

IBM Marketing Operations
Version 9 Release 1
October 25, 2013

User's Guide



Note

Before using this information and the product it supports, read the information in "Notices" on page 207.

This edition applies to version 9, release 0, modification 0 of IBM Marketing Operations and to all subsequent releases and modifications until otherwise indicated in new editions.

© **Copyright IBM Corporation 2002, 2012.**

US Government Users Restricted Rights – Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

Contents

Chapter 1. Introduction 1

Why use IBM Marketing Operations?	1
Who uses IBM Marketing Operations?	2
For more information	2
Using IBM Marketing Operations	4
Integration with IBM Campaign	4
Business processes	5
Relationship of planning objects	5
Plans	6
Programs	6
Projects	6
Approvals	7
Collaboration tools	7
To log in to IBM EMM	12
About customizing Marketing Operations	13
To set your start page	14
Setting your basic settings	14
Setting your approvals options	14
Setting options for projects	14
Setting your tasks options	16
Setting your operational analytics options	16
Defining out of office settings	16

Chapter 2. Common tasks 19

Working with attachments	19
To add an attachment to an object	20
To remove an attachment from an object	20
To send e-mail attachments	20
Statuses of business processes	21
To change the status of a process	22
Using disabled attribute values	23
Disabled attribute values in objects	23
Disabled attribute values in searches	23
Disabled attribute values example	24
Selecting resources	24
Using Save and Return to List	24
Column headers	25
To print an object	25
To export information in Microsoft Excel format	25

Chapter 3. Plans 27

Plan views	27
Summary information for plans	27
Fiscal year for plans	27
To add a plan	28
To add or remove a program area	28
To link a program to a plan	29
Security considerations for linking plans and programs	29
Adding a new program from a plan	30
To remove a program from a plan	30
To start a plan	31
To delete a plan	31

Chapter 4. Programs 33

To add a program	34
To start a program	34
To add new project requests and projects to programs	34
To link an existing project to a program	35
Security considerations for linking projects and programs	36
To navigate from a program to a plan	36
To remove projects from programs	36
To delete a program	36

Chapter 5. Projects 39

About projects and project requests	39
About project reconciliation	39
About request statuses	40
About monitoring project health	40
Project views	41
To select project views	42
Searching for projects	42
Choosing list or calendar view mode	42
About campaign projects	43
About project codes and campaign codes	43
To create a project	43
To create projects by cloning	44
To start a project	45
Project attachments tab	45
Project requests	45
To request a project	46
To create a request	46
To submit a request	47
To monitor the status of a project request	47
To cancel or re-draft a request	48
To respond to a request as an individual	48
To change the status of multiple projects or requests	49
To copy a project or request	49
Team projects and requests	50
Team projects lifecycle	50
To reassign a team project	50
To respond to team requests as a team manager	51
To navigate from a project to a program	51
Linking projects	51
Subprojects overview	52
Details on the project-subproject relationship	52
To create a child project/request	53
To link a child project or request to a project	53
Security considerations for linking projects	54
To remove a parent-child project link	54
To assign work	54
Selecting projects or requests	55
To reconcile a project	55
To delete a project	55

Chapter 6. Workflows 57

About monitoring and updating project workflows	57
---	----

About spreadsheet view mode	58
To work in spreadsheet view mode	58
To update a task from view mode	59
To add an attachment to a task	60
To start an approval process from view mode	61
About timeline view mode	62
To customize the spreadsheet or timeline view	62
To set first column width	63
Process flowchart view	64
Workflow concepts	64
About schedules	66
About date dependency calculations	67
Scheduling work time	68
To edit a workflow spreadsheet	70
About the edit mode toolbar	71
About adding a stage or task	73
About the workflow spreadsheet columns	77
To change the status of a task	84
To print the Workflow tab	86

Chapter 7. Approvals 87

About approvals	87
Stand-alone approvals	88
Approval tasks	88
Approval dates	88
Due dates for approvals	89
Approval Sequence	90
Rejected approvals	91
Approval organization	91
Approval process workflow	92
Creating Approval Processes	93
Assigning Approvers	93
Adding approval items	94
Enable markup for approval items	95
Submitting approval processes for review	95
Evaluating approval processes	96
Approval portlet	96
Evaluating approval processes in the Approval Portlet	97
Post complete response	97
Modifying approval processes	98
Canceling an approval process	98
Copying approval processes	99
To delete an approval	99
Completing approval processes	100
Putting approval processes on hold	100
Reactivating approval processes that are on hold	101
Reassigning team approvals	101
Approval processes linked to workflow tasks	102
Attachment markup types in IBM Marketing Operations	102
Marking up attachments	103
Adobe Acrobat markup in IBM Marketing Operations	104

Chapter 8. People and teams. 107

About people and teams	107
About the People tab	107
Managing project members	107
To manage project members	108

To change the access level for a project member	113
Finding and replacing task members or reviewers	114
Select project members/reviewers	115
To manage reviewers	116
Editing access levels for a member	117
About roles	117
To assign work by role	118
To remove a role	118
To add a role	119
To assign people to roles	119

Chapter 9. The calendar 121

Configuring display options for the calendar	121
Calendar display options	121
To set your default calendar options	123
To change your view of the calendar	123
Viewing the timeline	123
About timeline view of the calendar	124
Viewing the text or graphical calendar	124
About the monthly calendar	124
About calendar color coding	125
About horizontal bars on the calendar	125
Brief and detailed views of tasks	126
To publish the calendar	126

Chapter 10. Grids. 127

About editing grid data	127
Grid controls	128
To import grid data	129
To export grid data	130
To post read-only grid data to a URL	130
To group read-only grid data	130

Chapter 11. Marketing objects 131

About the offer object type	131
To create a marketing object	132
About the marketing object cross-reference report	132
About the modifies and references relationships	133
Selecting marketing objects	133
To delete marketing objects	133
To change the status of marketing objects	134
To add a marketing object reference to a form or a grid row	134
About marketing object references in approvals	135

Chapter 12. Assets and asset libraries 137

About asset libraries	137
To change from the asset list view to the thumbnail view	138
To add an asset	138
New asset page	138
To edit an asset	140
About asset versions	140
To add a new version of an asset	140
Asset statuses	141
To change the status of an asset	141
To view an asset	141
To view history of an asset	142
To add an asset folder	142

Deleting assets	142
To delete assets and folders from the asset list page	142
To delete an asset from within the asset	143
To move assets and folders from the asset list page	143
To move an asset from within the asset.	143

Chapter 13. Budgets 145

Budget funding.	146
Top-down budget planning.	146
Bottom-up budget planning	147
Effects of deleting links between plans, programs, and projects	147
Budgets and accounts	148
Budget views	148
The Plan Budget tab	148
Plan Budget Summary table	148
Program Costs table	149
The Program Budget tab	150
Navigating with budget ancestors	150
Program Budget Summary table	150
Project Costs table.	150
Program Line Item Details table	151
The Project Budget tab	151
Budget allocation versions	151
To create budget versions	152
To delete versions	152
To compare versions	153
To mark a version in-use	153
To allocate funds	154
To allocate funds for stand-alone programs and projects	154
To add or edit line items	155
To finalize budget line items	156
To discard budget line items	156
Budget line item approvals.	157

Chapter 14. Invoices 159

To add an invoice	159
New Invoice page.	160
To edit an invoice	160
About rolling up line items.	161
Invoice Line Item Approvals	161
Rollups to the source program or project	161
Rollups to the source account	162
To add or edit invoice line items	162
Field descriptions for the Edit Invoice Line Items page	162
Invoice status types	163
To change the status of an invoice	164
To delete an invoice	164
To print the invoice summary	164

Chapter 15. About accounts 167

About the accounts summary page	167
Account summary table	167
About selecting the fiscal year to view	168

Chapter 16. Metrics 169

To set up program or project metrics	169
--	-----

To edit program or project metrics	169
Entering planned values for rollup metrics	170
To enter planned values for metrics that roll up	170
Views for rollup metrics.	170
To import metrics from a campaign	171
Finalizing and rolling up metrics.	171
To finalize and roll up metrics.	171

Chapter 17. Reports 173

Filtering report criteria	174
Search and Select Prompt boxes	174
Dates	174
Multi-object reports	175
To run the Marketing Activity report	176
To run the Overdue Milestone report	177
To run the Program Tasks and Milestones report	177
To run the Project Performance Crosstab report	177
To run the Project Performance Summary report	178
To run the Resource Task Load report	180
To run the Vendor Spend Summary report	180
Single-object reports	181
To view the revision history of an object	182
To run the Approval and Compliance Listing report	182
To run the Budget Summary by Quarter report	183
To run the Detailed Expense Breakout report	184
To run the Work Assigned to Team or Team Member Reports	184
Dashboard portlets	185
Marketing Operations list portlets	185
Quick link portlets	186
Marketing OperationsIBM Cognos report portlets	187

Chapter 18. Searches 189

About searching within grids	189
About searching for marketing object attributes	190
To perform an advanced search of a digital asset library.	190
To perform an advanced search (except for assets)	190
To regroup and reorder search criteria	191
About the Not In operator	191
Assets advanced search page	192
Advanced search page for objects other than assets	193
About saved searches	194
To view a saved search	195
To delete a saved search.	195

Chapter 19. Alerts and the message board 197

Alerts	197
Message board	197
Viewing alerts	197
Receiving alerts when outside the organization's domain	198
About adding comments for alerts	198
To subscribe to alerts for an object	199
Brief and detailed task alerts	200
Group events that contribute to detailed alerts	200
Examples of brief and detailed alerts	201

To post a message on the message board	202
To read a message on the message board	202

Privacy Policy and Terms of Use Considerations	209
--	-----

Before you contact IBM technical support	205
---	------------

Notices	207
--------------------------	------------

Trademarks	209
----------------------	-----

Chapter 1. Introduction

IBM® Marketing Operations is a tool for enterprise planning, collaboration, and workflow that provides a complete solution for the needs of marketers. You can use IBM Marketing Operations to get a comprehensive and holistic view of all marketing projects across your company. You can then focus on improving each dimension of marketing planning. Everyone on the marketing team: chief marketing officers, marketing managers, event planners, creative directors, and marketing controllers, realizes immediate benefits in efficiency and performance.

What does IBM Marketing Operations do?

IBM Marketing Operations is the marketing resource management (MRM) solution that allows you to plan, budget, and monitor every type of marketing program in your company.

Use IBM Marketing Operations to perform the following tasks.

- Get real-time visibility into every marketing program.
- Manage all marketing activities, including advertising, brand management, direct and interactive marketing, promotions, events, collateral, research, public relations.
- Enforce marketing "best practices".
- Increase productivity and optimization of resources, including people and budgets, through automated workflow, collaboration, and unique optimization capabilities.
- Promote effective management of marketing content and projects created by dynamic marketing organizations.
- Manage workflow and projects across the entire marketing operation for all types of media, events, campaigns, and brand loyalty efforts. For projects as diverse as mailers, ad campaigns, catalogs, and seminars, Marketing Operations is an effective management tool.

Why use IBM Marketing Operations?

By using IBM Marketing Operations, marketers can increase the return and lower the risk of all their resource investments by optimizing decisions, collaborating across programs, operating more efficiently, and gaining greater visibility into what they are doing, what they are spending money on, and what the results are.

Marketing Operations allows you to do the following.

- **Manage and coordinate all your marketing activities in one solution.** Because all relevant marketing information is in one place, there are fewer misaligned investments. Centralization leads to tighter controls over which marketing programs are launched. As a result, greater operational efficiencies are gained, allowing marketers to get to market rapidly and spend more time on strategy.
- **Improve decision making, minimize risk.** The marketing measurement provided by using IBM Marketing Operations enables marketers to focus on the most profitable opportunities. Additionally, marketers make better tactical decisions because the marketing mix is more easily optimized.

- **Ensure that strategic goals and marketing activities are aligned.** Strategic goals, marketing plans, and budgets are centralized to promote clarity of agreed upon objectives and tactics to achieve business goals. The result is improved alignment of marketing plans and activity.
- **Achieve faster, lower-cost execution of all marketing activities.** Rather than reconciling individual project plans, chasing down approvals, and manually tracking creative changes, project plans and assets are centralized, and approvals are clear and automated. Waste is eliminated, because better execution results in less duplication of effort, fewer fees and penalties for completing tasks in a rush, and allocation of resources to the right programs.
- **Ensure compliance.** By using the centralized repository and advanced reporting capabilities in IBM Marketing Operations, marketers reduce time and money spent satisfying the needs of regulatory agencies, corporate auditors, and management.
- **Open, flexible architecture.** IBM Marketing Operations is based on an open architecture that makes it easy for IT to implement and allows you to leverage your existing infrastructure and data. Marketing Operations uses a 3-tier J2EE architecture, which separates the client, web server, application server, and backend data sources.

Who uses IBM Marketing Operations?

Your marketing department and any outside interested parties can benefit from using IBM Marketing Operations. People who benefit include the following.

- Executives who want to create strategic plans and manage their set of core marketing metrics.
- Executives outside the group who need visibility into group activities.
- Senior managers who contribute projects, allocate resources, and monitor critical events, metrics, and components.
- Managers for lines of business, channels, or geographies who need to define and track projects, automate the approval process, and track costs.
- Brand managers and advertising executives who want visibility into the entire corporate communications plan.
- Database marketers who create activities and tasks, track “To Do” lists, and send, receive, and monitor notifications.
- Team members who carry out the plan.
- External vendors who have a role in the marketing plan.

For more information

Different people in your organization use IBM Marketing Operations to accomplish different tasks. Information about Marketing Operations is available in a set of guides, each of which is intended for use by team members with specific objectives and skill sets.

The following table describes the information available in each guide.

Table 1. Guides in the Marketing Operations documentation set

If you	See	Audience
<ul style="list-style-type: none"> Plan and manage projects Establish workflow tasks, milestones, and personnel Track project expenses Get reviews and approvals for content Produce reports 	<i>IBM Marketing Operations User's Guide</i>	<ul style="list-style-type: none"> Project managers Creative designers Direct mail marketing managers
<ul style="list-style-type: none"> Design templates, forms, attributes, and metrics Customize the user interface Define user access levels and security Implement optional features Configure and tune Marketing Operations 	<i>IBM Marketing Operations Administrator's Guide</i>	<ul style="list-style-type: none"> Project managers IT administrators Implementation consultants
<ul style="list-style-type: none"> Create marketing campaigns Plan offers Implement integration between Marketing Operations and Campaign Implement integration between Marketing Operations and IBM Digital Recommendations 	<i>IBM Marketing Operations and IBM Campaign Integration Guide</i>	<ul style="list-style-type: none"> Project managers Marketing execution specialists Direct marketing managers
<ul style="list-style-type: none"> Learn about new system features Research known issues and workarounds 	<i>IBM Marketing Operations Release Notes</i>	Everyone who uses Marketing Operations
<ul style="list-style-type: none"> Install Marketing Operations Configure Marketing Operations Upgrade to a new version of Marketing Operations 	<i>IBM Marketing Operations Installation Guide</i>	<ul style="list-style-type: none"> Software implementation consultants IT administrators Database administrators
Create custom procedures to integrate Marketing Operations with other applications	<i>IBM Marketing Operations Integration Module</i> and the API JavaDocs available when you click Help > Product Documentation in Marketing Operations, and then download the IBM <version>PublicAPI.zip file	<ul style="list-style-type: none"> IT administrators Database administrators Implementation consultants
Learn about the structure of the Marketing Operations database	<i>IBM Marketing Operations System Schema</i>	Database administrators

Table 1. Guides in the Marketing Operations documentation set (continued)

If you	See	Audience
Need more information while you work	<ul style="list-style-type: none"> • Get help and search or browse the <i>User's</i>, <i>Administrator's</i>, or <i>Installation</i> guides: Click Help > Help for this page • Access all of the Marketing Operations guides: Click Help > Product Documentation • Access guides for all IBM Enterprise Marketing Management (EMM) products: Click Help > All IBM EMM Suite Documentation 	Everyone who uses Marketing Operations

Using IBM Marketing Operations

Before you start using IBM Marketing Operations, your administrator must install Marketing Operations and set it up. If you are having problems, contact your administrator.

The following steps outline some of the major tasks users perform in IBM Marketing Operations.

1. Create plans that contain programs.
2. Create programs that contain projects.
3. Create more projects, request a project, accept a request, start a project, or view projects.
4. Work with projects by navigating through them, completing the setup of workflows, viewing and modifying tasks, and printing, copying, and deleting the projects.
5. Work with assets, including adding, editing, and changing the status of assets, as well as adding folders.
6. Work with approvals, including adding an approval process; submitting it for review; canceling the review; modifying, printing, and deleting it; putting the approval on hold; responding to it; and marking up approval items with comments.
7. Create invoices that keep track of expenses related to programs and projects.
8. Search for projects and approvals using both the standard and advanced search capabilities, and save advanced searches for future use.
9. Collaborate with other users using the alerts window and the message board.

Integration with IBM Campaign

Marketing Operations optionally integrates with IBM Campaign, which, in turn, can integrate with several other products. When Marketing Operations and Campaign are integrated, you can use the marketing resource management features in Marketing Operations to create, plan, and approve campaigns.

For information about working with an integrated system, see the *IBM Marketing Operations and IBM Campaign Integration Guide*.

Business processes

A **business process** is the representation, in IBM Marketing Operations, of a collection of related, structured activities (a chain of events) that produce one of the following.

- marketing activities targeted at a particular set of prospects and/or customers
- reusable marketing components that support these marketing activities.

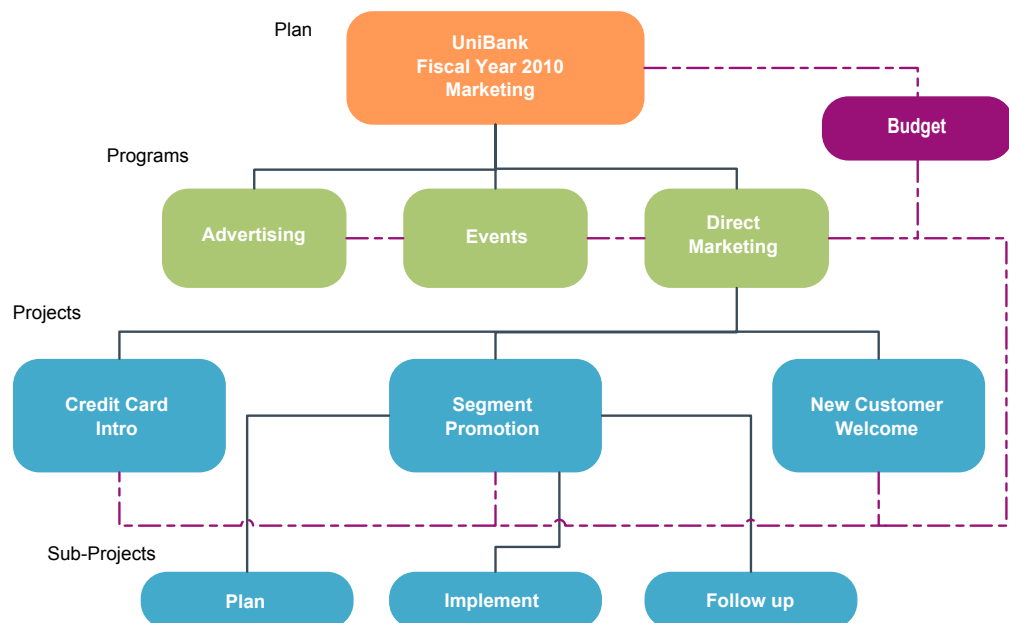
IBM Marketing Operations provides the following types of business processes.

- Plans
- Programs
- Projects
- Subprojects
- Project requests
- Approvals

Relationship of planning objects

This section details how planning objects (plans, programs, and projects) relate to one another. Plans contain one or more programs, and programs contain one or more projects.

Projects can contain subprojects. A budget for a plan consists of individual line items for projects and programs that roll up into the budget for the plan.



On the summary page of projects and programs, there is a field, Parent Items and Code, that contains a view of the ancestors for the object. For example, the summary page of a subproject shows the current object (a subproject), its parent project, and all of its ancestors back to its root plan. The ID codes for these objects are displayed, as well as direct links to each of the ancestor objects.

Plans

A **plan** is intended to capture the objectives of a given business unit/area, for a given period of time, typically measured yearly or quarterly. Additionally, a plan serves as a container and "rollup" point for the various programs and projects that you define in order to meet your marketing goals.

Information from "child" programs and child projects of the programs roll up to the plan, tracking linked information. For example, for a plan that has a child program, you can make metrics or budget information related to the program roll up—or move upwards from the program—to the plan, so that you can study and keep track of this information from the perspective of the plan.

Programs

A **program** represents a marketing activity and it is typically comprised of multiple related marketing deliverables or initiatives. A program can contain or group multiple projects. The program itself has information that is central or common to the development and execution of these marketing deliverables. For example, a direct marketing program could contain multiple projects each representing a distinct marketing promotion or campaign. Also, a product launch program could contain projects pertaining to various types of collateral development, analyst briefings, and tradeshow attendance.

Projects

A **project** represents all the information related to developing and executing one or more related marketing deliverables or initiatives. This information can include a checklist or schedule of tasks that people working on the project must perform in order to prepare and produce the deliverables for the project.

For example, you might use a project called **Monthly Tradeshow** to collect all the information needed for the one tradeshow each month that your organization attends. This information could include who attends the show, what equipment you need in the booth, copies of demos of the product that you intend to present, collateral you want to hand out to customers, costs of promotional materials, and any additional information that pertains to the tradeshow.

Note: Projects can have subprojects. A **subproject** has all the same characteristics as a project. A subproject is linked to a parent project; any project linked in this manner is referred to as a subproject.

Project structure

A project contains a workflow, budget information, metrics, digital assets, approvals, and both standard and custom information. Of course, not every project needs all of this information; most of it is optional and can be filled in only when needed.

Note: Note that approvals can also exist independently from projects. That is, an approval does not need to be associated with a particular project.

Project requests

A **project request** is similar to a work order or creative brief. It represents a request for someone else to do work according to the specifications supplied by the requester.

Users within an organization and outside vendors can request a project. For example, an outside vendor can submit a project request to the marketing services

organization requesting some collateral. The marketing services representative accepts the request and creates a project, organizing tasks and assigning resources to the project in order to manage the creation of the collateral.

If you request a project, you are a *requester*. You then submit the request to a *recipient* for approval. When the recipient accepts the request, the recipient owns the resulting project and is called the *owner*.

Note: A project request does not contain a workflow. When the request is approved and transitions to a project, it contains the appropriate workflow.

Approvals

An **approval** allows you to streamline and track the process of having your work reviewed and approved. This feature allows many users to review work in parallel or in an order that represents your business processes. Reviewers (or approvers) can electronically mark up content submitted for review. IBM Marketing Operations then records approvals and denials for audit purposes. You can tie approvals to a project or they can exist independently from any project.

Collaboration tools

Use the following IBM Marketing Operations functionalities to communicate information to other users.

- “Teams”
- “Alerts”
- “Attachments” on page 8
- “Message Boards” on page 8
- “Metrics” on page 8
- “Workflows” on page 8
- “Functional roles” on page 9
- “Security policies” on page 9

Teams

A **team** is a group of people who work together to complete tasks across a number of different business processes. Someone in charge of a business process can assign tasks to a team, rather than an individual, when necessary.

Team leaders can then manage their resources across initiatives. Team leaders can decide to explicitly assign work to team members or allow team members to assign work to themselves. In all cases, the team leader can monitor the queue of work assigned to their team and track the progress and performance of individual team members.

Alerts

Alerts are notifications of important events or actions you need to take regarding a program, project, a project request, asset, account, approval, or invoice. An alert could remind you that a project is running behind schedule or over budget, or that there is an item that needs your approval.

You receive alerts directly through IBM Marketing Operations and through email. When you receive an alert through Marketing Operations, you go to the Alerts page to view it. When you receive an alert through e-mail, it goes directly to the inbox of your e-mail application.

There are two types of alerts in IBM Marketing Operations.

- alerts that Marketing Operations sends based on events, such as the start of a project, or
- alarms that an administrator sets up to send at regular intervals, such as once a day.

Attachments

Team members can attach relevant documents to the main IBM Marketing Operations objects. An **attachment** is a URL, digital asset, or a file that you add to a Marketing Operations object. You can add attachments to plans, programs, projects, invoices, approvals, and accounts.

Attachments can be organized by category. For example, your project might contain the following attachment categories.

- Reference Materials
- Vendor Forms
- Offer Creatives
- Deliverables

The attachment categories are set up in the template used to create the particular object.

Message Boards

A **message board** is a place to post and read messages pertaining to a particular object. Plans, programs, projects, requests, accounts, approvals, and invoices can each have their own message board.

Useful for less formal collaboration, message boards allow team members to log comments and keep track of responses.

Metrics

Metrics are used for management reports and analysis. You view them on the **Tracking** tab for plans, programs, and projects.

Use IBM Marketing Operations metrics for the following calculations.

- Automatically calculate internal measures (such as budgets and resource consumption).
- Automatically tabulate program results, such as the following.
 - Measure consistently across activities.
 - Aggregate results across programs.
- Automatically link key metrics (such as number of contacts and responses) from campaigns back to project metrics.
- Build a marketing memory.

The metrics that are available in a plan, program, or project depend on the template you used to create it.

Workflows

A **workflow** allows you to view and edit the group of tasks and milestones that drives the project. It allows you to efficiently meet and manage project goals. Tasks, dependencies, and durations are populated for a workflow based on the template used to create it. You can view workflow information as either a

spreadsheet, timeline, or process flowchart. You can use workflows to forecast and plan your activities. Once work has begun, workflows make it easy to monitor progress and identify bottlenecks.

Functional roles

When setting up a project, one part of that process is assigning individuals to tasks based on the individuals' functional role or job role, such as writer, graphic artist, or project manager. IBM Marketing Operations uses the concept of roles as a bridge between people and tasks. Roles are useful for the following reasons.

- People come and go: assigning a role to a task makes it easier to control people leaving and returning a project.
- Resources are not always available: you can assign a role to a task before any people are available to fill the role or perform the task.
- Roles are predictable: you can create project templates with standard roles and fill people into the roles independently for each project you create from the project template.

Security policies

A security policy is a set of rules that govern any objects (such as projects or programs) that are associated with the policy. These rules indicate which types of users will be able to view, modify, delete or perform any of the other relevant functions for these objects.

In order to express these rules, security policies contain the following.

- user roles to identify the types of users, and
- function grants or blocks to identify what each type of user can or cannot do.

Multiple Security Policies are allowed, and one example security policy, **Global**, is provided with IBM Marketing Operations.

The global policy is a special policy that is always considered in the governance of all objects in the system (rather than all users). Companies with simple security models need only utilize the global policy to express their rules.

Companies that require different groups to be kept in discrete groups from one another will utilize custom security policies to do so, and use the global policy only for system-wide administrative or executive access rules.

Note: The term **global** is not intended to indicate that every user has full (global) access to everything, but rather that the security policy is, by default, globally-associated with every user.

Details of security policies are discussed in the *IBM Marketing Operations Administrator's Guide*.

Strategic planning and financial management

IBM Marketing Operations includes strategic planning and financial management functionality that allows you to do the following.

- Develop top-down budgets for marketing plans and the programs they contain.
- Track actual expenses incurred, with respect to budget.
- Facilitate spend tracking and reporting in Accounting (GL) terms.

In IBM Marketing Operations, you use the following to perform Strategic Planning and Financial Management tasks.

- Accounts
- Budgets
- Cost Categories
- Invoices

Accounts: A top-level **account** represents a specific corporate general ledger account established by a finance department for the purpose of tracking and controlling expenditures and cash flows for a certain area of the business. This account tracks budget needs and expenditures at weekly and monthly levels and then aggregates them to quarterly and yearly levels.

Accounts may have subaccounts. Depending on the account structure at your company, the subaccounts also may represent specific general ledger accounts, or they may have been created to represent a greater level of granularity that marketing wants to track, even if the general ledger structure doesn't include that level of detail.

Budgets: In IBM Marketing Operations, a *budget* allows you to plan expenses that will occur as you execute your plan, program, or project. After setting the plan budget, you can fund linked programs, and ultimately projects, from it. Marketing Operations tracks budgets of child programs and projects in the form of allocations, forecasted or committed spending, and actual expenses.

IBM Marketing Operations tracks budgets of child programs and projects, although these objects can have different owners. For example, a program linked to a plan can have a different owner than the plan itself. As such, the person who allocates a budget from a plan down to a program can be different from the person forecasting expenses from a program up to a plan. Marketing Operations allows a plan owner, a marketing manager for example, to track expected expenses from child programs and projects as well as the plan budget itself, and remain responsive to budgetary needs.

Note: Budgets are available only when the Marketing Operations financial module is enabled.

Fiscal year

You can view the total budget for all years, or see a detailed view for a particular year broken down into weeks, months, or quarters.

IBM Marketing Operations keeps budget information for the current fiscal year, the next two fiscal years, and any past fiscal years dating back to when you first installed Marketing Operations.

On the plan level, to view or edit a different fiscal year, change the **Fiscal Year** field value on the **Plan Summary** tab. Linked programs and projects take the financial year from the parent plan; stand-alone programs and projects use the system's current fiscal year.

Granularity

With IBM Marketing Operations, you can break fiscal years into weeks, months, or quarters. When creating a plan, program, or project, choose the wanted increment from the **Budget Granularity** list on the **Summary** tab.

Users are not allowed to edit budget granularity. Plans, programs, and projects with different budget granularities are not allowed to be linked together.

For example, if a plan's fiscal year is broken into months, you can only link it to programs and projects that also use months as the budget granularity. In this scenario, programs and projects with weeks or quarters as their granularity are unavailable for linking.

For more information about linking plans, programs, and projects, see "To link a program to a plan" on page 29, "To link an existing project to a program" on page 35, and "To link a child project or request to a project" on page 53.

Cost categories: Cost Categories are used to categorize expenses into types, such as travel expense, mailing expense, and so on. For details on creating and editing cost categories, see the *IBM Marketing Operations Administrator's Guide*.

Cost categories are used both when tracking invoices and creating budgets.

Invoices: In IBM Marketing Operations, an **invoice** electronically captures a paper invoice submitted to a marketing department for services, time, or materials provided by a third-party vendor or supplier. You must manually enter the information captured in paper invoices into an Marketing Operations invoice.

Here are some advantages of transferring your paper invoices to IBM Marketing Operations.

- Easy accessibility
- Accurate and immediate expense tracking
- Vendor spend analysis
- Rollup reporting
- Periodic transfer or export to a general ledger (GL) system

Libraries of reusable elements

IBM Marketing Operations allows you to reuse marketing items by providing the following.

- Marketing objects
- Digital Asset Management

Marketing objects: You can create new marketing objects if you have permission to do so. After you create a marketing object, you can start it at any time. Starting the marketing object makes it active.

A *marketing object* is any work product a team develops and reuses in the course of its marketing activities. A marketing object can represent a physical item (such as a letter, credit card, or banner ad), or a business component (such as a credit card offer, a target segment definition, or a rewards program definition).

- You define and manage marketing objects that represent all reusable work products.
- You can perform basic operations (create, edit, change state, copy, link, and delete) on marketing objects.
- You enter and manage all of the attributes that define a particular marketing object, such as name, owner, state/status, description.
- You can define and manage business processes (such as projects) that produce, modify, and retire marketing objects.

- You can construct robust projects which define multiple marketing activities by “assembling” each discrete marketing activity from existing marketing objects.

IBM Marketing Operations marketing objects are defined in stages, and how they are defined influences how they are organized and presented to users. The following terms are important in understanding the definition and organization of marketing objects.

Marketing object type

A *marketing object type* is the highest-level division for marketing objects. An administrator creates marketing object types. Each marketing object type has a menu item, but the menu on which it appears depends on how the administrator configured the marketing object type.

Marketing object template

A marketing object type is broken down into one or more *marketing object templates*. Typically, an administrator creates a marketing object template for each significant characteristic for the marketing object type.

Marketing object instance

A *marketing object instance* is a single marketing object. Users with appropriate security permissions create marketing object instances from marketing object templates. Marketing object instances are called “marketing objects” in this guide.

Digital asset management: An *asset* is any electronically stored document that you may want to use or reference in a marketing program. This can include brand images, marketing research documents, reference materials, corporate collateral, letterheads, or document templates.

You can store all marketing assets in a secure, central location, using IBM Marketing Operations Assets, with the following advantages.

- leverage concepts that were approved in previous marketing campaigns
- require pre-approval of material to reduce review times
- assign usage guidelines and expiration dates to items.

Additionally, assets contained in Approval objects have integrated mark-up capabilities, enabling collaboration between staff and agency partners and tracking of comments, edits, and changes within creative content.

To log in to IBM EMM

This procedure assumes that you know the website address (or URL) to your server and you have an assigned user name and password. If you need help, contact your IBM EMM administrator.

1. Open a supported browser and enter the URL to the IBM EMM server. The prompts that display vary based on the security settings that are defined for your installation.
2. If prompted, accept the digital security certificate.
3. On the login page, enter your user name and password, then click **Sign In**.
If you are prompted to accept the digital security certificate, click **Yes** to accept the certificate.

The dashboard or the default start page displays. The options that are available to you depend on the permissions that are assigned to you by your IBM EMM administrator.

Note: For a list of supported browsers, see the *IBM EMM Enterprise Products Recommended Software Environments and Minimum System Requirements* guide.

About customizing Marketing Operations

You can customize the Marketing Operations interface to meet your needs. Customization settings are available in Marketing Operations when you click **Settings** or **Settings > Marketing Operations Settings**.

The following table describes what you can customize.

Table 2. Options for customizing Marketing Operations

Option	Description
Set current page as Home	Set the current page to display automatically as soon as you log in to Marketing Operations.
Basic Settings	Set the security policy to apply to new items by default.
Timezone	Chose your local timezone.
Assets Options	Define the asset list to show by default.
Approvals Options	Define the approval list to show by default.
Projects Options	Define the project list and view to show by default for projects.
Tasks Options	Define the task list and view to show by default for tasks.
Operational Analytics Options	Set a default report to display when you go to the Analytics > Operational Analytics page, and set the Analytics home page as your login page.
Calendar/ Timeline Settings	Select options to customize how you view the calendar and task milestones. See “Calendar display options” on page 121.
Out of Office Settings	Define whether you are in or out of the office and identify delegates.

You (or another user with the appropriate permission) can set up dashboards to show the information that you view most often. Each dashboard can include one or more "portlets" that present:

- Lists of links to Marketing Operations items such as Approvals Awaiting Action, Manage My Tasks, and My Alerts.
For more information, see “Marketing Operations list portlets” on page 185.
- Quick Links that provide access with a single click to options such as Create New Project or Add Invoice.
For more information, see “Quick link portlets” on page 186.
- Reports, such as Budget by Project Type or Marketing Financial Position.
For more information, see “Marketing OperationsIBM Cognos report portlets” on page 187.

To set your start page

The start page is the page that displays when you log in to IBM EMM. The default start page is the default dashboard, but you can easily specify a different start page.

If you do not want a dashboard page to display when you first log in to IBM EMM, you can select a page from one of the installed IBM products as your start page.

To set a page you are viewing as your start page, select **Settings > Set current page as home**. Pages available for selection as a start page are determined by each IBM EMM product and by your permissions in IBM EMM.

On any page you are viewing, if the **Set current page as home** option is enabled, you can set the page as your start page.

Setting your basic settings

The basic settings option allows you to choose the security policy that is used by default when you create new items.

1. Select **Settings > Marketing Operations Settings**.

The Administrative Settings page opens.

2. Click **Basic Settings**.

The Basic Settings page opens.

3. Select the security policy that you want to use by default when you create new items in Marketing Operations in the **Default Security Policy** field.

You can leave **Global** selected, which is the default, to use the global security policy that is defined by your administrator, or you can select a security policy that your administrator instructed you to select. As a best practice, do not change the security policy without the guidance of your administrator. For more information about security policies, contact your administrator or see the Marketing Operations Administrator's Guide.

4. Click **Save Changes** to save your changes.

Setting your approvals options

The approvals options allow you to customize Marketing Operations so you view and receive information about approvals that is important to you.

1. Select **Settings > Marketing Operations Settings > Approvals**.

The **Approvals Options** page appears.

2. In the **Default List** field, select the default Approval List view that you want to appear when you open the approval list page.

By default, the **My Active Approvals** view appears in this field; the result is that Marketing Operations displays only your active approvals when you select **Operations > Approvals**.

If you have any saved searches, this list also includes that information.

Setting options for projects

You can customize Marketing Operations so that you receive the project information that is most important to you. For example, you can specify additional data columns to include when you review a list of projects, the default view to apply, and whether or not to receive email notifications about changes in health status for your projects.

To set project options

1. Select **Operations > Projects**.

2. Click **Options** ().

The Projects Options page appears.

3. In the **Default List** field, select the view to use by default when you select **Operations > Projects**.

By default, the **Active Projects and Requests** view appears in this field (unless you previously changed the setting).

If you have any saved searches, you can also select one of them.

4. In the **Default View Mode** field, select project list or project calendar.
5. In the **Optional Project Columns** field, select any optional project columns to add to the current project list view.

Note: The columns that you select here appear only when you view the default project list view you selected above.

6. Click **Save Changes** to save your changes.

The settings you choose remain in effect for all of your Marketing Operations sessions.

About optional project columns: For **Project List** view pages, you can customize which columns appear in the list.

When you select optional columns, note that you select them for a particular view.

For example, if you select an optional column called **Objectives** in the **Active Projects and Requests** view, this column does not appear in the **All Projects and Requests** view.

The column choices in the **Optional Columns** field include all fields used in all project templates in the system. Template creators define fields in project templates. Some projects that appear in the Project list view may have been created with a project template that did not contain a certain field. If a project does not have a field defined, there will be no value in the corresponding column on the project list view.

If you are in the **Project Calendar** view instead of the **Project List** view, in the **Optional Information to Show** field, select any optional project milestones or project start and end dates that you want to view. These milestones and dates appear in the calendar.

To receive project health status updates by email

On a daily basis, IBM Marketing Operations compares project data to a set of key performance indicators to assess project health. For the projects that you own, you can subscribe to daily messages with the health status of your projects.

1. Click **Settings > Marketing Operations Settings**.
2. Click **Project Health Daily Mails - Subscribe**. "Subscribe" changes to "Unsubscribe".

For more information about project health status, see "About monitoring project health" on page 40.

Setting your tasks options

Your tasks options allow you to customize Marketing Operations so you view and receive task information. For example, you can specify the list of tasks that appears by default when you open the Tasks page.

1. Select **Settings > Marketing Operations Settings > Tasks Options**.

The **Task Options** page opens.

2. For the **Default List**, select the default Task List view that you want to appear when you open the Tasks list page.

By default, the **My Tasks** view appears in this field, so Marketing Operations displays only tasks currently awaiting your action when you click **Operations > Tasks**.

This list also includes saved searches.

3. For the **Default List View**, select the default list view mode that you want to appear when you open the Tasks page. You can display tasks in a list view (the default) or a calendar view.
4. Click **Save Changes** to save your changes, **Revert to Saved** to discard the changes you made since the last time you saved changes, or **Cancel** to exit.

Setting your operational analytics options

By default, the Analytics Home page shows a list of all available reports. You can set a different report to display when you go to the Analytics Home page.

1. Select **Settings > Marketing Operations Settings**.

2. Click **Operational Analytics Options**.

The Analysis Options page appears.

3. Select the report you want as the default report.

If at any time the report you select is not available, the list of all available reports is displayed.

4. Click **Save Changes**.

Defining out of office settings

Out of office settings help ensure that there is coverage for your tasks, approvals, and requests when you are out of the office.

1. Select **Settings > Marketing Operations Settings**. The Administrative Settings page opens.
2. Click **Out of Office Settings**. The Out of Office Settings page opens.
3. At the top of the page, indicate whether you are currently in or out of the office. Your selection goes into effect when you click **Save Changes**.
4. Specify the Marketing Operations user who covers for your responsibilities when you are out of the office. You can specify the same user or different users for:
 - **Workflow Tasks and Approval Tasks**: only tasks that are ready to start are assigned to your delegate when you are out of the office. Tasks with other statuses that are assigned to you are not automatically reassigned to your delegate.

Your system administrator defines whether you can select any other user as a delegate, or only a user who is already a member of the same project teams and with appropriate permissions. If your system or any of your projects uses the more restrictive setting, an error displays if you attempt to delegate tasks to a user who cannot perform them.

- **Standalone Approvals and Budget Approvals:** approvals that are waiting for your response are assigned to your delegate while you are out of the office. An error displays if you attempt to delegate approvals to a user who cannot respond to them.
 - **Project Requests:** requests that are waiting for your response are assigned to your delegate while you are out of the office. An error displays if you attempt to delegate project requests to a user who cannot respond to them.
5. Enter an optional message to include with all of the activities that are delegated while you are out of the office.
 6. Click **Save Changes**.

When you indicate that you are Out of Office:

 - The Item Delegation History at the bottom of this page logs all of the activities that are delegated in your absence.
 - A reminder displays each time you log in to Marketing Operations.
 - Project and request owners can review a list of team members who are out of the office on the People tab. The assigned delegates and when delegation begins also display.

Chapter 2. Common tasks

Some tasks are not specific to IBM Marketing Operations objects. For example, several different types of objects can contain attachments. You work with project attachments in the same way as you work with program or plan attachments. This section describes:

- “Working with attachments”
- “Statuses of business processes” on page 21
- “Using disabled attribute values” on page 23
- “Selecting resources” on page 24
- “Using Save and Return to List” on page 24
- “Column headers” on page 25
- “To print an object” on page 25
- “To export information in Microsoft Excel format” on page 25

Working with attachments

You can attach relevant documents to IBM Marketing Operations objects (such as plans, programs, and so on). The **Attachments** tab of an object contains links to all files or URLs related to the object.

IBM Marketing Operations automatically creates a thumbnail for documents, images, PDFs, and web pages when these items are attached or sent for approval. Files types supported are as follows.

- BMP
- Doc
- Docx
- GIF
- htm
- html
- JPEG
- JPG
- pdf
- ppt
- pptx
- RTF
- xls

Note the following limitations.


- By default, IBM Marketing Operations allows you to attach up to five files at once. This number is configurable, and may be different in your system.
- Attachment size is limited to under 2 gigabytes (GB) in size. The exact limitation depends on your browser and operating system.

To add an attachment to an object

Users can add attachments on an ongoing basis.

1. Navigate to the object to which you would like to add an attachment.
2. Click the **Attachments** tab.

The tab displays any attachments that are already present for the object.

3. Click the **Add** icon () to add an attachment to the object.
The Add Attachment window appears.
4. From the drop-down list in the **Save Attachment To** field, select where you want to save the attachment.
5. In the **File to Attach** field, select **From My Computer**, **From the Asset Library**, or **URL**.
6. Do one of the following.
 - Click **Browse** to search for a file on your computer. When the dialog box appears, navigate to the file you want to attach, and click **Open**.
 - Click **Browse Library** to attach a file in an asset library. Click the library that contains the file you want to add. Use the tree in the left pane of the screen to navigate to the folder and then the asset that you want to attach. Click **Accept Asset** when viewing the asset in the right pane.
 - Enter the URL in the field provided.
7. Add any comments about the attachment.
8. Click **Add More** to display an additional set of fields for each additional attachment you want to add.
9. Click **Save Changes** to add the attachment or attachments.

The attachments are added to the Attachments tab for the object.

To remove an attachment from an object

1. Navigate to the object to which you would like to remove an attachment.
2. Click the **Attachments** tab.
The tab displays any attachments that already exist for the object.
3. Click **Remove** beside the attachment you would like to delete.
A message appears asking you to verify the deletion.
4. Click **OK**.

The attachment is removed.

To send e-mail attachments

Users that have a valid e-mail address configured in IBM Marketing Operations or IBM Marketing Platform can send e-mail attachments. If your e-mail address is configured incorrectly in the system, you receive an error message.

1. Navigate to the object to which you would like to add an attachment.
For approvals and assets, attachments are available on the summary page. For all other objects, click the **Attachments** tab.
The tab displays any attachments that already exist for the object.
2. Click **Send as Mail Attachment** beside the attachment you would like to send.
You can also right-click the attachment icon and choose **Send as Mail Attachment** from the menu.

The Send Mail Attachment window appears.

3. Enter or select values in the **To** and **Cc** fields for the email recipients.
 - To send the attachment to IBM Marketing Operations users, click the arrow at the right side of the field and select one or more email addresses. The addresses you select are added to the field. If you deselect an address, it is removed from the field.
 - You can also enter any valid external email address in the fields. Separate multiple addresses by a comma. For example:
user1@inbox.com,user2@myCompany.com
4. Enter values for the **Subject** field and body of the message.
5. Click **Send** to send the attachment.

The system displays a message that confirms that the e-mail has been sent or that an error occurred while the system attempted to send the message.

The Send Mail Attachment window remains open until the e-mail server has sent the message. If you close the window while the mail is being sent, you do not receive any confirmation.

Note the following.

- Any replies to the message go directly to the e-mail address of the sender.
- If you sends an attachment to an invalid address, a message is sent to the user that the e-mail was not delivered.
- If the mail server is down (for the Marketing Operations server), the system displays a message that the attachment could not be sent. You can take either of the following actions:
- If the mail is accepted by the e-mail server for delivery, and it cannot be delivered for any reason (for example, if an email address is invalid) the e-mail server sends the details directly back to the user in the local client e-mail application.

Statutes of business processes

The following table describes the possible statuses for plans, programs, and projects. For information about the statuses that you can assign to requests and approvals, see “About request statuses” on page 40 or “About approvals” on page 87.

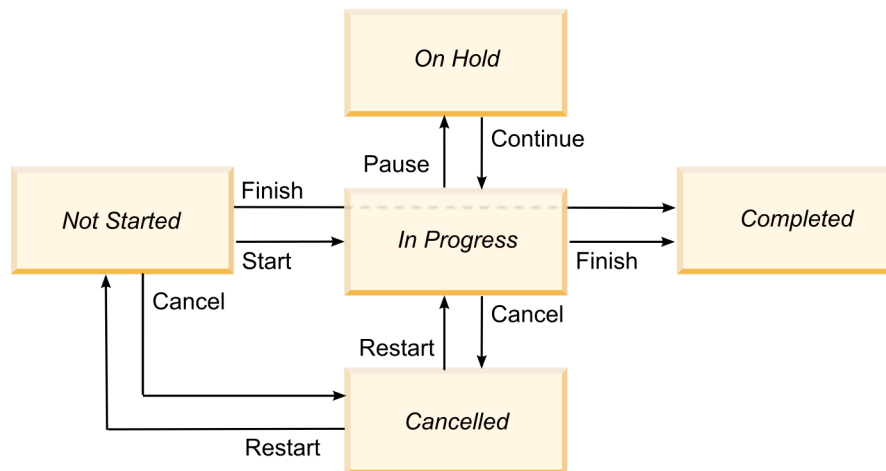
Table 3. Workflow statuses for business processes

Status	Description
Not Started	Indicates that the object has been created.
In Progress	Indicates that work on the object has started.
On Hold	Indicates that work on this object should not continue at this time.
Cancelled	Indicates that no users should access the object; work on it has stopped permanently.
Completed	Indicates that work on the object is finished.
In Reconciliation	(Projects only). Indicates that someone is editing a Cancelled or Completed project. This status is temporary and can be selected by users with the proper security permission.

Status transitions

To indicate a change in the status of a business process, you select a transition from one status to another. The transitions that are typically available follow.

Marketing Object States and Transitions



For example, if a program is In Progress, you can choose to:

- Pause it: change its status to On Hold
- Finish it: change its status to Completed
- Cancel it: change its status to Cancelled

Your system administrator can create additional statuses and add or remove transitions as required by your installation.

To change the status of a process

Statuses identify the progress of business processes. The following procedure describes how to change the status for plans, programs, projects, requests, marketing objects, and approvals.


Note: Your administrator can set up IBM Marketing Operations to send an alert to owners and members of a process when its status changes.

1. Select the type of object you want to work with from the navigational menus.

For example, to work with a plan click **Operations > Plans**.

2. Click the name of the object you want to change.

The Summary tab displays for the object.

3. Click **Status** (). For projects and requests, click **Change Status**. A list of transitions displays.

4. Select a transition.

The options that display depend on the status of the object.

- For objects that are Not Started, **Start <object>** changes the status to In Progress. For requests and approvals, select **Submit <object>** to make this change.
- For objects that are In Progress, **Pause <object>** changes the status to On Hold. For approvals, select **Stop Review** to make this change.
- For objects that are On Hold, **Continue <object>** changes the status to In Progress.
- For objects that are In Progress, **Finish <object>** changes the status to Completed. Objects in this status cannot be changed to any other status, except for projects, which you reconcile after completing.

- For objects that are Not Started or In Progress, **Cancel** <object> changes the status to Canceled. Select this option to cancel the object permanently. Objects in this status cannot be changed to any other status, except for projects, which you reconcile after canceling.

A dialog box displays the new status.

5. Add comments and additional information.
6. Click **Continue** to apply the new status.

Using disabled attribute values

Throughout IBM Marketing Operations, users select an item or items from a drop-down list. Over time, the items in the lists can change; administrators can add, remove, or disable items from drop-down lists. When an administrator disables an attribute, it affects the behavior of Marketing Operations in the following ways.

- When users perform advanced searches.
- When users edit an existing object that contains a disabled value in one of its drop-down lists.

Disabled attribute values in objects

When an administrator disables an attribute value, it no longer appears in drop-down lists for new objects. However, users need to consider disabled values in the following situations.

- A user edits a tab for an existing object with an attribute that is set to a disabled value. The attribute is optional.

If the user edits the attribute, he or she must select an enabled value. However, the user can save the page without editing the attribute (that is, the attribute can be saved with the existing, disabled value).

- A user edits a tab with an attribute that is set to a disabled value. The attribute is required.

The user must select an enabled value for the attribute. The system does not allow the user to save the data until an enabled value has been set for the attribute.

- A user creates a new object. One tab contains an optional attribute that has a disabled, default value.

The attribute is set to a blank value.

- A user creates a new object. One tab contains a required attribute that has a disabled, default value.

The system presents an error message that the attribute is required. The user cannot finish creating the object until he or she sets the value of the required attribute.

Disabled attribute values in searches

When users search on an attribute that contains disabled values, they can select from both enabled and disabled values. This allows users to find objects that contain values that may no longer be used.

Disabled attribute values example

Consider a project template, **Marketing Collateral**, which contains a tab, **Production Info**. **Production Info** contains several attributes, including a required attribute, **Color**, and an optional attribute, **Coating**. The attributes have the following values:

Color (required)	Coating (optional)
(default value)	Gloss Aqueous (default value)
4C	Dull Aqueous
4/4	UV Coating
Black and White	Etched

Tom creates a marketing collateral project, **MC001**, and sets the **Color** to **4/4** and the **Coating** to **Dull Aqueous**.

An administrator then disables the **4/4** and **Dull Aqueous** values.

Tom opens the **MC001** project, and edits the **Production Info** tab:

- He can leave the **Coating** value as **Dull Aqueous**, or set it to any of the enabled values, such as **Etched**.
- He must change the value of **Color** to one of the enabled values before he can save the **Production Info** tab.

The administrator re-enables **4/4** and **Dull Aqueous** values, and disables the default value (**Gloss Aqueous**).

Tom creates a marketing collateral project, **MC002**:

- The value of **Coating** is blank.
- Tom must select a valid value for **Color** before he can finish creating **MC002**

Selecting resources

Throughout IBM Marketing Operations, users can select people and teams as resources. Users add and remove members to planning objects, marketing objects, assets, invoices and approvals. When users perform advanced searches, they can add people and teams to the search criteria.

Note: The list of people available in IBM Marketing Operations is populated from IBM Marketing Platform. Administrators can limit the list of teams and people a particular user sees, depending on the role and permissions for the user.

Using Save and Return to List

When you create or edit a project, request, or marketing object, you can save your work at any time. If you click **Save and Return to List**, your work is saved and you see a list, saved search, default search, or summary page, as described here.

- If you start a wizard from a saved search or list page, you return to that page.
- If you start a wizard from the **Actions** menu, you return to your default search page for the object type.
- If you start a wizard from the **Manage Linked Objects** menu, you return to the Summary page of the parent program.



- If you edit an existing object you return to the saved search page, if that is where you initiated the edit, or the default search page if you initiated the edit from the summary page of the project or request.

Column headers

Many IBM Marketing Operations pages display a summary table with rows that contain objects (such as programs, plans, and tasks), and columns that contain characteristics for the object (such as name, status, and owner).

In these pages, you can click the column headers to sort or group the table on the selected column. Clicking a second time on the column name reverses the sort order.


You can determine how data on the page is sorted.

- If a column contains the  symbol, data on the page is sorted in ascending order based on the contents of this column.
- If a column contains the  symbol, data on the page is sorted in descending order based on the contents of this column.
- If the current sort column is any column other than Name, the list is sorted by current sort column, then by the Name column.

To print an object

You can print the current page for many IBM Marketing Operations objects. Use the following procedure to print any of these objects: accounts, approvals, invoices, plans, programs, projects, and marketing objects.

IBM Marketing Operations prints the information found on the tab currently showing.

1. Navigate to the **Summary** tab of the object to print.
2. Select the tab to print and click the **Print** icon () on the Marketing Operations toolbar.
For some objects, a drop-down menu displays with two choices: **Print** and **Export**.
3. If the menu appears, click **Print**.
A print dialog appears.
4. Complete the fields in the dialog and click **Print**.

The data on the screen prints to the selected printer.

To export information in Microsoft Excel format

You can export information from IBM Marketing Operations to an Excel spreadsheet for programs, projects, and project requests.

Note: You cannot export Tracking, People, Attachment, Workflow, Budget, or Analysis tabs to Excel.

In particular, you can export the Summary tab or a custom tab. From the Program or Project List page, you can export summary information for multiple programs, projects, or requests.

When you export list pages for programs, projects, tasks, and marketing objects, all the items in the list are exported, even if the list spans multiple pages.

1. You can export information for a single object or for a list of objects.
 - To export information to Excel for a single object, navigate to Summary or custom tab of the object.
 - To export a list of objects to Excel, click **Operations > Programs** or **Operations > Projects** and open the view you want to export.



2. Click the Print icon () and select Export from the drop-down menu.

A window displays, asking whether to Open or Save the file that will be exported. If you are exporting a list, IBM Marketing Operations prints information about all the objects in the current view of the list page.

3. You can either open the item in Excel, or save it to disk.
 - Click **Open** to launch Excel. The information you exported displays on the spreadsheet.
 - Click **Save** to save the file. You can then open the Excel spreadsheet, displaying summary information about the object or list of objects.

Chapter 3. Plans

Plans capture the objectives of a business unit or geographic area for a specific timeframe, such as a year or a quarter. A plan is the container for your marketing programs and projects.

After you add a plan, you link one or more programs to the plan. Information from each linked, or child, program, and from each of the projects that is linked to a program, "roll up" to the plan. As a result, you can review metrics and budget information from the perspective of the overall plan in addition to the program and project levels.

Plan views

IBM Marketing Operations organizes plans in views.

- The **All Plans** view lists all plans. It also contains links to the **Active Plans** view.
- The **Active Plans** view lists all plans currently in the **In Progress** state. The **Active Plans** view is the default view.

You can access the different plan views from the **Actions** menu. This menu contains a link to each of the plan views. In either view, you can change the sort order by clicking the column you want to sort by. Click the column a second time to reverse the sort order.

Additionally, you can search for a plan.

Summary information for plans

On the plan Summary tab, IBM Marketing Operations lists summary information about a plan, such as status, program areas, and security policy. By default, the plan Summary tab displays when you select a plan from the Plan List page. Any programs linked to the plan are listed on the Summary tab. You can perform tasks such as changing plan status, editing the plan, adding a new program, linking an existing program, or removing a linked program.

Fiscal year for plans

When you add or edit a plan, you choose its fiscal year from a drop-down list. You can edit budget information for the fiscal year you choose. IBM Marketing Operations keeps multi-year budget data for plans. The system keeps budget information for the current fiscal year, the next two fiscal years, and any past fiscal years dating back to when you first installed IBM Marketing Operations.

Viewing budget information

The budget information that you view in Total mode is for the life of the plan. The budget information that you view in Detailed mode is for the specified fiscal year.

Editing budget information

Budget information that you edit on the Budget tab corresponds to the selected fiscal year. You can edit only the budget for one fiscal year at a time. To edit

budget data for a fiscal year, edit the **Fiscal Year** value on the summary page for the plan; set the value to the fiscal year that corresponds to the budget data you want to edit.

To add a plan

When you add a plan, you become an owner of that plan.

1. Click **Operations > Plans**.

2. Click the **Add Plan** icon ().

3. Enter a plan name in the **Name** field.

4. Enter a description of the plan in the **Description** field.

5. Click **Add/Remove Members** to add team members to the plan.

6. Select **Auto-generate on save**, or Enter a plan ID in the **Plan Code** field.

By default, the **Auto-generate on save** field is checked and IBM Marketing Operations generates a number automatically when the plan is saved. To enter a plan ID manually in the **Plan ID** field, clear the **Auto-generate on save** check box.

The plan ID must be unique.

7. Select the security policy from the **Security Policy** list.

A security policy is required and defaults to Global or the default security policy set by your system administrator.

8. Select a business area in the **Business Area** field.

9. Click **Add/Remove Program Area** to select the program areas to use for programs in this plan.

10. Select a fiscal year from the **Fiscal Year** list.

To indicate the year in which the plan is active, you can choose the current fiscal year or one of the next two fiscal years. That is, for a plan created in fiscal year 2012 you can select FY 2012, FY 2013, or FY 2014.

Note: The budget information available on the Budget tab corresponds to the value in this field.

11. Select the **Budget Granularity**.

12. Click **Save Changes** to save the plan.

To edit an existing plan, click the **Edit** icon () found on the plan Summary tab.

To add or remove a program area

Program areas are subsections of plans, allowing programs that are linked to the plan to be arranged into logical subgroups.

IBM Marketing Operations administrators create the program areas from which you can choose.

1. Follow the steps for adding a plan until you get to the step of adding a program area.
2. Click **Add/Remove Program Areas** (located under the **Program Areas** field).

3. To add a program area, select a program area from the **Available Program Areas** field and click the right-pointing arrows to add the program area to the **Selected Program Areas** field.

When you add a program area to the **Selected Program Areas** field, it populates the **Program Areas** field on the plan Summary tab.

4. To remove a program area, select a program area in the **Selected Program Areas** field and click the left-pointing arrows to remove it.


Note: Before you remove a program area you must first remove any programs assigned to it.

To link a program to a plan

Once you have created a plan, you can link existing programs to it. When you link a program to a plan, all the plan participants receive an e-mail message informing them of the link.

1. Navigate to the plan to which you want to link a program.



2. Click the **Manage Linked Objects** icon () and select **Link Existing**. The **Link Existing Programs to Plan** window appears.

3. Enter a string in the **Find by name or code** field and click **Find** or leave the field empty and click **Find**

Note: The **Search Results** field shows only programs which you can link to the plan. Only programs with the same budget granularity and security policy as the plan will be available. Programs with a status of Cancelled, Deleted, or Completed never appear in **Search Results**.

4. In the **Select a Program Area** field select a program area. The program will belong to the program area that you choose.
5. In the **Search Results** field, click the programs to link to the plan.

Note: To select more than one program at a time, press the **Ctrl** key and click each program.

6. Click the right-pointing arrows. The **Selected Items to link** field populates with your selections.

To deselect a program, click the program in the **Selected Items to link** field and click the left-pointing arrows.

7. Click **Save Changes**.

The program appears in the **Supporting Program(s)** field on the Plan Summary tab.

Linked programs appear with summary information on the Plan Summary tab in the **Supporting Programs** field. Click the program name to be taken to the Summary tab for that program.

Security considerations for linking plans and programs

Linked programs and plans must have the same security policy. When you link a program to a plan, you cannot change the security policy of either object without first removing the program from the plan.

In order to link an existing program to the plan, you must have **Edit Summary Tab** permission on each program you want to link. If you do not have this permission, ask your administrator for help.

Adding a new program from a plan

You can create a new program when you are in a plan; IBM Marketing Operations links the new program to the plan. The program areas you choose in the program creation process are the program areas currently defined for the plan.

After you click the **Add Program** icon () on the plan summary page, the process is similar to creating a new, non-linked program.

Linked programs

If you add a program from the plan summary page, the new program's program area is constrained by the plan's program areas.

- If the plan from which you add a program contains more than one program area, you will be asked to choose the program area to which you would like the new program to belong.
- If the plan contains only one program area, the new program will default to that program area.
- If you want to re-assign a different program area to a linked program, you must first remove that program from the plan, then link the program to the other program area.

Non-linked programs

If you add a program that is not linked to a plan, you can assign it to any program area.

To remove a program from a plan

Before you can delete a plan, you must remove any programs linked to it. Removing the link does not delete the program from IBM Marketing Operations, it simply breaks the link.

1. Navigate to the **Summary** tab of the plan from which to remove a linked program.

2. Click the **Manage Linked Objects** icon () and select **Remove**.
The **Remove Program Links From Plan** window appears.




3. Select the program you want to remove from the **Linked Program(s)** field.
4. Click the right-pointing arrows button to move the program into the **Selected Items to Remove** field.

To move the program back to the **Linked Program(s)** field, click the program in the **Selected Items to Remove** field and click the left-pointing arrows.

5. Click **Save Changes**.

To start a plan

After you start a plan, all participants can work on the plan.

1. Click **Operations > Plans**.
2. Click **Actions** () and select a view, such as **My Plans** or **All Plans**, that includes plans in  **Not Started** status.
3. Click the name of the plan you want to start. The Plan Summary tab displays for the plan.
4. Click **Status** () and select **Start Plan**.
A dialog opens so that you can add comments or additional information about the plan.
5. Click **Continue**.


The plan status changes to  **In Progress**.

To delete a plan

You can delete a plan from the Plan List page or from the plan Summary tab.

Note: You cannot delete a plan if it has linked programs. You must first remove the link to the program before deleting the plan.

The following procedure describes how to delete a plan from the Plan List page.

1. Click **Operations > Plans**.
By default the **Active Plans** view of the Plan List page appears.
2. Select the checkbox next to each plan that you want to delete.
3. Click the **Delete this Item** icon ()
4. When IBM Marketing Operations prompts you to verify that you want to delete the plans, click **OK**.

Chapter 4. Programs

If you have permission to create programs, you can add a program. As part of adding a program, you select a template set up by an IBM Marketing Operations administrator.

After you create a program, you can start the program at any time. Starting the program makes it active and changes the status of the program to **In Progress**.

Program views

IBM Marketing Operations organizes programs in views.

- The **All Programs** view lists all programs. It also contains links to the **Active Programs** and **My Programs** views.
- The **Active Programs** view lists all the programs that are now in the **In Progress** state. The **Active Programs** view is the default view.
- The **My Programs** view lists all the programs that you own or are part of as a team member.

You can also access the different views of programs using the **Actions** menu. It contains links to each of the program views. In any view, you can change the sort order by clicking on the column you want to sort by. Click the column a second time to reverse the sort order.

Additionally, you can search for a program.

Summary information for programs

On the program Summary tab, IBM Marketing Operations lists summary information about a program, such as status and security policy. By default, the Summary tab for the program displays when you select a program from the Program List page. Any projects linked to the program are listed on the Summary tab as well.

From the Summary tab, you can also perform tasks such as changing program status, adding a request, editing the program, linking an existing project, or removing a linked project.

Supporting projects and requests

At the bottom of the Summary tab, the **Supporting Projects and Requests** section displays information about all child projects for the program. This list shows the name of the project, the name of the project owners, the project ID, the date and time when the last person updated the project, the target start and end dates of the project, and the project status.

To add a program

When adding a program, note the following

- To add a program you must have permission to add a program.
- If you add a program, you are the owner of the program.
- You can add other team members, some of whom can also be program owners.

1. Click **Operations > Programs**.

2. Click the **Add Program** icon ()

3. Select the appropriate template for your program.

Your administrator sets up templates that correspond to the types of programs that fit the needs of your organization. For more information about templates, see the *IBM Marketing Operations Administrator's Guide*.

4. Click **Continue**.

On the Summary page of the program wizard, you can click **Add/Remove Members** to add team members to the program. You can add members as either owners or participants in the program. For details, see "About team alerts" on page 109.


5. Fill in the fields and continue clicking **Next** and filling out the required fields until you reach the Attachments page. The required fields have a double asterisk (**) next to them.

The number and content of your program pages differ depending on the template you use. A typical program contains program summary information, perhaps some additional information pages, and attachments of documents related to the program.


To start a program

You can start any program you created, or any program for which you are listed as an owner. Additionally, a user can have permission to change the status of **all** programs. These permissions are assigned based on a user's role in the security policy for the program.


1. Click **Operations > Programs**.

2. Click **Actions** () and select a view, such as **My Programs** or **All Programs**, that includes programs in ☐ **Not Started** status.

3. Click the name of the program you want to start. The Summary tab displays for the program.

4. Click **Status** () and select **Start Program**.

A dialog box opens so that you can add comments or additional information about the program.

5. Click **Continue**. The program status changes to  **In Progress**.

To add new project requests and projects to programs

After you create a program, you can create a project request or project from within the program. When you do so, IBM Marketing Operations automatically links the project request or new project to the program.

After you add a project request or a project to a program, you cannot change the security policy of the project request, project, or program. You must remove the item from the program to change the security policy.

1. Navigate to the **Summary** tab of the program that you want to contain the new project request or project.



2. Click the **Manage Linked Objects** icon () and select **Add Request** to create a project request, or **Add Project** to create a project.

The wizard for adding a project request or adding a project opens

3. Do one of the following.
 - Follow the steps in “To request a project” on page 46 to add a project request and associate it with this program. After a user accepts the request, the project created from this project request is also part of this program.
 - Follow the steps in “To create a project” on page 43 to add a project and associate it with this program.

When you complete the steps, the project request or project opens to the Summary tab. The Summary tab has a field called **Parent Items and Code**. This field contains a link to the program of which the project is a part.

4. Click the link to open the program.

Scroll to the bottom of the Summary tab of the program to view a list of all the projects contained in the program.

To link an existing project to a program

Before you can link an existing project to a program, there must be existing projects in your system and you must have the appropriate permission.

After you create a program, you can link existing projects to the program. When you link a project to a program, all the team members listed in both the project and the program receive an email message informing them of the link.

1. Navigate to the **Summary** tab of the program that you want to link to an existing project.



2. Click the **Manage Linked Objects** icon () and select **Link Existing**.

A dialog box appears for you to specify the projects to link.

3. Enter search criteria in the **Find by name or code** field.
4. Click **Find**.

Note: The **Search Results** field displays only projects that you can link to the program. Only projects with the same budget granularity and security policy as the program will be available. Programs with a status of Canceled, Deleted, or Completed never appear in **Search Results**.

5. In the **Search Results** field, select the projects to link.
6. Click >> and << to move projects into or out of the **Selected Items to Link** list box.
7. Click **Save Changes** to create child links to the projects you selected.

The projects you added appear in the list of projects at the bottom of the Summary tab of the program.

Security considerations for linking projects and programs

Linked projects and programs must have the same security policy. After you link a project to a program, you cannot change the security policy of either object without first removing the project from the program.

In order to add projects to the program, you must have **Edit Summary Tab** permission for each project you want to add. If you do not have this permission for one or more projects, ask your administrator for help.

To navigate from a program to a plan

You can link the programs you create to a plan. A plan can contain several programs and helps organize programs in logical groups. After you link a program to a plan, you can navigate to the plan from within that program.


1. Navigate to a program that has a parent plan.
The Summary tab has a field called **Parent Items and Code**. This field contains a link to the plan that the program is part of.
2. Click the link to open the plan. The Summary tab of the plan appears. Scroll to the bottom of the Summary tab of the plan to view a list of all the programs contained in the plan.
3. Click the name of the program you were just in to go back to that program.

To remove projects from programs

You can remove new project requests, new projects, and existing projects from a program.

1. Navigate to the **Summary** tab of the program that contains the project you want to remove.




2. Click the **Manage Linked Objects** icon () and select **Remove**.
The Remove Project Links From Program window appears.
3. In the **Linked Project/Request** list box, select the project requests or projects to remove.
4. Use the arrow button to move selected items to the **Selected Items to Remove** list box.
5. Click **Save Changes**.


The project requests and projects no longer appear in the list on the Summary tab of the program.

To delete a program

When you delete a program, IBM Marketing Operations checks to see if the program contains links to any projects. If so, you cannot delete the program until you remove all linked projects.

1. Select **Operations > Programs**.
2. Select the check box next to each program to delete.
3. Click the **Delete this Item** icon ().

The selected programs are deleted from the system.

Note: You can also delete a program when you have the program open. From any tab, click the **Delete this Item** icon () in the IBM Marketing Operations toolbar.

Chapter 5. Projects

A **project** contains all the information related to developing and executing one or more related marketing deliverables or initiatives. This information can include a checklist or schedule of tasks that people working on the project must perform in order to prepare and produce the deliverables for the project.

For example, you might use a project called **Monthly Trade Show** to collect all the information needed for the one trade show each month that your organization attends. This information could include who attends the show, what equipment you need in the booth, copies of demonstrations of the product that you intend to present, collateral you want to hand out to customers, costs of promotional materials, and any additional information that pertains to the trade show.

Note: Projects can have subprojects. A **subproject** has all the same characteristics as a project. A subproject is linked to a parent project; any project linked in this manner is referred to as a subproject.

About projects and project requests

Your permission settings determine whether you create projects or project requests.

- If you have permission to create projects, you can create one by selecting either a project template or an existing project.

For example, to capture information about upcoming trade shows, you can create a project based on the Monthly Trade show template every month.

Alternatively, you can select any existing trade show project and copy it. To create up to 99 different projects at once, you can select a project and clone it.

For more information, see “To create a project” on page 43, “To copy a project or request” on page 49, or “To create projects by cloning” on page 44.

- If you do not have permission to create a project, you can instead create a project request. Project requests allow you to get formal approval of a proposed project, or allow for acceptance of a work request.

After you create a project request, you submit it to an authorized individual; when the request is accepted IBM Marketing Operations creates a project.

For example, a marketing manager can submit a project request to the CMO to have the request formally approved and turned into a project. A sales account manager can submit a project request to the marketing services department to request development and production of some specialized collateral.

For more information, see “To create a request” on page 46 or “To copy a project or request” on page 49.

Projects and project requests can also be created from within a program.

After you create a project, you can start it at any time. Starting the project makes it active and you can view it in different views in IBM Marketing Operations.

About project reconciliation

Typically, projects use the same statuses as other business objects in IBM Marketing Operations. See “Statuses of business processes” on page 21. However, projects can also be in a temporary state, **In Reconciliation**. You can apply this status while

you reactivate a completed or canceled project, update project information, then change the state back to its previous state (completed or canceled). For example, the owner of a project can make private changes to a canceled project.

While a project is in this state, it is not available to any other participants for editing. The project is read-only for users who do not have reactivate rights.

The spirit of project reconciliation is that one can do anything within the project but nothing externally. That is, for the rest of the Marketing Operations system, the project is not available. For example, while a project is in reconciliation you cannot reassign tasks.

For more information, see “To reconcile a project” on page 55.

A different set of statuses applies to project requests.

About request statuses

The following table describes the possible statuses for requests.

Table 4. Request statuses

Status	Description
Draft	Indicates that the request has been created, but not yet submitted.
Submitted	Indicates that the request has been submitted to the appropriate person who can accept or reject the request.
Returned	Indicates that the person who reviewed the request has returned it to the submitter, either for rework or some other deficiency.
Accepted	Indicates that the request has been accepted. After a request is accepted, IBM Marketing Operations creates a corresponding project. This status indicates the end of the lifecycle for the request.

About monitoring project health

In addition to the statuses that indicate the lifecycle stage of a project, IBM Marketing Operations calculates a health status for projects. A project can be given one of the following health statuses (your system administrator can change these names at your installation):

- Healthy
- Warning
- Critical
- Unknown

To objectively assess the overall health of a project, Marketing Operations compares project data to thresholds for key performance indicators (KPIs). For example, a project with 0% of its tasks overdue and 0% of its milestones overdue is Healthy. However, if more than 5% of its tasks, or 3% of its milestones, are overdue, the project is Critical.

Your system administrator uses the KPIs to define rules for this calculation. The rules are associated with specific project templates, and therefore with the projects that use those templates.

The system automatically calculates project health status daily, and updates the calculation periodically throughout the day. In addition, you can manually initiate the health status calculation when needed.

To review the health status of your projects, you can:

- Subscribe to daily email notifications with the daily status. See “To receive project health status updates by email” on page 15.
- Click **Operations > Projects** and view a project list. The Project Health column shows the status calculated during the most recent automated periodic update.
- View detailed information for a project and click its Health Status tab. When you click this tab, the system automatically updates the project health status; however, the values shown elsewhere in Marketing Operations are not updated.
- Add the Health Status portlet to your dashboard. See “Marketing OperationsIBM Cognos report portlets” on page 187.

To facilitate analysis, reports are available to compare the health statuses calculated for different projects within a month or trending over time. See “Multi-object reports” on page 175.

Project views

IBM Marketing Operations organizes projects and project requests in views as follows.

Table 5. Project views

View	Description
All Projects and Requests	Lists all projects and requests. It also contains links to the other project views and any saved project searches.
Active Projects and Requests	Lists any active projects or project requests. A project is active when it is in the In Progress state and a request is active when it is in the Submitted state. The Active Projects and Requests view is the default view.
My Projects	Lists all the projects that you own or are part of as a team member.
My Requests	Lists all the requests where you are either the requester or the recipient.
Completed Projects	Lists all projects with a status of Completed.
This Week's Projects and Requests	All projects and requests that fall within the current week.
Next Week's Projects and Requests	All projects and requests that fall within next week.
This Month's Projects and Requests	All projects and requests that fall within the current month.
Next Month's Projects and Requests	All projects and requests that fall within next month.
All My Teams Projects	All projects assigned to a team to which you belong.

Table 5. Project views (continued)



View	Description
All My Teams Project Requests	All project requests assigned to a team to which you belong.
All My Teams Unassigned Project Requests	Lists all project requests assigned to a team to which you belong but not assigned to a team member.

To select project views

You can access the different views of projects using the **Actions** menu. In any view, you can change the sort order by clicking on the column you want to sort by. Click the column a second time to reverse the sort order.

1. Open Marketing Operations and select **Operations > Projects**.

The default page that appears is the **Active projects and Requests** view. You can change this default page by modifying your user options.

2. Click the **Actions** icon () and select **All Projects and Requests** or **My Requests** or **My Projects** to view all projects, only project requests that pertain to you, or only projects that pertain to you.
3. Click the **Actions** icon () and select **Search for Projects** to search for projects meeting a specified criteria. You can then save that search.

Searching for projects

You can search for projects grouped by any criteria that is useful to you and save the results of that search for later viewing. For example, you might search for all projects that started in June and then save the results of that search by naming it June Projects. You can also search for all projects of a certain type, such as all trade show projects, and save that search. You can then access those search results at any time.

Choosing list or calendar view mode

When you select **Operations > Projects**, by default IBM Marketing Operations displays a list of projects. You can then:

- Click a project name to access detailed information about the project.
- Click **Actions** to select a different view.
- Click a column header to change the way the project list is sorted.

You can also see projects on a calendar: select **Operations > Calendar**. Marketing Operations uses the activity dates for the project to place them on the calendar.

You can:

- Click a project name to access detailed information about the project.
- Click **Actions** to select a different view.
- Change to the next or previous time period.

You can change the default for **Operations > Projects** so that the calendar displays by default instead of the list. See “To set project options” on page 15. You can also make choices about the way the calendar displays. See “Calendar display options” on page 121.

Note: This guide assumes that the project list displays when you click **Operations > Projects**.

About campaign projects

If your IBM Marketing Operations system is integrated with IBM Campaign, you can create campaign projects.

A campaign project collects the information related to developing a marketing campaign and executing it through Campaign.

A campaign project can contain any features available to projects, including subprojects. Campaign projects also contain a TCS tab with a Target Cell Spreadsheet and an additional Campaign Summary section of the Summary tab.

In a campaign project, you synchronize the campaign, offer, contact history, and response history data for the project with Campaign.

About project codes and campaign codes

When you create a campaign project, you must specify a project name and code. The same name and code are used as the campaign name and code when you click the **Create Linked Campaign** icon to create the campaign in IBM Campaign.

The code must be unique in both IBM Marketing Operations and IBM Campaign. The system checks the uniqueness of the code before creating the project or saving the project (if you changed the code).


To create a project

When creating a project, note the following.

- To create a project, you must have the appropriate security permission.
- When you create a project, you are the owner of the project.
- You can add other team members to the project (some of whom can also be project owners).

Follow these steps to create a single project based on a project template. Project templates are set up and maintained by an administrator. You can also create projects by copying a project, making up to 99 clones of a project, or responding to a project request.

1. Select **Operations > Projects**.

2. Click **Add Project** (). The Add Project dialog opens.
3. Select a template for your project.

An IBM Marketing Operations administrator sets up the templates for your organization. To access any of the IBM Marketing Operations and IBM Campaign integration features, you must select a template configured as a campaign project template.

4. Click **Continue**.
5. Complete the Add Project wizard: supply values for required and optional fields. Click **Next** to access all pages of the wizard.
6. When you save the project, the system verifies that all required fields have a value. It also completes optional fields by supplying default values from the template when available. To save your project, use one of the following options.




- Click **Finish**. The Summary tab displays for the new project.
- Click **Save and Duplicate**. The system saves the initial project and then uses the same information to create another project. The Summary tab displays for the duplicate project: edit the default name supplied for the duplicate and for other fields as needed, then save that project as well.
- Click **Save and Return to List** on any page. The All Projects and Requests page displays.

Newly created projects are given a status of Not Started. To use the project to collect and share information, you change its status. See “To start a project” on page 45.

The tabs in a project differ depending on the template you used. A typical project contains tabs for project Summary information; the team of People; Strategy; a Workflow schedule of tasks, milestones, and approvals; Tracking of expenses and resources; Health Status for monitoring the project; and Attachments related to the project. When IBM Campaign is integrated with Marketing Operations, a campaign project also contains a Target Cell Spreadsheet tab.

To create projects by cloning

To create multiple similar projects from a single existing project, you can clone the project. You specify how many projects to create, and select fields you want to edit before the new projects are saved. You can clone a project when it is in any status. To clone a project you must have the appropriate security permission.

1. Navigate to the Summary tab of the project you want to clone.
2. Click the **Clone** icon (). The **Clone this project** dialog opens.
3. Specify from 1 to 99 as the **Number of projects** to create.
4. Select either the project or the project template as the source of the metrics to use in the new projects.
5. If the project you are cloning is linked to a program, the **Copy parent link** check box appears. Select this check box to apply the same relationship link to all of the new projects.
6. Select at least one attribute (or field) to edit for the new projects. Use Ctrl+click or Shift+click to select up to 20 attributes from the list. For example, to edit the default name and specify a target start date for each of the new projects, hold down the Ctrl key while you click **Name** and **Target start date**.
7. Click **OK**. The Clone Projects Grid displays a column for each of the attributes you selected and a row for each new project.
8. To change or enter values for attributes in the grid, click the **Edit mode** icon () and then click in the cell you want to edit.
For more information about working with grids, see Chapter 10, “Grids,” on page 127.
9. To create all of the projects, click the **Save** icon () to save your edits and then click **Create Projects**.
For successfully created projects, the Status/Project Code column displays the assigned project code. For projects that cannot be created this column displays Failed.
10. Click **Back to Summary** to return to the Summary tab of the project you cloned.




All of the newly created projects are given a status of Not Started. To use the project to collect and share information, you change its status. See “To start a project.”

To start a project

You can start any project you own.

- The projects you create.
- The projects you create when you accept a project request.
- The projects that include you as an owner.

You can also start several projects at once: see “To change the status of multiple projects or requests” on page 49.

1. Select **Operations > Projects**.
2. Click **Actions** () and select a view, such as **My Projects**, that includes projects in  **Not Started** status.
3. Click the name of the project you want to start. The Summary tab displays for the project.
4. Click **Change Status** and select **Start Project** from the list. A dialog box opens so that you can add comments or additional information about the project.
5. Click **Continue**. The project status changes to  **In Progress**.

After you start a project, all project participants can work with their assigned tasks.

Project attachments tab

The **Project Attachments** tab is broken into two sections, one for attachments for the project as a whole and one for attachments to individual tasks in the project.

Table 6. Columns on the Project Attachments tab

Column	Description
Icon, file name	Icon of the file type and the file name of the attached file. The file type and file size are listed in brackets.
Description	The name of the person who attached the file, the date and time added, and the description for the file.
Task	Available in the Task Attachments section of the page only. Displays a link to the task the file is attached to.
Actions	This column contains the following links: <ul style="list-style-type: none">• Send as Mail Attachment: Click to send the attachment using email.• Remove: A user with privileges to remove the attachment can delete the attachment using this link. The task or project owner receives an alert when an attachment is removed. Removed attachments do not appear on the Project Attachments tab.

Project requests

A **project request** is similar to a work order or creative brief. It represents a request for someone else to do work according to the specifications supplied by the requester.

Users within an organization and outside vendors can request a project. For example, an outside vendor can submit a project request to the marketing services organization requesting some collateral. The marketing services representative accepts the request and creates a project, organizing tasks and assigning resources to the project in order to manage the creation of the collateral.

If you request a project, you are a *requester*. You then submit the request to a *recipient* for approval. When the recipient accepts the request, the recipient owns the resulting project and is called the *owner*.

Note: A project request does not contain a workflow. When the request is approved and transitions to a project, it contains the appropriate workflow.

To request a project

When adding a project request, note the following.

- To request a project, you must create the request and then submit it.
- To add a request you must have the appropriate security permission.
- If you request a project, you are a requester. You then submit the request to a recipient for approval. After the recipient accepts the request, the recipient owns the project and is called the owner.

To create a request

If you do not have permission to create a project yourself, you create a project request. After you create the request, you must submit it.

When you create a request, the pages in the wizard that you complete differ depending on the type of project you want to create. A typical request can contain the following sections:

- Summary information about the request.
- Tracking information.
- Attachments that are part of the request.

1. Select **Operations > Projects**.

2. Click **Add Request** (). The Add Request dialog opens.

3. Select a template for your request.

Your administrator sets up project templates that correspond to the types of projects that your organization undertakes. To request a project that uses IBM Marketing Operations-IBM Campaign integration features, you must select a campaign project template.

4. Click **Continue**.

5. Complete the Add Request wizard: supply values for required and optional fields. Each request identifies recipients to review and redraft or approve the request. If the template you selected allows these modifications, you can also:

- Add recipients
- Change recipient roles
- Change the duration periods for responses
- Change the sequence numbers that order request receipt and approval
- Specify whether a response is required


6. Click **Next** to access each page of the wizard.


7. When you save the request, the system verifies that all required fields have a value. It also completes optional fields by supplying default values from the template when available. To save your request, use one of the following options.
 - Click **Finish**. The Summary tab displays for the new request.
 - Click **Save and Duplicate**. The system saves the initial request and then uses the same information to create another request. The Summary tab displays for the duplicate request: edit the default name supplied for the duplicate and other fields as needed, then save that request as well.
 - Click **Save and Return to List** on any page. The All Projects and Requests page displays.
8. Submit the request to the first reviewer.
 - If you created a single request, on the Summary tab click **Change Status** and select **Submit Request**.
 - If you created multiple requests, submit them as described in “To change the status of multiple projects or requests” on page 49.

When the last required recipient approves the request, IBM Marketing Operations creates the project.

To submit a request

To submit a request, you must first add the request. You then submit the request to the request recipients. If the request is accepted, then one of the recipients becomes the owner of the project.

You can also submit several requests that are in  **Draft** status at once: see “To change the status of multiple projects or requests” on page 49.

1. Add a request. For detailed information, see “To create a request” on page 46.
2. If the request template does not supply recipients, add one or more recipients and select a User or Team as each recipient.
3. Click the name of the request to open its Summary tab.
4. Click **Change Status** and select **Submit Request** from the list. A dialog box opens.
5. Enter any comments or additional information for the recipients to know about the request.
6. Click **Continue**. The status of the request changes to  **Submitted**.

The recipients are notified of your request. If the recipients were assigned sequence numbers, they are notified in sequence. The recipients appear in the Recipient section of the Summary tab for the request.

To monitor the status of a project request

You can view the following information about project request recipients.

- Role
 - User assigned to the role
 - The sequence number assigned to the recipient
 - The status of the response from the recipient (Not yet notified, Waiting, Accepted, or Returned)
 - Any comments added by the recipients (click the **User comments link**)
1. Select **Operations > Projects**.





The Active Projects and Requests page appears.

2. Click the project request you want to monitor.

The Summary page for the project request appears, with information about the recipients and the status of their responses.

To cancel or re-draft a request

You can add or change information for a request before it has been accepted or if it has been returned by a required recipient.


1. Click **Operations > Projects**.
2. Click **Actions** () and select a view, such as **All Projects and Requests**, that includes projects in  **Submitted** status.
3. Click the name of the request to open its Summary tab.
4. To cancel the request, click **Change Status** and select **Cancel Request** from the list.
5. Alternatively, to re-draft the request, click **Change Status** and select **Re-draft Request** from the list.
6. Enter comments indicating the reason for the cancellation or revision.
7. Click **Continue**. The status of the request changes to  **Cancelled** or  **Draft**.

While you re-draft a request, recipients cannot respond to the original request. If you need to change recipients, click **Edit**.

When you resubmit a request, recipients are notified according to the re-approval rule selected when the request was created. If the re-approval rule allows you to select recipients, and if you have not changed recipients when re-drafting the request, when you resubmit the request you can select from a list of required recipients who have accepted the request. If the recipients have been assigned sequence numbers, recipients are notified in sequence.

To respond to a request as an individual

When someone creates a request for a project and names you as the recipient of the request, you receive an alert message in the My Alerts page and an email message notifying you of the request.

1. Navigate to a request by selecting **Operations > Projects**.
The **Active Projects and Requests** view appears. If the request you want to accept is not in the list, click **All Projects and Requests**.
2. Click the request to open it.
3. Review the request and decide whether you want to accept it or return it to the submitter.
4. Enter any comments in the **Comments** field and click **Accept** or **Return**.
5. If you are accepting a team request, in the **Assign to** field select the user who is responsible for the resulting project.
6. Click the **Actions** icon () and select **All Projects and Requests**:
 - If you accepted, both the accepted request and the not yet started project appear in the list. You are the owner of the not yet started project.
 - If you returned the request, Marketing Operations notifies the requester. The status of the request changes to **Returned**.

- If the request is returned, the requester has options to resubmit or cancel the project request.

To change the status of multiple projects or requests

You can change the status of one or more projects or requests. Your change must meet the following prerequisites; if it does not, a warning message describes the possible problems.

- The new status that you select must be valid for every item that you select.
- To make status changes you must have appropriate permissions.
- To accept or reject requests, you must be an approver for every item you select.


Your administrator can set up IBM Marketing Operations to send an alert to owners and members of a process when its status changes.

1. Select **Operations > Projects**.

2. Click **Actions** () and select **All Projects and Requests**. The All Projects and Requests page opens.

3. Use the check boxes next to items names to select one or more items.

Note: You can select items on more than one page. However, the system applies the status change only to the page you are viewing when you select the new status.

4. Click **Status** () and select a status to apply to all of the selected items. A dialog box opens with details about the status change for each of the items you selected.

5. Optionally, enter any comments or additional information.

6. Click **Continue** to close the dialog box and apply the new status.

To copy a project or request

To create a project or request that is similar to an existing one, you can copy that existing project or request. You can make the copy when the project or request is in any state, including before or after you submit a request. You can then edit the copied project or request as needed. To copy a project you must have the appropriate security permission.

1. Navigate to the **Summary** tab of the project or request you want to copy.

2. Click the **Copy** icon () .

The **Copy to** dialog box opens.

3. Select either the project or the project template as the source of the metrics to use in the new project.

4. If the project you selected to copy is linked to a parent program or project, choose whether the same relationship link applies to the new project:

- Select **Copy parent program link** to copy the parent program link.
- Select **Copy parent project link** to copy the parent project link.

5. Click **OK**.

The Summary tab opens for the new project or request. The name defaults to **Copy of original project name**.

6. Modify any information you want to change in the copy, including the default name, and click **Save Changes**.

The new project or request appears in your **All Projects and Requests** view and your **My Projects** or **My Requests** view. Projects are created with **Not Started** status; requests with **Draft** status.

Team projects and requests

Users can submit requests to a team, rather than an individual. Such requests are called *team requests*. When someone accepts a team request, the resulting project is called a *team project*.

Team projects lifecycle

The following table describes the lifecycle of team requests and projects.

Note: The following steps are dependent upon the routing model used for the particular team involved in the request.

Table 7. Lifecycle for team projects

	User action	System action
1	A user submits a request to a team.	<ul style="list-style-type: none">• Creates a team request.• Populates the My Team Routing field for the request.• Sets the status of the request to Submitted.
2a	A team manager assigns the request to a team member.	Sets the owner of the team project to the team member selected during the assignment.
2b	A team member accepts or returns the request.	Sets the owner of the team project to the team member selected during the assignment.
3a	If accepted, the owner of the team project sees it through to completion.	Updates the status for the team project as applicable.
3b	If the owner becomes unavailable, a team manager or member can reassign the project.	<ul style="list-style-type: none">• Sets the owner of the team project to the newly assigned team member.• Updates the My Team Routing field for the project.

To reassign a team project

A team project can be reassigned, for example if the team member responsible for the project goes on vacation or otherwise becomes unavailable.




1. Navigate to the Projects list page by selecting **Operations > Projects**.
The **Active Projects and Requests** view appears. If the project you wish to reassign does not display, click **All Projects and Requests**.
2. Select the team projects to reassign by checking the box next to each project.
3. Click **Reassign Team Projects**.

A dialog box appears. Note that you can only reassign team projects for which you have the proper authorization (via team membership and routing options).

4. In the **Assign to** field for each project, select the user to whom the project should belong (this user becomes the owner of the project).
5. Optionally, enter comments into the **Comments** text box.
6. Click the **Reassign Project(s)** button to complete the reassignments, or click **Cancel** to close the dialog box without changing any project ownerships.

To respond to team requests as a team manager

When someone submits a request to a team on which you are the manager, you may be required to assign a team member to the request. The assigned team member becomes the owner of the resulting project.

1. Select **Operations > Projects**.
2. Respond to team requests in either of the following ways:
 - Select a single project and click the **Assign Team Request** icon ().
 - Click the **Actions** icon () and select **All my teams project requests**. From this view you can respond to one or multiple project requests by selecting the requests you want to assign and clicking the **Assign Team Request** icon ().

Note: You can respond only to team requests for which you have the proper authorization (via team membership and routing options).

3. In the dialog box, assign the request or requests to the appropriate team members.
4. Optionally, enter comments into the **Comments** text box.

To navigate from a project to a program

You can link a project to a program. Programs help you organize projects in logical groups. Once you link a project to a program you can navigate to the program from within that project.

1. Open the **All Projects and Requests** view (by selecting **Operations > Projects** and clicking **All Projects and Requests** in the breadcrumb).
2. Click a project to open it.
The **Summary** tab has a field called **Parent Items and Code**. This field contains links to the ancestors of the project (its container program and plan).
3. Click the link to open the program.
The **Summary** tab of the program appears. Scroll to the bottom of the **Summary** tab of the program to view a list of all the projects contained in the program.
4. Click the name of the project you were just in to go back to that project.

Linking projects

Marketing projects often involve people from outside the marketing department, making it difficult to track everything with a single, comprehensive project.

For example, work for an upcoming trade show involves the following tasks, each a project in its own right.

- Identify and assign individuals to attend, present, cover the booth, etc.

- Produce marketing collateral.
- Design, build, and test a demonstration.
- Set up training sessions and speaking engagements.
- Generate the customer invitation list, create the invitation, send the invitation, track the responses, etc.
- Create and maintain the trade show web pages.

These individual tasks are tracked and managed within the respective departments, but this method never truly gives the coordinator a full view of whether the trade show will occur on time and without problems.

Using IBM Marketing Operations, you can organize projects by creating parent-child relationships between them. A project coordinator can create a trade show project and all of the necessary individual projects, assign owners to each, and then create links from the trade show project to each of the subprojects. This method provides the project coordinator with a single view into the entire project.

Note: No data is exchanged between parent and child projects; the relationship is for organizational purposes only.

Subprojects overview

From the summary page for a project, you can manage subprojects using the following menu items that display when you click the **Manage Linked Objects**

icon ().

- **Add Project:** creates a child project.
- **Add Request:** creates a child project request.
- **Link Existing:** creates a child link to one or more existing projects or requests.
- **Remove:** removes existing links to one or more child projects or requests.

Note the following.

- Security policies must be the same for parent and child projects.
- The summary page for a project contains an area showing the links to all of its direct children.
- A project can have a child-parent relationship with either another project or a program, but not both. That is, if a project is linked to a program, it cannot be linked to a parent project.
- After you add a subproject, you cannot change the security policy of the parent or child project; you must first remove the link.

Details on the project-subproject relationship

The project-to-subproject relationship has the following characteristics.

- Any project or request can be linked to another project with the same security policy.
- A project can have at most one parent project or program, but not both.
- A project can have an unlimited number of child projects.
- A project can have both a parent and children; this option makes it possible to have an n-level deep hierarchy for projects (parent-child-grandchild etc.).

However, requests can be children to projects only. A request cannot be a parent.

- You cannot delete a project that is linked to either a parent or child; you must first remove all parent-child (and project-program) relationships before you can delete a project.
- When copying a project that is either linked as child or parent, the new project is not linked.
- Metrics, budgets, and workflow do not roll up from a child project to a parent project.

To create a child project/request

1. Navigate to the **Summary** tab of the parent project.

2. Click the **Manage Linked Objects** icon () and select **Add Project** or **Add Request**.

Note: These options are available only if you have the appropriate security permissions.

3. Choose a template for the a new subproject or request.
The wizard for adding a project or project request appears.
4. Complete the wizard.
 - As the user completing these steps, you are the owner of the new subproject, so the owners of the parent and child projects can be different.
 - The security policy defaults to the value for the parent project.
 - If you use the **Save and Duplicate** option to create multiple projects or requests, they are linked to the same parent.

When you complete the wizard, the project request or project is open to the **Summary** tab. The **Summary** tab has a field called **Parent Items and Code**. This field contains links to the ancestors of the project.

To link a child project or request to a project

1. Navigate to the **Summary** tab of the parent project.

2. Click the **Manage Linked Objects** icon () and select **Link Existing**.
Note this link only appears enabled if you have the appropriate security permission.

A dialog box appears, where you specify project(s) to link.

3. Enter search criteria in the **Find by name or code** field.
4. Click **Find**.
IBM Marketing Operations displays search results of only those projects and requests that have the same security policy and budget granularity as the project. For example, if your project uses the global security policy, only projects and requests that also use the global security policy appear after a search. Additionally, projects with a status of **Cancelled**, **Deleted**, or **Completed** never appear in your search results.
5. In the **Search Results** field, select the project(s)/request(s) to link as children.
6. Use the >> and << buttons to move projects/requests into or out of the **Selected Items to Link** list box.
7. Click **Save Changes** to create child links to the project(s) or request(s) you selected.

Security considerations for linking projects

Linked projects and subprojects must have the same security policy. After you link a project to another project, you cannot change the security policy of either object without first removing the relationship.

In order to link, add, or remove parent-child projects and requests, you need to have the appropriate security permission. If you do not have the appropriate permission for the task you attempt, ask your administrator for help.

To remove a parent-child project link

You can remove N-level deep child relationships using this procedure. That is, you can remove “grandchild” and “great-grandchild” relationships, and so on.

1. Navigate to the **Summary** tab of the parent project.



2. Click the **Manage Linked Objects** icon () and select **Remove**.

A dialog box appears, where you specify project(s)/request(s) to remove.

Note: The list contains children from all levels; that is all children, direct and indirect, appear on the list.





3. In the **Linked Project...** field, select the project(s) to remove as children.
4. Use the >> and << buttons to move projects into or out of the **Selected Items to Remove** list box.
5. Click **Save Changes** to remove child links to the project(s) you selected.

The project requests and projects no longer appear in the list on the **Summary** tab of the project.

Note: Removing the link does not remove or delete the project; it simply removes the relationship.

To assign work

Once a project exists, users can assign work (tasks) to people or teams.

1. Navigate to a project.
2. Add people and teams to the project. To assign work to an individual or team, they must be members (or reviewers) of the project.
3. Assign tasks in any of the following ways:
 - Use the **Assign Work By Role** icon () on the **People** tab of the project to assign all tasks based on user roles.
 - Use the **Find And Replace Task Members** icon () or the **Find and Replace Task Reviewers** icon () on the **People** tab to reassign work for certain people or teams.
 - Use the **Workflow** tab to individually assign tasks to users and or teams.
 - Use the **Members/Roles** icon () on the **People** tab of the project to assign a team.

When users login, they can act on the work (tasks) that have been assigned to them.


Selecting projects or requests

When you select check boxes on the Projects list page, IBM Marketing Operations retains your selections during a session as follows.

- In View mode, your check box selections are retained until you navigate to a list page for a different object. For example, if you make a selection on page 1 of a multi-page project list, go to page 2, and then return to page 1, either by clicking the page number at the bottom of the page or using the **Recent** menu, your selections are retained. However, they are discarded if you navigate to the Tasks page.
- If you edit a project by clicking the **Edit a Tab** icon on the list page, your selections are retained if you click **Save and Return to List**.

To reconcile a project


After you complete (or cancel) a project, you can edit certain portions of the project by placing it into a temporary state, In Reconciliation.

1. Select **Operations > Projects**.
2. Click **Actions** () and select a view, such as **Completed Projects**, that includes projects in ☐ **Completed** or ☐ **Cancelled** status.
3. Click the name of the project you want to reconcile. The Summary tab displays for the project.
4. Click **Change Status** and select **Reconcile Project** from the list. A dialog box opens so that you can add comments or additional information about the project.
5. Click **Continue**.

The project status changes to ☐ **In Reconciliation**.

To delete a project

When you delete a project, IBM Marketing Operations checks to see if you linked the project to a program. If you did, you cannot delete the project until you remove it from the program.

1. Open IBM EMM and select **Operations > Projects**.
By default the **Active Projects and Requests** page appears.
2. Select the checkbox next to each project you want to delete.
3. Click the **Delete this Item** icon (.

Chapter 6. Workflows

To record and track the tasks that need to be completed during a project, you add information to the project Workflow tab. Project managers add tasks, organize them into stages, and identify dependencies, personnel, and other related information. Project participants update task status and scheduling data, add attachments, and provide approvals.





When a project manager creates a project, the selected template can provide an initial workflow. The project manager can then use the Workflow tab to customize the workflow that is provided by the template to meet specific needs.

Team members that are assigned to a project use the Workflow tab to track their work. Any team member that is involved in the project (with the appropriate access permission) can edit any value on the Workflow tab.

To help you complete different workflow-related efforts, the Workflow tab offers different view modes and an edit mode.

About monitoring and updating project workflows

When you display the Workflow tab for a project, you can choose different ways to view scheduled tasks and make changes to the tasks or the workflow.

- Spreadsheet view mode presents granular task-related information in tabular format. Team members can enter status, percentage completed, and scheduling data for individual tasks in this view mode. The Workflow tab displays the spreadsheet view by default, or click **Spreadsheet View** (). For more information, see “To work in spreadsheet view mode” on page 58.
- Timeline (or Gantt chart) view mode emphasizes data related to scheduling and presents pending, on schedule, late, and overdue tasks with color-coded indicators. Click **Timeline View** (). For more information, see “About timeline view mode” on page 62.
- Process flowchart view mode emphasizes task dependencies and presents a visual plot of task sequence. Click **Process Flowchart View** (). For more information, see “Process flowchart view” on page 64.
- Edit mode gives you access to the workflow spreadsheet so that you can make changes to it. Project managers add, delete, and organize tasks in the workflow, and all participants supply information for the tasks. Click **Edit** (). For more information, see “To edit a workflow spreadsheet” on page 70.


To monitor and update workflow in an ongoing project, project participants typically use the three view modes to work with the spreadsheet tab.

In addition to monitoring ongoing projects, project managers use the edit mode to set up the workflow for new projects, and to add stages, tasks, and approval tasks to projects that are in progress.

About spreadsheet view mode

When you display the Workflow tab in spreadsheet view (the default), information about the stages and tasks in your workflow display in tabular format. For information about the columns that display, see “About the workflow spreadsheet columns” on page 77.

In addition to viewing data for the workflow, you can update task status and scheduling information and add attachments. For more information, see “To update a task from view mode” on page 59 or “To start an approval process from view mode” on page 61.

To customize the spreadsheet view, click **Layout** () on the Workflow tab. You can select the columns to display and the width of the first (task name) column. For more information, see “To customize the spreadsheet or timeline view” on page 62.

To work in spreadsheet view mode

When you initially click the Workflow tab, it displays in spreadsheet view mode and offers the following user interface controls.

Table 8. Controls on the Workflow tab







Control	Description
Breadcrumb links	Breadcrumbs (links to the pages you visited before you arrive at the current page) are located above the project name. Click any active link in the breadcrumb trail to go to that page.
	Edit. Changes the display to edit mode so that you can add, remove, and change workflow stages and tasks and enter detailed information for the tasks. For more information, see “About the edit mode toolbar” on page 71.
	Save as Template. Saves the workflow definition as a reusable workflow template (if you have the permission to do so). A dialog opens for you to name the template. For more information about using template components, see the <i>Marketing Operations Administrator's Guide</i> .
	Spreadsheet View. Changes the display to spreadsheet view mode, which provides information about each task in tabular format. When you view the workflow as a spreadsheet, each task name is a link. Click a task to open a dialog where you can add and change information about the task. For more information, see “To update a task from view mode” on page 59.
	Timeline View. Changes the mode to present a graphic display of scheduling information for the tasks, including duration and status. For more information, see “About timeline view mode” on page 62. When you view the workflow on a timeline, each task name is a link. Click a task to open a dialog where you can add and change information about the task. For more information, see “To update a task from view mode” on page 59.

Table 8. Controls on the Workflow tab (continued)

Control	Description
	Process Flowchart View. Changes the mode to present a graphic display of dependency information for the tasks, including the planned sequence of the tasks. For more information, see “Process flowchart view” on page 64.
	Layout. Opens a dialog where you can select the columns that you want to display in spreadsheet view mode, and choose the time scale and dates to include in timeline view mode. For more information, see “To customize the spreadsheet or timeline view” on page 62.

To update a task from view mode

To provide a quick update for a workflow task when the Workflow tab is in spreadsheet view mode or timeline view mode, click the task name. The Post Task Update dialog opens. Use this dialog as a quick alternative to editing the entire workflow, when you need to update a single task only. From this dialog, you can update a subset of task values, add attachments, and add comments.

The Post Task Update dialog box contains two tabs, **Status** and **Attachments**.

Different options display when you click the name of an approval task. For more information, see “To start an approval process from view mode” on page 61.

Note: When you open the Post Task Update dialog for a task, the system locks the task to prevent anyone else from editing it. Make sure that you close this dialog by clicking either **Save and Return** or **Cancel**; otherwise, the task can remain locked and no one else can edit it.

To update task status

The **Status** tab contains the following fields.

Table 9. Fields on the Status tab

Field	Description
Owner(s)	Display only. The task owner or owners. At the task level, project members are identified as task owners. To change the task owners, you use workflow spreadsheet edit mode: in the Members column, add people to a task.
Target Dates	Display only. Calculated start and end dates and duration for the task. To update these values, change the values in the date and time fields.
Status	The status of the task. Select a value from the supplied list.
Enable attachments	Project owners and the administrators who design workflow templates can indicate whether members can add attachments for the task.
% Complete	Progress for the task. Enter a whole number from 0 to 100. Note: To change the state of a task marked as finished back to active, you must change the Status to Pending and the % Complete to a number less than 100. If you do not change both values, the task remains marked as completed after you save.
Actual Effort	The time that is spent on the task. Click the field to enter a value in days, hours, and minutes, for example, 03D-02H-00M.

Table 9. Fields on the Status tab (continued)

Field	Description
Forecast / Actual date and time	The begin and end dates and times for the task. Note: Begin and end dates are required; an error message displays if you attempt to save without entering both values. Additionally, the system checks to ensure that the end date is not earlier than the begin date.
Comments for revision history	Enter notes to include in the revision history of the project and in any notifications that are sent about the task.
Workflow Notes	Enter notes to display with the task in spreadsheet view or edit mode.

To add attachments

The **Attachments** tab contains the following fields.

Note: Only the owner of a task can add an attachment. You can identify member roles and members for tasks in edit mode.

Table 10. Fields on the Attachments tab

Item	Description
Attachments	The top of the page lists current task attachments. The following information displays for each attachment: <ul style="list-style-type: none"> • The attachment name, which is a link to the attachment. • The file type and size. • A description, including the date and time the attachment was added, the name of the person who added it, and the comments that are supplied with it. • Links for removing attachments or for sending the attachment by email.
File to Attach	Select the source of the file to attach.
Browse	Click to browse your computer or the asset libraries for the file to attach. Supported file formats include DOC, PPT, XLS, PDF, GIF, JPEG, PNG, and MPP.
Comments	Enter text to describe the attachment.
Save Attachment	Click to attach the selected file or URL.

To add an attachment to a task

To add attachments for a task, a project owner must enable adding attachments for the task. The following users can add or remove task attachments.

- Task owners can only add attachments to their tasks.
- Task owners and users with the **Delete Attachment** security permission for projects can delete task attachments.

Adding attachments to tasks is similar to adding attachments to other objects (such as programs). However, note the following behavior that is specific for adding attachments to tasks.

- You cannot use markup on task attachments
- There is no versioning for task attachments: uploading a new version overwrites the existing version of the attachment.

- It is possible to have multiple task attachments with the same name for the same task. This situation can occur if multiple owners of the task each upload a file with the same name. You can differentiate the files by the user who created the attachment.
 - You can add and remove attachments no matter the state of the task. That is, even if a task is marked complete or skipped, you can still add and remove attachments.
 - The Attachments tab for a project is divided into two sections: one for files that are attached directly to the project, and one for files that are attached to the tasks.
 - If a task owner adds task attachments, and later the project owner sets the **Enable Task Attachment** flag to false, attachments can no longer be added or removed from the Post Task Update dialog. However, task attachments for the project can still be removed from the Attachments tab.
1. Navigate to the task to which you would like to add an attachment.
Click the task from a project workflow or from the Tasks list page. The Post Task Update dialog box opens.
 2. Click the **Attachments** tab.
The tab displays any attachments that exist for the task.
 3. In the **File to Attach** field, select **From My Computer**, **From the Asset Library**, or **URL**.
 4. Do one of the following:
 - Click **Browse** to attach a file that is on your computer. When the dialog box appears, navigate to the file you want to attach and click **Open**.
 - Click **Browse Library** to attach a file in an asset library. Click the library that contains the file you want to add. Use the tree in the left pane of the screen to navigate to the folder and then the asset that you want to attach. Click **Accept Asset** when viewing the asset in the right pane.
 - Enter the URL in the field provided.
 5. Add any comments about the attachment.
 6. Click **Add More** to display an additional set of fields for each additional attachment you want to add.
 7. After you add all your attachments, click **Save and Return** to close the dialog box.

Any new attachments are added to the **Attachments** tab for the task.

To start an approval process from view mode

You can supply the approvers and target due date for an approval task, and start the approval process, when the Workflow tab is in spreadsheet view mode or timeline view mode.


1. Navigate to the Workflow tab of the project that contains the approval task.
2. In spreadsheet or timeline view mode, click the name of an approval task. The Start Approval dialog opens, and you can:
 - Add or remove owners.
 - Add or remove approvers.
 - Specify a target due date.
 - Select the re-approval rule.
 - Attach items to approve.
3. Complete the details for the approval process.

4. Click one of the following to complete the process.
 - **Send Approval:** saves the approval process with **In Progress** status. The approval task also displays as **In Progress**.
 - **Save for Later:** saves the approval process with **Not Started** status. The approval task also displays as **Not Started**. To start the approval process, you must edit the approval itself, not the workflow task.
 - **Cancel:** discards your changes and does not create an approval process.

For more information about the approval process, see “Approvals” on page 7.

Note: When the approval process is in progress for an approval task, the approval task is locked: project managers cannot change information for the task with spreadsheet edit mode.

About timeline view mode

The Workflow tab timeline view presents a view of the tasks for a project over a period of weeks or months. To display tasks on a timeline, click **Timeline View** ().


When you view the workflow on a timeline, you can update the task status and scheduling information and add attachments. For more information, see “To update a task from view mode” on page 59 or “To start an approval process from view mode” on page 61.

To customize the timeline view, click **Layout** () on the Workflow tab. You can:

- Choose weeks or months as the time scale.
- Select the dates to plot: Actual/Forecast or Target.
- Select captions for timeline bars.

For more information, see “To customize the spreadsheet or timeline view.”

To customize the spreadsheet or timeline view

When you view the Workflow tab in spreadsheet view mode or timeline view mode, you can make choices about the information that you want to see. To customize the view, click **Layout** (). The Project Workflow Tab Layout dialog opens with the following options.

Options on the Project Workflow Tab Layout dialog

Table 11. Options on the Project Workflow Tab Layout dialog

Option	Description
Spreadsheet Layout	To hide the options in the Spreadsheet Layout section on this dialog, click the icon next to the section title. To view a hidden section, click again.

Table 11. Options on the Project Workflow Tab Layout dialog (continued)

Option	Description
Columns to Display	<p>A list of check boxes that corresponds to the columns you can include in spreadsheet view mode. Click a link above the list to select a preset group of columns to display:</p> <ul style="list-style-type: none"> • all: default setting; all boxes checked (all columns display). • targets: hides Status, % Complete, and Actual date columns. • actuals: hides Target Dates/Effort and Member/Reviewer roles columns. • all dates: displays all columns that are related to target and actual dates. • responsibility: displays columns that are related to who is assigned to complete the tasks. <p>Alternatively, you can check individual columns to include them or clear columns to remove them.</p>
First Column Width	<p>Defines the width for the first column, which displays task names and dependencies. You can set a different first column width for spreadsheet view mode and for timeline view mode. Select:</p> <ul style="list-style-type: none"> • Remember Last Setting: When you view the workflow spreadsheet, you can adjust the first column width to see more or less of the task names. • Exactly: Select to enter a number that sets the column to an exact width in pixels.
Timeline Layout	To hide the options in the Timeline Layout section, click the icon next to the section title. To view a hidden section, click again.
Time Scale	The increment of time that is used for measurement. Select Weeks or Months . The default setting is Weeks.
Bars Represent	The bars in the timeline view indicate durations. You can choose to display Actual/Forecast dates, Target dates, or both. The default is to display both.
Bar Captions	By default, the bars do not have captions. Select an option to display task information as bar captions. For example, you can have task names or milestone types display as the captions.
First Column Width	<p>Defines the width for the first column, which displays task names and dependencies. You can set a different first column width for spreadsheet view mode and for timeline view mode. Select:</p> <ul style="list-style-type: none"> • Remember Last Setting: When you view the workflow spreadsheet, you can adjust the first column width to see more or less of the task names. • Exactly: Select to enter a number that sets the column to an exact width in pixels.
Make these the default settings for this project workflow tab	<p>Check this box to make your selections the default for the Workflow tab. This option ensures that whenever you navigate away from and back to this tab, your display settings will not change (until the next time you make a change and check this box).</p> <p>Note: Your settings become the defaults for all users for this workflow, until someone changes the defaults.</p>

To set first column width

You can change the width of the first column in the workflow spreadsheet view, and keep this setting for your entire session. That is, your changes remain after you navigate to other pages and then return to this tab.

1. Navigate to the Workflow tab of the project.
2. Use the column width control to resize the first column to your preferred width.
3. Click the **Layout** link in the upper right section of the screen.
4. In the **Project Workflow Tab Layout** dialog, do the following.
 - a. In the **First Column Width** section, select the **Remember Last Setting** radio button.
 - b. At the bottom of the dialog, check the **Make these the default settings for this project's workflow tab** box.
5. Click **Apply and Close** to save your changes and close the dialog.

The first column width is now set for this project for the remainder of your session. No matter which pages you navigate to, when you navigate back to this workflow tab, the first column width remains as you set it.

Process flowchart view

The process flowchart view displays the tasks in a network diagram style, as follows.

- Each task is displayed as a box with a task number and ID.
- Tasks that have dependencies are connected to any tasks they depend on.
- Sequential tasks are displayed on the same line.
- Parallel tasks are displayed on different lines.
- Independent/orphan tasks are displayed on their own line, with no connections.

Workflow concepts

Workflows organize the tasks, approval tasks, stages, and milestones for each project. Workflows measure the time that is spent on each part of the project and the people who are assigned to work on it.

Workflows contain workflow tasks and approval tasks. For an introduction to approvals, see “Approvals” on page 7.

Tasks

Tasks are steps in the workflow where a user acts. The task is not complete until the action is complete.

Approval tasks

You include approval tasks in a workflow to indicate that an approval process must take place. On the Workflow tab, you can start the approval process for an approval task. When the approval process is in progress, the Workflow tab organizes information about that process, but you can no longer edit the approval task.

Stages

You can group tasks together under headings called stages. Stages can help you with task organization. For example, you can create a stage that has all tasks your users do. In spreadsheet view mode or edit mode, stages are the headings in bold that group the tasks together.

Milestones

You can identify workflow tasks as milestones for your project. Example milestones include Job Start, Meeting, and Event.

Dates

Workflows contain the following types of dates.

- **Forecast/Actual dates** begin as forecast dates: future dates when a task owner plans on starting and completing a task. These dates are specified while the task is still pending. When a team member actually starts and completes a task, the same dates can be used or different dates that are supplied as the actual dates.
- **Target dates** are dates that are used to plan the project schedule. Typically, they are set at the beginning of the project.
- **Anchored dates** are fixed dates that cannot change, even if the dates of the tasks upon which they are dependent change.
- **Non-work time** represents dates when people do not work, so the system skips those dates when it calculates durations for tasks. Marketing Operations currently supports system-wide non-work time that applies to all tasks. It is up to the project manager to determine whether overriding any of these dates is necessary. System administrators enter and maintain these dates.
- **Weekend dates** are dates that you use to specify work that occurs on a weekend on a per-task basis. You can schedule work on a weekend date by using the Schedule Through option for each task.

Duration

Duration is the actual number of days that are assigned to a task. If you assign forecast or actual start and end dates, the system automatically calculates the difference between the forecast or actual start date, and the forecast or actual end date for a task. You can assign duration by using any non-negative number. For example, you can use 0.25 to assign a quarter of a day for the task duration.

Effort

The work effort in days (as opposed to duration) that it takes a user to complete a task. For example, a task takes three calendar days to complete, but the task owner spends only half a day on the task for each of the three days. The effort for the task is one and a half days even though the duration is three days.

Locked tasks

When you edit a task, the task is locked so no other user can edit it at the same time. Additionally, when someone creates an approval process from an approval task, the approval task becomes locked permanently.

If anyone attempts to edit a locked task, they receive a warning message, indicating that it is in use.

People and roles

You can assign tasks to individual team members or you can assign tasks to all team members in each role. When you assign a task to one or more team members, they are considered to be task owners. You assign roles to team members on the People tab of the project.

Workflows use the following concepts to identify people in the workflow.

- **Task owners** are the people responsible for running or managing workflow tasks.
- **Reviewers** are responsible for approval tasks. These members become the approvers of the task.
- **Roles** are used as a bridge between tasks and people. They are useful for assigning work on a generic basis. For example, each type of project you create can have its own workflow template, and the template can contain standard roles for certain tasks. Then, when you create a project, some (or all) of the tasks have a default role that is already associated with them.

Note: Each workflow might contain users from different timezones. You chose whether Marketing Operations displays the timezone after the timestamps on the workflow and workflow columns. For more information, see “Calendar display options” on page 121.

About schedules

There are two options for scheduling in workflows.

- Baseline
- Up-to-date

Baseline scheduling

You use baseline scheduling when you want to compare actual dates to fixed target dates. With baseline scheduling, you never change the target dates, allowing them to serve as a baseline. Users who are assigned tasks receive reminders on completing the actual/forecast dates.

Up-to-date scheduling

You use up-to-date scheduling when you want to use actual dates to update the official schedule (defined by the Target Start and End dates) regularly. This mode enables project managers to capture the most up-to-date, official schedule; however, it does not provide an easy way of viewing a baseline version of the schedule.

To use a baseline schedule

Before you create your projects, have the system administrator set up permissions and reminders as follows.

- Set permissions so that only project owners can update **Target** dates.
- Set reminders (alerts) based on the **Actual/Forecast** dates.

While you work with a baseline schedule, team members perform the following high-level steps.

1. The owner sets the **Target Start** and **End** dates for each task.
These dates stay fixed throughout the entire project.
2. As the project progresses, team members update the **Actual/Forecast** dates with real data.

To keep an up-to-date schedule

Before you create your projects, have your system administrator set up permissions and reminders as follows.

- Set permissions so that only project owners can update **Target** dates.

- Set reminders (Alerts) based on the **Target** dates.
- Set reminders to be sent only to the owner or owners.
- Optionally, set reminders on the **Actual/Forecast** dates to be sent to team members.

While you work with an up-to-date schedule, team members perform the following high-level steps.

1. The owner sets the initial **Target Start** and **End** dates for each task.
2. As the project progresses, team members update the **Actual/Forecast** dates with real data.
3. If a task is delayed (the owner receives reminders that are based on **Target** dates), the owner assesses the situation and adjusts the **Target** dates and durations as necessary.

About date dependency calculations

When you enter or change the date for a task, Marketing Operations can calculate other dates that are based on your entry. It uses an internal algorithm to bidirectionally calculate the dates of dependencies, starting with the cell where you entered the date.

When you initiate date dependency calculations for a workflow, note the following.

- In addition to factoring in non-work days and hours, date dependency calculations use two additional system-wide properties: start time of day and number of hours per day. Your system administrator configures these settings.
- If a task row is anchored, the date dependency calculation does not update its dates (even if the date columns are empty).
- Date dependency calculations do not affect active and finished tasks; only tasks with a status of Pending.
- Date dependency calculations observe the per-task options for non-work time. The calculation algorithm takes into account whether a task is scheduled to progress during non-work time, weekends, or both.
- Do not log forecast times outside of business hours if you intend to do date dependency or other automatic calculations afterward. That information is overwritten by the automated process.

To automatically calculate workflow dates

When you enter or change the date of a task, Marketing Operations can calculate other dates that are based on your entry.

1. Enter or change the date for a task in any of the date fields.
2. Select the date and click anywhere on the screen except for another date field.



The **Date Dependency Calculation** icon () is displayed next to the end date.

3. Click the **Date Dependency Calculation** icon.

Alternatively, you can select one of the toolbar icons for recalculating dependency dates.

The other dates in the workflow change, based on the new entry.

To calculate date dependencies above a locked task

If a workflow has a locked task, and you change the date of a task that is located above that task, you receive a warning when you calculate date dependencies.

To clarify this task, the procedure that follows assumes:

- Task 1.8 is locked.
 - You need to change the duration of task 1.5 from five days to 10 days.
 - All tasks are dependent on the previous task.
1. Open the workflow for editing, and change the duration on task 1.5 from five days to 10 days.



2. Click the **Date Dependency Calculation** icon () next to the end date of task 1.5.

The system displays a warning message, saying you cannot recalculate through the locked row.

3. Click the start date of task 1.8
4. Click the **Date Dependency Calculation** icon.

The system calculates the dates below the locked task.

Scheduling work time

IBM Marketing Operations offers the following settings to help manage and allocate resources effectively.

- Specify non-work time: allows your organization to define a set of dates that, by default, are not included when the system calculates task dates and durations.
- Include weekends in work time: by default, weekends are not included when calculating task dates and durations. However, you can override the default to schedule certain tasks through weekends.

By default, tasks **do not** include weekends or non-work dates when calculating their start or end dates.

To view a list of defined non-work dates, click **Non-working Business Days** from the Administration page.

Note: When viewing the IBM Marketing Operations calendar, any day specified as non-work time is indicated by a gray X in the background. In timeline view, non-work time appears in a gray-shaded column. Additionally, the name of the non-work time (for example, **Labor Day**) displays when you point to the date.

About non-work time

You can set days on which no work is typically done by employees as non-work time in IBM Marketing Operations. Marketing Operations supports a set of system-wide non-work time, separated into user-defined types.

For example, assume that you have the following non-work dates set in Marketing Operations.

Table 12. Non-work time example categories and dates

Category	Dates
Corporate Holiday	1/1/2006, 7/4/2006, 12/25/2006

Table 12. Non-work time example categories and dates (continued)

Category	Dates
State Holiday	4/15/2006, 10/3/2006
Corporate Off-site	8/15/2006

After you define non-work time, you can elect whether to schedule work on these days, for each project and its tasks.

If the active time for a task includes any non-work time, its end date is pushed out by an extra day for each of these dates. For example, assume 7/4/2006 is defined as non-work time. If Task 1.3 is scheduled to start on 7/3/2006, and has a duration of three days, its end date is 7/7/2006; work is not scheduled for 7/4, since it is defined as non-work time.

For any task, you can choose to ignore the non-work time; if so, the workflow includes any non-work time as normal work days. So, if you choose to ignore non-work time for Task 1.3, its end date becomes 7/6/2006.

About including weekends

For certain tasks, you might need to schedule work to proceed on weekends. For example, print shops often work 24 hours a day, 7 days a week, so if you have tasks that go to a print shop, you can have these tasks take into account weekend days.

For example, you have a task called “Print Brochures at print shop.” This task might start on Friday 6/15, and have a duration of three days. If you choose to include weekends for this task, its end date is end of business Monday, 6/18. If you choose not to include weekends for the task, it ends on end of business Wednesday, 6/20.

Work and non-work time settings

By using the **Schedule Through** indicator on the workflow, you have many options for scheduling tasks. You can schedule tasks in any of the following ways.

Table 13. Options for scheduling tasks

Flags	Behavior
Bus. (Business)	Non-work time and weekends are excluded from task scheduling. Note: This option is the default setting for all tasks.
Wkd. (Weekends)	The task is scheduled to include weekends, but not system-wide non-work time.
Off. (Days off)	Weekends are excluded from task scheduling, but work is expected to be done during other non-work time.
All (All calendar days)	The task is scheduled to include all days.



Note: The Schedule Through column is a planning and targeting tool; it should not be altered after actual dates and times are logged on a task. Doing so can overwrite the actual dates and times.

To edit a workflow spreadsheet

When you create a project, a wizard that is based on the template you selected collects information. When you complete the wizard pages, you can customize the default workflow that is provided by the project template.

In addition to project templates, which can include workflow tasks and values, your installation can maintain a set of workflow templates. Workflow templates are template components that are independent from project templates. While a project is in **Not Started** status, you can assess whether the workflow supplied by the project template is adequate or if a different workflow template provides a better starting point. For more information about workflow templates, see the *Marketing Operations Administrator's Guide*.

The ability to customize template-supplied workflows is controlled by your user permissions. If toolbar icons are disabled or values are read-only, you do not have the appropriate permissions to edit the workflow.

1. Open the new project and click the **Workflow** tab. The workflow displays as supplied by the template.
2. Click **Edit** (). The spreadsheet displays in edit mode. For information about the options in this mode, see “About the edit mode toolbar” on page 71.
3. To replace all spreadsheet rows and values with data from a previously defined workflow template (if the project is in Not Started status), click **Tools > Import and save workflow**. A warning that this procedure deletes the current workflow displays. Click **OK**, then select a workflow template and click **Import**.
4. To change default task and stage names to reflect your specific tasks and stages, click in the cells in first column to make your edits. You can also change task dependencies. For more information about dependencies, see “Managing task dependencies” on page 75.
5. Add rows to the spreadsheet as necessary: Click **Add Row** () and then select **Task**, **Approval**, or **Stage**. For more information, see “About adding a stage or task” on page 73.
6. Enter target or *forecast*/actual dates for the tasks, depending on how you want to use the schedule.
 - You can enter a start date, end date, and duration for a task. If you enter any two of these values, the system calculates the third value automatically. For example, if you enter a target start and a target end date, the system calculates the duration.
 - While the Schedule Through column indicates work days for a task, you can enter any date as a start or end date. For example, for a task that is not scheduled to include weekends you can still pick a Sunday as the end date.
7. To specify that a task is a milestone, such as a drop date, click the **Milestone Type** column and select a milestone from the list.

Your administrator sets the milestones options in this list.
8. Select members or roles to assign the task to in the **Members** and **Member Roles** columns or in the **Reviewers** and **Reviewer Roles** columns. For more information, see “Adding roles and members to tasks” on page 81.
9. Make other selections and entries in the spreadsheet to reflect the workflow for your project. For more information, see the other topics in this chapter.
10. Enter any instructions or notes about a task in the **Notes** column.

11. Click **Save** to save your changes.

About the edit mode toolbar

When you switch from a view mode to edit mode, you can make changes to the workflow. You click the icons on the toolbar to add, move, and delete stages and tasks. The following table describes the toolbar options.

Table 14. Using the Editing toolbar for the Workflow tab












Icon	Description
	<p>Add Row. To add a row after an existing row in the workflow, select the row then click this icon to specify the type of row. You can add:</p> <ul style="list-style-type: none">• Task• Approval• Stage: stages organize tasks into groups <p>Marketing Operations adds the task and renumbers the subsequent tasks.</p>
	<p>In Series. By default, the system adds rows to the spreadsheet in series: each task is dependent on the task that precedes it. To use a different dependency option, click this icon and make a selection before you add the next task to the workflow.</p> <p>Select a dependency option.</p> <ul style="list-style-type: none">• No Dependencies: when you add a row, the system does not make it dependent on any other row• In Series: when you add a row, the system makes it dependent on the row above it• In Parallel: when you add a row, the system makes it dependent on the same task or tasks as the row above it <p>Each row that you add uses the same dependency option until you change your selection.</p> <p>You can also change dependencies manually: click the task or stage name and supply a comma-separated list of numbers in parentheses. For more information, see “Managing task dependencies” on page 75.</p>
	<p>Move row up. Click a task or stage name to select the row, then click this icon to move the selected row upward.</p> <p>Note:</p> <ul style="list-style-type: none">• When you move a row, its task dependencies do not change.• When you move a stage, all of its associated tasks move with it.
	<p>Move row down. Click a task or stage name to select it, then click this icon to move the selected row downward.</p> <p>Note:</p> <ul style="list-style-type: none">• When you move a row, its task dependencies do not change.• When you move a stage, all of its associated tasks move with it.
	<p>Delete row. Click a task or stage name to select it, then click this icon to delete the component.</p> <p>Note:</p> <ul style="list-style-type: none">• You cannot delete the first stage in a workflow spreadsheet.• When you delete a stage, its associated tasks are appended to the previous stage. The tasks are not deleted.

Table 14. Using the Editing toolbar for the Workflow tab (continued)

Icon	Description
	<p>Recalculate Dates. Shift+click to select one or more adjacent cells in the spreadsheet, then click this icon to apply one of the following options:</p> <ul style="list-style-type: none"> Preserving slack time between Tasks: recalculates all date dependencies that are based on your changes; any slack time between dependent tasks is not removed. Removing slack time between Tasks: recalculates all date dependencies that are based on your changes; any slack time between dependent tasks is removed.
	<p>Tools. Offers options that affect the values in specific spreadsheet cells, or that affect a column or the entire spreadsheet.</p> <p>To apply any of the following options, you must first Shift+click to select one or more adjacent cells in the spreadsheet:</p> <ul style="list-style-type: none"> Copy: copies the contents of the selected cells to the clipboard. Paste: pastes the contents of the clipboard, beginning at the selected cell. Paste Rows After: pastes the contents of the clipboard below the selected row. Mark as: changes the Status and % Complete values for the corresponding task or tasks. For example, Mark as Finished changes the Status to Finished and % Complete to 100%. You can mark tasks as Skipped, Finished, Active, or Pending. Fill Down/Up: copies the value in the selected cell or group of cells to the cells below or above it. Clear: erases all entries in the selected cell or group of cells. <p>Note: You must apply these options to cells that are adjacent; that is, Ctrl+click selections are not supported.</p> <p>The other options on the Tools menu function as follows:</p> <ul style="list-style-type: none"> Import and save workflow: available if the project is in Not Started status only. Replaces the entire spreadsheet with the tasks and values in a previously defined workflow template. Clear Column: click a single cell, then select this option to erase all entries in that column. For columns that have a default value, such as Schedule Through, every cell is set to the default. Clear All: erases the entire spreadsheet.
	Undo. Click to undo your last change.
	Redo. Click to reapply a change you undid with the Undo action.
	<p>Save. Click this icon to select one of the following options:</p> <ul style="list-style-type: none"> Save: Interim save, the spreadsheet remains in edit mode. Save and Duplicate: Saves your work and creates a project with the data supplied on all tabs. Save and Finish: Saves your work and displays spreadsheet view mode. Save and Return to List: Saves your work and displays the most recently selected list of projects and requests.
	Cancel. Return to spreadsheet view mode without saving edits that are made since your last save.

About adding a stage or task



To add a task or stage to a workflow, you must have the appropriate permission for the related template. If the **Add** option is missing from the toolbar, contact your administrator about obtaining the appropriate access rights.

Note the following about stage and task rows.

- To differentiate stages from tasks, the rows for stages display in the spreadsheet with a shaded background. In addition, identifying icons differentiate tasks from approval tasks.
- When you add a stage or task, you can indicate where in the spreadsheet to insert it: enter the stage number and the task number before the task name. For example, if you enter 2.3 Have team meeting anywhere in the task list, the task is placed under the task that is labeled 2.2. Any subsequent tasks in that stage are automatically renumbered: the step that was previously labeled 2.3 is now 2.4.
- You can move a stage or task to a different part of the spreadsheet. Use the up and down options on the toolbar to move the stage or task to the appropriate place.
- There are several options for managing dependencies on tasks as new rows are added and existing rows are removed. For more information, see “Managing task dependencies” on page 75.
- After you create an approval from a workflow task, you can edit only the approval itself; you cannot edit the corresponding task in the workflow. If you try to edit the approval from its workflow task, an error message indicates that the task row is locked. You must open the approval to update any of its fields.

To add a row to the workflow spreadsheet

Before you can add a row to the workflow spreadsheet, you open the workflow in edit mode. For more information, see “About the edit mode toolbar” on page 71.

1. Decide what dependency option you want the new task or stage to use: Click **In Series** () and select **No Dependencies**, **In Series**, or **In Parallel**. Your selection remains in effect until you change it again.
2. In the workflow spreadsheet, click the stage or task name that you want the new row to follow.
3. Add the stage, approval, or task: Click **Add Row** () and then select **Task**, **Approval**, or **Stage**. Marketing Operations adds the new row to the spreadsheet. Stages display with a shaded background; tasks and approvals have different identifying icons.
4. Optionally, change the dependency that is assigned by the system to the row. The numbers of the tasks that a task or stage is dependent on display in parentheses after the name. If a date for one task changes, the system changes the dates for all the dependent tasks.

For example, suppose that you add a task and its name is 2.5 Deliver draft to vendor (2.4). To make this task dependent on task 1.3 instead of task 2.4, change the task name to 2.5 Deliver draft to vendor (1.3). To make this task dependent on both task 1.3 and task 2.4, separate the task numbers with commas: change the task name to 2.5 Deliver draft to vendor (1.3, 2.4).

For more information, see “Managing task dependencies” on page 75.



5. When you finish editing the workflow, save your changes.

The stage or task is added to the workflow after the insertion point.

To add a row below a locked approval task

Before adding a row to the workflow spreadsheet, open the workflow in edit mode. For more information, see “About the edit mode toolbar” on page 71.

When the approval process is in progress for an approval task, the approval task is locked: when a project manager clicks a locked approval task in spreadsheet edit mode an error results. To add a task directly below a locked approval task, perform the following steps.

1. Decide what dependency option you want the new task or stage to use: click **In Series** () and select No Dependencies, In Series, or In Parallel. Your selection remains in effect until you change it again.
2. Select any row that is not locked. For example, select the row immediately below the locked approval task.
3. Add a stage, approval, or task: click **Add Row** () and then select **Task**, **Approval**, or **Stage**.
4. Change the number assigned by the system to the new task or stage so that it follows the locked task.

For example, suppose that the locked task is 2.5 Review copy - informal (2.3). Click the name of the new task and change its number to 2.6. When you click in another spreadsheet cell, the system moves the new task so that it is after task 2.5.

Managing stage and task sequence

If you change the number for a task or stage, the task is inserted before the row that matches the new number.

For example, assume the stage order as shown here.

1. Planning
2. Collateral Design
3. Lead Generation
4. Show Setup-to-Breakdown
5. Marketing Review

If you edit task 5, Marketing Review, changing its number to 3, the new order is as follows.

1. Planning
2. Collateral Design
3. Marketing Review
4. Lead Generation
5. Show Setup-to-Breakdown

Now suppose that you edit task 2, Collateral Design, changing its number to 4. The new order is the following.

1. Planning
2. Marketing Review
3. Collateral Design
4. Lead Generation
5. Show Setup-to-Breakdown

To move a task or stage to the end, give it any number higher than the final task or stage. For example, to move stage 2, Marketing Review to the end, change its number to 6 or higher.

Managing task dependencies

IBM Marketing Operations offers different options for managing task dependencies as new rows are added to a workflow spreadsheet and existing rows are removed.

In spreadsheet edit mode, you click the **In Series** icon, then select:

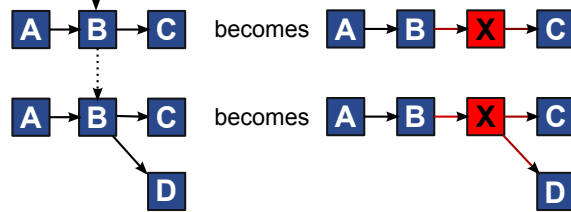
- **No Dependencies:** the system does not create dependencies for new rows automatically. If you need dependencies for the new tasks and stages, edit the task name to add them manually.
- **In Series:** the system inserts new rows into an existing chain of tasks.
- **In Parallel:** the system inserts new rows in a dependency branch that is parallel to an existing chain of tasks.

Inserting tasks in series

Insertion **in series** makes a new task dependent on the task before it, and then makes all items that were dependent on that task dependent on the new task.

You insert a task in series when it can start only after the previous task is complete. For example, in this figure, if task X cannot be worked on until task B is complete, you insert task X in series.

Insert a step after
"B" in Sequence

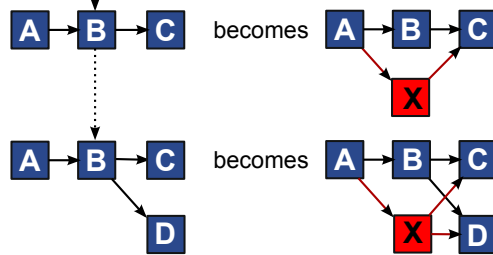


Inserting tasks in parallel

Insertion **in parallel** makes the task dependent on the items (tasks or stages) that the task before it was dependent on, and makes the items dependent on the previous task dependent on the new task as well.

You insert a task in parallel when it can be worked on at the same time as another task. For example, in this figure, if task X can be worked on simultaneously with task B, you insert task X in parallel.

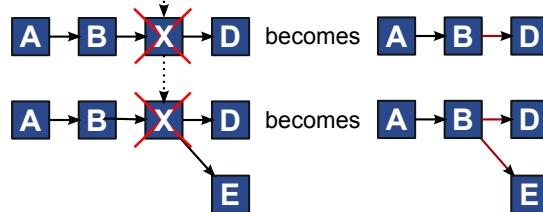
Insert a step after
"B" in Parallel



Deleting tasks

Deleting a task removes the selected task from the chain, and then the system relinks the two remaining segments of the chain together so that it is one continuous chain again.

Remove step "C"
preserving chains



When a task is deleted its dependent tasks are made dependent on its dependencies before the deletion takes place. This practice preserves all sequential chains of dependencies.

Default and "last used" modes

To make adding a task as simple and consistent as possible, IBM Marketing Operations provides the following behavior.

- The default mode is **In Series**; when you begin an editing session, this mode is used as the insertion mode.
- The "last used mode" is remembered for each editing session. When you select a different dependency mode, it is used each time that you add a task until you change it again or end the editing session.
- For example, to add several tasks in parallel, you need to select **In Parallel** mode only one time. Then, every time you insert another task, the system inserts it in parallel unless you explicitly select another mode.

If needed, you can change the dependency that is assigned by the system manually. Click the task name, then edit the comma-separated list of task numbers that display in parentheses after the name.

About the workflow spreadsheet columns

When the workflow displays in spreadsheet view mode (the default view) or in edit mode, data is presented in a spreadsheet of columns and rows. You review and enter information in the spreadsheet cells for each column.

Table 15. Workflow spreadsheet columns

Column	Description
Tasks, Stages	<p>Lists the tasks and stages that make up the project.</p> <p>When in edit mode, click a stage or task to revise or change its sequence, name, or dependencies.</p> <p>When in view mode, click a task to update status and scheduling information. For more information, see “To update a task from view mode” on page 59 or “To start an approval process from view mode” on page 61.</p>
Status	<p>Displays an icon to indicate the status of the task. Tasks can have one of the following statuses.</p> <ul style="list-style-type: none">• Pending• Active• Skipped• Finished <p>Approval tasks can have one of the following statuses.</p> <ul style="list-style-type: none">• Not Started• In Progress• On hold• Completed• Canceled• Approved <p>When an approval task has a status of Not started, in edit mode you can change the status to In Progress or Canceled. When the approval process is in progress for an approval task, this field is read-only. For more information, see “To start an approval process from view mode” on page 61.</p>
% Complete	<p>The percentage value that represents how complete a task is.</p> <p>In edit mode, click the measuring bar for a task and enter a new % Complete number. The measuring bar expands to display a comparable level. For approval tasks, this field is read-only.</p>
Forecast/Actual Start	<p>For tasks in the pending state, this field represents the Forecast Start date. Forecast Start dates display in italic font. After you change a task from Pending to Active, this field represents the Actual Start date. Actual Start dates are in regular font.</p> <p>In edit mode, click in the cell to use a calendar to select a date and time.</p>
Forecast/Actual End	<p>For tasks in the pending state, this field represents the Forecast End date. Forecast End dates display in italic font. After you change a task from Active to Finished, this field represents the Actual End date. Actual End dates are in regular font.</p> <p>In edit mode, click in the cell to use a calendar to select a date and time.</p>

Table 15. Workflow spreadsheet columns (continued)

Column	Description
Forecast/Actual Duration	<p>The duration of the task, in days, hours, and minutes.</p> <p>If you enter both start and end dates, the system automatically calculates a value for this field (the <i>Forecast/Actual</i> End date minus the <i>Forecast/Actual</i> Start date).</p>
Actual Effort	<p>The actual effort that it took to complete the task, as opposed to calendar duration. Effort is measured in days, hours, and minutes.</p>
Anchored Dates	<p>Indicates whether the task is anchored. If a lock icon displays, the dates for the task are anchored.</p> <p>To specify anchored dates for a task, click the column, then select Anchored from the menu. The task date cannot move even if the dates of the tasks it is dependent on change.</p> <p>If a dependency is not met, the dates in conflict appear with a different icon and in a different font.</p> <p>For example, suppose task 2.2 is dependent on task 2.1. If the target end date of task 2.1 is after the target start date of task 2.2, both the target end date of 2.1 and the target start date of 2.2 appear in red, if you anchored the date for task 2.2 by selecting the lock icon in the Anchored Dates column.</p>
Schedule Through	<p>Indicators for which dates to use when you determine task dates. The following options are available.</p> <ul style="list-style-type: none"> • Bus. - Business days only: include only standard, non-holiday, non-weekend dates in date calculations that are made for this task. This schedule is the default for all tasks. • Wkd. - Business days + Weekends: include weekends in date calculations that are made for this task. • Off. - Business days + Days off: include predefined system-wide non-work time in date calculations that are made for this task. • All - All calendar days: include all dates in date calculations that are made for this task. No dates are ignored when dates are calculated for this task.
Target Start	<p>The targeted start date of the task. In edit mode, use the pop-up calendar to select a date.</p>
Target End	<p>The targeted end date of the task. In edit mode, use the pop-up calendar to select a date.</p>
Target Duration	<p>The duration of the task, in days, hours, and minutes. The Target End minus the Target Start dates.</p>
Target Effort	<p>The targeted effort that is estimated to complete the task, as opposed to calendar duration.</p>
Milestone Type	<p>A task milestone that you choose from a list. Example options might be Meeting, Event, and Job Start. System administrators set the milestone types that are on the list.</p> <p>For more information about setting up milestones, see the <i>Marketing Operations Installation Guide</i>.</p>

Table 15. Workflow spreadsheet columns (continued)

Column	Description
Member Role(s)	<p>A role or roles that are associated with the task. These roles can be loaded automatically from the project template that is used to create the project, or the project owner can set them up manually.</p> <p>When an approval task has a status of In Progress, On hold, or Completed, this field is read-only.</p>
Members	<p>The people that are associated with the task.</p> <p>If a workflow task has a role in its Member Role(s) column, when you assign people to roles, the workflow automatically adds a person in the corresponding Members column.</p> <p>You can also add people to the Members column manually while you edit the workflow.</p> <p>When an approval task has a status of In Progress, On hold, or Completed, this field is read-only.</p>
Reviewer Role(s)	<p>A read-only field that shows the role or roles that are associated with an approval task.</p> <p>These roles can be loaded automatically from the project template that is used to create the project, or the project owner can set them up manually.</p> <p>Reviewer roles are used to pre-populate an approval process.</p>
Reviewer(s)	<p>A read-only field that shows the reviewers that are associated with an approval task. Reviewers are used to pre-populate an approval process.</p> <p>If a workflow task has a role in its Reviewer Role(s) column, when you assign people to roles the workflow automatically adds a person in the corresponding Reviewer column.</p>
Enforce Dep.	<p>If this task is dependent on other tasks, determines how strictly the system interprets dependencies. When this option is selected, the system restricts project members from updating this task until the tasks it depends on are finished.</p>
Required	<p>Indicates whether this task is required. Required tasks cannot be skipped or deleted and their names cannot be changed.</p>
Task Code	<p>A read-only code that identifies each task uniquely within a project. System integrators use this code to implement custom business logic for tasks.</p>
Notes	<p>Any comments about the task.</p>

To fill data into a range of cells

To reduce data entry time, you can copy data that is entered for one or more tasks and supply it for another task or tasks by using **Tools** options. For example, you have 10 consecutive tasks with the same values for target start, target end, target duration, and target effort. You enter the data for the first task. To copy the values in the first row into the remaining nine rows, you use Shift+click to select the cells in these four columns for all 10 tasks, then use the **Fill Down** option.


You can also copy the data in one or more adjacent cells and paste it into one or more adjacent cells. See “About copying and pasting” on page 80.

Note: The options for working with a range of cells apply to adjoining cells only: use Shift+click to select the cells.

1. Open the project that has the task values to duplicate, and click the **Workflow** tab.
2. Click **Edit**.
3. Shift+click in the first cell to select it.
4. Move the cursor to the last cell you want to include, then Shift+click in this cell.

The range of cells you selected is highlighted.

Note: You must select a continuous range of cells, rather than selecting multiple, disconnected cells.

5. Click **Tools** () and select one of the following options.
 - **Fill Down** copies the values in the top-most selected cell (or cells) to all the other selected cells, including the bottom-most.
 - **Fill Up** copies the values in the bottom-most selected cell (or cells) to all the other selected cells, including the top-most.
6. Click **Save**.

About copying and pasting

When you are copying and pasting tasks, note the following.

- For copying, you must select a continuous range of cells by using Shift+click, rather than selecting multiple, disconnected tasks (by using Ctrl+click).
- To select a single cell, you must use Shift+click.
- If you do not insert enough blank tasks to correspond to the ones you are copying, existing task values are overwritten.
- To paste rows at the insertion point, you can click **Paste** from the **Tools** menu or press Ctrl+V. To paste rows after the selected row, you must click **Paste Rows After** from the **Tools** menu.
- You can copy the status from one approval task and paste it in another approval task status column (but not in a standard task status column).
- If you copy the status from one approval and paste it in a new row of an approval that is not saved, the Not started status is supplied regardless of what you copied.

To copy tasks on Macintosh/Safari:

Copying and pasting tasks on a Safari browser is slightly different than the procedure described for Internet Explorer. The following procedures describe the steps involved.

Note: When selecting multiple task rows on the Macintosh using the Shift key, it can be difficult to determine which rows are selected by their appearance. Take extra care to make sure that you know which rows you selected.

1. Select and copy tasks.
 - a. Select the task, tasks, or the block of cells to copy.
 - b. Select **Copy** from the **Tools** menu or press Ctrl+C. The Text To Copy dialog appears with the information from your selection already highlighted.
 - c. Press Apple+C to copy all text in the dialog to your clipboard.
 - d. Click **Continue** to close the dialog.

You can now paste the information to another application or to another area on your spreadsheet.

2. Paste selected tasks.
 - a. Copy information from another application or from another area on your spreadsheet.
 - b. In IBM Marketing Operations, select the destination row, rows, or block of cells in the workflow.
 - c. Select **Paste** from the **Tools** menu or press Ctrl+V. The Text To Paste dialog appears containing an empty text box.
 - d. Press Apple+V to paste your clipboard information into the text box.
 - e. Click **Continue** to paste that information into the spreadsheet at your previous selection location.

To copy data in Internet Explorer:

You can copy data from a continuous group of cells to another place in the same workflow, or into the workflow for another project.

1. Open the project that has the tasks to copy and click the **Workflow** tab.
2. Click **Edit**.
3. Shift+click to select the first source cell. If this value is the only one that you are copying, skip to step 5.
4. Point to the final source cell, then press Shift+click over this cell. A range of cells you selected is highlighted.
5. From the workflow toolbar **Tools** menu, select **Copy** to copy the selected task or tasks.

If you are pasting the tasks into the same workflow, skip to step 7.



6. If you are copying the tasks to another project workflow, navigate to the destination Workflow tab, and open it for editing.
7. Optionally, insert enough blank rows below the destination to act as placeholders for the task values you are copying.

For example, if you copied data from six tasks, make sure that there are six consecutive task rows available. If you do not create the necessary rows, existing values for tasks below the insertion point are overwritten.
8. Shift+click the destination cells.
9. From the workflow toolbar, select **Paste** from the **Tools** menu item to paste the values.

The source data is placed in the workflow, starting from the selected destination task.

Adding roles and members to tasks

When you create a project, the workflow automatically includes member and reviewer roles for all tasks if the template you selected provides this information. However, you can edit workflow tasks to assign different roles.

1. Navigate to the Workflow tab of your project.
2. Click **Edit** ().
3. To select or change the member roles, click in the **Member Role** cell for the task you want to change.
4. Click the turndown icon () to view the list of available roles.
5. Click to select one role, or Ctrl+click to select more roles to assign to this task.

6. To select or change specific members, click in the **Member** cell for the task you want to change.
7. Click the turndown icon to view the list of available members.
8. Save your work.

If you have the **View people tab** and **Edit team members and roles** permissions, then you can select any users or roles, even if they were not previously included on the People tab. When you add a user to the project workflow, the system adds the user to the People tab automatically.

Note: For approval tasks, the **Reviewer** and **Reviewer Role** cells cannot be edited directly on the workflow spreadsheet. You select reviewers and reviewer roles when you start an approval process. For more information, see “To start an approval process from view mode” on page 61.

About roles, people, and approval tasks: You can assign an order to roles when you add them to an approval task in a workflow. This order is saved if you save the workflow as a template.

When you add people to the roles and then assign work, the spreadsheet lists the people alphabetically by their name. When you create an approval from the task, the reviewers are ordered according to their role order. However, in the **To** field of the approval, they are still listed in alphabetical order. If more than one user is in a role, those users are sorted alphabetically by their name.

Example ordering of reviewers for an approval task:

Assume that your workflow has approval task 1.5 Review printed Brochure. For reviewer roles, you add roles in the following order.

1. Legal reviewer
2. Marketing manager
3. Content reviewer

If you save this workflow as a template, and then later create a project using this template, this order is preserved.

Now assume that you assign people to roles as follows.

1. **Legal reviewer:** Nancy Chan
2. **Marketing manager:** Brian Doyle, Andy Proctor
3. **Content reviewer:** Elaine Jones, Mark Davis, Brad Johnson, Wilson Alvarez

When you click task 1.5 and create the corresponding approval task, the reviewers are listed in the following order (alphabetically within their respective roles):

1. Nancy Chan
2. Andy Proctor
3. Brian Doyle
4. Brad Johnson
5. Elaine Jones
6. Mark Davis
7. Wilson Alvarez

To list the reviewers in a different order, move them up and down within the approval task.

About My Tasks: IBM Marketing Operations allows users to view the list of tasks assigned to them. This list is called **My Tasks**, since each user gets a customized view when selecting **Operations > Tasks**.

On the My Tasks list you can see all tasks to which you are assigned, allowing you to view tasks across multiple projects. This feature consolidates the information that you would otherwise retrieve by navigating to each project individually, clicking its Workflow tab, and searching for all tasks to which you are assigned.

From this screen, you can perform the following actions.

- Get a summary view of all your tasks and approvals.
- Mark selected tasks as completed or skipped.
- Navigate to the Workflow tab for a task.
- Update task properties.
- Search or filter the task list by criteria you choose.

Filtering My Tasks:

By default, the My Tasks page displays all of your tasks, for all projects and requests. You can filter the list of tasks displayed by clicking the **Actions** icon (



) at the top of the page.

This table describes the available filters.

Table 16. Task Filters

Filter	Description
All My Teams tasks	Lists the tasks assigned to all teams of which you are a member.
All My Teams Unassigned Tasks	Lists the tasks that are assigned to a team of which you are a member but that are not yet assigned to an individual.
All Tasks	Lists all tasks in the system.
My Active Tasks	Lists your assigned tasks for all projects that are currently active (started but not yet completed).
My Completed Tasks	Lists tasks assigned to you that are marked as completed.
My Future Milestones	Lists tasks where all the following criteria are met. <ul style="list-style-type: none">• The task has a milestone flag specified.• The task is assigned to you.• The task is not completed or skipped.
My Milestones	Lists all milestones in tasks that are assigned to you.
My Recent Tasks	Lists all upcoming and in progress tasks meeting the following criteria. <ul style="list-style-type: none">• The task is assigned to you.• The task is not completed or skipped.• The task has a start or end date that falls within the past 14 days.
My Pending Approvals	Lists all the approval tasks waiting for your response.
My Tasks	Lists all assigned tasks. This list is the default view when you select Operations > Tasks .
My Upcoming Tasks	Lists tasks assigned to you that are scheduled to end within the next 14 days.

About the task pane: When you click a task in the **My Tasks** page, its parent object opens on the left and the task pane opens on the right. The task pane provides shortcuts to many IBM Marketing Operations functions, context for the task you are working on, and tools that allow you to move directly through the workflow.

Depending on the parent object you are working on and your permissions, you can click links in the task pane to do the following tasks.

- Edit project tabs.
- Add attachments. See “Working with attachments” on page 19.
- Read and post messages. See “To read a message on the message board” on page 202 and “To post a message on the message board” on page 202.
- Manage team members and reviewers. See “Managing project members” on page 107 and “To manage reviewers” on page 116.
- Find and replace task owners.
- Edit the workflow. See “To edit a workflow spreadsheet” on page 70.
- Edit budget allocations and line items. See “To allocate funds” on page 154 and “To add or edit line items” on page 155.
- Edit tracking.
- Add a child object or request. See “To create a project” on page 43 or “To create a request” on page 46.
- Link an existing program, project, or request to the parent object. See “To link a program to a plan” on page 29.

The task pane also provides context while you work by showing the next task in the workflow (that you have permission to see) on the bottom of the task pane. If you do not have permission to edit it, the task is in view mode. You can also record effort time and write hand-off comments.

The following tools allow you to move through multiple tasks and approvals directly on the task pane.

- Save the task to work on later by clicking **Save for Later**.
- Mark the task complete by clicking **Finish**.
- Skip the task by clicking **Skip**.

Defining a milestone for a task

You can set a milestone for a task to ensure that task is complete before the workflow proceeds.

1. Open the project, then open the Workflow tab.
2. Click **Edit** to make the workflow spreadsheet editable.
3. In the **Milestone Type** column, in the task row for which you want to set a milestone, select a milestone from the drop-down list.
4. Click **Save** or **Save and Finish** to save the milestone you set.

The milestone is now in effect for the project.




To change the status of a task

Each new workflow task has a status of **Pending**. As project managers and participants work on tasks, they update the status to indicate the current progress.

You can change the status of a task when you are working in spreadsheet view mode or timeline view mode by clicking the task name. For more information, see

“To update a task from view mode” on page 59. You can also change the status of a task when you are in edit mode: Click the **Status** column of the task, then choose the appropriate status from the drop-down list.

Table 17. Task statuses

Status	Description
Pending	Indicates that a task is not yet in progress. When you create a task, it defaults to the pending state. The pending state is symbolized by a blank status field.
Active	Indicates that a task is in progress. Symbolized by the  icon. You can also type A to place a task in the active state
Skipped	Indicates that a task was skipped. Symbolized by the  icon. Skipped tasks are tasks for which members no longer do work. Any dependencies of this task are also disregarded. You can also type S to place a task in the skipped state.
Finished	Indicates that a task is complete. Symbolized by the  icon. You can also type F to place a task in the finished state.

Note:

- If you enter 100 as the % **Complete** for a task, the status is updated to **Finished**.
- If you enter 0 as the % **Complete** for a task (if it was previously finished), the status is updated to **Pending**.
- If you enter any number from 1 to 99 as the % **Complete** for a task (if it was previously finished), the status is updated to **Active**.
- If you mark the status for a task as **Skipped**, all of the dates for the task are cleared. Until you click **Save** (or **Save and Finish**), you can retrieve the dates by canceling the editing session. However, after you save the spreadsheet with the dates cleared you cannot retrieve them.

About changing the status of approval tasks

The approval process updates the status for approval tasks. When the approval process starts for an approval task, you can no longer edit the task on the Workflow tab.

For more information, see “To start an approval process from view mode” on page 61.

To complete multiple tasks

You are assigned tasks for one or more projects.

1. Open the Tasks list page to view all of your assigned tasks.
2. Select the check box for each task you want to complete.
3. Click **Complete Selected**.
4. In the Complete Selected Tasks dialog box, select one of the following:
 - **Leave all dates as they are.** The tasks are marked as complete, but no end dates are modified.
 - **Set all actual end dates to now.** Each selected task is marked complete, and its actual end date field is set to the current date and time.
5. Click **Continue** to complete the selected task or tasks, or **Cancel** to return to the list page without making any changes.

Any tasks that you selected are removed from the Tasks list page, and their status is changed to complete. Additionally, their end dates are set, if you selected that option.

To skip multiple tasks

You can perform this task when you are assigned tasks for one or more projects.

1. Open the Tasks list page to view all of your assigned tasks.
2. Select the check box for each task to skip.
3. Click **Skip Selected**.
4. In the confirmation dialog box, click **OK** to skip the selected tasks, or **Cancel** to return to the list page without making any changes.

Any tasks that you selected and skipped are removed from the Tasks list page, and their status is changed to Skipped.

To skip an approval task


This topic describes how to skip an approval process from a task on the Workflow tab.

1. Navigate to the Workflow tab of the project that contains the approval to skip.
2. Click the name of the approval task to skip. The Approval dialog appears as a popup.
3. Click **Status > Cancel Review**.
4. Close the dialog.

The approval task is crossed out and can no longer be accessed. If necessary, you can also delete the approval.

To print the Workflow tab

You can print all information found on your project Workflow tab, or select certain columns of information to print.

1. From the Workflow tab, click **Print** ().
A dialog opens with a list of the spreadsheet columns. By default, all columns are selected.
2. Click to clear any columns you do not want to include when you print.
3. Optionally, clear the **Shrink to Fit Landscape Page Width** check box to print the columns at a size of 100%.
If you keep this option checked, all selected columns print on a single page. If you use this feature, change your printing preference (for this print job) to landscape.
4. Click **Print Selected Columns**. A preview dialog opens.
5. Click **Print**.
6. Select your printer and printer options. Choose landscape mode for best results.
7. Click **Print** to print the selected workflow columns.
8. In the preview dialog, click **Close** to close the print preview.

Chapter 7. Approvals

An **approval** allows you to streamline and track the process of having your work reviewed and approved. This feature allows many users to review work in parallel or in an order that represents your business processes. Reviewers (or approvers) can electronically mark up content submitted for review. IBM Marketing Operations then records approvals and denials for audit purposes. You can tie approvals to a project or they can exist independently from any project.

About approvals

An **approval** is an item or group of items that approvers review and respond to, either by approving, suggesting changes, or denying. The approval process makes sure the right people view and sign-off on content, creatives, and marketing objects.

The **approval process** is the lifecycle of an approval. It is set up by a project owner, and contains all the details about what to approve, who approves, and when to approve. Typically, an approval goes through four stages: it is created, submitted, active, and completed. The system notifies the required approvers by sending alerts and emails. The approvers can pose comments or questions before they decide. And when the approval is completed (either approved or denied) the approval owner or reviewer gets notified about the results.

Note: You can create an approval process without any approval items, and approvers can still respond to it.

An **approval owner** is the person who created the approval. Normally, the owner has all the capabilities associated with the approval (such as being able to delete it or change its status), although this feature set can be different depending on the security policy associated with the approval.

An **approver** is someone who is designated to review a particular deliverable and approve or deny it. There are several ways an approver can be designated:

- Add the person directly to the approval process itself.
Add the person as a **reviewer** to the project. This procedure can auto-populate approval processes created from the workflow, depending on how your administrator set up the project templates.

A required approver is an approver who is designated as required, as opposed to optional. For an approval process to be marked complete, all required approvers must respond to the approval.

An **approval round** indicates how many times an approval is submitted. The first time an approval owner submits an approval, its round number is 1; the system increments the round number each time the approval is resubmitted.

Approval Status

The following are valid approval statuses.

- **Not Started:** an owner creates an approval, beginning the approval process.

- **In Progress:** when ready, an owner submits the approval, changing its status from **Not Started** to **In Progress**.

While the status of the approval is **In Progress**, approvers review it, comment on it, and respond. Additionally, if the approval is linked to a task in a workflow, its progress is tracked in the % Complete column.

- **On Hold:** an owner can temporarily stop an approval, if necessary, changing the status of the approval to **On Hold**.
- **Cancelled:** an owner can cancel the approval, changing its status to **Cancelled**.
- **Completed:** the owner marks the approval as finished, changing its state to **Completed**.

Note: If the approval process contains multiple approval items, the overall status is dependent on the status of each approval item. For example, if an approval contains two items to approve, and an approver approves (or approves with changes) both the items, then the overall response is Approved. But if an approver denies one of the items, then the overall response is Denied, and the approval state is changed to Rejected.

Stand-alone approvals

Stand-alone approvals exist apart from any projects or other business process. They are not connected to any workflows and their security permissions are configured differently.

To create a stand-alone approval, select **Operations > Approvals** and click the **Add**

Approval Process icon ().

Approval tasks

An approval task is an approval process that is connected to a step in a workflow.

An approval that is linked to an approval task in a workflow can be updated in either the workflow or in the approval itself. Additionally, changes made to one are automatically propagated to the other.

If you want the approval process to be connected to an approval task in a workflow, create the process from the Workflow tab of the project. To add an approval task to a workflow, your security role must have the **Add/Edit/Delete, Tasks/Approvals, Dependencies**, and **Targetssetting** enabled.

An approval that is created from a workflow task can have some information that is filled in already, based on the approval task it represents.

Approval dates

When you create an approval from a workflow task, note the following behavior concerning the Forecast/Actual and Target dates for the approval.

- If the task contains a date in either the Target End Date or Forecast/Actual End Date field, the system automatically copies the date into the Target Due Date for the approval.
- If you modify the date in the Target Due Date field, the Forecast/Actual End Date in the corresponding workflow approval task is updated with the new date.

Note the following about the way IBM Marketing Operations calculates duration when the project owner enters the start and end dates for an approval from a workflow task.

- If the duration is less than what is specified in the approval for each approver, an equal amount of time is deducted from each required approver.
- If the duration is more than what is specified in the approval for each approver, an equal amount of time is added to each required approver.
- When an approver responds, the duration for that approver is not adjusted. The durations for the remaining approvers are adjusted if possible or an error message displays.
- If for any reason the duration for an approver cannot be adjusted automatically, an error message displays requesting different values.
- The Forecast/Actual Duration field in the workflow is overwritten with the sum of approver durations if the duration for an approver is changed and saved.
- Marketing Operations automatically calculates the approval start date if the Forecast/Actual duration and Forecast/Actual end date are changed.

Due dates for approvals

Marketing Operations determines individual due dates for approvers to complete their reviews. Due dates for approvals depend on whether the approver is required or optional and the approver's place in the sequence.

Approval due dates are determined differently for required reviewers than they are for optional reviewers.

- For optional reviewers, the due date is the date that the approval was submitted plus the duration that is specified for the reviewer. The place in the sequence does affect the due date for optional reviewers.
- Due dates for required approvers do not reserve time for optional reviewers to respond. Marketing Operations calculates due dates for required approvers as follows:

Approval submission date
+ sum of previous required approvers' durations
+ duration for this required approver
= current approver's due date

For example:

- Three approvers are required
- Each one approves in sequence
- The duration for each approver is one day

In this case, the due date for the third approver is three days after the approval was submitted.

The durations for approvers that work in parallel (that is, they have the same sequence number in the process) is calculated as follows.

- The duration is counted one time; it is not summed.
- If the durations have different lengths, the longest duration is used.

Note: When Marketing Operations calculates dates, the system-wide setting for non-work time is considered. Depending on the value of this setting, weekend or other non-business days can also be included in the calculation. Marketing Operations also accounts for each user's timezone.

Approval due date calculation example

For example, consider an approval process that is configured as follows.

- Approval submission date: 25 August 2008 03:00 PM
- Target due date: 30 August 2008 05:00 PM
- Four approvers:

Table 18. Sequences and durations for example

Approver	Sequence	Duration	Required?
A	1	01D-00H-00M	yes
B	2	01D-00H-00M	yes
C	2	01D-00H-00M	yes
D	3	01D-00H-00M	yes

The due dates for the approvers are as follows:

- Approver A: 26 August 2008 03:00 PM
- Approver B: 27 August 2008 03:00 PM
- Approver C: 27 August 2008 03:00 PM
- Approver D: 28 August 2008 03:00 PM

Different approver durations example

Marketing Operations can give different approvers different amounts of time to complete their review. For example, change the duration of time that is given to Approver C in the previous example to two days.

Table 19. Sequences and durations for example 2

Approver	Sequence	Duration	Required?
A	1	01D-00H-00M	yes
B	2	01D-00H-00M	yes
C	2	02D-00H-00M	yes
D	3	01D-00H-00M	yes

If the duration for Approver C is two days, then the due date is 28 August; the due date for Approver D is 29 August. There are now three days between Approvers A and D.

- Approver A: 26 August 2008 03:00 PM
- Approver B: 27 August 2008 03:00 PM
- Approver C: 28 August 2008 03:00 PM
- Approver D: 29 August 2008 03:00 PM

Approval Sequence

Approval processes can contain sequential and parallel portions for required approvers. Sequential approvers review one after the other; an approver with a later sequence number must wait for the previous approvers to finish. By contrast, approvers with the same sequence number review at the same time.

For example, suppose that the following approvers are set with the following sequence numbers.

- Mary Manager: 1
- Connie Contact: 2
- Larry Lawyer: 2
- Pablo Picasso: 2
- Charlie CFO: 3

This approval process has sequential and parallel portions.

Mary Manager must act first. She is the only approver with sequence number 1. If any other approvers try to respond before Mary Manager, they receive a warning message. After Mary Manager finishes her review, Connie Contact, Larry Lawyer, and Pablo Picasso can start because they have sequence number 2.

Connie Contact, Larry Lawyer, and Pablo Picasso all act simultaneously, in parallel. They can review in any order. They do not prevent each other from approving.

After Connie Contact, Larry Lawyer, and Pablo Picasso all respond, the parallel portion of the review is completed. Now, Charlie CFO can begin his review because he has sequence number 3.

Note: You cannot respond to the approval if it is not your turn. If you try to respond to the approval, you receive a warning message. After the required approvers ahead of you respond, Marketing Operations notifies you that you can complete your review.

Note: The approval sequence applies only to required approvers. Optional approvers can complete their review in any order.

Rejected approvals

If a required approver denies the approval, the approval process stops and the status changes to **On Hold**. The approval owner must resubmit the approval for the approval process to continue.

If a required approver denies the approval, the approval status changes to **On Hold** and no other required approvers can respond. For example, if the third of five required approvers denies the approval, the fourth and fifth required approvers cannot respond. Instead, the system sends a notice to the approval owner and approvers who completed their reviews that the approval status changed to **On Hold**.

If a required approver denies the approval, the owner must update the approval and request reapproval from the person who denied it. Resubmitting the approval starts a new round of review, starting with the approver who denied it. After that person approves the approval process, the next required approver can respond and sequential review continues.

Approval organization

When you click **Operations > Approvals**, My Active Approvals is the default page. This page lists any active approvals to which you can respond. From this page, you can also select other approval views.

Table 20. Views for approvals

View	Description
All Approvals	Lists all approvals. It also contains links to the other approval views. Additionally, any saved searches for approvals appear as links.
My Active Approvals	Lists any active approvals to which you can respond. It also contains a link to the Approvals Pending My Response view under Saved Searches. The My Active Approvals view is the default view.
Approvals Pending My Response	Lists all the approvals waiting for your response. This list is a subset of the My Active Approvals view. It includes any approvals that are waiting for your approval (that you have not responded to already). You can also see approvals pending your response on the My Tasks page. These approvals are also listed in the Interactive Approvals Portlet for easy access from the dashboard.
All My Teams Approvals	Lists all approvals that are assigned to members of your team.
All My Teams Un-Assigned Approvals	Lists all approvals that are assigned to your team but not yet assigned to an individual team member by your team leader.

Approval process workflow

To begin the approval process, you create an approval, add approvers, and add approval items. Then, you submit the approval and the review process begins. IBM Marketing Operations sends the approval process to approvers based on their sequence and whether the reviewers are required or optional. The approval process can go through several iterations as all the approvers complete their review.

1. You create the approval process, either as a stand-alone approval or as an approval task in a workflow.
2. Add the items to be approved.
3. Add approvers.
 - You can add as many approvers as you need.
 - You specify whether each approver acts in parallel with other approvers or before or after any other approver by specifying a sequence number.
 - You specify approvers as required or optional.
 - You can create individual instructions for each approver.
 - If you are adding an approval workflow task, you can select project roles for the approvers, for example legal approver and subject approver.
4. Submit the approval.
5. The system immediately notifies all the approvers with the sequence number of "1."

No other required approvers can respond to the approval yet; they must wait their turn, which is based on the sequence order specified. However, optional approvers can respond at any time; optional approvers are not tied to the established approver order.
6. Approvers respond to the approval. Depending on how Marketing Operations is configured, the approver might also be able to place comments in approval items.
7. Approvers assess each item that is attached to the approval and then post their completed response.

8. The system notifies the next approver, which is based on the sequence numbers that are set in the approval.

Several things to note about approval processes.

- The approval owner can cancel the approval process at any time in the process.
- Approvers provide a separate opinion about each item in the approval: approve, approve with changes, or deny. They then post the entire response.
- Marketing Operations organizes approvals in views. When you click **Operations > Approvals**, by default the My Active Approvals view displays. This list shows only approvals that are active and you are a member of (as either an owner or approver).

Note: You can also view the approvals waiting for your response to through the My Active Approvals portlet on your dashboard.

- Approvals display on your approval list when it is your turn to respond. When you are next in the approval sequence, Marketing Operations notifies you. To see all approvals, navigate to the All approvals view.
- If an approval is linked to a task in the workflow, then the system considers the Schedule Through setting for the task. Marketing Operations also considers the system-wide setting for non-work days and individual users' timezones when it schedules approvals.

Creating Approval Processes

You create approval processes to organize the review process. After you create the review process, you can assign approvers and add approval items.

1. Click **Operations > Approvals** to open My Active Approvals.

2. Click  to add an approval process.

3. Complete the fields and click **Save Changes**.

The required fields are Owner/Sent By, Subject, and Target Due Date. By default, **Enable comment attachments** is checked. You can add multiple approval items and multiple approvers. If you add approvers, you must specify each approvers place in the sequence and the Default Duration for their reviews.


For more information about assigning approves, see “Assigning Approvers.”
For more information about adding approval items, see “Adding approval items” on page 94.

Assigning Approvers

When you create an approval, you add the people who must offer feedback. Approvers can be required or optional. After they are added, Marketing Operations informs approvers of the status and changes to the approval process.

When you make assign approvers, consider the following functions.

- You can assign as many approvers as you need.
 - The sequence number that you assign specifies the order in which approvers work and whether any of them work in parallel.
 - You specify approvers as required or optional.
 - If you are adding an approval workflow task, you might select project roles for the approvers: for example, legal approver and subject approver.
1. Create or open an approval process.

2. In the Approvers section, click the **Add Approvers** link.
3. In the Select Member Access Levels window, approvers are organized in folders by role. Expand the appropriate folder, select the approver, and click >> to add the person to the Selected Reviewers column. You can use Ctrl-click to add several approvers at the same time. When you finish selecting approvers, click **Save**.
4. Click the clock  to specify the duration of the review for each approver. The default duration is one day.
5. Specify each approver's place in the sequence. Enter integer values in the field for each approver.
 - By default, approver sequence is based on the order in which you add the approvers to the approval process.
 - Use the sequence numbers to specify the order in which approvers act, and whether some approvers act in parallel or in sequence.
 - Assigning the same number to more than one approver means that these approvers act in parallel, and can respond to the approval simultaneously.
 - When a user revisits the approval, approvers are listed by their sequence number, rather than the order they were added to the approval.
6. Set at least one approver as Required.

Although a user can save the approval with all optional approvers, such an approval process cannot be started. If someone tries to start an approval that does not contain a required approver, Marketing Operations generates a warning message.

 - By default, all approvers are Required.
 - If an approver is required, the next approver in sequence is not notified and cannot respond until the current, required approver responds.
 - If an approver is required, and that approver denies the approval, then the next sequential approver is not notified. Instead, the approval is placed on hold and the owners are notified.
 - If you have multiple simultaneous approvers and one required approver rejects the approval, the system notifies the approval owner. The approval process continues until all simultaneous required approvers respond. However, the approval process status changes to on-hold and approvers later in the sequence cannot respond.
7. Optionally, you can add individualized instructions for each reviewer. The instructions field is not available for stand-alone approvals.
8. When you finish adding approvers, click **Save Changes**.

Note: If you click **Cancel**, you are canceling the whole approval process, not just the approvers section. You lose unsaved work elsewhere in the approval if you click **Cancel**.

Adding approval items

Add the items that require feedback to the approval process, such as images, documents, and templates.

You can add URLs and marketing objects. You can also add items from your computer and the Marketing Operations's asset library.

Note: You can create an approval process without any approval items or as many as needed.

1. Create or open an approval process.
2. Click **Add Item(s) to approve**.
3. Add approval items from your computer as necessary.
 - a. Select **From My Computer** from the **Add Item to Approve:** menu.
 - b. Browse to an asset, add comments if needed, and click **Save Changes**.
4. Add approval items from the Marketing Operations Asset Library as necessary.
 - a. Select **From the Asset Library** from the **Add Item to Approve:** menu.
 - b. Click **Browse**, which opens the Asset Library in a new window.
 - c. Navigate to the asset you want. Click **Accept Asset** on the right pane to select it and return to the **Add Item(s) to approve** window.
5. Add URLs to the approval process as necessary.
 - a. Select **URL** from the **Add Item to Approve:** menu.
 - b. Enter the URL and any comments.
6. Add marketing objects to the approval items as necessary.
 - a. Select **Marketing Object** from the menu. Search or browse for marketing objects in the new window.
 - b. Click **Browse**, which opens a new window.
 - c. Select an asset and click **Accept and Close** to return to the **Add Item(s) to approve** window.
7. Optionally, add more assets. Click **Add More** and repeat the steps for each asset.
8. Click **Save Changes** on the **Add Item(s) to Approve...** window. The window closes.
9. Click **Save Changes** on the approval process.

Enable markup for approval items

Owners of approvals can choose whether to enable markup for attachments. Approvers use markup to leave review comments directly on the attachment. If markup is enabled for an attachment, and IBM Marketing Operations supports markup for the file type, anyone who can view the attachment can make comments.


Approval owners enable markup on attachments in two ways.

- When an owner adds an item to an approval process, the system prompts the owner to enable markup for the PDF.
- For an existing approval process, each approval item has **Enable/Disable Markup** links. Click the link to turn on markup.

To allow users to add comments, choose **Enable Markup** when prompted.

Submitting approval processes for review

After you add an approval process, you must submit the approval to notify the approvers that they take action. Submitting the approval begins the review process.

1. Navigate to the Summary tab of the approval you want to submit.
2. Click the **Status** icon () and select **Submit for Review**.
The Approvals window opens.
3. Enter any comments that you want the approvers to see when they receive notification of your approval, and click **Continue**.

After an owner submits an approval, its status changes to In Progress. If an owner makes any further changes to the approval, IBM Marketing Operations sends notifications to all owners and approvers.

Evaluating approval processes

When it is your turn, you provide feedback on the approval process and any approval line items. You provide feedback by approving or denying the approval process and individual line items. You can also add comments or markup for more detailed feedback.

When it is your turn to respond to an approval process or complete an approval task, IBM Marketing Operations notifies you with an alert and an email message. Both the alert and the email message contain a link to the approval. You can also access the approval from the link in the email or alert. The approval process appears in the **My Active Approvals** and **Approvals Pending My Response** views.

1. Open the approval process with line items you want to review. Click **Operations > Approvals**, the link to the approval in an alert or email notification, or an approval task in the workflow.
2. Review the description and any notes or instructions that are provided for the approval process.
3. Complete the following steps for each approval line item.
 - a. To view an item, click its thumbnail image or file name.

Note: Select **View/Add Markup** to add in-document comments to a PDF file. If you do not choose this link, any comments you make are lost when you close the file.
 - b. Click **Post Feedback**. A dialog opens for your response.
 - c. Enter your comments in the **Your Response** section. Alternatively, attach a file with detailed comments. Click **Attach Comments File** and browse to the file.
 - d. Select the appropriate response.
 - **Approve** indicates that you approve the item as it is.
 - **Approve w/Changes** indicates that you approve the item with the exceptions noted in your comments or attachment.
 - **Deny** indicates that fundamental changes must be made to the item by the approval owner. If your organization requires you to supply a reason, select a **Deny reason** from the list.
4. After you respond to every item in the list, or supply comments and a response for an approval with no attachments, click **Post Complete Response**.

Note: You cannot change your response after you click **Post Complete Response** unless the approval process owner resubmits the review.

The response form displays with your response listed next to your name in the list of approvers. IBM Marketing Operations sends an alert and an email message with your response to the approval owner and sends an alert to the next reviewer, if any.

Approval portlet

The approval portlet allows you to access the approvals that require your response from your dashboard.

You can add the Manage My Approvals portlet to your dashboard to streamline your work. The approval portlet is most useful if you frequently evaluate approval processes, but do not create approval processes or submit approval processes for review. For more information on adding portlets to your dashboard, see the *IBM Marketing Operations Administrator's Guide*.

Evaluating approval processes in the Approval Portlet

Use the approval portlet to quickly respond to approvals directly on your dashboard. You can approve all approvals that are waiting for your response with one click, or assess approval processes and approval line items one at a time.

1. Start Marketing Operations. Your dashboard is the default start page. If you set a different default start page, navigate to your dashboard.
2. You can approve all approvals that require your response. Click **Approve all (#) approvals**.
3. You can respond to individual approval process and any approval items by clicking the **My Actions** menu. From the **My Actions** menu, you can perform the following actions on the approval items.
 - **Send as email attachment(s)**
 - **Approve all with comments**
 - **Approve all with changes**
 - **Approve all without comments**
 - **Deny all with comments**
 - **Deny all without comments**
 - **Post complete response**

Note: If the approval has line items, you cannot click **Post complete response** until you approve or deny the line items.

4. Alternatively, you can approve or deny line items one at a time by clicking the **My actions** menu on an individual line item. From the **My actions** menu, you can perform the following actions on the approval items.
 - **Send as email attachment(s)**
 - **Approve with comments**
 - **Approve with changes**
 - **Approve without comments**
 - **Deny with comments**
 - **Deny without comments**
5. After you respond to all the line items, click **Post complete response** to finish the approval. After you click **Post complete response**, you cannot make any more changes unless the approval process owner starts a second round of review.

Post complete response

To finish an approval process with multiple approval items, you click **Post complete response**. To finish an approval process without approval items, you click **Post Feedback**. After you click **Post complete response** or **Post Feedback**, you cannot change your response to the approval process.

Click **Post Complete Response** after you respond to all of the approval items. A confirmation page displays and you can add any final comments.

Note the following.

- If the approval owner requires disposition of all items, and you click **Post Complete Response** before you respond to all items, this warning displays: "Please respond to all documents before marking the process as complete."
- If the approval owner does not require disposition of all items, you must respond to at least one approval item, or this warning displays: "Please respond to at least one document before marking the process as complete."
- You can respond to an approval item multiple times before you complete your response to the entire approval process. However, after you click **Post Complete Response** to complete the review you cannot respond to the approval again.

After you complete your review, the **Post Feedback** link changes to **View Item Responses**. You can then view the item responses and response history only.

Modifying approval processes

The owner of an approval process can modify the approval process after it is created and even after it is submitted. The owner can add new items for approval, or assign new approvers. The owner can also delete items and approvers, or update existing items to be reviewed.

The process of modifying an approval is similar to creating one. If you are an owner of the approval process, you can change it at any time. If the approval process has multiple owners, any owner can modify it.


By default, approvers cannot modify the information in the approval; they can respond only to the approval. In some cases, the security policy of the approval might allow approvers to modify the approval process.

After you modify the approval, you chose whether to resubmit the approval process to approvers. When you modify a submitted approval, the Approvals window displays and prompts you to add comments to send to new and existing approvers. If you want an approver who already responded to view your changes, check the approver's **Request Reapproval** check box. Whenever you want an approver to reapprove, the system increments the approval round number.

Canceling an approval process

You can cancel the approval process at any time. Canceling the approval process does not delete the approval. You might decide to cancel rather than delete an approval process if you think you will need its details in the future.

If you cancel the approval process, you cannot submit it for review later. Any responses or comments that are made before cancellation are saved, essentially "freezing" the approval with all of its current details.

1. Open the approval process.
 - a. Select **Operations > Approvals**. The **My Active Approvals** view displays by default.
 - b. If the approval process you want to cancel is not available in this view, select **All Approvals**.
2. Click the **Status** icon () and select **Cancel Review**.
3. Enter comments that you want to add to the approval in the Approvals window. For example, you might add reasons why you are canceling the review. Click **Continue**.


The **All Approvals** view shows the approval status as **Cancelled**.

If you cancel an approval that is linked to a workflow task, the task is “crossed out” on the workflow tab. That is, the font for the task and all of its details changes to italics, strikethrough. Additionally, there is an ‘x’ in the status column, indicating the workflow is considered “Skipped.”

Copying approval processes

You can copy an approval process to create another approval process that is similar to an existing one. You can make a copy of the existing approval process and modify the copy, leaving the original approval process intact.

1. Open the approval process that you want to copy.
 - a. Select **Operations > Approvals**. The **My Active Approvals** view displays by default.
 - b. If the approval process you want to copy is not available in this view, select **All Approvals**.

2. Click the **Copy this Item** icon ().
3. Click **OK** when Marketing Operations prompts to copy the approval.

The copy of the approval process opens. The copy is titled “Copy of *original approval name*.” Its status is **Not Started**.
4. Modify any information that you want to change in the copy and click **Save Changes**.

The copy appears in your **All Approvals** view.

Details copied

The following details are copied.

- List of approvers and whether they are required or optional
- List of owners
- The subject, with “Copy of” before the original approval name
- Target Due Date
- Sequence
- Description
- Items to approve

Details not copied

The following items are not copied.

- Any instructions for individual approvers are not copied.
- The contents of the message board are not copied.
- Information from the Analysis tab is not copied.
- The copy is not linked to any project workflow, even if the original is. That is, copying an approval creates a stand-alone approval

To delete an approval

As the owner of the approval process, you can delete it at any time.

1. Select **Operations > Approvals**.
2. Select the check box next to the approvals you want to delete.

3. Click **Delete this Item** () and click **OK** when IBM Marketing Operations prompts you to confirm the deletion.


Note: You cannot delete an approval that is linked to a workflow task.

Completing approval processes

If the approval process does not have the **Enable approval auto completion** flag enabled, only the owner can change its status to **Completed**. Marking approval processes complete helps organize approval processes. Approval processes with a status of **Completed** display only in the **All Approvals** view.

Unless the approval was created with the **Enable approval auto completion** flag enabled, it is entirely up to the approval owner as to when to complete the approval. If auto-completion is enabled, the approval is automatically marked **Completed** when the last required approver approves.

Marking the approval process complete signifies that the review is finished. The following are some examples of when you might want to mark an approval as complete.

- After all approvers respond
 - After the **Target Due Date** passes
 - After all suggested changes to approval items are made
1. Open the approval process that you want to complete.
 - a. Select **Operations > Approvals**. The **My Active Approvals** view displays by default.
 - b. If the approval process you want to complete is not available in this view, select **All Approvals**.
 2. Click the **Status** icon () and select **Finish Review**.
 3. Enter a comment about why you want to complete the review in the Approvals window, and click **Continue**.

The approval now has a status of **Completed**; IBM Marketing Operations sends a notification that the approval process is finished.


Putting approval processes on hold

After you submit an approval process for review, you can put the approval process on hold. You might put an approval process on hold to revise the approval items and request reapproval. Putting an approval on hold is different from canceling a review of an approval process because you can modify it and continue the review.

Note the following behavior when you put an approval on hold.

- IBM Marketing Operations notifies the approvers that the approval process is on hold.
 - Approvers cannot approve or reject the approval process during the time it is on hold.
 - Owners can view the approval process and comment on approval items while the approval is on hold.
1. Open the approval process that you want to put on hold.
 - a. Select **Operations > Approvals**. The **My Active Approvals** view displays by default.


- b. If the approval process you want to put on hold is not available in this view, select **All Approvals**.

2. Click the **Status** icon () and select **Stop Review**.
3. Enter a comment about why you want to stop the review in the Approvals window.
4. Click **Continue**.

The approval process status is set to **On Hold**. IBM Marketing Operations sends a notification to the approvers that informs them that the approval process is on hold.

Reactivating approval processes that are on hold

After you put an approval process on hold, you can reactivate it to resume the review process.

1. Open the approval process that you want to reactivate.
 - a. Select **Operations > Approvals**. The **My Active Approvals** view displays by default.
 - b. Approval processes that are on hold are not active, so they are not available in this view. Select **All Approvals**.
2. Click the **Status** icon () and select **Continue Review**.
3. Enter a comment about why you want to continue the review in the Approvals window, and click **Request Approvals**.


Note: Whenever any approver is checked and you want them to reapprove, the approval round number is incremented.


The approval process status changes to **In Progress**. IBM Marketing Operations sends a notification to the approvers that the approval process is active and they can respond.

Reassigning team approvals

When your team is assigned as an approver, you can accept the approval or reassign it to someone else on your team. Reassignment options depend on how your team is configured.

A team can be assigned as an approver. The routing options for the team determine whether team members can respond to such an approval, or whether the team manager must assign it.

- If the team has **Managers can route approvals to members** enabled, the manager can assign approvals to members.
 - If the team has **Members can accept team-assigned approvals** enabled, team members can assign themselves approvals, without manager input.
 - If the team has **Members can return team-assigned approvals back to the team** enabled, team members can return approvals back to the queue for the team.
1. Select **Marketing Operations > Operations > Approvals**.
 2. Click the **Actions** icon () and select one of the following searches.
 - **All My Team Approvals** or

- **All My Team Unassigned Approvals**
3. Select the approval or approvals to assign.
 4. Click the **Reassign Selected** icon ().
 5. For each selected task, select a team member for the assignment in the **Assign To** field.

Note: Team members can assign tasks to themselves or back to the team.

6. After you make all the assignments, click **Save Assignments** to save your changes and return to the Approvals list window.

Approval processes linked to workflow tasks

Approval processes can be linked to workflow tasks. If an approval process is linked to the workflow, editing the approval process changes the workflow task.

Both stand-alone approvals and workflow approvals are listed in the approval views. When you edit an approval that is linked to an approval workflow task, your work is reflected in the workflow task as follows.

Table 21. Results of editing an approval to a linked workflow task

Your action	Changes to the linked workflow task
Cancel the approval	The task status changes to Canceled .
Change the approval due date	The task Forecast/Actual End Date changes to match.
Start the approval	The task status changes to Active , and the Forecast/Actual Start Date is set to the current date.
Pause the approval	The task status changes to On Hold .
Complete the approval	The task status changes to Finished , and the Actual End Date is set to the current date.
Delete the approval	You cannot delete a linked approval from the approval itself. You must delete the approval task row from the workflow.

Attachment markup types in IBM Marketing Operations

You can use markup tools to add feedback directly on top of an attachment. IBM Marketing Operations has two different methods for marking up attachments: native Marketing Operations markup and Adobe markup. Your administrator chose one of these methods for markup during installation.

IBM Marketing Operations users can mark up attachments for plans, programs, projects, and marketing objects in either of the following ways.

- Marketing Operations can open a PDF document in Adobe Acrobat. Users can use all of the markup features in Acrobat to make comments, then save the comments in Marketing Operations.
- Marketing Operations can be set up to use native markup function, which allows users to mark up the following file types.
 - PDF (each page of the PDF is converted to an image for markup)
 - GIF
 - JPG (RGB only, not CMYK)

- PNG
- BMP
- HTML pages and hosted websites

During installation, an administrator chooses which type of markup to enable throughout the application.

For both types of markup, note the following behaviors.

- You access the IBM Marketing Operations markup tool by clicking the **View/Add Markup** link for an individual approval item.
- Marketing Operations tags markups with the name of the person who made the comments, so everyone can view all review comments at once, or one reviewer's comments at a time.

Native markup for websites

You can upload an entire website for review. However, the following limitations apply.

- IBM native markup does not support markup on websites that include or are built entirely in Flash.
- Pages that require server-side processing, such as CGI, ASP, ASPX, CFM, do not work properly in the markup tool.
- Framed sites are not supported.

As an alternative to uploading HTML files, consider a URL to link to externally hosted content.

Marking up attachments

Anyone who has permission to view an approval process can add comments to attached approval items.

During installation, IBM Marketing Operations was configured to use either Adobe Acrobat markup or native Marketing Operations markup.

Note the following restrictions.

- Markup is only for latest/last version of the approval item.
 - You can mark up items for an approval with a status of In progress or On hold only.
1. Navigate to the approval that contains the item to edit.
 2. Click **View/Add Markup** next to the item on which to add comments.

Note: If the link is unavailable, the owner of the approval chose not to enable markup for the item.

The document opens in a browser.

3. Mark up the item with either Adobe Acrobat or the native Marketing Operations markup tool, depending on your installation.
 - If your system uses Adobe Acrobat markup, only PDFs can be marked up. Click **Review & Comment** in the Acrobat toolbar and click **Note Tool** in the Commenting toolbar to start adding comments to the PDF.
 - If your system uses the native Marketing Operations markup, use the icons and controls in the markup tool. All icons include mouse over help. Inactive controls are gray and cannot be selected.

4. Close the window that contains the marked-up item.

Any member can see the marked-up item by opening the container object and clicking **View/Add Markup**. Members keep adding markups to the file this way. To view the original file without the markups, click the link that contains the name of the attached item instead of View/Add Markup.

Adobe Acrobat markup in IBM Marketing Operations

Adobe Acrobat markup is one option for marking up attachments.

To use the Adobe Acrobat markup feature effectively, you or your IBM Marketing Operations administrator must perform the following setup activities.

- If you are working on a Microsoft Windows operating system, the customized UMO_Markup_Collaboration.js file must be placed in the JavaScripts subdirectory of your Adobe Acrobat installation directory. If you cannot view comments by other approvers, it is likely that you are missing this file.
- If you use Internet Explorer to access IBM Marketing Operations, you must set your Internet Explorer preferences to display PDF files in the browser.
- More setup steps are required if you are using the Safari browser on a Macintosh to access IBM Marketing Operations. For more information, see “Adobe markup on the Apple Macintosh.”

Note: IBM does not support the **Save and Work Offline** option in Adobe Acrobat. As a result, if you use **Save and Work Offline**, add markup, go back online, and try to send and receive your comments, your edits might be lost.

Adobe markup on the Apple Macintosh

There are special considerations for using Adobe markup in IBM Marketing Operations with a Macintosh operating system.

The following behavior applies to users that work in with Adobe Acrobat markup on Macintosh operating system, in the Safari browser.

- You must have Adobe Acrobat Standard or Professional 6.0 or higher.
- You must configure Acrobat as follows, when Acrobat is opened on its own, not through the browser.
 - Select **Edit > Preferences > Reviewing** and select **Custom** in the ServerType dropdown list.
 - Select **Comments > Show Comment & Markup Toolbar**.
- IBM Marketing Operations tags comments with the Macintosh login name of the approver, which can be different from the Marketing Operations user name.
- If you use Notes, Text Annotations, or other Acrobat markup functions where text is entered, after you mark up a page of the item to be approved, you must click outside the text field (outside the Notes text field, for example) before you click **Send Comments**. If you do not do this, the Macintosh does not send the text portion of the markup back to the server, and the field appears empty when a user opens it in Acrobat.
- The stamp tool always displays the name of the user currently viewing the markup, not the name of the user who did the markup.
- Each time that you open a PDF, a blank Safari window opens.
- When you use the markup capabilities within Marketing Operations with the Safari browser, temporary internet files are stored on the Macintosh desktop.

- There are two **Send** icons: one is the same as seen in Windows, and the other is an Marketing Operations custom icon specific to the Safari browser on



Macintosh: . Use this icon to capture markup comments; the Windows icon does not work.

- In Acrobat version 6, when you click the markup link for an approval, the Safari browser opens the PDF inline, rather than in an Acrobat window.

Note: This behavior does not exist if you are using Acrobat version 7. Upgrade to version 7, if possible.

If you want to view the PDF in an Acrobat screen, perform one of the following actions:

- To open the current document in an Acrobat screen, right-click (hold the **CTRL** key down while you click the mouse (if you use a one-button mouse) on the PDF and choose **Open with Acrobat 6.0 Professional**.
- To always open PDFs in an Acrobat screen, run the following command in Terminal:

```
$> defaults write com.apple.Safari WebKitOmitPDFSupport-bool YES
```

Native IBM Marketing Operations markup

Use native IBM Marketing Operations markup to comment on attachments.

The native IBM Marketing Operations markup tool uses the following icons and controls. All icons include mouse-over help.

Note: If another user is marking up a document at the same time as you, refresh the browser page to see those new comments.

Menu bar

This table describes the items in the menu bar.

Table 22. Icons and controls for the IBM markup tool










Icon	Description
	Click Add Note , then drag to a specific location on a page to add feedback. You cannot move a note after you save. Each note is fixed to a location that is important to the context of the feedback and any replies. You can attach a file to a note. Use the action links in a note to reply to, update, or delete the note.
	Click Add Scribble , then drag to add a free-form "scribble" on the page
	Click Zoom In to zoom in.
	Click Zoom Out to zoom out.
	Click Zoom Reset to reset the size of the page to the original display.
	Click Download Original to acquire a copy of the original attachment that you can save to your local computer.




Table 22. Icons and controls for the IBM markup tool (continued)

Icon	Description
	Click Toggle Annotations to display or hide comments.
	Click Help for tips on using this markup tool.
	Click Close Markup Window to close the markup tool.

Annotations list

This table shows the items available in the annotations list. You can sort on any column by clicking its header.

Table 23. Columns in the annotations list

Item	Description
Page filter	Provides options to view annotations for the current page only, or for all pages in the document. If you select All Pages , you can sort in ascending or descending order by clicking the heading of the Source column.
Annotations filter	Provides options to view all annotations, only active annotations, or only archived annotations.
Author filter	Provides options to view annotations from all authors or a single selected author. If you select Any Author , you can sort by ascending or descending order by clicking the heading of the Author column.
Actions column	<p>Offers the following options.</p> <ul style="list-style-type: none"> Click  Show Reply Dialog to reply to the comment. Your reply can include a heading, a body, and an attachment. Click  Update to edit the comment. You can archive the comment, change the text in the heading and body, and add an attachment. Click  Delete allows to delete the comment <p>If you are viewing annotations for all pages, this column includes a V (View) option for comments that are found on other pages. Click this option to view the comment in context by opening a view of that page.</p>
Created Date column	Shows the date on which the comment was added.
Author column	Shows the author of the comment.
Title	Shows the title of the comment.
Attachments	Provides links to any attachments to the comment.
Archived	A check in this column means that the comment is archived.

Chapter 8. People and teams

In IBM Marketing Operations, you assign work to individual users or to teams.

About people and teams

You assign people or teams to units of work. You make assignments primarily through the People tab on a project. You can also add and assign members, teams, and roles when you edit the workflow tab.

Note: You might see only a subset of the people and teams available. Your organization can limit the view of available resources.

About the People tab

Each project contains its own People tab. Use this screen to do the following.

- Manage the members of a project.
- Edit access level for a member.
- Replace a person in a role when a team member becomes unavailable.
- Add or remove a role.
- Keep track of team members or request recipients who are out of the office, their delegates, and start dates. (Displays for project or request owners only.)

A project template can contain information about the functional roles for the project. A template can reduce some of the work necessary to assign people or teams to units of work within the project.

Managing project members

On the People tab, you can:

- Add team members to the project.
- Remove team members from the project.
- Change a role for a member.
- Add and remove roles.

Note: A role must exist within the project before you can assign a team member to it.



- Review a list of team members or request recipients who are out of the office, their delegates, and delegation start dates. (Displays for project or request owners only.)

Security permissions for the People tab are as follows.


- **View People tab.**
- **Edit Team Members, Roles, and Access Levels.**
- **Assign Work by Role.** Users with this permission can also access the Assign Work by Role and Find/Replace dialog boxes.

Note: Users with **View People tab** and **Edit Team Members, Roles, and Access Levels** permissions can automatically add members and member roles on workflow spreadsheets without adding them to the People tab first.

Notes on managing project members

- If a role is not listed for the project, you (or an administrator with the appropriate permission) can create it using **Setting > Marketing Operations Settings > List Definitions > Roles**.
- When you edit members, the list of people in the Folders section of the Select Team Members dialog is populated from IBM Marketing Platform. This list reflects limitations based on your role and permissions. For details, consult your IBM Marketing Operations administrator or the *IBM Marketing Platform Administrator's Guide*.
The list of teams in the Select Team Members dialog is based on the teams defined in Marketing Operations. As with the list of people, the list of teams is limited based on your role and permissions.
- The email address displays for a team member only if this information is available in Marketing Platform.
- You cannot remove project members (or roles) who have tasks assigned to them. You must remove them from all future workflow tasks before removing them from the project.
- In the Project Members column, teams are in italics and are preceded by the  icon. Individuals are in bold font and preceded by the  icon.

To manage project members

1. Navigate to the **People** tab of the project.
2. Click the **Edit Member/Role Settings** icon ().
The **Select Team Members** dialog box opens.
3. Do one of the following.
 - a. To add a person or team, select the name from the left pane of the dialog, and click >>.
 - b. To remove a person or team, select the name in the **Select Team Members** list box and click <<.
 - c. To change the role for a person or team, select the name in the **Select Team Members** list box then click **Up** and **Down** to move it to the required role.

Note: You cannot remove a user or team assigned to a task.

4. Click **Save Changes**.
The **Select Team Members** dialog box closes. The **People** tab becomes the active window.

The changes that you make are reflected in the list of people and roles. For example, if you added a creative lead, the screen would contain a line similar to the following.

Member/Access Level	Role	Email Address
P Picasso (participant)	Creative Lead	ppicasso@mycompany.com

Managing teams

Selecting **Operations > Teams** opens the My Teams page. Use this page to do the following.

- Create and remove teams
- Assign team managers and members
- Set the work routing model

- Enable and disable teams

These groups of people are available across templates and object instances. Project Managers can assign tasks to teams, in addition to being able to assign them to individual members.

Wherever you can assign or work with individuals, you can also work with teams. For example, the procedure “To assign people to roles” on page 119 can be used to assign individuals or teams to roles.

About team alerts: IBM Marketing Operations sends alerts for team-related events in the same way it sends alerts to individuals.

Additionally, alerts have the following behavior as applied to teams:

- For tasks assigned to a team, all the team members and managers receive the alert
- After a task is assigned to a team member, only the member and managers receive the alert

For the following events, only the specific team member affected by the event receives the alert

- A member is added to the team
- A member is removed from the team
- A team-task is assigned to a member of the team
- A team-task assigned to a user is reassigned back to the team or to another member

Team summary page:








When you first navigate to a team, its summary page appears. This page contains the following items.

Table 24. Team summary page

Field	Description
Name	Displays a name for the team. This name appears on the Teams list page, as well as selecting project members or reviewers. This field is required.
Description	Displays a short description for the team.
Skill Sets	Displays a list of skills associated with the team. Add terms here that might be useful when describing teams. For example, you can enter Photoshop as a skill, so that anyone viewing the team knows that the team has this skill.
Suggested Security Policies	Displays the security policy or policies that apply to the team. This field is required.
Routing Models	Check any combination of the work routing option check boxes.
Members and Managers	Displays the managers and members of the team. Use the scroll bar to page through the list.

From the Team Summary screen, you can perform the following actions.

Table 25. Actions available from the Team summary page

Action	Details
Edit the team	Edit the fields for the team and members by clicking the Edit icon ().
Change alert subscriptions	Click the Manage icon () and select Set Alert Rules to change the way team members and managers are notified of task assignments.
Delete the team	Click the Delete this Item icon () to remove the team.
Copy the team	Click the Manage icon () and select Create a duplicate Team to create a copy of the team. The system opens the summary page of the new team in edit mode.
Add a team	Click the Actions icon () and select Add Team to add a team.
Navigate back to the Teams list page	Click All Teams or My Teams in the breadcrumb; either or both of these links are displayed, depending on how you navigated to the current summary page. Or, click the Action icon () and select All Teams or My Teams .
Print team details	Click the Print icon () to print the details of the team.


To add or edit teams:

If you have the appropriate permissions, you can add or edit teams.

1. Select **Operations > Teams**.

The Teams list page appears.

2. Do one of the following.

- To create a team, click the **Add Team** icon ().
- To edit an existing team, click a team to display its summary page, then click the **Edit** icon ().

3. Complete the fields on the Team summary page.

4. Click **Save Changes** to save your changes to the team.

To edit members of a team:

If the people you want to add to a team do not appear in Select Team Members and Roles, you must add them as IBM Marketing Operations users in IBM Marketing Platform.


You can set team members and managers when you create a team. Additionally, you can edit the members of a team any time during its existence.

1. Select **Operations > Teams**.

The Teams list page appears.

2. Click the team to edit from the Teams list page. To edit a team that is not listed, click **All Teams** to display all available teams. If it is still not visible, you may not have the appropriate permissions to view it.

The Teams summary page appears.

3. Click the **Edit** icon ().
4. Click **Add/Remove Managers and Members**. The Select Team Members and Roles page appears.
5. Move people into and out of the team as appropriate.

About routing work for teams: When you edit a team, you can choose how tasks, approvals, and project requests are routed for that team.

Task routing options: You can check any of the following options under the Task Routing Model section of the Team summary.

- **Managers can route tasks to members**

Tasks assigned to the team appear on the team manager tasks page. The manager can then assign these tasks to team members.

- **Members can accept team-assigned tasks**

Tasks assigned to the team appear on the My Tasks page for each team member. Team members can then assign a task from the list to themselves.

- **Members can return team-assigned tasks back to the team**

Members can return their tasks back to the team.

When you set up a team, you must select one or both of **Managers can route tasks to members** and **Members can accept team-assigned tasks**.

Note: To view team tasks, you must apply either the All My Team Tasks or All My Teams Unassigned Tasks filter from the Tasks list page.

The task routing options function independently, and you can choose any combination for the team. For example, you want the manager to be able to assign tasks to members and the members to be able to return assigned tasks back to the unassigned queue. Therefore, you select both **Managers can route tasks to members** and **Members can return team-assigned tasks back to the team**. If you want the manager to be able to assign tasks to members, but not allow the members to return assigned tasks back to the unassigned queue, select only **Managers can route tasks to members**.

Approval routing options: IBM Marketing Operations provides the same routing options for both task approvals and stand-alone approvals as for standard tasks. As for standard tasks, a team can have any combination of options for routing approval tasks.

You can check any of the following options under the **Approval Routing Model** section of the Team summary.

- **Managers can route approvals to members**

The manager can assign these approval tasks to team members.

- **Members can take ownership of team-assigned approvals**

Team members can then take ownership of these approval tasks.

- **Members can return team-assigned approvals back to the team**

Members can return their approval tasks back to the team.

When you set up a team, you must select one or both of **Managers can route approvals to members** and **Members can take ownership of team-assigned approvals**.

Request routing options: IBM Marketing Operations provides similar routing options for project requests as for tasks. You must select at least one of the following options under the **Project Request Routing Model** section of the Team summary.

- **Managers can route project requests to members**
The manager can assign these requests to team members.
- **Members can accept team-assigned project requests from the team.**
Team members can take ownership of these requests.
- **Members can return team-assigned project requests back to the team**
Members can return requests they previously accepted

Virtual project participants:

If a user is a member of a team that participates in a project, but the user is not a participant of the project, the user can see team tasks assigned for the team, and be assigned such tasks. Additionally, such a user can view the project and all of its tasks.

Consider the following scenario.


- Don is a member of the **Major Accounts** team.
- The Major Accounts team has **Members can accept team-assigned tasks** enabled.
- The Major Accounts team is assigned in the Members column of the **Handouts – design** workflow task for the Fall 2007 Tradeshow project.
- Don is **not** a project member for the Fall 2007 Tradeshow project.

Even though Don is not a member of the Fall 2007 Tradeshow project, he can view and update the **Handouts – design** task, by navigating to his All My Team Tasks page and selecting the **Handouts – design** task. In this case, Don is a *virtual participant* for the Fall 2007 Tradeshow project, and can view all of its project and task information.

Assigning team tasks:

Depending on the work routing options, team managers can assign tasks to team members, or members can pull tasks off the queue themselves.

- If the team has the **Managers can route tasks to members** option enabled, team managers can assign tasks to team members.
- If the team has the **Members can accept team-assigned tasks** option enabled, team members can assign themselves any unassigned team tasks.
- If the team has the **Members can return team-assigned tasks back to the team** option enabled, team members can return tasks assigned to them back to the pool of unassigned team tasks.

1. Select **Operations > Tasks**.
2. Click the **Actions** icon () to display all saved searches/filters for tasks.
3. Choose one of the following searches.
 - To display all tasks assigned to the team, grouped by assignment, click **All My Team Tasks**.

- To display all tasks assigned to the team that are not assigned to any team members, click **All My Team Unassigned Tasks**.

Note: You cannot reassign tasks from the All Tasks page. To reassign tasks, select another filter; for example, All My Team Tasks.

4. Check the boxes for all the tasks to assign. To select all listed tasks, you can check the box for the **Name** column.

The Reassign Selected page appears. If you do not have permission to assign the selected tasks, the page contains a message to this effect.


5. For each selected task, select a team member for the assignment in the **Assign To** field.

Note: Team members only can assign tasks to themselves or back to the team.

6. After you make all the assignments, click **Save Assignments** to save your changes and close the page.

Assigning team requests:


You must have appropriate permissions to assign a team to a project request.

1. Go to the **People** tab of the project and click the **Members/Roles** icon ().
A dialog box opens listing teams and team members to assign.
2. Select a role in the **Selected Members and Roles** area, and move a team from the list of teams and team members to assign that team or team member to the selected role.

If you assign a team member to a role, the team is not automatically assigned.

To change the access level for a project member

While all IBM Marketing Operations objects have access levels, it is useful to change access levels for projects only.

1. Navigate to the People tab of the project.
2. Click the **Change Member Participation Level** icon ().
This icon is unavailable unless you have the appropriate permission. Typically, project owners and IBM Marketing Operations administrators have this permission, but it may be assigned differently depending upon the security policy for the project.
The Change Member Participation Level page appears.
3. In the **Selected Team Members** list box, select the member who has an access level to change.
4. Use the **Up** or **Down** controls to move the member to the new access level.
5. Repeat Steps 3-4 as necessary.
6. Click **Save Changes**.

The Change Member Participation Level dialog box closes, and your changes are applied. The People tab becomes the active window.



Note the following.

- The list of people in the Folders section of the Change Member Participation Level page is populated from IBM Marketing Platform, and may be limited based on your role and permissions. For details, consult your IBM Marketing Operations administrator or the *IBM Marketing Platform Administration Guide*.

The list of teams is based on the teams defined in Marketing Operations. As with the list of people, the teams you can view may be limited based on your role and permissions.

- You can also use the **Change Member Participation Level** link to add users to the project. They are added with the selected access level and placed by default into the Unassigned role.
- Access levels are associated with objects, and cannot be created or removed. For example, approvals always have two access levels: owner and approver.

Finding and replacing task members or reviewers

After you click the **Find and Replace Task Members** icon () or the **Find and Replace Task Reviewers** icon () , the Find and Replace Task Members or Find and Replace Task Reviewers page opens.

You can replace any member or reviewer with any other current member of the project. To replace with someone not on the project list, you first need to add that person to the project. (This requirement applies only to owner-assigned task members and reviewers. To remove a member or reviewer assigned by an administrator when a template was created, you must go to the approval and remove them, assuming you have permissions to do so.

Note: When accessing the Find and Replace Task Members/Reviewers page, the project Workflow is locked; any other user who attempts to access it receives a warning message, indicating the workflow is currently in use.

The following table describes some uses for the search and replace feature.

Table 26. Search and replace use cases

Goal	Select	Replace with
Switch specific resources: replace a given user, in a given role, with another user for all tasks in the project.	task member/reviewer = Karen role = Project Manager	Connie Contact
Switch specific users: replace a given user, anywhere on the project, regardless of role.	task member/reviewer = Karen role = Any Role	Mary Manager
Add a backup to a role: add another person to a role, as a backup or additional resource.	task member/reviewer = Karen role = Project Manager	Connie Contact
Assign tasks to a role: newly assign a given user to tasks, by role.	task member/reviewer = Any User role = Project Manager	Mary Manager

Note: To delegate tasks to another user temporarily, each user can define Out of Office settings. For more information, see “Defining out of office settings” on page 16.

This page contains the following sections.

- **Filters:** Allow you to filter the search by role, task member, or a date range. Filters are at the top of the page.

- **Buttons:** Allow you to preview and update the search. The buttons are at the center of the page.
- **Search results:** Displays tasks that meet the search criteria. Use it as a preview of the tasks that will change if you click **Update All Occurrences**.

Filters

Use the top-most fields in the Find and Replace Task Members/Reviewers dialog to filter the results. You can search by role, task member, or project date ranges.

Table 27. Filters on the Find and Replace Task Members/Reviewers dialog

Field	Description
Task member or reviewer is	Select the name of the member to replace. The list contains all team members and reviewers on the project. It also contains a choice for any user , which is the default.
Role is	Select the role of the task member to replace. The list contains all roles in the project, and also contains a choice for any role , which is the default.
Date Constraint	Check this box to search using a date range. If selected, you can choose the following information. <ul style="list-style-type: none"> • Type of task: supply the type of date to search, either forecast or target, in the for tasks box. • Range: choose dates for the search range.
Status	Select the status on which to filter. You can choose Pending/NotStarted, Active/In progress, or both.
Replace with/Add this task member	Select one of the radio buttons, depending on whether to replace or add members/reviewers. Then, enter the person you want to fill the selected role on the tasks in the search results.

Buttons

Table 28. Buttons on the Find and Replace Task Members/Reviewers dialog

Button	Description
Find All Occurrences	Preview search results. You can view the list of tasks that meet your search criteria in the Search Results area of the page.
Update All Occurrences	Update members, after you confirm that the list of tasks is correct. As a best practice, click Find All Occurrences before doing the update.
Cancel	Close the page without making changes.

Select project members/reviewers

The Select Project Members page appears when you are adding or removing project members, and the Select Reviewers page appears when you are adding or removing reviewers.

Note: You may see only a subset of the people and teams available in IBM Marketing Operations, since your organization can limit the view of available resources.

Table 29. Fields on the Select Project Members/Reviewers page


Field	Description
Folders	Displays a list of users you can choose from. <ul style="list-style-type: none"> The list of people is set up by an administrator in IBM Marketing Platform. The list of teams is based on the teams defined in IBM Marketing Operations.
Roles	Displays a list of roles in your system. It is set up by an administrator and contains all the roles defined in IBM Marketing Platform and IBM Marketing Operations template files. In the Select Project Members or Select Reviewers page, use the Roles tab to add roles for the members and reviewers.
Selected Project Members / Reviewers	Displays the current list of members or reviewers for the project. You can move people and roles to and from the list and reorder them using the buttons.

Note: An asterisk (*) next to a role indicates that the role is used in the workflow, and therefore cannot be deleted.

To manage reviewers

Reviewers are different from project members because they do not have access to the project. The reviewer roles and users are defined in the People tab to be used in the workflow, mostly for approval tasks.

Use the Select Reviewers page to perform the following tasks.

- Add a reviewer
 - Remove a reviewer from the project
 - Change the role for a reviewer
1. Navigate to the People tab for the project.
 2. Click the **Reviewers/Roles** icon ().
The Select Reviewers dialog box appears.
 3. In the Selected Reviewers list box, select a person or team.
 4. Do one of the following.
 - To add the person or team to the project, select them from the left pane of the page, and click >>.
 - To remove the person or team from the project, click <<.
 - To change the role for a person or team, use the **Up** and **Down** controls to move them to the required role.
 5. Click **Save Changes**.

The Select Team Reviewers dialog box closes and your changes are applied. The People tab becomes active.

Editing access levels for a member

IBM Marketing Operations is a collaborative tool, and people using the software may need varying degrees of access to projects. Marketing Operations accomplishes this requirement, in part, with the ability to assign different **object access roles** to project members. Object access roles are also sometimes called access levels.

Access levels are default roles that exist for different types of objects. For example, a project has an owner, participant, requester, and approver. A request has an owner and recipient. While the names of the object access roles are fixed, the security permissions granted by them depends on the security policy assigned to the object.

IBM Marketing Operations objects contain the following access levels.

Table 30. Object access levels

Access level	Description
Owner	All object types have owners, usually the person who created the object. Owners can typically perform any function associated with an object, such as adding members to the team or editing the properties of the object.
Participant	Can typically view the object, but not edit it. For projects, when a project is created using the wizard, all members added to the project become participants by default.
Requester (projects only)	Can typically view the project, but not edit it. If you create a project from a request, the owner of the request becomes the requester of the project.
Recipient (requests only)	Can accept or return a request. A requester submits a request to the recipient, who then decides what to do with the request.
Approver (approvals only)	Can approve, deny, or suggest changes to an approval assigned to them.

Sometimes, a project owner needs to change the access levels of a member or members. For example, after assigning people to roles, there are many people with the Participant access level. You can grant some of them owner-level access or deny some of them even participant privileges.

About roles

Ask your IBM Marketing Operations administrator if you need help with permissions.

- **View People tab.** Users with this permission can view the People tab.
- **Edit Team Members, Roles, and Access Levels.** Users with this permission can edit members, roles, and access levels
- **Assign Work by Role.** Users with this permission can assign tasks to roles and people, and access the Assign Work by Role and Find/Replace dialog boxes.

To assign work by role

Typically, at the beginning of a project, the project owner or manager assigns work to the members of their team. The section describes how to perform this task for owner-assigned approvers (as opposed to approvers assigned in the template).

1. Click the **Assign Work By Role** icon ().

Note: If the project started, a warning dialog box appears; click **OK** to proceed or **Cancel** to cancel the assignment process.

The **Assign All team members and reviewers to their respective tasks** page appears.

2. Select one of the following.
 - Select **append the new user** to add members to the existing assignments.
 - Select **replace the existing assignment** to replace anyone currently in a role.
3. Click **OK**.

A confirmation dialog box appears.
4. Click **Close**.

In the workflow, all users assigned to roles are also assigned to the tasks associated with their role.

Note the following when you assign work.

- When you access the **Assign All team members and reviewers to their respective tasks** dialog, the project Workflow is locked; that is, any other user who attempts to access it receives a warning message, indicating the workflow is currently in use.
- Only tasks with a status of **pending** have people assigned to them when performing this task; all other tasks remain unchanged.

To remove a role

If you are removing a role, note the following.

- If you delete a role that has people or teams assigned to it, they are not removed from the project. Instead, they are reassigned to the Unassigned role.
- The Unassigned role cannot be removed.
- You cannot remove a role that has work assigned to it. You must first either assign a person or team to that role, or assign the work to a different role.
- You cannot remove a user who is assigned to a workflow task.

1. Navigate to the People tab for the project.
2. You can remove a member or reviewer role.

- To remove a member role, click the **Members/Roles** icon (.

- To remove a reviewer role, click the **Reviewers/Roles** icon (.

3. Select a role to remove, and click <<.

If the role selected for removal has people or teams assigned, a warning dialog box opens. Click **OK** to remove the role, or **Cancel** to keep it.

4. Click **Save Changes**.

The Select Project Members/Reviewers dialog box closes. The People tab becomes the active window. Your changes are reflected in the list of people and roles.



To add a role

Occasionally, a project owner or manager realizes that the project needs another project role. For example, the organization decides that a certain project needs the Legal department to approve its collateral. If this role is not added when the project is created, the project owner can add it to the project later.

Note the following.

- The system **does** allow you to add a role that exists in the project already. However, this action does not result in a duplicate or copy of the role.
- Permissions based on project roles can be configured at the template level only. You cannot configure custom security for project roles that are added to a project after the project was created.
- A project role must exist before you can add it to a project. To create a project role, select **Administration > List Definitions > Roles** (note that you must have the appropriate permission in order to access this item). Then you can add the role to your project using the steps that follow.

1. Navigate to the People tab for the project.
2. You can add a member or reviewer role.

- To add a member role, click the **Members/Roles** icon ().
- To add a reviewer role, click the **Reviewers/Roles** icon (.

3. Click the **Roles** tab in the list box on the left side of the page.
4. Select a role to add, and click >>.
5. Click **Save Changes**.

The Select Project Members/Reviewers dialog box closes. The People tab becomes the active window. Your changes are reflected in the list of people and roles.

To assign people to roles

Before you can complete this task, the workflow must be set up to include the necessary tasks and approvals, and a role must be assigned to each task that should have one. The requirements for a project derive from the template that it is based on.

Note the following.

- Administrators create roles using the List Definitions section of the Administration menu item.
- The list of people in the Folders section of the Select Project Members page is populated from IBM Marketing Platform, and may be limited based on your role and permissions. For details, consult your IBM Marketing Operations administrator or the *IBM Marketing Platform Administration Guide*.
- Administrators can define assignments using the Request tab of the template. Therefore some roles can be pre-assigned.
- The list of teams in the Select Project Members page is based on the teams that defined in Marketing Operations. As with the list of people, the teams you can view may be limited based on your role and permissions.

1. Navigate to the People tab of the project.
2. You can assign work to project members or reviewers.

- Click the **Members/Roles** icon () to add project members.

- Click the **Reviewers/Roles** icon () to add reviewers.

The Select Project Members or Select Reviewers dialog box appears.

3. **The template used to create the project may contain the necessary roles. If so, skip this step.** Click the Roles tab on the left side of the dialog and add all the roles you might need for the project.
4. In the Selected Team Members/Reviewers list box, select the role you want to assign.
5. Click the **Folders** tab, and navigate to the person or team to assign.
6. Select the person or team and click >>.

The selected person or team is assigned to the selected role.
7. Repeat Steps 4 through 6 until each member and reviewer role has at least one person or team assigned to it.
8. Click **Save Changes**.

The Select Project Members/Reviewers dialog box closes. The People tab becomes the active window.

Chapter 9. The calendar

Marketing organizations typically organize their work with calendars. For example, seasonal events drive marketing programs, as well as other external dates, such as store openings, and seasonal product announcements.

Historically, organizations produced paper-based calendars and updated them with the latest calendar-driven data. The calendar feature provides marketing groups with an electronic means of viewing and updating this data.

You can customize the appearance of the calendar in the following ways.

- You can set a default view of the calendar: Click **Settings > Marketing Operations Settings > Calendar/Timeline Settings**.
- You can choose the look of the calendar by using the Set View Options dialog box.
- You can filter the items that are displayed on the calendar by using an Advanced Search.

Configuring display options for the calendar

Selecting **Operations > Calendar** opens a time-centric view of your business processes. When you view the calendar, its appearance depends on several options that you can set:

- The default calendar view: Use the Calendar/Timeline Settings page (**Settings > Marketing Operations Settings > Calendar/Timeline Settings**) to set a default appearance for the calendar.
- The initial calendar view: When you click **Operations > Calendar**, you can



change calendar appearance by clicking **View Options** ().

- The type of calendar view: Click **View Options** to choose timeline, text calendar, or graphical calendar, and the time scale (fiscal year, quarter, month, and so on) to display.

You can click **View Options** on the list pages for Projects, Programs, Plans, and Tasks to change to calendar view.

Calendar display options

You can customize the appearance of the calendar and timeline to suit your needs.

You can set the appearance of the calendar in either of these ways.

- By setting an initial, default view of the calendar.
- By changing options while you view the calendar.

You set the default view on the Calendar/Timeline Settings page (**Settings > Marketing Operations Settings > Calendar/Timeline Settings**).

Table 31. Fields on the Calendar/Timeline Settings page

Field	Description
Include Weekend Days	You choose whether the calendar shows a five-day week or a seven-day week with this option. Select Yes to display a seven-day week.
Weeks Should Begin On	You can specify whether the calendar displays Monday as the first day or Sunday as the first day, even if weekends are shown on the calendar. Select either Sunday or Monday. Sunday is the default.
Default Content of Calendar Section	You can choose the objects to display on the calendar. Select: <ul style="list-style-type: none"> Plans (the default) Projects Tasks Programs
Default Search of Calendar Section	Selects the filter for the objects that display on the calendar. Select a saved search to be the default when you click the Calendar menu item. The list of available items depends on which objects you selected for the Default Content field. For example, if you selected Projects for the default content, you can choose Active Projects for the default search. For example, if you selected Corporate Campaigns for the default content, you can choose Active Projects for the default search.
Display the timezone for the logged in user	Displays the timezone in which all times are shown in workflow columns. If you have users in many locales, selecting this option can help you track of work across different timezones. If all your users are in the same timezone, you can turn this option off to save screen space.

The following parameters are available on both the Calendar/Timeline Settings page and on the Set View Options dialog that opens when you click **Options (Operations > Calendar)** or list pages).

Table 32. Fields on the Calendar/Timeline Settings page and Set View Options dialog box

Field	Description
Default Layout of Calendar Section	On the Calendar/Timeline Settings page, you use this option to choose timeline view and a time range to display, or a one month text or graphical calendar.
Display as / Time Scale	On the Set View Options dialog, you use the Display as and Time Scale fields to make these selections.
Enable Color Coding	Color codes the calendar based on an attribute you select. Check this box, and then select the attribute to use for color coding objects on the calendar.
When displaying tasks, only show milestones	Limits the amount of information to show when the calendar displays tasks. Check this box, and then choose the milestone types to display. Only the selected milestone types display.

The following option is available only on the Set View Options dialog when selected for tasks.

Table 33. Fields on the Set View Options dialog box

Field	Description
Brief/Detailed	Determines the amount of information that is displayed for tasks. This option is available for tasks only.

To set your default calendar options

You set all available options for the calendar using the Calendar/Timeline Settings page. The settings that you choose remain in effect between your sessions. That is, if you log out of IBM EMM and then log back in later, your calendar appears with the options you last set on this screen


1. Select **Settings > Marketing Operations Settings**.
2. Click **Calendar/Timeline Settings**.
The Calendar/Timeline Settings page appears.
3. Supply the details on the Calendar/Timeline Settings page.
4. Do one of the following:
 - Click **Save Changes** to save your changes.
 - Click **Revert to Saved** to discard your changes, and reload the settings from your previous save.
 - Click **Cancel** to exit the page.

To change your view of the calendar

You can access the different views of the calendar by clicking the **View** icon (



) on the Calendar page.

1. Select **Operations > Calendar**.
The calendar appears in the default view. This view depends on settings in the Calendar/Timeline Settings page.
2. Click the **View** icon (). The Set View Options dialog box appears.
3. Supply the details on the Set View Options dialog box.
4. Do one of the following:
 - Click **Apply** to view your changes.
 - Click **Reset** to discard changes.
 - Click **Close** to exit the screen and keep your changes.

Your changes are applied. However, unlike the Calendar/Timeline Settings page, the changes you make here do not persist. After you leave the Calendar page, your settings return to the default values.

Viewing the timeline

If you choose a timeline view, you can choose from several date ranges. The screen can display data for a single week all the way up to data for an entire year.

About timeline view of the calendar

The timeline view displays a grid-like view of the objects (Projects, Programs, or Plans) that you selected and filtered (for example, Active Projects) by some unit of time, depending on which timeline view you selected.

Each object is displayed in a horizontal bar across its date range. The name of the object displays on the bar.

Note: If you select **Enable Color Coding** from the calendar view options screen, the bar for each object is displayed in a color that is based on an attribute you chose.

Choose a date-range for the timeline.

- **Week:** displays one week, with each day listed as a column. The starting day is either Sunday or Monday depending on the option that is selected in the Calendar/Timeline Settings screen.
- **Month:** displays a single calendar month. Each day is listed as a column, and days are grouped into weeks.
- **Quarter:** displays three calendar months. Each week is listed as a column, and those weeks are grouped into months.
- **Fiscal Year:** displays a fiscal year (starting month depends on a configuration setting, `firstMonthInFiscalYear`). Each month is listed as a column, and the months are grouped into quarters.
- **Calendar Year:** displays a calendar year (starts in January and ends in December). Each month is listed as a column, and the months are grouped into quarters.

Note: Any day that is specified as non-work time has its column disabled. Additionally, the name of the non-work time (for example, **Labor Day**) displays when you point to the date. This feature is not available when the time scale is Quarter, Fiscal Year, or Calendar Year.

Viewing the text or graphical calendar

The calendar views display data for a selected month. The page displays a grid that contains a column for each day of the week: either five columns that represent the weekdays, or seven, if you choose to display weekend days. You set this option on the Calendar/Timeline Settings page. The page contains either five or six rows, each representing a week.

The view contains a cell for each day of the selected month. The cell for a day contains either a list of items active on the day (text) or a portion of a horizontal bar for each active item (graphical).

About the monthly calendar

The monthly calendar view displays a calendar of the selected month. It lists the objects (Projects, Programs, or Plans) you selected and filtered on (for example, Active Projects).

Choose either of these monthly calendar views.

- **1-Month Text:** Each day contains a list of objects. An object is displayed for all days in its date range.

- **1-Month Graphical:** Each object is displayed in a horizontal bar that begins on its start date and ends on its end date. If you select **Enable Color Coding** from the calendar view options page, the bar for each object appears in a different color.

Note: Any day that is specified as non-work time is indicated by a gray X in the background. Additionally, the name of the non-work time (for example, **Labor Day**) displays when you point to the date.

About calendar color coding

You can display objects in a color-coded manner on either the graphical calendar or in the timeline views.

You first select the **Enable Color Coding** check box in either the Calendar/Timeline Settings page or the Set View Options dialog box. After you check the box, the **Based on values for** menu displays. This list contains attributes for your projects, programs, or plans (depending on which objects you are currently displaying in the calendar).

From this list, you can choose any attribute that is an enumerated type. For example, consider the following attribute:

- Name: Product Family
- Valid values: CDs, Credit Card, Home Mortgage

If you choose to group objects by this attribute, your calendar contains four colors: one for each valid value plus **N/A**, corresponding to any objects that do not contain a value for the Product Family attribute.

The calendar also displays a legend in the lower-right corner of the screen. The legend lists all valid values (plus **N/A**) along with the color corresponding to that value.

Note: You can also color code by the template on which the project or program is based.

About horizontal bars on the calendar

The timeline view and graphical calendar view display horizontal bars.



Note the following.

- The bars represent the date range for objects that are displayed on the calendar.
- The name of the object displays on the bar.
- The bars can be colored based on an attribute you select.
- The shapes of the bars indicate the following:
 - Rounded-end "start": indicates that the object starts on the date where the bar has a rounded end.
 - Rounded-end "end": indicates that the object ends on the date where the bar has a rounded end.
 - Flat-end "start": indicates that the object starts before the visible date range.
 - Flat-end "end": indicates that the object ends after the visible date range.



Brief and detailed views of tasks

Use the Set View Options dialog box or the Calendar/Timeline Settings page to choose brief or detailed mode to view information about tasks on the calendar.

In brief mode (the default), the text contains the following items.

- Task () or approval () symbol
- Task ID
- Name of the task

In detailed mode, the text contains the following items.

- Task () or approval () symbol
- Name for the project that contains the task
- Code for the project that contains the task
- Task ID
- Name of the task

To publish the calendar

To get a snapshot of the current calendar, save it in HTML format (into a ZIP compressed archive file).

1. Choose the calendar view to publish.


Select the objects, time range, and appearance for the calendar view. You can make selections in either of the following ways:

- From the **Operations** menu, select **Calendar**, then select items to view.
- At a list page for plans, programs, projects, or tasks, click the **View** icon (



) and choose a calendar view.

Note: If the current calendar view includes projects, Project data is exported as well. The exact data that is exported depends on how the project template was set up; Summary and custom tabs might be exported for some or all projects.

2. Click the **Print** icon () and select **Export**.
3. Do one of the following.
 - Click **Open** to open the compressed file of the calendar.
 - Click **Save** and choose a location to save the calendar to disk.
 - Click **Cancel** to return to the Calendar page without publishing.

The system publishes the calendar into a compressed file archive. You can use any application for working with compressed files to access the calendar HTML pages. You can go to the next and previous pages of the calendar view in your web browser. If you exported any project data, you can also go to that data from the calendar HTML pages.

Chapter 10. Grids

A grid is a spreadsheet-like presentation of data. Grids allow IBM Marketing Operations users to store all campaign- and project-related data within the project.

With grids, users no longer need to search through email, a file folder, or another computer to find information about a campaign or project. IBM Marketing Operations serves as the system of record and offers enterprise-wide access to data stored in grids. Any Marketing Operations user who has access to the project can view and edit the grid, if that user has appropriate security permissions.

Users can move the traditional spreadsheet information into a grid within IBM Marketing Operations. Then, marketing managers can analyze, measure, and report on the project- and campaign-related information within and across multiple projects or campaigns.

Depending on how your templates are defined, grids can appear on marketing object, plan, program, and project tabs. Campaign projects include a TCS tab that displays a special grid called the Target Cell Spreadsheet (TCS). You can create campaign projects only if IBM Marketing Operations-Campaign integration is enabled.

A template creator configures grids, specifying the data source, whether data is grouped, whether a user can sort the data, and other grid characteristics. Then, administrators and users can use them when they create marketing object tabs and project tabs.

A grid can also be read-only, displaying data that you cannot edit.

About editing grid data

When you work with grids in edit mode, you can add rows, delete rows, and edit existing data. In a single editing session, you can perform all of these tasks if you have the appropriate permissions.

Permissions

You must have the following permissions to work with grids. Ask your administrator if you need help.

- To add a row, you must have the **View Tab**, **Edit Tab**, **Edit Grid**, and **Add Grid Row** permissions for the tab with the grid.
- To edit a row, you must have the **View Tab**, **Edit Tab**, and **Edit Grid** permissions for the tab with the grid.
- To copy and paste a row, you must have the **View Tab**, **Edit Tab**, and **Edit Grid** permissions for the tab with the grid.
- To delete a row, you must have the **View Tab**, **Edit Tab**, **Edit Grid Row**, and **Delete Grid** row permissions for the tab with the grid.

Locked data

The system prevents you from editing a row that is currently being edited by another user. For a Target Cell Spreadsheet in a campaign project, the entire grid is

locked for editing instead of individual grid rows.

Revision history

Marketing Operations maintains an audit log for grids. The audit log contains the user details and the time it was saved. This information is available on the Analysis tab.

Grid controls







The following tables describe the controls you use when working with grids in the View and Edit modes.

The following features are available in both modes.

- Data displays in pages. To navigate, click the arrows to go to the next, previous, first, and last pages, or enter a number in the box and press **Enter**.
- You can sort by column by pointing to the column heading, clicking the down arrow, and selecting **Sort Ascending** or **Sort Descending** in the drop-down menu. Depending on how the grid was designed, some columns do not have sorting enabled.
- You can view or hide columns by pointing to any column heading, clicking the down arrow, pointing to **Columns** in the menu, and selecting or clearing the check box next to the column name.
- You can reorder columns by dragging and dropping the column heading. (This ability is not available in grids that have column grouping.)
- You can change column width by dragging the edge of the column headings.

View mode

Table 34. View mode controls

Control	Description
	Switch to Edit mode.
	Copy selected grid rows. Click in the first column to select a row.
	Import a CSV file that contains grid rows.
	Export all the data in the grid in a comma-separated list.
	Use advanced search to filter grid data.
	Select the calculation used for each column in the Summary row. The options are: Sum, Avg (average), Min (lowest value in the column), and Max (highest value in the column). In a multi-page grid, calculations are performed across all the data, not just for individual pages. This control is available only in view mode.
Save Preferences	Save your customized view of the grid.

In addition, the following controls are available for the Target Cell Spreadsheet (TCS) available in campaign projects. You can create campaign projects only if IBM Marketing Operations-Campaign integration is enabled.

Table 35. View mode controls (Target Cell Spreadsheet grids only)









Control	Description
Approve All	Approve all the rows in the TCS.
Deny All	Deny approval to all the rows in the TCS.
Clear All	Delete all the rows in the TCS.
Publish	Send the current TCS data to Campaign so the flowchart designer can access it.
Get cell status	Retrieve the latest flowchart and cell count information from Campaign.

Edit mode

In edit mode, you can click single line text, multi-line text, or numeric and money type column contents, and then begin typing to overwrite existing data. For any editable column, you can double-click a cell to open the content editor for that column type.


If the row is currently in use by another user, the system displays an error message. Before you save your changes, edited cells contain a small red triangle in the corner; these markers disappear after you save.

Table 36. Edit mode controls

Control	Description
	Add a row. The row is added below the currently selected row. The first row is selected by default when you enter edit mode.
	Copy selected grid rows. To select a row, click in the first column.
	Paste grid cells and rows.
	Mark a selected row for deletion. The row is deleted when you save. Within a row, the same icon indicates the row status.
	Unmark a selected row for deletion. Within a row, the same icon indicates the row status.
	Save your changes and remain in edit mode.
	Save your changes and return to view mode.
	Revert all changes made since your last save and return to view mode.

To import grid data

To quickly add data to a grid, use the import feature. You can import data to a grid in comma-separated value (.csv) format.

1. Navigate to the grid for the import.
2. Click the **Import** icon ().
3. Browse to the CSV file that contains the data to import.
4. If the first row of the file contains header information, select the **First row is header row** box.

The confirmation screen appears.

5. Click **Save** to import the file or **Cancel** to quit the import process.


If the CSV data does not match the number and data type of the grid columns, you receive an error message. The message describes the differences between the grid and the CSV file.

6. Click **Finish** to close the dialog and return to the grid tab.

To export grid data

You can export grid data in comma-separated value (.csv) format. Note the following.

- All pages (if the data is paginated) are exported.
- All rows except the Summary row are exported.
- All columns (including hidden columns) are exported.
- Exported rows are in the same order as in the current view. If you are viewing the grid alphabetized by ID, the exported data is also alphabetized by ID.

1. Navigate to the grid to export.
2. Click the **Export** icon ().
3. In the File Download dialog box, choose one of the following.
 - Click **Open** to display the file in Microsoft Excel.
 - Click **Save** to save the file to disk.
 - Click **Cancel** to close the dialog box without exporting the data.

To post read-only grid data to a URL

If the template creator enables a read-only grid for data posting, the screen contains a **Post Data** link.

1. Navigate to the read-only grid whose data you want to post.
2. If the grid contains more than one page, click **Show All** to view the entire grid on the screen.
3. Check the box for each row you want to post.

Note: As a shortcut, you can check the box in the grid header to select all currently displayed rows.

4. Click **Post Data**.

Marketing Operations calls the specified URL with the selected data.

To group read-only grid data

If the template creator enables data grouping for a read-only grid, you can group data in the grid by any of its columns.

1. Navigate to the read-only grid you want to view.
2. Click **View**.

Set View Options appears.
3. Check **Enable Grouping**. To turn off grouping, clear this field.
4. In the **Group By Column** field, select the column for grouping.
5. Click **Apply** to save your changes and close the dialog box.

Chapter 11. Marketing objects

You can create new marketing objects if you have permission to do so. After you create a marketing object, you can start it at any time. Starting the marketing object makes it active.

A *marketing object* is any work product a team develops and reuses in the course of its marketing activities. A marketing object can represent a physical item (such as a letter, credit card, or banner ad), or a business component (such as a credit card offer, a target segment definition, or a rewards program definition).

- You define and manage marketing objects that represent all reusable work products.
- You can perform basic operations (create, edit, change state, copy, link, and delete) on marketing objects.
- You enter and manage all of the attributes that define a particular marketing object, such as name, owner, state/status, description.
- You can define and manage business processes (such as projects) that produce, modify, and retire marketing objects.
- You can construct robust projects which define multiple marketing activities by “assembling” each discrete marketing activity from existing marketing objects.

IBM Marketing Operations marketing objects are defined in stages, and how they are defined influences how they are organized and presented to users. The following terms are important in understanding the definition and organization of marketing objects.

Marketing object type

A *marketing object type* is the highest-level division for marketing objects. An administrator creates marketing object types. Each marketing object type has a menu item, but the menu on which it appears depends on how the administrator configured the marketing object type.

Marketing object template

A marketing object type is broken down into one or more *marketing object templates*. Typically, an administrator creates a marketing object template for each significant characteristic for the marketing object type.

Marketing object instance

A *marketing object instance* is a single marketing object. Users with appropriate security permissions create marketing object instances from marketing object templates. Marketing object instances are called “marketing objects” in this guide.

About the offer object type

If your system includes the IBM Marketing Operations application only, your system administrators can set up a custom marketing object type to represent offers or promotions.

If your Marketing Operations environment is integrated with IBM Campaign, it includes a system-provided marketing object named "offer." However, there are two options for offer management:

- If your system is configured with optional offer integration enabled, offers are managed through Marketing Operations: you use the **Offers** option from the **Operations** menu. For information about creating offers in this way, see the *IBM Marketing Operations and Campaign Integration Guide*.
- If your system is configured so that offer integration is not enabled, offers are managed through Campaign: you use the **Offers** option from the **Campaign** menu. For information about creating offers in this way, see the "Offers" chapter in the *IBM Campaign User Guide*.

Ask your system administrator about how your system is configured for offer management.

To create a marketing object

You must have the appropriate permission to add a marketing object. When you add a marketing object, you become an owner of that marketing object.

Marketing object types are specific to each organization. The marketing object types that are available to you and how they are organized on the menus depend upon your template creator.

1. From the menus, select the marketing object type that you want to create.
The list page for that marketing object type appears.
2. Click the Creation icon.
The **Select a Template** dialog box appears, containing all the templates available for this marketing object type.
3. Select a template and click **Continue**.
The first step of the wizard for the selected marketing object template appears.

Note: Each marketing object can contain any number of custom pages and fields. All marketing object templates contain at least one page, with a name, membership list, and security policy field, as a minimum.

4. Follow the wizard, entering information on each page.
5. When you finish configuring your object, do one of the following.
 - Click **Finish** to save the object. The system displays the list page for the marketing object type, with the new marketing object included in the list.
 - To create another object that is similar to the one you just created, click **Save and Duplicate**. The current object is saved, and you then see the Summary page of a new object, with data already populated. Change the default name and edit the new object as needed.

About the marketing object cross-reference report

All projects and marketing objects contain a report describing cross-references to and from other marketing objects. This report appears on the Analysis tab, and is titled Marketing Object Cross-Reference.

For projects, the report contains the following sections.

- Marketing objects referenced by this project
- Marketing objects modified by this project

For marketing objects, the report contains the following sections.

- **Marketing Objects that Reference This Item:** other marketing objects containing a link to this marketing object.
- **Marketing Objects that This Item References:** other marketing objects to which this marketing object links.
- **Projects that Modify This item:** projects that can change this marketing object.
- **Projects that Refer to This Item:** projects containing a link to this marketing object
- **Approvals that Refer to This Item:** approvals containing a link to this marketing object.

About the modifies and references relationships

Whether a project references or modifies a marketing object is determined by how the template creator configured the marketing object reference field.

- **Modifies:** The project or marketing object that contains this marketing object is intended to change or update the contents of a marketing object (a Change Order or Work Request project, for example).
- **References:** The project or marketing object that contains this marketing object does not modify it, but references it only.


Selecting marketing objects

When you select check boxes on the Marketing Objects list page, IBM Marketing Operations retains your selections during a session as follows.


- In View mode, your check box selections are retained until you navigate to a list page for a different object. For example, if you make a selection on page 1 of a multi-page project list, go to page 2, and then return to page 1, either by clicking the page number at the bottom of the page or using the **Recent** menu, your selections are retained. However, they are discarded if you navigate to the Tasks page.
- If you edit a marketing object by clicking the **Edit a Tab** icon on the list page, your selections are retained if you click **Save and Return to List**.

To delete marketing objects

You cannot delete a marketing object if a project or another marketing object is linked to it. You must first remove the link before deleting the marketing object.

1. From the menu, select the marketing object type of the marketing object that you want to delete.
2. Select the check box next to each marketing object that you want to delete.
3. Click the **Delete this Item** icon () in the left toolbar.
4. When Marketing Operations prompts you to verify that you want to delete the marketing objects, click **OK**.

You can also delete a marketing object from its Summary tab. To do so, click the

Delete this Item icon () in the Marketing Operations toolbar.

To change the status of marketing objects

Each marketing object type is assigned a status. The status of a marketing object changes during its lifecycle. You can change the status of a marketing object to control its lifecycle.

1. From the menu, select the marketing object type of the marketing object whose status you want to change.
2. On the Marketing Objects List page, select the check box next to each item whose status you want to change.
3. Click the Status icon and select one of the available statuses. A dialog box appears in which you can add comments. If you select a status that cannot be changed later, the system warns you that your change cannot be undone.
4. Enter any comments, and click **Continue** to close the dialog box and apply the new status.

To add a marketing object reference to a form or a grid row

Forms and grids can contain columns that hold references to marketing objects. IBM Marketing Operations makes it easy to find the specific marketing object to reference in such a column.

1. Navigate to a form or a grid that contains a field or column to hold a marketing object reference.
2. If the marketing object reference field is on a form, switch to the **Edit** tab. In the **Marketing Object** reference field, click **Select**.

3. For a grid, perform one of the following actions:
 - To add a row: switch to Edit mode and click the Add Row icon. Then double-click the **Marketing Object** column cell.
 - To edit an existing row: switch to Edit mode, then double-click the **Marketing Object** column cell.

A dialog box appears for the Marketing Object search.

4. Choose one of the tabs.
 - To perform a simple search for a marketing object: In the **Search** tab, enter search criteria. The system searches all of the marketing object attributes to match your criteria. All attributes are searched except for attributes of linked marketing objects.
 - To use a predefined search for a marketing object: In the **Browse** tab, select a predefined saved search.

The system returns the results of your search.

5. Select a marketing object and click one of the available buttons.
 - To accept the selected object and close the dialog box, click **Accept and Close**.
 - To accept the selected object and continue selecting objects, click **Accept**.
 - To close the dialog without choosing the selected object, click **Close**.

The marketing object you selected appears in the marketing object reference field. If you selected more than one object, and the field accepts multiple marketing objects, then all the objects you selected are listed.

Note the following.

- For simple searches, attributes of linked marketing objects are not searched.

- Fields that hold marketing object references can be set up so they are limited to holding one particular type of marketing object, such as Offer Letters. In this case, the Browse tab contains only those saved searches that apply to that particular marketing object type.

About marketing object references in approvals

You add marketing object references to approvals in the same way you add them to forms and grid fields. However, the options for searching for marketing objects are slightly different.

Simple search (Search tab)

The simple search screen in the marketing object selection box for approvals contains an additional drop-down list. You use this control to select a single type of marketing object for your search. A selection is required before you can begin the search.

Saved search (Browse tab)

The drop-down list of saved searches contains previously saved searches for all enabled marketing object types. For example, if you have marketing object types for Creatives and Envelopes, all saved searches for Creatives and Envelopes appear in the list.

Chapter 12. Assets and asset libraries

IBM Marketing Operations provides centralized management, secure storage, and web-based access for digital assets.

About Assets

In IBM Marketing Operations, you store your assets in libraries.

- An asset library is the highest level organizational structure in the digital asset repository.
- You can access libraries and add assets to the libraries if your Marketing Operations administrator granted you permission in the security policy assigned to the asset).
- You can organize assets using folders.
- You can view all the assets that you own.
- If you do not own an asset, you can view it when it has a status of finalized.
- You must have administrative access to Marketing Operations to create a library.

You can view assets in a library in either a list view or thumbnail view. By default, IBM Marketing Operations displays assets in a list view when you select an asset library.

Table 37. Views for assets

View	Description
Asset List	<p>Displays all the assets in the current library, listed alphabetically in ascending order. Change the order by clicking once on the Name column.</p> <p>To sort by any of the other columns, click that column. Click the column a second time to change the order of the column from ascending to descending.</p>
Asset Thumbnails	<p>Displays a thumbnail image for each asset in the library. You can upload a thumbnail image for an asset when you add the asset to a library.</p>

About asset libraries

Digital assets are stored in libraries, which are the top-level organizational structure in the digital asset repository. You can access libraries and add assets to the libraries. You can only access a library if your IBM Marketing Operations administrator granted you permission in the security policy assigned to the asset.

After you click the library that contains assets or folders you want to view, the Asset List page appears.

Note: You must have administrative access to IBM Marketing Operations to create a library.

To change from the asset list view to the thumbnail view

By default, IBM Marketing Operations displays assets in a list view when you select an asset library. To change to a thumbnail view, perform the following steps.

1. Open IBM EMM and select **Operations > Assets**.

A list of all available asset libraries displays.

2. Select an asset library from the list.

A list of assets in the current library displays.

3. Click the **List View Mode** icon () and select **Asset Thumbnails**.

The thumbnails view appears. For all assets that have an associated thumbnail image, the thumbnail is displayed next to the asset.

To add an asset

1. Log in to IBM EMM.

2. Select **Operations > Assets**.

A list of libraries appears. An administrator created these libraries to organize the assets.

3. Click the library that you want to contain the new asset. The library opens. If it contains folders, they appear at the top of the screen.

4. If the library contains folders, navigate to the folder that you want to contain the asset.

5. Click the **Add Asset** icon ().

The New Asset screen appears.

6. Complete the New Asset screen.

7. Click **Save Changes** to create the asset.

The asset appears with a status of **Draft**.

New asset page

When you add a asset, the system displays the New Asset page.

Table 38. Fields on the New Asset page

Field	Description
Asset Name	Enter a descriptive name for the asset.
Description	Enter a short, text description for the asset.
Owner(s)	Click Add/Remove Members to use the Select Owners dialog to designate additional asset owners.
Asset Code	<p>To manually enter a code for an asset, clear the Auto-generate on save box. Then, type a code for the asset. The code can be any alphanumeric string.</p> <p>To have Marketing Operations automatically create an asset code, leave the Auto-generate on save box checked.</p> <p>Note: You can configure Marketing Operations to generate a code according to an algorithm your administrator specifies.</p>

Table 38. Fields on the New Asset page (continued)

Field	Description
Keywords	Enter any keywords for the asset, separated by commas. When users search on these keywords IBM Marketing Operations retrieves this asset.
Usage guidelines	Enter any guidelines for how you want people to use this asset. For example, if it is a logo, you can let users know where this type of logo should appear.
Expiration date	<p>Enter an expiration for the asset or select the arrow in the drop-down list to choose a date from the calendar.</p> <p>After you enter a date, you can use the arrow icon to incrementally move the date forward or back.</p> <p>Note: Marketing Operations sends a notification to the owners upon expiration, but the status of the asset does not automatically change to expired. At the expiration date, you should archive the asset or change the expiration date.</p>
Version name	<p>Enter the version number of the asset. Note the following.</p> <ul style="list-style-type: none"> • This field defaults to version 1.0. • Each version you add after this one, by default, increments the version number. • To override the default value, enter your own version number.
Files	<p>Click Upload to open the Add Asset Files dialog. Check one or more of the check boxes.</p> <ul style="list-style-type: none"> • File: specify the file for your asset. This field is required. • Preview File: You may want users to access the preview file for reasons of security, speed, or convenience. For example, if the source file is a Photoshop file, you may want to provide a PDF file as your preview file so that users who do not have Photoshop can still see it. IBM recommends you use a PDF, GIF or JPEG file as a preview of the asset. This field is optional. • Thumbnail File: You can upload a smaller version of the file that users see when they open the asset or when they view their library using the Asset Thumbnails view. This field is optional. <p>For each box you check, browse to the appropriate file and add it to the Add Asset Files dialog box.</p>


Security considerations

For more information about setting up security to allow some users to view only the preview of an asset, see the *IBM Marketing Operations Administrator's Guide*. If you have security concerns, consider watermarking the preview file, using a low-resolution version, or using some other method that protects the file and does not allow copying and saving of the file.

To edit an asset

If you upload a new file while editing, it replaces the previous file but does not create a new version of the asset. It is the same version as before you edited it, even if you change the Version Name field to a higher number. This procedure allows you to correct the file if you accidentally added the wrong one previously.

You can only edit assets in draft state.

1. Select **Operations > Assets**.
2. Select the library that contains the asset you want to edit.
3. Click the asset you want to edit.
4. Click the **Edit** icon () and change any of the fields on the page.
5. Click **Save Changes** when you finish editing.

The asset is saved, with the same version number it had before the editing session.


About asset versions

Rather than replace an existing asset, you can add a new version of the asset. Note the following.

- You can download, preview, or delete older versions of an asset in the Version History section.
- If you delete the current version of an asset, the previous version becomes the current version.
- The current version of an asset displays when users navigate the library and try to attach assets.
- You cannot delete an asset version if it is the only version of the asset.

To add a new version of an asset

Rather than replace an existing asset, you can upload a new version of the asset.

1. Select **Operations > Assets**.
2. Select the library that contains the asset you want to edit.
3. Click the asset for which you want to add a version.
4. Click the **New Version** icon () and change any of the fields on the page.
The Version Name field automatically increments to the next version number.
5. Click **Upload** under File to upload the new version of the asset.
6. Upload files for the asset. You must at least upload a source file.
7. Click **Save Changes** to create the asset.

The asset is saved and the version number is incremented.

Asset statuses


You must own an asset to change its status, or have the appropriate permissions.

An asset can have any of the following statuses.

Table 39. Asset statuses

Status	Description
Draft	Indicates that the asset is in a draft state. All owners can edit the asset. Other users can view it or select it as an attachment. When you first add an asset, it has a status of Draft.
Locked	Indicates that the asset is in a locked state. No one can edit the asset until it is unlocked. You can lock an asset for a period if you do not want anyone to edit the asset.
Finalized	Indicates that the asset is finalized. Everyone with permission to do so can access the asset (and attach it to a business process), but no one can edit it.
Archived	Indicates that the asset is no longer available. No one can access the asset nor retrieve it. If this asset is attached to an object (such as a project or plan), it is still available from that object.

To change the status of an asset

1. Select **Operations > Assets**.
2. Select the library that contains the asset you want to edit.
3. Click the asset whose status you want to change.
4. Click the **Status** icon () and select one of the available statuses.

To view an asset

After an asset has a status of **Finalized**, all authorized users can view and use the asset.

1. Select **Operations > Assets**.
2. Select the library that contains the asset you want to view.
3. Click the asset you want to view.
4. Perform one of the following actions.
 - To view the asset, click **Download** next to the asset file.
 - To preview the asset, click **Preview**. Use this option if you do not have permission to download assets, or you are not sure if this is the asset you need.
 - To save the asset file or the preview file and download it to your computer, right-click the **Download** or **Preview** link and select **Save Target As** to save the corresponding file. Browse to the location where you want to save the file and click **Save**.
5. Close the window that contains either the downloaded file or the preview when you finish viewing the asset.

To view history of an asset

When an asset has a status of **Finalized**, all users who have permission to do so can view the revision history and download history for the asset. Owners can view the revision history when the asset has any status.

1. Select **Operations > Assets**.
2. Select the library that contains the asset you want to view.
3. Click the asset you want to view.
4. Click the **Analysis** tab.

The revision history for the asset appears.


The revision history displays status changes for the asset, version changes, updates to fields in the asset, and any comments entered during the changes.

5. Select **Download History** in the View field to view the download history for the asset.

The download history displays the date, time, file name, user who downloaded it, and the version of each asset that the user downloaded by clicking the **Download** link.

To add an asset folder

Use folders as a way to organize assets in a library. You must have permission to create folders before you can add them.

1. Select **Operations > Assets**.
2. Select the library to which you want to add a folder.
3. Click the **Add Folder** icon (.

The New Folder page appears.

4. Enter a name and a description for the new folder.
5. Click **Save Changes**.

The folder opens. You can now add or move assets into this folder.

Deleting assets


Asset folders have the following characteristics.

- From within any library, you can delete assets and folders, if you have the appropriate permissions.
- You can delete only empty folders.
- If you have permission to delete assets as an owner of the asset, but some other security role that you are in allows you to delete assets only if you inherit that delete permission from another role, you cannot delete an asset from the list of assets: you only can delete the asset from within the asset itself.
- Asset folders do not have owners. Different owners can own different assets in a folder, therefore the permission to delete an asset folder is not based on ownership.

To delete assets and folders from the asset list page


From the asset list page, you can delete multiple assets and empty asset folders.

1. Select **Operations > Assets**.
2. Select the library that contains the assets and folders you want to delete.

3. Select the check boxes next to all the folders and assets you want to delete.
You cannot delete asset folders unless they are empty.
4. Click the **Delete Selected Items** icon (.
5. Click **OK** when IBM Marketing Operations prompts you to confirm the deletion.

The selected assets or folders are removed.


To delete an asset from within the asset

1. Select **Operations > Assets**.
2. Select the library that contains the asset you want to delete.
3. Click the asset you want to delete.
4. Click the **Delete Selected Items** icon (.
5. Click **OK** when IBM Marketing Operations prompts you to confirm the deletion.

To move assets and folders from the asset list page

From within any library, you can move assets and folders, if you have the appropriate permissions.


1. Select **Operations > Assets**.
2. Select the library that contains the assets and folders you want to move.
3. Select the check boxes next to all the folders and assets you want to move to a particular destination.
To move assets to a different location, repeat this procedure for each different destination.

4. Click the **Move this Item** icon (.
5. Select the destination directory and click **Save Changes** or double-click the destination directory.

The destination directory opens with the folder or asset displayed in it.

To move an asset from within the asset

If you have permission to move assets as an owner of the asset, but some other security role that you are in allows you to move assets only if you inherit that move permission from another role, you cannot move an asset from the list of assets: you can only move the asset from within the asset itself.

1. Select **Operations > Assets**.
2. Select the library that contains the asset to move.
3. Click the asset to move.
4. Click the **Move this Item** icon (.
5. Select the destination directory and click **Save Changes** or double-click the destination directory.

The destination directory opens with the folder or asset displayed in it.

Chapter 13. Budgets

In IBM Marketing Operations, a *budget* allows you to plan expenses that will occur as you execute your plan, program, or project. After setting the plan budget, you can fund linked programs, and ultimately projects, from it. Marketing Operations tracks budgets of child programs and projects in the form of allocations, forecasted or committed spending, and actual expenses.

IBM Marketing Operations tracks budgets of child programs and projects, although these objects can have different owners. For example, a program linked to a plan can have a different owner than the plan itself. As such, the person who allocates a budget from a plan down to a program can be different from the person forecasting expenses from a program up to a plan. Marketing Operations allows a plan owner, a marketing manager for example, to track expected expenses from child programs and projects as well as the plan budget itself, and remain responsive to budgetary needs.

Note: Budgets are available only when the Marketing Operations financial module is enabled.

Fiscal year

You can view the total budget for all years, or see a detailed view for a particular year broken down into weeks, months, or quarters.

IBM Marketing Operations keeps budget information for the current fiscal year, the next two fiscal years, and any past fiscal years dating back to when you first installed Marketing Operations.

On the plan level, to view or edit a different fiscal year, change the **Fiscal Year** field value on the **Plan Summary** tab. Linked programs and projects take the financial year from the parent plan; stand-alone programs and projects use the system's current fiscal year.

Granularity

With IBM Marketing Operations, you can break fiscal years into weeks, months, or quarters. When creating a plan, program, or project, choose the wanted increment from the **Budget Granularity** list on the **Summary** tab.

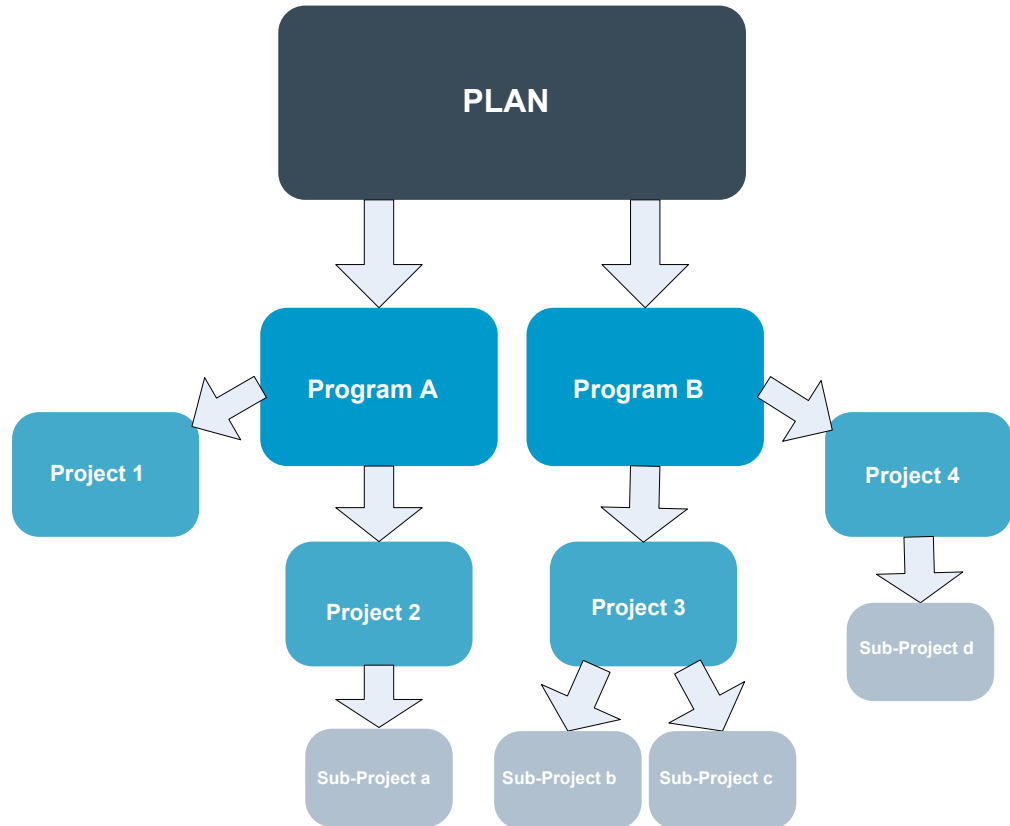
Users are not allowed to edit budget granularity. Plans, programs, and projects with different budget granularities are not allowed to be linked together.

For example, if a plan's fiscal year is broken into months, you can only link it to programs and projects that also use months as the budget granularity. In this scenario, programs and projects with weeks or quarters as their granularity are unavailable for linking.

For more information about linking plans, programs, and projects, see "To link a program to a plan" on page 29, "To link an existing project to a program" on page 35, and "To link a child project or request to a project" on page 53.

Budget funding

Although you can plan your budget using either top-down or bottom-up methods, the flow of actual money travels down the linked plan, program, project hierarchy. Regardless of how you plan your expenses, plans fund programs, which fund projects, which in turn fund any child or subprojects.



For more information about budget planning, see “Top-down budget planning” and “Bottom-up budget planning” on page 147.

Note: Since stand-alone programs and projects are not linked to plans, they have their own budgets which you enter directly on their respective budget tabs.

Top-down budget planning

“Top-down” planning is useful if a plan has predictable expenses from year to year.

For example, if every year you create a plan called *New Product Launch* which includes trade shows, you can create programs such as *Trade show 1*, *Trade show 2*, and so on, and assign funds to each program.

The *Trade show 1* program may include a project called *New Customer Acquisitions*, and as such, you can allocate funds from *Trade show 1* to make *New Customer Acquisitions* successful. Since the flow of funds is from the plan down to associated programs and projects, top-down planning is highly useful and easy.

In summary, you manage budgeting from plans down to programs and projects in the following way.

1. Allocate funds to the plan budget.
2. Allocate funds from the plan budget its child programs.

3. Allocate funds from the programs to its child projects, which are grandchildren of the plan.
4. Allocate funds from the projects to its child subprojects, which are great-grandchildren of the plan.

Bottom-up budget planning

In contrast to top-down budget funding, "bottom-up" budget funding is useful if you are not sure how much funding to allocate down from the plan to child objects, but can forecast line items for the programs and projects. After predicting all project expenses, you can roll them up to parent programs, and ultimately, to plans.

Using the previous example, if you can predict the line item expenses of the *New Customer Acquisition* project in your *Trade show 1* program, you can finalize those line items to roll them up into *Trade show 1*'s expenses. Then, add additional line item expenses to *Tradeshow 1* if necessary and finalize them to roll expenses for *Trade show 1* up to the parent plan, *New Product Launch*. Starting from the bottom-most level, continue to add expenses to projects, programs, and plans until the parent plan accounts for all necessary allocations.

In summary, you manage budgeting from projects up to programs and plans in the following way.

1. Create projects and forecast their line item expenses.
2. Link the projects to a parent program and plan.
3. Finalize the line items on each child object in the plan to roll up the expenses. You can now see how much funding the programs and projects need for successful completion.

Effects of deleting links between plans, programs, and projects

In general, removing the link between a parent object and a child object affects the budgets of both objects in the following ways.

- The parent object no longer allocates money to the child object.
- The expenses for the child no longer count against the parent.
- Funds allocated from the parent remain with the child, but have no source. In other words, the child object still accounts for having the money, but the parent object no longer accounts for giving it.

For example, removing the link between a program and a plan affects the budgets of both objects in the following ways.

- The plan no longer allocates money to the program, so the budget for the corresponding program area is decreased accordingly.
- The expenses for the program no longer count against the plan.
- The program still accounts for funds formerly allocated from the plan, so these funds either need to be removed from the program or funded from another source.



Budgets and accounts

In IBM Marketing Operations, budgets and accounts do not have predetermined relationships. Accounts represent the financial element of an organization, while budgets represent the marketing side. Typically the financial element is not granular enough to capture marketing needs in detail. Budgets make up for this lack. A plan, program, or project can be funded from one or more accounts.

For more information about accounts in IBM Marketing Operations, see Chapter 15, “About accounts,” on page 167.

Budget views

IBM Marketing Operations offers two budget views on all budget tabs.

- Total view () is the default. It displays the total amount budgeted and remaining for forecasted, committed, and actual spending, for all fiscal years that the plan, program, or project existed.
- Detailed view () displays budget information for a specified fiscal year broken down by week, month, or quarter.

Across all of the budget tabs for a plan, its child programs, and their child projects, the totals reflect the total amounts for the life of the plan, program, or project. Therefore, the individual rows and columns in edit screens or the detailed view often do not add up to match the values displayed in the total view. This difference is not an error, but reflects the fact that the data, other than the total, corresponds to values for the currently selected fiscal year.

Note: The views on the budget tab depend on the in-use budget allocation version. By default, you navigate to the budget tab of an object for the first time after login, the in-use version of the current fiscal year displays. The total view shows totals for the in-use version for all previous fiscal years and the current in-use budget allocation version. Detailed view also shows information based on the in-use budget version. For more information, see “Budget allocation versions” on page 151.

The Plan Budget tab

From top to bottom, the Plan Budget tab contains the following tables.

- The Plan Budget Summary table provides an overview of the entire budget.
- The Program Cost Summary table shows allocations to child programs.

Plan Budget Summary table

The Plan Budget Summary table is the topmost table on the budget tab of a plan and summarizes funds that you expect to spend in the plan and the programs it contains. The Plan Budget Summary table monitors finances for the entire plan.

- **Plan Budget** is the total budgeted amount.
In total view, the Plan Budget Summary table displays the total budget for the plan’s entire life; detailed view separates it into increments of the currently-selected fiscal year. Change the fiscal year on the Summary tab if necessary.
- **Program Allocations** shows the total budget of all the plan's programs.

- The **Forecast Total** is all predicted spending across the plan.
- The **Committed Total** is all the money spoken for in the plan up to this point. Even though the money is not yet spent, the committed total represents costs that will occur even if the plan is terminated.
- The **Actual Total** is all funds spent so far on the plan. IBM Marketing Operations calculates the actual amount spent through the invoice functions. This total is likely to be much lower than the others due to time lags between planning expenses and actually paying bills.

The Remaining column

In each row, the **Remaining** column is the difference between the Plan Budget and the entry in the **Amount** column. For example, IBM Marketing Operations calculates the forecast remainder by subtracting the forecast total from the Plan Budget.

Although calculated by a simple subtraction, the **Remaining** column provides high-level information and potential warnings about the financial state of the plan's budget. The remaining column summarizes how much money has already been allocated or planned for use, how much remains for additional spending, and how much you could recover if you canceled unfinished efforts.

- In the **Program Allocations** row, the **Remaining** column represents additional money the plan owner has left to distribute to existing or not-yet-created programs. If the total allocation of funds to child programs exceeds the total budget of the plan, the remainder is negative and the plan will need more funding to successfully complete the programs.
- In the **Forecast Total** row, the **Remaining** column indicates the amount of money the plan owner will have left if current forecasts are accurate. If the figure is negative, the plan will need more funding to succeed at expected costs.
- In the **Committed Total** row, the **Remaining** column indicates how much money the plan owner will have left if the plan and all its programs and projects are canceled. The plan owner needs to understand how much money can be returned if associated programs do not continue to execute, in the event that budgets are tightened.
- In the **Actual Total** row, the **Remaining** column represents the real balance that the plan owner has at the current time. This figure can be useful for monitoring cash flows, though it is likely lower than the forecast total or committed total remainder due to the time lags between planning expenses and paying bills.

Note: This topic specifically references the Plan Budget summary table. Programs and projects also have a Budget Summary table with the same layout and information about their respective Budget tabs.

Program Costs table

The Program Costs table is underneath the Plan Budget Summary table on the Budget tab for plans. The table rows list programs by area; the columns provide figures for Actual, Committed, Forecast, and Allocated spending.

On the plan Budget tab, the program costs table shows only programs, without breaking them down into their respective projects. However, even though you do not see the project expenses directly, IBM Marketing Operations accounts for them through their parent programs.

The program name in each row of the Program Costs table provides a direct link to the budget for that program. This link is helpful because the program Budget tab provides a breakdown of its child-project expenses in the corresponding Project Costs table.

Note: This topic specifically references the Program Costs table on the Budget tab for a plan. The Budget tabs for programs and projects also have a Costs table that details expenses for their respective child-objects with the same layout and information.

The Program Budget tab

The Program Budget tab is similar to the Plan Budget tab, but one level down the plan, program, project hierarchy. While the Plan Budget tab breaks down into information about linked programs, the Program Budget tab breaks down to information about linked projects. The Program Budget tab also contains an additional table about the program's line items.

After budget ancestors, from top to bottom, the program Budget tab contains the following tables.

- The Program Budget Summary table provides an overview of the entire budget.
- The Project Cost Summary table shows allocations to child projects.
- The Line Item Details table organizes line items for the program.

Navigating with budget ancestors

At the top of the Budget tab for projects and programs, **Parent Budget(s)** shows a hierarchical view of the current object, its parent, and all ancestors back to its root plan. The name and ID code displays for each object as well as direct links to each of the ancestor objects.

Use these links for easy navigation through the plan, program, project budget hierarchy.

Program Budget Summary table

The Program Budget Summary table is the topmost table on the Budget tab of a program, and summarizes funds that you expect to spend in the program and the projects it contains. The Program Budget Summary table monitors finances for the entire program.

In total view, the Program Budget Summary table displays the total budget for the program's entire life; detailed view separates budget information into increments for the currently-selected fiscal year and up to two previous fiscal years.

The Program Budget Summary table contains the same data as the Plan Budget Summary table, except on the program level. For more information about the table's fields and their meanings, see "Plan Budget Summary table" on page 148.

Project Costs table



The Project Costs table, found on the Program Budget tab, lists total costs associated with all of the projects that this program contains. It has the same layout and information as the Program Costs table on the Plan Budget tab.

For more information, see "Program Costs table" on page 149.

Program Line Item Details table

The Program Line Item Details table is the third table found on the Program Budget tab. It summarizes line item information entered for individual expenses on the program level; these expenses belong to the program itself, not the projects linked to it. This table works with invoices to track spending. For more information about line items and invoices, see “About rolling up line items” on page 161.

If the program requires approvals for line items, the Line Item Details table shows the approval status for each line item in the second column.

-  = In Progress
-  = On Hold
-  = Canceled
-  = Completed

Note: This topic specifically refers to the Program Line Item Details table on the Program Budget tab. Projects also have a Line Item Details table with the same information and layout on their Budget tabs.

The Project Budget tab

The Project Budget tab has the same tables, layout, and information as the Program Budget tab, except down one level in the plan, program, project, subproject hierarchy. While the Program Budget tab breaks down into information about linked projects, the Project Budget tab breaks down to information about subprojects if the project has any.

After budget ancestors, from top to bottom, the Project Budget tab contains the following tables.


- The Project Budget Summary table provides an overview of the entire budget.
- The Subproject Cost Summary table shows allocations to child projects.
- The Project Line Item Details table organizes line items for the project.

For more information, see “Plan Budget Summary table” on page 148 for the Project Budget Summary table, “Program Costs table” on page 149 for the Subproject Cost Summary table, and “Program Line Item Details table” for the Project Line Item Details table.

Budget allocation versions


Budget allocation versions are a powerful tool for financial planning. Budget allocation versions allow you to explore different financial possibilities without overwriting the previous budget. You can create multiple budget versions with different allocations for expenses, compare versions, and then chose the most appropriate one for the plan, program, or project.



Use the options on the budget version drop-down list () to create, delete, and compare potential budgets until you find the best fit for your plan, program,

or project. Then activate or finalize that version to mark it "in-use;" IBM Marketing Operations rolls the allocations from the in-use version up to linked parent objects and down to linked child objects.



The budget version drop-down list () also lists all budget versions. The name of the budget version you are currently looking at is shown in red. The name of the in-use version is marked with a "^."

Note: Budget versions account for different allocations, not different line items. Adding a line item to one budget version adds the item to all versions. However, you can use budget versions to determine how much to allocate to the line items. Budget versions allow you to explore the effects of spending different amounts of money on the same expenses. For more information, see "Program Line Item Details table" on page 151 and "To add or edit line items" on page 155.


Note: To view and compare budget versions, you must have the security permission "view budget tab." To create, edit, delete, update, and mark in-use, you must have the security permissions "edit budget tab."

To create budget versions

Create different budget versions for financial forecasting of different scenarios. Then you can choose the most appropriate budget by comparing them.

1. Navigate to the budget tab of the plan, program, or project.



2. Click the versions icon (). Choose the new version option most helpful to you from the drop-down list.

- **Create a new version** creates a blank allocation version and opens it in edit mode.
- **Copy Current Version** copies allocation data from the version currently being viewed and opens it in edit mode. This method is helpful for making subtle changes between versions.
- **Copy Version From Different FY** opens a dialog box on which you can choose to copy any version from any fiscal year and opens the copy in edit mode. This tool is useful if the budget you are working with closely resembles the one for a prior fiscal year; for instance, if the budget decreased significantly from year A to years B and C, but the budget for year D resembles year A, you can copy that budget and use it as a starting point.

3. Give the new version a unique, descriptive name.

IBM Marketing Operations's default names are of the form "version #x," where x is one greater than the number of versions currently existing in that fiscal year. Version names must be unique within each financial year, but you can have the same name in different fiscal years.

4. Enter or edit allocations for the new budget version.

5. Click **Save and Finish** to return to the Budget tab. You can now access the new version from the versions drop-down list.

To delete versions

You cannot delete the currently selected version or in-use version. If you want to delete the in-use version, you must first mark a different version as in-use.

Note: To create, edit, delete, update, and mark in-use, you must have the security permissions "edit budget tab."

1. Navigate to a version other than the one you want to delete by clicking its



name in the version () drop-down list. The name of the currently selected version appears in red on the drop-down list.

2. Select the check box next to the names of one or more versions to delete.
3. Without leaving the drop-down list, click **Delete Selected Version(s)**.
4. When prompted, click **OK** to confirm the deletion.

To compare versions

This tool allows you to view the allocations for up to six budget versions on the same screen and is useful when selecting the most appropriate one.

1. Navigate to the version to which you want to compare others by clicking its



name in the versions () drop-down list. The name of the currently selected version appears in red on the drop-down list.

2. Select the check box next to the names of up to five other versions in the drop-down list.
3. Without leaving the drop-down, click **Compare Current with Selected**.

The comparison screen appears. Colors differentiate each budget version. Red arrows indicate whether the allocations for each area are higher or lower than the current budget. While comparing, you can show and hide versions using + and - to isolate specific versions in the comparison.

4. After you finish comparing, click **End Comparison** in the yellow box at the top of the screen.

To mark a version in-use

IBM Marketing Operations considers the active or finalized budget version of a plan, program, or project "in-use" and rolls this version down to linked child objects and up to linked parent objects. When working with budget versions, please note the following.

- Only one version can be active or finalized at a time.
- The default budget version is active and in-use for new plans, programs, and projects.
- After you finalize a version, you can no longer activate versions.
- After you finalize a version, you can finalize a different version, but you cannot remove the finalized status from all versions. After you finalize one version, one version from that fiscal year must always have the finalized state.

Note: If upgrading to IBM Marketing Operations 8.5.0, the previously existing budget is automatically finalized.

1. Navigate to the version you want to activate or finalize by clicking its name in



the versions () drop-down list. The name of the currently selected version appears in red on the drop-down list.

2. Click **Make Current Version Active** or **Finalize Current Version** from the versions drop-down list.

The version is marked active or finalized and is in-use. On the drop-down list, the in-use version is marked with "^" before the name.

Note: To create, edit, delete, update, and mark in-use, you must have the security permissions "edit budget tab."

To allocate funds


A parent plan, program, or project allocates funds down to individual child programs and projects contained within it. Plans fund programs, programs fund projects, and projects fund subprojects.

Add and edit allocations on the parent's Budget tab. Begin by allocating money to a plan, then allocate down the program, project, subproject hierarchy using the same procedure.

Note: In this task, parent object refers to the plan, program, or project from which you are allocating funds. Child object indicates the next level down in the plan, program, project, subproject hierarchy. For instance, if allocating from a program to a project, the program is the parent object and the project is the child object.

1. Navigate to the Budget tab for the parent object from which you want to allocate funds.
2. Select the allocation version you want to edit or create an allocation version.



3. Click the **Allocations** icon () to modify allocations to the child project. The Cost Summary table appears opens in edit mode.
 - If you are working below the plan level, the first row of data is bold and controls allocations for the objects line items. See "To add or edit line items" on page 155.
 - The table lists the child objects in normal font below the parent's line items.
4. Add or edit allocations by clicking cells in the table and entering the appropriate value by week, month, or quarter.
 - For reference, the topmost row shows total funding for the parent object from which you are allocating funds for each week, month, or quarter.
 - The Remaining column shows the amount of money left in the parent object's budget with the current allocations.
5. Click **Save and Finish** to save your work and return to the Budget tab.

To continue funding, click a child object in the Total Costs table to navigate to its Budget tab. Repeat the process by allocating funds from the new object to its child objects.

Note: If you need to link additional parent and child objects, do so on the Summary tab and then return to the Budget tab to allocate funds to the new child objects.

To allocate funds for stand-alone programs and projects


A stand-alone program or project is not linked to a parent plan. When you create a budget for a stand-alone program, the budget reflects costs associated with the program itself and any costs associated with any projects linked to the program.

Note: For stand-alone programs, the fiscal year is assumed to be the current year defined by the system clock.

1. Navigate to the Budget tab for the stand-alone program or project.
2. Allocate money directly in the **total budget** row at the top of the table.

Note: This row is only editable for stand-alone programs and projects; linked programs and projects have a read-only total budget row because they receive funding from parent objects.



3. Click **line items** () and add line items as needed. For more information, see “To add or edit line items.”
4. Enter a budget amount for each week, month, or quarter.
5. Click **Save and Finish** to return to the Budget tab.


The system populates total budget row at the top of table with the information you entered.

To add or edit line items

Line items outline the forecasted and committed costs for a program, project, or subproject so a manager knows whether the allocated or planned budget is sufficient. Additionally, forecasted and committed amounts, once finalized, roll up to the accounts affected, providing visibility into budget and cash flow needs for higher level objects.

1. Navigate to the program, project, or subproject Budget tab.



2. Click the **Line Items** icon (). The Edit Program/Project/Sub-Project Line Items page appears.
3. To add a line item, double-click an empty cell in the **Item Description** column. Enter an item name or description.

Note: The # field populates automatically after you enter an item in the **Item Description** field.

To edit a line item, double-click it in the **Item Description** column and make changes as necessary.

4. If the line items table contains custom text fields, enter appropriate values.
5. In the **Expenditure Date** field, enter the anticipated date that funds will be spent. Click the arrow to launch a menu from which you can select a date. You must enter an expenditure date for the budget to be finalized.

Note: To track a certain expense on different dates, you should use separate line items. For example, to track the expense for Printing in May, June, and July, enter three separate line items, one for each month.

6. Select a source account from the **Source Account** drop-down menu. The funds for this program, project, or subproject are posted against the account you choose when the line items are finalized.
7. Select a cost category from the **Cost Category** drop-down menu.
8. In the **Committed Amount** field, enter any committed funds related to the line item. Leave this field blank if no portion of the line item is committed.
9. In the **Forecast Amount** field, enter the amount that you predict or forecast the line item will cost.

10. Click **Save and Finish** to save your changes and go to the object's Summary tab.

IBM Marketing Operations totals the line items, but they are not rolled into the parent object's budget until you finalize them. Finalizing line items can require approval. For more information, see "To finalize budget line items."

Note: Adding line items to one budget version adds them to all budget versions. For more information, see "Budget allocation versions" on page 151.

To finalize budget line items

When you finalize budget line items for projects or programs that are linked to a parent program or plan, the forecasted and committed line item amounts roll up to the parent program or plan.

If the project or program requires line item approval, finalizing the line items triggers the approval process. When a line item requires approval, it rolls up to the parent program or plan only after completing the approval process. The first column of the Line Item Details table shows the approval status; for more information, see "Program Line Item Details table" on page 151.

Note: In order to finalize line items, they must have an assigned expenditure date.

Note: Finalizing line items and finalizing budget allocation versions are unrelated. Finalize line items to roll them up to all budget versions, then activate or finalize the most appropriate budget version to use for your plan, program, or project. For more information, see "Budget allocation versions" on page 151.

1. Add budget line items. For more information, see "To add or edit line items" on page 155.

Finalize and **Discard Changes** links appear on the budget tab.

2. Navigate to the object's Budget tab and click the **Finalize** link.
 - If the program or project does not require line item approval or if the line item is automatically approved because of rules your administrator established in the object's template, IBM Marketing Operations prompts you to confirm that you want to finalize your changes.
 - If any or all line items require approval, IBM Marketing Operations prompts you to send the approval; for more information on the approval process, see "Approvals" on page 7. Line items that require approval are rolled up to the parent object only after the approval process is completed.
3. Click **OK** to finalize your changes or send the approval. Click **Cancel** if you do not want to finalize changes or send approvals.

After the budget line item changes are finalized, and approved if required, they roll up to their parent objects.

To discard budget line items

Instead of finalizing budget line item edits, you can discard all changes made since the last time you finalized budget line items.

1. Add budget line items. For more information, see "To add or edit line items" on page 155.

Finalize and **Discard Changes** links appear on the Budget tab.

2. Click **Discard Changes**.

IBM Marketing Operations prompts you to confirm that you want to discard your changes.

3. Click **OK**.

IBM Marketing Operations discards the changes that you made to budget line items since the last time you finalized them and restores the previous finalized version of the budget line items. Marketing Operations does not trigger the approval process.

Budget line item approvals

Depending on rule criteria your administrator establishes in project and program templates, budget line items can be automatically approved or sent through IBM Marketing Operations's approval process. For example, your administrator might define rules based on the line item's expenditure date, source account, or cost category. Your administrator can also select default approvers for each rule, such as object or account owners. If your administrator has written these rules in your organization's project and program templates, then budget line items must be approved, either automatically using the rules or by the assigned approvers, before they are finalized and roll up to the parent program or plan. However, if your projects and programs use templates that do not contain budget line item approval rules, the functionality works as it did before IBM Marketing Operations 8.5.0 and line items can be finalized directly on the object's budget tab without going through an approval process in Marketing Operations.

Approval status for line items can be seen on the object's budget tab in the second column of the Line Item Details table.

-  = In Progress
-  = On Hold
-  = Canceled
-  = Completed

After an approval is sent, you may or may not be able to edit the line item.

- If the approval status is canceled or completed, the approval can be edited. Finalizing any changes to the updated line item may trigger a new approval process.
- When the approval status is in progress, the approval cannot be edited. You must cancel the approval first; see “Canceling an approval process” on page 98.

Chapter 14. Invoices

IBM Marketing Operations allows you to view all changes made to an invoice, and records the time and date, as well as the type of changes made to the invoice.


An invoice typically bills for multiple items or services, and itemizes them. It is important to be able to capture each item or service separately, because different line items can be attributed to different projects or programs as well as to different accounts.

For example, one invoice contains two line items, the first associated with a project called Trade show, and the other associated with a program called Database Marketing Campaign. One line item can be associated with Account 1, and the other, with Account 2.

After you create an invoice, you can do any of the following actions from its Summary tab.

- Edit the summary information of the invoice.
- Add or edit line items for the invoice.
- Delete the invoice.
- Change the status of the invoice.
- Print the Invoice summary page.

To add an invoice

1. Select **Financials > Invoices**. The My Active Invoices page appears by default.
2. Click the **Add Invoice** icon ().
3. Enter information in the fields on the New Invoice page. For more information, see “New Invoice page” on page 160.
4. To add line items, click **Save and Edit Line Items**. For more information, see “To add or edit invoice line items” on page 162.

Note: You must add line items to move the invoice out of **Draft** state, mark it as **Paid**, and roll up the expenses.

5. **Save** the invoice.


New Invoice page

This table describes the fields available on the New Invoice page.

Table 40. Fields on the New Invoice page

Field	Description
Invoice #	<p>An invoice number can be one of the following.</p> <ul style="list-style-type: none">• A number provided to you by an external vendor or supplier in a paper invoice.• An original number based on your company's code schema for internal invoices or expense reports. <p>Note: Invoice numbers are not required to be unique across all the invoices in IBM Marketing Operations, but they must be unique among all invoices for a particular vendor.</p>
Vendor Name	<p>Select a vendor from the drop-down list.</p> <p>IBM Marketing Operations administrators populate this list. If you cannot find a vendor on the list, ask your administrator.</p>
Owner(s)	<p>Click Add/Remove Members to add or remove owners. By default, this field contains the name of the invoice creator.</p>
Security Policy	<p>Select the invoice security policy from the drop-down list.</p> <p>The default value is Global.</p>
Purchase Order #	<p>Enter the purchase order number associated with the work now being invoiced. Typically, this value is an internal company number. In some cases, the purchase order number is used to track preapproved invoices.</p>
Invoice Date	<p>Enter the billing date of the invoice or select it on the calendar.</p>
Due Date	<p>Enter the date by which the vendor expects payment or select it on the calendar.</p>
Other Notes	<p>Enter any helpful notes or comments related to the invoice.</p>
Payment Terms	<p>Enter any notes regarding payment.</p>

To edit an invoice

1. Select **Financials > Invoices**.
2. Select the invoice you want to edit. Depending on the status and owner of the invoice, it is on the My Active Invoices page or the All Invoices page.
3. If your invoice is not in **Draft** state, click the status drop-down () and select **Re-draft**.
4. Edit the fields on the Invoice page as needed. For more information, see "New Invoice page."
5. Add or edit line items. For more information, see "To add or edit invoice line items" on page 162.

Note: You must add line items to move the invoice out of **Draft** state, mark it as **Paid**, and roll up the expenses.

6. **Save** the invoice.

About rolling up line items

When you change the status of an invoice to **Paid**, the invoice line item amount rolls up to the program or project budget as well as to the account with which you associated it. Remember that you can attribute the different line items of one invoice to different projects or programs and to different accounts. Line items from multiple invoices can roll up to the same program or project.

There are two types of rollups.

- **Scheduled** rollups occur on a scheduled basis.
- **Immediate** rollups occur when you change the status of an invoice to **Paid**.

Note: Depending on the line item approval rules set by your IBM Marketing Operations administrator, line items can require an approval process before the whole invoice can be marked Payable, a prerequisite to changing the status of the invoice to **Paid** and rolling up line items. For more information, see “Invoice Line Item Approvals.”

Invoice Line Item Approvals

Depending on rule criteria your administrator establishes in invoice templates, line items can be automatically approved or sent through the IBM Marketing Operations approval process. For example, your administrator might define rules based on the line item's cost per unit, total quantity, or total cost. If your administrator has written rules in your organization's invoice templates, then all invoice line items must be approved, either automatically using rules or by the assigned approvers, before the invoice is marked as **Payable**. After the invoice is moved from **Payable** to **Paid**, the invoice rolls up to assigned accounts and the parent program or project's budget. However, if your invoice templates do not contain line item approval rules, the functionality works as it did before IBM Marketing Operations 8.5.0 and the invoice can be marked as **Payable** without going through an approval process in Marketing Operations.

Approval status for line items can be seen on the invoice summary page.

-  = In Progress
-  = On Hold
-  = Canceled
-  = Completed

Rollups to the source program or project

When you add an invoice line item, you link it to a program or project through the Source Project or Program field. After the invoice is paid, IBM Marketing Operations includes the invoice line item amount in the program or project budget. Depending on whether the invoice line item is a negative or positive number, IBM Marketing Operations adds or subtracts the amount on the Actual Total field on the source project or program Budget tab.

For example, if an invoice contains a line item of \$75 that you associate with Project 1, the Actual Total field on the Project 1 Budget tab increases by \$75 after the invoice is paid, signifying the amount of funds used in the budget.

If an invoice contains a line item of -\$75 (indicating a credit) associated with Project 1, the Actual Total field on the Project 1 Budget tab decreases by \$75 after the invoice is paid. If the Actual Total previously showed \$200 (the total from all Paid invoices containing line items linked to Project 1), the Actual Total column, once the credit is rolls up to Project 1, shows \$125, signifying the funds used so far for Project 1.

Note: Depending on how your administrator configures your invoice templates, marking the invoice Payable can trigger an approval process.

Rollups to the source account

When you add an invoice line item, you can also designate an account to which you linked the invoice line item. After the invoice is paid, the invoice line item amount rolls up to, or figures into, the account. The invoice line item amount displays on the Actual row on the account Summary tab. IBM Marketing Operations places the amount in a date column that corresponds to the invoice paid date.


Note: Depending on how your administrator configures your invoice templates, marking the invoice Payable can trigger an approval process.





To add or edit invoice line items

You must add line items to eventually mark the invoice **Payable** and roll expenses up to accounts and budgets.

1. Navigate to the invoice by selecting **Financials > Invoices**.
2. Click the invoice number of the invoice to which you want to add line items.



3. Click the **Line Items** icon ().
4. Supply information for the fields on the Edit Invoice Line Items page. Use the following tools to help you add, edit, move, or delete line items.

- Click the **Add Row** icon () to insert a new line item.
- Use the **Move Selected Row Up** icon  or **Move Selected Row Down** icon  to change the order in which the line items appear.
- Click a line item and use the **Delete the Selected Row** icon  to delete a line item.

5. **Save** your changes.

After line items are saved, the system calculates the Invoice Total of all line items.

Field descriptions for the Edit Invoice Line Items page

This table lists the fields available on the Edit Invoice Line Items page.

Table 41. Fields on the Edit Invoice Line Items page

Field	Description
Item Description	Enter a description for the line item. Note: The # field populates automatically when you create a line item.

Table 41. Fields on the Edit Invoice Line Items page (continued)

Field	Description
Source Project or Program	<p>Click the drop-down list to search for a project or program with which the invoice line item is associated.</p> <p>In the Select Item window, do the following.</p> <ol style="list-style-type: none"> 1. Select either Project or Program under the Find by name or code field to find a particular type of item. 2. Enter a search string to search for a specific project or program in the Find by name or code field. Or, leave blank and click Find to search for all projects or programs. 3. Select a project or program from the Search Results list. 4. Click Select to close the dialog box and add the selected project or program to the line item. <p>Note: This field is required in order to be able to move an invoice into the Payable state. Once in the Paid state, the invoice amount rolls up to the Actual Total field on the source project or program Budget tab.</p>
Source Account	<p>Click the drop-down list to select from all enabled accounts. The funds for this item come from the account you choose.</p> <p>Note: Once in the Paid state, the invoice amount rolls up to the source account's summary information.</p>
Cost Category	Click the drop-down list to select an enabled cost category.
Cost per Unit	Enter the amount of the line item.
Qty	Enter the line item quantity.
Cost	Displays the total cost for the line item. The system calculates this field after you enter values in both the Cost per Unit and Qty fields.

Invoice status types

IBM Marketing Operations invoices can be in the **Draft**, **Canceled**, **Payable**, **Under Review**, or **Paid** state.

Table 42. Invoice statuses


Status	Description
Draft	<p>Indicates that the invoice is still being worked on; an invoice is in Draft state when it is first created. To move an invoice out of Draft state, you must add line items.</p> <p>If necessary, you can place an invoice in Draft state by choosing Re-draft Invoice from the Status drop-down menu.</p>
Canceled	Canceling an invoice is not the same as deleting an invoice. When you cancel an invoice, it is inactive, yet you retain the ability to view it in IBM Marketing Operations. Deleting an invoice removes it from the system. When you move an invoice to this state, Marketing Operations sends an alert to the invoice owner(s).
Under Review	<p>Approvers are in the process of examining the invoice's line items.</p> <p>Note: This is an internal status that occurs after marking an invoice Payable.</p>

Table 42. Invoice statuses (continued)

Status	Description
Payable	<p>Items on the invoice have been reviewed, and the invoice is ready to be sent to Accounts Payable. When you move an invoice to this state, the owner of the account to which the invoice belongs receives a notification.</p> <p>Changing an invoice's state to Payable triggers the IBM Marketing Operations approval process if your organization is using this functionality. The invoice may enter the Under Review status while waiting for approvals. For more information, see "Invoice Line Item Approvals" on page 161.</p>
Paid	The invoice has been paid. When you move an invoice to this status, the system triggers invoice rollup. This status is not available until the approval process is complete.


When changing an invoice from one state to another, a dialog box appears in which you are able to enter comments regarding the status change. IBM Marketing Operations records these comments in the invoice revision history. When changing an invoice to the **Paid** status, you are able to enter the date on which the invoice was marked **Paid**.

To change the status of an invoice

1. Navigate to the Summary tab for the invoice of which you want to change the status.
2. Click the **Status** icon () and select a status. A dialog box appears in which you can add comments.
If you select **Canceled** or **Paid**, you cannot change the status of the invoice at a later time.
3. Click **Continue** to close the dialog box and apply the new status.


To delete an invoice

Owners and users with the appropriate privileges can delete an invoice that is in the **Draft** state. You cannot delete invoices in the **Canceled**, **Payable**, or **Paid** state.

1. Navigate to the invoice by selecting **Financials > Invoices**.
2. Click the invoice number of the invoice you want to delete.
3. Click the **Delete this Item** icon ().
IBM Marketing Operations asks whether you would like to delete the invoice.
4. Click **OK**.

To print the invoice summary

You can print all information found on your invoice summary page, or select certain columns of information to print.

1. Navigate to the summary page of the invoice you want to print.
2. Click the **Print** icon (). A window appears with a list of columns from which you can choose to print. By default, all columns are selected.

3. Clear any columns you do not want to print.
4. By default, the **Shrink to Fit Landscape Page Width** box is checked. Clear to print the columns at a size of 100%.
Selecting this option shrinks the page to fit all selected columns onto a single page. If you use this feature, change your printing preference (for this print job) to landscape.
5. Click **Print Selected Columns**. A preview window appears, showing you what the printed information will look like.
6. Click **Print**. The Print dialog appears.
7. Select your printer and printer options (choose landscape mode for best results), and click **Print** to print the selected columns.
8. In the preview window, click **Close** to close the print preview.

Chapter 15. About accounts

A top-level IBM Marketing Operations account represents a specific corporate general ledger account established by a finance department for the purpose of tracking and controlling expenditures and cash flows for a certain area of the business. Accounts may have subaccounts.

Key capabilities related to accounts include the following.

- Defining a hierarchy of accounts and subaccounts.
- Funding or allocating money to the account, at the beginning of a fiscal period, typically a year, revisited weekly, monthly, or quarterly.
- Tracking estimated and actual withdrawals from those accounts, by time period.

You must have administrative privileges to add new accounts to IBM Marketing Operations.

About the accounts summary page

When you select **Financials > Accounts**, the account Summary tab appears. Use the account Summary tab to perform the following tasks.

- View Basic account information.
- Review the Account summary table. This is a view-only table which reflects the budgeted, forecasted, committed, and actual amounts for that account, as well as remainder amounts.
- Select the fiscal year to view.

Account summary table

The Account Summary table contains the following information.

Table 43. Fields in the Account Summary table

Field	Description
Budget	Amounts that the account administrator entered to fund the account. For more information about creating and editing accounts, see the <i>IBM Marketing Operations Administrator's Guide</i> .
Forecast	The sum of all forecasted values entered into the Forecast Amount field of finalized project and program budget line items for which this account is the source account (as specified in the budget line item Source Account field). These sums appear for a particular month on the table according to when you finalized the line items. For example, if you finalize a forecasted line item amount in May, that amount appears in the May column of the Forecast row.
Available	The difference between values in the Budget and Forecast rows.
Committed	The sum of all committed values entered into the Committed Amount field of finalized project and program budget line items for which this account is the source account (as specified in the budget line item Source Account field). These sums appear for a particular month on the table according to when you finalized the line items. For example, if you finalize a committed line item amount in May, that amount appears in the May column of the Committed row.

Table 43. Fields in the Account Summary table (continued)

Field	Description
Uncommitted	The difference between values in the Budget and Committed rows
Actual	<p>The sum of all invoice line items for which this account is the source account (as specified in the invoice line item Source Account field). These invoice line items roll up to this field only when the invoice to which they belong is in the Paid state. These sums appear for a particular month in the table according to when you marked the invoice line items Paid.</p> <p>For example, if you mark an invoice line item amount Paid in May, that amount appears in the May column of the Actual row.</p>
Remaining	The difference between values in the Budget and Actual rows.

About selecting the fiscal year to view

Because accounts can span multiple fiscal years, you can select a year in which to view the account information.

From the **Account Summary** drop-down list, you can choose from the current year, and the following two years. Additionally, if budget or invoice line items draw from the account in other years, those years also appear in the list.

A Marketing Operations administrator configures your fiscal year by setting the **Settings > Configuration > Marketing Operations > umoConfiguration > firstMonthInFiscalYear** parameter to the month that you would like your account fiscal year to begin. For more information, see the *IBM Marketing Operations Administrator's Guide*.

Chapter 16. Metrics

Metrics are used for management reports and analysis. You view them on the **Tracking** tab for plans, programs, and projects.

Use IBM Marketing Operations metrics for the following calculations.

- Automatically calculate internal measures (such as budgets and resource consumption).
- Automatically tabulate program results, such as the following.
 - Measure consistently across activities.
 - Aggregate results across programs.
- Automatically link key metrics (such as number of contacts and responses) from campaigns back to project metrics.
- Build a marketing memory.

The metrics that are available in a plan, program, or project depend on the template you used to create it.

To set up program or project metrics

This procedure describes setting up metrics for a program; setting up metrics for a project is similar.

1. Add a program, using the wizard.

While using the wizard, the tracking page displays the template tracking information for your program. You cannot change the type of information that is captured on this page. You can enter target values for the categories that exist on the Tracking page. Depending on how your administrator set up your program templates, the number of columns on this page can vary.

2. Enter the target value you want to achieve by executing this program in the **Target** column. For example, if the program is a product launch, you may want to achieve 100 contacts, or get 1 hour of media coverage.
3. If other columns such as **Optimistic** or **Pessimistic** appear, you can enter corresponding values. For example, if your target value for a **Total Contacts** category was 100, a **Pessimistic** value for **Total Contacts** might be 50.
4. Click **Next** to continue the program wizard.


When you are finished creating the program, the metrics you entered appear on the **Tracking** tab for that program.

To edit program or project metrics

When you created your program or project using the wizard, you entered various metrics on the Tracking page. To edit the values you entered, follow the procedure below.

If the program is linked to a plan, or the project is linked to a program, you must finalize the edits you made before they will roll up to the parent object.

This procedure describes editing metrics for a program; editing metrics for a project is similar.

1. Navigate to the **Tracking** tab of the program whose metrics you would like to edit.
2. Click the **Program Metrics** icon ().
The Edit Program Tracking page appears.
3. Edit the values you would like to change.
4. Click **Save and Finish**.

The **Tracking** tab for the program displays. The updated metrics appear in the Program Metrics table.


Entering planned values for rollup metrics

You can incorporate your goals and performance expectations for your marketing campaign into IBM Marketing Operations by entering planned values for metrics that roll up. The planned values display side-by-side with the actual values at the end of the campaign.

When entering planned values for metrics, you work top-down. That is, you open a plan and specify planned values for the metrics for each of its child programs. You then open a program and add planned values for the metrics for each of its child projects.

To enter planned values for metrics that roll up

1. Open a plan or program that has child programs or projects with rollup metrics.
2. Click the **Tracking** tab.

3. Click the **Planned Rollups** icon ().
The Edit Planned Rollup Values page displays.
4. Enter the planned values for the metrics.
5. Click **Save and Finish**.

The values you entered display in the Planned column of the Program Metrics or Project Metrics table on the Tracking tab.

Views for rollup metrics

The following views are available for rollup metrics.

Table 44. Views for rollup metrics

View mode	Description
High-Level Summary	Displays a summarized view of all rolled up metric dimensions. The High-Level Summary is the default view.
Breakout of Planned	Displays details of planned values for rollup metrics.
Breakout of Planned and Rollup Target(s)	Displays details of planned and target values for rollup metrics

Table 44. Views for rollup metrics (continued)

View mode	Description
Breakout of Planned, Rollup Target(s), and Rollup Actual(s)	Displays details of planned, target, and actual values for rollup metrics.
Breakout of All Rollups	Displays details of target, actual, and any other custom values for rollup metrics used in the plan or program.



To change the view for rollup metrics, click the **View** icon () and select a view from the drop-down menu.

To import metrics from a campaign

1. Navigate to the **Tracking** tab of the campaign project whose metrics you want to import.
2. Click **Import Values**.
The IBM Campaign metrics are displayed on the **Import Values** page. The information imported depends on the metrics the template creator defined. IBM Marketing Operations captures and displays the last date of import, shown as **External Sources Last Refreshed Date Time** at the bottom of the table.
3. Click **Save and Finish** to update the metrics on the Tracking tab and close the **Import Values** page.

If necessary, manually update metrics that you imported.

Finalizing and rolling up metrics

When a project is linked to a program or a program is linked to a plan, you can roll up metric values from the child object to the parent object. Template creators define how metrics roll up to the parent object. For more information about defining rollup behavior, see the *IBM Marketing Operations Administrator's Guide*.

Note: Planned values for metrics do not roll up. Those values are for top-down planning.

Metric values do not roll up automatically. IBM Marketing Operations rolls up the values when you indicate that they are final. Each time you import new metric values or edit metric values, you must indicate that the values are final in order for them to roll up.

Whenever there are metric values that have not been rolled up, a **Finalize** link displays on the Tracking tab of the object containing the values.

To finalize and roll up metrics

The **Finalize** link displays only if there are new or changed metric values that have not yet been rolled up.

1. Navigate to the **Tracking** tab of the project or program whose metrics you want to roll up to their parent program or plan.
2. Click the **Finalize** link. (The **Finalize** link appears after metrics are edited or imported.)

3. The metrics that are defined for rollup are rolled up to the parent program or plan and are available on the parent object's **Tracking** tab.

Chapter 17. Reports

By default, IBM Marketing Operations provides a set of predefined reports and dashboard components. The Marketing Operations reports package provides additional example reports and dashboard report components created in IBM Cognos®, a separate business intelligence application.

You access reports from IBM Marketing Operations in the following ways.

- Click the **Analysis** tabs of individual items like projects and marketing objects to see reports that apply to the current item.
- Select the **Analytics > Operational Analytics** to see example Cognos reports that present data from more than one object.

The reports administrator can modify the reports, create new ones, add custom attributes, set up criteria filters, etc.

Report appearance and output

Each Cognos report has a header, a body section, a page footer, and navigational controls. When you run a report, it appears in your browser window in HTML format. For many of the reports, you can select a different format (for example, PDF or XML) to view.


Because the following reports have multiple queries, you cannot export them as CSV or XML files.

- Analytics page report: Project Crosstab Summary Report
- Analysis Tab reports: Project Detailed Expense Breakout, Project Approval and Response, and Budget Summary reports (plan, program, project)

For further details on report output appearance and formats, see the Cognos documentation.

Sending reports in email



Click the **Email** icon () to open a form where you enter email addresses for recipients of the report. After you complete the form and choose OK, the report is sent in the current format chosen for display.

For example, if you choose PDF then email, the report is sent as a PDF attachment to the message.

Enter the following information in the email dialog:

- **Email addresses:** type the address for each recipient, separated by semicolons.
- **Subject:** type subject for the message. Defaults to the name of the report.
- **Body:** type in the message.
- **Attachments:** ensure the **Include the report** box is checked.

Note: Do not select **Include a link to the report**; this option is not currently supported.

Filtering report criteria

The data in reports can be filtered in various ways, depending on the report. You use filters to specify report criteria and parameters for your report.

This section describes how to use the filters and prompts that appear when you run reports.

Search and Select Prompt boxes

This type of filter allows you to perform a search and then choose which results to use for the report. Various reports use these filters for the following types of data:

- Owners
 - Users
 - Vendors
 - Projects; you can search by project name or project code.
1. Type a keyword or words to search, then optionally choose the search option:
 - Starts with any of these keywords (default setting)
 - Starts with the first keyword, and contains all of the remaining keywords
 - Contains any of these keywords
 - Contains all of these keywords

For example, if you are searching for project code **PRO1001**, you can type **PRO** or **1001**, and choose the **Contains any of these keywords** option.

2. Click **Search**.

System returns data matching the search criteria.

3. Use **Insert**, **Remove**, **Select all**, and **Deselect all** to create a list of items for your report. Move the items to appear in your report into the **Choices** list box, as shown here:

The screenshot shows a web-based interface for filtering report data. At the top, there's a section for "Projects (Optional)". Below it, a "Keywords:" label is followed by the instruction "Type one or more keywords separated by spaces." A text input field contains the word "market", and a "Search" button is next to it. Below the search field is a link for "Options".

Below the search section, there are two main list boxes. The left one is titled "Results:" and contains a list of project names with their codes in parentheses: "Brand Marketing (CMP1015)", "Database Marketing Campaign (CMP1016)", "Marketing Collateral Project (MCP1012)", "Marketing Collateral: New Day (MCP1010)", "Misc. Marketing Internal Print Jobs (ORACLE) (MCP1007)", and "Summer Database Marketing Campaign (CMP1017)". Below this list are two buttons: "Insert" with a right-pointing arrow and "Remove" with a left-pointing arrow.

The right list box is titled "Choices:" and contains two items: "001 Tradeshow Demo (TRS1016)" and "Brand Marketing (CMP1015)".

At the bottom of each list box, there are links for "Select all" and "Deselect all".

The report contains data for the owners, users, vendors, or projects that appear in the **Choices** list box.

Dates

To narrow the date range for your report, use the Date filter:

- The **Earliest date** option puts no limitation on the begin dates for the search. Similarly, the **Latest date** option does not limit by end date. The default setting is to have both of these options selected, which means the system does not filter on dates at all.

- Entering actual dates in the **From** or **To** field, or both, limits the report to tasks that contain dates active within the selected range.

Active dates

Date prompts use active dates. All projects (or plans or programs) that are active any time within the date range specified meet the report criteria.

For example, if you specify a date range from January 1, 2005 to March 15, 2005, the following projects will meet the criteria:

- Projects starting on or after January 1, 2005, no matter when they end.
- Projects ending on or before March 15, 2005, no matter when they began.

Projects that do not meet the criteria:

- Projects ending before January 1, 2005
- Projects starting after March 15, 2005

Status and Type

These filters limit the report to contain only tasks with selected status or type (determined based upon the template used to create the project). For these filters, select as many choices as you like.

Note: Making no selection is equivalent to selecting all choices.

Multi-object reports

This section describes the default reports that are listed on the **Analytics Home** page when the IBM Marketing Operations reports package is installed. It also presents procedures for running them.

The following table introduces the default reports.

Table 45. Default reports: Analytics Home page

Report	Description
Marketing Activity Report	Lists all users who logged in to Marketing Operations during a specified date range, with the total number of projects each user created.
Overdue Milestone Report	Displays all overdue milestones with task end dates that fall between the selected start and end dates.
Program Tasks and Milestones	Displays all milestones for the program you selected in the parameter field.
Project Health (Monthly)	Reports the percentage of time that each health status applied to the selected projects during the specified month. Includes a bar graph and a data grid for each project. The system uses the automated daily health status calculations for this report. To see the status that was calculated for each day, click the bar graph or the project name.
Project Health (Trend)	Plots the average monthly health scores of the selected projects during the specified year on a line graph. The system uses the daily automated health status calculations for this report.
Project On Time Analysis	Displays completed projects within the specified time period along with the number of days early or late. These dates are calculated by pulling the greatest date in the workflow for the project for both the target and forecast/actual columns.

Table 45. Default reports: Analytics Home page (continued)

Report	Description
Project Performance Crosstab (Custom)	Displays project performance metrics, including leads passed, revenue, and ROI. The data is aggregated over initiative and project type versus business units. This report requires the Financial Management Module.
Project Performance Summary	Displays projects and their budget data. This report requires the Financial Management Module.
Project Performance Summary (Custom)	Displays projects that are grouped by initiative, with their budget, cost, revenue, response rate, and lead generation performance data. This report demonstrates how a sample report can be customized with custom attributes. This report does not work unless your template administrator implements the example custom attributes. This report requires the Financial Management Module.
Project Tasks	Displays all tasks and their status for the specified project.
Resource Task Load	Displays tasks that are assigned to selected users. The report returns tasks for each project that falls into the specified date range.
Resource Utilization Summary	Displays a summarized view of resource utilization percentages by user. Select start and end dates to specify a date range for the report.
System Programs	Displays a breakdown of programs by status and template type.
System Projects	Displays a breakdown of projects by status and template type.
System Users	Displays details for each IBM Marketing Operations user.
Task On Time Analysis	<p>Displays all tasks that are either early or late, where the task end date falls between the selected Start Date and End Date. The report is grouped by task name.</p> <p>If a task ended early, the number of days it finished ahead of schedule displays on a green background. If it ended late, the number of days late displays as a negative number on a red background.</p>
Vendor Spend Summary	Displays total invoiced expenses for specified vendors in the specified date range, including breakouts for paid, approved, and received expenses. This report requires the Financial Management Module.

To run the Marketing Activity report

The Marketing Activity report presents a list of all Marketing Operations users who logged in to the system during a specified date range, with the total number of projects each one created. You produce the report by entering a **Report Start Date** and **Report End Date**.

1. Select **Analytics > Operational Analytics**.
2. In the list of reports, click **Marketing Activity Report**.
A screen appears allowing you to set filter criteria.
3. Choose start and end dates for the report.
4. Click **Finish** to create the report.

The report contains the following columns: First Name, Last Name, Email Address, Login ID, No. of Projects, and No. of Subprojects.

To run the Overdue Milestone report

The Overdue Milestone report shows all overdue milestones with task end dates that fall between the selected start and end dates. You can filter the report by using the **Report Start Date** and **Report End Date** parameters as well as the **Task Status** and **Project Status** parameters.

1. Select **Analytics > Operational Analytics**.
2. In the list of reports, click **Overdue Milestone Report**.
A screen appears allowing you to set filter criteria.
3. Choose start and end dates for the report.
4. Optionally, set filters for Task and Project status.
5. Click **Finish** to create the report.

The report displays a list of milestones, grouped by the milestone owner, sorted by project code, and containing the following columns: Milestone Owner, Project Code, Milestone, Task Number, Status, Task Name, End Date, Forecast/Actual End, Days Late, and Notes.

To run the Program Tasks and Milestones report

The Program Tasks and Milestones report shows all milestones for projects that are part of the program selected in the parameter field. You can filter the report on milestone type. If you chose not to filter on milestone type, all tasks are displayed.

1. Select **Analytics > Operational Analytics**.
2. In the list of reports, click **Program Tasks and Milestones**.
A screen appears allowing you to set filter criteria.
3. Select a program in the **Program** drop-down menu.
4. Optionally, select Milestone types for the report. If you do not choose any Milestone types, the report contains all tasks in all projects that belong to the selected program.
5. Click **Finish** to create the report.

The report displays a list of milestones (or tasks), grouped by project and sorted by date, and containing the following columns: Project Name, Milestone type, Task Number, Forecast/Actual dates and effort, Target dates and effort, Variance, and Notes.

The Variance column contains the number of days early or late the milestone occurred. If a milestone is reached early, it is displayed on a green background. If it is reached late, it is displayed as a negative number on a red background.

To run the Project Performance Crosstab report

The Project Performance Crosstab report shows high-level project metrics in a cross tabulation along multiple dimensions of custom attributes.

The example included is a cross tab of project performance metrics including leads passed, revenue, and ROI (Return on Investment), aggregated over initiative and project type vs. business units.

This report requires the Financial Management Module.

1. Select **Analytics > Operational Analytics**.
2. In the list of reports, click **Project Performance Crosstab**. A screen appears allowing you to set filter criteria.

3. On the first filter page, choose the projects to include in the report. To specify other filters, click **Additional Prompts** and proceed to step 4. Otherwise, skip to step 5.
4. On the second filter page, specify filters for any or all of the following:
 - Project owner
 - Project date range
 - Project status
 - Project type: determined based on the template used to create the project

All sections on the filter pages are optional. If you do not enter any information in any of the sections, the resulting report contains the resource task load for all users and all projects in the system.
5. Click **Finish** to create the report.

The sample report provided contains the following information:

- Row Dimensions: (1) Initiative, (2) Project Type
 Data in the rows is grouped by Initiative; you can use this field to categorize your programs and plans. Each Initiative section contains rows for each Project Type included in the report.
 Project type is determined from the template used for creating the project. Sample project types are **Database Marketing Campaign**, **Tradeshow Template**, **Marketing Collateral**, and **Campaign Project Template**.
- Column Dimension: Business Unit
 A business unit is a field on the project and plan creation page. It is one way to categorize projects and plans.
- Metrics to show: number of leads passed, revenue, and ROI (Return on Investment)
 Example of a Project Performance Crosstab report:

	<i>Business Units</i>			
	Credit Card	Insurance	Investment Services	Business Unit Total
<i># Leads Passed (Actual)</i>				
<i>\$ Revenue (Actual)</i>				
<i>ROI (Actual)</i>				
Report Total		520	263	783
			\$1,718.00	\$1,718.00
			76.39%	-72.26%
Initiative: (No Value)		520		520
Project Type:				
Project Type: Tradeshow		520		520
Project Type: Marketing Collateral Project				
Initiative: Product Launch			263	263
			\$1,718.00	\$1,718.00
			76.39%	76.39%
Project Type: Database Marketing Campaign			263	263
			\$1,718.00	\$1,718.00

To run the Project Performance Summary report

The standard Project Performance Summary report lists projects alphabetically, along with status, date, and budget information. The custom version lists projects grouped by initiative, with budget, cost, revenue, response rate, and lead generation performance data. Both versions require the Financial Management Module.

The custom version of this report also contains additional prompts and custom fields. It demonstrates how a standard report can be customized using custom attributes and works only if your template administrator implements the custom attributes.

1. Select **Analytics > Operational Analytics**.
2. In the list of reports, click **Project Performance Summary**.
A screen appears allowing you to set filter criteria.
3. On the first filter screen, you can choose the projects to include in the report. If your only filter criteria is projects, click **Finish** to run the report. To specify other filters, click **Additional Prompts** and proceed to step 4.
4. On the second filter page, specify filters for any or all of the following:
 - Project owner
 - Project date range
 - Project status
 - Project type: these are determined based upon the template used to create the project

All sections on the filter pages are optional. If you do not enter any information in any of the sections, the report contains project performance for all projects in the system.
5. Click **Finish** to create the report.

The report displays a list of projects sorted by project name. The custom version is grouped by Initiative. The reports contain the following columns:

Table 46. Columns in the Project Performance Summary report

Column	Description
Project Name/Code	Displays the project name and its ID.
Status	Displays the status of each project.
Target dates	Displays the target start and end dates.
Business Unit, Segment, and Product Family	Displays the business unit, segment, and product family for each project. These fields are included with the sample templates, and are used to categorize projects. Not all types of projects contain all of these fields. If your report uses a project that does not contain one or more of these fields, the column is ignored (it is blank for that project). (These fields are only in the custom version of the report.)
Total Budgeted Total Forecasted Actual Cost	Displays a variety of budgeting information. These fields are supplied from the budget tab for each project.
Total Revenue	Displays revenue metrics (if defined) for the project.
Response rates and leads columns	Displays response rate and leads generation data. Response rates and leads data are taken from the metrics for each project (found in the Tracking tab). (These fields are only in the custom version of the report.)
ROI	Displays ROI (Return On Investment) metrics (if defined) for the project. (This field is only in the custom version of the report.)

To run the Resource Task Load report

1. Select **Analytics > Operational Analytics**.
2. In the list of reports, click **Resource Task Load**.
The **Filter Resource Workload** screen appears.
3. Specify filters for any or all of the following:
 - User
 - Projects
 - Project date range
 - Project status
 - Project type: these are determined based upon the template used to create the project

All sections on this page are optional. If you do not enter any information in any of the sections, your report contains the resource task load for all users and all projects in the system.

4. Click **Finish** to create the report.

The report results are written to the screen, unless another format is selected. The report displays tasks meeting the filter criteria, grouped by user, and containing the following columns from the workflow tab of the project:

Table 47. Columns on the Resource Task Load report

Column	Description
Task Name	Displays the project name and its ID.
Project Name	Displays the project name and code; clicking the link opens the summary page of the project (if your report administrator has configured the drill-back URL).
Dates	Displays the forecast/actual and target start and end dates.
Status	Displays the status of each task.
% Complete	Displays the current progress of each task.
Notes	Displays the notes for a task.
Condition	<p>Displays a condition, based on the dates for a task.</p> <p>If the end date for a task is later than its target end date, this column contains one of two values:</p> <ul style="list-style-type: none">• Late: if status is In Progress or Completed, and Forecast Start Date is later than Target Start Date.• Overdue: if status is In Progress or Completed, and Forecast End Date is later than Target End Date. <p>For all other tasks, this field is blank.</p>

To run the Vendor Spend Summary report

The Vendor Spend Summary report displays total invoiced expenses for specified vendors in a specified date range, including breakouts for paid, approved and received expenses. This report requires the Financial Management Module.

1. Select **Analytics > Operational Analytics**.
2. In the list of reports, click **Vendor Spend Summary**.
A screen appears where you can set filter criteria.
3. Specify filters for:

- Vendor
- Invoice date range (defaults to today's date)

Both filters are required.

4. Click **Finish** to create the report.

The report is a summary of invoices by vendor, with three columns. The columns categorize the invoice totals by their status, as follows:

- The **Outstanding** column totals all invoices with a status of **Draft**.
- The **Payable** column sums all invoices with a status of **Payable**.
- The **Actual Spent** column sums all invoices with a status of **Paid**.

An example of the Vendor Spend Summary report:

	Outstanding (Draft)	Payable	Actual Spent (Paid)
All Selected Vendors	\$0.00	\$100.00	\$26,452.00
CATER007 - Rebecca's Catering	\$0.00	\$0.00	\$150.00
PRINT002 - Reactivity	\$0.00	\$0.00	\$5,852.00
PRINT003 - Accenture	\$0.00	\$100.00	\$13,500.00
SECC0011 - American Security	\$0.00	\$0.00	\$6,250.00
SHIPP008 - Federal Express	\$0.00	\$0.00	\$700.00

Single-object reports

The single-object reports are available from the **Analysis** tab of projects, programs, and plans. For these reports, you are reporting on that single object.

The following table describes both the standard single-object reports and the example IBM Cognos reports made available when the IBM Marketing Operations reports package is installed.

Table 48. Default reports: Analysis tab

Report	Description
Revision History	A report that lists the revisions made to the current object. You see this report by default when you click the Analysis tab of accounts, approvals, assets, plans, programs, projects, marketing objects, requests, teams, and invoices.
Approval Responses	A report for projects that displays information about approval tasks.
Invoice Summary List	A report for projects and programs that lists invoice summary information. This report requires the Financial Management Module.
Marketing Object Cross-Reference	A report for projects and marketing objects that lists the marketing objects referenced or modified by the current object.
Approval and Compliance Listing	An example Cognos report for projects that displays additional information about approval tasks.
Budget Summary	An example Cognos report for projects, programs, and plans that displays a summary of the budget by week, month, or quarter. This report requires the Financial Management Module.

Table 48. Default reports: Analysis tab (continued)

Report	Description
Detailed Expense Breakout	An example Cognos report for projects that displays a breakout of the project expenses. This report requires the Financial Management Module.
Work Assigned	A report for teams that displays work assignments by team and by team member.

To view the revision history of an object

After you work in an object, you can view its revision history to see who created and modified the object, which fields were modified, and when the modification took place.

You can review the revision history for the following objects: accounts, approvals, assets, plans, programs, projects, requests, teams, and invoices.

1. Navigate to the **Summary** tab of an object to view its revision history.
2. Click the **Analysis** tab.

By default, the page displays the revision history of the object, listing all modifications to the object since it was created.

You can click **Revision History** in the **Report Type** pull-down menu to display the revision history if another report is displayed.

Note the following:

- For projects, click **Approval Responses** in the **Report Type** pull-down menu to display the revision history for any approvals linked to tasks within the project.
- For approvals, an entry is created whenever the approval round number changes (when the approval owner requests reapproval for whatever reason).

For example, if Connie Contact (approval owner) changes an approval and requests reapproval, an entry like the following is added to the revision history of the approval:

Connie Contact on 12/15/2005 01:47:50 PM Approval Round #2: Approval was re-requested and the round number has increased.

To run the Approval and Compliance Listing report

The Approval and Compliance Listing report lists the approval processes for the workflow approval tasks of a project. It is separated into sections for current approval processes, completed approval processes, and approval processes scheduled to begin in the future.

1. Select **Operations > Projects**.
2. From the list of projects, select the one to report on.
3. Navigate to the **Analysis** tab of the project.
4. From the **Report Type** pull-down menu, choose **Approval and Compliance Listing**.

The report displays on screen.

This report contains the following information:

Table 49. Columns on the Approval and Compliance Listing report

Column	Description
Approval Process/Progress	Displays the task number, name, and progress for each approval process listed. Progress is described as how many approvals have been received out of the total number expected.
Items Being Approved	Displays a list of the items being approved.
Approvers	Displays a list of the approvers. For a required approver, displays (Required) next to the name of the approver.
Linked Task	Displays the task number and name of the workflow task linked to the approval.
Status	Displays the status of the approval: <ul style="list-style-type: none"> • In Progress: indicates an active approval process. • On Hold: indicates a temporarily halted approval process • Completed: indicates an approval process that is finished. • Not Started: indicates an approval process that has not yet been submitted for review.

To run the Budget Summary by Quarter report

The Budget Summary by Quarter report displays budget information by quarter for the selected project, program, or plan, and fiscal year. For programs and plans, data rolls up from contributing projects and programs. This report requires the Financial Management Module.

1. From the **Operations** menu, select:
 - **Projects** to run the report for a project.
 - **Programs** to run the report for a program.
 - **Plans** to run the report for a plan.
2. From the list, select the project, program, or plan to report on.
3. Click the **Analysis** tab.
4. From the **Report Type** pull-down menu, choose **Budget Summary by Quarter**.
The report for the current fiscal year displays. If there is data for more than one year, you can choose a different fiscal year for the report from the **Fiscal Year** pull-down menu.

Data is organized for the selected fiscal year, as follows:

Table 50. Data on the Budget Summary by Quarter report

Section	Description
Summary table	<p>This table displays summary budget information:</p> <ul style="list-style-type: none"> • Rows: different breakdowns of the budget; actual/remaining, committed/uncommitted, and forecast/available • Columns: Fiscal year total, then one column for each quarter. <p>Note: For projects, the report consists of only this table.</p>

Table 50. Data on the Budget Summary by Quarter report (continued)

Section	Description
Details table	<p>For programs and plans, this table shows budget information rolled up from subordinate objects.</p> <ul style="list-style-type: none"> • Rows: for a program report, each individual project that is part of the program has its own row. Similarly for a plan report, each program has its own row. • Columns: Each quarter has columns for rollup budget, rollup forecast, rollup committed, and rollup actual.

To run the Detailed Expense Breakout report

This report requires the Financial Management Module.

1. Select **Operations > Projects**.
2. From the list of projects, select the one to report on.
3. Click the **Analysis** tab of the project.
4. From the **Report Type** pull-down menu, choose **Detailed Expense Breakout**.

The report for the current quarter displays. If there is data for more than one quarter, you can choose a different quarter for the report from the **Fiscal Quarter** pull-down menu.

Data is organized for the selected quarter, as follows:

Table 51. Data on the Detailed Expense Breakout report

Section	Description
Accounts	Displays three columns (actual, committed, and forecast) of the budget information for the account. The data for each account is displayed on its own row. The first row contains summary data for all accounts.
Cost categories	Displays three columns (actual, committed, and forecast) of budget information. The data for each category is displayed on its own row. The first row contains summary data for all cost categories.
Vendors	Displays actual money spent per vendor. There is one row per vendor, and the first row presents summary data.

To run the Work Assigned to Team or Team Member Reports

You can view the approvals, projects, project requests, and tasks associated with a team as a whole or with a specific team member.

1. Navigate to the **Analysis** tab of a team.
2. Select the report type and work assignment (approvals, projects, project requests, or tasks). If you select the Work Assigned to Team Member report, also select the team member.

The report is displayed.

The following information is available.

Table 52. Data on the Work Assigned to Team or Team Member Reports

Section	Description
Name	Displays the name for approvals, project requests, and tasks; clicking the link opens the summary page of the work assignment (if your Report Administrator has configured the drill-back URL).

Table 52. Data on the Work Assigned to Team or Team Member Reports (continued)

Section	Description
Project Name	Displays the project name for projects; clicking the link opens the summary page of the project (if your Report Administrator has configured the drill-back URL).
Project Code	Displays the project code for approvals, projects, and tasks.
Project Owner	Displays the project owner for approvals and tasks.
Requester	Displays the requester for approvals and project requests.
Task Owner	Displays the task owner for tasks.
Request ID	Displays the ID for project requests.
Approver	Displays the approver for approvals.
Status	Displays the status for approvals, projects, and tasks.

Dashboard portlets

Dashboards use portlets to help you access the information and application features that you need most often. Each dashboard includes one or more portlets that present different ways for you to access and update information quickly and efficiently:

- List portlets provide a list of links to items in Marketing Operations, such as Approvals Awaiting Action, Manage My Tasks, and My Alerts.
- Quick Links provide single-click access to options such as Create New Project or Add Invoice.
- Report portlets give you access to reports such as Budget by Project Type or Marketing Financial Position. These portlets are available if the Marketing Operations reports package is installed

To manage your dashboards and add portlets to them, click **Dashboard > Create Dashboard**.

Marketing Operations list portlets


This section describes the standard Marketing Operations list portlets. Additional portlets are available after the Marketing Operations reports package is installed.

Your system administrator selects the portlets that members of your organization can add to the dashboard with **Settings > Dashboard Portlets**. To manage your dashboards and add portlets to them, click **Dashboard > Create Dashboard**.

Table 53. Standard Marketing Operations list portlets

Report	Description
Approvals Awaiting Action	List of approvals waiting for your action.

Table 53. Standard Marketing Operations list portlets (continued)

Report	Description
Manage My Tasks	<p>Lists your Pending and Active tasks and Not Started and In Progress approvals. An option to change the status of each item appears.</p> <ul style="list-style-type: none"> • For tasks, you can change the status to Finish or Skip. • For Not Started approvals, you can change the status to Submit or Cancel. • For In Progress approvals that you own, you can change the status to Stop, Finish, or Cancel. • For In Progress approvals that you are assigned to approve, you can change the status to Approve or Reject.
My Active Projects	Lists your active projects.
My Alerts	Lists your Marketing Operations alerts.
My Project Health	<p>Lists the name, health status, percentage complete, and number of tasks that are assigned to you for each project that you own or that includes you as a reviewer or member. The percentage complete is calculated as:</p> $(\text{Number of Finished Tasks} + \text{Number of Skipped Tasks}) \div \text{Total Number of Workflow Tasks}$ <ul style="list-style-type: none"> • To recalculate project health status, click . The system recalculates the health status for display by this portlet only, not for use elsewhere in Marketing Operations. <p>Note: Project health calculations can be made only at 5-minute intervals.</p> <ul style="list-style-type: none"> • If you own more than 100 projects, click Show All to open the list in a new dialog. • To export listed project data into a .CSV file, click Export. • To view the Summary tab for a project, click its name. To view more metrics for project health, click the percentage complete indicator. To view the My Tasks list, click the number in the Tasks column.
My Requests	Lists requests that you own.
My Tasks	Lists tasks that you own.
Projects Over Budget	Lists all projects that are over budget for the calendar year. This report requires the Financial Management module.

Quick link portlets

Quick links are pre-defined links to IBM EMM products. Some quick links enable users to perform basic actions in the IBM EMM product within the dashboard, without navigating to the product. You can configure portlets that contain a set of quick links that you choose.

To add a quick links portlet to one of your dashboards, click **Manage Portlets > Create Quick Link Portlet** and select the quick links you want to include.

The following table describes the quick links available when Marketing Operations is installed.

Quicklink	Function
Create New Project Request	Opens up a popup window where you can choose a project template to create a Project Request. You can also click Continue to open the Project Request wizard in the application.
Create New Project	Opens up a popup window where you can choose a Project template to create a Project. You can also click Continue to open the Project wizard in the application.
Add Invoice	Opens the Add Invoice wizard in the application.
Projects	Opens the Project List page in the application.
Reports	Opens the Analytics > Operational Analytics page.
Resource Library	Opens the Asset Library page in the application.
Approvals	Opens the Approvals List page in the application.

Marketing OperationsIBM Cognos report portlets

This section describes the Marketing Operations dashboard portlets that are available after the Marketing Operations reports package is installed.

Table 54. Standard Marketing OperationsIBM Cognos report portlets

Report	Description
Budget by Project Type	An example IBM Cognos report showing a 3-D pie chart of the budget per project type for the current calendar year. This report requires the Financial Management module.
Completed Projects by Quarter	An example IBM Cognos report showing a 3-D bar chart of the number of early, on-time, and late projects completed this quarter.
Forecast by Project Type	An example IBM Cognos report showing a 3-D pie chart of the forecasted spending per project type for the current calendar year.
Manager Approval Summary	An example IBM Cognos report showing data for active and completed approvals for all In Progress projects in the system.
Manager Task Summary	An example IBM Cognos report showing data for active and completed tasks for all In Progress projects.
Marketing Financial Position	An example IBM Cognos report showing a timeline with Budget, Forecasted, Committed, and Actual amounts for all plans in all states in the current calendar year. This report requires the Financial Management module.
My Task Summary	An example IBM Cognos report showing data about all active and completed tasks for the user viewing the report in all In Progress projects.
My Approval Summary	An example IBM Cognos report showing data about active and completed approvals for the user viewing the report.
Projects by Project Type	An example IBM Cognos report showing a 3-D pie diagram that shows all In Progress projects in the system by template type.
Projects by Status	An example IBM Cognos report showing a 3-D bar chart that shows all projects in the system by status: draft, in progress, on hold, canceled, and finished.
Projects Requested and Completed	An example IBM Cognos report showing a timeline graph of the number of project requests and number of completed projects per month. This report counts project requests with the following states only: Submitted, Accepted, or Returned.

Table 54. Standard Marketing OperationsIBM Cognos report portlets (continued)

Report	Description
Spend by Project Type	An example IBM Cognos report showing a 3-D pie chart of the actual amount spent per project type in the current calendar year. This report requires the Financial Management module.

Chapter 18. Searches

You can perform two kinds of search in IBM Marketing Operations: simple and advanced.

You can perform a simple or advanced search for plans, programs, projects, tasks, assets, approvals, marketing objects, and invoices from any view in the corresponding section of IBM Marketing Operations. Searching in the Programs section retrieves only programs; searching in the Projects section retrieves only projects, etc.

Simple searches

IBM EMM provides a simple search function that enables you to search for most objects, including plans, programs, projects, assets, approvals, tasks, and invoices. You can perform these searches using the **Search** field in the menu bar at the top of the IBM EMM window. For details on this search function, see the *IBM Marketing Platform Administrator's Guide*. You can use this search to search for most objects, including plans, programs, projects, assets, approvals, tasks, and invoices.

Advanced searches

IBM Marketing Operations also provides an advanced search function that enables you to specify more complex searches based on several different criteria that apply the type of items for which you are searching. You can save commonly used advanced searches to save time.

Advanced searching works the same for all objects except assets. Marketing Operations provides one type of advanced search page for assets, and a different type for all other objects that contain advanced search functionality.

Permissions considerations

When you search for an object, IBM Marketing Operations always conducts the search against all the objects the user has security rights to view (for example, all projects). This comprehensive search occurs even if you initiate the search from within a filtered view, such as the Active Projects view, or from within a saved search.

For example, if you do not have access to the Workflow tab of a project template, tasks from the project created from that template do not appear in the results of an All Tasks search even if you are a member (Owner/Participant/Requester) of the project. However, if one or more tasks from that project are assigned to you, then those projects display regardless of your access rights.

About searching within grids

In advanced search, grid attributes appear in the list of available attributes to add to a search for all project templates that are enabled, whether or not any projects or marketing objects exist that have been created from that template.

For example, assume that your system contains the following:

- A project template named Trade show, and this template is enabled.
- A tab named Vendors is available for Trade show templates.
- The Vendors tab contains a grid, and one of the grid columns is named **Vendor URL**.

On the advanced search screen for projects, you can select **Vendor URL** when you choose a condition for the search. The **Vendor URL** attribute appears in the list, even if your system does not contain any **Trade show** projects.

When a template is deleted, its grid attributes are no longer available as search criteria. You can search for attributes in a disabled template; choose a disabled template (or **All Disabled**) from the advanced search screen.

About searching for marketing object attributes


You can search for attributes contained in a linked-to marketing object, from marketing objects or projects. For example, suppose that you have projects that link to marketing objects that in turn contain an attribute for which you want to search:

- You have projects of type Marketing Collateral, which can link to
- Marketing objects of type Creatives, which contain an attribute
- **Cost**, representing the cost of the creative.

From the project page, you can perform an advanced search which returns projects based on criteria you specify about the Cost attribute.


To perform an advanced search of a digital asset library

The advanced search for assets allows you to search for information in specific fields that the owner filled out when creating or modifying the assets.

1. Select **Operations > Assets**.
2. Select a digital asset library to search
3. Click the **Search/Filter** icon ().
The Assets Search screen appears.
4. Fill in one or several of the fields, depending on what you want to search for.
5. Click **Search**.

The items meeting the search criteria are displayed on the Assets list page.

To perform an advanced search (except for assets)

1. Open the list page of the object type for which you want to search (for example, projects or tasks).
2. Click the **Search** icon ().
The Advanced Search page appears:

3. Select a template on which to base the search. The list groups templates for the object type into All Templates, All Enabled, and All Disabled.

Note: This list does not appear if there is only one template available for the object type.

4. Select an attribute on which to base the search. Attributes are listed in alphabetical order.
5. Select an operator for the search. The operators that are available depend on the type of attribute selected for the search.
6. Select or enter a value.
7. Repeat steps 3 through 6 as necessary to add criteria to your advanced search.
8. If you specify multiple criteria, indicate whether you want to search for objects that match *any* of your criteria or *all* of them at the top of the dialog.
9. Optionally, click **Save as** to save the search. Administrators can also publish the search by selecting the **Publish** check box on the Save As dialog box. Published searches are available to all Marketing Operations users.
10. Click **Apply** to perform the search based on your criteria.

To regroup and reorder search criteria

As you construct search criteria, you can rearrange the grouping and order of any individual search condition:

1. For the condition you want to move, position the cursor over the condition's number box.
The cursor changes to a double vertical arrow, and the tooltip, "Drag to move this condition to another place in the query." appears.
2. Drag the condition to where you want to insert it. Note the red guide line, showing where the condition will be inserted.
3. Once the condition is positioned correctly, release the mouse to drop it into its new location.

Note: You can drag and drop search criteria at any level.

About the Not In operator

Background

IBM Marketing Operations objects (plans, programs and projects) are created from templates.

Templates have definitions of attributes, for example, **brochure_type**. Project instances created from the same template can have different values for their attributes. For example, TS001 might have **Tri-fold** as its brochure type, and TS002 might have **Bi-fold**.

In a typical IBM Marketing Operations installation, there are multiple project templates, and a particular attribute might be present in some templates and absent in others.

The behavior of the Not In operator

The operator, **Not In**, returns all instances of objects (for example, projects) that do not have the value of the attribute as given in the search, or if the object does not have the attribute itself. To illustrate, if you search for **all Fruits that do not have black colored seeds**, this search returns fruits that do not have black colored seeds **AND** fruits that are seedless, since seedless fruits do not have black colored seeds.

Consider the following example:

- Template1 has a custom tab, **Business**, that contains the attribute **BusinessUnit**.
- Template2 does not have the **Business** custom tab (hence it does not contain the **BusinessUnit** attribute).
- Two projects are created from Template1:
 - Project1 is created with "Insurance" as the value for BusinessUnit.
 - Project2 is created with "Banking" as the value for BusinessUnit.
- Two projects are created from Template2: Project3 and Project4.

Assume that you create a search with the following criteria:

[All Templates] -> [BusinessUnit] -> [Not In] -> [Insurance]

This search returns Project2, Project3, and Project4, since none of these projects has BusinessUnit = Insurance.

Assets advanced search page

When you click Advanced Search on a digital asset list page, the system displays a page with the following fields.

Table 55. Advanced Search options for digital assets

Field	Description
Asset Name	Allows you to search in the Asset Name field of all existing assets. IBM Marketing Operations searches for all asset names that contain the text string you enter. You can use the following standard wildcards. <ul style="list-style-type: none">• * - to search for any string• ? - to search for any character.
AND OR	Allows you to choose a Boolean operator. <ul style="list-style-type: none">• AND: to return items containing all the words in the Asset Name field.• OR: to return items containing any of the words in the Asset Name field.
Asset Code	Allows you to search in the Asset Code field of all existing assets. IBM Marketing Operations searches for all codes that contain the string you enter.

Table 55. Advanced Search options for digital assets (continued)

Field	Description
Description	Allows you to search for text in the Description field of all the existing assets. IBM Marketing Operations searches all the description fields for the characters you enter.
Status	Allows you to select any or all of the statuses to search; Draft, Finalized, or Locked.
Expires Before	Allows you to specify a date. IBM Marketing Operations searches for all assets with expiration dates on or before the specified date.
Folder Name	Allows you to enter part or all of a folder name to search. IBM Marketing Operations searches for all folder names that contain the text string entered and searches for assets in that folder.
Keywords	Allows you to search in the Keywords field of all existing assets. IBM Marketing Operations searches for any of the keywords that contain the text string you enter.
Owners	Allows you to select one or more owners to search for assets belonging to the selected owner(s).
Version Name	Allows you to search in the Version Name field of all existing assets. IBM Marketing Operations searches for all versions that contain the text string you enter.
Usage Guidelines	Allows you to search in the Usage Guidelines field of all existing assets. IBM Marketing Operations searches for all usage guidelines that contain the text string you enter.

Advanced search page for objects other than assets

When you click Search on the list page for most IBM Marketing Operations objects, the system displays a page with the following information.

Table 56. Advanced Search options for other objects

Control	Description
Search for	Displays text indicating the objects for which you are searching. For example, if you are searching for programs, the dialog displays Search for: Programs.
Select items	Determines whether the search needs to match all or any of the search criteria. Options are: all, to specify that the search must meet all search criteria, or any, to specify that the search can match any of the search criteria. The default is all.

Table 56. Advanced Search options for other objects (continued)

Control	Description
Condition	<p>Allows you to construct a search condition by specifying the following.</p> <ul style="list-style-type: none"> From the first pull-down list, select the template on which to base the condition. From the second pull-down list, select the attribute for which you want to search. Possible values are: Project Name, Owner, Description, etc. From the third pull-down list, select the search operator. In the fourth field, enter the value for the criteria. <p>For example, if you are searching for projects, and want to find project names that include the word Marketing.</p> <ul style="list-style-type: none"> Select All Enabled to search on all enabled project templates Select Project Name in the second pull-down, Select Contains in the third pull-down, and Type Marketing in the fourth field.
Grouping	<p>Allows you to construct a grouping for the search results by specifying the following.</p> <ul style="list-style-type: none"> From the all/any pull-down, select all or any, to determine whether to use all or any of the grouping criteria. Supply the remainder of the grouping criteria as described for constructing the Condition.
Insert a new condition	Click to insert a new line for entering a condition.
Insert a new grouping	Click to insert a new line for grouping the search criteria.
Remove selected	Click to remove any selected conditions or groupings.
Save as	Click to save your criteria as a named search. You are prompted to enter a name for the search. Additionally, IBM Marketing Operations administrators can publish a search by selecting the Publish check box.
Apply	Click to perform the search based on the criteria specified.
Reset	Click to reset the dialog box, clearing any criteria already specified.
Close	Click to close the dialog box without performing a search.

About saved searches

You can save any advanced search by clicking **Save As** on the Advanced Search page. Saved searches are available only for plans, programs, projects, and marketing objects.

There are two types of saved searches: unpublished and published. Unpublished saved searches are available only to the user who saved it. Published saved searches are available to all users. Only an IBM administrator can publish saved searches.

Accessing saved searches

After you save a search, you can access the search and rerun it with the same criteria, or delete it. You can access saved searches in two ways:

- On the **Action** icon's menu on the object's list page

- On the list page itself, when you view all objects of that type by selecting **All [item]** in the **Action** menu

For example, saved searches for projects are available on the Projects List page when viewing all projects and requests. If your system contains any published saved searches, they are listed along with your unpublished saved searches.

Setting the sort order in saved searches

When you save a search, the sort column and sort order that exist on the page from which you are searching becomes the default sort order in the saved search.

Note: If you create a saved search from another saved search that has optional columns, the optional columns are not included. Thus, if the sort column in the original search was an optional column, in the second saved search the sort column reverts to the default, as the sort column does not exist in the new saved search.

You can change the sort column and sort order of an unpublished search by changing the sort column and sort order of the list page, accessing the saved search, and clicking **Save**, which updates the search. This option applies only to unpublished searches. To change the sort column, sort order, or both for a published search, an IBM administrator must first unpublish the search, change the sort as described above, and then republish the search.

To view a saved search


1. Open the list page for an object type.
2. Click **All <objects>** (where *objects* are projects/requests, programs, or plans).
Your saved searches and all published searches appear as folders at the top of the screen.
3. Click the folder that contains the search results you want to view.

Note: Saved searches are also available from the Actions icon menu.

To delete a saved search

You cannot delete a saved search with any of the following characteristics.

- Created by another user
- A default calendar, project, or task search
- A system search
- Published
- The search the user is currently using

1. Open the list page for an object type.
2. Click the **Actions** icon () and click the check box next to the search or searches you want to delete.
You can delete only your own saved searches; you cannot check boxes for any other searches.
3. Click **Delete Selected** to remove your selected saved searches.

Chapter 19. Alerts and the message board

Alerts and the message board both allow you to communicate information to other users of IBM Marketing Operations.

Alerts and the message board are available for the following objects: plans, programs, projects, requests, assets, accounts, approvals, invoices, tasks, teams, and marketing objects.

Alerts

You can use alerts to communicate information to specific people about the state of an object or about an action that the user needs to take. Default alert subscriptions are set by administrators, but can be overridden on a per-object basis by owners and participants of the specific objects.

For workflow tasks, alerts are either brief or detailed.

Message board

The message board allows you to communicate information to the other members of the team or to an object owner.

Viewing alerts

When you receive an alert, go to the Alerts page to view it. Alerts are also sent to affected users' email addresses (for each user that has a valid email address that is set up). For a detailed list of events that could trigger an alert and for more information about setting up alerts, see the *IBM Marketing Operations Administrator's Guide*.



To view alerts, log in and click the **Alerts** icon (). Clicking, or scrolling, over the alerts icon shows a drop-down menu that separates the alerts for your installed applications. The number of alerts is displayed to the left of each application name. After you choose which application's alerts to view, the page displays the following information:

Table 57. Columns on the Alerts page

Column	Description
Page heading	Contains the number of unread alerts (which is displayed in parentheses) and the total number of alerts
Check box	Each alert contains a check box; use check boxes to select alerts for a specific action (for example, to mark a group of alerts for deletion). Check the box in the first line (next to the Message Text label) to select all the alerts.
Message text	Displays the text of the alert.
Date/Time	Displays the time of the event that triggered the alert.

You can perform the following actions from the page.

Table 58. Controls on the Alerts page

Link/Button	Description
	Select the yellow envelope icon next to an alert to mark the alert as read. After you click the icon, the alert is disabled. Reselect the icon to mark the alert as unread.
Alert title	Click the link in the alert to go to the object that is the subject of the alert. Note: The Alerts page remains open while you view the information in a separate window.
Pages	Click a page number to list the corresponding page of alerts.
Delete Selected	Click to delete the selected alerts.
Delete All	Click to delete all of your alerts.
Mark All as Read	Click to mark all your alerts as read, graying out each alert. A confirmation screen is displayed to ensure that you want to mark all alerts as read.
Mark All as Unread	If you have no unread alerts, click this link to mark all your alerts as unread.
Close	Click to close the Alerts page.

Receiving alerts when outside the organization's domain

If your email address is outside the domain of the organization that has IBM Marketing Operations installed, you need to modify your SMTP server in order to receive alerts. Add the IP address of the Marketing Operations server to the relay allowed IP address list.

About adding comments for alerts

For many events, the system sends out alerts based on actions users perform. For example, when a project owner starts a project, the system sends out alerts to project members.

In this example, before the system sends the alert, the project owner can add comments to the alert. The system provides a dialog box containing the text of the alert. The user can enter any additional comments to the alert. When the user closes the dialog box, the system sends the alert, including the comments.

For the following events, users can add comments to the alert before the system sends the alert.

Table 59. You can add comments to the alerts for these events


Object	Events
Project request	<ul style="list-style-type: none"> • A project request is submitted. • A project request is accepted. • A project request is returned. • A project request is canceled.

Table 59. You can add comments to the alerts for these events (continued)

Object	Events
Project	<ul style="list-style-type: none"> • A project is started. • A project is put on-hold. • A project is restarted. • A project is completed. • A project is cancelled. • A project is put in not started state.
Program	<ul style="list-style-type: none"> • A program is started. • A program is put on-hold. • A program is restarted. • A program is completed. • A program is cancelled.
Plan	<ul style="list-style-type: none"> • A plan is started. • A plan is put on-hold. • A plan is restarted. • A plan is completed. • A plan is cancelled.
Approval	<ul style="list-style-type: none"> • An approval process is started. • An approval process is put on-hold. • An approval process is restarted. • An approval process is complete. • An approval process is cancelled
Asset	<ul style="list-style-type: none"> • An asset is drafted. • An asset is locked. • An asset is finalized. • An asset is archived.
Invoice	<ul style="list-style-type: none"> • An invoice is marked as payable. • An invoice is marked as paid. • An invoice is redrafted. • An invoice is canceled.
Marketing object	The status of a marketing object changed.

To subscribe to alerts for an object

You can override default settings within a plan, program, project, or project request even if you are not an administrator, which allows you to control the alerts that each object owner and participant receives. However, if there are permissions that are configured for any of the tabs of a project or request, the system filters alerts appropriately. For example, alerts about attachments are not sent to users who do not have access to a project's Attachments tab.

1. Open the object for which you want to change alert subscriptions.
2. Click the **Communicate** icon () and select **Subscribe to Alerts** from the drop-down list.

3. From the list of alerts, select the check boxes that correspond to the alert that you want to change. You can set or clear alert subscriptions for each type of user, **Owner**, or **Participant**. The possible entries are as follows:
 - Check mark: indicates that the user receives the alert or alarm
 - Blank: indicates that the user does not receive the alert or alarm
 - n/a: indicates that you did not specify team members for this access level (for example, Program Participant) when you created the object. After you add users with the corresponding access level, you can set alerts for that access level.
4. Click **Accept** to save your changes or **Cancel** to leave the alert settings as they were.

Brief and detailed task alerts

When someone makes edits to a workflow, they can make numerous edits that affect several tasks, members, dates, and so on. IBM Marketing Operations allows you to determine whether users should receive detailed or brief alerts (through notification by email and within Marketing Operations) about the workflow changes:

- Brief mode: The notification informs users that changes were made to the workflow. In certain cases, the field changed and new value are shown.
- Detailed mode: The notification contains a section for each task that changed. For each change, both the previous and current values are listed in the alert.

Determine the correct level of information, and set the **Detailed workflow change notification** alert accordingly.

Note the following:

- If a project is set up to deliver detailed alerts to owners and participants, any changes to workflow tasks leads to a detailed alert being sent to project owners and affected task members (that is, specific participants who are task members). In this case, brief alerts related to workflow tasks (such as Task Assigned or Task Started) are not sent.
- If a project is set up to deliver detailed alerts to owners only, then changes to workflow task rows lead to a detailed alert being sent to project owners only. Affected task members (project participants) receive brief alerts.

Group events that contribute to detailed alerts

In addition to edits made to the workflow itself, a few other actions can lead to task alerts being sent, if a project is set for detailed alerts.

Table 60. Actions that result in alerts

Tab	Actions
People	<ul style="list-style-type: none">• If a user uses the find and replace feature to change a workflow, IBM Marketing Operations sends an alert to both the previous and new task owners.• If a user clicks Assign work by role, Marketing Operations sends an alert to each user assigned (or unassigned) tasks.

Table 60. Actions that result in alerts (continued)

Tab	Actions
Tasks	<ul style="list-style-type: none"> If a user clicks Complete Selected, Skip Selected, or Reassign Selected, IBM Marketing Operations sends an alert that indicates the affected tasks. If a user edits a task from the screen, Marketing Operations sends an alert indicating the changes to the task.
Teams	If a team manager or member reassigns tasks, IBM Marketing Operations sends an alert to both the previous and new task owners.
Approvals	If a user edits an approval task that is part of a workflow, IBM Marketing Operations sends an alert indicating changes to the task.

Examples of brief and detailed alerts

The following example depicts an email a user might receive if the project is set up to deliver detailed alerts.

Subject: Project workflow updated: "Project 0004 (TRS1022)"
Project workflow updated: "Project 0004 (TRS1022)"
By: asm admin
When: Monday, October 15, 2007 at 1:38:24 PM EST
Task : 1.1 Determine objectives and theme (Task Code : <empty>)
Target Start changed to 11/01/2007 09:00:00 AM from 10/17/2007 09:00:00 AM
Notes changed to My Added new notes..... from Added new notes
% Complete changed to 6 from 3
Target End changed to 11/05/2007 05:00:00 PM from 10/19/2007 05:00:00 PM
Members changed to rm_user3, rm_user2, from asm admin
Task : 1.2 Estimate costs (1.1,1.1) (Task Code : <empty>)
Target Start changed to 11/06/2007 09:00:00 AM from 10/22/2007 09:00:00 AM
Notes changed to My Added new notes..... from Added new notes
% Complete changed to 25 from 10
Target End changed to 11/07/2007 05:00:00 PM from 10/23/2007 05:00:00 PM
Members changed to rm_user3, rm_user2, from asm admin
:
:
Click
<http://svr01:7001/MktOps/affiniumplan.jsp?cat=projectworkflow&projectid=103> to go to project.

The following example depicts an email a user might receive if the project is set up to deliver brief alerts:

Subject: Project workflow updated: "Project 0004 (TRS1022)"
Project updated: "Project 0004 (TRS1022)"
By: asm admin
When: Monday, October 15, 2007 at 1:38:24 PM EST
Comment: "Workflow" tab updated.
Description: Tradeshow for 1st Mutual Bank of Fred
Click
<http://svr01:7001/MktOps/affiniumplan.jsp?cat=projecttabs&projectid=103> to go to project.

Configuring task alert level

Your administrator can select the **Detailed workflow change notification** alert. If so, by default, all projects send detailed alerts. Project owners and members can

override the default setting on a per-project basis, by changing the setting for the **Detailed workflow change notification**, located in the alert subscription window for each project.

To post a message on the message board

On the message board, you post and read messages about a particular plan, program, project, asset, account, approval, or invoice object. You can use this feature as a method of communicating information about an object. When you post a message to the message board, any user who has permission to access that object can view the posted message.

1. Open the list page for the object type of the object for which you would like to post a message. For example, click **Operations > Accounts**. (You can post messages for plans, programs, projects, assets, accounts, approvals, or invoices.)
2. Click the plan, program, project, account, approval, or invoice for which you want to post a message.

3. Click **Communicate** () in the IBM Marketing Operations toolbar and select **Post a Message**.

The Messages window displays.

4. Enter your message.
5. Select a delivery option.

By default, you also receive an email alert when you post a message.

6. Click **Post Comment**.

The Messages window displays all the posted comments for this object. Your new comment displays at the top of the list.

If you chose an email option, your message includes a line that lists the email recipients, such as:

(cc'd to Mary Manager, Connie Contact, aartiste@mycompany.com)


Full names displays for users who are identified in IBM Marketing Platform, otherwise the email address displays.

7. Click **Close** if this comment is the only one you want to post now, or click **Post a Comment** to post an additional comment.

IBM Marketing Operations posts the message to the message board and sends email messages as specified. The email messages contain the text that you posted and a link to the object you identified as the subject.

To read a message on the message board

You can read messages that were previously posted to the message board, if you have permission to view that object. Messages can be posted for plans, programs, projects, assets, accounts, approvals, or invoices.

1. Open the list page for the object type of the object for which you would like to read a message. For example, click **Operations > Accounts**. (You can post or read messages for plans, programs, projects, assets, accounts, approvals, or invoices.)
2. Click the plan, program, project, asset, account, approval, or invoice whose messages you want to read.
3. Click the **Communicate** icon () and select **Read Messages**.

The Messages window appears, displaying all the messages on the message board for that object.

4. Click **Close** to exit the message board or click **Post a Comment** if you want to respond to a posted message.

Before you contact IBM technical support

If you encounter a problem that you cannot resolve by consulting the documentation, your company's designated support contact can log a call with IBM technical support. Use these guidelines to ensure that your problem is resolved efficiently and successfully.

If you are not a designated support contact at your company, contact your IBM administrator for information.

Information to gather

Before you contact IBM technical support, gather the following information:

- A brief description of the nature of your issue.
- Detailed error messages that you see when the issue occurs.
- Detailed steps to reproduce the issue.
- Related log files, session files, configuration files, and data files.
- Information about your product and system environment, which you can obtain as described in "System information."

System information

When you call IBM technical support, you might be asked to provide information about your environment.

If your problem does not prevent you from logging in, much of this information is available on the About page, which provides information about your installed IBM applications.

You can access the About page by selecting **Help > About**. If the About page is not accessible, check for a `version.txt` file that is located under the installation directory for your application.

Contact information for IBM technical support

For ways to contact IBM technical support, see the IBM Product Technical Support website: (http://www.ibm.com/support/entry/portal/open_service_request).

Note: To enter a support request, you must log in with an IBM account. This account must be linked to your IBM customer number. To learn more about associating your account with your IBM customer number, see **Support Resources > Entitled Software Support** on the Support Portal.

Notices

This information was developed for products and services offered in the U.S.A.

IBM may not offer the products, services, or features discussed in this document in other countries. Consult your local IBM representative for information about the products and services currently available in your area. Any reference to an IBM product, program, or service is not intended to state or imply that only that IBM product, program, or service may be used. Any functionally equivalent product, program, or service that does not infringe any IBM intellectual property right may be used instead. However, it is the user's responsibility to evaluate and verify the operation of any non-IBM product, program, or service.

IBM may have patents or pending patent applications covering subject matter described in this document. The furnishing of this document does not grant you any license to these patents. You can send license inquiries, in writing, to:

IBM Director of Licensing
IBM Corporation
North Castle Drive
Armonk, NY 10504-1785
U.S.A.

For license inquiries regarding double-byte (DBCS) information, contact the IBM Intellectual Property Department in your country or send inquiries, in writing, to:

Intellectual Property Licensing
Legal and Intellectual Property Law
IBM Japan, Ltd.
19-21, Nihonbashi-Hakozakicho, Chuo-ku
Tokyo 103-8510, Japan

The following paragraph does not apply to the United Kingdom or any other country where such provisions are inconsistent with local law: INTERNATIONAL BUSINESS MACHINES CORPORATION PROVIDES THIS PUBLICATION "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Some states do not allow disclaimer of express or implied warranties in certain transactions, therefore, this statement may not apply to you.

This information could include technical inaccuracies or typographical errors. Changes are periodically made to the information herein; these changes will be incorporated in new editions of the publication. IBM may make improvements and/or changes in the product(s) and/or the program(s) described in this publication at any time without notice.

Any references in this information to non-IBM websites are provided for convenience only and do not in any manner serve as an endorsement of those websites. The materials at those websites are not part of the materials for this IBM product and use of those websites is at your own risk.

IBM may use or distribute any of the information you supply in any way it believes appropriate without incurring any obligation to you.

Licensees of this program who wish to have information about it for the purpose of enabling: (i) the exchange of information between independently created programs and other programs (including this one) and (ii) the mutual use of the information which has been exchanged, should contact:

IBM Corporation
170 Tracer Lane
Waltham, MA 02451
U.S.A.

Such information may be available, subject to appropriate terms and conditions, including in some cases, payment of a fee.

The licensed program described in this document and all licensed material available for it are provided by IBM under terms of the IBM Customer Agreement, IBM International Program License Agreement or any equivalent agreement between us.

Any performance data contained herein was determined in a controlled environment. Therefore, the results obtained in other operating environments may vary significantly. Some measurements may have been made on development-level systems and there is no guarantee that these measurements will be the same on generally available systems. Furthermore, some measurements may have been estimated through extrapolation. Actual results may vary. Users of this document should verify the applicable data for their specific environment.

Information concerning non-IBM products was obtained from the suppliers of those products, their published announcements or other publicly available sources. IBM has not tested those products and cannot confirm the accuracy of performance, compatibility or any other claims related to non-IBM products. Questions on the capabilities of non-IBM products should be addressed to the suppliers of those products.

All statements regarding IBM's future direction or intent are subject to change or withdrawal without notice, and represent goals and objectives only.

All IBM prices shown are IBM's suggested retail prices, are current and are subject to change without notice. Dealer prices may vary.

This information contains examples of data and reports used in daily business operations. To illustrate them as completely as possible, the examples include the names of individuals, companies, brands, and products. All of these names are fictitious and any similarity to the names and addresses used by an actual business enterprise is entirely coincidental.

COPYRIGHT LICENSE:

This information contains sample application programs in source language, which illustrate programming techniques on various operating platforms. You may copy, modify, and distribute these sample programs in any form without payment to IBM, for the purposes of developing, using, marketing or distributing application programs conforming to the application programming interface for the operating platform for which the sample programs are written. These examples have not

been thoroughly tested under all conditions. IBM, therefore, cannot guarantee or imply reliability, serviceability, or function of these programs. The sample programs are provided "AS IS", without warranty of any kind. IBM shall not be liable for any damages arising out of your use of the sample programs.

If you are viewing this information softcopy, the photographs and color illustrations may not appear.

Trademarks

IBM, the IBM logo, and [ibm.com](http://www.ibm.com)[®] are trademarks or registered trademarks of International Business Machines Corp., registered in many jurisdictions worldwide. Other product and service names might be trademarks of IBM or other companies. A current list of IBM trademarks is available on the Web at "Copyright and trademark information" at www.ibm.com/legal/copytrade.shtml.

Privacy Policy and Terms of Use Considerations

IBM Software products, including software as a service solutions, ("Software Offerings") may use cookies or other technologies to collect product usage information, to help improve the end user experience, to tailor interactions with the end user or for other purposes. A cookie is a piece of data that a web site can send to your browser, which may then be stored on your computer as a tag that identifies your computer. In many cases, no personal information is collected by these cookies. If a Software Offering you are using enables you to collect personal information through cookies and similar technologies, we inform you about the specifics below.

Depending upon the configurations deployed, this Software Offering may use session and persistent cookies that collect each user's user name, and other personal information for purposes of session management, enhanced user usability, or other usage tracking or functional purposes. These cookies can be disabled, but disabling them will also eliminate the functionality they enable.

Various jurisdictions regulate the collection of personal information through cookies and similar technologies. If the configurations deployed for this Software Offering provide you as customer the ability to collect personal information from end users via cookies and other technologies, you should seek your own legal advice about any laws applicable to such data collection, including any requirements for providing notice and consent where appropriate.

IBM requires that Clients (1) provide a clear and conspicuous link to Customer's website terms of use (e.g. privacy policy) which includes a link to IBM's and Client's data collection and use practices, (2) notify that cookies and clear gifs/web beacons are being placed on the visitor's computer by IBM on the Client's behalf along with an explanation of the purpose of such technology, and (3) to the extent required by law, obtain consent from website visitors prior to the placement of cookies and clear gifs/web beacons placed by Client or IBM on Client's behalf on website visitor's devices

For more information about the use of various technologies, including cookies, for these purposes, See IBM's Online Privacy Statement at: <http://www.ibm.com/privacy/details/us/en> section entitled "Cookies, Web Beacons and Other Technologies."



Printed in USA