HP Project and Portfolio Management Center

Software Version: 8.00

HP Center Management for Quality Center Guide

Software Version: 2.00

Document Release Date: July 2009
Software Release Date: July 2009

Legal Notices

Warranty

The only warranties for HP products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. HP shall not be liable for technical or editorial errors or omissions contained herein.

The information contained herein is subject to change without notice.

Restricted Rights Legend

Confidential computer software. Valid license from HP required for possession, use or copying. Consistent with FAR 12.211 and 12.212, Commercial Computer Software, Computer Software Documentation, and Technical Data for Commercial Items are licensed to the U.S. Government under vendor's standard commercial license.

Copyright Notices

© Copyright 1997-2009 Hewlett-Packard Development Company, L.P.

Trademark Notices

Adobe® is a trademark of Adobe Systems Incorporated.

Intel®, Intel® Itanium®, Intel® Xeon™, and Pentium® are trademarks or registered trademarks of Intel Corporation or its subsidiaries in the United States and other countries.

Java™ is a U.S. trademark of Sun Microsystems, Inc.

Microsoft®, Windows®, and Windows® XP are U.S. registered trademarks of Microsoft Corporation.

Microsoft Vista® is either a registered trademark or trademark of Microsoft Corporation in the United States and/or other countries.

Oracle® is a registered U.S. trademark of Oracle Corporation, Redwood City, California.

UNIX® is a registered trademark of The Open Group.

Documentation Updates

This manual's title page contains the following identifying information:

- Software version number, which indicates the software version
- Document release date, which changes each time the document is updated
- Software release date, which indicates the release date of this version of the software

To check for recent updates, or to verify that you are using the most recent edition of a document, go to:

h20230.www2.hp.com/selfsolve/manuals

You will also receive updated or new editions if you subscribe to the appropriate product support service. Contact your HP sales representative for details.

Support

You can visit the HP Software Support Web site at:

hp.com/go/hpsoftwaresupport

HP Software Support Online provides an efficient way to access interactive technical support tools. As a valued support customer, you can benefit by using the support site to:

- Search for knowledge documents of interest
- Submit and track support cases and enhancement requests
- Download software patches
- Manage support contracts
- Look up HP support contacts
- Review information about available services
- Enter into discussions with other software customers
- Research and register for software training

Most of the support areas require that you register as an HP Passport user and sign in. Many also require a support contract.

To find more information about access levels, go to:

h20230.www2.hp.com/new_access_levels.jsp

To register for an HP Passport ID, go to:

h20229.www2.hp.com/passport-registration.html

Contents

1 Getting Started with HP Center Management for Quality Center 9
Overview of HP Center Management for Quality Center 9
CMQC Functionality 11
CMQC Basics 12
HP Center Management for Quality Center Roles and Responsibilities 12
Capturing and Tracking Demand 14
Submitting Requests from the Line of Business 14
Creating and Managing Quality Management Projects 16
Reporting on Quality Metrics 16
HP Center Management for Quality Center Administration Functions 17
Supporting Quality Center Application Users 18
About the Documentation 19
Intended Audience 19
In this Document 19
Related Documentation 20

2 Installing and Configuring HP Center Management for Quality Center 23
Overview of Installation and Configuration 23
System Requirements 23
Additional Installation Considerations 24
Documentation Related to HP Center Management for Quality Center System Requirements 25
Before You Install HP Center Management for Quality Center 25
Installing HP Center Management for Quality Center 26
Registering Your Quality Center Instance 29
Configuring HP Center Management for Quality Center 30
Running a Server Configuration Report 32
What's Next? 32

3 Setting Up HP Center Management for Quality Center . . . 33
Overview of HP Center Management for Quality Center Setup . . . 33
Customizing HP Center Management for Quality Center . . . 34
Customizing Field Values . . . 34
Documentation Related to Customizing HP Center Management for Quality Center Entities . . . 38

4 Configuring Resources for HP Center Management for Quality Center . . . 39
Configuring Resources . . . 39
Creating PPM Center User Accounts . . . 40
Linking Users to Security Groups . . . 41
Configuring User Resource Information . . . 42
Setting Up Contact Information . . . 43
Delivering Role-Based PPM Dashboard Views . . . 43

5 HP Center Management for Quality Center QA Testing Projects . . . 49
Overview of CMQC - QA Testing Projects . . . 49
Creating a CMQC - QA Testing Project . . . 50
Project Overview Page . . . 53
Project Overview Portlets . . . 54
Exporting the Project Overview Page as a PDF File . . . 58
Configuring Project Settings . . . 60
Configuring Project Participants . . . 65
CMQC - Testing Project Workflow . . . 66
Creating and Managing Work Plans . . . 72
Work-Plan Templates . . . 73

6 HP Center Management for Quality Center Application Projects . . . 75
Overview of CMQC Application Projects . . . 75
Creating a CMQC - Application Project . . . 76
Project Overview Page . . . 81
Project Overview Portlets . . . 81
Exporting the Project Overview Page as a PDF File . . . 85
Configuring Project Settings . . . 87
Configuring Project Participants . . . 91
CMQC - Application Project Workflow . . . 92
Phases of the CMQC - Application Project Workflow . . . 94
Creating and Managing Work Plans . . . 97
Work Plan Templates . . . 98

7 Viewing and Tracking Project Progress and Quality 101
Overview of HP Center Management for Quality Center PPM Dashboard Portlet Content 101
HP Center Management for Quality Center IT Service Portlets 101
Viewing and Tracking Project Activity 105
CMQC - Project Listing Portlet 105
CMQC - Business Value Map Portlet 109
Application Quality Portlets 110
CMQC - Defects BreakDown By Status (#) Portlet 110
CMQC - Defects Breakdown By Status (%) Portlet 111
CMQC - Defect by Status Trending Portlet 112
CMQC - Defect Density Over Time Portlet 113
CMQC - Generic User Query (CM) Portlet 113
Changes to CMQC Data Sources 118
HP Center Management for Quality Center Reports 118
CMQC - Cross Environment Query Reports 118
Creating a CMQC - Cross Environment Query Report 119
CMQC - Quality Center User Query Reports 124
Creating and Running a CMQC User Query Report 124
Viewing Reports, Report Settings, and Report Logs 129
Viewing a Report 129
Viewing Report Settings and Report Logs 132
8 Project Status Update Requests and Test Status Report Requests 135
Project Status Update Requests 135
Submitting a Project Status Update Request 137
Test Status Report Requests 141
9 QA Test Status Reports 153
Overview of CMQC - QA Test Status Reports 153
Creating a CMQC - QA Test Status Report Request 155
10 Managing Quality Center of Excellence Administrative Activity 165
Overview of Managing CoE Administration 165
Quality Center Instance Registration Requests 165
QC Administrative Requests 169
Creating CMQC - QC User Administrative Requests 173
Creating CMQC - QC Project Administrative Requests 178
Creating CMQC - IT Service Requests 184

Index 189

1 Getting Started with HP Center Management for Quality Center

Overview of HP Center Management for Quality Center

Many IT organizations have adopted the *Center of Excellence* (CoE) model as a practical way to improve IT operations consistently and continuously. In the CoE model, the QA infrastructure, processes, and best practices are consolidated and centralized to provide a management and automation platform for application delivery, as well as leadership, consulting, and support services to help companies optimize application quality. A CoE also provides the entire organization with visibility into standardized quality metrics and key performance indicators (KPIs). This helps to keep all stakeholders informed, and keep applications aligned with business objectives.

HP Center Management for Quality Center (CMQC) uses the technology and features of HP Project and Portfolio Management Center (PPM Center) to optimize CoE management by introducing repeatable best practices, projects, workflows, and key performance indicators (KPIs) for principal quality activities.

A Quality CoE can use CMQC to provide the following support services:

- Build and execute a project testing process, which involves:
  - Set up a test strategy
  - Implement quality KPIs
  - Implement test management processes
  - Define a test plan
  - Automate test execution
- Optimize existing processes:
  - Determine the return on investment (ROI) of automating functional testing
  - Integrate unit testing and functional testing processes
  - Measure and monitor the user experience
- Define and implement quality standards for:
  - Quality metrics
  - Quality processes
  - Quality management and automation technologies

All Quality CoE practices must be tightly integrated with all other upstream and downstream application delivery processes. By increasing the communication with the lines of business (LOBs) and exposing their processes within the organization, the CoE can enable project teams to:

- Understand project interdependencies—how decisions made on one project can affect other projects. Seeing the big picture helps team members meet business goals, not just application goals.
- Lower costs by creating higher-quality applications. Application defects and other issues are fixed before deployment.

- Distribute quality expertise around the organization by accelerating knowledge transfer and sharing best practices. Knowledge is shared around the organization, and stored for future projects.
- Develop more generalized skills while honing expertise in areas of specialty. Sharing both specific and general knowledge raises the level of quality for applications, and of the organization.
- Begin collecting and monitoring KPIs across the application lifecycle. This data helps establish future quality metrics.

By involving both the LOB and Quality CoE members from the inception of each project, and by encouraging feedback and collaboration at each stage, organizations can achieve a truly business-oriented approach to application delivery.

CMQC Functionality

CMQC includes functionality that enables you to:

- Introduce and enforce consistent workflows for all major application delivery processes
- Initiate and manage application and testing projects
- Gain (and provide) visibility into project and test status
- Access automated Quality Center (QC) support and administration

In PPM Center, CMQC lets you:

- Create projects based on templates and copy existing projects
- Synchronize project configurations and customizations with another project or template
- Create a user accounts
- Update user accounts
- Reset user passwords
- Add or remove users from a Quality Center project or security group

HP Center Management for Quality Center Roles and Responsibilities

To support the core quality processes, both the LOB and the Quality CoE maintain dedicated staff, toolsets and templates, as well as documentation of best practices, procedures, and techniques.

CMQC divides the roles into two groups; the LOB roles such as project manager, developer, QA manager, tester, and the CoE roles such as administrator or support engineer. These roles continuously interact to provide seamless information and process flow between all groups involved in application delivery. *Figure 1-1* shows the roles in the LOB and CoE groups.

Figure 1-1. LOB and CoE roles

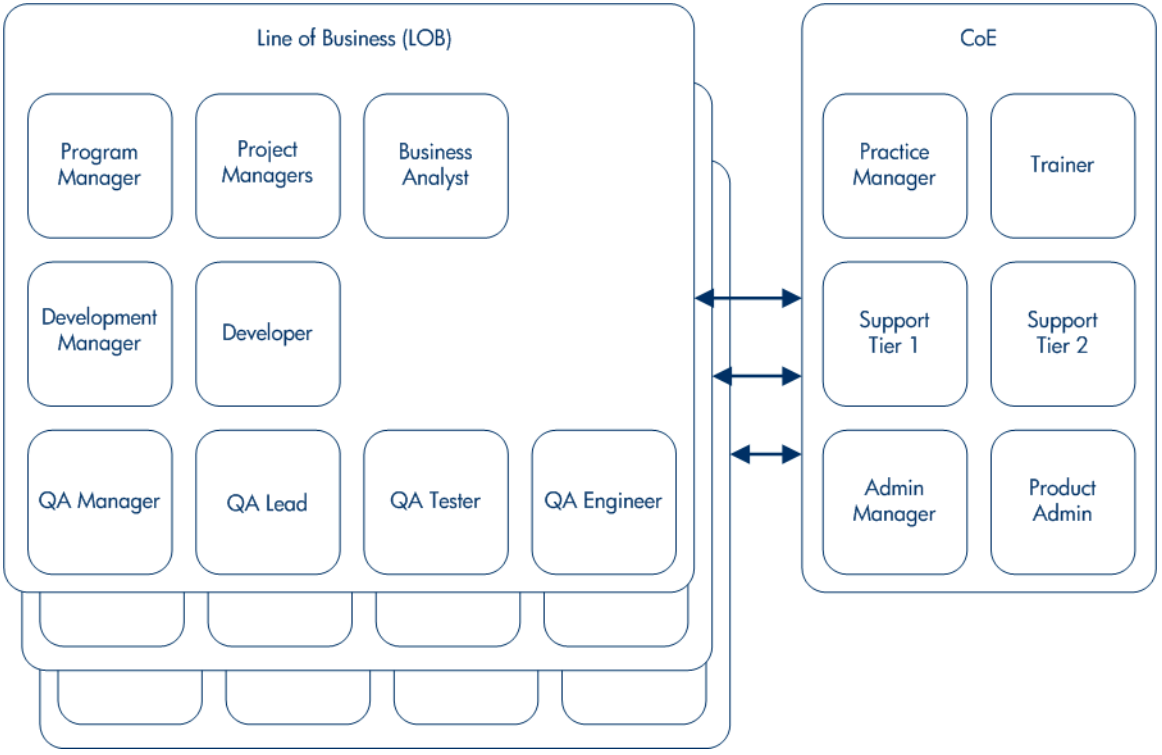


Table 1-1 lists detailed descriptions of each LOB and CoE role.

Table 1-1. CMQC roles and responsibilities (page 1 of 2)

Team	Role	Description
LOB Project Management Team	Program Manager	Manages one or more business units and multiple projects.
	Business Analyst	Manages business process mapping, provides design reviews, testing requirements, defines business processes, and reviews test scenarios and results.
	Project Manager	Manages application projects and the development lifecycle.
LOB Development Team	Developer	Designs and develops application and fixes defects.
	Development Manager	Manages development project, assigns defects to developers, manages development priorities, analyzes defect trends and root cause.
LOB Quality Assurance Team	QA Manager	Manages QA department (within the LOB).
	QA Project Lead	Performs software test planning, risk analysis, design reviews, go/no-go recommendations, test scenario reviews, and so on.
	QA Tester	Executes test scenarios, verifies and reports defects.
	QA Engineer	Performs testing coverage review, provides business test design, execution. Builds automated scripts. Provides code reviews and recommendations for improving automation efficiency.

Table 1-1. CMQC roles and responsibilities (page 2 of 2)

Team	Role	Description
CoE Application Support Team	Support Tier 1	CoE Support: Tier 1 Support Engineer
	Support Tier 2	CoE Support: Tier 2 Support Engineer
CoE Administration Team	Administrative Manager	Manages the CoE infrastructure and applications
	Product Administrator (QC)	Provides administration for the CoE infrastructure (Quality Center, PPM Center, and so on)
	PPM Center Administrator	Provides administration for the PPM Server
	System Administrator	Supports networking, the operating system, DBA and other systems

Capturing and Tracking Demand

Users in an LOB can use CMQC predefined request forms to streamline and automate the initiation of Quality CoE projects. Requests submitted from the LOB follow a workflow that ensures consistency, visibility, and accountability at each stage of the application delivery process. CoE personnel can perform the required activities, track project status and progress, and report on the quality level of any application at any point in the lifecycle.

Submitting Requests from the Line of Business

By following the workflows provided for projects, you ensure that each project follows all required approval, review, and sign-off steps by all required roles. The workflows and their layouts are designed to support automatic creation and linkage between the PPM Center and Quality Center projects and follow a standard software development lifecycle (SDLC) flow.

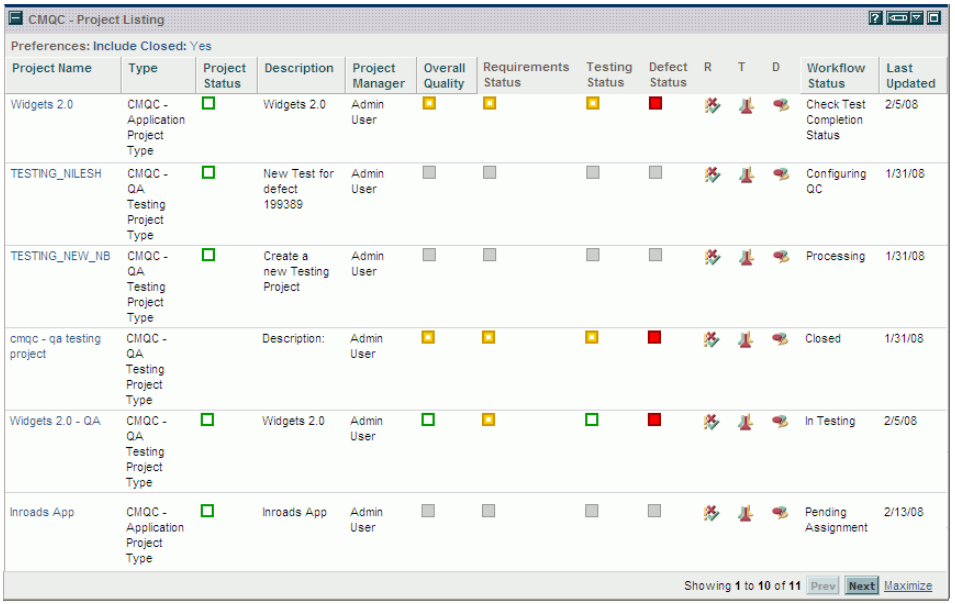
The workflows include a testing request that is assigned to a QA lead for managing the testing processes and resources and gathering the quality

metrics. The application project is managed by a project manager. A QA lead, development lead, and an operations lead help drive the project to completion through the key phases of the development lifecycle.

Incoming project initiation is handled by appropriate members of the Quality CoE and routed through the CoE personnel for reviews and approvals as specified in the workflow. Once the approval phase is complete, the CoE manager can initiate a testing project using the quality process management functionality of Quality Center.

CoE managers can use the portlets on personalized PPM Dashboard pages to get a real-time view of proposed and in-flight testing projects and related metrics. *Figure 1-2* shows the Project Listing portlet, which displays relevant statistics for ongoing projects.

Figure 1-2. Project Listing portlet



The Project Listing portlet is described in detail in Chapter 7, *Viewing and Tracking Project Progress and Quality,* on page 101.

Creating and Managing Quality Management Projects

CMQC provides project types for managing application and testing projects. These requests are integrated with Quality Center to automate frequently performed tasks or retrieve information.

A CoE project manager can use CMQC's project types to create CMQC - QA Testing Projects and CMQC - Application Projects. These projects are designed for QA leads to manage the resources, progress, and key performance indicators for their testing initiatives. With the testing project, you can:

- Use HP Project Management capabilities to manage the testing work plan and associated tasks
- Use HP Resource Management to manage resources against project tasks
- Link PPM Center with Quality Center projects to manage test status and key performance indicators
- Create an independent testing project, or link a project to an application project to combine quality metrics with the general application project status information.

A testing project follows a common testing workflow that includes test plan design, test environment setup, detailed test plan and asset development, test execution, periodic test status report generation, and final QA report submission to all application stakeholders.

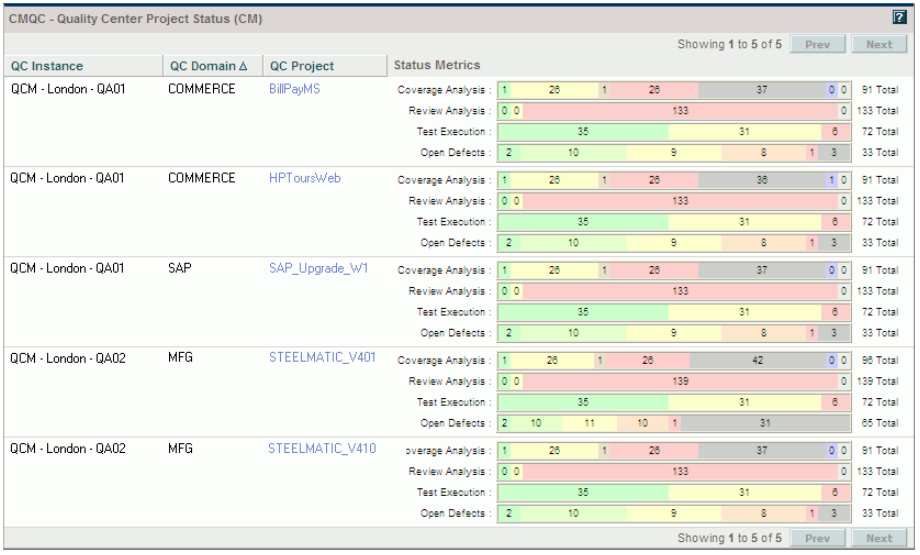
Reporting on Quality Metrics

Quality is a critical factor throughout the application delivery lifecycle. Status reports are generated on an ongoing basis to give all stakeholders visibility into application quality and progress of the QA efforts. This transparency is made possible through the integration of Quality Center and PPM Center projects and the test status report results available through various PPM Center portlets (and through Cross-Environment Query and Quality Center User Query reports).

A test status report is linked to a single Quality Center project. It queries the Quality Center project for statistics on requirements coverage, review status, test execution status, and defect statistics. A series of test status reports for a testing project are used for trending captured quality metrics.

Figure 1-3 shows a project status update report in the Project Status portlet. This portlet provides an overview of current project status based on scope, resources, schedule, risks, and issues.

Figure 1-3. HP Quality Center Project Status (CM) portlet



HP Center Management for Quality Center Administration Functions

A major role of the CoE revolves around administration and support activities. CMQC includes request types, project types, and workflows that support actions related to the administration of the CoE itself, Quality Control, and IT in general.

A Quality Center Administration request is a call for assistance with a specified Quality Center instance or project, such as:

- Creating a new project based on a template
- Copying an existing project

- Synchronizing project configurations and customizations with another project
- Creating a user account
- Updating a user account
- Resetting a user account password
- Changing the users assigned to a Quality Center project or group

These requests are routed to the CoE administration or operations teams and are handled by either an Quality Center administrator or a system administrator. Unlike general support requests, these requests are specific to Quality Center administration, and automate a predefined list of administrative tasks.

All requests for general, administrative, or IT support are handled by either an application administrator for Quality Center, PPM Center administrator, or system administrator. These requests focus primarily on application software or hardware configuration, upgrades, installations, customizations, and so on.

CoE users can submit, view, and approve administration requests, as specified in the workflow. Administration request activity can be viewed through portlets distributed to the appropriate roles.

Supporting Quality Center Application Users

Users of quality assurance applications (such as HP Quality Center, HP QuickTest Professional, HP WinRunner, and so on) can submit requests for support. These requests, which typically revolve around application usability and technical issues, are handled by the CoE support engineers. Feedback provided by the requestor upon completion of the support request is channeled to the CoE manager to ensure that support services are handled effectively.

About the Documentation

Intended Audience

This document contains both administrative and end-user information. It is written for the following:

- System administrators responsible for installing and configuring HP Center Management for Quality Center.
- PPM Center administrators who sets up configurations within PPM Center.
- Business users who need to view standardized quality metrics and *key performance indicators* (KPIs) to keep applications aligned with business objectives.

In this Document

If you are a system administrator who is responsible for setting up CMQC, see the following sections:

- For an overview of CMQC functionality and use, see *Overview of HP Center Management for Quality Center* on page 9.
- For information on system requirements for CMQC, see *System Requirements* on page 23.
- For information on what to consider and what tasks to perform before you start to install CMQC, see *Additional Installation Considerations* on page 24 and *Before You Install HP Center Management for Quality Center* on page 25.
- For installation instructions, *Installing HP Center Management for Quality Center* on page 26.
- For information on how to configure CMQC, see *Configuring HP Center Management for Quality Center* on page 30.

If you are responsible for setting up configurations within PPM Center, see the following sections:

- For information on how to administer resources, see Chapter 4, *Configuring Resources for HP Center Management for Quality Center,* on page 39.
- For information about CMQC application projects and how to create them, see Chapter 6, *HP Center Management for Quality Center Application Projects,* on page 75.
- For information about CMQC testing projects and how to create them, see Chapter 5, *HP Center Management for Quality Center QA Testing Projects,* on page 49.
- For information on how to monitor project progress and quality, see Chapter 7, *Viewing and Tracking Project Progress and Quality,* on page 101, Chapter 8, *Project Status Update Requests and Test Status Report Requests,* on page 135, and Chapter 9, *QA Test Status Reports,* on page 153.
- For information on how to manage the administrative activities of a quality center of excellence, see Chapter 10, *Managing Quality Center of Excellence Administrative Activity,* on page 165.

Related Documentation

The following PPM Center documents provide additional information for system administrators and PPM Center configurators:

- *Getting Started*
- *Configuring the Standard Interface*
- *Customizing the Standard Interface*
- *HP Demand Management Configuration Guide*
- *HP Project Management Configuration Guide*
- *HP-Supplied Entities Guide*

- *Reports Guide and Reference*
- *System Administration Guide and Reference*
- *System Requirements and Compatibility Matrix*
- *Release Notes*

The following PPM Center documents provide additional information for developers, quality engineers, and business users:

- *Getting Started*
- *HP Demand Management User's Guide*
- *HP-Supplied Entities Guide*
- *HP Project Management User's Guide*
- *Master Index*

2 Installing and Configuring HP Center Management for Quality Center

Overview of Installation and Configuration

HP Center Management for Quality Center installation and configuration involves the following:

- Performing preinstallation tasks
- CMQC software installation
- Configuring CMQC parameters on the PPM Server

This chapter provides information about the requirements for installing HP Center Management for Quality Center, the tasks to perform before you begin the installation, and detailed installation and configuration instructions. It also includes a list of documents that are useful as you prepare to install CMQC.

System Requirements

To install and use CMQC version 2.00, you must have the following components:

- HP Quality Center version 9.0 or 9.2

If you are using PPM Center to manage multiple Quality Center instances, all of the Quality Center instances must be of same version and patch level.

- HP Project and Portfolio Management Center (PPM Center) version 7.5 or later, with the following conditions:
  - Best Practices content must be installed on the PPM Center instance.
  - The PPM Server must run on Microsoft® Windows® only.

    VMware deployments are supported.
  - If the Quality Center database uses Microsoft SQL Server, you must have Oracle® Windows interfaces (for example, Oracle Provider for OLE DB or Oracle ODBC) installed.
  - PPM Server Web access must use Microsoft Internet Explorer 6.0 or 7.0.

    Mozilla Firefox is not supported.

For detailed information about PPM Center system requirements, see the PPM Center *System Requirements and Compatibility Matrix*.

Additional Installation Considerations

Before you install CMQC version 2.00, be aware of the following:

- If you are working with multiple servers in a clustered environment, you must install CMQC on each server node in the cluster, and provide the identical configuration parameter values for each.
- If you are using PPM Center to manage multiple Quality Center instances, all of those instances must be at the same version and patch level.
- You cannot upgrade from (PPM Center version 6.0-based) CMQC version 1.0 to (PPM Center version 7.5-based) version 2.00. If you have version 1.0 installed, you need assistance from HP Software Support to upgrade to version 2.00.
- CMQC version 2.00 is available in English only. Other languages are not yet supported.

- To use the request types, workflows, and project types that CMQC provides, ensure that you have user product licenses for HP Demand Management and HP Project Management.

For detailed information about licenses for HP Demand Management and HP Project Management, see the PPM Center *Security Model Guide and Reference* the *HP Demand Management Configuration Guide,* and the *HP Project Management Configuration Guide.*

Documentation Related to HP Center Management for Quality Center System Requirements

For information on the tasks related to installing and configuring PPM Center and Quality Center, see the following documents:

- For information on the system requirements and procedures for installing HP Quality Center, see the *HP Quality Center Installation Guide.*
- For information on the system requirements for installing PPM Center, see the *System Requirements and Compatibility Matrix.* For information about how to install PPM Center, see the *System Administration Guide and Reference.*
- For information about the specific versions required for third-party software, see the PPM Center *System Requirements and Compatibility Matrix.*

Before You Install HP Center Management for Quality Center

Before you begin to install CMQC, perform the following tasks:

1. Ensure that you can connect to your PPM Center Oracle database instance from the command line using SQL*Plus.
2. If you cannot connect to your PPM Center Oracle database instance, add the `Oracle bin` directory to the path, and then verify that you can connect to your PPM Center Oracle database instance from the command line using SQL*Plus.

3. Set the DB_CONNECTION_STRING server configuration parameter to the PPM Center Oracle Database TNS name. (The TNS name typically matches the Oracle SID, although there are exceptions.)

CMQC uses the DB_CONNECTION_STRING parameter to set up scripts that upload required data and SQL procedures into the PPM Center database. For information on how to modify this and other PPM Center server configuration parameters, see the PPM Center *System Administration Guide and Reference.*

Installing HP Center Management for Quality Center

To install CMQC:

1. Update database settings for the KINTANA_SERVER environment object, as follows.

If the database connection information is not correctly specified for the default environment, much functionality can be lost and errors may occur.

   a. Log on to PPM Center.

   b. From the menu bar, select **Open > Administration > Open Workbench.**

      The PPM Workbench opens.

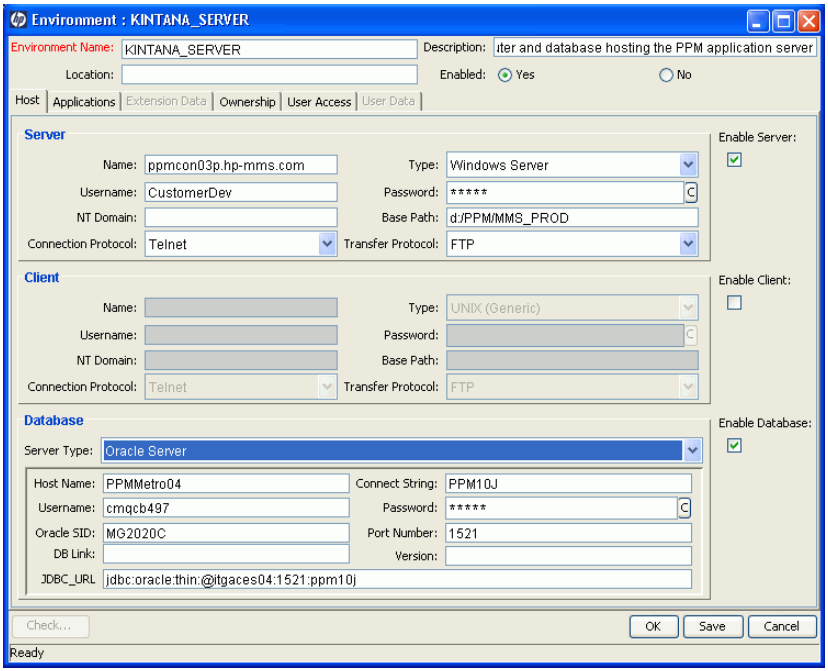
   c. From the shortcut bar, select **Environments > Environments.**

      The Environment Workbench opens to the **Query** tab.

   d. Click **List.** and then, on the **Results** tab, double-click **KINTANA_ SERVER.**

If the KINTANA_SERVER environment object does not exist, you must create it. For instructions on how to create an environment in PPM Center, see the *HP Deployment Management Configuration Guide*.

The Environment window opens to the **Host** tab and displays the KINTANA_SERVER environment settings.



e. To the right of the **Database** section, select the **Enable Database** checkbox.

f. In the **Database** section, update the database settings for the environment.

If the `JDBC_URL` parameter is already defined in your `<PPM_Home>\server.conf` file, then, in the **JDBC URL** field, reference the JDBC connection string using the token `[AS.JDBC_URL]`.

2. Obtain the CMQC installation bundle (`mitg-800-CMQC.jar`).

3. Copy the `mitg-800-CMQC.jar` file to the `<PPM_Home>` directory.

   where `<PPM_Home>` represents the path where your PPM Center instance is installed. For example: `xyzserver/E/PPMServer`.

4. Run the `kDeploy.sh` script (located in the `<PPM_Home>\bin` directory), as follows:

```
sh ./kDeploy.sh -i CMQC
```

5. Provide your PPM Center username and password, as prompted.
6. To update the PPM Server configuration, run the `kUpdateHtml.sh` script, which is located in the `<PPM_Home>\bin` directory.
7. Stop, and then restart the PPM Server.

   JSR-based portlets are not registered with PPM Center until you restart the PPM Server. For information on how to start and stop the PPM Server, see the *System Administration Guide and Reference.*

   After installation is complete, the installer displays a message to indicate that CMQC was successfully installed and lists the entities installed. Each entity that was installed correctly is marked "Complete."
8. If installation errors occur, correct them, and then repeat step 4 through step 7.
9. Because some of the interaction between Quality Center and PPM Center occurs through the QC client code, you must enable Quality Center connectivity by installing the QC client-side component on the PPM Server.

   If you later install a Quality Center service pack, or you upgrade Quality Center, you must then re-enable Quality Center connectivity.

   To install the QC client-side component on the PPM Server:

   a. On the Microsoft Windows computer hosting the PPM Server, open a browser window, and navigate to Quality Center:

      `<QC_Server>:<Port>/qcbin`

      where `<QC_Server>` represents the name assigned to your Quality Center server during installation, and `<Port>` represents the port number used to connect to the Quality Center server. For example, http://xyz.company.com:8080/qcbin.

      This corresponds to the `KINTANA_SERVER_NAME` server configuration parameter value and does not necessarily reflect the actual host name of the server.

b. Select the link for Quality Center to download and install the user site ActiveX controls.

c. Select the link for Site Administration to download and install the Quality Center Administration ActiveX controls.

   Downloading the ActiveX controls also downloads and installs the required libraries for Quality Center OTA interfaces (TD Client and SA APIs).

d. Validate Quality Center connectivity, as follows:

   i. Open a command prompt window

   ii. Change to the `<PPM_Home>\ext\qcm\scripts` directory.

   iii. Execute the following command:

   ```
   cscript.exe /nologo qcm_qc_ListOfDomains.vbs
   <QC_URL_Address> <QC_User> <QC_Password>
   ```

   where `<QC_URL_Address>` is the URL of the Quality Center target instance, `<QC_User>` is the Quality Center username used to log on to the QC instance, and `<QC_Password>` is the password for the Quality Center username.

   Example:

   ```
   cscript.exe /nologo qcm_qc_ListOfDomains.vbs
   http://xyz.company.com:8080/qcbin testuser testpwd
   ```

   The script output lists all domains to which the specified user has access.

All Quality Center-related portlets (for example, QC Project Status, QC User Query) reference data in the Quality Center USERS_PROJECTS table.

Registering Your Quality Center Instance

After you install CMQC, you must register your Quality Center instance to enable CMQC functionality. For detailed instructions on how to register a

Quality Center instance, see *Quality Center Instance Registration Requests* on page 165.

Configuring HP Center Management for Quality Center

CMQC uses PPM Center technology to trigger email notifications when certain workflow events occur during the request lifecycle. These notifications contain parameters defined in the PPM Center `server.conf` file.

This section provides descriptions of these configuration parameters, which you must add manually to the `server.conf` file and then modify to reflect the names and identifiers of your organization's naming conventions.

The `server.conf` file contains the values of all of the server parameters when the server configuration utility was last run. The `server.conf` file is automatically regenerated by the configuration utility.

To edit the `server.conf` file:

1. Back up your `server.conf` file, which is located in the `<PPM_Home>` directory.
2. Run the `kStop.sh` script to stop the PPM Server:

   ```
   sh ./kStop.sh
   ```

3. Open the `server.conf` file in a text editor, and then add and specify values for the parameters listed in the following table.

   The parameter names listed in this table are shortened versions of the actual names, all of which start with the string `com.kintana.core.server.` For example, the full name of the `CMQC_SUPPORT_REQUEST_ID` parameter is `com.kintana.core.server.CMQC_SUPPORT_REQUEST_ID`. To add a parameter to the `server.conf` file, you must use its full name.

Parameter Name	Description
CMQC_DELIVERY_CENTER	Name of the QA team or QA Center of Excellence that uses CMQC to provide QA services to the development team
CMQC_DELIVERY_MANAGEMENT	Name of the group that leads the QA team
CMQC_ITSUPPORT_REQUEST_ID	IT or administrative service request (ASR) identifier
CMQC_ITSUPPORT_CENTER	Name of IT or administrative center or division
CMQC_ITSUPPORT_TEAM	Name of the IT or administrative team
CMQC_MAX_ALLOWED_ PROJECTS	Number of projects that a user can select for querying and viewing in the following portlets: • CMQC - Quality Center Defects (CM) • CMQC - Quality Center Project Status (CM) • CMQC - Quality Center Requirements (CM) • CMQC - Quality Center User Query (CM) Restricting the number of selectable projects in these portlets helps improve performance.
CMQC_STATUS_UPDATE_ID	Status update identifier
CMQC_SUPPORT_CENTER	Name of the product support center or division
CMQC_SUPPORT_REQUEST_ID	Support request identifier
CMQC_SUPPORT_TEAM	Name of the product support team

4. To regenerate the `server.conf` file and propagate the changes, run the `kUpdateHtml.sh` script from the `<PPM_Home>\bin` directory.
5. Run the `kStart.sh` script to restart the PPM Server.

```
sh ./kStart.sh
```

Running a Server Configuration Report

You can view a list of the server configuration parameter values on an active PPM Server by running the Server Configuration report.

To run the Server Configuration report:

1. Log on to PPM Center.
2. From the menu bar, select **Open > Administration > Open Workbench.**

   The PPM Workbench opens.
3. From the shortcut bar, select **Sys Admin > Server Tools.**

   The Admin Tools window opens.
4. From the list at the top of the window, select **Server Configuration Report.**
5. Click **Submit.**

What's Next?

After you install and configure CMQC, you can examine the HP-supplied content that comes with the product and customize it for your organization. This is covered in Chapter 3, *Setting Up HP Center Management for Quality Center,* on page 33.

3 Setting Up HP Center Management for Quality Center

Overview of HP Center Management for Quality Center Setup

Before you can get started using the newly-installed CMQC, you must perform the following required tasks:

- Create PPM Center users and assign these users to CMQC security groups based on their roles and responsibilities. For complete instructions on how to set up user accounts and assign users to security groups, see Chapter 4, *Configuring Resources for HP Center Management for Quality Center,* on page 39.
- Register your HP Quality Center instance(s). For complete instructions on how to register your Quality Center instances, see *Quality Center Instance Registration Requests* on page 165.

In addition to these required tasks, there are several ways in which you can customize CMQC content.

For example:

- Some CMQC fields contain generic values, which you can change (using the provided CMQC validations) to reflect your organization's naming conventions and processes.
- You can create simple HTML form elements, or *banners,* to add eye-catching color and graphic complexity to your request type forms.

- You can create requests that trigger email notifications to be sent to specific users at different steps along a workflow. The email notifications contain fields that you can modify to fit your organization's naming conventions.
- To streamline the user experience for the Quality CoE and LOB users, you may want to disable certain request types, workflows, or other entities that are not part of the quality process.

Before you disable any entities, be sure to check with other business units that may be using PPM Center. For information on how to disable a request type, see the *HP Demand Management Configuration Guide*.

Customizing HP Center Management for Quality Center

Although the request types, workflows, project types, and work plan templates delivered as part of CMQC are ready to use immediately after installation and system-level configuration, you can configure the product further to better suit your organization's requirements. The following sections provide information on how to do this.

Customizing Field Values

PPM Center field types and values are controlled by validations. To determine the list of possible values for a field, you edit its validation (change, add, or remove a validation value) from the PPM Workbench.

Although you can modify any validation listed in the Validation Workbench, HP strongly recommends that you only modify those that are explicitly described as "Customizable." Modifying other validations (for example, those described as "Static," "AutoComplete," or "Workflow") can interfere with CMQC functionality.

CMQC provides the following customizable validations:

- CMQC_CMN_KPI_Status. This is used to validate status values in drop-down lists (for example, the **Overall Quality Status, Coverage Status, Defect Status,** and **Test Status** lists on the CMQC - QA Test Status Report configuration page).
- CMQC_CSR_ITSERVICE_CAT_SUB_TPC_LIST. This is used to validate items in the **Categories, Subcategories,** and **Topics** drop-down lists for IT service requests. You can specify all the token codes for these lists using only this validation.

The following example procedure shows how to add values to a validation list:

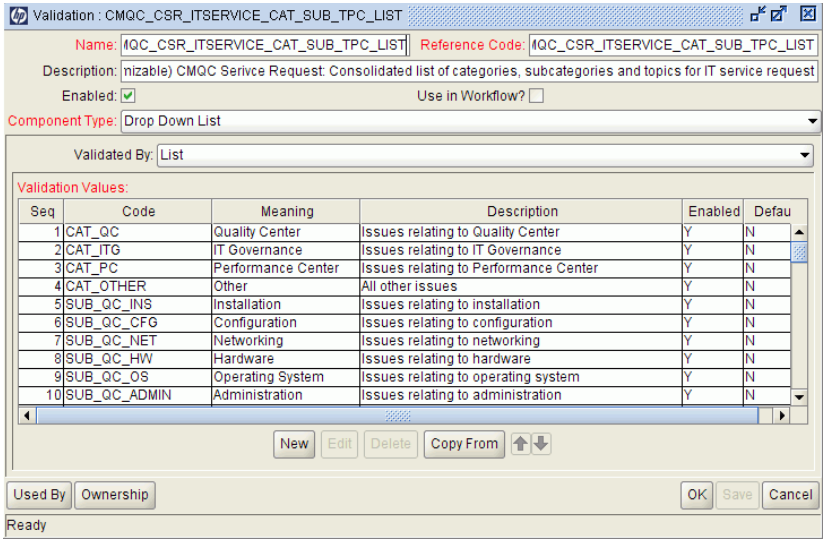
1. Log on to PPM Center.
2. Select **Open > Administration > Open Workbench.**

   The PPM Workbench opens.
3. From the shortcut bar, select **Configuration > Validations.**

   The Validation Workbench opens.
4. On the **Query** tab, click **List.**

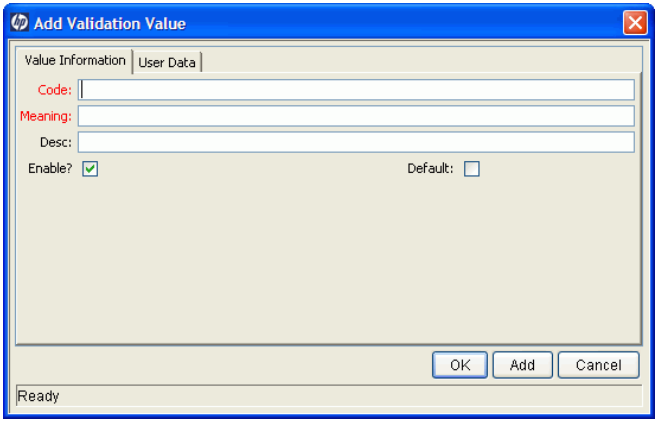
   The **Results** tab displays the search results.
5. Scroll to, and then double-click **CMQC_CSR_ITSERVICE_CAT_SUB_TPC_LIST.**

   The Validation window opens and lists the validation values for the **Category, Subcategory,** and **Topic** lists for CMQC - IT Service Requests.



6. Click **New.**

The Add Validation Value window opens to the **Value Information** tab.



7. Complete the fields as described in the following table:

Field Name	Description
Code	Type the underlying code for the new validation value. **Note:** The code is the value stored in the database or passed to any internal functions, and is rarely displayed.
Meaning	Type the meaning of the value for display.
Desc	Type a short description of this value.
Enable?	To enable the validation value, leave this checkbox selected.
Default	To make this value the default value in the list, select this checkbox. **Note:** The **Default** checkbox is only available for drop-down lists.

8. The CMQC_CSR_ITSERVICE_CAT_SUB_TPC_LIST validation has two user data fields (**Type** and **Parent**), which you configure as follows:
   a. Click the **User Data** tab.
   b. In the **Type** list, select the name of the list to which you want to add the new value.
   c. In the **Parent** list, specify the parent token code to which a subcategory or topic belongs.
9. To close the window and add the value to the validation, click **OK.**
10. To change the order in which a value is displayed in the list, in the **Validation Values** table, select the value, and then use the up and down arrows to change its position.
11. After you finish adding values to the validation, click **OK.**

Use caution as you create validations that are validated by lists. You must update a validation every time its values set changes. Instead, consider validating using a SQL query or PLSQL function to obtain the values from a database table.

For detailed information on how to create and edit validations in PPM Center, see the *Commands, Tokens, and Validations Guide and Reference.*

Documentation Related to Customizing HP Center Management for Quality Center Entities

CMQC delivers request types, workflows, portlets, PPM Dashboard modules, and work plan templates as best practice content. You can use these entities immediately after installation, or tailor them to better fit your organization's business practices and procedures.

The following documents provide information on how to customize HP PPM Center entities:

- *Configuring the Standard Interface*
- *HP-Supplied Entities Guide*
- *HP Demand Management Configuration Guide*
- *HP Portfolio Management Configuration Guide*
- *HP Program Management Configuration Guide*
- *HP Project Management Configuration Guide*
- *HP Time Management Configuration Guide*
- *Reports Guide and Reference*
- *Commands, Tokens, and Validations Guide and Reference*

4 Configuring Resources for HP Center Management for Quality Center

Configuring Resources

All LOB and Quality CoE members who require access to CMQC must be defined as users in PPM Center.

To give a resource access to CMQC, you perform the following tasks:

1. Create a user account for the resource in PPM Center.

   For detailed instructions on how to create PPM Center user accounts, see the *Security Model Guide and Reference.*

   Before you create your user accounts in PPM Center, be sure to read *Creating PPM Center User Accounts*.

2. Assign the user to one or more security groups based on his or her role.

   Instructions for adding users to security groups are available in the *Getting Started* guide. However, before you perform this task, be sure to read *Linking Users to Security Groups* first.

3. Assign licenses to the user based on the license requirements of the security group.

   For detailed instructions on how to create PPM Center user accounts, create security groups, assign users to security groups, and how to assign licenses, see the *Security Model Guide and Reference.*

4. Configure the appropriate PPM Dashboard pages for security groups.

   For instructions on how to configure PPM Dashboard pages, see the *Getting Started* guide.

Creating PPM Center User Accounts

Both PPM Center and Quality Center have their own user management systems. The login name for a given user must be the same in PPM Center and in Quality Center.

The PPM Center portlets that pull information from Quality Center use the PPM Center user's login name to determine which Quality Center project that login name can access. If the PPM Center user login name does not exist in Quality Center, then PPM Center cannot access the information in the Quality Center portlets.

Both PPM Center and Quality Center support LDAP integration. To ensure that both applications have the same accounts and access grants, HP strongly recommends that you use either LDAP or Active Directory services with each to manage accounts. Using LDAP for user authentication also facilitates compliance with SOX and other regulations.

PPM Center provides the ability to import and validate user data from the user interface tables or from an LDAP server into the PPM Center user data model. This report runs the user open interface. For more information about this report, see the *Open Interface Guide and Reference.*

For detailed instructions on how to create PPM Center user accounts, see the *Security Model Guide and Reference.*

Before you create your PPM Center user accounts, ensure that you have configured the validations PPM - Department - Enabled and CRT - Company to suit your business needs.

Linking Users to Security Groups

CMQC users can be grouped into one of two categories: the LOB users, and the CoE users. LOB users have the role of project manager, developer, QA manager, tester, and so on. CoE users can perform the role of administrator or support engineer, for example.

Each role is represented by a PPM Center security group. Each security group has its own permissions and access grants that enable users in different roles to access information that relates to the quality process.

CMQC users must belong to at least one of the security groups listed in *Table 4-1*, and to at least one of the groups listed in *Table 4-2*.

Table 4-1. Required security groups

PPM Center Security Group	User
CMQC CORE USERS	Users who belong to a CoE-type security group must be assigned to this security group.
CMQC ALL USERS	All CMQC users must be assigned to this security group. Some views are only visible to users who belong to this group.

Table 4-2 lists descriptions of the security groups to which you can assign users, the license(s) linked to the security group, and the CoE teams to which members of the security groups might typically belong.

Table 4-2. Security groups and roles (page 1 of 2)

Team	Security Group/Role	Licenses
LOB - Project Management Team	CMQC - Program Manager	PM[a], RM[b], DM[c]
	CMQC - Business Analyst	PM, DM
	CMQC - Project Manager	PM, RM, DM
LOB - Development Team	CMQC - Developer	PM, DM
	CMQC - Development Manager	PM, RM, DM

Table 4-2. Security groups and roles (page 2 of 2)

Team	Security Group/Role	Licenses
LOB - Quality Assurance Team	CMQC - QA Manager	PM, RM, DM
	CMQC - QA Project Lead	PM, DM
	CMQC - QA Tester	PM, DM
	CMQC - QA Engineer	PM, DM
CoE - Application Support Team	CMQC - Support Tier-1	DM
	CMQC - Support Tier-2	DM
CoE - Administration Team	CMQC - Administrative Manager	U[d], C[e]
	CMQC - Product Administrator (Quality Center)	PM, DM
	CMQC - PPM Administrator	U, C
	CMQC - System Administrator	DM

a. PM represents the Project Management license
b. RM represents the Resource Management license
c. DM represents the Demand Management license
d. U represents the User Administration license
e. C represents the Configuration license

You can assign a user to security groups using the **Security Groups** tab in the User window or through an organization model defined in PPM Center.

Configuring User Resource Information

A resource is a person who performs work tracked by PPM Center. Resources can include employees, contractors, managers, or any other category your organization may need. Each user is treated as a resource in PPM Center. For each user, you can capture information specific to that resource, such as:

- **Skills.** The main duties or abilities of the user (such as develop automated testing suites, design test plans, software architect).

- **Roles.** Resource descriptions (such as resource manager, program manager, resource, portfolio manager) based on resource responsibilities. Roles are assigned specific permissions.
- **Cost Rate.** The hourly cost associated with a resource or skill. This rate represents the charge-back or billed labor cost.
- **Workload Capacity.** The percentage of a resource's working day that is available for planned workload items. For instance, a particular DBA may be required to participate in meetings every day, and, therefore, is set to devote 80% of her capacity to workload items.

For information on how to configure resource information in PPM Center, see the *HP Resource Management User's Guide.*

Setting Up Contact Information

Contacts are resources who are used as points of reference or information. Contacts must have a valid PPM Center username, and the company for which they work must be included in the validation CRT - Company validation.

For information on how to configure validations in PPM Center, see the *Commands, Tokens, and Validations Guide and Reference*.

You can configure contact information for any individual, regardless of whether he is or is not a PPM Center system user. For information on how to configure contacts, see the *HP Demand Management Configuration Guide*.

Delivering Role-Based PPM Dashboard Views

CMQC provides a number of PPM Dashboard modules that provide essential information based on the user role in the quality process. Each module corresponds to the security group with the same name (for example, a CMQC QA Manager security group member would get the CMQC - QA Manager module) and includes preconfigured pages that contain sets of portlets specific to each role.

Table 4-3 lists the PPM Center security groups and the CMQC modules designed for viewing by members of these groups.

Table 4-3. Security groups and corresponding PPM Dashboard modules

PPM Center Security Group	PPM Dashboard Module
CMQC Program Manager	CMQC - Program Manager
CMQC Project Manager	CMQC - Project Manager
CMQC Business Analyst	CMQC - Business Analyst
CMQC Development Manager	CMQC - Development Manager
CMQC Developer	CMQC - Developer
CMQC QA Manager	CMQC - QA Manager
CMQC QA Project Lead	CMQC - QA Project Lead
CMQC QA Tester	CMQC - QA Tester
CMQC QA Engineer	CMQC - QA Engineer

Table 4-4 shows the default role-based distribution of PPM Dashboard pages to teams. It also lists the portlets these preconfigured pages contain. For detailed descriptions of the portlets listed in this section, see Chapter 7, *Viewing and Tracking Project Progress and Quality,* on page 101.

Table 4-4. PPM Dashboard pages and role-based portlet content (page 1 of 4)

Team	Role	PPM Dashboard Page	PPM Dashboard Portlets
LOB - Project Management Team	Program Manager	Front Page	• CMQC - Business Value Map • CMQC - Project Listing • CMQC - Web Frame Portlet (CM) - Business Service Levels • My Requests • Project Gantt • My Tasks
		Quality Mgmt	• CMQC - Quality Center Project Status (CM) • Project Health Pie Chart • CMQC - Defects Breakdown by Status (#) • CMQC - Defect by Status Trending • CMQC - Requirement Coverage by Status • CMQC - Requirement Coverage Trending (%)
		Service Mgmt	• CMQC - Web Frame Portlet (CM) Business Availability View
		Resource Mgmt	• CMQC - Skillset Coverage • Analyze Resource Pools • Resource Pool List

Table 4-4. PPM Dashboard pages and role-based portlet content (page 2 of 4)

Team	Role	PPM Dashboard Page	PPM Dashboard Portlets
LOB - Project Management Team	Business Analyst	Front Page	• CMQC - Project Listing • My Requests • Project Gantt • My Tasks
		Project Mgmt	• CMQC - Quality Center Project Status (CM)
	Project Manager	Front Page	• CMQC - Business Value Map • CMQC - Project Listing • My Requests • Project Gantt • My Tasks
		Quality Mgmt	• CMQC - Quality Center Project Status (CM) • Project Health Pie Chart • CMQC - Defects Breakdown by Status (#) • CMQC - Defect by Status Trending • CMQC - Requirement Coverage by Status • CMQC - Requirement Coverage Trending (%)
		Service Mgmt	• CMQC - Web Frame Portlet (CM) Business Availability View
		Resource Mgmt	• CMQC - Skillset Coverage • Analyze Resource Pools • Resource Pool List

Table 4-4. PPM Dashboard pages and role-based portlet content (page 3 of 4)

Team	Role	PPM Dashboard Page	PPM Dashboard Portlets
LOB - Development Team	Developer	Front Page	• My Requests • My Tasks
		Quality Center	• CMQC - Web Frame Portlet (CM) - Quality Center View
	Development Manager	Front Page	• CMQC - Project Listing • My Requests • Project Gantt • My Tasks
		Quality Mgmt	• CMQC - Quality Center Project Status (CM)
		Quality Center	• CMQC - Web Frame Portlet (CM) - Quality Center View
		Resource Mgmt	• CMQC - Skillset Coverage
LOB - Quality Assurance Team	QA Manager	Front Page	• CMQC - Project Listing • My Requests • My Tasks • Project Gantt
		Quality Overview	• CMQC - Quality Center Project Status (CM) • CMQC - Requirement Coverage Trending (%) • CMQC - Defect by Status Trending
		Quality Center	• CMQC -Web Frame Portlet (CM) - Quality Center View
		Practice Mgmt	• CMQC - Skillset Coverage

Table 4-4. PPM Dashboard pages and role-based portlet content (page 4 of 4)

Team	Role	PPM Dashboard Page	PPM Dashboard Portlets
LOB - Quality Assurance Team	QA Project Lead	Front Page	• CMQC - Project Listing • My Tasks • My Requests • Project Gantt
		Quality Center	• CMQC - Web Frame Portlet (CM) - Quality Center View
	QA Tester	Front Page	• My Requests • My Tasks
		Quality Center	• CMQC - Web Frame Portlet (CM) - Quality Center
	QA Engineer	Front Page	• My Requests • My Tasks
		Quality Center	• CMQC - Web Frame Portlet (CM) - Applications Under Test

For instructions on how to configure PPM Dashboard modules, see the *Configuring the Standard Interface* guide.

5 HP Center Management for Quality Center QA Testing Projects

Overview of CMQC - QA Testing Projects

The QA Testing Project request type is designed to help QA managers govern their testing projects. Using PPM Center's project and resource management capabilities, a QA lead can generate work plans, allocate resources, track progress, and create key performance indicators for all of their testing initiatives.

A QA testing project provides the following key capabilities:

- You can use HP Project Management to manage testing, work plans, and associated tasks.
- Use HP Resource Management to assign resources to specific project tasks.
- Use your Quality Center project data to review test status and application performance indicators.

In addition, each CMQC - QA Testing Project:

- Comes with a sample work plan, many useful fields, and its own workflow
- Serves as a collection point for QA Test Status reports
- Can be used to collect historical trending data (through QA Test Status reports)
- Provides a single view into QC data. This view is similar to a Quality Center “favorite,” which includes a subset of QC project data.

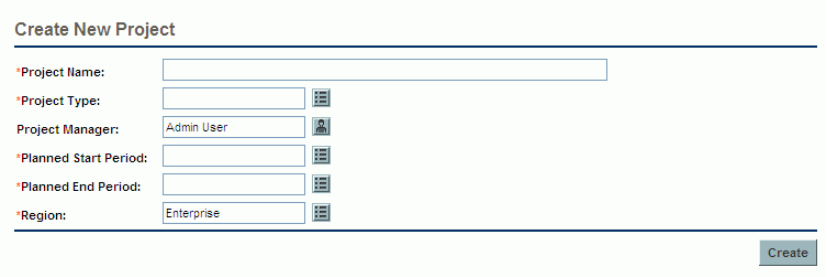
You can create a CMQC - QA Testing Project as an independent project, or link it to a CMQC - QA Application Project to combine data on the quality assurance activities with the application project status.

Creating a CMQC - QA Testing Project

To create a testing project:

1. Log on to PPM Center.
2. From the menu bar, select **Open > Center Management > Quality Management > Initiate Testing Project.**

   The Create New Project page opens.

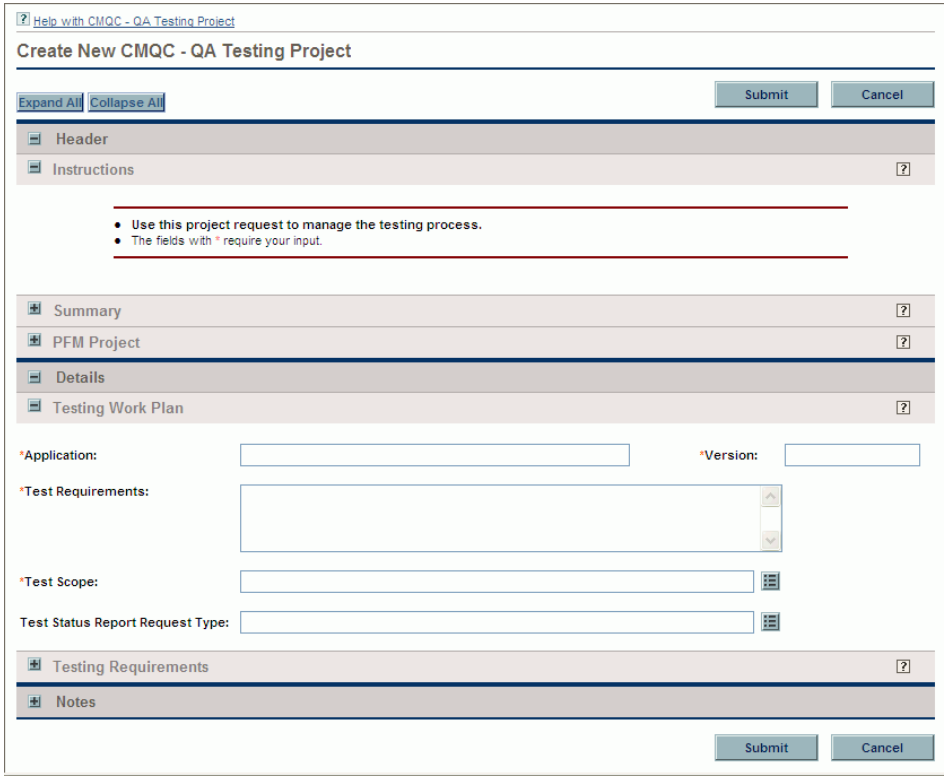


3. Complete the following fields:

Field Name (*Required)	Description
*Project Name	Type a name for the project in this field.
*Project Type	From the auto-complete list, select **CMQC - QA Testing Project Type.**
*Project Manager	From the auto-complete list, assign a resource other than the default (your name) as project manager.
*Planned Start Period	From the auto-complete list, select the calendar period (month and year) during which you expect the project to start.
*Planned End Period	From the auto-complete list, select the calendar period (month and year) during which you expect the project to end.
*Region	From the auto-complete list, specify a region (other than the default) to associate with the project.

4. Click **Create.**

   The Create New CMQC - QA Testing Project page opens.



5. In the **Testing Work Plan** section, complete the following fields:

Field Name (*Required)	Description
*Application	Type the name of the application under test in this field.
*Version	Type the version of the application under test in this field.
*Test Requirements	Type a summary of the testing requirements in this field.
*Test Scope	From the auto-complete list, select one or more items (for example, **Requirements Testing, Unit Testing, Security Testing,** and so on) to reflect the entire scope of the testing effort for this project.
Test Status Report Request Type	From the auto-complete list, select a status report request type to use to provide an overview of testing requirements.

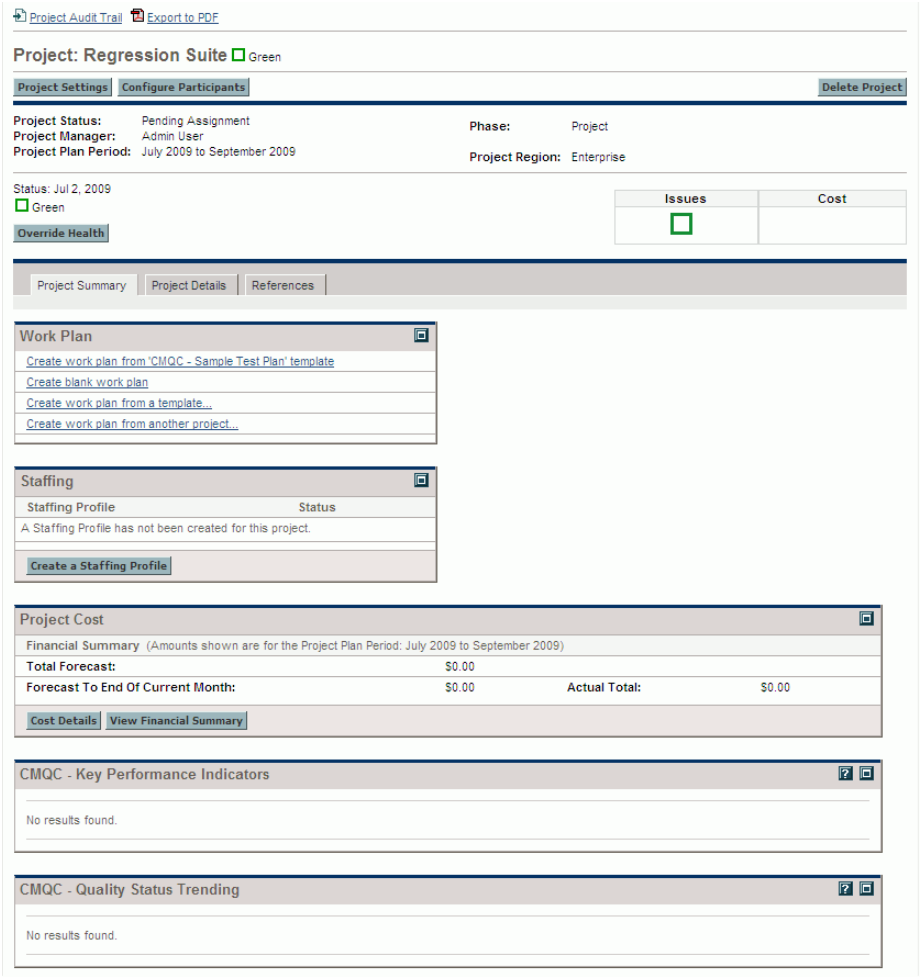
To view descriptions of the remaining (optional) fields on this page, click the **Help with CMQC - Testing Project** link at the top left of the page.

6. (Optional) For each of the types of testing shown in the **Testing Requirements** section (**Requirements Testing, Functional Testing, Performance Testing, Security Testing, User Acceptance Testing, Operational Readiness Testing**), you can complete the following fields:

Field Name (*Required)	Description
Requirements Detail	In this field, type text that provides an overview of testing requirements or goals for this type of testing.
Attachment	Click **Add** in this field to browse for and select a file that provides more detail about the requirements for this type of testing.
URL Reference	Click **Edit** to the right of this field to specify a URL for a Web site that provides details about the requirements for this type of testing.

7. Click **Submit.**

   The Project Overview page opens.



Project Overview Page

After you initiate a new testing project, a new Project Overview page opens. From here, you can (with the required permissions) configure project participants and settings, add portlets to the page, create a work plan, staffing

profile, and budget for the project. Project overview portlets help you track project progress.

Project Overview Portlets

Portlets on of the Project Overview page let you track metrics specific to the application quality effort and outcomes. *Figure 5-1* shows the Project Overview page for an active QA testing project. *Table 5-1* lists the Project Overview portlets available for CMQC testing and application projects.

Project Overview portlets can display project performance data, including project percent complete, trends in project quality, exceptions, milestone data, and much more information vital to effective project management.

Figure 5-1. Project Overview page

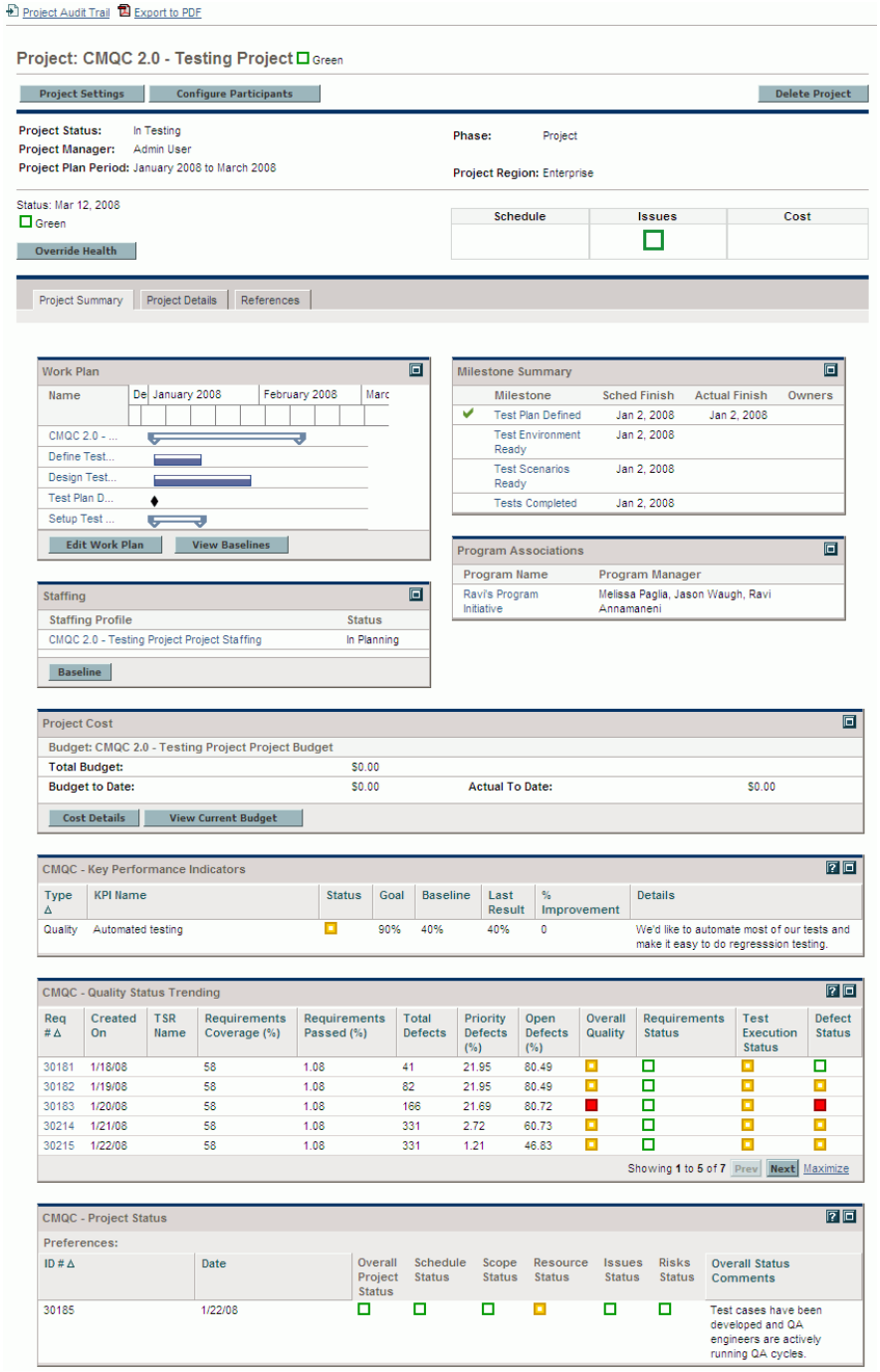


Table 5-1. Project Overview portlets (page 1 of 2)

Portlet Name	Description
CMQC - Key Performance Indicators	Shows current status of user-defined KPIs for both project and quality metrics.
CMQC - Quality Status Trending	Shows overview of all test status reports related to the project.
CMQC - Project Status	Displays the status of the project based on all dimensions.
EV Summary	Displays work plan-level earned value metrics for the project.
Issues	Displays issues logged against the project and includes links to log issues and view all issues.
Program Associations	Lists the programs with which the project is associated (if at least one program association exists).
Project Associations	Lists programs associated with the project. This portlet is print-only and cannot be displayed.
Project Details	Presents information from the **Project Details** tab. This portlet is print-only and cannot be displayed.
Project Exceptions	Displays details of project exceptions, including the violation, task state, start and finish dates, and the assigned resource.
Milestone Summary	Displays a chronological list of all project milestones, along with their scheduled start dates, actual finish dates, and owners.
Project Cost	Provides details on the budget and work plan costs associated with the project.
Project Participants	Lists participants associated with the project. This portlet is print-only and cannot be displayed.
Project References	Displays the references that are attached to the project based on reference types, relationship, time period when they were added, and whether or not they are preventing actions on tasks.

Table 5-1. Project Overview portlets (page 2 of 2)

Portlet Name	Description
Project Summary and Health	Provides a quick status for the selected project or subproject, including information on the project status, project health, percent complete, project manager, and start and finish dates. This portlet is print-only and cannot be displayed.
Risks	Lists the risks associated with the project and displays a link to view all risks.
Scope Changes	Lists project scope changes and displays a link to a view of all scope changes.
Staffing	Displays the staffing profile associated with the project, plus any staffing profile baselines that have been created.
Time Approval	Displays the staffing profile associated with the project and any staffing profile baselines that have been created.
Work Plan	Displays summary tasks, tasks and milestones for the project in Gantt chart format, and includes drill-down to task details.

A few Project Overview portlets cannot be displayed, but can only be printed. These hidden portlets contain information (such as the project name and project manager) from the project header and the project request that is not available in the visible portlets. You can select the print-only portlets when you export a Project Overview page to PDF for printing.

Print-only portlets are visible in the **Layout** section of the Project Overview Layout page, where they are indicated with a grey background.

The position of the print-only portlets within the layout configuration page has no impact on the project summary. The project manager can remove them, although this is not recommended. A user printing the Project Overview page can also exclude these portlets from the exported PDF file.

Exporting the Project Overview Page as a PDF File

You can export the Project Overview page for a project as a PDF file for viewing or printing.

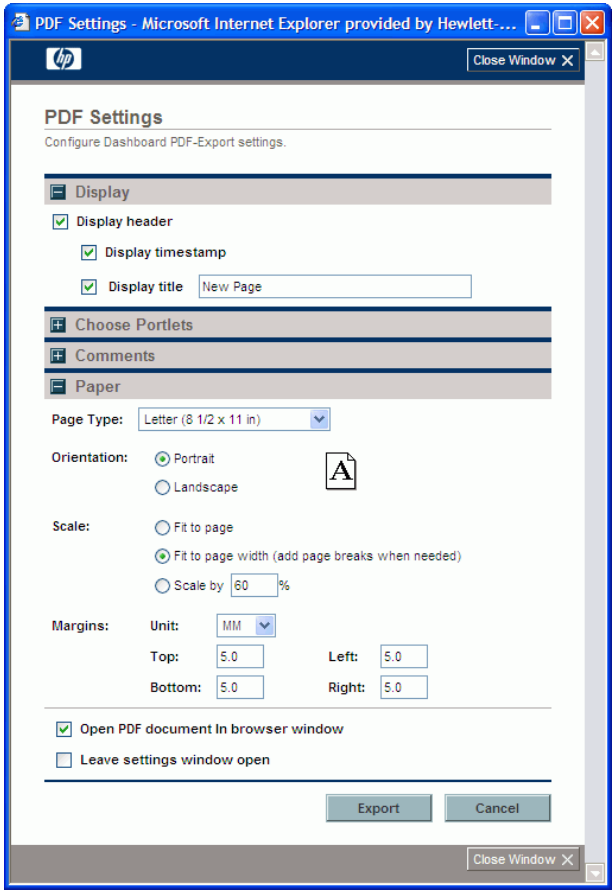
To export the Project Overview page as a PDF file:

1. In PPM Center, search for, and then open the project of interest.

   For information on how to search for and open projects in PPM Center, see the *HP Project Management User's Guide*.

2. At the top of the Project Overview page, select the **Export to PDF** link.

The PDF Settings window opens.



3. To specify which portlets to include in the exported page:

   a. Expand the **Choose Portlets** section.

   b. To exclude a portlet from the exported PDF file, deselect the corresponding checkbox.

4. Configure the remaining PDF page settings, and then click **Export.**

The new PDF file opens in a new browser window.

Configuring Project Settings

Every project type has associated policies, which are formalized business rules that govern various aspects of a project. The project type and its policies determine a project's settings. You can edit policy setting from the Project Settings page.

To view the Project Settings page:

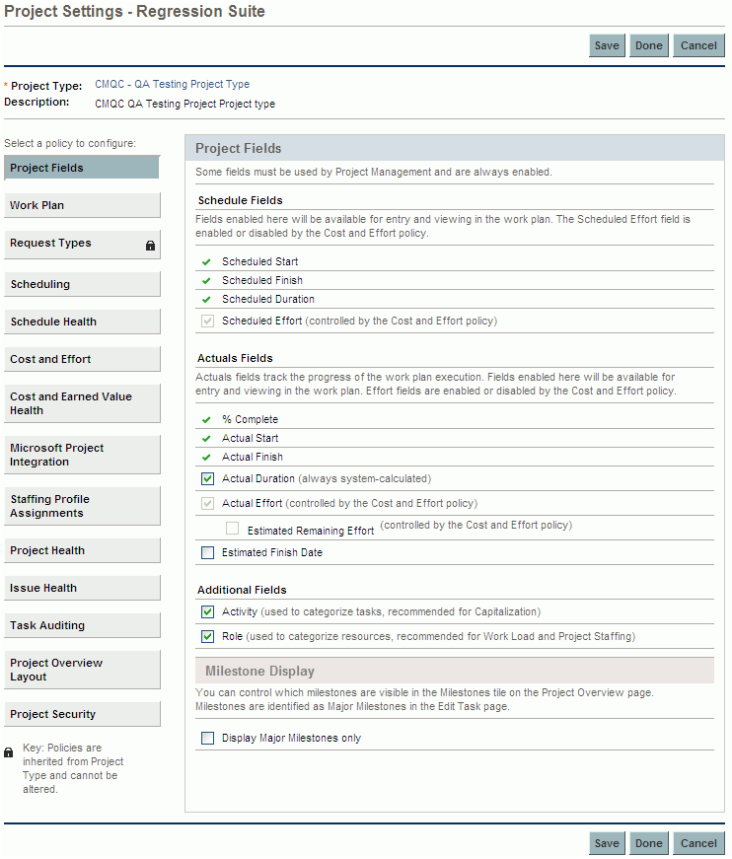
1. Log on to PPM Center.
2. From the menu bar, select **Open > Project Management Project & Tasks > Search Projects.**

   The Search Projects page opens.
3. Complete one or more fields to specify your project search criteria, and then click **Search.**

   The projects that match your search criteria are listed.
4. In the **Project Name** column, click the name of the project to view.

   The Project Overview page opens.

5. Click **Project Settings.**



You can configure the following project policies from the Project Settings page:

- **Project Fields.** The Project Fields policy controls the fields tracked by a work plan. Selecting the checkbox or option next to a field activates it. Some fields contained in the Project Fields policy are required in order for you to take full advantage of HP Project Management functionality, and should be left active.

- **Work Plan.** The Work Plan policy allows you to specify whether a project will have a work plan, as well as suggest or enforce a specific work plan template to be used with the project type.

  The Work Plan policy lets you specify whether a project will have a work plan, as well as suggest or enforce a specific work plan template to be used with the project type. This policy's override behavior is as follows:

  - If you specify a work plan template in the **Work Plan Template** field and specify that the policy cannot be overridden, a project created from this project type can only create a work plan based on this work plan template. Moreover, the default work plan template cannot be changed.
  - If you specify a work plan template in the **Work Plan Template** field and specify that the policy can be overridden, the manager for a project of this type can choose to create the work plan from the default template, another template, or from scratch.
  - If you do not specify a work plan template, the policy can be overridden by default. This is appropriate for project types that do not require a work plan template.

- **Request Types.** The Request Types policy specifies the request type that:
  - Controls the fields displayed on the **Project Details** tab on the Project Overview page. This request type is also associated with the workflow that drives the project process.
  - Represents the project in your portfolio (if you have installed HP Portfolio Management).
  - Is used to report and resolve project issues, report and resolve project risks, and report and resolve project scope changes.
- **Scheduling.** The Scheduling policy specifies options that govern how the work plan is scheduled.
- **Schedule Health.** The Schedule Health policy controls the project's schedule health indicator, and determined the active exception rules for a project.

- **Cost and Effort.** The **Cost and Effort** policy determines how the project costs, effort, and workload are managed, including how this information flows between project entities such as the work plan, staffing profile, budget, and time sheets, if any. The policy determines whether financial information is tracked for the project, how actuals are captured, and how costs are calculated. If you have installed HP Time Management to capture actuals, this policy controls the Time Management settings for a project type. If you do not have HP Time Management installed or choose not to use it, you can select and configure HP Financial Management options.

- **Cost and Earned Value Health.** The Cost and Earned Value Health policy determines whether the cost health for a project is tracked, and if it is, which metrics will be evaluated to determined project health. It is used to indicate the health of a project in terms of its cost.

- **Microsoft Project Integration.** If you integrate HP Project Management and Microsoft Project, you can:

  - Open a Microsoft Project file in HP Project Management
  - Send an HP Project Management work plan to Microsoft Project
  - Use Microsoft Project to maintain the work plan as actuals are collected through HP Project Management
  - Map HP Project Management user data and Microsoft Project custom data

  The Microsoft Project Integration policy controls the level of integration between HP Project Management and Microsoft Project.

- **Staffing Profile Assignments.** HP Resource Management allows you to attach a staffing profile to a project to track resource demand and usage. The Staffing Profile Assignments policy lets you specify a default resource pool to which all resource requests for the staffing profile will be routed. For more information on staffing profiles, see the *HP Resource Management User's Guide.*

- **Project Health.** The project summary condition indicator displayed on the Project Overview page next to the project name reflects the project's overall health as a weighted average of the health indicators for Scheduling, Cost and Earned Value Health, and Issue Health. The Project Health policy determines the relative weights of these indicators. (By default, each indicator is weighted equally.) The Project Health policy also controls whether project managers can override the project's calculated health.

- **Issue Health.** As a project progresses through its workflow, any number of issues may come up that must be submitted and resolved using the project issue request. The issue health indicator (a colored icon similar to the indicators for Scheduling and Cost and Earned Value Health) reflects the real-time project status in terms of the issues submitted against it.

  The Issue Health policy determines whether issue health is tracked for a project, and also controls the factors that affect issue health indicator calculation.

- **Task Auditing.** HP Project Management can maintain an audit trail of changes to task fields as well as a history of task status, which is always recorded. The Task Auditing policy controls which fields are recorded.

To maintain a transaction history for a field, you must first enable the field through the Project Fields policy.

- **Project Overview Layout.** The Project Overview Layout policy controls the many settings used to print and display portlets for a project.

- **Project Security.** The Project Security policy determines whether a summary task owner can edit the summary tasks assigned to them, as well as the users who can view the project and its cost data.

For more detailed information on project policies and instructions on how to configure each of them, see the *HP Project Management User's Guide*.

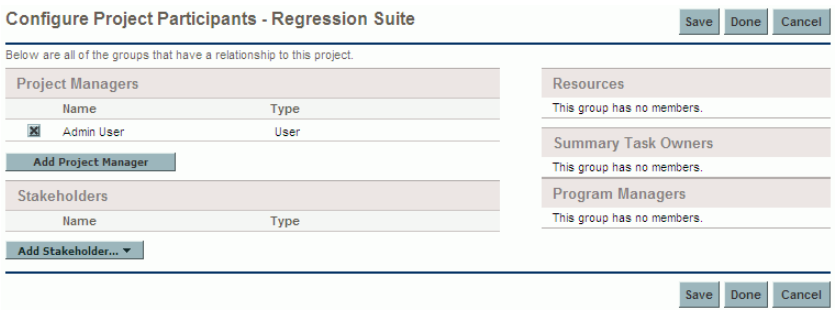
Configuring Project Participants

In HP Project Management, project participants belong to one or more of the following groups:

- **Project managers.** Project managers take part in project planning and management, and oversee project execution, issue resolution, and budget management.
- **Stakeholders.** Stakeholders are users who do not work on a project, but are interested in and need to be updated on project status and progress.
- **Resources.** Resources are project team members who work on project tasks, but do not have the administrative responsibilities of a project manager.
- **Summary Task Owners.** Summary task owners are the people named on summary tasks who have oversight over associated sections of the work plan.
- **Program managers.** Program managers are responsible for managing a collection of projects and their associated scope changes, risks, issues, and resource requests.

You can add participants to a new application project from the Configure Project Participants page, which is shown in *Figure 5-2*.

Figure 5-2. Configure Project Participants page



To open this page from the Project Overview page, click **Configure Participants.** For detailed instructions on how to add project participants, see the *HP Project Management User's Guide.*

CMQC - Testing Project Workflow

The testing projects that you create follow the CMQC - Testing Project workflow, the graphical layout of which is shown in *Figure 5-3* on page 67.

The CMQC - Testing Project workflow is the default workflow attached to new CMQC-testing projects. You can create a different workflow and assign it to a project. For information on how to create a workflow, see the *HP Demand Management Configuration Guide*.

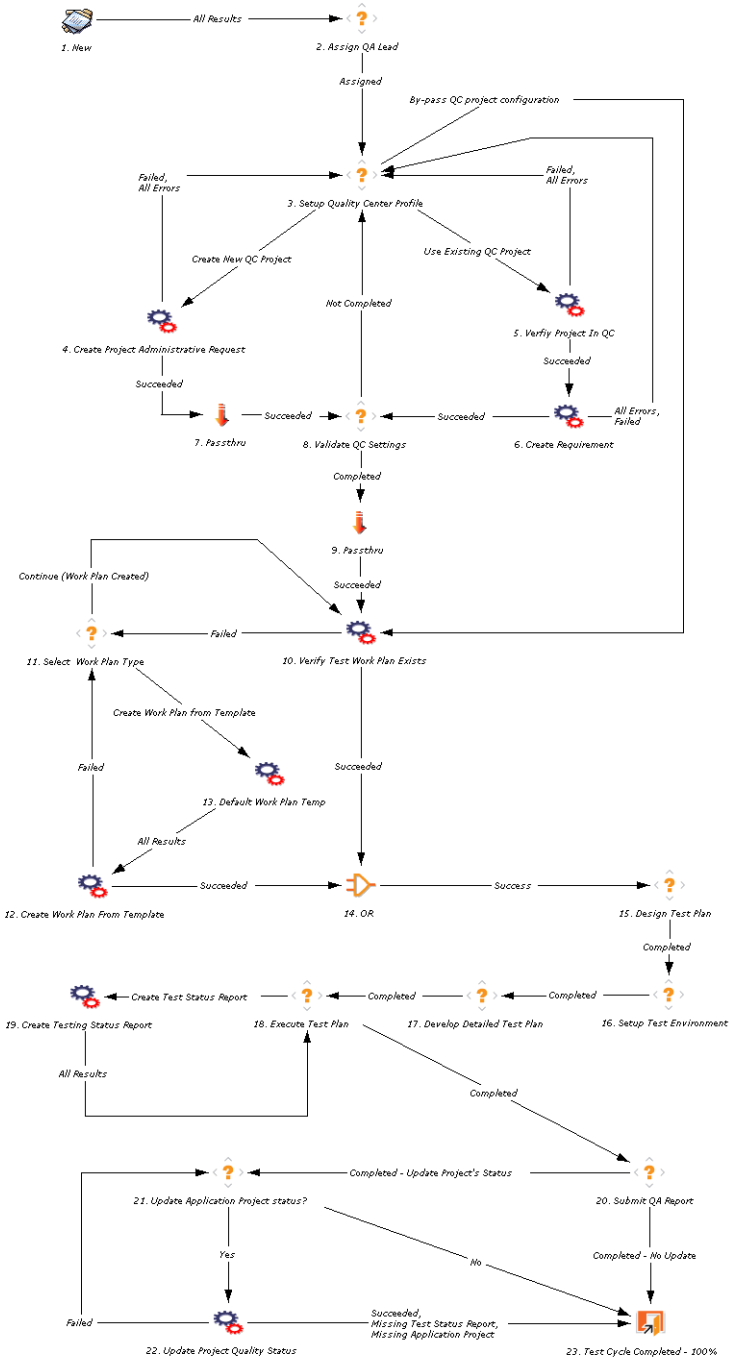
The CMQC - Testing Project workflow includes the following steps:

1. Create a test plan.
2. Set up the testing environment.
3. Specify test plan details and determine required testing assets.
4. Run tests.
5. Generate test status reports.
6. Submit a final QA report detailing test results and application quality status.

Table 5-2 on page 68, *Table 5-3* on page 69, and *Table 5-4* on page 70 list descriptions of the steps in all three phases of the CMQC - QA Testing Project workflow.

The actual testing activities (defining test requirements, recording test scripts, running tests, and so on) are performed in Quality Center. The QA testing project within the CMQC provides an overriding structure and best practices for governing the testing effort within the application lifecycle.

Figure 5-3. CMQC - QA Testing Project workflow



A QA testing project begins with the submission of a request form that details the requirements for the application quality effort, including project scope, testing requirements, and test plan details. As the request passes through the workflow, it is assigned to the QA manager, who is responsible for overseeing the project's progress and reporting on its status.

Through a link to the QC project, a QA testing project can receive automatic updates on the test status. To take advantage of this feature, HP recommends that you establish a connection between two such projects.

The QA manager can link a QA testing project to an existing QC project, or create a new QC project, in which case he must submit a Quality Center Administrative Request. (For additional information on QC Administrative requests, see Chapter 10, *Managing Quality Center of Excellence Administrative Activity,* on page 165).

The QA lead must verify that the specified Quality Center project is valid, and that the requirement ID provided corresponds to the parent requirement for the entire testing effort. This requirement ID is used to report on coverage and test results. The details of this phase of the testing project workflow are described in *Table 5-2*.

Table 5-2. CMQC - QA Testing Project workflow - Phase 1 (page 1 of 2)

	Workflow Step	Description
1.	New	A new testing project request is submitted.
2.	Assign QA Lead	The request is assigned to a QA manager.
3.	Set Up Quality Center Profile	If a new QC project is required, the QA manager may choose to submit a new QC administrative request to automate its creation. Alternatively, the QA Testing Project request may be assigned to an existing QC project.
4.	Create Project Administrative Request	The QA manager creates a QC administrative request and attaches it as a reference to the QA testing project request. This administrative request is a child of the QA testing project request. The administrative request is used to create a new QC project, which is then linked to this testing initiative.

Table 5-2. CMQC - QA Testing Project workflow - Phase 1 (page 2 of 2)

	Workflow Step	Description
5.	Verify Project In QC	Information provided for the QC instance is verified.
6.	Create Requirement	This step checks to determine whether the specified requirement path exists in the particular QC project. If the path does not exist, it is generated. • If a new requirement path is specified, it is created in the QC project, and a new QC requirement ID is assigned. • If a requirement ID is set, the path corresponding to the requirement ID is displayed in the requirement field.
8.	Passthru	This automated check determines whether the requirement path and ID settings were completed.
7.	Validate QC Settings	The QA lead verifies the QC project and requirements settings.
9.	Passthru	This automated check determines whether the field(s) required to validate the QC settings were completed.

During Phase 2, the assigned QA manager either creates a work plan for the QA testing project based on a work plan template, or associates an existing PPM Center work plan as a reference to this QA testing project request. Phase 2 workflow steps are described in *Table 5-3*.

Table 5-3. CMQC - QA Testing Project workflow - Phase 2 (page 1 of 2)

	Workflow Step	Description
10.	Verify Test Work Plan Exists	The QA manager verifies that a test work plan exists.
11.	Select Work Plan Type	The QA manager selects a work plan template on which to base a new work plan for the QA testing project.

Table 5-3. CMQC - QA Testing Project workflow - Phase 2 (page 2 of 2)

	Workflow Step	Description
12.	Create Work Plan From Template	The QA manager creates a work plan based on the selected work plan template.
13	Default Work Plan Temp	This step retrieves the default work plan template from the project type, which can be used as the basis to create a work plan at a later workflow step.
14.	OR	If either step 9 or step 11 was successful, the request moves to the next step.

During Phase 3 of the workflow, the QA manager designs a testing plan, sets up the test lab environment, and then monitors the workflow steps to ensure a comprehensive and consistent testing effort. HP recommends that the QA manager create and distribute periodic test status reports to identify trends and provide visibility into the testing project.

CMQC provides the ability to automatically query the QC project and gather data on application quality and progress of the testing effort. For details on test status report requests, see Chapter 9, *QA Test Status Reports,* on page 153. Before a QA testing project can be closed, the QA lead submits a final application quality status report to project management and other stakeholders. Quality KPIs are a key factor in determining whether the application is ready for deployment. The details of Phase 3 of the testing project workflow are described in *Table 5-4*.

Table 5-4. CMQC - QA Testing Project workflow - Phase 3 (page 1 of 2)

	Workflow Step	Description
15.	Design Test Plan	The QA lead designs a test plan for the project.
16.	Set up Test Environment	The QA lead sets up the testing environment for the application under test.
17.	Develop Detailed Test Plan	The QA lead develops test scripts and any related assets for the testing effort.

Table 5-4. CMQC - QA Testing Project workflow - Phase 3 (page 2 of 2)

	Workflow Step	Description
18.	Execute Test Plan	This step is used to indicate the start of application testing. The QA lead may choose to automate the creation of test status reports that retrieve progress data on test coverage and defect status.
19.	Create Testing Status Report	The test status report request is automatically generated and attached as a reference.
20.	Submit QA Report	The QA lead submits a report to project management and application development stakeholders. The results in the KPI table can be uploaded to the linked application project's KPI table to update the project management team on the status of the QA effort.
21.	Update Application Project Status?	Updates the status fields (overall quality, requirements coverage and review status, test execution results, and defect statistics) in the application project, which is a parent of this QA testing project request. A test status report request must be created for this testing project to upload data on requirements, test execution, and defects.
22.	Update Project Quality Status	This step updates the quality status information in associated application project (if any).
23.	Test Cycle Completed	This step closes the QA testing project request.

For detailed information on how to work with workflows, see the *HP Demand Management Configuration Guide* or the *HP Deployment Management Configuration Guide.*

Creating and Managing Work Plans

Once you have created a project, you can create its work plan. A work plan is a vital tool that organizes specific project tasks and deliverables into a hierarchical structure that makes project work easier to prioritize and track. It covers the all project requirements and the steps required to meet them. It helps keep a project team aware of what they need to do and when they need to do it.

Project managers oversee work plans to ensure they accurately reflect current project status through all phases of the project lifecycle. With a well-managed work plan, a project team always knows what work has been completed, and what work remains to be done.

The work plan contains the work breakdown structure of the application or testing project, which defines such project elements as:

- Task hierarchy
- Resources or skills assigned to tasks
- Task and project schedule
- Project exception monitoring
- Project milestones
- Baselines
- Project budget
- Expected cost and effort
- Import a work plan from Microsoft Project
- Build a work plan from scratch

Work-Plan Templates

Work plan templates are used in HP Project Management to create repeatable processes to be used as a model and basis for new projects. These templates speed up work-plan setup.

A work plan template consists of a reusable set of tasks that you can use to create a work plan and at the same time preserve any notifications, resource assignments, and predecessors. For example, a company with several different software product projects might use the same workflow for all development efforts. Instead of creating a separate work plan from scratch for each new project, the company can use a work plan template to quickly create the work plans. A project manager can modify information for an individual project, as needed.

The default workflows for CMQC projects require that you associate a work plan with the project. You do this from HP Project Management.

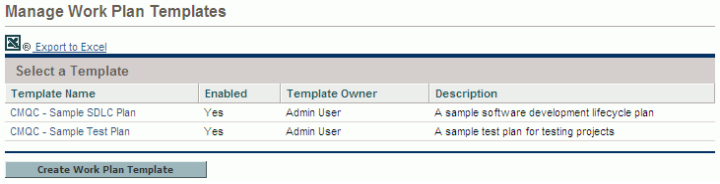
PPM Center provides two out-of-the-box work plan templates for CMQC projects. The CMQC - Sample SDLC Plan is designed for creating work plans for CMQC - application projects, and the CMQC - Sample Test Plan template is designed for creating work plans for CMQC QA testing projects.

If the CMQC - Sample Test Plan template does not suite your needs for all of your QA testing project work plans, you can revise it and save it as a new template, or create a template from scratch to better address your project needs.

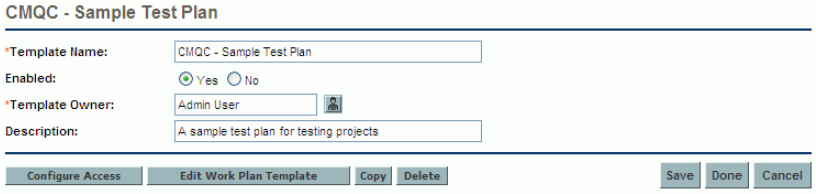
To view the CMQC - Sample Test Plan template:

1. Log on to PPM Center.
2. From the menu bar, select **Open > Administration > Project Types and Templates > Manage Work Plan Templates.**

   The Manage Work Plan Templates page opens.

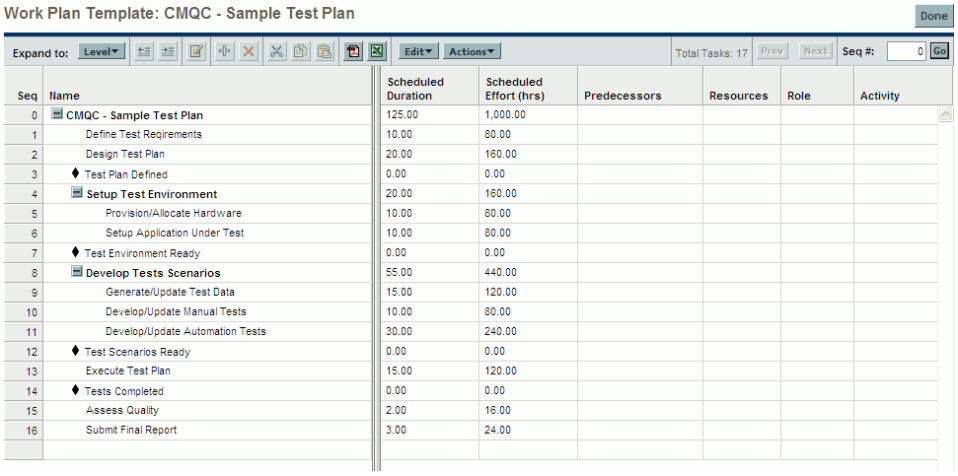


3. In the **Template Name** column, click **CMQC - Sample Test Plan.**



4. Click **Edit Work Plan Template.**

   The Work Plan Template page opens.



Seq	Name	Scheduled Duration	Scheduled Effort (hrs)	Predecessors	Resources	Role	Activity
0	CMQC - Sample Test Plan	125.00	1,000.00				
1	Define Test Requirements	10.00	80.00				
2	Design Test Plan	20.00	160.00				
3	Test Plan Defined	0.00	0.00				
4	Setup Test Environment	20.00	160.00				
5	Provision/Allocate Hardware	10.00	80.00				
6	Setup Application Under Test	10.00	80.00				
7	Test Environment Ready	0.00	0.00				
8	Develop Tests Scenarios	55.00	440.00				
9	Generate/Update Test Data	15.00	120.00				
10	Develop/Update Manual Tests	10.00	80.00				
11	Develop/Update Automation Tests	30.00	240.00				
12	Test Scenarios Ready	0.00	0.00				
13	Execute Test Plan	15.00	120.00				
14	Tests Completed	0.00	0.00				
15	Assess Quality	2.00	16.00				
16	Submit Final Report	3.00	24.00				

For instructions on how to create and edit work plans and work plan templates, see the *HP Project Management User's Guide.*

6 HP Center Management for Quality Center Application Projects

Overview of CMQC Application Projects

Application delivery is a complex process that involves development, testing, and fine tuning before production deployment. To ensure successful business outcomes, application quality must be approached as a consistent process that is part of the overall application delivery lifecycle.

The IT projects you create and manage in PPM Center provide visibility into IT tasks and promote collaboration between IT and the LOB. This enables businesses to consolidate, prioritize, and fulfill demand for both strategic projects and day-to-day activities, and also manage service levels. CMQC extends this PPM Center functionality to include quality steps in the application delivery project processes and workflows.

By linking the HP Quality Center and PPM Center projects and extending the workflow to include the essential testing steps, CMQC helps keep applications aligned with business objectives and provides the entire organization with visibility into quality effort's resources, progress, and metrics. The project manager manages the application project, while the QA lead, development lead, and operations lead ensure that the key phases of the development lifecycle are successfully completed.

This chapter contains instructions on how to create CMQC application projects. It also provides high-level information about project work plans, and details about the workflow and workflow steps that define an application project's lifecycle.

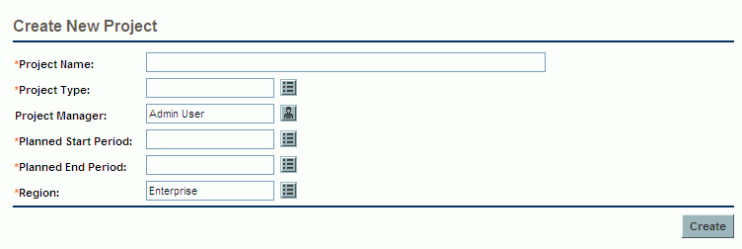
To meet the requirements of your organization, you can create projects types. For instructions, see the PPM Center *HP Project Management Configuration Guide.*

Creating a CMQC - Application Project

To create an application project:

1. Log on to PPM Center.
2. From the menu bar, select **Open > Center Management > Quality Management > Initiate Testing Project.**

   The Create New Project page opens.

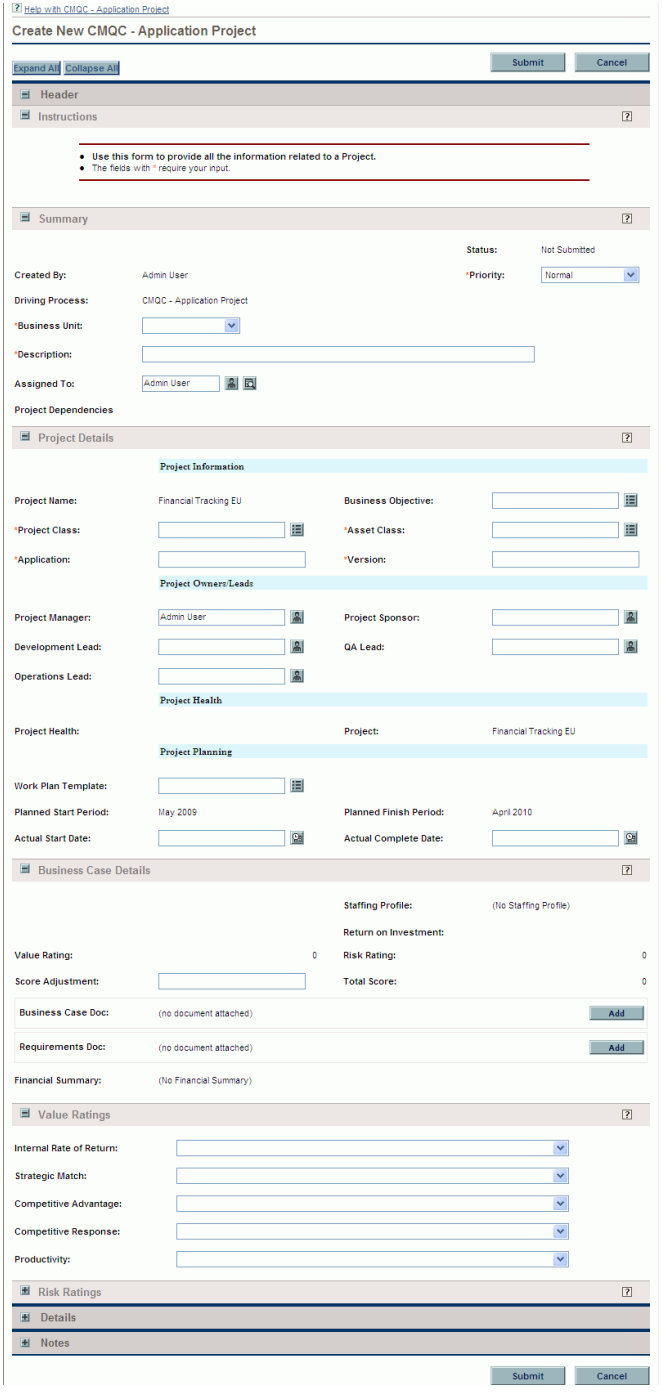


3. Complete the following fields:

Field Name (*Required)	Description
*Project Name	Type a name for the project in this field.
*Project Type	From the auto-complete list, select **CMQC - Application Project Type.**
*Project Manager	From the auto-complete list, assign a resource other than the default (your name) as project manager.
*Planned Start Period	From the auto-complete list, select the calendar period (month and year) during which you expect the project to start.
*Planned End Period	From the auto-complete list, select the calendar period (month and year) during which you expect the project to end.
*Region	From the auto-complete list, specify a region (other than the default) to associate with the project.

4. Click **Create.**

The Create New CMQC - Application Project page opens.



To view descriptions of the fields in each section of this page, click the **Help with CMQC - Application Project** link at the top left of the page.

5. Complete the following fields in the **Summary** section:

Field Name (*Required)	Description
*Priority	To change the project priority to a value other than Normal, select a value from this list.
*Business Unit	From this list, select the business unit on behalf of which you are creating the project.
*Description	Type a short description of the project.
Assigned To	From the auto-complete list or the resource selector, specify a resource to be responsible for completing or managing the application project request.

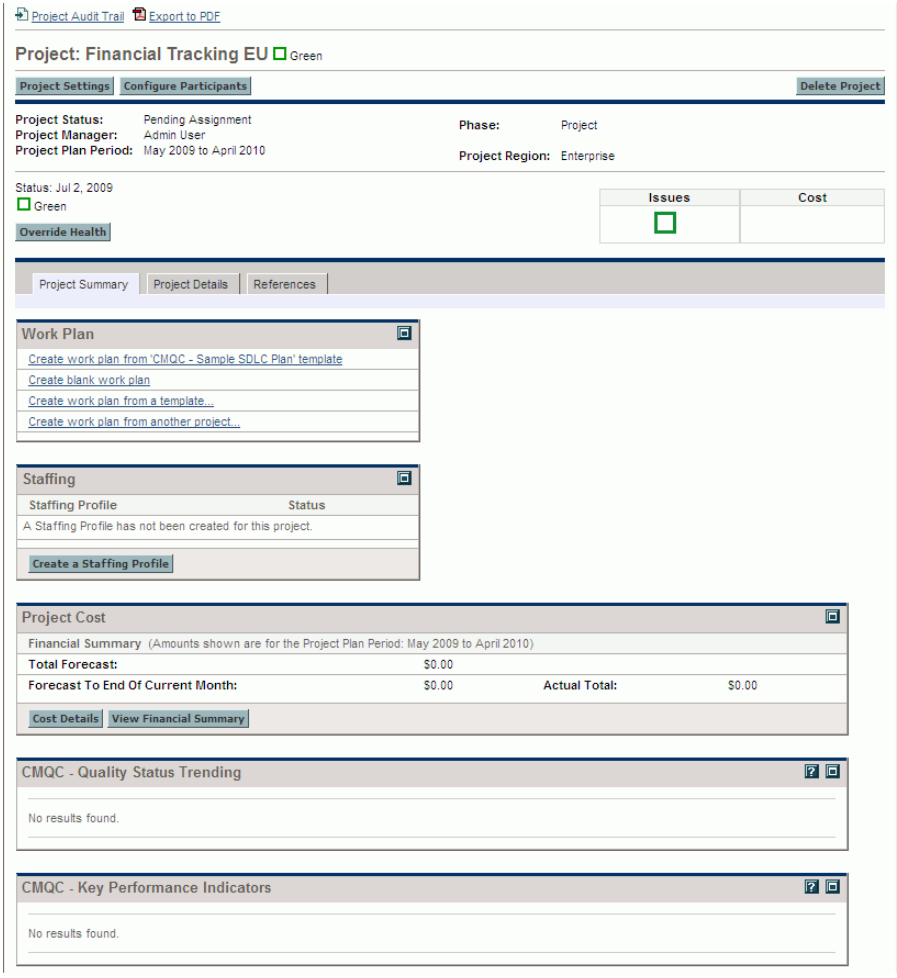
6. Complete the following fields in the **Project Details** section:

Field Name (*Required)	Description
Project Information	
Business Objective	From the auto-complete list, specify a business objective for the project.
*Project Class	From the auto-complete list, select the project class (such as growth, innovation, core, and so on).
*Asset Class	From the auto-complete list, specify the class of asset the project produces (such as informational, infrastructure, transaction, and so on).
*Application	Type the product or application name in this field.
*Version	Type the product or application version in this field.
Project Owners/Leads	
Project Manager	From the list, select the name of the resource to act as the project manager responsible for the application project request.

Field Name (*Required)	Description
Project Sponsor	From the list, select the name of the project sponsor supporting the application or project initiative.
Development Lead	From the list, select the name of the resource to be responsible for overseeing project development.
QA Lead	From the list, select the name of the QA manager or lead responsible for the project testing effort.
Operations Lead	From the list, select the name of the operations lead responsible for application deployment.
Project Planning	
Work Plan Template	From the auto-complete list, select an existing PPM Center work plan. This value must match the project name, or the name of an existing PPM Center project.

7. Click **Submit.**

   The Project Overview page opens.


Project Audit Trail
Export to PDF
Project: Financial Tracking EU Green
Project Settings
Configure Participants
Delete Project
Project Status: Pending Assignment
Project Manager: Admin User
Project Plan Period: May 2009 to April 2010
Phase: Project
Project Region: Enterprise
Status: Jul 2, 2009
Green
Override Health
Issues
Cost
Project Summary
Project Details
References
Work Plan
Create work plan from 'CMQC - Sample SDLC Plan' template
Create blank work plan
Create work plan from a template...
Create work plan from another project...
Staffing
Staffing Profile
Status
A Staffing Profile has not been created for this project.
Create a Staffing Profile
Project Cost
Financial Summary (Amounts shown are for the Project Plan Period: May 2009 to April 2010)
Total Forecast: $0.00
Forecast To End Of Current Month: $0.00
Actual Total: $0.00
Cost Details
View Financial Summary
CMQC - Quality Status Trending
No results found.
CMQC - Key Performance Indicators
No results found.

Project Overview Page

After you initiate a new application project, a new Project Overview page opens. From here, you can (with the required permissions) configure project participants and settings, add portlets to the page, create a work plan, staffing profile, and budget for the project. The Project Overview portlets help you track project progress.

Project Overview Portlets

Portlets on the Project Overview page let you track metrics specific to the application quality effort and outcomes. *Figure 6-1* shows the Project Overview page for an active CMQC application project. *Table 6-1* lists the Project Overview portlets available for CMQC application projects and QA testing projects.

Project Overview portlets can display project performance data, including project percent complete, trends in project quality, exceptions, milestone data, and much more information vital to effective project management.

Figure 6-1. Project Overview page

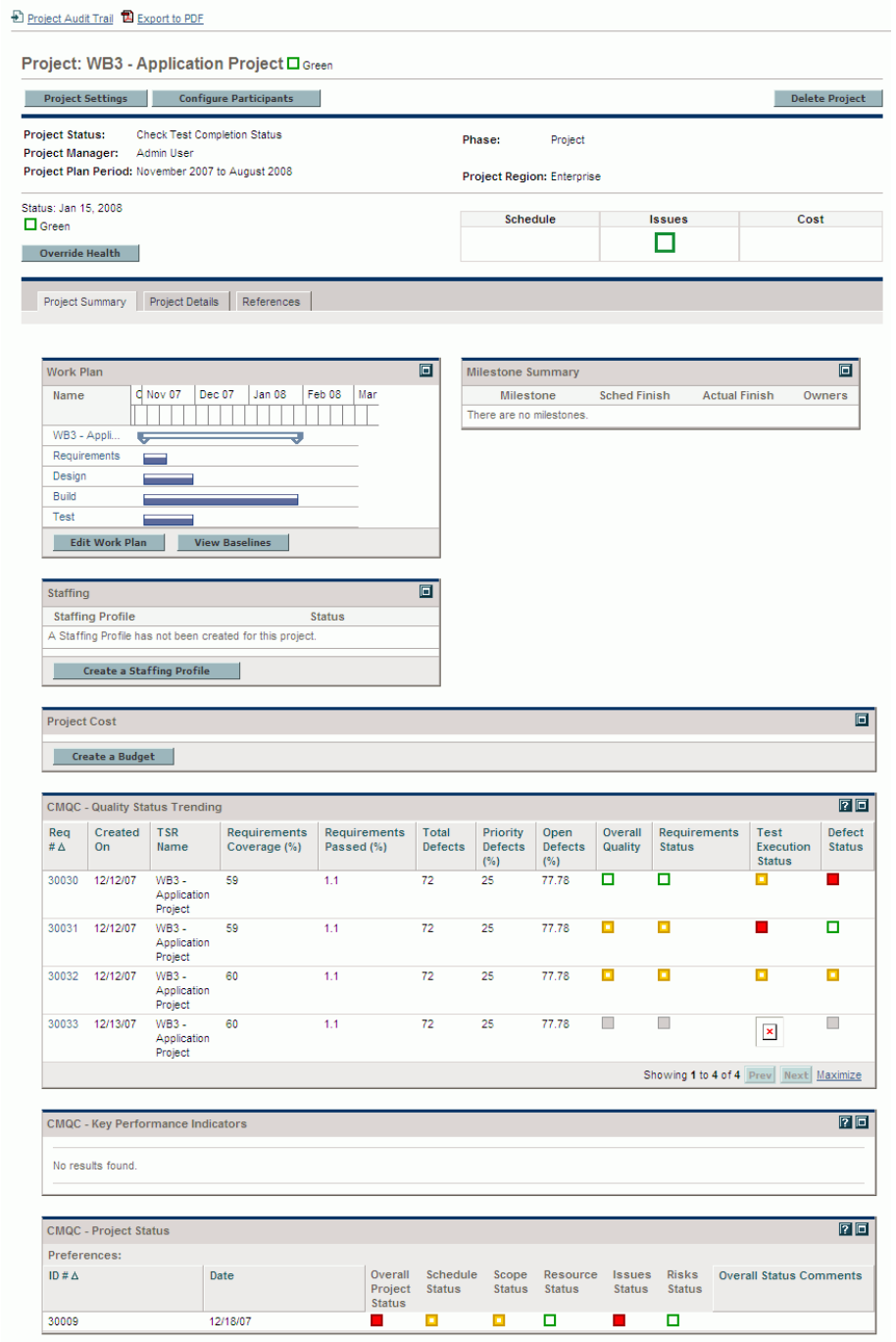


Table 6-1. Project Overview portlets (page 1 of 2)

Portlet Name	Description
CMQC - Key Performance Indicators	Shows current status of user-defined KPIs for both project and quality metrics.
CMQC - Quality Status Trending	Shows overview of all test status reports related to the project.
CMQC - Project Status	Displays the status of the project based on all dimensions.
EV Summary	Displays work plan-level earned value metrics for the project.
Issues	Displays issues logged against the project and includes links to log issues and view all issues.
Program Associations	Lists the programs with which the project is associated (if at least one program association exists).
Project Associations	Lists programs associated with the project. This portlet is print-only and cannot be displayed.
Project Details	Presents information from the **Project Details** tab. This portlet is print-only and cannot be displayed.
Project Exceptions	Displays details of project exceptions, including the violation, task state, start and finish dates, and the assigned resource.
Milestone Summary	Displays a chronological list of all project milestones, along with their scheduled start dates, actual finish dates, and owners.
Project Cost	Provides details on the budget and work plan costs associated with the project.
Project Participants	Lists participants associated with the project. This portlet is print-only and cannot be displayed.
Project References	Displays the references that are attached to the project based on reference types, relationship, time period when they were added, and whether or not they are preventing actions on tasks.

Table 6-1. Project Overview portlets (page 2 of 2)

Portlet Name	Description
Project Summary and Health	Provides a quick status for the selected project or subproject, including information on the project status, project health, percent complete, project manager, and start and finish dates. This portlet is print-only and cannot be displayed.
Risks	Lists the risks associated with the project and displays a link to view all risks.
Scope Changes	Lists project scope changes and displays a link to a view of all scope changes.
Staffing	Displays the staffing profile associated with the project, plus any staffing profile baselines that have been created.
Time Approval	Displays the staffing profile associated with the project and any staffing profile baselines that have been created.
Work Plan	Displays summary tasks, tasks and milestones for the project in Gantt chart format, and includes drill-down to task details.

A few Project Overview portlets cannot be displayed, but can only be printed. These hidden portlets contain information (such as the project name and project manager) from the project header and the project request that is not available in the visible portlets. You can select the print-only portlets when you export a Project Overview page to PDF for printing.

Print-only portlets are visible in the **Layout** section of the Project Overview Layout page. They are indicated with specialized styles, such as a grey background color.

The position of the print-only portlets within the layout configuration page has no impact on the project summary. The project manager can remove them, although this is not recommended. A user printing the Project Overview page can also exclude these portlets from the exported PDF file.

Exporting the Project Overview Page as a PDF File

You can export the Project Overview page for a project as a PDF file for viewing or printing.

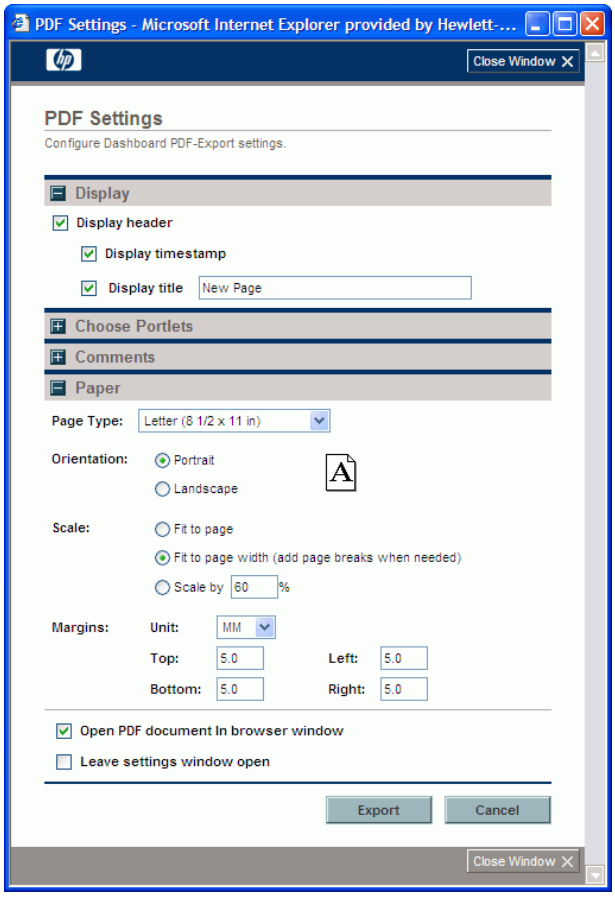
To export the Project Overview page as a PDF file:

1. In PPM Center, search for, and then open the project of interest.

   For information on how to search for and open projects in PPM Center, see the *HP Project Management User's Guide*.

2. At the top of the Project Overview page, select the **Export to PDF** link.

The PDF Settings window opens.



3. Configure the PDF page settings, and then click **Export.**

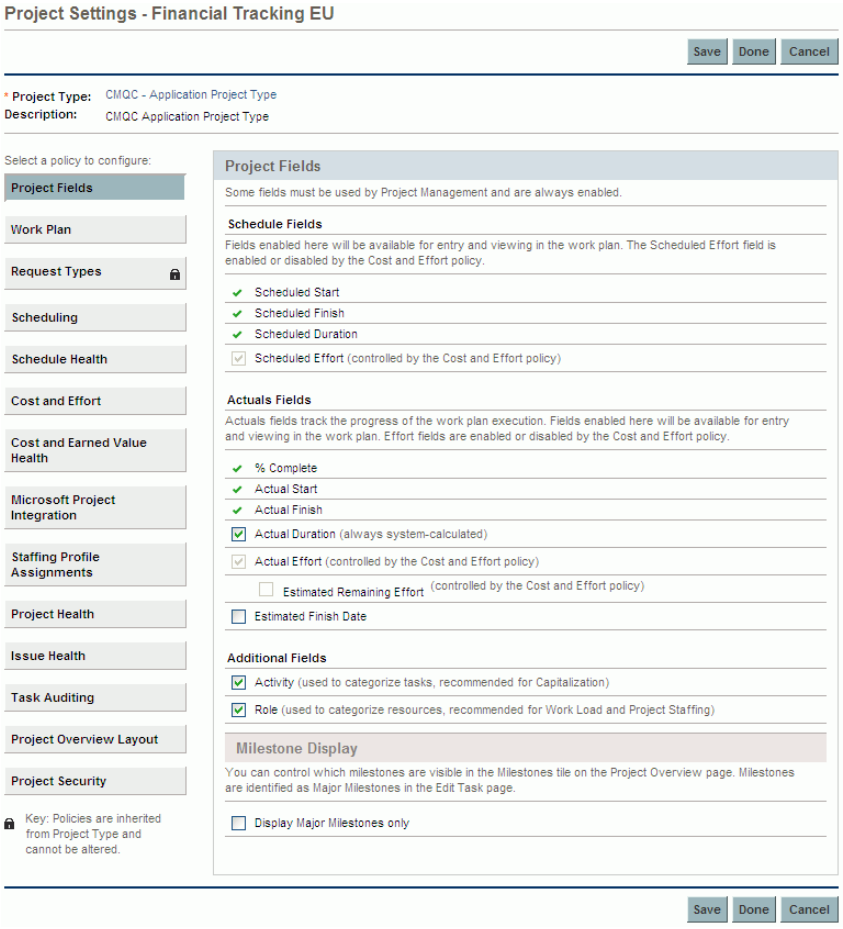
   The PDF file opens in a new browser window.

Configuring Project Settings

Every project type has associated policies, which are formalized business rules that govern various aspects of a project. The project type and its policies determine a project's settings. You can edit policy setting from the Project Settings page.

To view the Project Settings page:

- From the Project Overview page, click **Project Settings.**



You can configure the following project policies from the Project Settings page:

- **Project Fields.** The Project Fields policy controls the fields tracked by a work plan. Selecting the checkbox or option next to a field activates it. Some fields contained in the Project Fields policy are required in order for you to take full advantage of HP Project Management functionality, and should be left active.
- **Work Plan.** The Work Plan policy allows you to specify whether a project will have a work plan, as well as suggest or enforce a specific work plan template to be used with the project type.

  The Work Plan policy lets you specify whether a project will have a work plan, as well as suggest or enforce a specific work plan template to be used with the project type. This policy's override behavior is as follows:

  - If you specify a work plan template in the **Work Plan Template** field and specify that the policy cannot be overridden, a project created from this project type can only create a work plan based on this work plan template. Moreover, the default work plan template cannot be changed.
  - If you specify a work plan template in the **Work Plan Template** field and specify that the policy can be overridden, the manager for a project of this type can choose to create the work plan from the default template, another template, or from scratch.
  - If you do not specify a work plan template, the policy can be overridden by default. This is appropriate for project types that do not require a work plan template.
- **Request Types.** The Request Types policy specifies the request type that:
  - Controls the fields displayed on the **Project Details** tab on the Project Overview page. This request type is also associated with the workflow that drives the project process.
  - Represents the project in your portfolio (if you have installed HP Portfolio Management).
  - Is used to report and resolve project issues, report and resolve project risks, and report and resolve project scope changes.

- **Scheduling.** The Scheduling policy specifies options that govern how the work plan is scheduled.
- **Schedule Health.** The Schedule Health policy controls the project's schedule health indicator, and determines the active exception rules for a project.
- **Cost and Effort.** The Cost and Effort policy determines how the project costs, effort, and workload are managed, including how this information flows between project entities such as the work plan, staffing profile, budget, and time sheets, if any. The policy determines whether financial information is tracked for the project, how actuals are captured, and how costs are calculated. If you have installed HP Time Management to capture actuals, this policy controls the Time Management settings for a project type. If you do not have HP Time Management installed or choose not to use it, you can select and configure HP Financial Management options.
- **Cost and Earned Value Health.** The Cost and Earned Value Health policy determines whether the cost health for a project is tracked, and if it is, which metrics will be evaluated to determined project health. It is used to indicate the health of a project in terms of its cost.
- **Microsoft Project Integration.** If you integrate HP Project Management and Microsoft Project, you can:
  - Open a Microsoft Project file in HP Project Management
  - Send an HP Project Management work plan to Microsoft Project
  - Use Microsoft Project to maintain the work plan as actuals are collected through HP Project Management
  - Map HP Project Management user data and Microsoft Project custom data

  The Microsoft Project Integration policy controls the level of integration between HP Project Management and Microsoft Project.
- **Staffing Profile Assignments.** HP Resource Management allows you to attach a staffing profile to a project to track resource demand and usage. The Staffing Profile Assignments policy lets you specify a default resource pool to which all resource requests for the staffing profile will be routed.

For more information on staffing profiles, see the *HP Resource Management User's Guide.*

- **Project Health.** The project summary condition indicator displayed on the Project Overview page next to the project name reflects the project's overall health as a weighted average of the health indicators for Scheduling, Cost and Earned Value Health, and Issue Health. The Project Health policy determines the relative weights of these indicators. (By default, each indicator is weighted equally.) The Project Health policy also controls whether project managers can override the project's calculated health.

- **Issue Health.** As a project progresses through its workflow, any number of issues may come up that must be submitted and resolved using the project issue request. The issue health indicator (a colored icon similar to the indicators for Scheduling and Cost and Earned Value Health) reflects the real-time project status in terms of the issues submitted against it.

  The Issue Health policy determines whether issue health is tracked for a project, and also controls the factors that affect issue health indicator calculation.

- **Task Auditing.** HP Project Management can maintain an audit trail of changes to task fields as well as a history of task status, which is always recorded. The Task Auditing policy controls which fields are recorded.

To maintain a transaction history for a field, you must first enable the field through the Project Fields policy.

- **Project Overview Layout.** The Project Overview Layout policy controls the many settings used to print and display portlets for a project.

- **Project Security.** The Project Security policy determines whether a summary task owner can edit the summary tasks assigned to them, as well as the users who can view the project and its cost data.

For more detailed information on project policies and instructions on how to configure each of them, see the *HP Project Management User's Guide.*

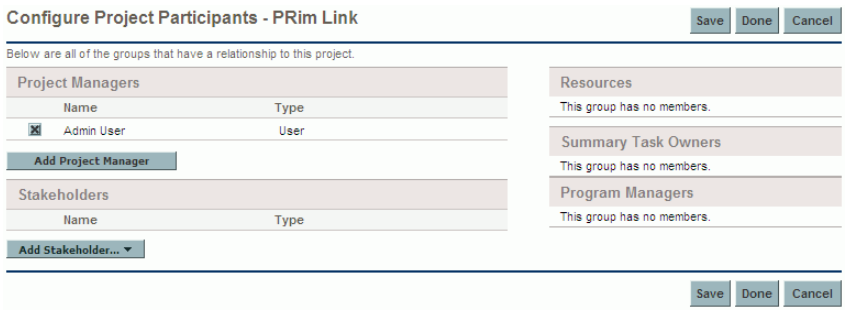
Configuring Project Participants

In HP Project Management, project participants belong to one or more of the following groups:

- **Project managers.** Project managers take part in project planning and management, and oversee project execution, issue resolution, and budget management.
- **Stakeholders.** Stakeholders are users who do not work on a project, but are interested in and need to be updated on project status and progress.
- **Resources.** Resources are project team members who work on project tasks, but do not have the administrative responsibilities of a project manager.
- **Summary Task Owners.** Summary task owners are the people named on summary tasks who have oversight over associated sections of the work plan.
- **Program managers.** Program managers are responsible for managing a collection of projects and their associated scope changes, risks, issues, and resource requests.

You can add participants to a new application project from the Configure Project Participants page, which is shown in *Figure 6-2*.

Figure 6-2. Configure Project Participants page



To open this page from the Project Overview page, click **Configure Participants.** For detailed instructions on how to add project participants, see the *HP Project Management User's Guide.*

CMQC - Application Project Workflow

The application projects that you create follow the CMQC - Application Project workflow.

The CMQC - Application Project workflow is the default workflow attached to new application projects. You can create and assign a different workflow for a project. For information on how to create a workflow, see the *HP Demand Management Configuration Guide*.

To view this workflow in the PPM Workbench:

1. Log on to PPM Center.
2. From the menu bar, select **Open > Administration > Open Workbench.**

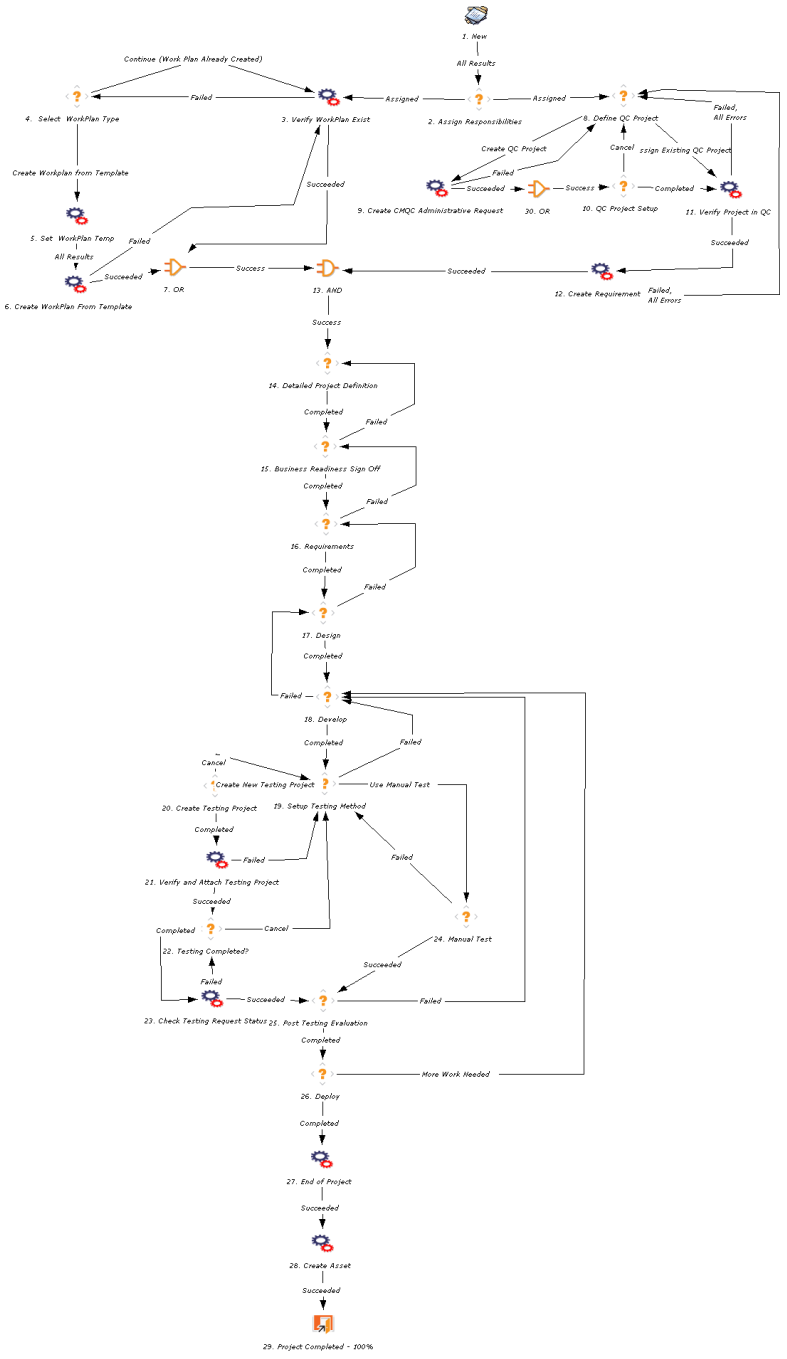
   The PPM Workbench opens.
3. From the shortcut bar, select **Configuration > Workflows.**

   The Workflows Workbench opens.
4. Click **List.**
5. In the **Workflow Name** column, double-click **CMQC - Application Project.**

   The Workflow window opens to the **Layout** tab, which displays a graphical view of the workflow. *Figure 6-3* shows the layout of the CMQC - Application Project workflow.

Table 6-2 on page 95 provides descriptions of each step in the workflow, which is based on the best practices for application delivery.

Figure 6-3. Layout of the CMQC - Application Project workflow



Phases of the CMQC - Application Project Workflow

The CMQC - Application Project workflow includes three major phases:

Phase 1. Submit a CMQC application project in PPM Center.

Phase 2. Define and create a Quality Center project.

Phase 3. Follow the *software development life cycle* (SDLC) through application design, development, testing, and deployment.

During Phase 1, a user in an LOB or member of the Quality CoE on behalf of an LOB creates an application project. The application project information includes high-level objectives and requirements for the project, including initial justification, business need, completion time, and resource estimate.

As the project passes through the workflow, the project manager configures ownership and resource assignments, business case details, value and risk ratings and project health metrics. For each stage of the application delivery lifecycle, the project manager assigns leads to be responsible for the completing of a set of steps in the workflow. The development lead is responsible for delivering the application to QA for testing. The QA lead is responsible for initiating a Quality Center project, managing the testing effort, and providing quality metrics and status. The operations leads are responsible for helping to deploy the application.

The project manager creates a work plan—usually by using a work plan template provided with CMQC. The project manager then either references an existing PPM Center project or creates a new PPM Center project to assign to this work plan.

Table 6-2 lists the details of this phase of the application project workflow.

Table 6-2. Steps in the CMQC - Application Project workflow (page 1 of 3)

	Step Name	Description
Phase 1		
1.	New	A new request for initiating a project is created.
2.	Assign Responsibilities	The project manager assigns owners for key stages in the application delivery lifecycle, such as application development, quality assurance, or operations.
3.	Verify Work Plan Exists	The project manager verifies that a work plan exists.
4.	Select Work Plan Type	The project manager selects a work plan type to create.
5.	Set Work Plan Temp	The project manager selects a work plan template.
6.	Create Work Plan From Template	The project manager creates the new template-based work plan.
7.	OR	If step 6 was successful, continue to step 8. If step 6 failed, return to step 3.
Phase 2		
8.	Define QC Project	The QA lead creates a QC project.
9.	Create Project Administrative Request	A QC Administrative Request is created by the user for the purpose of requesting a new QC project.
10.	QC Project Setup	After a QC project is created, the project manager or QA lead provides all required information and submits the request for verification. The CMQC Administrative Request used to create the QC project is closed or completed.
11.	Verify Project in QC	Verify the information provided for the QC instance.
12.	Create Requirement	Create or verify the test requirement path provided in the QC project.

Table 6-2. Steps in the CMQC - Application Project workflow (page 2 of 3)

	Step Name	Description
13.	AND	If the requirement was successfully created, continue to step 14.
14.	Detailed Project Definition	The project manager defines detailed project requirements.
15.	Business Readiness Sign Off	Application project is pending approval and sign-off from program or project manager.
16.	Requirements	Create or verify the test requirement path provided in the QC project.
17.	Design	Application is designed.
18.	Develop	Application is developed and, when it is ready, ready, it is submitted for testing.
Phase 3		
19.	Setup Testing Method	The QA lead sets up the method for testing the application.
20.	Create and attach new testing project	The QA lead creates a testing project to associate it with the QC project.
21.	Verify and Attach Testing Project	The testing project is verified and attached to the QC project.
22.	Testing Completed?	The assigned QA lead or the project manager determines if testing is completed.
23.	Check Testing Request Status	The status of the testing project request is verified.
24.	Manual Test	Manually test the application and document the results (pass/fail).
25.	Post Testing Evaluation	Confirm that the application quality passed testing requirements and the application is ready to deploy.
26.	Deploy	Deploy application as per the standard SDLC process.

Table 6-2. Steps in the CMQC - Application Project workflow (page 3 of 3)

	Step Name	Description
27.	End of Project	The project reaches its end.
28.	Create Asset	Create asset for the application.
29.	Project Completed	The application project request is closed.

In parallel with the PPM Center project creation, the project manager or QA lead must specify a QC project to track testing requirements, assets, and results for the application project. Either a new or existing QC project may be assigned to this application request. To create a QC project, the QA manager submits a QC Administrative Request, which must be completed and closed before continuing. (For more information on the QC Administrative Request, see Chapter 10, *Managing Quality Center of Excellence Administrative Activity,* on page 165).

Once both the PPM Center project and the QC project have been created and assigned to the request, the application project can continue through the design, development, testing, and deployment workflow phases. The project definition and requirements must be signed off by all required stakeholders and the design and development steps must be completed before the application is ready for testing. The testing cycle consists of setting up and assigning the testing request or performing a series of manual tests. For details on the testing project type, see Chapter 5, *HP Center Management for Quality Center QA Testing Projects,* on page 49.

Creating and Managing Work Plans

A work plan is a vital tool that organizes specific project tasks and deliverables into a hierarchical structure that makes project work easier to prioritize and track. It covers the all project requirements and the steps required to meet them. It helps to keep a project team aware of what they need to do and when they need to do it.

Project managers oversee work plans to ensure they accurately reflect current project status through all phases of the project lifecycle. With a well-managed

work plan, a project team always knows what work has been completed, and what work remains to be done.

The work plan contains the work breakdown structure of the application or testing project, which defines such project elements as:

- Task hierarchy
- Resources or skills assigned to tasks
- Task and project schedule
- Project exception monitoring
- Project milestones
- Baselines
- Project budget
- Expected cost and effort
- Import a work plan from Microsoft Project
- Build a work plan from scratch.

Work Plan Templates

Work plan templates are used in HP Project Management to create repeatable processes to be used as a model and basis for new projects. These templates speed up work-plan setup.

A work plan template consists of a reusable set of tasks that you can use to create a work plan and at the same time preserve any notifications, resource assignments, and predecessors. For example, a company with several different software product projects might use the same workflow for all development efforts. Instead of creating a separate work plan from scratch for each new project, the company can use a work plan template to quickly create the work plans. A project manager can modify information for an individual project, as needed.

The default workflows for CMQC projects require that you associate a work plan with the project. You do this from HP Project Management.

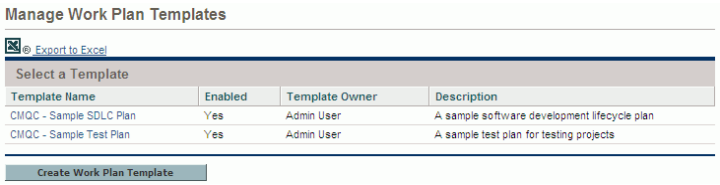
PPM Center provides two work plan templates for CMQC projects. The CMQC - Sample SDLC Plan is designed for creating work plans for CMQC - application projects, and the CMQC - Sample Test Plan template is designed for creating work plans for CMQC testing projects.

If the CMQC - Sample SDLC Plan template does not suite your needs for CMQC - application project work plans, you can revise it, or create a template from scratch to better address your project needs.

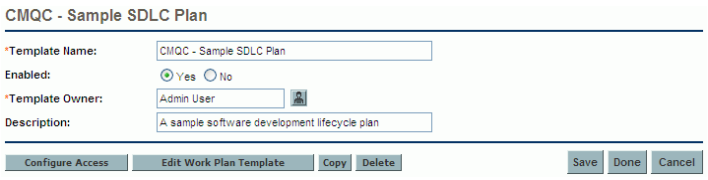
To view the CMQC - Sample SDLC Plan template:

1. Log on to PPM Center.
2. From the menu bar, select **Open > Administration > Project Types and Templates > Manage Work Plan Templates.**

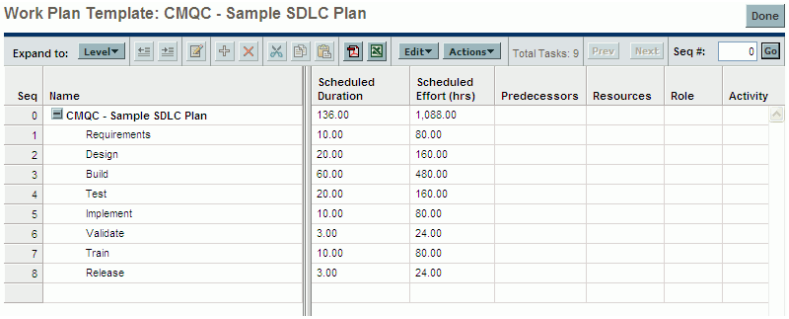
   The Manage Work Plan Templates page opens.



3. In the **Template Name** column, click **CMQC - Sample SDLC Plan.**



4. Click **Edit Work Plan Template.**



For detailed information about how to create and edit work plans and work-plan templates in PPM Center, see the *HP Project Management User's Guide.*

7 Viewing and Tracking Project Progress and Quality

Overview of HP Center Management for Quality Center PPM Dashboard Portlet Content

CMQC delivers preconfigured PPM Dashboard content that provides a comprehensive, real-time view of project status and key performance metrics. These portlets provide visibility to various content for managing and running a CoE. Quality Center-specific portlets show cross-project information.

The various portlets and pages are available to you depend on your role on a team or project. (*Delivering Role-Based PPM Dashboard Views* on page 43 provides descriptions of the preconfigured PPM Dashboard pages and portlets available to users based on roles.)

For detailed instructions on how to distribute PPM Dashboard modules, see the PPM Center *Configuring the Standard Interface* guide.

After an application or testing project request is created, you can view its details and track its progress from the PPM Dashboard. This chapter provides information about the CMQC role-based portlets displayed in PPM Center.

PPM Center portlets query data using direct SQL calls to the Quality Center data model. This is the only method used to get data from Quality Center.

HP Center Management for Quality Center IT Service Portlets

Table 7-1 lists the IT service-related portlets available for CMQC.

Table 7-1. CMQC IT Service portlets

Portlet Name	Description
CMQC - Issue Priority	Shows the breakdown of IT service requests based on issue priority.
CMQC - Issue Status	Shows the breakdown of IT service requests based on status.
CMQC - IT Service Open Administrative Requests	Lists all administrative requests that are either open or that have been escalated.
CMQC - My IT Service Requests	Lists all IT service requests that were either created by or assigned to you.
CMQC - Open IT Service Requests	Lists all IT service requests that are either open or that were escalated.

Table 7-2 lists the preconfigured application quality-related portlets available for CMQC.

Table 7-2. CMQC Quality portlets (page 1 of 2)

Portlet Name	Description
CMQC - Business Value Map	Bubble chart that shows the breakdown of application project budget size as a function of business value and business risk. Bubble size represents budget size.
CMQC - Defect Breakdown By Status (%)	Shows the percent breakdown of defects by status for selected projects. Defect status is based on the most recent test status report. If a test status report was not completed for the project, no data is shown for that project. Data can be displayed in a clustered bar chart, a stacked bar chart, or in a list.
CMQC - Defect by Status Trending	Shows the trend of total defects over time period for selected projects. Trending data is based on the test status report created during the sampling interval. If a test status report was not completed for the project, no data is shown for the project.
CMQC - Defect by Status Trending (Drill Down)	Displays a graph that depicts trending of defects based on status over time for a project.
CMQC - Defect Density Over Time	Displays bar chart that depicts defect density (open defects/requirements) over time for selected projects.
CMQC - Defects BreakDown By Status (#)	Shows a breakdown of the number of defects based on the most recent test status report for selected projects.
CMQC - Generic User Query (CM)	Displays results of user-defined query for selected environments.
CMQC - Open Priority Defect Trending (%)	Shows the percentage total defects that are open for selected projects over time.
CMQC - Project Listing	Overview of application or testing projects and their status, owners, and project details.
CMQC - Quality Center Defects (CM)	Displays a list of defects from selected Quality Center projects.
CMQC - Quality Center Instances	List of Quality Center instances and their respective status values.

Table 7-2. CMQC Quality portlets (page 2 of 2)

Portlet Name	Description
CMQC - Quality Center Project Status (CM)	Displays requirements, test execution, and defect status from selected Quality Center projects.
CMQC - Quality Center Requirements (CM)	Displays a list of requirements from selected Quality Center projects.
CMQC - Quality Center User Query (CM)	This portlet lets you define a custom query against any number of Quality Center projects and display the results in tabular form. The portlet also provides aggregation capabilities to sum values for any of the defined numerical columns.
CMQC - Requirement Coverage by Status	Horizontal stacked chart that shows the percentage of requirements having the different status values (Passed, Failed, Not Run, Not Completed) for selected projects.
CMQC - Requirement Coverage Trending (%)	Shows the percentage of test requirements covered over time for selected projects.
CMQC - Requirement Coverage Trending (Drill Down)	Stacked bar chart that shows the number of test requirements over time for a project. This view shows the trend in the number of test requirements based on status over time for a project. Trending data is based on the creation date of the test status reports submitted against the testing project. If a test status report was not submitted for a project over a specific sampling interval, then no data are shown for the project during that interval.
CMQC - Skillset Coverage	Shows the breakdown of skills of selected users based on proficiency.
CMQC - Test Execution Status Trending (Drill Down)	Stacked bar chart that shows the trend in the number of test scripts for a project over time.
CMQC - Web Frame Portlet (CM)	URL portlet

Viewing and Tracking Project Activity

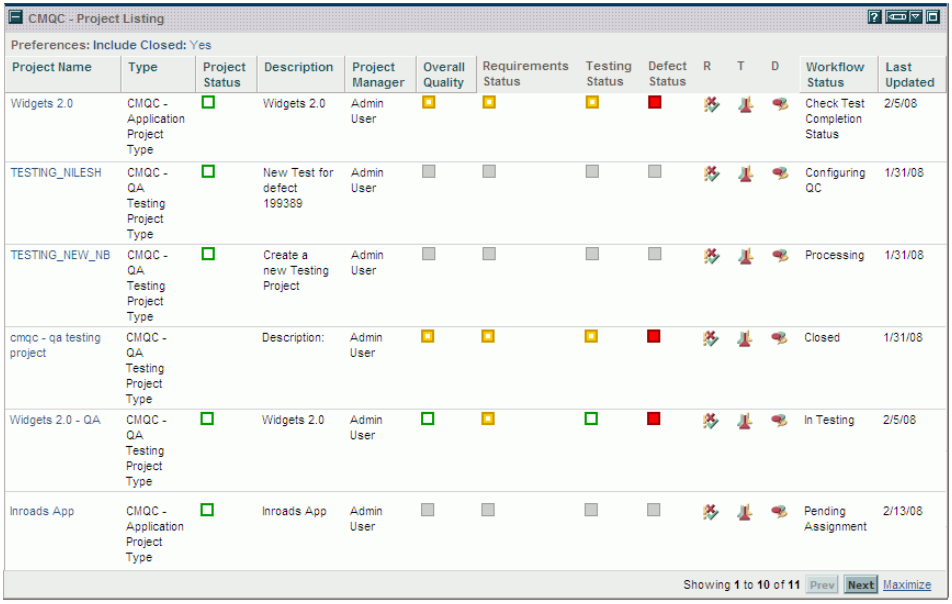
This section provides detailed information about the CMQC portlets that you can use to monitor project activity and progress.

CMQC - Project Listing Portlet

The CMQC - Project Listing portlet shown in *Figure 7-1* ties together PPM Center project status based on timelines, risks, and scheduling with the Quality Center quality statuses. It lists application and testing projects, and displays real-time status values for project requirements, testing, and defects, as well as the overall quality of each project within Quality Center.

The portlet in *Figure 7-1* also displays project progress and quality status values, workflow status, and the names of people responsible for different stages of project delivery (project manager, development lead, QA manager, or operations lead).

Figure 7-1. CMQC - Project Listing portlet



You can drill down to view the details of requirements, testing, and defects to examine the Quality Center data from which the displayed metrics are derived. For example, in the **U** column, you can double-click a defect trend link ( ) for a project to view an historical trending view of defects. From there, you can drill down further to view a list of pending defects, and, finally, drill down on a specific defect to launch Quality Center and view its details.

The workflow status shows where the project is in its software development lifecycle. A project manager can view the project status from PPM Center, and all of the quality metrics and status from Quality Center within a single view.

- Project status based on timelines and risks
- Quality status indicators, based on Quality Center results
- Trend analysis of requirements, tests, and defects
- SDLC or testing status

You can drill down to the trend analysis of the particular requirements, defects, or testing statuses. You can drill into it graphically, you can actually drill through a specific defect, for example, and start Quality Center from that defect.

The CMQC - Project Listing portlet shown in *Figure 7-1* displays a list of application and testing projects, along with their progress and quality status values, workflow status, and the names of people responsible for different stages of project delivery (project manager, development lead, QA manager, or operations lead).

By default, the CMQC - Project Listing portlet lists the active projects to which you have access. However, filters can be set to show specific additional projects or projects managed by another user. If the portlet is set to exclude closed projects, it displays only active application and testing projects.

Table 7-3 lists the fields available for display in the CMQC - Project Listing portlet.

Table 7-3. Fields available for display in the CMQC - Project Listing portlet (page 1 of 3)

Field Name	Description
Type	The type of project (application project or testing project).
Project Name	Project name and link to the project detail page.
Project Status	Project status based on the work plan, milestones, and tasks: Indicates that the project is on schedule. Indicates that the project schedule may be at risk with a few scheduling exceptions. Indicates that the project is at risk, with multiple scheduling exceptions.
Description	Project description, including project name, application, and version information.
Project Manager	Username of the resource who manages the project.
Overall Quality	Overall project status based on quality indicators. Rating is based on the last test status report submitted by QA for this project, as follows: Indicates that product quality is good. Indicates that product quality is mediocre. Indicates that product quality is poor.
Requirements Status	Requirements coverage data based on Passed, Failed and Pending status. Rating is based on the last test status report submitted by QA for this project, as follows: Indicates that most or all requirements have been met. Indicates that several high-priority requirements have failed. Indicates most requirements have failed or have not been covered.

Table 7-3. Fields available for display in the CMQC - Project Listing portlet (page 2 of 3)

Field Name	Description
Testing Status	Status of test script execution and maintenance. Rating is based on the last test status report submitted by QA for this project, as follows: Indicates that most test scripts have passed. Indicates that several test scripts covering high-priority requirements have failed. Indicates that many test scripts have failed or were not completed.
Defect Status	The status of product based on defects. This rating is based on the last test status report submitted by QA for this project. Indicates that no critical or high-priority defects exist. Indicates that several critical or high-priority defects are unresolved. Indicates many critical or priority defects exist.
R	A link ( ) to requirements coverage trend view for this project.
T	A link ( ) to test execution trend view for this project.
D	A link ( ) to defect trend view for this project.
Workflow Status	Current workflow step of the project.
Last Updated	Calendar date on which the project request was last updated.
Priority	Assigned project priority.
Project Sponsor	Username of the person who sponsors the project.
R&D Manager	Username of the person who leads the development effort for the project. (In maximized view only.)

Table 7-3. Fields available for display in the CMQC - Project Listing portlet (page 3 of 3)

Field Name	Description
QA Manager	Username of the person who leads the QA activities for the project. (In maximized view only.)
OPs Manager	Username of the person who leads the implementation and deployment activities for the project. (In maximized view only.)

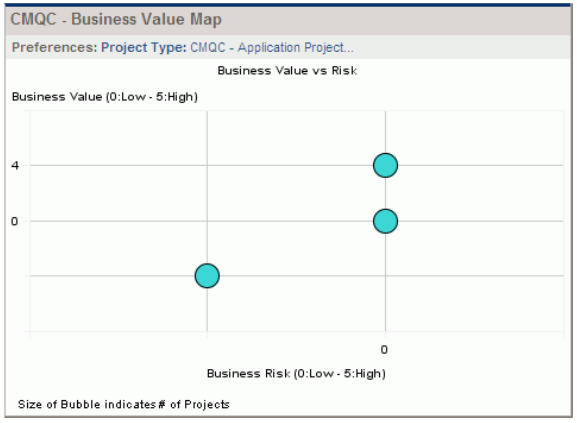
For a detailed view of the project status and trends, drill down into (click) the individual project indicators.

For information on how to modify a portlet in PPM Center, see the *Configuring the Standard Interface* guide.

CMQC - Business Value Map Portlet

The CMQC - Business Value Map portlet (*Figure 7-2*) displays a bubble chart that shows the distribution of application projects based on business value and business risk. The size of the bubble indicates budget size expressed in thousands (of selected currency units).

Figure 7-2. CMQC - Business Value Map portlet



You can retrieve data for display in the portlet based on project type to display all project requests of selected project types that support business value and

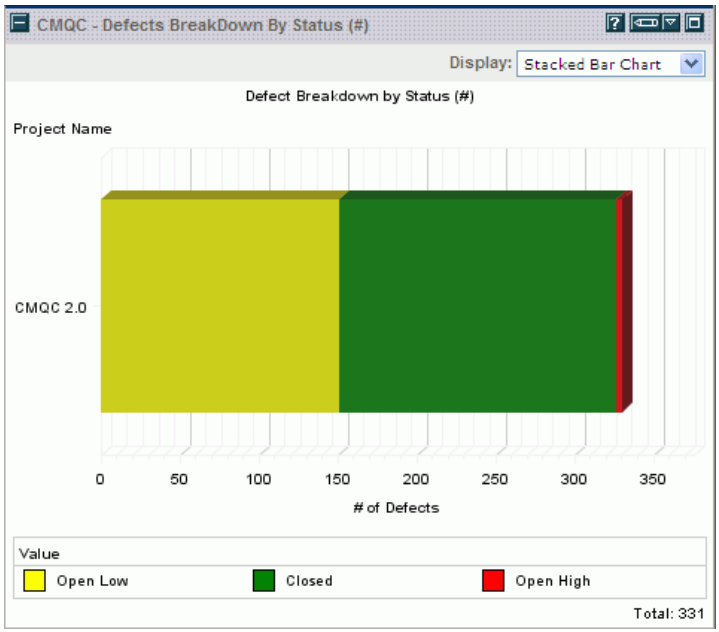
risk ratings. You can also retrieve data based on project manager name to display all project requests that support business value and risk ratings for selected project managers.

Application Quality Portlets

CMQC - Defects BreakDown By Status (#) Portlet

The CMQC - Defects BreakDown By Status (#) portlet (*Figure 7-3*) displays a breakdown of the number of defects based on the most recent test status report results for selected projects.

Figure 7-3. CMQC - Defects BreakDown By Status (#) portlet

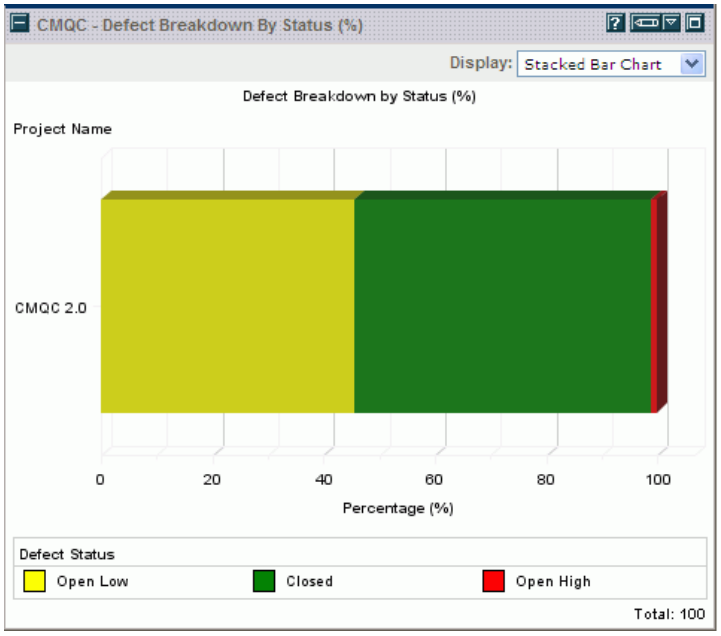


The number of closed defects, open high priority defects, and open low priority defects are represented along x axis. Project names are displayed along the y axis. If a QA test status report was not completed for a project, no data is shown for that project.

CMQC - Defects Breakdown By Status (%) Portlet

The CMQC - Defects Breakdown By Status (%) portlet (*Figure 7-4*) shows the percent breakdown of defects based on status for selected projects. The defect status is based on the most recent QA test status report submitted for the project.

Figure 7-4. CMQC - Defects Breakdown By Status (%) portlet



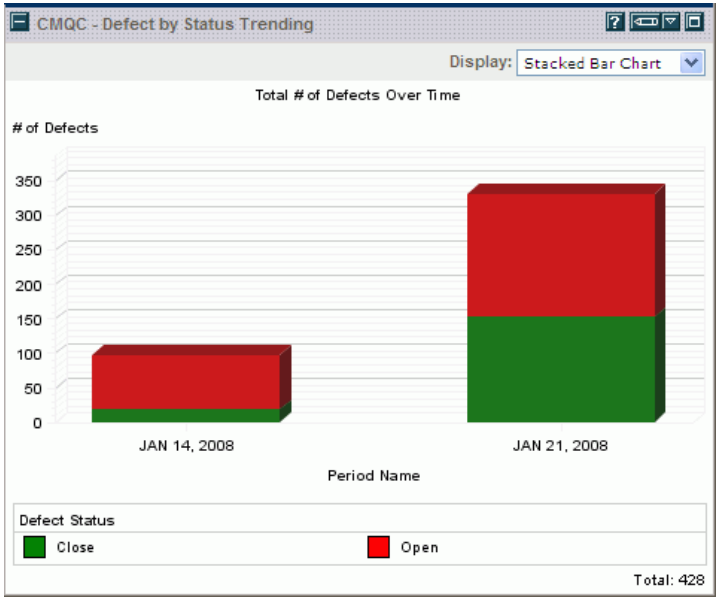
The number of closed defects, open high priority defects, and open low priority defects are represented along x axis. Project names are displayed along the y axis. If a QA test status report was not completed for a project, no data is shown for that project.

To view the actual number of defects represented by a colored bar in the chart, move your cursor to that bar to reveal the tooltip text. The tooltip for each displays the actual number as well as with the percentage of defects that have the status indicated. You can choose whether to display closed defect data.

CMQC - Defect by Status Trending Portlet

The CMQC - Defect by By Status Trending portlet (*Figure 7-5*) displays the trend of the total number of defects over a specified time period for selected projects. Trending data is based on the QA test status reports created during the sampling interval.

Figure 7-5. CMQC - Defect by By Status Trending portlet



Sampling intervals are represented along the x axis, and the number of defects is represented on the y axis. If no QA test status reports were created for a project, no data is shown for that project.

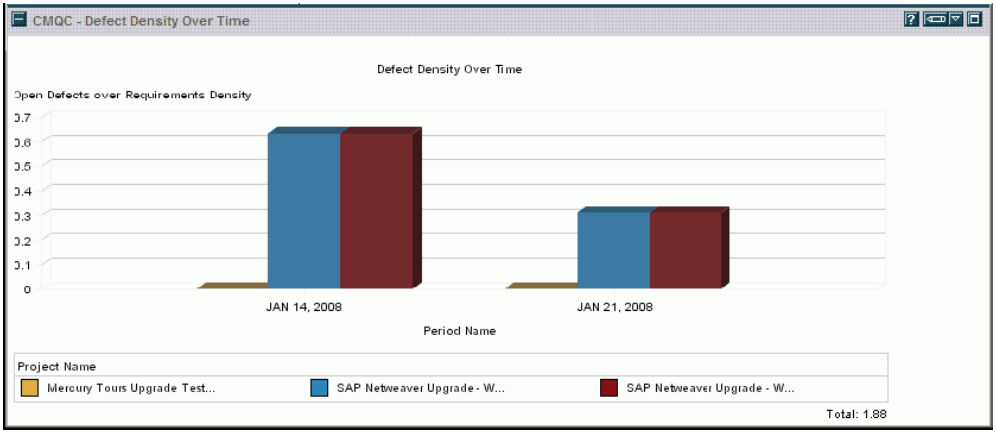
To view the actual number of defects represented by a colored bar section in the chart, move your cursor to that section. The tooltip for each displays the number of defects, as well as with the percentage of defects represented.

You can retrieve data for display in this portlet based on trend type (for example, daily, weekly, or monthly intervals). You must specify the date range that you want represented in the chart.

CMQC - Defect Density Over Time Portlet

The CMQC - Defect Density Over Time portlet (*Figure 7-6*) displays the number of open defects in relation to requirements over time for selected projects.

Figure 7-6. CMQC - Defect Density Over Time portlet



Time is represented along the x axis and the number of open defects relative to requirements is represented on the y axis. You can select the time interval, or trend type (for example, daily, weekly, or monthly) displayed on the x axis.

In this portlet, each project is represented by a single color. The tooltip for each colored bar displays the actual number of defects and the defect density ratio for that sampling interval.

CMQC - Generic User Query (CM) Portlet

Any user can use the CMQC - Generic User Query (CM) portlet to generate custom queries against multiple Quality Center instances and display the results in tabular form. The portlet can also aggregate and display total values for any defined numerical columns.

Preferences are available to filter the information in the portlet view. These options are described in *Table 7-4*.

The initial query is run separately in each Quality Center instance specified, and the results are combined into a single set for display in the portlet.

You can use the **Extended Query** box in the **SQL Logic** section to impose additional logic on the combined results from the initial queries. Suppose, for example, that you perform an initial query for a list of defects from three separate Quality Center instances. Then, to display the total number of defects in each category, you would use the extended query to perform this logic. This way, defects of the same category from different QC instances would be included in a single count.

Note that there is a limitation to be aware of when performing an extended query; the capability to insert hyperlinks to items in their respective QC instances is only supported for the initial query, and not for extended queries. Consider using extended queries only in scenarios that require summary or aggregate data. An extended query is not necessary if, for example, you simply want to display a list of defects. The combined result set from the initial query supports basic sorting capabilities, and you can display hyperlinks for each defect listed in its respective QC instance.

Table 7-4. Filters for setting data display preferences for the CMQC - Generic User Query (CM) portlet (page 1 of 3)

Filter Name	Description
Filter By User	Specify the list of users for which to retrieve information. To use this value in the SQL query, the following tokens are defined: • [Q.USER] - Set to '1' if the user filter is either Current or Specified list of users, or '0' for everyone. • [Q.VP.USER] - A comma-delimited list of user names (user1, user2, user3, and so on). The portlet automatically substitutes the tokens with their literal values before running the query. You can use the token as many times as necessary in the SQL expression.
Creation Date From	Specifies a from date filter. In order to use this value in the SQL query, the following tokens have been defined: • [Q.CREATED.FROM] - Set to 1 if 'From' date filter is specified, otherwise 0. • [Q.VP.CREATED.FROM] - Set to the date. SQL bind variables are used to pass the date value. The portlet automatically substitutes the tokens with their literal values before running the query. You can use the token as many times as necessary in the SQL expression.
Creation Date To	Specifies a to date filter. In order to use this value in the SQL query, the following tokens have been defined: • [Q.CREATED.TO] - Set to 1 if 'To' date filter is specified, otherwise 0. • [Q.VP.CREATED.TO] - Set to the date. SQL bind variables are used to pass the date value. The portlet automatically substitutes the tokens with their literal values before running the query. You can use the token as many times as necessary in the SQL expression.
Sort Order	To determine the sort order of the listed results, select either **Ascending** or **Descending.**
*Rows Displayed	Use this field to specify the number of rows to display in the default view.

Table 7-4. Filters for setting data display preferences for the CMQC - Generic User Query (CM) portlet (page 2 of 3)

Filter Name	Description
*Rows Displayed in Maximized View	Use this field to specify the number of rows to display in the maximized view.
Display Columns	To make a column visible, move its name from the **Available** list to the **Visible** list. To change the display order for a column, select its name in the **Visible** list, and then use the up and down arrows to move it.
SQL Query Logic	
	Each set of environment queries includes the target database environment, SQL query, and target result table. The target result table is used by the extended query (if defined). You can define any number of environment queries. To add environment queries, define query information in existing environment query sections, and save preferences. A new empty environment query will be added.
Environment	Name of an environment object. Only environment objects that the logged on user can access are listed. An environment can point to either an Oracle database or an MSSQL database.

Query	A valid SQL expression executed against selected environment database.
	Guidelines for forming a SQL query are as follows:
	• You can only use a SELECT statement in this query.
	• The SQL statement must be valid for the database type referenced by the environment (MSSQL and Oracle).
	• Instead of using `DECODE(...)`, which works only for Oracle, consider using:
	`case`
	`when (condition1) THEN result1`
	`when (condition2) THEN result2`
	`...`
	`else resultN`
	`end`

Table 7-4. Filters for setting data display preferences for the CMQC - Generic User Query (CM) portlet (page 3 of 3)

Filter Name	Description
Result Table	If an extended query is defined, this field is used to specify the name of a temporary table in which the results of the query are to be stored. The extended query can reference the results of each environment query by this result table name.
Extended Query	Extended query is executed on the results of the environment queries defined. This allows the user to perform cross-environment queries (aggregate data from multiple data sources). The SQL statement must be a valid SELECT statement against the result table name(s). If an extended query is not defined, the results displayed in the view are based on Environment Query #1 (only). **Note:** You cannot use the filter tags [Q.*] or [Q.VP.*] in an extended query.
SQL Columns	To display the result columns, you must define the list of columns and specify their display order. If you use an extended query, the column properties must correspond to the results of the extended query. Otherwise the column settings must correspond to the per-project SQL query. This section lets you add, edit, remove, or rearrange columns. A column has the following properties: • **SQL Column Name.** The name of the column in the SQL query. • **Column Title.** The title of the column, as it will appear in the table's column header. • **Column Width.** The width of the column (Small, Medium, or Large). • **Is Date.** Flag to display the column as a date. • **Aggregate.** Sum the numeric value of the column and display total in table's column footer. Useful for aggregating results across projects.

Changes to CMQC Data Sources

If HP Center Management for Quality Center (CMQC) is deployed on your PPM Center 7.5 instance, when you upgrade to PPM Center 8.00, the following data sources are updated in accord with the new data model:

- CMQC - Requirement Coverage Trending
- CMQC - Open Priority Defects Trending
- CMQC - Defect by Status Trending
- CMQC - Defect Density over Time

Existing portlet definitions are redirected to these updated data sources. Validations are updated on the Preferred User Table Space and Preferred TEMP Tablespace fields in the CMQC - QC Instance Registration request type and on the Oracle User Table Space and Oracle TEMP Table Space fields in the CMQC - QC Project Administrative Request request type.

After you upgrade from PPM Center 7.5 instance to PPM Center 8.00, you must reinstall CMQC version 2.0 software.

HP Center Management for Quality Center Reports

CMQC provides preconfigured reports that mirror the content of two important portlets. However, unlike portlets, which query and display information only when the you view the PPM Dashboard, you can configure these reports to run at regular intervals, and to be actively shared by or emailed to all interested shareholders. You can run the reports to generate HTML or CSV files, which you can then use to produce custom multi-purpose reports or graphs in various formats.

CMQC - Cross Environment Query Reports

The CMQC - Cross Environment Query report content mirrors the content of the Generic User Query (CM) portlet, and provides similar viewing options.

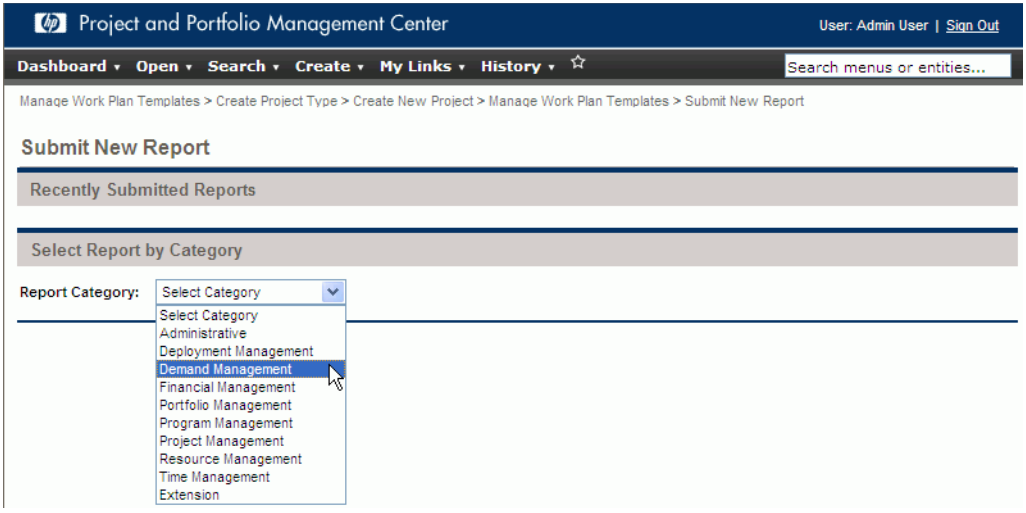
This report queries multiple database environments and aggregates the results into a single table.

Creating a CMQC - Cross Environment Query Report

To create a CMQC - Cross Environment Query report:

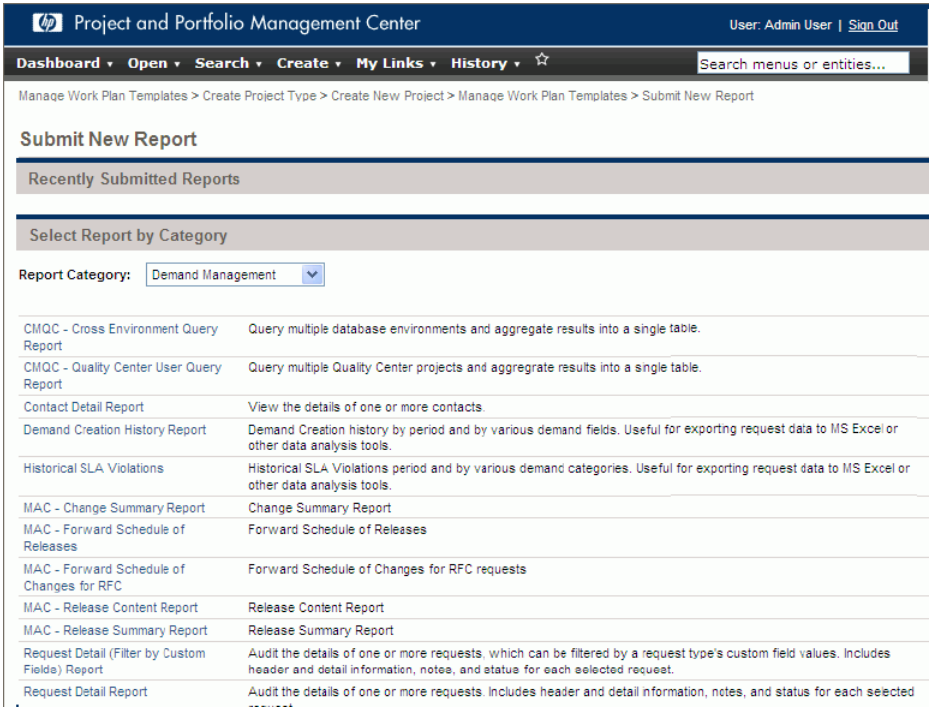
1. Log on to PPM Center.
2. From the menu bar, select **Open > Reports > Create Report.**

   The Submit New Report page opens.

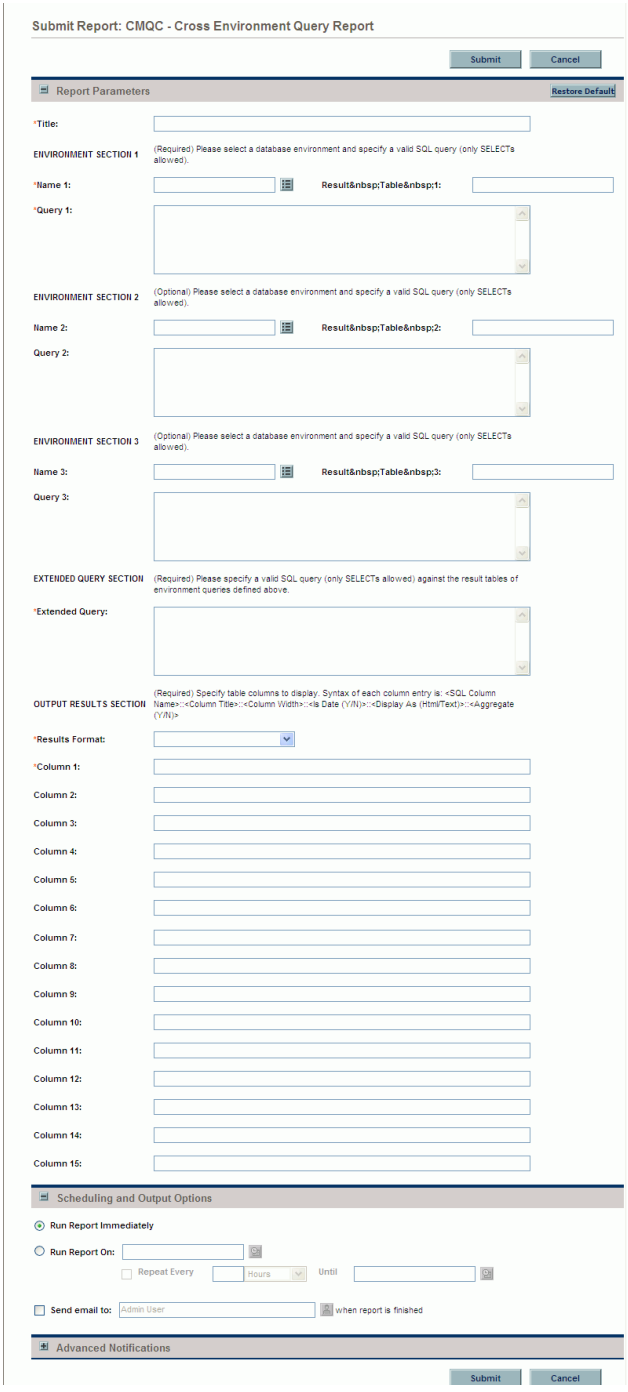


3. From the **Report Category** list, select either **Demand Management** or **Project Management.**

   Links for the reports that belong to the selected category are listed, along with a brief description of each.



4. Select the **CMQC - Cross Environment Query Report** link.



5. Complete the following fields.

Field Name (*Required)	Description
Title	Type the report title in this field.
ENVIRONMENT SECTION (1, 2, and 3)	Use each ENVIRONMENT SECTION to select up to three database environments and specify a valid SQL SELECT query for each. Only the **Environment Section 1** fields are required.
*Name 1	From the auto-complete list, select the environment name.
Result Table	Type a name for the table that is to contain the query results.
*Query 1	Type a valid SQL SELECT query against the selected environment (in the **Name** field).
EXTENDED QUERY SECTION	Use this section to create an extended SQL SELECT against more than one environment.
*Extended Query	In this field, type a valid SQL SELECT query against the result tables of the environment queries you specified.
OUTPUT RESULTS	Use this section to specify table columns to display.
*Results Format	To specify the format to use to display the results, from this list, select **CSV** or **HTML.**
Column 1, Column 2, and so on	Use each **Column** (1, 2, 3, ...N) row to specify a column to include in the report. Use the following syntax for a column entry: `<SQL_Column_Name>::<Column_Title>::<Column_Width>::<Is_Date_(Y/N)>::<Display_As_(Html/Text)>::<Aggregate_(Y/N)>`
Scheduling	
Run Report Immediately	Specifies that the report is to be run immediately after you configure it. This is the default scheduling option.

Field Name (*Required)	Description
Run Report On	To specify a date on which to run the report, select this option. Using the date chooser, select the date and time to run the report. To run the report periodically after the first run: 1. Select the **Repeat Every** checkbox. 2. From the list, a unit of time (**Hours, Minutes, Weekdays,** and so on) to use to specify the run interval. 3. In the field to the left of the list type the number of time units to use to specify the run interval. 4. Use the **Until** auto-complete to specify the end date for the repeated report runs.
Send email to	To send email notifications to specific users after the report is run, select this checkbox, and then use the auto-complete to select the notification recipient(s). The recipient(s) can use the **View Report** and **View Report Log** links in the email notification to open the PPM Center logon page, and from there, view the report or report log.
Advanced Notifications	
Add a Notification	Click **Add a Notification** to open the Edit Advanced Notifications window, which you can use to configure customized email messages to specific recipients after the report run is complete.
Send When	If you configure notifications, this column displays the events that triggers the sending of the notification. The event can be either when the report completes, or fails, or both.
Description	This column displays descriptions you provide (if any) for any notifications you configure.
Recipients	This column displays the names of the recipients specified for any notifications you configure.

6. Click **Submit.**

For information on how to view reports, see *Viewing Reports, Report Settings, and Report Logs* on page 129.

CMQC - Quality Center User Query Reports

The CMQC - Quality Center User Query report content mirrors the Quality Center User Query (CM) portlet content, and provides similar viewing options. This report queries multiple Quality Center projects and displays aggregate results in a single table.

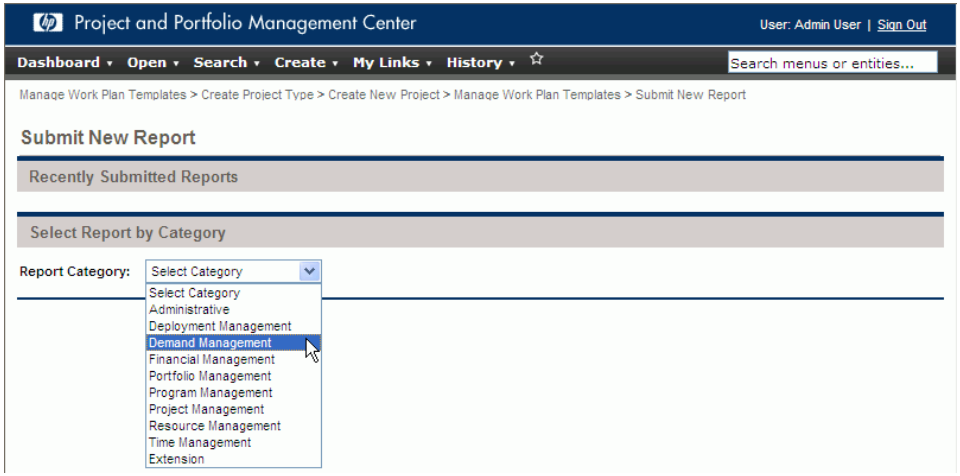
For details on using preferences, view help for the Generic User Query (CM) portlet and the Quality Center User Query (CM) portlet.

Creating and Running a CMQC User Query Report

To create and run a CMQC User Query report:

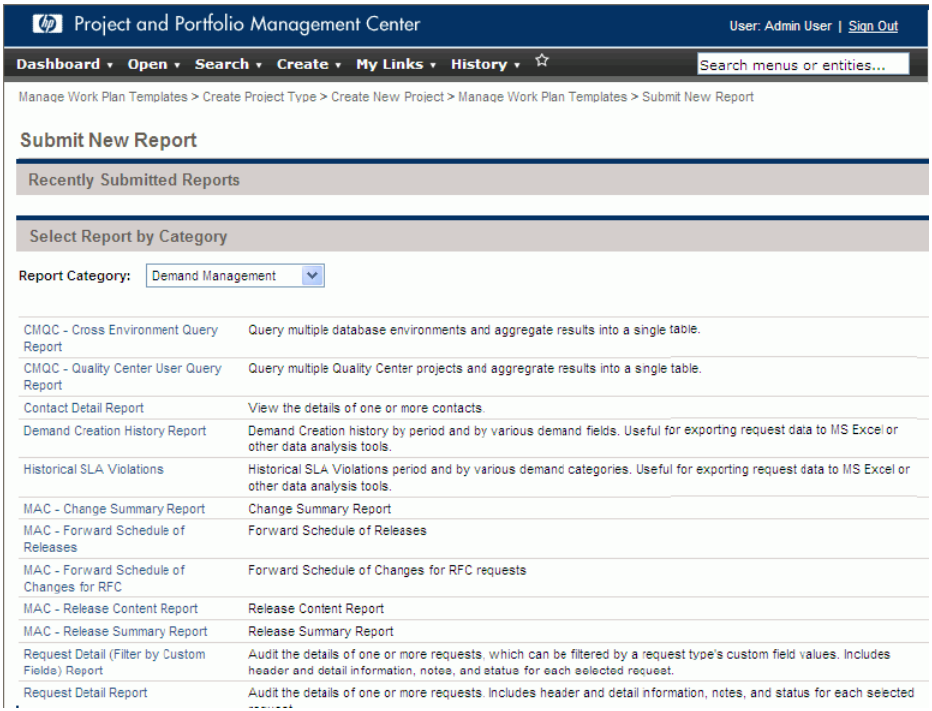
1. Log on to PPM Center.
2. From the menu bar, select **Open > Reports > Create Report.**

   The Submit New Report page opens.

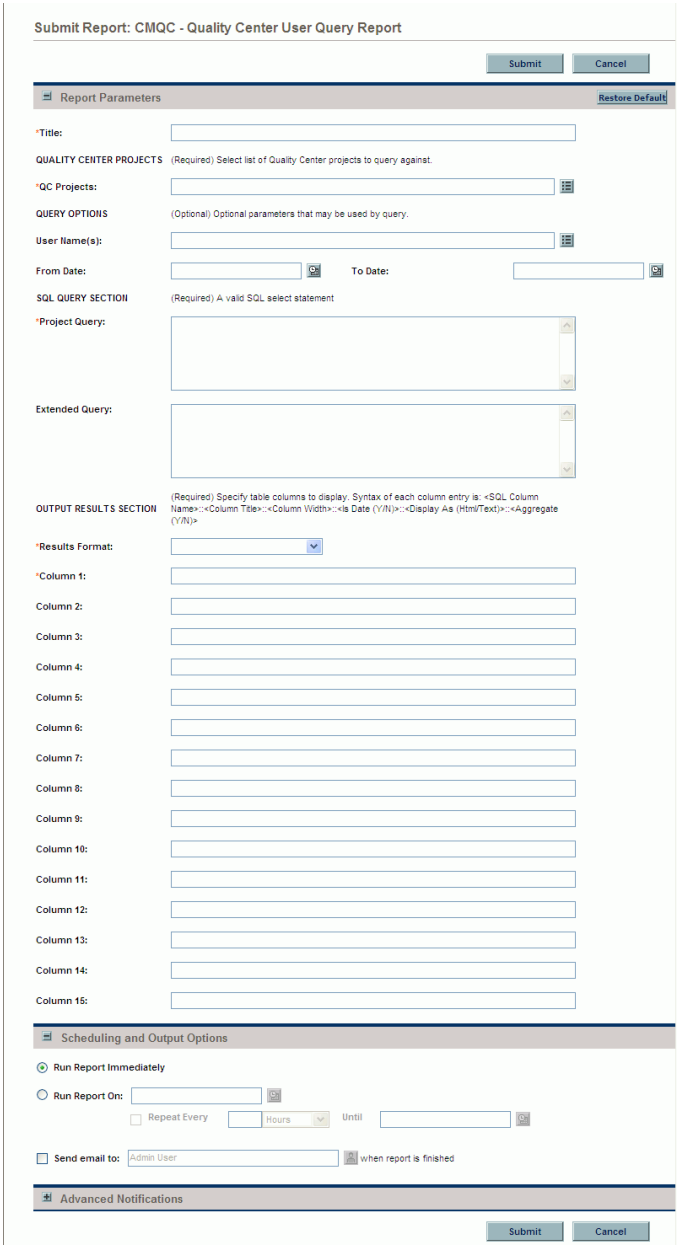


3. From the **Report Category** list select either **Demand Management** or **Project Management.**

Links for the reports that belong to the selected category are listed, along with a brief description of each.



4. Select the **CMQC - Quality Center User Query Report** link.



5. Complete the following fields.

Field Name (*Required)	Description
Title	Type the report title in this field.
QUALITY CENTER PROJECTS	(Required) Use this section to select the Quality Center projects to query for the report.
*QC Projects	From the auto-complete list, select the environment name.
QUERY OPTIONS	Use this section to select optional report parameters
User Name(s)	From the auto-complete list, select the names of one or more users assigned to the specified Quality Center projects.
From Date	Using the date chooser, select the start date for the report
To Date	Using the date chooser, select the end date for the report
SQL QUERY SECTION	Use this section to construct your query.
*Project Query	Type a valid SQL SELECT statement in this field.
Extended Query	Use this section to specify a valid SQL SELECT query against the result tables of project query you specified.
OUTPUT RESULTS SECTION	(Required) Use this section to specify the table columns to display in the report.
*Results Format	To specify the format used to display the report results, from this list, select **CSV** or **HTML.**
Column 1, Column 2, and so on	Use each **Column** (1, 2, 3, ...N) row to specify a column to include in the report. Use the following syntax for a column entry: *<SQL_Column Name>::<Column_Title>* *::<Column_Width>::<Is_Date_Y/N)>* *::<Display_As_(Html/Text)>::<Aggregate_(Y/N)>*

Field Name (*Required)	Description
Scheduling	
Run Report Immediately	Specifies that the report is to be run immediately after you configure and submit it. This is the default scheduling option.
Run Report On	To specify a date on which to run the report, select this option. Using the date chooser, select the date and time to run the report. To run the report periodically after the first run: 1. Select the **Repeat Every** checkbox. 2. From the list, a unit of time (**Hours, Minutes, Weekdays,** and so on) to use to specify the run interval. 3. In the field to the left of the list type the number of time units to use to specify the run interval. 4. Use the **Until** auto-complete to specify the end date for the repeated report runs.
Send email to	To send email notifications to specific users after the report is run, select this checkbox, and then use the auto-complete to select the notification recipient(s).
Advanced Notifications	
Add a Notification	Click **Add a Notification** to open the Edit Advanced Notifications window, which you can use to configure customized email messages to specific recipients after the report run is complete.
Send When	If you configure notifications, this column displays the events that triggers the sending of the notification. The event can be either when the report completes, or fails, or both.
Description	This column displays descriptions you provide (if any) for any notifications you configure.
Recipients	This column displays the names of the recipients specified for any notifications you configure.

6. Click **Submit.**

For information on how to view reports, see *Viewing Reports, Report Settings, and Report Logs*.

Viewing Reports, Report Settings, and Report Logs

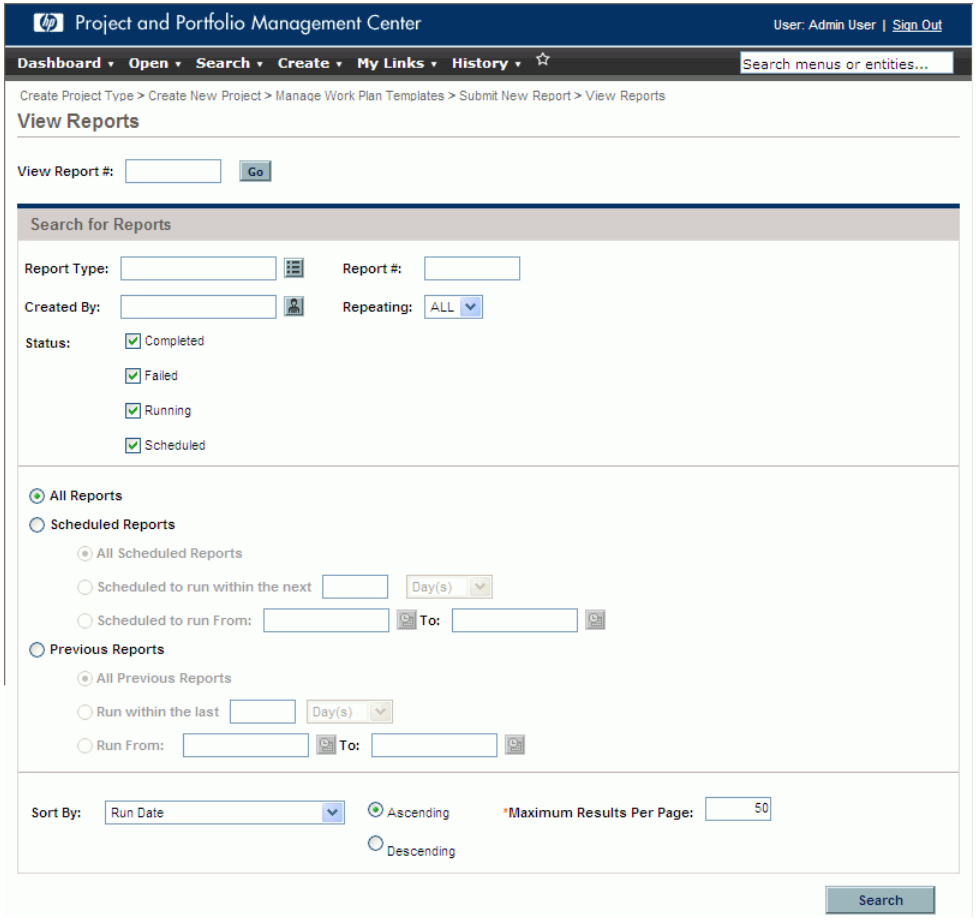
If you scheduled a report to run immediately after submission, the report is displayed as soon as it is generated. You can use the PPM Center menu bar to access any report after its scheduled run.

Viewing a Report

To access a report from the menu bar:

1. Log on to PPM Center.
2. From the menu bar, select **Open > Reports > View Reports.**

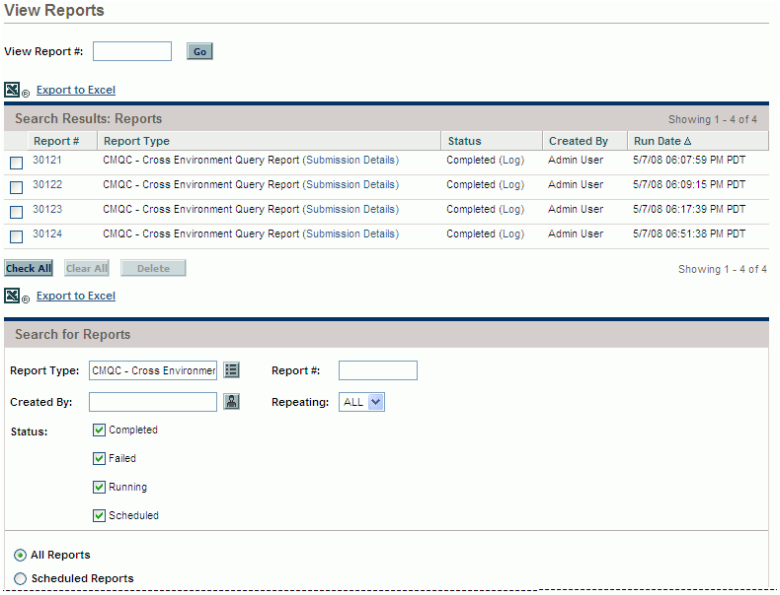
   The View Reports page opens.



3. In the **Search for Reports** section, complete one or more search criteria fields.

4. Click **Search.**

   The **Search Results** section of the View Reports page lists the reports that match your search criteria.



5. In the **Report #** column, click the number that corresponds to the report you want to view.

   The selected report opens in a new browser window.

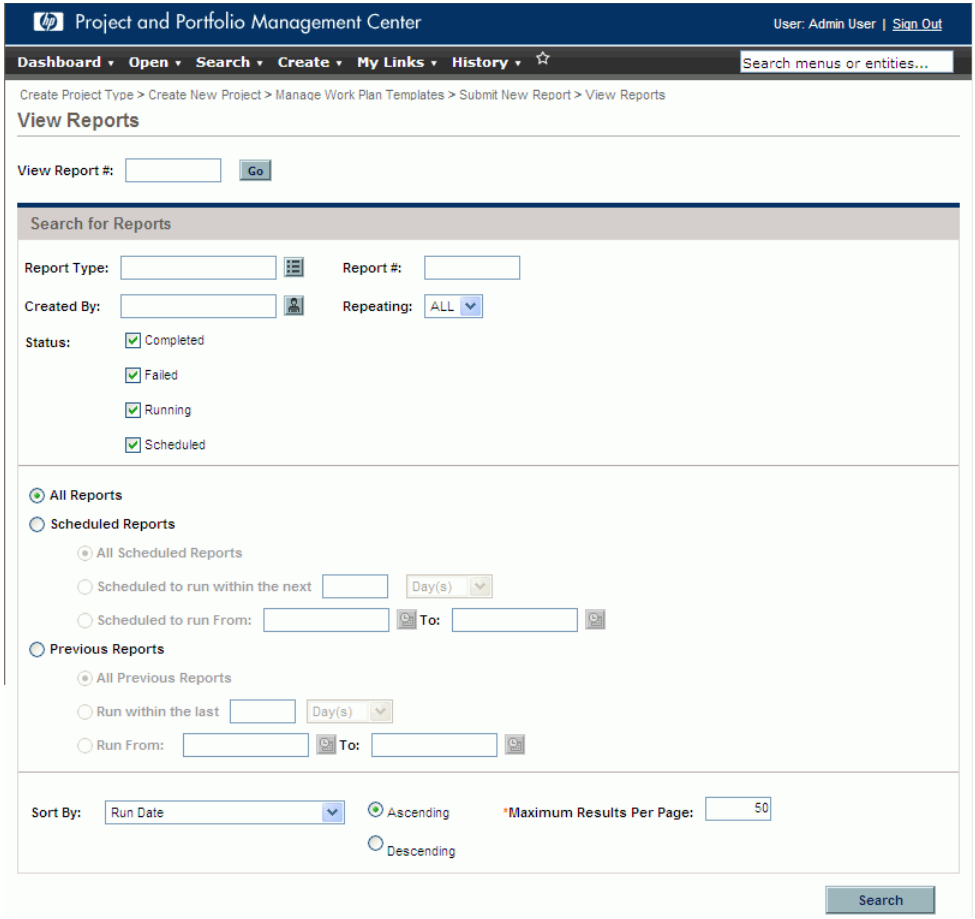
6. To print the report, in the upper right corner of the page, click **Print.**

Viewing Report Settings and Report Logs

To view the settings and log for a report:

1. Log on to PPM Center.
2. From the menu bar, select **Open > Reports > View Reports.**

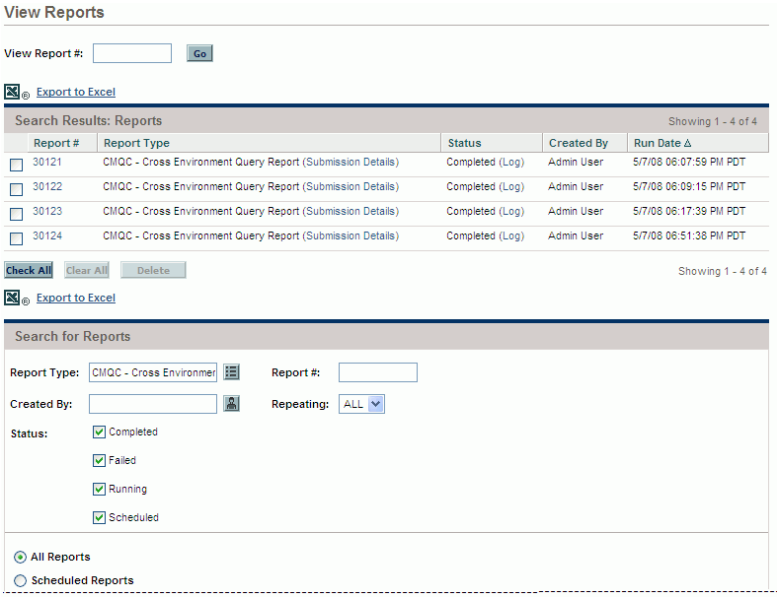
   The View Reports page opens.



3. In the **Search for Reports** section, complete one or more search criteria fields.

4. Click **Search.**

   The **Search Results** section of the View Reports page lists the reports that match your search criteria.



5. To view the report setting for a listed report, in the **Report Type** column, click the **Submission Details** link for the report.

   The Submission Details page opens and displays the report settings.

   From the Submission Details page, you can click the **View Report** link to open the report, or click the **View Log** link to open the log for the report run.

6. To view the log of the report run, in the **Status** column, click the **Log** link for the report.

   The HP Project and Portfolio Management Execution Log History page opens. This page lists the report submission ID (the report number), the workflow name, the workflow step that started the report run, and the time and date on which the report run started. The page also includes the report run completion status.

8 Project Status Update Requests and Test Status Report Requests

Project Status Update Requests

To keep a project team up to date on all aspects of project status, a project manager can submit project status update requests on a regular basis. Although a project manager can submit the request at any regular time interval, it is considered a best practice for the project manager to issue project status updates weekly.

The project status update request queries a QC project and gathers metrics, which it then stores in a set of fields on the project status update request. The data are then used to populate the project status portlets.

Over time, the collected metrics accumulate to provide enough meaningful data for the quality status and trending portlets. You can think of the project status update request as a periodic report to query status metrics of the QC project and store that information in PPM Center.

The project status update request updates project status based on the following:

- A project status update request must be related to an application project or testing project request through the **Master Project** field.
- Upon completion of the project status update request, the corresponding project request's status fields are automatically updated.
- The project manager submits the project status update request to update the QC project status information in PPM Center.

The project status update request qualifies project health based on:

- Overall project status
- Scope status
- Resource status
- Schedule status
- Risks status
- Issues status

The request must be created as a child of a master project request, such as an application project or a QA testing project.

The Project Status Update request follows the workflow shown in *Figure 8-1* and described in *Table 8-1*.

Figure 8-1. CMQC - Project Status Update workflow

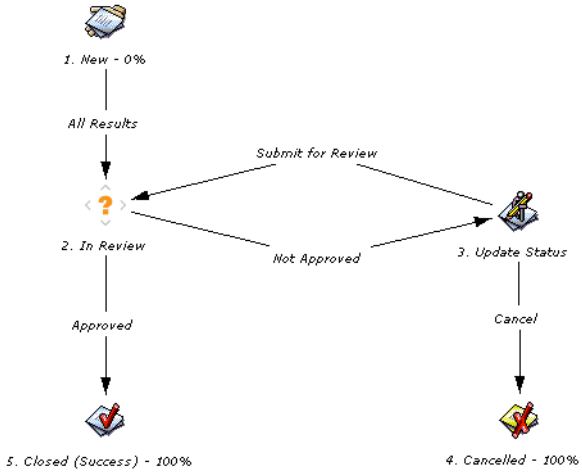


Table 8-1. CMQC - Project Status Update workflow steps

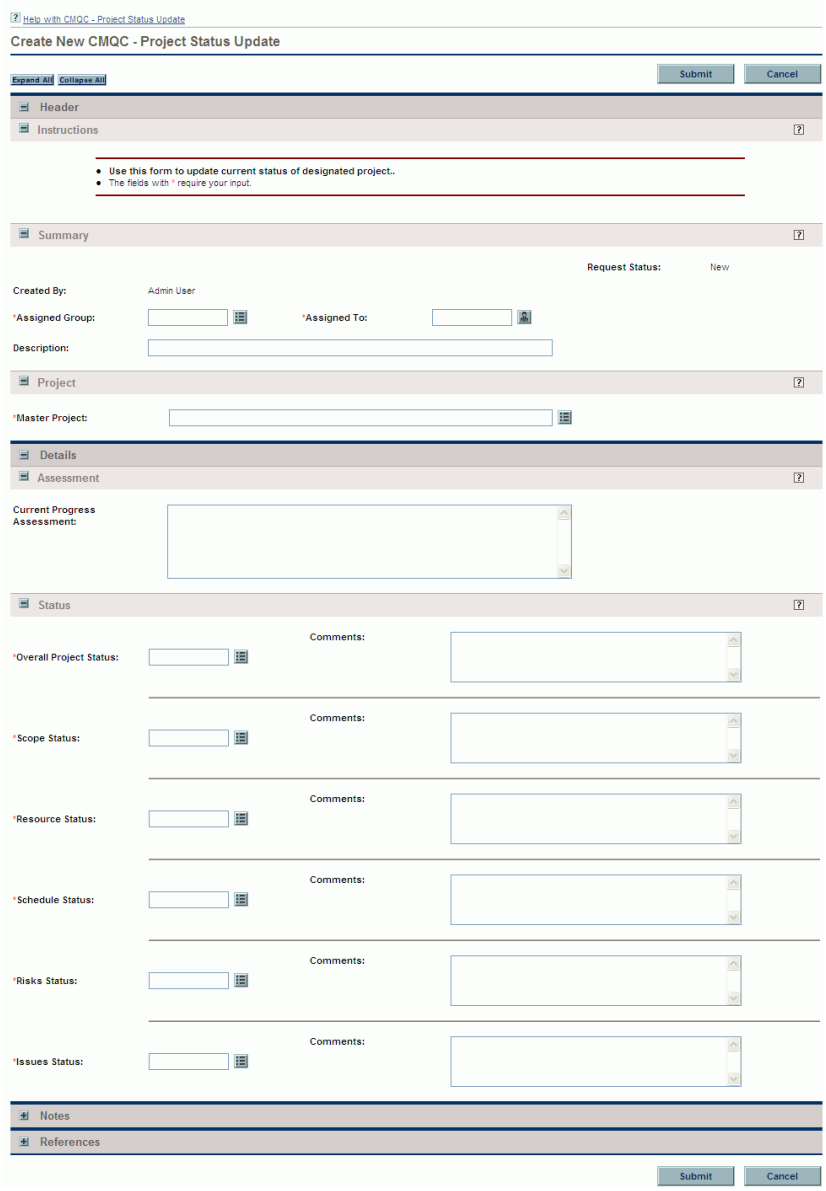
	Workflow Step	Description
1.	New	A new request for project status update request is submitted.
2.	In Review	The reviewer verifies the project status update request. A notification email is sent to the CoE Manager, project owner, and any assigned reviewer on the status of this project request. If the request is not approved, a notification email is sent to the owner requesting an update.
3.	Update Status	If the request was rejected, the request owner must update the project status information and resubmit it for approval. A notification email is sent to the owner regarding the status of the project update status request.
4.	Cancelled	The request was cancelled by the request owner.
5.	Closed (Success)	The request was successfully completed.

Submitting a Project Status Update Request

To submit a project status update request:

1. Log on to PPM Center.
2. From the menu bar, select **Open > Center Management > Quality Management > Project Status Update.**

The Create New CMQC - Project Status Update page opens.



3. In the **Summary** section, complete the following required fields:

    a. To select a security group name to use to filter names for the **Assigned To** field, use the **Assigned Group** auto-complete.

    b. To select the name of the user to be responsible for completing the project status update request, use the **Assigned To** auto-complete.

4. To supply additional information about this request that would be useful to stakeholders, you can type a short description of the request in the **Description** field.

If you leave the **Description** field empty, and you then specify a master project, the **Description** field is automatically populated with the value "Project status update for <*Project_Name*>."

5. In the **Project** section, use the **Master Project** auto-complete to select the application project to be updated.

The project status update request must be related to an application project or QA testing project request through the **Master Project** field.

6. In the **Assessment** section, you can type comments about overall project progress in the **Current Progress Assessment** field.

For information about the fields on this page, select the **Help with CMQC - Project Status Update** link in the top left corner of the page.

7. In the **Status** section, complete the following required fields:

    a. To select the indicator (green, yellow, or red) that best represents the current overall project status, use the **Overall Project Status** auto-complete.

    b. To select the indicator (green, yellow, or red) that best represents the current project scope status, use the **Scope Status** auto-complete.

    c. To select the indicator (green, yellow, or red) that best represents the current resource status for the project, use the **Resource Status** auto-complete.

d. To select the indicator (green, yellow, or red) that best represents the current project schedule status, use the **Schedule Status** auto-complete.

e. To select the indicator (green, yellow, or red) that best represents the current project risks status, use the **Risks Status** auto-complete.

f. To select the indicator (green, yellow, or red) that best represents the current project issues status, use the **Issues Status** auto-complete.

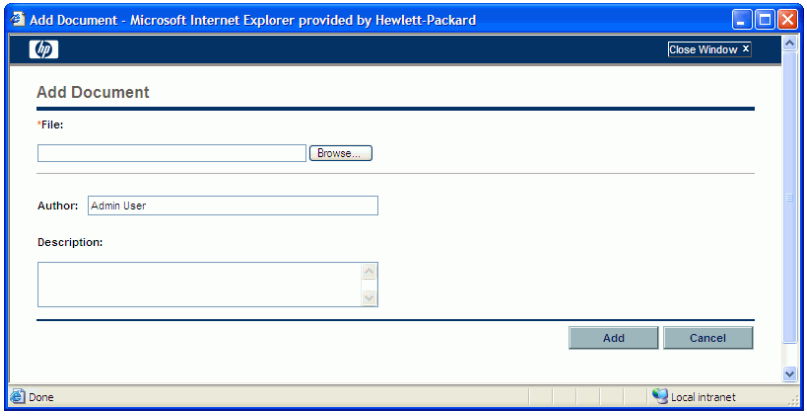
8. In the **Notes** section, type any additional information you want to save about this project status update request.

9. To add a reference to this request, in the **Reference Additions** section, do the following:

   a. From the **New Reference** list, select the type of reference to add.

   b. Click **Add.**

      The Add <*Reference Type*> window opens.



   c. Complete the required fields, and then click **Add.**

10. Click **Submit.**

Test Status Report Requests

The test status report is used by the project, development, and QA teams to track the progress of the testing effort and quality of the application. The test status report is linked to a single Quality Center project. It queries the Quality Center project for data on requirements coverage, review status, test execution progress and defects trends.

Test status report results are distributed to the application stakeholders in various PPM Dashboard portlets. It is critical that the QA manager run the test status report on a regular basis to gain visibility into the application quality levels, identify trends, and resolve any potential issues before they threaten the application's business success.

CMQC provides the workflow to create a status report, complete with major quality indicators. If additional quality metrics must be retrieved from the Quality Center project, the QA manager should contact the PPM Center administrator to extend the status report's capabilities.

Figure 8-2 shows the workflow that the test status report request follows.

Figure 8-2. CMQC - QA Test Status Report workflow

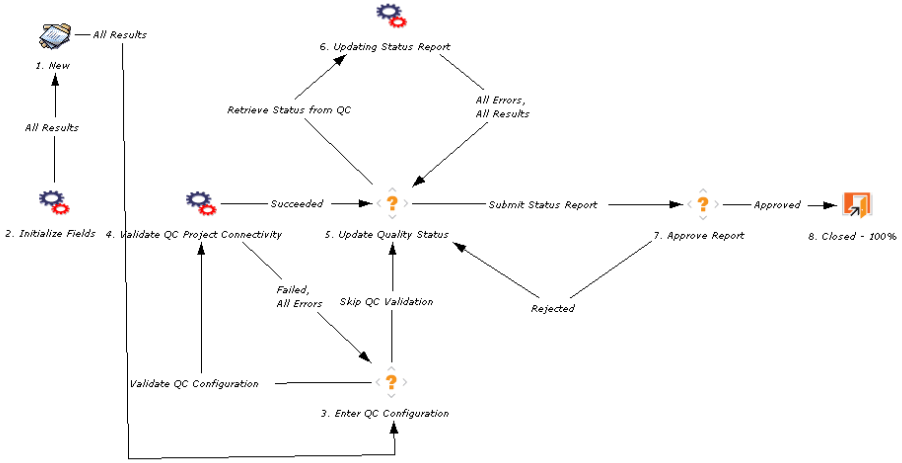


Table 8-2. CMQC - QA Test Status Report workflow steps

	Workflow Step	Description
1.	New	A new test status report is submitted for processing.
2.	Enter QC Configuration	Details on the Quality Center instance, domain, and project are provided. Test results will be retrieved from this project.
3.	Validate QC Project Connectivity	An execution step that validates the connection to the specified Quality Center project.
4.	Update Quality Status	The creator or reviewer may manually update the test results, or automate the retrieval of test results from the target Quality Center project. (If retrieval is automated, the user validates the results before submitting for review.)
5.	Updating Status Report	This execution step connects to the target Quality Center project and retrieves statistics on requirements coverage, requirements review status, test execution status, and defect statistics. Information is only retrieved for metrics that have defined filters or prerequisites.
6.	Approve Report	An assigned reviewer (for example, a QA manager, development manager, or project manager) approves the test status report.
7.	Closed	The test status report is complete.

To submit a test status report initiation request:

1. Log on to PPM Center.
2. From the menu bar, select **Open > Center Management > Quality Management > Create Test Status Report.**

   The Create New CMQC - QA Test Status Report page opens.

3. In each section, complete the required fields (marked with a red asterisk) and any of the optional fields for which you want to provide information.

   Figure 8-3 shows the Create New CMQC - QA Test Status Report page. *Table 8-3* on page 145 provides descriptions of the fields in each section of the page.

   Additional information helps all stakeholders gain a better understanding of a project. For information about the fields in a specific section, click the ? icon in the section heading (where available).

4. Click **Submit.**

   PPM Center can be configured so that you can save the request before you submit it. To have this feature enabled, contact your PPM Center administrator.

Figure 8-3. Create New CMQC - QA Test Status Report page

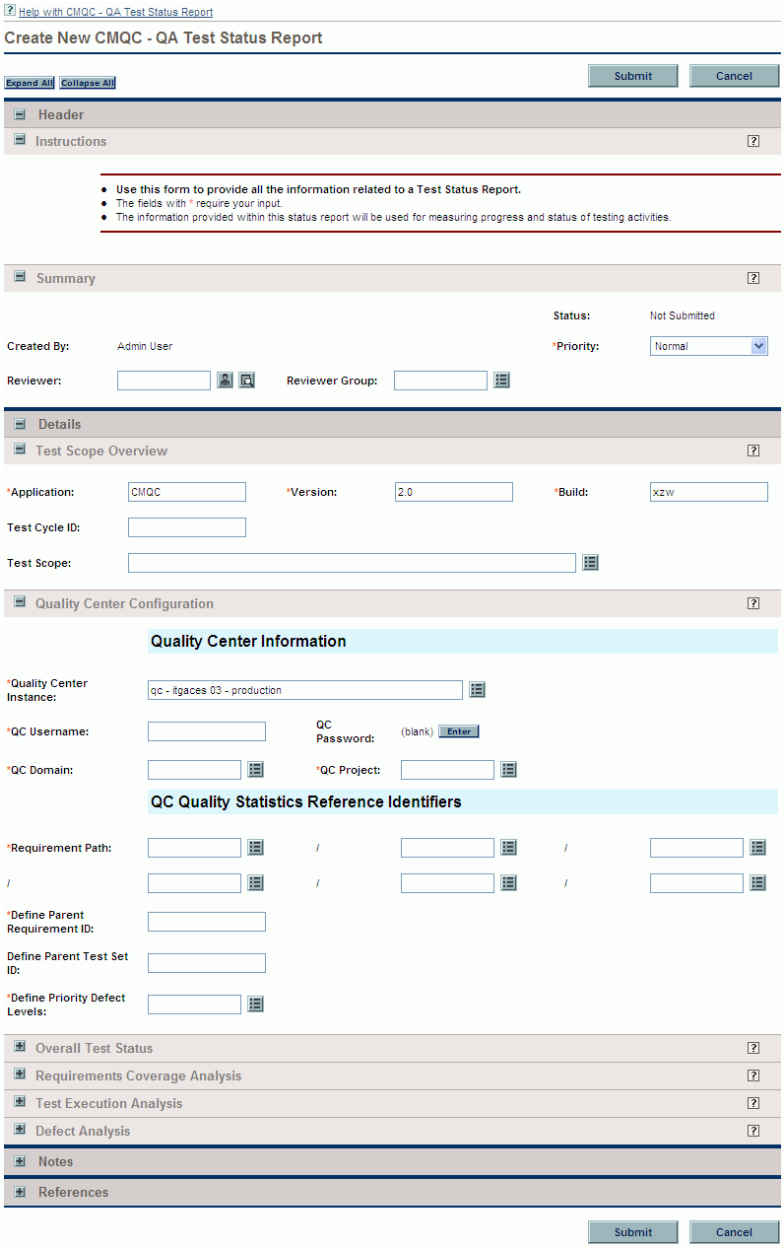


Table 8-3. Fields on the Create New CMQC - QA Test Status Report page (page 1 of 7)

Field Name (*Required)	Description
Summary section	
Request Status	Displays the current workflow status of the request.
Created By	Displays the name of the user who created the request.
*Priority	Displays the priority value assigned to the request.
Reviewer	Use the auto-complete to select the name of a user to review the report results.
Reviewer Group	Use the auto-complete to select the name of the security group to which the review belongs.
Test Scope Overview section	
	Use this section to provide information about the application version, test cycle, and the scope of the testing effort.
*Application	Type the name of the product or application under test in this field.
*Version	Type the version of the product or application under test in this field.
*Build	Type the development build identifier in this field.
Test Cycle ID	Type the identifier for the test iteration or cycle in this field.
Test Scope	Use the auto-complete to select one or more values that indicate the scope of the testing.

Table 8-3. Fields on the Create New CMQC - QA Test Status Report page (page 2 of 7)

Field Name (*Required)	Description
Quality Center Configuration section	
	Use this section to provide details on how to connect to the Quality Center project, and your preferences for how to process the test status report.
Quality Center Information	
*Quality Center Instance	Type the name of the Quality Center instance in this field.
*QC Username	Type the name of the Quality Center user in this field. This account is used to retrieve the list of available QC domains and projects.
QC Password	Type the password of the Quality Center user in this field.
*QC Domain	Type the name of the Quality Center domain in this field. Only domains that the Quality Center user has access to are allowed.
*QC Project	Type the name of the Quality Center project from which to retrieve data in this field. You can only specify projects to which the Quality Center user has access.
QC Statistics Reference Identifiers	
*Requirement Path	Use the auto-complete to select the test requirement path provided in the Quality Center project.
*Define Parent Requirement ID	Type the parent requirement ID in this field. The parent requirement ID is defined by the request owner in the specified project. This reference is used to obtain all information related to requirements coverage, review status, and test execution. If requirement ID is set to 0, all requirements in the project and their sub-nodes are processed. If the requirement ID is set to a negative number, requirements and test execution data are not processed.

Table 8-3. Fields on the Create New CMQC - QA Test Status Report page (page 3 of 7)

Field Name (*Required)	Description
Define Parent Test Set ID	Type the parent test set ID in this field. The request owner provides the identifier for the test set in Quality Center's Test Lab module.
*Define Priority Defect Levels	Use the auto-complete select. The request owner provides a list of defect priorities. This information is used to identify high-priority defects and enable better project risk assessment.
Overall Test Status section	
	Use this section to select an indicator of application quality and provide a summary of the results.
Overall Quality Status	From this list, select a value (Green, Yellow, or Red) to indicate the overall status of the testing effort or results.
Test Status Summary	In this field, you can type a brief summary of the testing activities and results.
Requirements Coverage Analysis section	
Coverage Status	From this list, select a value (Green, Yellow, or Red) to indicate the overall status of testing requirements (based on coverage and review).
Results Analysis	You can type a brief summary of the test requirements status in this field.
Coverage Statistics	
Total	Type the total number of requirements analyzed (under the specified parent requirement ID) in this field.
Passed	Type the number of requirements with a direct coverage status of “Passed” in this field.
Failed	Type the number of requirements with direct coverage status of “Failed” in this field.
Not Covered	Type the number of requirements with a direct coverage status of “Not Covered” in this field.

Table 8-3. Fields on the Create New CMQC - QA Test Status Report page (page 4 of 7)

Field Name (*Required)	Description
N/A	Type the number of requirements with a direct coverage status of “NA” in this field.
Other	In this field, type the number of requirements with all other direct coverage status values.
Review Statistics	
Total	In this field, type the total number of requirement nodes under and including the specified parent requirement ID.
Reviewed	In this field, type the number of requirements with the status “Reviewed.”
Not Reviewed	In this field, type the number of requirements with the status “Not Reviewed.”
Other	In this field, type the number of requirements with all other review status.
Test Execution Analysis section	
Test Status	From this list, select a value (Green, Yellow, or Red) to indicate the overall status of test development and execution.
Results Analysis	You can type a brief summary of test execution activities and results in this field.
Test Execution Statistics	
Total	In this field, you can type the total number of unique tests linked to requirements.
Passed	In this field, you can type the number of completed tests with Passed status.
Failed	In this field, you can type the number of completed tests with Failed status.
Other	In this field, you can type the number of tests pending.

Table 8-3. Fields on the Create New CMQC - QA Test Status Report page (page 5 of 7)

Field Name (*Required)	Description
Defect Analysis section	
Defect Status	From this list, select the red, yellow, or green indicator to reflect application quality based on the defect statistics.
Results Analysis	In this field, you can type a brief summary of known project defects and risks.
Overall Total Defects	In the generated report, this field displays the total number of defects (with any status) in the specified Quality Center instance for the selected project, application, build, and so on.
Open Priority Defects	In the generated report, this field displays the total number of open defects with a priority level defined as high in the specified Quality Center instance for the selected project, application, build, and so on.
Open Defects	In the generated report, this field displays the total number of defects with the status of Open in the specified Quality Center instance for the selected project, application, build, and so on.

Table 8-3. Fields on the Create New CMQC - QA Test Status Report page (page 6 of 7)

Field Name (*Required)	Description
QC Filters	QC filters allow the QA manager to filter only the types of defects that they wish to report on. The filter name can include information on application version, defect type, and so on, to help identify defects that should be processed for this report. You can use the following names, conditions, and values to filter defects: • **Field Name.** A name of a defect field or attribute as specified in the Quality Center project. • **Operator.** A comparator for the field name and value (for example, Equals, Like, In, and so on), a logical operation between two conditions (for example, AND, OR) or a grouping of conditions (for example, begin/ end group). • **Available Condition.** (Optional) An auto-complete list of available condition values. • **Actual Condition.** A value for the field. If operator is "In" or "Not In," then the actual condition must be within single quotes and delimited by a comma (for example, "Value," "ValueB," "ValueC") If the operator is "Like" or "Not Like," then the value can contain a wildcard (%) such as %ProjectX%. For example, if a given Quality Center project is tied to many application projects, setting the filters lets you create a report that contains only defects of a certain type that are specific to a project. (For example, Application = Application Project A AND Type = Functional.) You must specify at least one filter for this report. Otherwise, no query is made and no data are collected.
Total Defects	Total number of defects that match the filter conditions.
Open Priority	Number of defects that are pending (not closed), and that have priority levels defined as high (based on the **Define Priority Level Defects** field).
Open Defects	Number of defects that are pending (not closed).

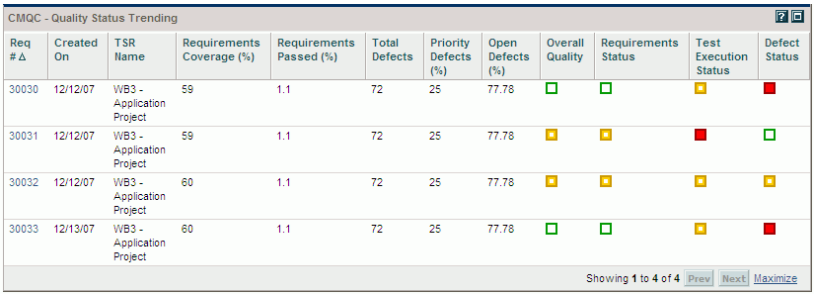
Table 8-3. Fields on the Create New CMQC - QA Test Status Report page (page 7 of 7)

Field Name (*Required)	Description
Notes section	
Notes to be added on save	Use this field to record any additional notes you want to save about this QA test status report.
Reference Additions section	
New Reference	From this list, select the type of new reference that you want to associate with this QA test status report.
Add	Click this button to search for and select the specific reference (of the type you selected from the **New Reference** list) to add.
References to be added on Save	Field that lists the references you selected to be added when you submit the request.
Open	Click this button to open and view a reference selected in the **References to be added** on Save list.
Remove	Click this button to remove a reference selected in the **References to be add**ed on Save list.

After you submit the request, the Request Creation Confirmed page opens. To view the newly generated detail page for the project initiation request, click the **Request #** link. The project initiation request is routed along its workflow.

All test status update reports are listed chronologically in the Project Overview page as shown in *Figure 8-4*. It is considered best practice for the project manager to issue project status updates on a weekly basis.

Figure 8-4. CMQC - Quality Status Trending portlet


CMQC - Quality Status Trending

Req # Δ	Created On	TSR Name	Requirements Coverage (%)	Requirements Passed (%)	Total Defects	Priority Defects (%)	Open Defects (%)	Overall Quality	Requirements Status	Test Execution Status	Defect Status
30030	12/12/07	WB3 - Application Project	59	1.1	72	25	77.78				
30031	12/12/07	WB3 - Application Project	59	1.1	72	25	77.78				
30032	12/12/07	WB3 - Application Project	60	1.1	72	25	77.78				
30033	12/13/07	WB3 - Application Project	60	1.1	72	25	77.78				

Showing 1 to 4 of 4 Prev Next Maximize

The test status report data is also used in multiple PPM Dashboard portlets. For more information on the quality-related PPM Dashboard portlets, see Chapter 7, *Viewing and Tracking Project Progress and Quality,* on page 101.

9 QA Test Status Reports

Overview of CMQC - QA Test Status Reports

The QA test status report is used by the project, development, and QA teams to track the progress of the testing effort and application quality. The report is linked to a single Quality Center project. It queries the Quality Center project for data on requirements coverage, review status, test execution progress, and defects trends.

QA test status report results are distributed to the stakeholders in various PPM Dashboard portlets. It is important that the QA manager run the test status report on a regular basis to provide visibility into the application quality levels, identify trends, and resolve any potential issues before they threaten the application's business success.

CMQC provides the workflow to create a status report that includes several major quality indicators. If you need to collect additional quality metrics from the Quality Center project, the QA manager can contact the PPM Center administrator, who can then extend the test status report’s capabilities.

Figure 9-1 shows the workflow that the CMQC - Test Status Report request follows. *Table 9-1* lists descriptions of the individual steps in this workflow.

Figure 9-1. CMQC - QA Test Status Report workflow

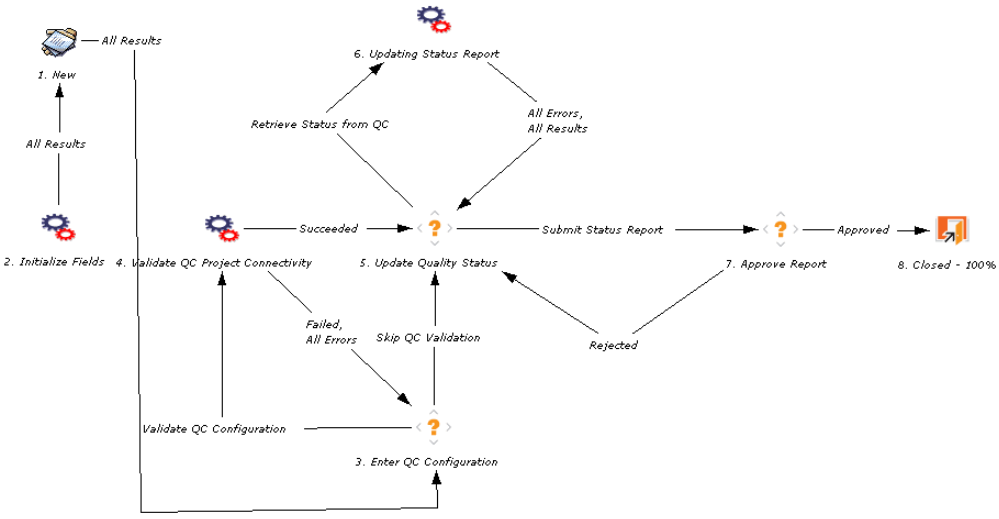


Table 9-1. CMQC - QA Test Status Report workflow steps

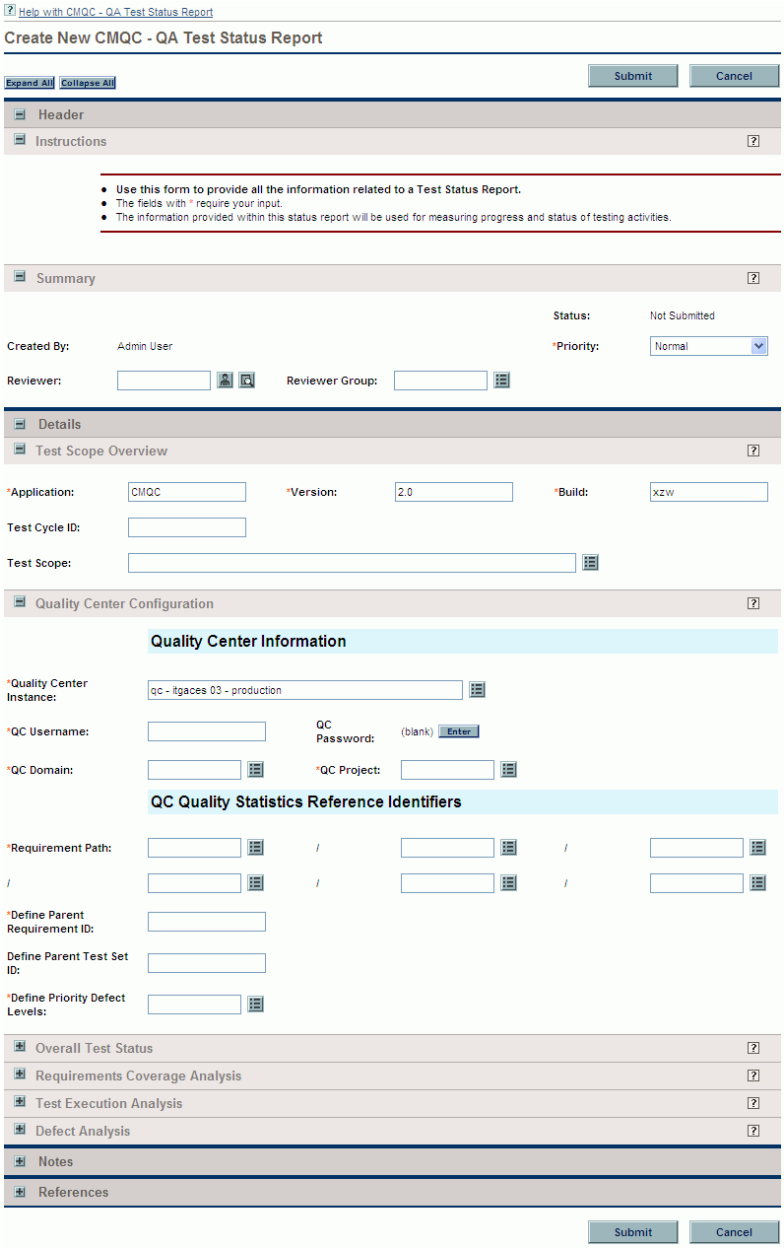
	Workflow Step	Description
1.	New	A new QA test status report is submitted for processing.
2.	Initialize Fields	QA test status report fields are initialized.
3.	Enter QC Configuration	Details on the Quality Center instance, domain, and project are provided. Test results will be retrieved from this project.
4.	Validate QC Project Connectivity	An execution step that validates the connection to the specified Quality Center project.
5.	Update Quality Status	The creator or reviewer may manually update the test results or automate the retrieval of test results from the target Quality Center project. (If retrieval is automated, the user validates the results before submitting for review.)
6.	Updating Status Report	This execution step connects to the target Quality Center project and retrieves data on requirements coverage, requirements review status, test execution status, and defect statistics. Information is only retrieved for metrics that have defined filters or prerequisites.
7.	Approve Report	An assigned reviewer (for example, a QA manager, development manager, or project manager) approves the test status report.
8.	Closed	The test status report is complete.

Creating a CMQC - QA Test Status Report Request

To submit a QA test status report request:

1. Log on to PPM Center.
2. From the menu bar, select **Open > Center Management > Quality Management > Create Test Status Report.**

The Create New CMQC - QA Test Status Report page opens.



3. In each section, complete the required fields (marked with a red asterisk) and any of the optional fields for which you want to provide information.

   Table 9-2 lists descriptions of all of the fields on the page.

   Additional information helps all stakeholders gain a better understanding of a project. For information about any of the fields on this page, select the **Help with CMQC - QA Test Status Report** link in the upper-left corner of the page.

4. Click **Submit.**

   PPM Center can be configured so that you can save the request before you submit it. To have this feature enabled, contact your PPM Center administrator.

Table 9-2. Fields on the Create New CMQC - QA Test Status Report page (page 1 of 7)

Field Name (* Required)	Description
Summary section	
Status	Displays the current workflow status of the report request.
Created By	Displays your name as originator of the request.
*Priority	From this list, you can replace the default (Normal), with a value that more closely indicates the relative importance of this report.
*Reviewer	From the list, assign a resource to review the report results.
*Reviewer Group	From the auto-complete list, select the name of a security group to review the report results.
Test Scope Overview section	
*Application	Type the name of the product or application under test in this field.
*Version	Type the version number of the product or application under test in this field.
*Build	Type the development build identifier in this field.

Table 9-2. Fields on the Create New CMQC - QA Test Status Report page (page 2 of 7)

Field Name (* Required)	Description
Test Cycle ID	Type the identifier for the test iteration or cycle in this field.
Test Scope	From the auto-complete list, select one or more values that indicate the scope of the testing report.
Quality Center Configuration section	
	Use this section to provide details on how to connect to the Quality Center project, and your preferences for how to process the test status report.
Quality Center Information	
*Quality Center Instance	Type the name of the Quality Center instance in this field.
*QC Username	Type the name of the Quality Center user in this field. This account is used to retrieve the list of available QC domains and projects.
QC Password	Click **Enter,** and then, in the PPM Center password window, type and then confirm a new QC password.
*QC Domain	Type the name of the Quality Center domain in this field. You can only specify domains to which the Quality Center user has access.
*QC Project	Type the name of the Quality Center project from which to retrieve data in this field. You can only specify projects to which the Quality Center user has access.
QC Quality Statistics Reference Identifiers	
*Requirement Path	Use the auto-complete to specify the path to the Quality Center requirements.

Table 9-2. Fields on the Create New CMQC - QA Test Status Report page (page 3 of 7)

Field Name (* Required)	Description
*Define Parent Requirement ID	Type the parent requirement ID in this field. The parent requirement ID is defined by the request owner in the specified project. This reference is used to obtain all information related to requirements coverage, review status, and test execution. If requirement ID is set to 0, all requirements in the project and their sub-nodes are processed. If the requirement ID is set to a negative number, requirements and test execution data are not processed.
Define Parent Test Set ID	Type the parent test set ID in this field. The request owner provides the identifier for the test set in Quality Center's Test Lab module.
*Define Priority Defect Levels	Use the auto-complete to select. The request owner provides a list of defect priorities. This information is used to identify high-priority defects and enable better project risk assessment.
Overall Test Status section	
	Use this section to select an indicator of application quality and provide a summary of the results.
Overall Quality Status	From this list, select a value (green, yellow, or red) to indicate the overall status of the testing effort or results.
Test Status Summary	In this field, you can type a brief summary of the testing activities and results.
Requirements Coverage Analysis section	
Coverage Status	From this list, select a value (Green, Yellow, or Red) to indicate the overall status of testing requirements (based on coverage and review).
Results Analysis	You can type a brief summary of the test requirements status in this field.

Table 9-2. Fields on the Create New CMQC - QA Test Status Report page (page 4 of 7)

Field Name (* Required)	Description
Coverage Statistics	
Total	Type the total number of requirements analyzed (under the specified parent requirement ID) in this field.
Passed	Type the number of requirements with a direct coverage status of “Passed” in this field.
Failed	In this field, type the number of requirements with direct coverage status of “Failed.”
Not Covered	In this field, type the number of requirements with a direct coverage status of “Not Covered.”
N/A	In this field, type the number of requirements with a direct coverage status of “NA.”
Other	In this field, type the number of requirements with all other direct coverage status values.
Review Statistics	
Total	In this field, type the total number of requirement nodes under and including the specified parent requirement ID.
Reviewed	In this field, type the number of requirements with the status “Reviewed.”
Not Reviewed	In this field, type the number of requirements with the status “Not Reviewed.”
Other	In this field, type the number of requirements with all other review status values.
Test Execution Analysis section	
Test Status	From this list, select the indicator (green, yellow, or red) that best reflects the overall status of test development and execution.
Results Analysis	You can type a brief summary of test execution activities and results in this field.

Table 9-2. Fields on the Create New CMQC - QA Test Status Report page (page 5 of 7)

Field Name (* Required)	Description
Test Execution Statistics	
Total	In this field, you can type the total number of unique tests linked to requirements.
Passed	In this field, you can type the number of completed tests with Passed status.
Failed	In this field, you can type the number of completed tests with Failed status.
Other	In this field, you can type the number of tests pending.
Defect Analysis section	
Defect Status	From this list, select the red, yellow, or green indicator that best reflects current application quality based on the defect statistics.
Results Analysis	In this field, you can type a brief summary of known project defects and risks.
Overall Total Defects	In the generated report, this field displays the total number of defects (with any status) in the specified Quality Center instance for the selected project, application, build, and so on.
Open Priority Defects	In the generated report, this field displays the total number of open defects with a priority level defined as high in the specified Quality Center instance for the selected project, application, build, and so on.
Open Defects	In the generated report, this field displays the total number of defects with the status of Open in the specified Quality Center instance for the selected project, application, build, and so on.

Table 9-2. Fields on the Create New CMQC - QA Test Status Report page (page 6 of 7)

Field Name (* Required)	Description
QC Filters	QC filters allow the QA manager to selectively filter for the information to include in the QA test status report. The filter can be used to specify application version, defect type, and so on, to help capture the data to be processed for the report. You can use the following names, conditions, and values to filter defects: • **Field Name.** A name of a defect field or attribute as specified in the Quality Center project. • **Operator.** A comparator for the field name and value (for example, Equals, Like, In, and so on), a logical operation between two conditions (for example, AND, OR) or a grouping of conditions (for example, begin/end group). • **Available Condition.** (Optional) An auto-complete list of available condition values. • **Actual Condition.** A value for the field. If operator is “In” or “Not In,” then the Actual Condition must be within single quotes and delimited by a comma (for example, “Value,” “ValueB,” “ValueC”) If operator is “Like” or “Not Like,” then the Actual Condition value can contain a wildcard (%) such as %ProjectX%. For example, if a given Quality Center project is tied to many application projects, setting the filters Lets you create a report that contains only defects of a certain type that are specific to a project. (For example, Application = Application Project A AND Type = Functional.) You must specify at least one filter for this report. Otherwise, no query is performed and no data are collected.
Total Defects	Total number of defects that match the filtering conditions.

Table 9-2. Fields on the Create New CMQC - QA Test Status Report page (page 7 of 7)

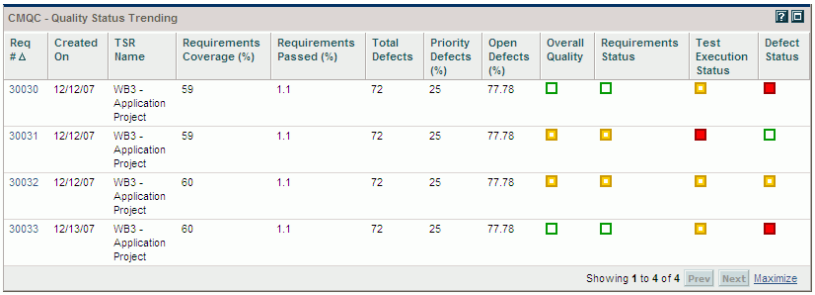
Field Name (* Required)	Description
Open Priority	Number of defects that are pending (not closed), and that have priority levels defined as high (based on the **Define Priority Level Defects** field).
Open Defects	Number of defects pending (not closed).
Notes section	
Notes to be added on save	Use this field to record any additional notes you want to save about this QA test status report.
Reference Additions section	
New Reference	From this list, select the type of new reference that you want to associate with this QA test status report.
Add	Click this button to search for and select the specific reference (of the type you selected from the **New Reference** list) to add.
References to be added on Save	Field that lists the references you selected to be added when you submit the request.
Open	Click this button to open and view a reference selected in the **References to be added on Save** list.
Remove	Click this button to remove a reference selected in the **References to be added on Save** list.

The new QA test status report request is routed along its workflow.

After you submit the request, the Request Creation Confirmed page opens. To view the newly-generated detail page for the project initiation request, click the **Request #** link.

All test status update reports are listed chronologically in the CMQC - Quality Status Trending portlet, as shown in *Figure 9-2*. It is considered a best practice for the project manager to issue project status updates weekly.

Figure 9-2. CMQC - Quality Status Trending portlet



CMQC - Quality Status Trending

Req # Δ	Created On	TSR Name	Requirements Coverage (%)	Requirements Passed (%)	Total Defects	Priority Defects (%)	Open Defects (%)	Overall Quality	Requirements Status	Test Execution Status	Defect Status
30030	12/12/07	WB3 - Application Project	59	1.1	72	25	77.78				
30031	12/12/07	WB3 - Application Project	59	1.1	72	25	77.78				
30032	12/12/07	WB3 - Application Project	60	1.1	72	25	77.78				
30033	12/13/07	WB3 - Application Project	60	1.1	72	25	77.78				

Showing 1 to 4 of 4 Prev Next Maximize

QA test status report results are used in multiple PPM Dashboard portlets. For more information on the quality-related portlets, see Chapter 7, *Viewing and Tracking Project Progress and Quality,* on page 101.

10 Managing Quality Center of Excellence Administrative Activity

Overview of Managing CoE Administration

The Quality Center of Excellence includes a set of internal administrative activities that must follow a defined series of workflow steps to ensure successful processing and resolution. CMQC provides administrative request types and workflows for managing these activities, which are:

- Quality Center instance registration (see *Quality Center Instance Registration Requests* on page 165)
- Quality Center project and user administration (see *QC Administrative Requests* on page 169)
- Requesting service from IT (see *Creating CMQC - IT Service Requests* on page 184)

The request types that you can use to manage these activities are addressed in detail in the following sections.

Quality Center Instance Registration Requests

To register a Quality Center instance, you submit a CMQC - QC Instance Registration request. Once a Quality Center instance is registered, it can be referenced by other types of requests (CMQC - QC Project Administrative requests, CMQC - QC User Administrative requests, CMQC Testing Project requests, and so on) and portlets to perform queries and actions.

To register a QC instance, you must provide QC connection information for both the QC database and the QC site administrator.

CMQC - QC Instance Registration requests are routed to CMQC's administrative or operations teams and are handled by either an application administrator for Quality Center or a systems administrator. CMQC - QC Instance Registration requests follow the workflow shown in *Figure 10-1* and described in *Table 10-1*.

Figure 10-1. CMQC - QC Instance Registration workflow

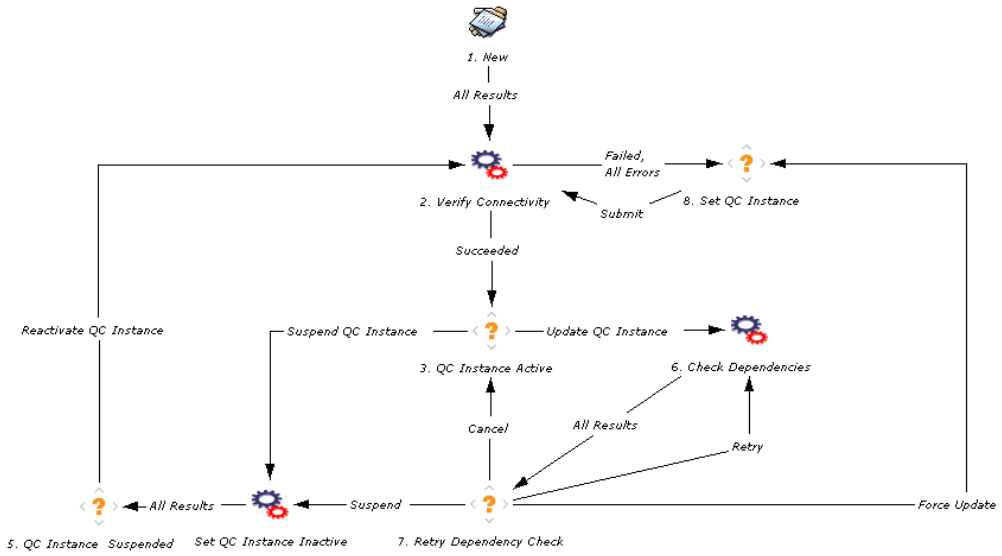


Table 10-1. CMQC - QC Instance Registration workflow steps

	Workflow Step	Description
1.	New	A new Quality Center registration request is submitted for processing.
2.	Verify Connectivity	Information provided for the Quality Center instance is tested and verified. If both the application server and database details are valid, the check passes.
3.	QC Instance Active	Registered instance has been validated and is available for referencing and use in various requests that require Quality Center instance information.
4.	Set QC Instance Inactive	Sets the active state of the Quality Center instance to “unavailable.” The instance cannot be referenced by new requests.
5.	QC Instance Suspended	The instance has been temporarily suspended and cannot be used in new requests. This typically happens while maintenance is performed on the registered Quality Center instance.
6.	Check Dependency	Checks to determine whether the Quality Center instance is being used by a project or request. Quality Center instances that are in use cannot be modified.
7.	Retry Dependency Check	The administrator can either retry the dependency check in order to perform an update, cancel the update request and return to active state with existing configuration, or suspend the Quality Center instance.
8.	Set QC Instance	The administrator updates the instance configuration. If an error occurs, the administrator checks the status message, corrects the problem, and then resubmits so that the instance information can be validated.

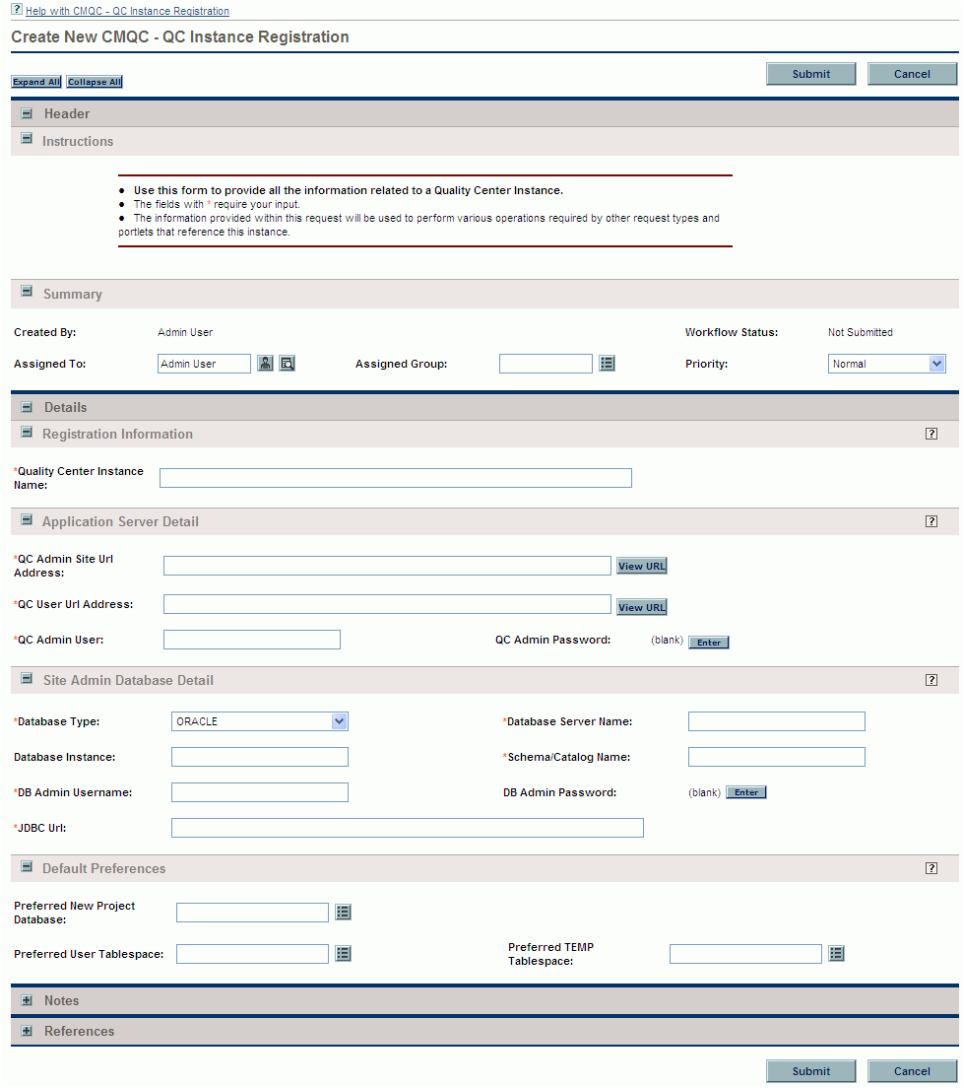
To create and submit a CMQC - QC Instance Registration request:

1. Log on to PPM Center.

For information on how to log on to PPM Center, see the *Getting Started* guide for PPM Center.

2. From the menu bar, select **Open > Center Management > Administrative Requests > Register a QC Instance.**

   The Create New CMQC - QC Instance Registration page opens.



3. Complete all required fields (marked with a red asterisk), if any, in each section of the page.

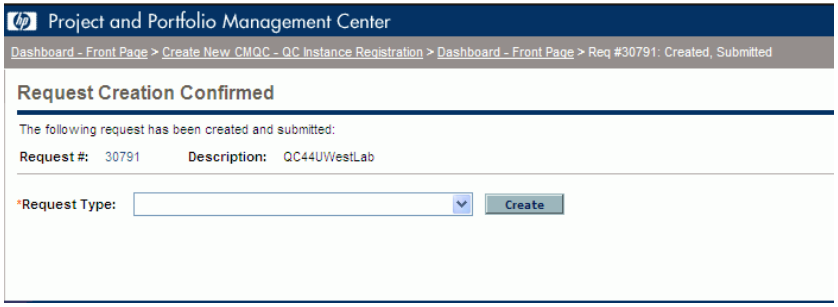
   For help on the request fields, select the **Help with CMQC - QC Instance Registration** link at the top left of the page.

4. Complete any optional fields that provide users with additional information they might find useful.

5. Click **Submit.**

   Your PPM Center administrator can configure PPM Center so that you can save requests before you submit them. To have this feature enabled, contact your PPM Center administrator.

   The Request Creation Confirmed page opens.



6. To open the detail page for the new request, click the number displayed in the **Request #** field.

The submitted QC Instance Registration request is routed along the workflow shown in *Figure 10-1* on page 166.

The information you provided in the request can now be used to perform various operations required by other request types and portlets that reference this Quality Center instance.

QC Administrative Requests

A Quality Center Administrative request is a request for service on a specific Quality Center instance or project. You can create two types of Quality Center

administrative requests to carry out tasks that Quality Center administrators perform frequently.

To automate Quality Center project administration tasks, you create a CMQC - QC Project Administrative request. To automate Quality Center user administration tasks, you create a CMQC - QC User Administrative Request. Task automation for requests of these types is driven by approvals from QC administrators.

Use CMQC - QC Project Administrative requests to automate:

- Creating a project based on a Quality Center template
- Copying an existing project
- Synchronizing project configuration and customization with another project or template

Use CMQC - QC User Administrative requests to automate:

- Creating a user account
- Updating a user account
- Resetting passwords for user accounts
- Adding resources to a Quality Center project or group
- Removing resources from a Quality Center project or group

When you create these types of requests, you specify the Quality Center instance you want to use as well as the project and the domain.

Quality Center administrative requests are routed to Center of Excellence administrative or operations teams to be handled by either a Quality Center application administrator or a systems administrator. Both CMQC - QC Project Administrative and CMQC - QC User Administrative type requests follow the workflow shown in *Figure 10-2* and described in *Table 10-2*.

Figure 10-2. CMQC - QC Administrative Request workflow

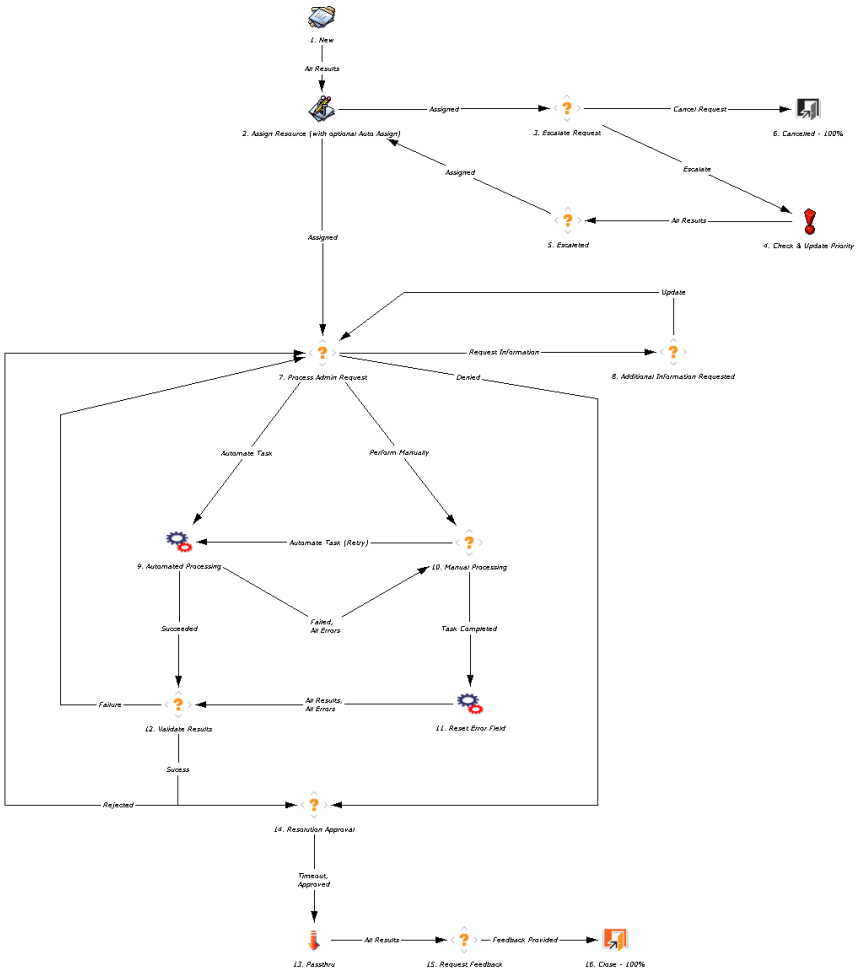


Table 10-2. CMQC - QC Administrative Request workflow steps (page 1 of 2)

	Workflow Step	Description
1.	New	A new QC administrative request is submitted for processing.
2.	Assign Resource (with optional Auto Assign)	If a resource was not automatically assigned to the request, the CoE IT service team manually assigns a resource to the request.
3.	Escalate Request	The request creator escalates the request by increasing its priority and notifying CoE administration that the request requires attention.
4.	Check & Update Priority	If the request is escalated, this step checks and updates the request priority.
5.	Escalated	The request is escalated, and action must be taken to expedite its resolution. The administrative manager may assign additional resources to help resolve the issue.
6.	Cancelled	The request is cancelled by its creator.
7.	Process Admin Request	The assigned administrator verifies the information provided in the request. If the request operation is permitted based on CoE policies, the administrator can either perform the task manually or automate the task. Task automation allows administrators to quickly process operations that are frequently requested.
8.	Additional Information Requested	The request creator requires additional information so that the request can be processed correctly. This step is also used to get necessary feedback or clarification on the task.
9.	Automated Processing	The tasks defined in the administrative request are automated. It is important to ensure that all required information is provided in the appropriate section for the task.
10.	Manual Processing	The administrator assigned to the task performs the requested task manually. This may be required based on the complexity of the request.

Table 10-2. CMQC - QC Administrative Request workflow steps (page 2 of 2)

	Workflow Step	Description
11.	Reset Error Field	The task **Status** field is cleared.
12.	Validate Results	The assigned administrator is allowed to validate the task performed, especially if it was automated. The administrator can complete or audit the task manually.
13.	Passthru	A pass-through step.
14.	Resolution Approval	A submitted resolution is pending requestor approval.
15.	Request Feedback	A submitted resolution is pending requestor feedback. The requestor can complete the feedback section to provide service-level metrics. If feedback is not provided within the configured timeout interval (typically 14 days), the request is automatically closed.
16.	Close (Success)	The request was closed with success.

Creating CMQC - QC User Administrative Requests

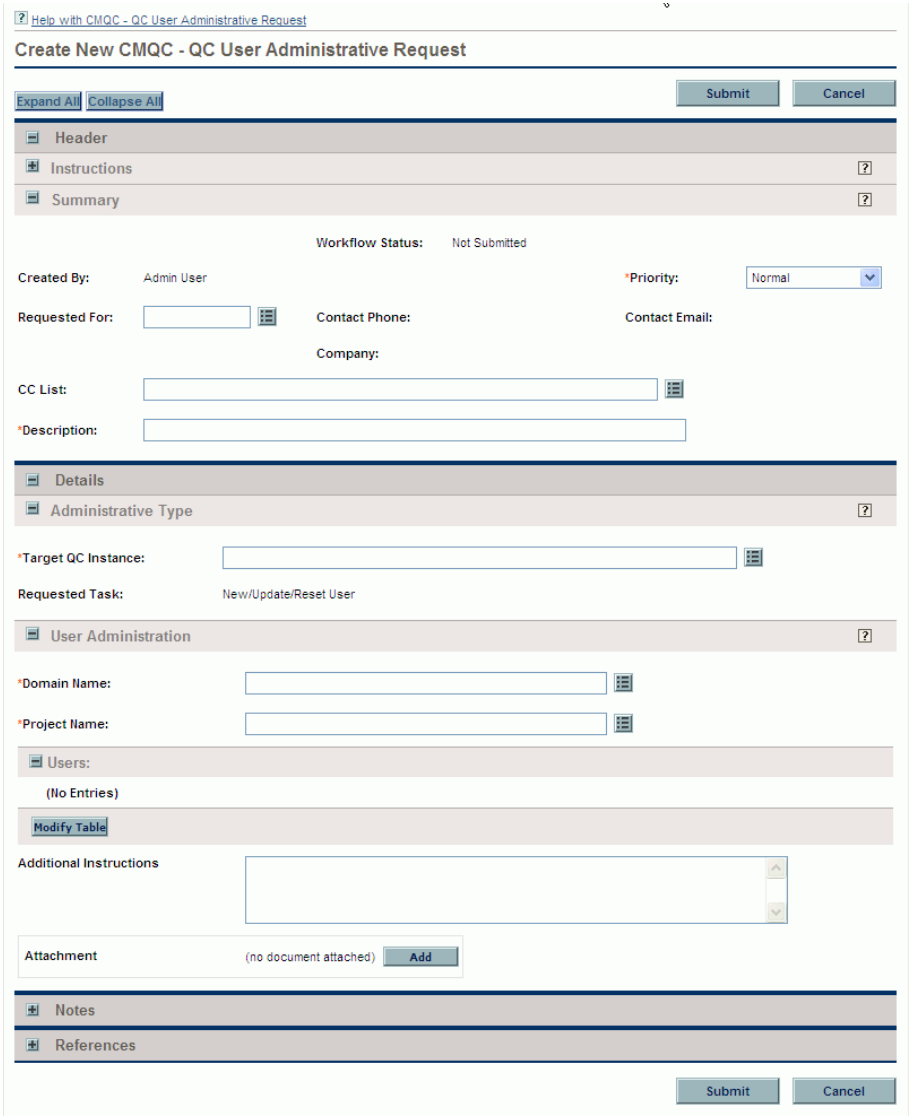
To create and submit a CMQC - QC Administrative request:

1. Log on to PPM Center.

   For information on how to log on to PPM Center, see the *Getting Started* guide for PPM Center.

2. From the menu bar, select **Open > Center Management > Administrative Requests > QC User Administration.**

   The Create New CMQC - QC User Administrative Request page opens.

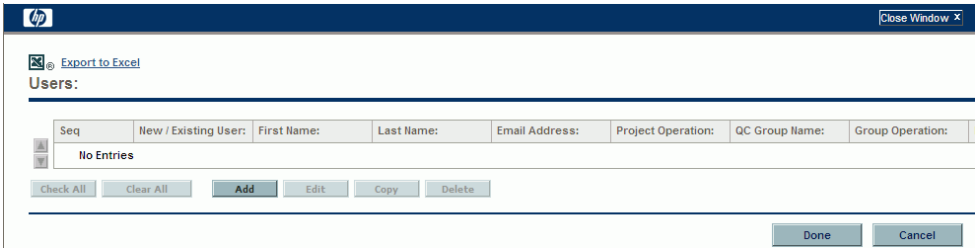

Help with CMQC - QC User Administrative Request
Create New CMQC - QC User Administrative Request
Expand All
Collapse All
Submit
Cancel
Header
Instructions
Summary
Workflow Status:
Not Submitted
Created By:
Admin User
*Priority:
Normal
Requested For:
Contact Phone:
Contact Email:
Company:
CC List:
*Description:
Details
Administrative Type
*Target QC Instance:
Requested Task:
New/Update/Reset User
User Administration
*Domain Name:
*Project Name:
Users:
(No Entries)
Modify Table
Additional Instructions
Attachment
(no document attached)
Add
Notes
References
Submit
Cancel

3. Complete the following fields in the **Summary** section:

Field Name (*Required)	Description
*Priority	To change to a priority value other than Normal, select a different value from this list.
Requested For	In PPM Center, contacts are resources used as a point of reference or information. If you are submitting the request on behalf of a PPM Center contact, select the contact's name from the auto-complete list. After you select a contact the **Contact Phone, Contact Email,** and **Company** fields will be populated automatically if the contact's phone number and email address have been provided. For more information about contacts, see the *HP Demand Management Configuration Guide.*
CC List	From the auto-complete list, select the email IDs of users to be copied on this request.
*Description	Type a short description of this request.

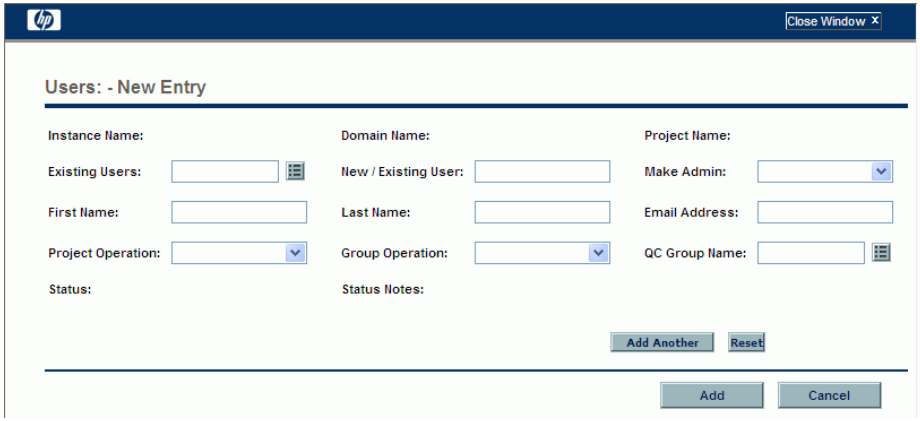
4. In the **Administrative Type** section, from the auto-complete list for the **Target QC Instance** field, select the Quality Center instance to use.
5. In the **User Administration** section, complete the following required fields:
   a. From the auto-complete list for the **Domain Name** field, select the target Quality Center domain.
   b. From the auto-complete list for the **Project Name** field, select the target Quality Center project.
6. To select resources to add to, remove from, or update for the selected project:
   a. In the **Users** section, click **Modify Table.**

      The Users window opens.



b. Click **Add.**

The Users: New Entry window opens.



c. Do one of the following:

- To select an existing resource, use the **Existing Users** auto-complete.
- To create a new PPM Center user account, in the **New / Existing User** field, type a username for the resource.

  If you are adding a new resource, the remaining enabled fields are now required.

d. In the **First Name** field, type the first name of the resource.

e. In the **Last Name** field, type the last name of the resource.

f. In the **Email Address** field, type the email address of the resource.

If you are adding a new resource, then after you submit the request, a password is generated for the new resource and sent to this email address.

g. From the **Project Operation** list, select one of the following:

- To add this resource to the selected project, select **ADD.**
- To update the information for an existing resource with the information you add in this window, select **UPDATE.**
- To remove this resource from the selected project, select **REMOVE.**
- If you are adding a resource to the system, but not to the selected project, select **NONE.**

h. From the **Group Operation** list, select one of the following:

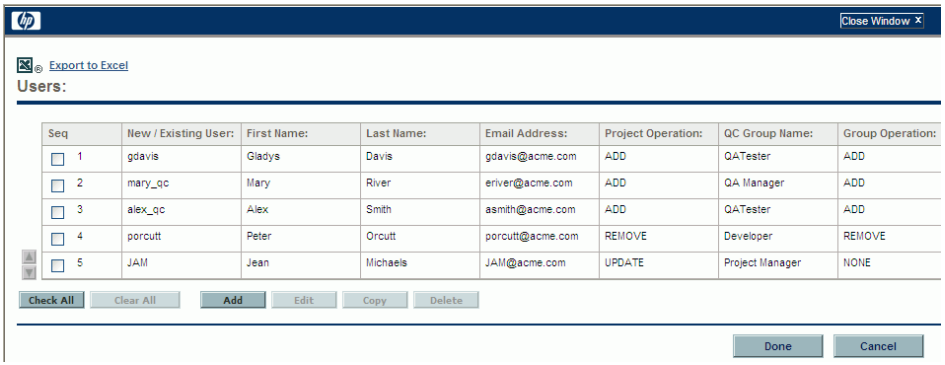
- To add the resource to a Quality Center security group, select **ADD.**
- To remove the resource from a Quality Center security group, select **REMOVE.**
- If you are adding the resource to the system, but not to any security groups, select **NONE.**

i. To specify the Quality Center security group to add the resource to, or remove the resource from, use the **QC Group Name** auto-complete.

j. To designate this resource a Quality Center administrator, from the **Make Admin** list, select **TRUE.** Otherwise, select **FALSE.**

k. To add this user to the **Users** section and close the Users - New Entry window, click **Add.** Otherwise, to select another user, click **Add Another.**

After you finish adding users, the Users window lists your selections.



7. Click **Done.**

   The **Users** section of the Create New CMQC - QC User Administrative Request page does not list the selected users until you submit the request. Your administrator can configure PPM Center so that you can save requests before you submit them. To have this feature enabled, contact your PPM Center administrator.

8. Click **Submit.**

   The Request Creation Confirmed page opens.

9. To open the detail page for the new request, click the number displayed in the **Request #** field.

The submitted CMQC - QC User Administrative request is routed along the workflow shown in *Figure 10-2* on page 171.

Creating CMQC - QC Project Administrative Requests

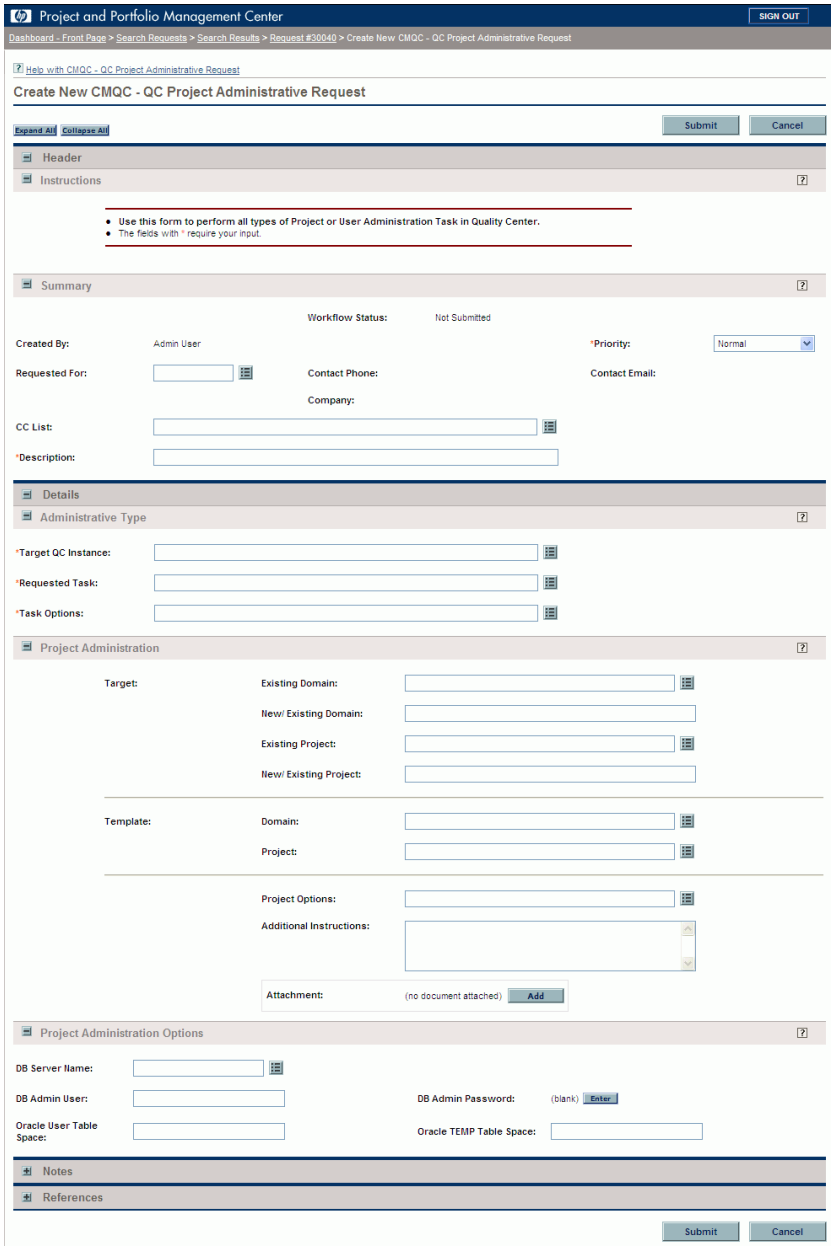
To create and submit a CMQC - QC Project Administrative request:

1. Log on to PPM Center.

   For information on how to log on to PPM Center, see the *Getting Started* guide for PPM Center.

2. From the menu bar, select **Open > Center Management > Administrative Requests > QC Project Administration.**

The Create New CMQC - QC Project Administrative Request page opens.



3. Complete the following fields in the **Summary** section:

Field Name (*Required)	Description
*Priority	To change to a priority value other than Normal, select a different value from this list,
Requested For	In PPM Center, contacts are resources used as a point of reference or information. If you are submitting the request on behalf of a PPM Center contact, then from the auto-complete list, select the contact's name. After you select a contact the **Contact Phone, Contact Email,** and **Company** fields will be populated automatically if the contact's phone number and email address have been provided. For more information about contacts, see the *HP Demand Management Configuration Guide.*
CC List	From the auto-complete list, select the email IDs of users to be copied on this request.
*Description	Type a short description of this request.

4. Complete the following fields in the **Administrative Type** section:

Field Name (*Required)	Description
*Target QC Instance	From the auto-complete list, select the name of the Quality Center instance on which the administrative tasks are to be performed.
*Requested Task	From the auto-complete list, select one of the following tasks to perform: • To create a new and empty Quality Center project, select **Create Empty Project.** • To create a new Quality Center project from a template, select **Copy Project From Template.** • To synchronize project configuration and customization with another project or template, select **Synchronize Project.** • To perform a customized task on Quality Center, select **Other.**
*Task Options	From the auto-complete list, specify the task options to include. The selections available depend on the requested task you selected.

Depending on the requested task you selected, various combinations of fields in the **Project Administration** section are optional or required.

5. Complete the following fields in the **Project Administration** section:

Field Name (*Required)	Description
Target	
Existing Domain	From the auto-complete list, specify an existing Quality Center domain.
New / Existing Domain	If you cannot locate the target domain you want using the **Existing Domain** auto-complete, then type the domain name in this field.
Existing Project	If the request task is to either the create a new project or copy a project from a template, then from the auto-complete list specify an existing Quality Center project as the target project.
New / Existing Project	If you cannot locate the target project you want in the auto-complete list for the **Existing Project** field, then type the project name in this field.
Template	
Domain	If you are creating a project based on a template or synchronizing project configuration and customization, then from the auto-complete list, specify the source or template domain.
Project	If you are creating a project based on a template or synchronizing project configuration and customization, then from the auto-complete list, specify the source or template project.
Additional Information	
Project Options	From the auto-complete list, select available options for the selected task.
Additional Instructions	In this field, type any additional required steps to be performed.
Attachment	To attach a document that contains information required to complete this administrative request, in this field, click **Add,** and then browse for and select the document.

6. In the **Project Administration Options** section, the following fields are to be completed by the Quality Center administrator:

Field Name (*Required)	Description
DB Server Name	From the auto-complete list, select a registered database server. **Note:** A database server must be registered in Quality Center before it can be available to create new projects.
DB Admin User	Specify a database administrator username to use to create a new Quality Center project database schema.
DB Admin Password	To specify the password that corresponds to the selected database administrator username, to the right of this field, click **Enter** and then type and confirm the password.
Oracle User Table Space	(Oracle database only) If you are creating or copying a project, this field displays the name of the user tablespace in which the project database schema is to be created. You can select a different user tablespace from the auto-complete list.
Oracle TEMP Table Space	(Oracle database only) This field displays the name of the temporary tablespace that the Quality Center project is to use. You can select a different temporary tablespace from the auto-complete list.

7. To save additional information on this request, type it into the **Notes to be added on save** field.

8. Click **Submit.**

Your administrator can configure PPM Center so that you can save requests before you submit them. To have this feature enabled, contact your PPM Center administrator.

The Request Creation Confirmed page opens.

9. To open the detail page for the new request, click the number displayed in the **Request #** field.

The submitted CMQC - QC Project Administrative request is routed along the workflow shown in *Figure 10-2* on page 171.

Creating CMQC - IT Service Requests

The IT Service request supplied by CMQC is used to obtain general administrative or IT support. These requests are routed to the CMQC's administrative or operations teams and are handled by a Quality Center application administrator, PPM Center administrator, or systems administrator. Unlike support requests, IT service requests focus on items such as application software, hardware configuration, upgrades, and installations

The IT service request follows the workflow shown in *Figure 10-3* and described in *Table 10-3*.

Figure 10-3. CMQC - IT Service Request workflow

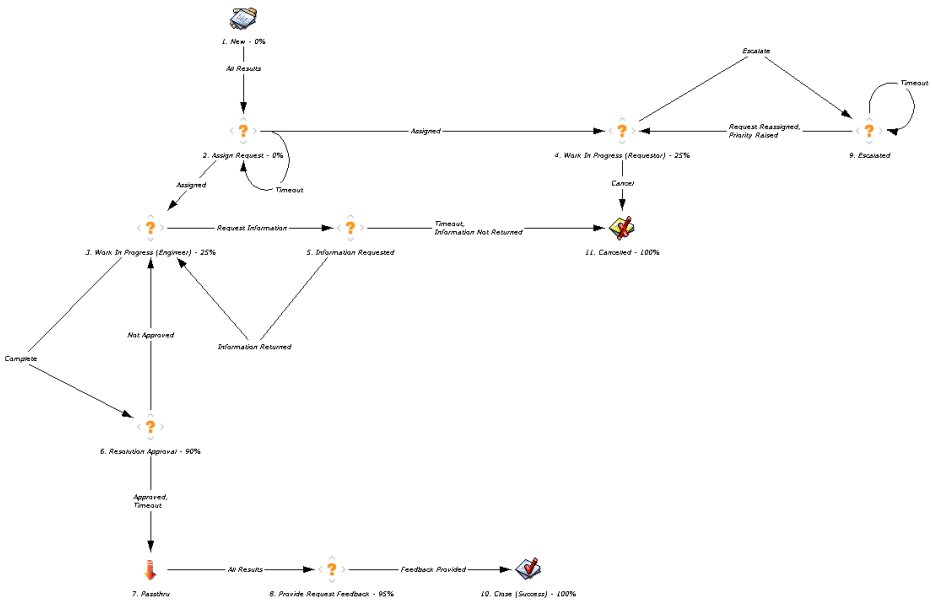


Table 10-3. CMQC - IT Service Request workflow steps

	Workflow Steps	Description
1.	New	A new IT Service request is submitted.
2.	Assign Request	A notification email is sent to CoE administrators requesting assignment of the request. The request is assigned to the appropriate resources. Typically, the administrative resource to whom it is assigned coordinates the tasks with other administrative resources.
3.	Work In Progress (Engineer)	The assigned engineer performs the required tasks to process and address the request requirements.
4.	Work In Progress (Requestor)	The requestor is provided the opportunity to track the request and, if necessary, escalate it.
5.	Information Requested	An email notification is sent to the request owner, asking for additional information or clarification.
6.	Resolution Approval	The requestor approves a submitted resolution.
7.	Passthru	A pass-through step.
8.	Provide Request Feedback	The requestor completes the feedback section to provide CoE management with service-level. If feedback is not provided within the configured timeout interval (usually 7 days), the request is automatically closed and a notification email is sent to the requestor with the request status.
9.	Escalated	The request is escalated. It is either reassigned or re-prioritized, so that the administrative team, or project and technical account managers take action to resolve it. A notification email is sent to CoE administrators to ask that the escalated request be handled.
10.	Close (Success)	The request is closed with a successful result.
11.	Cancelled	The requestor cancelled the request, or the did not respond to the demand for additional information.

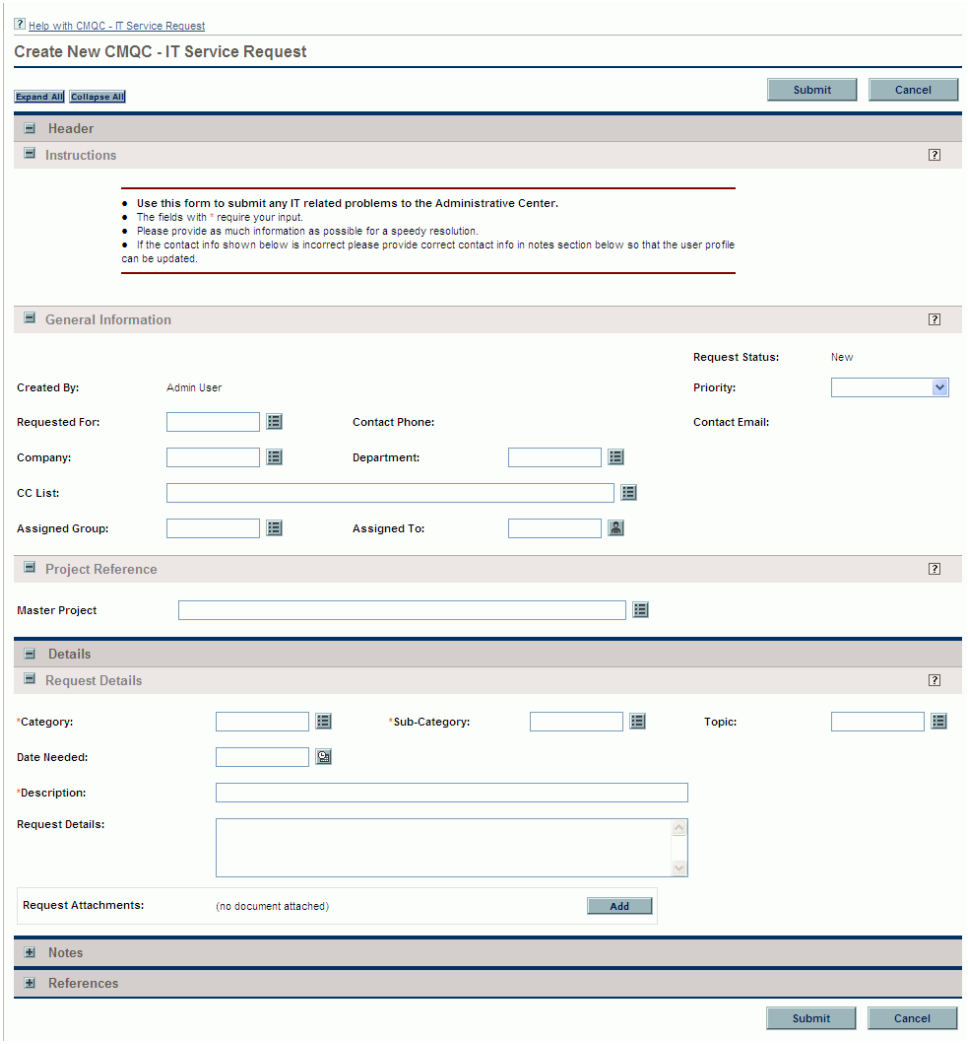
To create a CMQC - IT Service request:

1. Log on to PPM Center.

   For information on how to log on to PPM Center, see the *Getting Started* guide.

2. From the menu bar, select **Open > Center Management > Administrative Requests > IT Service Request.**

   The Create New CMQC - IT Service Request page opens.



3. (Optional) To provide users with additional information they might find useful, you can complete the following fields in the **General Information** section:

Field Name	Description
Priority	From this list, select a value to indicate the relative importance of the request.
Requested For	If you are submitting the request on behalf of another resource, then from the auto-complete list, select the username for that resource.
Contact Phone	If you are submitting the request on behalf of another resource, type the phone number of the resource in this field.
Contact Email	If you are submitting the request on behalf of another resource, type the email of the resource in this field.
CC List	From the auto-complete list, select the email IDs of users to be copied on this request.
Assigned Group	From the auto-complete list, select a security group to handle this request. **Note:** The security group you select determines which names are available in the **Assigned To** field.
Assigned To	From the list, select a specific engineer to handle this request.

4. In the **Project Reference** section, you can use the **Master Project** auto-complete to specify a project that is associated with this request.

5. In the **Request Details** section, complete the following fields:

Field Name (*Required)	Description
*Category	From the auto-complete list, specify the category to which this IT service request belongs.
*Sub-Category	From the auto-complete list, specify the sub-category to which this IT service request belongs.
Topic	From the auto-complete list, select a topic that describes this IT service request.
Date Needed	Using the date chooser, specify the date by which this IT service request must be resolved.
*Description	In this field, type a short description of this IT service request.
Request Details	To provide more detailed information about the issue to be addressed, type it into this field.
Request Attachments	To attach a supporting document or image file that might help clarify or resolve this issue, in this field, click **Add,** and then browse to and select the file.

6. To save additional notes related to this request, type them into the **Notes to be added on save field.**

For help on the request fields, select the **Help with CMQC - IT Service Request** link at the top left of the page.

7. Click **Submit.**

Your administrator can configure PPM Center so that you can save requests before you submit them. To have this feature enabled, contact your PPM Center administrator.

The Request Creation Confirmed page opens.

8. To open the detail page for the new request, click the number displayed in the **Request #** field.

The submitted CMQC - IT Service request is routed along the workflow shown in *Figure 10-3* on page 184.

Index

A

application projects
creating, 76
workflow for, 92

application quality portlets in CMQC, 110

C

Center Management for Quality Center
customizing entities, 38
installing, 26
overview, 9
overview of setup, 33
preinstallation tasks, 25
requirements for installing, 23
software requirements, 23

Center of Excellence
described, 9

CMQC
CMQC - Cross Environment Query Report, 118
CMQC - Cross Environment Query report, 129
configuring, 30
creating application projects, 76
creating QA test status reports, 155
installing, 26
portlet content, 101
preinstallation tasks, 25
QA test status report, 153
registering QC instances, 165
software requirements, 23
Test Status Report requests, 141

CMQC - Application Project request type, 92

CMQC - Application Project workflow, 92

CMQC - Business Value Map portlet, 109

CMQC - Cross Environment Query Report, 118

CMQC - Cross Environment Query report, 129

CMQC - Defect by Status Trending portlet, 112

CMQC - Defects Breakdown By Status (%) portlet, 111

CMQC - Generic User Query (CM) portlet, 113

CMQC - Project Listing portlet, 105

CMQC - QA Test Status Report
overview, 153

CMQC - QA test status report requests
creating, 155

CMQC - Quality Center User Query reports, 124

CMQC - Testing Project workflow, 66

CMQC IT Service portlets, 101

CMQC portlets
application quality portlets, 110
CMQC - Defects Breakdown By Status (%), 111

CMQC projects
configuring participants, 65, 91
creating work plans for, 73, 99
project settings, 60, 87

CMQC Quality portlets, 103
CMQC reports, 118
CMQC request types
  CMQC - Application Project, 92
CMQC_DELIVERY_CENTER parameter, 31
CMQC_DELIVERY_MANAGEMENT parameter, 31
CMQC_ITSUPPORT_CENTER parameter, 31
CMQC_ITSUPPORT_REQUEST_ID parameter, 31
CMQC_ITSUPPORT_TEAM parameter, 31
CMQC_MAX_ALLOWED_PROJECTS parameter, 31
CMQC_STATUS_UPDATE_ID parameter, 31
CMQC_SUPPORT_CENTER parameter, 31
CMQC_SUPPORT_REQUEST_ID parameter, 31
CMQC_SUPPORT_TEAM parameter, 31
CoE
  described, 9
configuring
  CMQC, 30
  participants for CMQC projects, 65, 91
creating
  application projects in CMQC, 76
  CMQC - Cross Environment Query report, 119
  CMQC User Query reports, 124
  project status update requests, 137
  user accounts, 39
customizing
  Center Management for Quality Center entities, 38
customizing field values, 34

D

demand
  capturing and tracking in CMQC, 14

F

fields
  customizing values, 34

H

HP Center Management for Quality Center
  overview, 9
  roles and responsibilities, 12

I

installing
  Center Management for Quality Center, 26
  CMQC, 26
  preinstallation tasks for CMQC, 25
  requirements for CMQC, 23
IT service-related portlets, 101

L

logs
  viewing for reports, 132

M

metrics
  reporting on quality metrics, 16

P

portlets
  CMQC - Business Value Map, 109
  CMQC - Defect by Status Trending, 112
  CMQC - Defects Breakdown By Status (%), 111
  CMQC - Generic User Query (CM), 113
  CMQC - Project Listing portlet, 105
  CMQC Quality portlets, 103
  content for CQMC, 101
  IT service-related, 101

Project Overview page, 54, 81
preinstallation tasks
Center Management for Quality Center, 25
Project Overview page
portlets, 54, 81
project settings
CMQC projects, 60, 87
Project Settings page
viewing, 60
project status update requests
creating, 137
submitting, 137
project templates
setting up, 73, 98

Q

QC Instance Registration requests, 165
QC instances
registering for CMQC, 165
Quality Center
instances, registering for CMQC, 165
registering an instance, 29
quality metrics
reporting on, 16

R

registering
QC instance requests in CMQC, 165
Quality Center instances after CMQC installation, 29
report logs
viewing, 132
reporting
on quality metrics, 16
reports
CMQC, 118
CMQC - Cross Environment Query Report, 118
CMQC - Cross Environment Query report, 129
CMQC - Quality Center User Query, 124
creating
CMQC - Cross Environment Query reports, 119
Test Status Report requests in CMQC, 141
viewing, 129, 132
request types
CMQC - Application Project, 92
requests
CMQC - QA test status report, 155
for registering QC instances, 165
requirements
for installing CMQC, 23

S

scheduling
CMQC - Cross Environment Query reports, 119
CMQC User Query reports, 124
security groups
linking users to, 41
server configuration parameters
for CMQC, 30
setting up
Center Management for Quality Center, overview, 33
project templates, 73, 98
software requirements
for Center Management for Quality Center, 23
system requirements
CMQC, 23

T

Test Status Report requests for CMQC, 141
testing projects
default workflow for, 66
tracking demand through CMQC, 14

U

user accounts
creating, 39
users
linking to security groups, 41

V

viewing
Project Settings page, 60
report logs, 132
report settings, 132
reports, 129

W

work plans
creating for CMQC projects, 73, 99
workflows
CMQC - Application Project, 92
CMQC - Test Status Report request, 153
CMQC - Testing Project workflow, 66