

Version 11 Release 1
March 15, 2019

*IBM Marketing Operations User's
Guide*



Note

Before using this information and the product it supports, read the information in “Notices” on page 223.

This edition applies to version 11, release 1, modification 0 of IBM Marketing Operations and to all subsequent releases and modifications until otherwise indicated in new editions.

© **Copyright IBM Corporation 2002, 2019.**

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
Marketing Operations documentation and help	2
IBM Marketing Operations workflow	4
Integration with IBM Campaign	4
Business processes	4
Relationship of planning objects	5
Plans	5
Programs	6
Projects	6
Approvals	7
Teams	7
Alerts	7
Attachments	7
Metrics	8
Workflows	8
Functional roles	8
Security policies	9
Strategic planning and financial management	9
Libraries of reusable elements	11
Logging in to IBM Marketing Software	12
Customize Marketing Operations	13
Setting your start page	13
Setting your basic settings	14
Setting your approvals options	14
Setting options for projects	14
Optional project columns	15
Rearranging columns on object lists	15
Setting your tasks options	16
Setting your operational analytics options	16
Defining Out-of-office settings	17

Chapter 2. Common tasks 19

Attachments	19
To add an attachment to an object	19
To remove an attachment from an object	20
To send e-mail attachments	20
Statuses of business processes	21
Changing the status of business processes	23
Changing the status of multiple projects or requests	24
Disabled attribute values	25
Disabled attribute values in objects	25
Example: disabled attribute values	25
Selecting resources	26
Printing objects	26
Exporting information in Microsoft Excel format	27

Chapter 3. Plans 29

Plan views	29
Summary information for plans	29
Fiscal year for plans	29
Adding a plan	30
Adding and removing program areas	30
Linking a program to a plan	31

Creating a program from a plan	32
Removing a program from a plan	32
Starting plans	32
Deleting a plan	33

Chapter 4. Programs 35

Adding a program	36
Starting programs	36
Adding new project requests and projects to programs	36
Linking existing projects to programs	37
Removing projects from programs	38
Deleting programs	38

Chapter 5. Projects 39

Projects and project requests	39
Project reconciliation	40
Project request statuses	40
Project health	40
Project views	41
Selecting project views	42
Project search	42
Displaying projects in list and calendar view modes	42
Campaign projects in an integrated system	43
Project codes and campaign codes	43
Creating projects	43
Cloning projects	45
Starting projects	45
Project attachments tab	46
Project requests	46
Creating requests	47
Submitting requests	48
Monitoring the status of project requests	48
Canceling or redrafting requests	48
Responding to requests as an individual	49
Copying requests	49
Copying projects	50
Team projects and requests	51
Team projects lifecycle	51
Reassigning team projects	52
Responding to team requests as a team manager	52
Navigating from projects to programs	53
Linked projects	53
Subprojects overview	53
Details on the project-subproject relationship	54
Creating child projects and requests	54
Linking child projects and requests to projects	55
Security for linked projects	55
Removing parent-child project links	55
Assigning work	56
Reconciling projects	56
Deleting projects	56
Project and request deactivation	57
Deactivating projects and requests	57

Reactivating projects and requests	58
Chapter 6. Workflows	59
Advanced Workflows	59
Workflow views	60
Spreadsheet view mode	60
Post Task Update dialog	60
Adding an attachment to a task	63
Starting an approval process from view mode	64
Timeline view mode	64
Spreadsheet or timeline view customization	65
Setting the first column width	66
Process flowchart view	67
Workflow concepts	67
Schedules	69
Date dependency calculations	70
Scheduling work time	72
Editing workflow spreadsheets	73
Edit mode toolbar	74
Adding a stage or task	76
Workflow spreadsheet columns	81
Workflow task status	90
Importing workflow templates into projects	92
Considerations for importing and exporting form tasks in workflow templates	92
Considerations for importing and exporting approvals with approval steps in workflow templates	93
Printing the Workflow tab	93
Chapter 7. Approvals	95
Approval concepts	95
Stand-alone approvals	96
Approval tasks	96
Reapproval rules for form approvals	97
Configuring form approval tasks	97
Approval dates	98
Due dates for approvals	98
Approval Sequence	100
Rejected approvals	100
Approval organization	101
Approval process workflow	101
Creating Approval Processes	102
Assigning Approvers	103
Adding approval items	104
Submitting approval processes for review	105
Methods of evaluating approvals	105
Evaluating approval processes	106
Approval portlet	107
Evaluating approval processes in the Approval Portlet	107
Mobile features in IBM Marketing Operations	107
Post complete response	108
Modifying approval processes	109
Canceling approval processes	109
Copying approval processes	110
Deleting an approval	111
Completing approval processes	111
Putting approval processes on hold	111
Reactivating approval processes that are on hold	112

Reassigning team approvals	112
Approval processes linked to workflow tasks	113
Attachment markup types in IBM Marketing Operations	113
Marking up attachments	114
Adobe Acrobat markup in IBM Marketing Operations	115
Native IBM Marketing Operations markup	116
Chapter 8. People and teams.	119
People tab	119
Project member management	119
Managing project members	120
Changing the access level for a project member	126
Find and replace task members or reviewers	126
Select project members and reviewers page	128
Managing reviewers	128
Object access levels	129
Roles and permissions	130
Assigning work by role	130
Removing a role	131
Adding a role	131
Assigning people to roles	132
Chapter 9. Calendar	133
Customizing the calendar appearance	133
Calendar display options	133
Setting your default calendar options	135
Changing your view of the calendar	135
Timeline view of the calendar	135
Text or graphical calendar views	136
Monthly calendar	136
Calendar color coding	137
Horizontal bars on the calendar	137
Brief and detailed views of tasks	138
Publishing the calendar	138
Chapter 10. Grids.	141
Grid edit mode	141
Grid controls	142
Importing grid data	144
Exporting grid data	144
Posting read-only grid data to URLs	144
Grouping read-only grid data	145
Chapter 11. Marketing objects	147
Offer object type	147
Creating marketing objects	148
Marketing object cross-reference report	149
Modifies and references relationships	149
Select marketing objects	149
Deleting marketing objects	149
Adding marketing object references to forms or grid rows	150
Marketing object references in approvals	151
Chapter 12. Assets and asset libraries 153	
Asset libraries	153
Changing from asset list view to thumbnail view	154
Adding an asset	154

New Asset page	154
Editing an asset	156
Adding a version of an asset	156
Asset statuses	157
Changing the status of assets	157
Viewing an asset	157
Viewing history of an asset	158
Adding an asset folder	158
Deleting assets and folders from the Asset list page	158
Deleting an asset from within the asset	159
Moving assets and folders from the Asset list page	159
Moving an asset from within the asset	160

Chapter 13. Budgets 161

Budget funding.	161
Planning budgets from the top down	162
Planning budgets from the bottom up	163
Effects of deleting links between plans, programs,	
and projects	163
Budgets and accounts	163
Budget views	164
The Plan Budget tab	164
Plan Budget Summary table	164
Program Costs table	165
The Program Budget tab	166
Program Budget Summary table	166
Project Costs table	166
Program Line Item Details table	167
The Project Budget tab	167
Budget allocation versions	167
Creating budget versions	168
Deleting budget versions	169
Comparing budget versions	169
Marking a budget version "in-use"	169
Allocating funds	170
Allocating funds for stand-alone programs and	
projects	171
Adding and editing line items.	171
Finalizing budget line items	172
Discarding budget line items	173
Budget line item approvals	173

Chapter 14. Invoices 175

Adding an invoice.	175
New Invoice page	176
Editing invoices	176
Line item rollups	177
Invoice Line Item Approvals	177
Rollups to the source program or project	177
Rollups to the source account	178
Adding and editing invoice line items	178
Field descriptions for the Edit Invoice Line Items	
page	179
Invoice status types	179
Changing the status of invoices	180
Deleting an invoice	180
Printing the invoice summary	181

Chapter 15. Accounts 183

The account Summary page	183
------------------------------------	-----

Account summary table	183
Selecting the fiscal year to view	184

Chapter 16. Metrics 185

Setting up program and project metrics.	185
Editing program and project metrics.	185
Entering planned values for metrics that roll up	186
Views for rollup metrics.	186
Importing metrics from a campaign	187
Finalizing and rolling up metrics	187

Chapter 17. Reports 189

Filtering data with search and select.	190
Dates filters	190
Status and type filters	191
Multi-object reports	191
Generating the Marketing Activity report	192
Generating the Overdue Milestone report	193
Generating the Program Tasks and Milestones	
report	193
Generating the Project Performance Crosstab	
report	193
Generating the Project Performance Summary	
report	195
Generating the Resource Task Load report.	196
Generating the Vendor Spend Summary report	
197	
Single-object reports	198
Viewing the revision history of an object	198
Generating the Approval and Compliance	
Listing report	199
Generating the Budget Summary by Quarter	
report	199
Generating the Detailed Expense Breakout	
report	200
Generating the Work Assigned to Team or Team	
Member reports	201
Dashboard portlets	201
Marketing Operations list portlets	202
Quick link portlets	203
Marketing Operations IBM Cognos report	
portlets	203
Custom portlet to show standard or saved	
search	204

Chapter 18. Searches 205

Grid searches	205
Object attribute searches.	206
Searching a digital asset library	206
Searching for objects other than assets	206
Regrouping and reordering search criteria.	207
The Not In operator	208
Assets advanced search page	208
Advanced search page for objects other than assets	
209	
Saved searches	210
Viewing a saved search	211
Deleting a saved search	211

Chapter 19. Alerts and the message board 213

The Alerts page	213
---------------------------	-----

Alerts on outside email addresses	214
Comments for alerts	214
Subscribing to alerts for an object	215
Brief and detailed task alerts	216
Group events that contribute to detailed alerts	216
Examples of brief and detailed alerts	217
Posting a message on the message board	218

Chapter 20. Reading a message on the message board 219

Before you contact IBM technical support 221

Notices 223

Trademarks	225
Privacy Policy and Terms of Use Considerations	225

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 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 to plan, budget, and monitor every type of marketing program in your company.

Use IBM Marketing Operations for 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 quality standards.
- 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 that are 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?

Marketing Operations, users increase the return and lower the risk of resource investments by optimizing decisions, collaborating across programs, operating more efficiently, and gaining greater visibility.

Marketing Operations has the following benefits.

- 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 started. 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 that is provided by using 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 align.

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 Marketing Operations, marketers reduce time and money that is spent satisfying the needs of regulatory agencies, corporate auditors, and management.

- Open, flexible architecture.

Marketing Operations is based on an open architecture that makes it easy for IT to implement and use your existing infrastructure and data. Marketing Operations uses a three-tier Java™ Platform, Enterprise Edition architecture, which separates the client, web server, application server, and back-end data sources.

Marketing Operations documentation and help

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.

The following three-column table describes tasks in one column, guide names in the second column, and audience in the third column.

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

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

The following three-column table describes tasks in one column, guide names in the second column, and audience in the third column.

If you	See	Audience
<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 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 for the SOAP API and IBM<version>PublicAPI-RestClient.zip for the REST API.	<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
Need more information while you work	<ul style="list-style-type: none"> • Get help and search or browse the <i>Marketing Operations User's</i>, <i>Administrator's</i>, or <i>Marketing Operations 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 Marketing Software products: Click Help > All IBM Marketing Software Suite Documentation 	Everyone who uses Marketing Operations

IBM Marketing Operations workflow

The workflow for Marketing Operations includes creating and managing marketing objects, such as plans, programs, and projects.

Before you start working in 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 do in 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 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. You can also add 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 track expenses related to programs and projects.
8. Search for projects and approvals with both the standard and advanced search capabilities, and save advanced searches for future use.
9. Collaborate with other users with 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 and flowcharts.

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

Business processes

In IBM Marketing Operations, a business process is the representation of a collection of related, structured activities (a chain of events).

A business process can produce one of the following results:

- Marketing activities that are targeted at a particular set of prospects or customers
- Reusable marketing components that support these marketing activities

IBM Marketing Operations provides the following types of business processes:

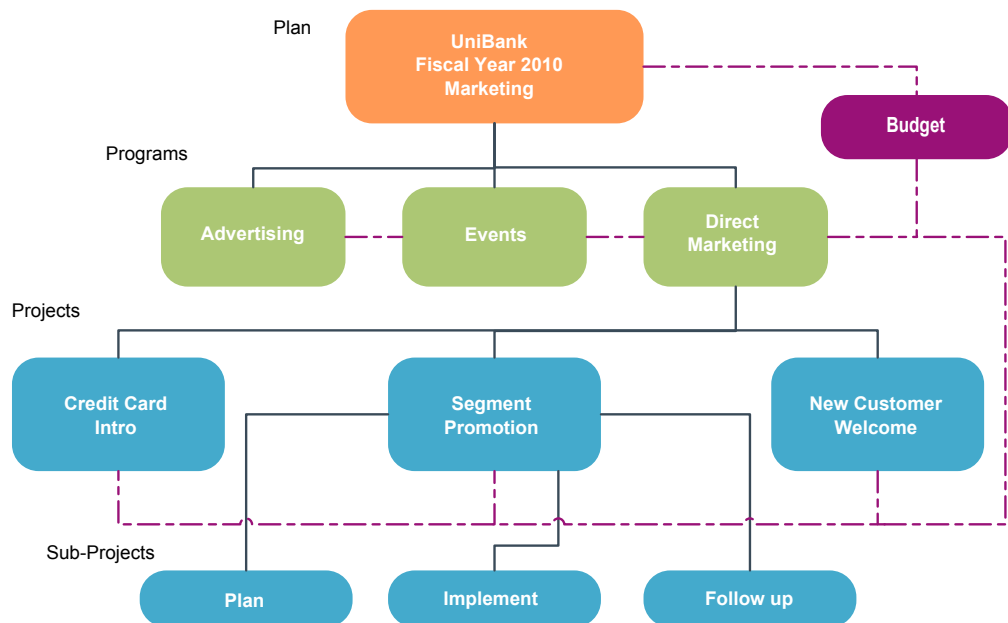
- Plans
- Programs
- Projects

- Subprojects
- Project requests
- Approvals

Relationship of planning objects

In Marketing Operations, planning objects include plans, programs, and projects. 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.

The following diagram shows how the planning objects relate to one another.



On the summary page of projects and programs, there is a field called **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 captures the objectives of a business unit or area for a specific time period, typically measured yearly or quarterly. A plan also serves as a container and "rollup" point for the various programs and projects that you define 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, if you have a plan with a child program, you can make budget information that is related to the program roll up from the program to the plan. You can then study and track this information from the perspective of the plan.

Programs

A program represents a marketing activity and is typically comprises 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 might contain multiple projects each representing a distinct marketing promotion or campaign. A product launch program might contain projects that pertain to various types of collateral development, analyst briefings, and tradeshow attendance.

Projects

A project represents all of the information that is related to developing and running one or more related marketing deliverables or initiatives. This information can include a checklist or schedule of tasks that people who work on the project must complete to prepare and produce the deliverables for the project.

For example, you might create the project "Monthly Tradeshow" to collect all information that is needed for the one tradeshow each month that your organization attends. This information might include any of the following information:

- Who attends the show
- What equipment you need in the booth
- Demonstrations of the product that you intend to present
- Collateral to hand out to customers
- Costs of promotional materials

Note: Projects can have subprojects. A subproject has the same characteristics as a project. A subproject is linked to a parent project; any project that is 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. Not every project needs all of this information; most of it is optional and can be completed only when needed.

Note: Approvals can also exist independently from projects. An approval does not need to be associated with a particular project.

Project requests

If you do not have the security permissions to create a project, you create a project request. 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 that requests collateral material. The marketing services representative accepts the request and creates a project, which organizes tasks and assigning resources to manage the creation of the collateral.

If you request a project, you are a requester. The requester then submits 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 is converted to a project, it contains the appropriate workflow.

Approvals

An approval process streamlines the process of having your work reviewed and approved. Multiple users can review work in parallel or in an order that represents your business processes.

Reviewers (or approvers) can electronically mark up content that is submitted for review. Then, IBM Marketing Operations records approvals and denials for audit purposes. You can tie approvals to a project or they can exist independently from any project.

You can use some approval features on mobile devices.

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 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 that is 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. For example, an alert might remind you that a project is running behind schedule or over budget, or that an item 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 email, it goes directly to the inbox of your email application.

There are two types of alerts in Marketing Operations.

- Alerts that Marketing Operations sends based on events, such as the start of a project.
- Alarms that an administrator sets up to send at regular intervals, such as one time 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 that is used to create the particular object.

Metrics

Metrics are used for management reports and analysis. View metrics 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 results.
 - 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 displays and manages the group of tasks and milestones that drives the project. Workflows efficiently meet and manage project goals.

Tasks, dependencies, and durations are populated for a workflow based on the template that is 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. After work begins, workflows make monitoring progress and identifying bottlenecks easy.

Functional roles

When you set up a project, you assign 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 have the following benefits.

- People come and go: assigning a role to a task makes it easier to control work when people leave or return to 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 objects that are associated with the policy, such as plans, programs, and projects. These rules indicate which types of users can view, modify, delete, or perform any of the other relevant functions for these objects.

To express these security privileges, security policies contain the following components:

- User roles to identify the types of users
- Function grants or blocks to identify what each type of user can or cannot do

Your organization might use multiple security policies. One example security policy, Global, is provided with IBM Marketing Operations.

The global policy is a special policy that is always considered in controlling all objects in the system, rather than all users. Companies with simple security models can customize the global policy to express their rules.

Companies that require different, discrete groups can use custom security policies to do so. Then, these companies can use the global policy only for system-wide administrative or executive access rules.

Note: The term global does not indicate that every user has full access to everything. Instead, the security policy is globally associated with every user by default.

The *IBM Marketing Operations Administrator's Guide* discusses the details of security policies in more depth.

Strategic planning and financial management

IBM Marketing Operations includes strategic planning and financial management.

Manage strategic planning and financial management with the following features.

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

In Marketing Operations, you use the following tools for Strategic Planning and Financial Management tasks.

- Accounts
- Budgets
- Cost Categories
- Invoices

Accounts

The finance department can use accounts to monitor the expenditures and cash flow for your business.

A top-level account represents a specific corporate general ledger account for 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 can have subaccounts. Depending on the account structure at your company, the subaccounts also might represent specific general ledger accounts. Alternatively, subaccounts might 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 coordinates expenses of plans, programs, and projects. After you establish 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.

Marketing Operations tracks budgets of child programs and projects, although these objects can have different owners. For example, a program that is 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. A plan owner, such as a marketing manager, can track expected expenses from child programs, projects, and the plan budget itself, to remain responsive to budgetary needs.

Note: Budgets are available only when the IBM 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 that is broken down into weeks, months, or quarters.

Marketing Operations keeps budget information for the current fiscal year, the next two fiscal years, and any past fiscal years that date 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 Marketing Operations, you can break fiscal years into weeks, months, or quarters. When you create a plan, program, or project, choose the wanted increment from the **Budget Granularity** list on the **Summary** tab.

Users cannot 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.

Cost categories

Cost categories are used to categorize expenses into types, such as travel expense and mailing expense. Cost categories are used both when tracking invoices and creating budgets.

For details on creating and editing cost categories, see the *IBM Marketing Operations Administrator's Guide*.

Invoices

In IBM Marketing Operations, an invoice electronically captures a paper invoice that is submitted to a marketing department for services, time, or materials that are provided by a third-party vendor or supplier. You must manually transfer the information from the paper invoice into an Marketing Operations invoice.

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

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

Libraries of reusable elements

Within IBM Marketing Operations, you can store and reuse marketing items.

Marketing Operations provides libraries to store the following reusable elements:

- Marketing objects: Products a marketing team develops
- Digital assets: Electronically stored documents that can be used or referenced in a marketing program

Marketing objects

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

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.

- 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 that 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. Within Marketing Operations, marketing object instances are called "marketing objects".

Digital asset management

A digital asset is any electronically stored document that you might want to use or reference in a marketing program. Digital assets 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, by using IBM Marketing Operations Assets, with the following advantages:

- Use 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 that are contained in Approval objects have integrated mark-up capabilities that enable collaboration between staff and agency partners and tracking of comments, edits, and changes within creative content.

Logging in to IBM Marketing Software

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 Marketing Software administrator.

1. Open a supported browser and enter the URL to the IBM Marketing Software 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 Marketing Software administrator.

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

Customize 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	Choose 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 133.
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 202.
- 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 203.
- Reports, such as Budget by Project Type or Marketing Financial Position.
For more information, see “Marketing Operations IBM Cognos report portlets” on page 203.

Setting your start page

The start page is the page that displays when you log in to IBM Marketing Software. 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 Marketing Software, 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 Marketing Software product and by your permissions in IBM Marketing Software.

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

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

To set the security policy, complete the following steps.

1. Select **Settings > Marketing Operations Settings**.
The Administrative Settings page opens.
2. Click **Basic Settings**.
The Basic Settings page opens.
3. In the **Default Security Policy** field, select the security policy to use by default when you create items in Marketing Operations.
You can leave **Global** selected, which is the default, to use the global security policy that is defined by your administrator. Otherwise, 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 *IBM Marketing Operations Administrator's Guide*.
4. Click **Save Changes** to save your changes.

Setting your approvals options

Use the approvals options to customize Marketing Operations so you can view and receive information about approvals that are important to you.

To set your approval options, complete the following steps.

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 the following options:

- The default view

- Data columns to include when you review a list of projects
- Whether to receive email notifications about changes in health status for your projects

You can also arrange the columns in the order most useful for you.

Receiving project health status updates by email

Daily, 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.

To receive project health status updates by email, complete the following steps.

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 "Project health" on page 40.

Optional project columns

For Project List view pages, you can customize which columns appear in the list.

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

In the Project Calendar 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.

When you select optional columns, you select them for a particular view. For example, if you select an optional column that is called **Objectives** in the Active Projects and Requests view, this column does not appear in the All Projects and Requests view.

Rearranging columns on object lists

You can rearrange the custom and standard columns of data on marketing object lists so you can see the most relevant data without scrolling. You can choose which custom columns to display.

You can rearrange the column order on the lists of the following marketing objects.

- projects
- assets
- offers
- marketing objects

Note: You cannot remove standard attributes because they are used by the system, but you can put them where they are most useful or least intrusive.

1. Go to a list page for one of these object types, such as **Active Projects**.

2. Click **Options**. The **Project Options** window opens. In this window, **Available Columns** shows all columns that can be displayed. The list of **Selected Columns** shows columns that are currently displayed in the order that they display.
3. Use the >> and << arrows to move the columns you want to display into **Selected Columns**.

Note: You cannot remove standard attributes from **Selected Columns**.

Note: On the Assets list page, standard columns are not shown in the **Available Columns** list.

4. Use the up and down arrows arrange the columns in **Selected Columns** in the order you want them to appear.
5. For projects only, in the **Default List** field, select the list 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 as your default view.
6. For projects only, in the **Default View Mode** field, select project list or project calendar.
7. Click **Save Changes**.

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:** You are provided three options in Out-of-office settings for Delegating users for workflow tasks and approval tasks:
 - Do not auto-delegate: The workflow tasks and approvals which are currently ready to start and assigned to the user will not be delegated. However, tasks and approvals that will become ready to start after enabling Out-of-office will be delegated automatically.
 - Auto-delegate all: All the workflow tasks and approvals which are currently ready to start and assigned to the user will be delegated. However, tasks and approvals that will become ready to start after enabling Out-of-office will be delegated automatically.
 - Auto delegate selected: Only the selected workflow tasks and approvals which are currently ready to start and assigned to the user will be delegated. However, tasks and approvals that will become ready to start after enabling Out-of-office will be delegated automatically.

Note: Workflow tasks and approval delegation will happen if the project state is draft/in progress (started)/on hold (paused)/reconcile. Workflow tasks and approval delegation will not happen if project state is cancelled or complete.

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:** You are provided three options in Out-of-office settings for Delegating user for standalone approvals and budget approvals:
 - Do not auto-delegate: The standalone approvals and budget approvals which are currently ready to start and assigned to the user will not be delegated. However, standalone approvals and budget approvals that will become ready to start after enabling Out-of-office will be delegated automatically.
 - Auto-delegate all: All the standalone approvals and budget approvals which are currently ready to start and assigned to the user will be delegated. However, standalone approvals and budget approvals that will become ready to start after enabling Out-of-office will be delegated automatically.

- Auto delegate selected: Only the selected standalone approvals and budget approvals which are currently ready to start and assigned to the user will be delegated. However, tasks and approvals that will become ready to start after enabling Out-of-office will be delegated automatically.

An error displays if you attempt to delegate approvals to a user who cannot respond to them.

- **Project Requests:** You are provided three options in Out-of-office settings for Delegating user for project requests:

- Do not auto-delegate: The project requests which are currently ready to start and assigned to the user will not be delegated. However, project requests that will become ready to start after enabling Out-of-office will be delegated automatically.
- Auto-delegate all: All the project requests which are currently ready to start and assigned to the user will be delegated. However, project requests that will become ready to start after enabling Out-of-office will be delegated automatically.
- Auto delegate selected: Only the selected project requests which are currently ready to start and assigned to the user will be delegated. However, project requests that will become ready to start after enabling Out-of-office will be delegated automatically.

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:

- “Attachments”
- “Statuses of business processes” on page 21
- “Disabled attribute values” on page 25
- “Selecting resources” on page 26 “Selecting resources” on page 26
- “Printing objects” on page 26
- “Exporting information in Microsoft Excel format” on page 27

Attachments

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

Marketing Operations automatically creates a thumbnail for documents, images, PDF files, and web pages when these items are attached or sent for approval. Marketing Operations supports the following file types.

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

Note the following limitations.


- By default, you can attach up to five files at one time. This number is configurable, and might 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 status of a business process quickly informs users of where the business process is in its lifecycle. You change the status by selecting a transition.

The available statuses and transitions depend on the type of business process and the needs of your organization. Your system administrator can create more statuses and add or remove transitions as required by your installation.

The following table describes the possible default statuses for plans, programs, projects, approvals, assets, and custom marketing objects.

Table 3. Workflow statutes for plans, programs, projects, approvals, and custom marketing objects.

Status	Description
Not Started	The object was created, but work is not started.
In Progress	The work on this object started.
On Hold	Work on this object stops while the object status is On Hold. Work might resume later.
Canceled	This status warns users not to access the object because work on it is stopped permanently.
Completed	The work on this object is finished.
In Reconciliation	(Projects only). Indicates that someone is editing a Canceled or Completed project. This status is temporary and can be selected by users with the correct security permission.

The following table describes the possible default statuses for requests.

Table 4. Request statuses

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

The following table describes invoice status types.

Table 5. Invoice status types

Status	Description
Draft	<p>Indicates that the invoice is still being worked on. An invoice is in the Draft state when it is first created. To move an invoice out of the Draft state, you must add line items.</p> <p>If necessary, you can place an invoice in the Draft state by choosing Re-draft Invoice from the Change Status menu.</p>
Canceled	Canceling an invoice is not the same as deleting an invoice. When you cancel an invoice, it is not active but you can still view it in Marketing Operations. Deleting an invoice removes it from the system. When you move an invoice to Canceled, Marketing Operations sends an alert to the invoice owners.
Under Review	<p>Approvers are currently examining the invoice line items.</p> <p>Note: This internal status occurs after you mark an invoice Payable.</p>
Payable	<p>Items on the invoice were reviewed, and the invoice is ready to be sent to Accounts Payable. When you move an invoice to Payable, the owner of the account to which the invoice belongs receives a notification.</p> <p>If your organization uses the invoice approval function, changing an invoice state to Payable triggers the Marketing Operations approval process. The invoice can enter the Under Review state while approvers examine the line items. For more information, see "Invoice Line Item Approvals" on page 177.</p>
Paid	The invoice is 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.

The following table describes asset status types.

Table 6. Asset statuses

Status	Description
Draft	<p>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.</p> <p>When you first add an asset, it has a status of Draft.</p>

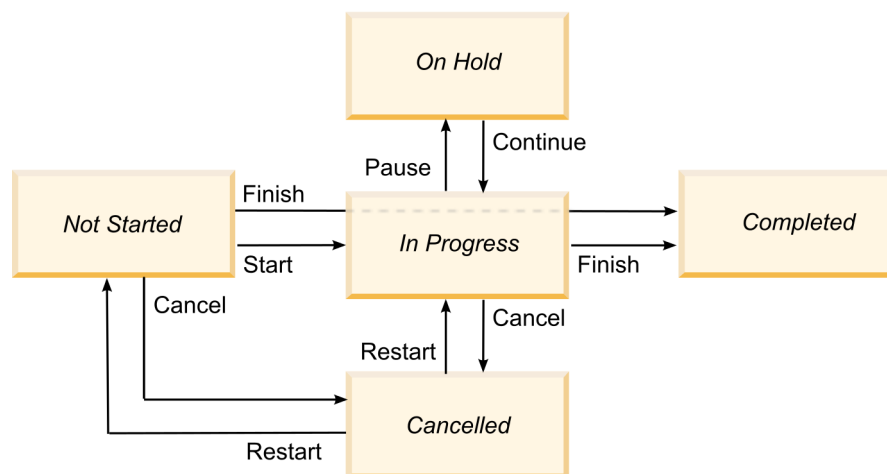
Table 6. Asset statuses (continued)

Status	Description
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.

Status changes

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

Marketing Object States and Transitions



For example, if a program is In Progress, you can choose one of the following transitions.

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

Changing the status of business processes

Statuses identify the progress of business processes. To move a business process through the lifecycle, you must change the status.

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.
3. Click **Change Status** and select a transition from the menu.

Most status transitions are available with comments and without comments. To add more information, select an option with comments. To change the status immediately, select an option without comments.

Note: You can only select transitions to **Finish** or **Cancel** an object with comments.

The available transitions 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>*.
 - For objects that are In Progress, **Pause** *<object>* changes the status to On Hold. For approvals, select **Stop Review**.
 - 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. You can reconcile projects to open them again after you change the status to Completed.
 - 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. You can reconcile projects to open them again after you change the status to Canceled.
4. Optional: If you selected a transition option "with comments," enter appropriate comments. Click **Continue**.

If you do not enter comments, the status changes immediately after you select a transition from the menu. If you enter comments, the status changes after you enter your comments.


Changing the status of multiple projects or requests

You can change the status of one or more projects or requests simultaneously to improve efficiency.

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**.
3. 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 **Change Status** and select a status from the menu to apply to all of the selected items. You can make most status changes with or without comments.
 - If you chose a new status without comments, Marketing Operations changes the status immediately when you click the new status.
 - If you chose a new status with comments, type your comments and click **Continue** to apply the new status.

Disabled attribute values

Throughout IBM Marketing Operations, users select an item or items from a list. Over time, the items in the lists can change; administrators can add, remove, or disable items from lists.

When an administrator disables an attribute, it affects the behavior of Marketing Operations in the following ways.

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

Disabled attribute values in objects

When an administrator disables an attribute value, it no longer appears in lists for new objects. However, disabled attributes still affect users in some situations.

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, the user must select an enabled value. However, the user can save the page without editing the attribute. If the user does not edit the attribute, the object 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 is 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 the user sets the value of the required attribute.

Example: disabled attribute values

When an administrator deletes an attribute value, it affects templates and objects that use that value.

Consider a project template, named 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.

- Tom can leave the **Coating** value as **Dull Aqueous**, or set it to any of the enabled values, such as **Etched**.
- Tom 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 finishes 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.

Printing objects

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.

1. Go to the **Summary** tab of the object you want to print.
2. Select the tab to print and click **Print** () 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**.
4. Complete the fields in the print dialog and click **Print**.

The data on the screen prints to the selected printer.


Exporting information in Microsoft Excel format

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

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

1. You can export information for a single object or for a list of objects.
 - To export information to Excel for a single object, go 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 that you want to export.

2. Click **Print** () and select **Export** from the menu.

A window displays, asking whether to Open or Save the file that will be exported. If you are exporting a list, 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 that 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.

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 that you want to sort by. Click the column a second time to reverse the sort order.

- 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.

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 Listpage. Any programs that are 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 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. Then, set the value to the fiscal year that corresponds to the budget data you want to edit.

Adding a plan

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

To add a plan, complete the following steps.


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 that is created in fiscal year 2015 you can select FY 2015, FY 2016, or FY 2017.
- 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.

Adding and removing program areas

Program areas are subsections of plans, allowing programs that are linked to the plan to be arranged into logical subgroups. In IBM Marketing Operations, administrators create the program areas.

Important: Before you remove a program area, you must first remove any programs that are assigned to it.

To add or remove a program area, complete the following steps.

1. Follow the steps for adding a plan until the step where you add a program area.
2. Click **Add/Remove Program Areas** 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.


Linking a program to a plan

After you create a plan, you can link existing programs to it. When you link a program to a plan, all the plan participants receive an email message that informs them of the link.

Important: 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.

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.

To link a program to a plan, complete the following steps.

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. Type 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 that you can link to the plan. Only programs with the same budget granularity and security policy as the plan are available. Programs with a status of Canceled, Deleted, or Completed never appear in **Search Results**.

4. In the **Select a Program Area** field, select a program area. The program belongs 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**.

Note: Plans can sort their linked plans or projects.

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.


Creating a 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 that you choose in the program creation process are the program areas that are currently defined for the plan.

When 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 contains more than one program area, you must select the program area to which you want the new program to belong.
- If the plan contains only one program area, the new program defaults to that program area.
- To assign a different program area to a linked program, you must remove that program from the plan and then link the program to the other program area.


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

Click the **Add Program** icon () on the plan summary page. The process is similar to creating a non-linked program.

Removing a program from a plan

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

To remove a program from a plan, complete the following steps.


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 that you want to remove from the **Linked Program(s)** field.
4. Click the right-pointing arrows 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**.


Starting plans

You start a plan by changing the status. Select the status transition **Start Plan**. After you start a plan, all participants can work on the plan.

To start a plan, complete the following steps.

1. Go to the Summary tab of the plan you want to start.

- Click **Operations > Plans**. Click **Actions**() and select a view (such as **My Plans** or **All Plans**) that includes plans with "Not Started" as the status.
2. Click **Change Status** and select **Start Plan** or **Start Plan with comments** from the menu.
 3. Optional: If you chose **Start Plan with comments**, type your comments and click **Continue**.


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

Deleting 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 you delete the plan.

To delete a plan from the Plan List page, complete the following steps

1. Click **Operations > Plans**.
By default the **Active Plans** view of the Plan List page appears.
2. Select the check box next to each plan that you want to delete.
3. Click the **Delete this Item** icon ().
4. Click **OK** at the prompt.

Chapter 4. Programs

Programs are the child-objects of Plans. Programs can contain multiple projects to organize work for your organization.

If you have permission, you can add a program. To add a program, you select a template that was set up by an IBM Marketing Operations administrator and enter custom information.

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 on the **Actions** menu. It contains links to each of the program views. In any view, you can change the sort order by clicking the column that 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 that are linked to the program are listed on the Summary tab as well.

From the Summary tab, you can change program status, add a request, edit the program, link an existing project, or remove 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 project name, the project owners, the project ID, when the last person updated the project, the target start and end dates, and the project status.

Adding a program

If you have permission, you can add a program.

When you add a program, consider the following issues:

- 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 "Team alerts" on page 121.

5. Complete the fields and continue clicking **Next** and completing 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 that are related to the program.

Starting programs

You start a program by changing the status. Select the transition Start Program.

You can start any program that 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. Go to the Summary tab of the program to want to start. Click **Operations >**

Programs. Click **Actions**() and select a view (such as **My Programs** or **All Programs**) that includes programs with ● "Not Started" as the status.

2. Click **Change Status** and select **Start Program** or **Start Program with comments** from the menu.


3. Optional: If you chose **Start Program with comments**, type your comments and click **Continue**.

The program status changes to ● **In Progress**.

Adding 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. Go 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 either **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. Complete one of the following actions:
 - Follow the steps in “Submitting requests” on page 48 to add a project request and associate it with this program. After a user accepts the request, the project that is created from this project request is also part of this program.
 - Follow the steps in “Creating projects” 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 that is 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 that are contained in the program.


Linking existing projects to programs

Link projects and programs to create an organizational hierarchy of work. 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.

Note: 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.

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.

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

1. Go to the Summary tab of the program that you want to link to an existing project.
2. Click **Manage Linked Objects** () and select **Link Existing**.
A dialog box appears for you to specify the projects to link.
3. Type your 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 are 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 the double arrows 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.
Note: Programs can sort their linked plans or projects.

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

Removing projects from programs


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

1. Go to the Summary tab of the program that contains the project you want to remove.
2. Click **Manage Linked Objects** () and select **Remove**.
3. In the **Linked Project/Request** list box, select the project requests or projects to remove.
4. Use the arrows 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.

Deleting programs

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

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.

To delete a program, complete the following steps.

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

The selected programs are deleted from the system.

Chapter 5. Projects

A project organizes all the information that is related to develop and run one or more related marketing initiatives. Projects contain general information, resources, and attachments for the marketing initiative. Projects also typically organize the people who work on the marketing initiative, including who completes which tasks, and the timeline to complete the tasks. Projects can also include budget information. Monitoring features ensure that everyone knows whether the project is completed on time.

For example, you might use a project that is called "Monthly Trade Show" to collect all the information your organization needs for one trade show each month. This information might include who attends the show, equipment for the booth, product demonstrations, collateral to hand out to customers, costs of promotional materials, and more.

Projects are based on project templates. In the previous scenario, your organization might use a template for Trade Show projects, so that you consistently reuse the basic information about the trade show. When you create a project for the June trade show, you enter any specific information for that month. For example, if a team member is on vacation during the June trade show, select a substitute to attend the trade show and then reassign work in the project.

Projects can have subprojects. A subproject has the same characteristics as a project. A subproject is linked to a parent project; any project that is linked in this manner is referred to as a subproject. For example, designing new collateral to hand out at the trade show might be a subproject of the trade show project.

Projects and project requests

Your permission settings determine whether you create projects or project requests. If you do not have permission to create projects, you submit a project request to someone who has the necessary permissions.

Your organization might limit the number of users who can create projects. Depending on your permissions, you either create projects or project requests, which you submit to someone else for approval.

- If you have permission to create projects, you can create one directly by selecting either a project template or copying an existing project.
- If you do not have permission to create a project, you create a project request instead. Project requests ask for formal approval of a proposed project, or 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 submits a project request to the CMO. The CMO approves the request, which becomes a project. Similarly, a sales account manager might submit a project request to the marketing services department to request development and production of some specialized collateral.

You can also create projects and project requests 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 see it in different views in IBM Marketing Operations.

Project reconciliation

Typically, projects use the same statuses as other business objects in IBM Marketing Operations. However, projects can also be in a temporary state, **In Reconciliation**. You apply this status while you reactivate a completed or canceled project, update project information, then change the state back to completed or canceled. For example, the owner of a project can make private changes to a canceled project.

While a project is in the **In Reconciliation** 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 “Reconciling projects” on page 56.

Note: A different set of statuses applies to project requests.

Project request statuses

Project requests have a different set of statuses from other marketing objects: draft, submitted, returned, and accepted.

The following table describes the possible statuses for requests.

Table 7. Request statuses

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

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 default health statuses.

- Healthy
- Warning
- Critical
- Unknown

Note: Your system administrator can change these default names for your installation.

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.

Use the following features to review the health status of your project.

- Subscribe to daily email notifications with the daily status. See “Receiving project health status updates by email” on page 15.
- Click **Operations > Projects** and view a project list. The Project Health column shows the status that was 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 that are shown elsewhere in Marketing Operations are not updated.
- Add the Health Status portlet to your dashboard. See “Marketing Operations IBM Cognos report portlets” on page 203.

To facilitate analysis, reports are available to compare the health statuses that were calculated for different projects within a month or trending over time. See “Multi-object reports” on page 191.

Project views

IBM Marketing Operations organizes projects and project requests in views.

The following table describes the views that organize projects and requests.

Table 8. 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.

Table 8. Project views (continued)



View	Description
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 that are assigned to your team.
All My Teams Project Requests	All project requests that are assigned to your team.
All My Teams Unassigned Project Requests	Lists all project requests that are assigned to your team, but not yet assigned to a team member.

You can also customize the order in which columns appear in these views. For more information, see “Rearranging columns on object lists” on page 15.

Selecting project views

You can access the different views of projects from the **Actions** menu. Views organize projects based on criteria, such as the team to which the project is assigned or the due date.

In any view, you can change the sort order by clicking the column that 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, My Requests, or My Projects**.
3. Click the **Actions** icon () and select **Search for Projects** to search for projects that meet a specified criteria. You can then save that search.

Project search

You can search for projects that are grouped by any criteria that is useful to you and save the results of that search to view later.

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.

Displaying projects in list and calendar view modes

By default, IBM Marketing Operations displays your projects in project list view. You can also display your projects in calendar view, which shows your projects by

due date on a calendar. Your administrator sets the default of whether projects are displayed in list view or calendar view when you select **Operations > Projects**.

Note: Marketing Operations documentation assumes that the project list displays when you select **Operations > Projects**. If your administrator changed the default display option, you might see the calendar view instead.

- You can also see projects in a list by selecting **Operations > Projects**. In project list view, you can take the following actions:
 - To access detailed information about the project, click a project name.
 - To select a different view, click **Actions**.
 - To change the way the project list is sorted, click a column header.
- You can also see projects on a calendar by selecting **Operations > Calendar**. Marketing Operations uses the activity dates for the project to place them on the calendar. In the calendar view, you can take the following actions:
 - To access detailed information about the project, click a project name.
 - To select a different view, click **Actions**.
 - Change to the next or previous time period.

Campaign projects in an integrated system

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

A campaign project collects the information that is related to developing a marketing campaign and running 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.

In a campaign project workflow you can create flowchart approval tasks. When such approval are created, the Flowchart will not run until all related approvals are in completed or canceled state.

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. If you change the code, the system checks the uniqueness of the code before it creates or saves the project.

Creating projects

You can create a single project from a project template. Your administrator sets up and maintains project templates. You can also create projects by copying a project, making up to 99 clones of a project, or responding to a project request.

When you create a project, note the following behavior.

- 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.

1. Select **Operations > Projects**.

2. Click **Add Project** ().

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 that is configured as a campaign project template. The template selected here will reflect in the **Operations > Approvals** page in the **All approvals > My active** approvals. The template name is thus indicative of the project template the approval belongs to.

4. Click **Continue**.

5. Use the Add Project wizard to supply values for the project fields.

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. You can edit the default name for the duplicate project 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 “Starting projects” on page 45.

The tabs in a project differ depending on the template you used. A typical project contains the following tabs:

- Summary
- People
- Strategy
- Workflow (schedule of tasks, milestones, and approvals)
- Tracking (expenses and resources)
- Health Status (project monitoring)
- Attachments



When IBM Campaign is integrated with Marketing Operations, a campaign project also contains a Target Cell Spreadsheet tab.

Some selections in the Add Project wizard also affect the tab content in the project. If your administrator configured workflow template branching, your field options might include a specific template for the Workflow tab. For example, the template might use a different workflow for a project that is based on whether you selected direct mail or email as the channel.


Cloning projects

To create multiple similar projects from a single existing project, you 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. Go 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 141.

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 “Starting projects.”

Starting projects

You start a project by changing the status. Select the transition Start Project.

You can start any project that you own:

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

You can also start several projects at the same time. For more information, see “Changing the status of multiple projects or requests” on page 24.

1. Go to the Summary tab of the project you want to start. Select **Operations > Projects**. Click the **Actions** icon and select a view, such as **My Projects**, that includes projects with a "Not Started" status.
2. Click **Change Status** and select **Start Project** or **Start Project with comments** from the menu.
3. Optional: If you chose **Start Project with comments**, type your comments and 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 organizes attachments to the project. The tab contains two sections: one for attachments for the project as a whole and one for attachments to individual tasks in the project.

Table 9. 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 that the file was 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 by using email.• Remove: A user with privileges to remove the attachment can delete the attachment by 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

If you do not have the security permissions to create a project, you create a project request. 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, which organizes tasks and assigning resources to manage the creation of the collateral.

If you request a project, you are a requester. The requester then submits 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.

Creating requests

If you do not have permission to create a project, you create a project request.

When you create a project request, note the following behavior:

- You must create the request and then submit it.
- You must have the appropriate security permission.
- After the recipient accepts the request, the recipient owns the project. (You are the requester.)

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 contains 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. Use the Add Project wizard to supply values for the project 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. 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**.
- 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 that is supplied for the duplicate and other fields as needed, then save that request as well.
- Click **Save and Return to List** on any page.

7. 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 “Changing the status of multiple projects or requests” on page 24.

You cannot change the request after the first reviewer approves the project request. If you need to change a request after the first reviewer approves the project, you should change the project status to draft and resubmit the project after you make your changes.

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

Submitting requests

To submit a request, you must first add the request. Next, you 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 the same time. For more information, see “Changing the status of multiple projects or requests” on page 24.

1. Add a request. For detailed information, see “Creating requests” on page 47.
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** or **Submit Request with comments** from the list.
5. Optionally, if you chose **Submit Request with comments**, enter any comments or additional information for the recipients and 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.

Monitoring the status of project requests

You can monitor the status of project requests to see which recipients must respond to the request and their response to the request.

You can view the following information about project request recipients:

- Role
- User who is assigned to the role
- The sequence number that is 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 that you want to monitor.

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

Canceling or redrafting requests

To edit a request, you can cancel or redraft it. You can add or change information for a request before recipients accepted the request or if a required recipient returns the request.

1. Go to the Summary tab of the request you want to change. For example, click **Operations > Projects**. Click **Actions** () and select a view, such as **All Projects and Requests**, that includes projects in  Submitted status.
2. To cancel the request, click **Change Status** and select **Cancel Request** or **Cancel Request with comments** from the list.
3. Alternatively, to redraft the request, click **Change Status** and select **Re-draft Request** or **Re-draft Request with comments** from the list.
4. Optional: If you chose an option "with comments," type comments that indicate the reason for the cancellation or revision, and click **Continue**.


The status of the request changes to  Canceled or  Draft.

While you redraft a request, recipients cannot respond to the original request. If you must change recipients, click **Edit**.

When you resubmit a request, recipients are notified according to the reapproval rule selected when the request was created. Reapproval rules might allow you to select recipients. In this case, if you did not change recipients when you redrafted the request, you can select from a list of required recipients who accepted the request when you resubmit it. If the recipients were assigned sequence numbers, recipients are notified in sequence.

Responding to requests as an individual


When someone creates a project request and you are the recipient, you receive an alert message on the My Alerts page and an email to notify you of the request. Then, you must respond to the request.

1. Go 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, select the user who becomes the owner of the resulting project in the **Assign to** field.
6. Click the **Actions** icon () and select **All Projects and Requests**:
 - If you accepted, both the accepted request and the new project appear in the list. You are the owner of the project, which is not yet started.
 - 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 can resubmit or cancel the project request.

Copying requests

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

To copy a request or to edit a copied request, you must have the appropriate security permission.


1. Go to the Summary tab of the request you want to copy.
2. Click **Copy** ().
The **Copy to** dialog box opens.
3. Select either the copied project or the project template as the source of the metrics to use in the new project. The metrics in the project instance you are copying might be customized from the template.
4. Click **OK**.
The Summary tab opens for the new request. The name defaults to **Copy of original request name**.
5. Modify any information that you want to change in the copy, including the default name, and click **Save Changes**.

The new request appears in your All Projects and Requests view and your My Requests view. New requests have a status Draft.

Copying projects

To create a project that is similar to an existing one, you can copy that existing project. You can make the copy when the project is in any state. You can then edit the copied project as needed. This functionality provides you a high flexibility with many options.

To copy a project, or to edit a copied project, you must have the appropriate security permission.

1. Go to the Summary tab of the project you want to copy.
Note: The copy option is available on all tabs.
2. Click **Copy** ().
The **Copy project** dialog box opens.
3. Select the **Make me the owner** check-box to become the co-owner with the current project owners.
4. Select either the **From project** or the **From template** (*this is the project template*) or **Customized copy** as the source to use in the new project.
5. On clicking the **Customised Copy** button, a hidden section, consisting of Summary, Workflow, Budget, Tracking and Attachment tabs, becomes visible. On clicking the other buttons (From project or the From template), this panel remains hidden.
 - a. On clicking the **Summary** and **Workflow** button, a dropdown shows and you can make further choices. From the **Summary** page you have the option of including the dates from the original project. If the **Include Dates** checkbox is unchecked, then the dates field remains blank in the new project. From the **Workflow** section, you can choose to keep the dates and attachments by checking the required checkboxes. By default, all the checkboxes are checked.
 - b. On clicking the **Attachments** Button, a dropdown shows up with two options **Include Attachment from Project** and **Include Attachment from Template**. As the name suggests, the attachments will be copied from the project or from the template respectively. The **Include Attachment from Project** radio button is checked by default. If you choose not to copy any attachment then you may keep the **Attachments** button unchecked.

- c. If the template of the project you are copying from has no metrics, then the **Tracking** tab will remain hidden under the **Customised copy** section.
- d. If the **Financial module** is disabled in the original project, then the **Budget** button is hidden under the **Customised copy** section.
6. If the project you copy is linked to a parent program or project, and you wish to maintain the link in the newly copied project, you can do that by checking either the **Copy parent program** link or the **Copy parent project** link.
7. Click **OK**.
The Summary tab opens in a View mode for the new project . The name defaults to **Copy of original project name**.
8. The **Edit** button will remain enabled or disabled as per your project permissions. Modify any information that you want to change in the copied project, including the default name, and click **Save Changes**.

The new project appears in your All Projects view and your My Projects view. New projects have a status of Not Started.

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

Team projects and requests have a different lifecycle because multiple team members work together on the project or request.

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

Note: The following steps depend on the routing model for the particular team that is involved in the request.

Table 10. 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.

Table 10. Lifecycle for team projects (continued)

	User action	System action
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.

Reassigning team projects




A team project can be reassigned if a team member becomes unavailable. For example, you can reassign a team project if the team member who is responsible for the project goes on vacation.

To reassign a team project, complete the following steps.

1. Go to the Projects list page by selecting **Operations > Projects**.
The Active Projects and Requests view appears. If the project you want 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. You can reassign only team projects for which you have the correct authorization. Authorization depends on team membership and routing options.
4. In the **Assign to** field for each project, select the user to whom the project belongs. This user becomes the owner of the project.
5. Optional: Type your comments.
6. Click the **Reassign Project(s)** button to complete the reassignments, or click **Cancel** to close the dialog box without changing any project ownerships.

Responding to team requests as a team manager

When someone submits a request to a team you manage, you might 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 that 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. Authorization depends on team membership and routing options.

3. In the dialog box, assign the request or requests to the appropriate team members.
4. Optional: Type your comments.

Navigating from projects to programs

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

1. In the All Projects and Requests view, select **Operations > Projects** and click **All Projects and Requests**.

2. Click a project to open it.

The Summary tab has a field that is 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 that are contained in the program.

4. Click the name of the project you were just in to go back to that project.

Linked projects

Marketing projects often involve people from outside the marketing department, making it difficult to track everything with a single, comprehensive project. You can use multiple linked projects or subprojects to manage these tasks.

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, and so on.
- 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, and so on.
- Create and maintain the trade show web pages.

You can track and manage these individual tasks within the respective departments, but you might lack a full view of whether the trade show occurs 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

Projects can contain multiple subprojects.

From the summary page for a project, you can manage subprojects with 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 behaviors.

- Security policies must be the same for parent and child projects.
- The summary page for a project shows the links to all of its direct subprojects.
- 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

Within certain parameters, you can build complicated hierarchies of projects and subprojects to organize work.

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 child project. This option makes it possible to have an n-level deep hierarchy for projects, such as: parent project, child project, grandchild project.

However, a request cannot be a parent. Requests can be a child of projects only.

- 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 you copy a project that is either linked as child or parent, the new project is not linked.
- Metrics, budgets, and the workflow do not roll up from a child project to a parent project.

Creating child projects and requests

Use child projects and requests to organize work below the project level.

1. Go to the Summary tab of the parent project.
2. Click **Manage Linked Objects** () 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 new subproject or request.
The wizard for adding a project or project request appears.
4. Complete the wizard.
 - As the user who completes these steps, you are the owner of the new subproject. Depending on who completes the wizard, 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, each project and request links 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 that is called **Parent Items and Code**. This field contains links to the ancestors of the project.

Linking child projects and requests to projects

To organize a hierarchy of work with projects and subprojects, you must link the parent projects to child projects and requests.

1. Go to the Summary tab of the parent project.
2. Click **Manage Linked Objects** () and select **Link Existing**. This link is enabled only if you have the appropriate security permission.
Specify the projects to link in the dialog box.
3. Type your 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 the status of **Cancelled**, **Deleted**, or **Completed** never appear in your search results.
5. In the **Search Results** field, select the projects and requests to link as children.
6. Use the double-arrows to move projects and requests into or out of the **Selected Items to Link** list box.
7. Click **Save Changes** to create child links to the projects or requests that you selected.


Security for linked 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.

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.

Removing parent-child project links

If the hierarchy of work changes, you can remove links between projects, subprojects, and requests. You can remove N-level deep child relationships with this procedure. For example, you can remove "grandchild" and "great-grandchild" relationships.

1. Go to the Summary tab of the parent project.
2. Click **Manage Linked Objects** () and select **Remove**.
A dialog box appears, where you specify projects and requests to remove.

Note: The list contains child projects and requests from all levels. All child projects and requests, direct and indirect, appear on the list.

3. In the **Linked Project...** field, select the projects to remove as children.

4. Use the double-arrows to move projects into or out of the **Selected Items to Remove** list box.
5. Click **Save Changes** to remove child links to the projects 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 removes only the relationship.

Assigning work




After a project exists, users can assign work to people or teams.

1. Go 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: Click **Manage roles > Assign work by role** on the People tab of the project to assign all tasks. Tasks are assigned based on user roles.
 - Click **Find and Replace > Find And Replace Task Members** or **Find and Replace > Find and Replace Task Reviewers** 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.
 - Click **Members** on the People tab of the project to assign a team.

When users log in, they can act on the tasks that are assigned to them.

Reconciling projects

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. Go to the Summary tab of the project to want to place In Reconciliation. For example, select **Operations > Projects**. Click **Actions**() and select a view (such as Completed Projects) that includes projects in the status of  Completed or  Canceled.
2. Click **Change Status** and select **Reconcile Project** or **Reconcile Project with comments** from the list.
3. Optional: If you chose **Reconcile Project with comments**, add comments and click **Continue**.

The project status changes to  In Reconciliation. You can edit the project information.

Deleting projects

When you delete a project, IBM Marketing Operations checks to see whether 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 Marketing Software and select **Operations > Projects**.
By default the Active Projects and Requests page appears.
2. Select the check box next to each project you want to delete.

3. Click **Delete this Item** ().

Project and request deactivation

After your organization uses IBM Marketing Operations for some time, the user interface can become cluttered with out-dated or unwanted projects and requests. You can deactivate projects and requests to reduce clutter and simplify searches.

Most Marketing Operations users can deactivate and reactivate projects and requests from the object Summary tab or project and request list pages. You can deactivate or reactivate up to 1000 projects and requests with this method, which depends on the number of objects that are displayed on each page. Your administrator specifies the maximum number of objects that display on each page in the administrative configuration settings. Administrators can also deactivate or reactivate multiple projects and requests that fit selected criteria with bulk deactivation and reactivation features.

Note: You must have appropriate security permissions to deactivate and reactivate projects. Administrators set permissions at the template level. When a template is created, the Project Owner and Plan Administrator can deactivate and reactivate projects and requests by default.

After you deactivate projects and requests, they no longer appear in the user interface or search results unless you specifically search for it. The following standard searches show deactivated projects and requests.

- Deactivated Projects
- Deactivated Requests
- Deactivated Projects and Requests

You can also locate deactivated projects and requests in searches that are built by filtering these default searches.

The inactive projects and requests remain in your database. Inactive projects can always be reactivated.

To deactivate a project or request, it must fulfill the following criteria.

- Projects must be in the state of Complete, Canceled, or On Hold.
- Project requests must have a status of Canceled.
- If the project has subprojects, the state of the subprojects must also be Complete, Canceled, or On Hold. You must also deactivate the subprojects before you can deactivate the parent project.
- In an integrated Campaign-Marketing Operations environment, the campaign end date must pass before you can deactivate a project or subproject with a linked campaign. You cannot deactivate a project with a future end date.


Deactivating projects and requests

You can deactivate projects and requests to remove them from the Marketing Operations user interface directly from the list pages.

You can deactivate up to 1000 projects and requests with this method. If you need to deactivate more than 1000 items and have the appropriate permissions, use the bulk deactivation feature.

1. Go to the projects or requests you want to deactivate. You can open the project or request Summary tab. You can also select multiple projects and requests from a list view such as All Projects and Requests.

Note: Projects must be in the state of Complete, Canceled, or On Hold state. Project requests must have the status of Accepted or Canceled status. Select a list view that shows projects and requests in these statuses.

2. Click .
3. Optional: Type comments to explain why you are deactivating the project or request.
4. Click **Deactivate**.


After you deactivate projects and requests, you see them in the user interface only if you use predefined searches for deactivated projects and requests. To see the deactivated projects, use the **Deactivated Projects**, **Deactivated Requests**, and **Deactivated Projects and Requests** searches. You can refine these predefined searches for more specific results.

Reactivating projects and requests

You can reactivate projects and requests on an individual basis.

Find deactivated projects and requests with the default searches **Deactivated Projects**, **Deactivated Requests**, and **Deactivated Projects and Requests**. When projects and requests are deactivated, you can view them only in these searches.

You can reactivate up to 1000 projects and requests with this method. If you need to reactivate more than 1000 items and have the appropriate permissions, use the bulk reactivation feature.

1. Go to the projects or requests you want to reactivate. You can open the project or request Summary tab. You can also select multiple projects and requests from a list view.
2. Click .
3. Optional: Type comments to explain why you are reactivating the project or request.
4. Click **Reactivate**.

After reactivation, projects and requests appear in the All projects and requests view again.

Chapter 6. Workflows

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

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.

Advanced Workflows

When IBM Marketing Operations and Workflow Services are integrated, you can use the Advanced Workflow capabilities in Marketing Operations to create, workflows with rework loops.

Rework loops

A rework loop includes a sequence of tasks that must be redone when an approver selects the Denied option for an approval task. The status for the approval task is set to On Hold and the status for the tasks that are included in the rework loop is set as Pending.

For example, an approval task 2.5 depends on task 2.4. If the approval is denied, tasks 2.4 and 2.3 must be redone. So the approval task name is set as 2.5 Cost Approval (2.4) [2.3].

Note: Rework loops for approvals are optional and can be added as required.

Advanced Workflows for projects

You can edit a workflow before the project starts. For more information about the considerations for editing an Advanced Workflow, see the IBM Marketing Operations Administration Guide.


You cannot start tasks or approvals before the project is started. You cannot update the **Status** of a task or the % **Complete** field of a task.

You can edit the status, dates, Milestones, members, and roles for the tasks after the project is started.

Workflow views

To monitor and update workflow in an ongoing project, project participants typically use the three view modes to work with the spreadsheet tab. Project managers also use the edit mode to set up the workflow for new projects. In edit mode, project managers can add stages, tasks, and approval tasks to projects that are in progress.

On the Workflow tab of a project, you can choose different ways to view scheduled tasks and to change the tasks or the workflow.


- Spreadsheet view mode presents granular task-related information in tabular format. Team members can enter status, the percentage of work that is completed, and scheduling data for individual tasks in this view mode. The Workflow tab displays the spreadsheet view by default, or click **View > View as a spreadsheet**.
- Timeline view mode emphasizes data that is related to scheduling and presents pending, on schedule, late, and overdue tasks with color-coded indicators. Click **View > View as a Timeline/Gantt chart**. For more information, see “Timeline view mode” on page 64.
- Process flowchart view mode emphasizes task dependencies and presents a visual plot of task sequence. Click **View > View as a process flowchart**. For more information, see “Process flowchart view” on page 67.
- Edit mode gives you access to the workflow spreadsheet so that you can changes 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 “Editing workflow spreadsheets” on page 73.

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 “Workflow spreadsheet columns” on page 81.

In addition to viewing data for the workflow, you can update task status and scheduling information and add attachments. For more information, see “Post Task Update dialog” or “Starting an approval process from view mode” on page 64.

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 “Spreadsheet or timeline view customization” on page 65.

Post Task Update dialog

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 the Status and Attachments tabs.

Different options display when you click the name of an approval task. For more information, see “Starting an approval process from view mode” on page 64.

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.

Task status tab

The Status tab contains the following fields.

Table 11. Fields on the Status tab

Field	Description
Owners	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 0 - 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 11. Fields on the Status tab (continued)

Field	Description
Forecast / Actual date and time	<p>The begin and end dates and times for the task.</p> <p>Marketing Operations calculates these dates for your task based on the status if you do not enter a start date, end date, or both</p> <p>When you start a task (change the status from Pending or empty to Active), and save:</p> <ul style="list-style-type: none"> • If the start and end date are empty, then the start date is set to the current date and time. The end date is set to the current date time plus duration. • If the start date is set, but the end date is not set, the end date is set to the start date plus duration. • If the end date is set, but the start date is not set, the start date is set to the end date minus duration. <p>When you complete a task (change status from Pending or empty to Finish), and save:</p> <ul style="list-style-type: none"> • If the start and end date are empty, then the end date is set to current date and time. The start date is set to the end date minus duration. • If the start date is set, but the end date is not set: <ul style="list-style-type: none"> – If the start date is set prior to the current date, then the end date is set to the current date and the duration is set to the end date minus the start date. – If the start date is set later than the current date, then the end date is set to the current date and the start date is set to the end date minus duration. • If the end date is set, but the start date is not set, the start date is set to the end date minus duration. <p>When you change a task to pending, and save:</p> <ul style="list-style-type: none"> • If the start and end dates are empty, those dates are kept empty. • If the start date is set but the end date is not set, then the end date is set to the current time plus duration. • If the end date is set but the start date is not set, then the start date is set to the end date minus duration.
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.

Task attachments tab

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 12. 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 any additional comments. • 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.

Adding an attachment to a task

To add attachments for a task, a project owner must enable adding attachments for the task. New attachments are added to the Attachments tab for the task.

The following users can add or remove task attachments.

- Task owners can add attachments only 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. Complete one of the following actions:
 - 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 you view 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 extra 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.

Starting an approval process from view mode

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


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. In this dialog, you can do any of the following actions:
 - Add or remove owners.
 - Add or remove approvers.
 - Specify a target due date.
 - Select the reapproval rule.
 - Attach items or flowchart to approve.
3. Complete the details for the approval process.
4. Do any of the following actions to complete the process:
 - To save the approval process with the status of In Progress, click **Send Approval**. The approval task also displays as In Progress.
 - To save the approval process with the status of Not Started, click **Save for Later**. The approval task also displays as Not Started. To start the approval process, you must edit the approval not the workflow task.
 - To discard your changes, click **Cancel**. No approval process is created.

Timeline view mode

When you view the workflow on a timeline, you can update the task status and scheduling information and add attachments.

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 **View > View as a Timeline/Gantt chart**.

For more information, see “Post Task Update dialog” on page 60 or “Starting an approval process from view mode” on page 64.

To customize the timeline view, click **Layout** () on the Workflow tab. You can customize the timeline view in any of the following ways:

- 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 “Spreadsheet or timeline view customization.”

Spreadsheet or timeline view customization

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** ().

Options on the Project Workflow Tab Layout dialog

The Project Workflow Tab Layout dialog displays the following options:

Table 13. 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.
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>

Table 13. Options on the Project Workflow Tab Layout dialog (continued)

Option	Description
First Column Width	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: <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	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: <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	Check this box to make your selections the default for the Workflow tab. This option ensures that your display settings for this tab do not change until you make another change and check this box. Note: Your settings become the defaults for all users for this workflow, until someone changes the defaults.

Setting the 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.

To set the first column width, complete the following steps.

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 **Layout** in the upper right section of the screen.
4. In the Project Workflow Tab Layout dialog, complete the following steps:
 - a. In the First Column Width section, select **Remember Last Setting**.
 - 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.

Process flowchart view

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

- 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 and 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.

Tasks

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

Form tasks

Form tasks are steps in the workflow where a user must complete a specific form. After the user completes the form, the task is complete.

Each form task requires the user to complete one specific form on a custom tab in the template. Use multiple form tasks to instruct users to complete multiple forms. You cannot use form tasks to complete custom forms on the summary tab.

After users complete the form, they can submit the form for approval.

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.

Flowchart approval

In an Marketing Operations/Campaign integrated setup, you can now create a flowchart approval and attach a flowchart to it.

When a flowchart is run, the following points are checked:

1. If no approval exists for a particular flowchart, it should be executed successfully.
2. If one or more approvals exist, the flowchart will be allowed to run only if all the approvals are approved and in completed/canceled state else it should not run.

Note:

1. One flowchart can have several approvals.
2. One flowchart approval can have only one flowchart.

Rework loops

When IBM Marketing Operations and Workflow Services are integrated, you can use the Advanced Workflow capabilities in Marketing Operations to create, workflows with rework loops. You can specify the rework loop task for an approval task. If an approval is denied, the status for the approval task is set to On Hold and the status for all the tasks that are included in the rework loop is set as Pending.

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 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. When you assign 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. The actual number of days between the start and end dates equals the duration of the 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. In this case, 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 time stamps on the workflow and workflow columns. For more information, see “Calendar display options” on page 133.

Schedules

There are two options for scheduling in workflows: baseline and 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.

Using a baseline schedule

System administrators set up permissions and reminders for baseline schedules. Schedule owners set the dates for each task in the baseline schedule. Team members update the progress for their tasks in the baseline schedule.

Before you create your projects, have the system administrator set up the following permissions and reminders:

- Set permissions so that only project owners can update **Target** dates.
- Set reminders (alerts) that are 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.

Keeping an up-to-date schedule

System administrators set up permissions and reminders for schedules. Schedule owners set the dates for each task in the schedule. Team members update the progress for their tasks.

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) that are 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.

Date dependency calculations

When you enter or change the date for a task, the system calculates 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 issues:

- 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.


Calculating workflow dates automatically

When you enter or change the date of a task, the system calculates other dates that are based on your entry.

To calculate workflow dates automatically, complete the following steps.

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 are updated, because of the new entry.


Calculating 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 depend 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

You can use IBM Marketing Operations to help you manage and allocate your resources effectively.

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

- 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 task dates and durations are calculated. However, you can override the default to schedule certain tasks through weekends.

By default, tasks do not include weekends or non-work dates when task dates and durations are calculated.

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

Note: When you view the IBM Marketing Operations calendar, any day that is 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.

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, which is separated into user-defined types.

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

Table 14. Non-work time example categories and dates

Category	Dates
Corporate Holiday	1/1/2015, 7/4/2015, 12/25/2015
State Holiday	4/15/2015, 10/3/2015
Corporate Off-site	8/15/2015

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 7/4/2015 is defined as non-work time. If Task 1.3 is scheduled to start on 7/3/2015, and has a duration of three days, its end date is 7/7/2015. 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 7/6/2015.

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. 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 that is 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 15. 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. Do not change this column after the actual dates and times are logged on a task. Doing so can overwrite the actual dates and times.


Editing workflow spreadsheets

When you create a project, a wizard that is based on the template you selected collects information. After 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 the 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 unavailable or if 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 "Edit mode toolbar" on page 74.

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 “Task dependencies” on page 79.
5. To add rows to the spreadsheet, click **Add Row** () and then select **Task**, **Form Task**, **Approval**, **Flowchart approval**, or **Stage**. For more information, see “Adding a stage or task” on page 76.
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 86.
9. Make other selections and entries in the spreadsheet to reflect the workflow for your project.
10. Enter any instructions or notes about a task in the **Notes** column.
11. Click **Save** to save your changes.

Edit mode toolbar

When you switch from a view mode to edit mode, you can change 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 16. The edit 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 • Form task • Approval • Flowchart approval • Stage: stages organize tasks into groups <p>Marketing Operations adds the task and renumbers the subsequent tasks.</p>

Table 16. The edit toolbar for the Workflow tab (continued)











Icon	Description
	<p>In Series. By default, the system adds rows to the spreadsheet in series, so each task depends 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 “Task dependencies” on page 79.</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.
	<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.

Table 16. The edit toolbar for the Workflow tab (continued)

Icon	Description
	<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.

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 information 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 “Task dependencies” on page 79.
- 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.


Adding form tasks

Add form tasks to the workflow when the user needs to complete a specific form as one step in the workflow. Select one form to assign to each form task.

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. Click **Add Row** () and then select **Form Task**.

4. Select a form in the pop-up and click **Ok**.

Note: You can only select one form for each form task. Your administrator populates this list on the project template.


After you add form tasks to the workflow, you can configure approval tasks to send the completed forms for approval.

Adding rows to the workflow spreadsheet


Add rows to the workflow spreadsheet to add more tasks, form tasks, approvals, and stages.

Before you can add a row to the workflow spreadsheet, you open the workflow in edit mode. For more information, see “Edit mode toolbar” on page 74.

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, flowchart approval, task, or form task: Click **Add Row** () and then select **Task**, **Form 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. If Advanced Workflow capabilities are enabled, configure the rework loop for the approval tasks by adding the first task that is to be reworked in square brackets. For example, an approval task 2.5 depends on task 2.4. If the approval is denied, tasks 2.4 and 2.3 must be redone. So the approval task name is set as 2.5 Cost Approval (2.4) [2.3].
5. Optional: Change the dependency that is assigned by the system to the row. The numbers of the tasks that a task or stage depends 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 “Task dependencies” on page 79.
6. When you finish editing the workflow, save your changes.

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

Adding rows below a locked approval task

When the approval process is in progress for an approval task, the approval task is locked. If a project manager clicks a locked approval task in spreadsheet edit mode, an error results. You might need to add another step after the approval process starts. To avoid this error, you add a task and then change number the system assigns to the task.

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. Select the row immediately below the locked approval task.
3. Add a stage, approval, or task. Click **Add Row** () and then select **Task**, **Approval**, **Stage**, or **Form Task**.
4. Change the number that the system assigns to the new task or stage so that it follows the locked task. 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.

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 following stage order:

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 as follows.

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.

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 **In Series** and select one of the following options:

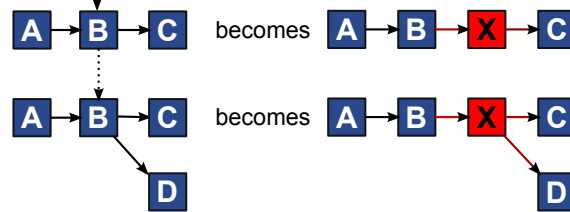
- **No Dependencies:** the system does not create dependencies for new rows automatically. If you need dependencies for the new tasks and stages, edit the task name to add them manually.
- **In Series:** the system inserts new rows into an existing chain of tasks.
- **In Parallel:** the system inserts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

Inserting tasks in series

Inserting **In Series** makes a new task dependent on the task before it, and then makes all items that depended 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

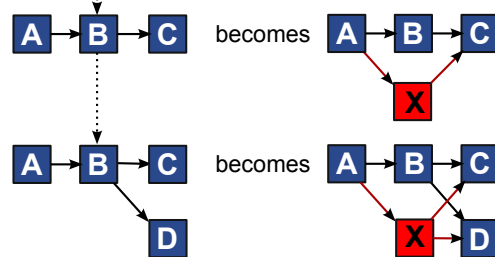


Inserting tasks in parallel

Inserting **In Parallel** makes the task dependent on the items (tasks or stages) that the task before it depended on. This action makes the items that are dependent on the previous task also dependent on the new task.

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.

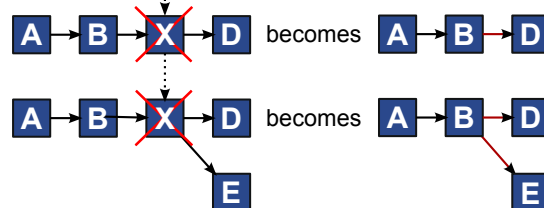
Insert a step after
"B" in Parallel



Deleting tasks

Deleting a task removes the selected task from the chain. 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.

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 17. 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 "Post Task Update dialog" on page 60 or "Starting an approval process from view mode" on page 64.</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 "Starting an approval process from view mode" on page 64.</p>

Table 17. Workflow spreadsheet columns (continued)

Column	Description
% 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>
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 Forecast/Actual End date minus the Forecast/Actual 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 depends 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 depends 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. This action occurs only 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.

Table 17. Workflow spreadsheet columns (continued)

Column	Description
Target Start	<p>The targeted start date of the task. In edit mode, use the calendar to select a date.</p> <p>You can add a custom milestone type to set a target and forecast dates for all tasks in a workflow in a project template. To do this, create a milestone with code START. Then, create a project template. In the workflow of this template, assign one task with this milestone type. When you create and save a project with a target start date that uses this template, the task with the new milestone type copies the project start date as its own target start date as well as its forecast start date. These target and forecast dates are then rippled to all dependent tasks in the project.</p> <p>The milestone type START can only be assigned to one task in a workflow.</p>
Target End	The targeted end date of the task. In edit mode, use the calendar to select a date.
Target Duration	The duration of the task, in days, hours, and minutes. The Target End minus the Target Start dates.
Target Effort	The targeted effort that is estimated to complete the task, as opposed to calendar duration.
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>
Member Roles	<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 Roles	<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>

Table 17. Workflow spreadsheet columns (continued)

Column	Description
Reviewers	A read-only field that shows the reviewers that are associated with an approval task. Reviewers are used to pre-populate an approval process. 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.
Enforce Dep.	If this task depends 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.
Required	Indicates whether this task is required. Required tasks cannot be skipped or deleted and their names cannot be changed.
Task Code	A read-only code that identifies each task uniquely within a project. System integrators use this code to implement custom business logic for tasks.
Notes	Any comments about the task.

Filling 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 that are in the first row into the remaining nine rows, Shift+click to select the cells in those 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 “Workflow copy and paste” on page 85.

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:

Option	Description
Fill Down	Copies the values in the top-most selected cell (or cells) to all the other selected cells, including the bottom-most.

Option	Description
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**.

Workflow copy and paste

For efficiency, you can copy and paste most kinds of tasks in the workflow.

Note: You cannot copy and paste form tasks in the workflow spreadsheet.

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

- To copy, you must select a continuous range of cells by using Shift+click. You cannot select 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. You cannot paste the status into a standard task status column.
- Approval statuses do not copy. If you copy the status from one approval and paste it in a new row of an approval that is not saved, the status of the new approval is **Not started**.

Copying tasks on Macintosh/Safari:

Copying and pasting tasks on a Safari browser is slightly different than the procedure described for Internet Explorer.

When you use the Shift key to select multiple task rows on the Macintosh, 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.

Note: You cannot copy form tasks on the workflow spreadsheet.

1. Select and copy tasks.

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

- Copy information from another application or from another area on your spreadsheet.
- 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.

Copying 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.

Note: You cannot copy and paste form tasks in the workflow spreadsheet.

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, go to the destination Workflow tab, and open it for editing.
7. Optional: 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.

To add roles and members to tasks, complete the following steps.

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 the "Edit team members and roles" permissions, you can select any users or roles, even if they were not 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 "Starting an approval process from view mode" on page 64.

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: Order of reviewers for an approval task:

You can specify the order 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 later create a project that uses 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.

The My Tasks list:

IBM Marketing Operations allows users to view the list of tasks that are assigned to them.

This list is called My Tasks. Each user sees a customized view when they select **Operations > Tasks**.

On the My Tasks list, you can see all tasks to which you are assigned, which allows 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.

Filters on the My Tasks page

By default, the My Tasks page displays all of your tasks, for all projects and requests.

You can filter the list of tasks that are displayed by clicking the **Actions** icon (



) at the top of the page.
This table describes the available filters.

Table 18. Task Filters

Filter	Description
All My Teams tasks	Lists the tasks that are 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 that are 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 that meet 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.

Table 18. Task Filters (continued)

Filter	Description
My Pending Approvals	Lists all the approval tasks that are 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 that are assigned to you that are scheduled to end within the next 14 days.

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 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.
- Read and post messages.
- Manage team members and reviewers.
- Find and replace task owners.
- Edit the workflow.
- Edit budget allocations and line items.
- Edit tracking.
- Add a child object or request.
- Link an existing program, project, or request to the parent object.
- If you are a project owner, you can change the form linked to a form task in the workflow.

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.

Use the following tools to move through multiple tasks and approvals directly on the task pane.

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

Note: You cannot **Skip** or **Finish** form tasks from the task pane. To finish the form task, follow the link to the form and complete it.

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.

Workflow task status

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 “Post Task Update dialog” on page 60. 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 19. Task status

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 the following relationships between the task status and the % **Complete** for a task.

- 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.

Note: Form tasks in the workflow can have only a status of **Pending** or **Active**. To finish a form task, you must complete the linked form.

Approval task status

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 “Starting an approval process from view mode” on page 64.

Completing multiple tasks

If you are assigned tasks for one or more projects, you can set them to complete at the same time.

To complete multiple tasks at one time, complete the following steps.

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 options:

Option	Description
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 saving your 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.

Skipping multiple tasks

You can skip tasks when you are assigned tasks for one or more projects.

Note: You cannot skip form tasks in the workflow.

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**.

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

Skipping an approval task

You can skip an approval process from a task on the Workflow tab.

Note: You cannot skip form tasks in the workflow.



1. Go 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.
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.


Importing workflow templates into projects

You can import a previously saved workflow template into a new project instance.

Note: Administrators can also import saved workflow templates into project templates so every project instance has the same workflow. However, administrators cannot import saved workflow templates with form tasks into project templates.

1. Open Workflow tab of the project instance.
2. Click **Edit** ().
3. In Edit mode, click **Tools** () and select **Import workflow and save** from the menu.
4. IBM Marketing Operations warns you that importing a workflow template deletes the current workflow. Click **OK** to continue.
5. Select a workflow template and click **Import**.

Marketing Operations imports the new workflow, saves it automatically, and warns you if you imported form tasks with broken links or approval steps with invalid users, teams or rules.

Click **Edit** () to modify the workflow you imported.


Considerations for importing and exporting form tasks in workflow templates

You can save a project workflow as a template to use in other projects. You can export the template from the project and import it into another project. If the workflow template contains some flowchart approval and you cannot import it in a non Campaign project.

The following situations apply to importing a saved project workflow template into a new project instance. Administrators can also import workflow templates into templates for projects if the workflow template does not contain form tasks.

- When you save a project workflow as a template with a linked form task and export it, then the link to the form is maintained. However, the form is not exported with the workflow template.
- You can import Approver steps as part of workflow import. This saves your time to set-up approvers again at both the template and project instance level.

The following situations apply to importing a project workflow template into a new project.

- If you import a workflow template and the linked form is present in the new project, then the link to the form works as expected.
- If you import a workflow template and the linked form is not present in the new project, then the link is broken.
 - A warning lists form tasks with broken links. The form task is shown with an icon that indicates a broken link ().
 - If you copy or clone the workflow, broken link copies as they are. The links remain broken in any copies.

- You can save the workflow with broken links. A user who tries to complete a task with a broken link cannot access the form.

If you encounter a broken link in the workflow, the project owner can open the form task pop-up and select an available form before assigning the form task to a team member.


Considerations for importing and exporting approvals with approval steps in workflow templates

- if user does not exist - step is not created
- if team does not exist -> step is not created
- if team exist but with different users -> no checking of that
- if rule refers to a form that is not part of the template -> step is not created
- if rule refers to a user or team that does not exist -> step is not created
- if role does not exist it will be created in the system. There is no verification of rule having criteria on form attribute of type user selection.

In case some steps could not be created a warning message is shown and user can get the detail about these steps that were not created and can export it for reference and be able to recreate these steps manually.

Printing the Workflow tab

You can either 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. Optional: 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 process streamlines the process of having your work reviewed and approved. Multiple users can review work in parallel or in an order that represents your business processes.

Reviewers (or approvers) can electronically mark up content that is submitted for review. Then, IBM Marketing Operations records approvals and denials for audit purposes. You can tie approvals to a project or they can exist independently from any project.

You can use some approval features on mobile devices.

Approval concepts

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 of the capabilities that are associated with the approval, such as being able to delete it or change its status. However, this feature set can be different depending on the security policy that is 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 that are 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 list describes the valid approval status:

- **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.
- **Canceled:** An owner can cancel the approval, changing its status to Canceled.
- **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 depends 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 ().

Note: You cannot review forms in stand-alone approvals. This feature applies only to approvals in the project workflow.

Approval tasks

A Flowchart 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 **Targetsetting** 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.

Reapproval rules for form approvals

You can link forms to approvals in the workflow to send completed forms for approval. After the user completes a form task, the next task in the workflow can include approving the form.

When you add a form to an approval task, the following reapproval options are automatically selected.

- The reapproval rule **If approval is edited/resubmitted, approval is processed through all review steps** is selected automatically and disabled. Approvals with linked forms must use this reapproval rule.

Based on these automatic selections, the reapproval cycle for an approval process includes the following stages.

- After the requester submits the approval process, any forms linked to the approval process lock.
- The approver rules on each item in the approval process and clicks **Post Complete Response**. If the approver rejected any of the approval items, the approval process is placed On Hold and resubmitted to the requester.
- While the approval process is On Hold, the forms linked to the approval unlock so the requester can make changes. The forms unlock even if the approver rejected another linked item and approved the forms. In this case, the status of a linked form task changes from **Finished** to **Active**.
- After the requester makes changes, they resubmit the approval. The forms lock.
- The approver receives the modified approval items and rules on them. To approve the modified approval process, the approver must mark the original approval process Approved and then click **Post Complete Response**.
- **Post Complete Response** finishes the approval process.

Note: You can only approve forms in a workflow task. If you copy an approval task with attached forms, the approval task becomes a stand-alone approval process and the linked forms are removed.

Configuring form approval tasks

You can use approval tasks to send forms that were completed earlier in the workflow for review.

The **Allow approvers to approve with changes** is available and can be edited based on the configurations for Approvals.

1. Open the workflow where you want to add the form approval task in Edit mode. You can add forms to workflow approval tasks only. This option is not available for stand-alone approvals.
2. Add a row to the workflow. Click **Add row** and select **Approval**. For more information, see “Adding rows to the workflow spreadsheet” on page 77. Click **Save >> Save and finish** to exit Edit mode.
3. Double-click the approval to open it. Click **Add Item(s) to approve** at the bottom of the new window. Select one or more forms from the list.
4. From the **Add Item to approve** menu, select **Marketing Operations Form**. A new menu appears containing forms that are associated with the template. This menu contains only forms that your administrator associated with the template.
5. Select a form from the menu. To add multiple forms, click **Add more**.
6. Click **Save Changes**.

7. Click **Send Approval** to start the approval process immediately. Otherwise, click **Save for Later**.

Approval dates

When you create an approval from a workflow task, the approval must include a Target Due Date.

Note the following behavior about 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 methods that IBM Marketing Operations uses to calculate 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 20. 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 21. 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.

If Advanced Workflow capabilities are enabled for the workflow and if a rework loop is configured for the approval, the status for the tasks in the rework loop is set to **Pending**. The rework tasks must be completed again before the approval can be updated and sent for reapproval.

Approval organization

When you select **Operations > Approvals**, My Active Approvals is the default page. The My Active Approvals page lists any active approvals to which you can respond.

From My Active Approvals page, you can also select any of the following approval views:

Table 22. 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	<p>Lists all of the approvals that are 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).</p> <p>You can also see approvals that are pending your response on the My Tasks page. These approvals are also listed in the Interactive Approvals Portlet for easy access from the dashboard.</p>
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.

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 that are 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.
1. You create the approval process, either as a stand-alone approval or as an approval task in a workflow.
 2. 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.
 3. Submit the approval.
 4. 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.
 5. Approvers respond to the approval. Depending on how Marketing Operations is configured, the approver might also be able to place comments in approval items.
 6. Approvers assess each item that is attached to the approval and then post their completed response.
 7. The system notifies the next approver, which is based on the sequence numbers that are set in the approval.

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.

The **Allow approvers to approve with changes** is available and can be edited based on the configurations for Approvals.

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.


When you create a standalone approval here, the Template name column will be blank. If you have created a project as described in Chapter 5. Projects, the Template name column will show the project's template name. The template name is indicative of the project template the approval belongs to.

For more information about assigning approves, see "Assigning Approvers."
For more information about adding approval items, see "Adding approval items" on page 104.

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. You can add Marketing Operations forms to approvals in the workflow, but not in stand-alone approvals.

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 **Add Item to Approve: > From My Computer**.
 - 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 **Add Item to Approve: > From the Asset Library**.
 - 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 **Add Item to Approve: > URL**.
 - 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. If you are adding approval items to a workflow approval, add forms to the approval items as necessary.
 - a. Select **Marketing Operations Form** from the menu. A new menu appears containing forms that are associated with the template. This menu contains only forms that your administrator associated with the template.
 - b. Select a form from the menu.
8. Optional: To add more assets, click **Add More** and repeat the steps for each asset.
9. Click **Save Changes** on the Add Item(s) to Approve window. The window closes.
10. Click **Save Changes** on the approval process.

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 **Change Status** and select **Submit for Review** or **Submit for Review with comments** from the menu.
3. If you chose **Submit for Review with comments**, enter comments that you want the approvers to see when they receive notification of your approval, and click **Continue**.

After an owner submits an approval, the 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.

Methods of evaluating approvals

When you are notified that it is your turn to review, you can evaluate the approval process in the Marketing Operations user interface, through the Approval Portlet, or on a mobile device.

Each method has different benefits.

- Full user interface

Evaluating approvals through the Marketing Operations user interface is the most robust method. Use this method when you need to extensively markup attachments or if you also need to create approvals. In addition to reviewing approvals, you can also copy, cancel, create, modify, and finish approvals processes in the user interface.

- Approval Portlet

The Approval Portlet on your dashboard is a quick, easy method to efficiently access the approvals you need to review. The Approval Portlet contains all the same review and markup features of Marketing Operations. However, you cannot copy, cancel, or create approvals in the Approval Portlet.

- Mobile approvals

Use Marketing Operations approvals on mobile devices for quick access to your approvals away from your computer. Follow the link in the email that notifies you that it is your turn to review to immediately evaluate the approvals on your mobile device. Mobile approvals are especially useful for approvals without creative attachments or when you can describe the changes in comments.

Mobile approvals are especially useful for approvals without creative attachments or when you can describe the changes in comments.

Note: At this time, you cannot view or markup attachments when you review approvals on mobile devices.

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. To open the approval process with line items you want to review, do one of the following options:
 - Select **Operations > Approvals**.
 - Click the link to the approval in an alert or email notification.
 - Click 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.

This option is available based on the Approval configurations and approval task settings.
 - **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.

Mobile features in IBM Marketing Operations

Marketing Operations includes limited features that are optimized for a mobile browser. Marketing Operations now includes support to evaluate approval processes on mobile devices.

Mobile approvals are especially useful for approvals without creative attachments or when you can describe the changes in comments. They are aimed at cases where a text description captures the essence of what needs to be approved, such as "Requesting approval to increase the number of mailings from 10,000 to 15,000."

These approvals might include one or more attachments to approve as well, but only the names of those attachments are visible in the mobile approval. A requester should include descriptive text with each attachment to enable the approver to make a decision, such as, "changed the Corporate logo to the one on file as you requested."

At this time, mobile approvals have the following limitations.

- You cannot open items that are attached to approvals on mobile devices.
- You cannot use markup features on mobile devices.
- Mobile features are supported on the following devices:
 - Android devices 4.4.x and higher, using Chrome 3.6 browser.
 - iPads
 - iPhones

You must have permission to access your organization's network on your mobile device to use these features. Your organization can enforce the same security and VPN protection on the mobile browser.

Evaluating approval processes on mobile devices

Evaluating approval processes on a mobile device increases efficiency and streamlines work. You can response to approval processes immediately after you receive a notification, without going to a computer to access the IBM Marketing Operations user interface.

You can access the approval process on your mobile device, if you receive an email notification that a requester sent an item to you for approval. You can also bookmark the approval process page to check your approvals frequently and quickly on your mobile device.

1. Follow the link in the email notification and sign in to Marketing Operations on your mobile device. If you access the notification on a mobile device, the url in the notification automatically directs you to the mobile version.

Note: To use this feature, configure approval alerts and your email address in Marketing Operations

2. Select **Approve** or **Deny** for each approval item. If you need to view attachments or add markup, consider viewing the approval item in the Marketing Operations user interface. A red "X" or green check mark visually indicates your denial or approval of each item.
3. Optional: Enter comments to explain your response.
4. After you **Approve** or **Deny** each approval item, select **Post complete response**.

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.
- If you do not press **Post complete response** before navigating away from the Approval page, the responses are not saved.

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 approval processes

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 might need details from the approval process in the future.

If you cancel the approval process, you cannot submit it for review later. Any responses or comments that were made before you canceled the process 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 **Change Status** and select **Cancel Review** or **Cancel Review with comments** from the menu.
3. Optional: If you chose **Cancel Review with comments**, add comments that you want to add to the approval. You might add reasons why you are canceling the review. Click **Continue**.

The All Approvals view shows the approval status as Canceled.

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.

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, except for forms

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.
 - Linked forms are not copied because stand-alone approvals do not support forms.
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.

Deleting an approval

As the owner of the approval process, you can delete it at any time.

To delete an approval, complete the following steps.

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 **Change Status** and select **Finish Review** from the menu.
 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 **Change Status** and select **Stop Review** or **Stop Review with comments** from the menu.
 3. Optional: If you chose **Stop Review with comments**, type your comments explaining why you want to stop the review and 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 **Change Status** and select **Continue Review**.
3. Enter comments about why you want to continue the review, 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**
 - **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 23. 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. Use the Acrobat Comment toolbar to add your markups and comments to the PDF. When you are done with your markups, click **Send Comments**.
 - 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 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.”

Due to limitations in the Adobe Acrobat API, if you use Adobe Acrobat to markup attachments in Marketing Operations, you cannot record audio comments and cannot attach files as comments.

Note: Adobe Acrobat markup in Marketing Operations does not support Google Chrome.

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 Pro DC installed.
- You must configure Acrobat as follows, when Acrobat is opened on its own, not through the browser.
 - Navigate to **Acrobat > Preferences > Internet** and clear **Display in Read Mode by default**.
 - Install the latest version of Safari and completely remove the old version of Safari. When the installation is complete, launch Safari. Then navigate to **Safari > Preferences > Security** and click **Website Settings** for Internet plug-ins. Under **When visiting other Websites** in the drop-down list and choose **Allow Always**. Click **Done**. This allows Adobe Reader for websites.
 - Navigate to Security and uncheck **Block pop-up windows**.
- You must configure the Safari browser as indicated in the following steps:
 1. Open the Safari browser.
 2. Open **Preferences** and click on the **Websites** tab.
 3. In the left pane, ensure that the check box for Adobe Reader is selected.

4. Highlight Adobe Reader in the left pane.
 5. In the right pane, ensure that your application server is listed in the configured websites list and the **On** option is selected from the drop down menu.
- 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.

If you want to view the PDF in an Acrobat screen, complete 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 Pro DC**.
- 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 24. Icons and controls for the IBM markup tool










Icon	Description
	<p>Click Add Note, then drag to a specific location on a page to add feedback.</p> <p>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.</p> <p>You can attach a file to a note.</p> <p>Use the action links in a note to reply to, update, or delete the note.</p>

Table 24. Icons and controls for the IBM markup tool (continued)

Icon	Description
	Click Add Scribble . With this tool, you can draw a free-from "scribble," straight line, or arrow on the page. You can also add squares and ellipses with fill or no fill. You can select a color for all of these options.
	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.
	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 25. 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.

Table 25. Columns in the annotations list (continued)

Item	Description
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 teams or individual users.

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.

People tab

Each project contains its own People tab.

Use this screen to do the following activities.

- Manage the members of a project.
- Edit the access level for a member.
- Replace a person in a role when a team member becomes unavailable.
- Add or remove a role.
- Track 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.

Project member management

You manage project members on the People tab. For example, you can manage teams and security permissions.

On the People tab, you can do the following actions.

- 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.)

The People tab controls the following security permissions.

- **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 Available resources 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 that are 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 that are assigned to them. You must remove them from all future workflow tasks before you can remove 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.

Managing project members

Use the **People** tab of the project to manage team members.

To manage project members, complete the following steps.

1. Click **Members**.

The Select Team Members dialog box opens.

2. Do any of the following options:

- To add a person or team, select the name from the left pane of the dialog, and click >>.
- To remove a person or team, select the name in the Select Team Members list box and click <<.
- 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 that is assigned to a task.

3. 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 example:

Member/Access Level	Role	Email Address
P Picasso (participant)	Creative Lead	ppicasso@mycompany.com

Managing teams

Use the My Teams page to manage teams.

Selecting **Operations > Teams** opens the My Teams page. Use the My Teams page to do the following tasks:

- 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 “Assigning people to roles” on page 132 can be used to assign individuals or teams to roles.

Team alerts:

IBM Marketing Operations sends alerts for team-related events in the same way it sends alerts to individuals.

Alerts for teams have the following behavior.

- 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 that is 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 that is assigned to a user is reassigned back to the team or to another member

Team summary page:

When you first go to a team, its summary page appears. The team summary page displays basic information about the team.

Table 26. Team summary page fields






Field	Description
Name	Displays a name for the team. This name appears on the Teams list page, and selecting project members or reviewers. Note: This field is required.
Description	Displays a short description for the team.
Skill Sets	Displays a list of skills that are associated with the team. Add terms here that might be useful when you describe team. For example, you can enter "Adobe Photoshop proficiency as a skill, so that anyone who views the team knows that at least one person on this team has this skill.
Suggested Security Policies	Displays the security policy or policies that apply to the team. Note: This field is required.

Table 26. Team summary page fields (continued)

Field	Description
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 view the entire list.

From the Team Summary screen, you can perform the following actions.



Table 27. 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 Set Alert Rules to change the way team members and managers are notified of task assignments.
Delete the team	Click Delete this Item () to remove the team.
Copy the team	Click Create a duplicate Team to create a copy of the team. The system opens the summary page of the new team in edit mode. Then, you can modify the copied team to make a similar team.
Add a team	Click Actions () and select Add Team to add a team.
Go 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 Print () to print the details of the team.

Adding and editing teams:

If you have the appropriate permissions, you can add or edit teams as personnel changes.


To add or edit teams, complete the following steps.

1. Select **Operations > Teams**.
2. On the Teams list page, take one of the following options.
 - To create a team, click **Add Team** ().
 - To edit an existing team, click a team to display its summary page, then click **Edit** ().
3. Complete the fields on the Team summary page.
4. Click **Save Changes**.

Editing team members:

You can set team members and managers when you create a team. Additionally, you can edit the members of a team any time during the existence of the team. You manage team members by using both IBM Marketing Operations and IBM Marketing Platform.

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.

1. Select **Operations > Teams**.
2. On the Teams list page, click the team to edit. To edit a team that is not listed, click **All Teams** to display all available teams. If it is still not visible, you might not have the appropriate permissions to view the team.
3. On the Team summary page, click the **Edit** icon ().
4. Click **Add/Remove Managers and Members**.
5. On the Select Team Members and Roles page, move people into and out of the team.

Task routing options:

When you edit a team, you can choose how tasks, approvals, and project requests are routed for that team. You can assign several different task routing options to teams and team members.

You can select any of the following options under the Task Routing Model section of the Team summary page:

- **Managers can route tasks to members**
Tasks that are 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 that are assigned to the team appear on the My Tasks page for each team member. Then, team members can 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. For standard tasks, a team can have any combination of routing options for approval tasks.

You can select any of the following options under the Approval Routing Model section of the Team summary page:

- **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 page:

- **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 that they previously accepted

Virtual project participants:

A virtual project participant can assist with a project if the user is a member of a team that is working on the project, but not a project participant. The virtual user can see team tasks that are assigned for the team, and be assigned such tasks. Additionally, a virtual 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 2016 Tradeshow project.
- Don is not a project member for the Fall 2016 Tradeshow project.

Even though Don is not a member of the Fall 2016 Tradeshow project, Don can view and update the "Handouts - design" task. Don can go to the All My Team

Tasks page and selecting the "Handouts - design" task. In this case, Don is a "virtual participant" for the Fall 2016 Tradeshow project, and can view all of its project and task information.

Assigning team tasks:

On some teams, managers assign tasks to team members. On other teams, members can assign themselves tasks from the queue.

Depending on the following 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 that are assigned to them back to the pool of unassigned team tasks.

1. Select **Operations > Tasks**.

2. Click \ **Actions** () to display all saved searches/filters for tasks.

3. Choose one of the following searches.

- To display all tasks that are assigned to the team, grouped by assignment, click **All My Team Tasks**.
- To display all tasks that are 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, a message informs you that you cannot reassign the tasks.

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 can assign a request to a whole team instead of a single member. You must have appropriate permissions to assign a team to a project request.

1. Go to the **People** tab of the project and click **Members/Roles** ().

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.

Changing the access level for a project member

You might want to change the security access level and permissions for project members. While all IBM Marketing Operations objects have access levels, it is useful to change access levels for projects only.

Note the following behavior:

- The list of people in the Team members section of the Change Member Participation Level page is populated from IBM Marketing Platform. This list of people might 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 that are defined in Marketing Operations. As with the list of people, the teams you can view might 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.

1. Go to the People tab of the project.

2. Click **Change Member Participation Level**.

This icon is not available unless you have the appropriate permission. Typically, project owners and IBM Marketing Operations administrators have this permission, but it can 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.

Find and replace task members or reviewers

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 that is assigned by an administrator when a template was created, you must go to the approval and remove them. You can only remove the member or reviewer if you have the proper permissions.

To open the Find and Replace Task Members or Find and Replace Task Reviewers page, click **Find and Replace > Find and Replace Task Members** or **Find and Replace > Find and Replace Task Reviewers**.

The following table describes some uses for the search and replace feature.

Table 28. Search and replace use cases

Goal	Select	Replace with
Switch specific resources: replace a user, in a specific role, with another user for all tasks in the project.	task member/reviewer = Karen role = Project Manager	Connie Contact
Switch specific users: replace a 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 extra resource.	task member/reviewer = Karen role = Project Manager	Connie Contact
Assign tasks to a role: newly assign a 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 17.

The components tools help you refine your search.

- Filters: Filter the search by role, task member, or a date range.
- Preview and Update search Buttons: Preview and update the search.
- Search results: Displays tasks that meet the search criteria. Use it as a preview of the tasks that 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 29. 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 by 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.

Table 29. Filters on the Find and Replace Task Members/Reviewers dialog (continued)

Field	Description
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 that you want to fill the selected role on the tasks in the search results.

Buttons

Table 30. 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 you start the update.
Cancel	Close the page without any changes.

Select project members and reviewers page

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 might 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 31. Fields on the Select Project Members/Reviewers page

Field	Description
Available resources	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 in alphabetical order. 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.

Managing reviewers

Reviewers are different from project members because they do not have access to the project. Reviewers approve other project members work. Both reviewer roles and users are defined in the People tab for use 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. Go to the People tab for the project.
 2. Click **Manage roles > Reviewers**.
 3. In the Selected Reviewers list box, select a person or team.
 4. Take one of the following actions.
 - To add the person or team to the project, select them from the left pane of the page, and click >> to move them to the right pane. The right pane contains people and teams who are active on the project.
 - To remove the person or team from the project, click <<. This action moves the person or team back to the inactive pane.
 - To change the role for a person or team, use the **Up** and **Down** controls to move them to the necessary role.
 5. Click **Save Changes**.

The Select Team Reviewers dialog box closes and your changes are applied. The People tab becomes active.

Object access levels

Access levels are default roles that exist for different types of objects. For example, a project has an owner, a participant, a requester, and an 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. In other words, different members of a project might need different access roles. Object access roles are also sometimes called access levels.

IBM Marketing Operations is a collaborative tool, and users might need varying degrees of access to projects. With Marketing Operations, you can assign different object access roles to project members.

IBM Marketing Operations objects contain the following access levels.

Table 32. Object access levels

Access level	Description
Owner	All object types have owners, usually the person who created the object. Owners can typically take any action that is associated with an object, such as adding members to the team or editing the properties of the object.
Participant	Participants can typically view the object, but not edit it. For projects, when the wizard creates a project, all members added to the project become participants by default.
Requester (projects only)	Requesters 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)	Recipients can accept or return a request. A requester submits a request to the recipient, who then decides what to do with the request.

Table 32. Object access levels (continued)

Access level	Description
Approver (approvals only)	Approvers 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 you assign 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.

Roles and permissions

Different users and roles have different permissions.

Note: If you need help with permissions, talk to your IBM Marketing Operations administrator.

The following list describes the 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.

Assigning work by role

Typically, at the beginning of a project, the project owner or manager assigns work to the members of their team.

Note the following issues when you assign work:

- When you access the Assign All team members and reviewers to their respective tasks dialog, the project workflow is locked. Any other user who attempts to access it receives a warning message, indicating that the workflow is in use.
- Only tasks with a status of Pending have people who are assigned to them. All other tasks remain unchanged.

To assign work by role, complete the following steps.

1. Click **Manage roles > Assign work by role**.

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 options:
 - To add members to the existing assignments, select **append the new user**.
 - To replace anyone who is in a role, select **replace the existing assignment**.
3. Click **OK**.
A confirmation dialog box appears.
4. Click **Close**.

In the workflow, all users who are assigned to roles are also assigned to the tasks associated with their roles.

Removing a role

You can remove member and reviewer roles from projects.

If you are removing a role, note the following issues:

- 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 a reviewer role.
 - To remove a member role, click **Manage roles** > **Members**.
 - To remove a reviewer role, click **Manage roles** > **Reviewers**.
 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.

Adding a role

A project owner or manager might realize 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 issues when you add roles:

- You cannot add a role that already exists in the project. 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**. You must have the appropriate permission to access this item. Then, you can add the role to your project by 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 **Manage roles** > **Members**.
 - To add a reviewer role, click **Manage roles** > **Reviewers**.
 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.

Assigning people to roles

Roles define tasks and permissions in projects. Assign users to roles before starting work on a project.

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 behavior.

- Administrators create roles using the List Definitions section of the Administration menu item.
- The list of people in the Team members 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. Go to the People tab of the project.
2. You can assign work to project members or reviewers.
 - Click **Manage roles > Members** to add project members.
 - Click **Manage roles > Reviewers** to add reviewers.The Select Project Members or Select Reviewers dialog box appears.

Note: If the template used to create the project already contains the necessary roles, skip the next step.

3. 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 **Available resources** 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**.

Chapter 9. Calendar

Historically, organizations produced paper-based calendars and updated them with the latest information. The calendar feature provides marketing groups with electronic means to view and update calendar data.

Marketing organizations typically organize their work with calendars. For example, seasonal events drive marketing programs, and other external dates, such as store openings, and seasonal product announcements.


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 in the Set View Options dialog box.
- You can filter the items that are displayed on the calendar with Advanced Search.

Customizing the calendar appearance

The calendar displays a time-centric view of your business processes. You can customize the appearance of the calendar to suit the needs of your organization.

When you view the calendar, its appearance depends on several options that you can set.

- Open the calendar by selecting **Operations > Calendar**.
- To change to the calendar view from the list pages for Projects, Programs, Plans, and Tasks, click **View Options**.
- To set the default appearance for the calendar, use the Calendar/Timeline Settings page. Select **Settings > Marketing Operations Settings > Calendar/Timeline Settings**.
- To change calendar appearance, select **Operations > Calendar**. Then, click **View Options** ().
- To choose the type of calendar (timeline, text calendar, or graphical calendar) and the time scale (such as fiscal year, quarter, or month), click **View Options**.

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 the following ways:

- Set an initial, default view of the calendar.
- Change 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 33. Fields on the Calendar/Timeline Settings page

Field	Description
Include Weekend Days	You can 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 34. 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 35. 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.


Setting your default calendar options


You set all available options for the calendar by 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 Marketing Software 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 actions:
 - 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.

Changing your view of the calendar

You can temporarily change your view of the calendar, but the changes do not persist for your next session.

You can access the different views of the calendar by clicking **View** () 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 **View** ().
3. Supply the details on the **Set View Options** dialog box.
4. Take one of the following actions.
 - Click **Apply** to view your changes.
 - Click **Reset** to discard changes.
 - Click **Close** to exit the screen.

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.

Timeline view of the calendar

If you choose a timeline view, you can choose from several date ranges. The screen can display data for a single week, up to data for an entire year.

The timeline view displays a grid-like view of the objects, such as projects, programs, or plans that you selected and filtered (for example, Active Projects). The objects are organized by a 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 page.
- **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. The 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, which 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 that is 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.

Text or graphical calendar views

The calendar views display data for a selected month. 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).

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.

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.

Calendar color coding

You can display objects in a color-coded manner on either the graphical calendar or in the timeline views.

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 opens. 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, CDs, Credit Card, and Home Mortgage, and **N/A**. **N/A** corresponds 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 (CDs, Credit Card, and Home Mortgage, and **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.

Horizontal bars on the calendar

The timeline view and graphical calendar view display horizontal bars. The bars help illustrate the duration and dates of calendar objects.



Note the following information.

- 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 conditions of the object.
 - 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

The brief view mode contains only the most essential information about a task: the task name and task ID. Detailed mode contains additional information about the project to which the task belongs. 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.

Brief mode is the default. Brief view mode presents only the most essential information and can reduce clutter. In brief mode, the calendar text contains the following items.

- Task () or approval () symbol
- Task ID
- Name of the task

Detailed mode provides all important information at a glance. 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

Publishing the calendar

You can save a snapshot of the calendar at a certain moment in time. When you publish the calendar, you chose which information you want to display and how you want to display it.

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. Take one of the following actions.
 - 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 that is 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.

Grid edit mode

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 do 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 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

You use a consistent set of controls to organize grids, such as **sort ascending**.

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 36. 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.

Table 36. View mode controls (continued)

Control	Description
	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 37. 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 38. 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.

Table 38. Edit mode controls (continued)

Control	Description
	Save your changes and return to view mode.
	Revert all changes made since your last save and return to view mode.

Importing 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. Go to the grid that you want to import.
2. Click **Import** ().
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.
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.

Exporting grid data

You can export grid value to use it elsewhere in the product.

You can export grid data in comma-separated value (.csv) format. Note the following criteria.

- 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. Go 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.

Posting read-only grid data to URLs

You can select rows of a read-only grid to post to a URL.

If the template creator enables a read-only grid for data that you are posting, the screen contains a **Post Data** link.

1. Go to the read-only grid that contains the 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.

Grouping read-only grid data

If the template enables data grouping for a read-only grid, you can group data in the grid by any of its columns.

To group read-only grid data, complete the following steps.

1. Navigate to the read-only grid you want to view.
2. Click **View**.
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

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

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.

- 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 that 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. Within Marketing Operations, marketing object instances are called "marketing objects".

Offer object type

Depending on whether you only installed IBM Marketing Operations or if you integrated IBM Campaign, you have different options for offer objects.

If your installation contains only Marketing Operations, your system administrators can set up a custom marketing object type to represent offers or promotions. However, if Marketing Operations is integrated with Campaign, your installation includes a system-provided marketing object named "offer."

When Marketing Operations is integrated with Campaign, there are two options for offer management:

- If your system is configured with optional offer integration enabled, offers are managed through Marketing Operations. 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. 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.

Creating marketing objects

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.

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.

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, take one of the following actions.
 - 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 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.

Marketing object cross-reference report

All projects and marketing objects contain a report that describes 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 that are referenced by this project
- Marketing objects that are modified by this project

For marketing objects, the report contains the following sections.

- **Marketing Objects that Reference This Item:** other marketing objects that contain 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 that contain a link to this marketing object including offers. Marketers can see the list of Campaign Projects where an offer or offer list is referenced. The information can be useful when the user wishes to update, cancel or delete an offer or an offer list.
- **Approvals that Refer to This Item:** approvals that contain a link to this marketing object.

Modifies and references relationships

Some projects reference or modify other marketing objects.

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. For example a Change Order or Work Request project, modifies the project or marketing object.
- **References:** The project or marketing object that contains this marketing object does not change it, but references it only.

Select marketing objects

You select marketing objects by checking boxes on the Marketing Objects list page.


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 go 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 back to page 1, your selections are retained. Your selections are retained whether you move between pages by clicking the number at the bottom of the page or opening the **Recent** menu. However, your selections 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**.


Deleting marketing objects

If you no longer need a marketing object, you can delete it.

You cannot delete a marketing object if a project or another marketing object is linked to it. You must first remove the link before you delete 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 **Delete this Item** () 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.

Adding marketing object references to forms or grid rows

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.

Note the following behaviors:

- 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.
1. Go 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. If the marketing object reference field is on a grid, do 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. To complete a search, choose one of the tabs.
 - To do a simple search for a marketing object: In the **Search** tab, type your 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. To accept a marketing object, select the object and click one of the available options:
 - 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 that 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.

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 extra drop-down list. You use this control to select a single type of marketing object for your search. You must select one type of marketing object 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.

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 grants you permission in the security policy that is assigned to the asset).
- You can organize assets by 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 39. 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 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>

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 access a library only if your IBM Marketing Operations administrator grants you permission in the security policy that is 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.

Changing from asset list view to 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, complete the following steps.

1. 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.

Adding an asset

You can add an asset to a library.

To add an asset to a library, complete the following steps.

1. Log in to IBM Marketing Software.

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 ().

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 an asset, the system displays the New Asset page.

Table 40. 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.

Table 40. Fields on the New Asset page (continued)

Field	Description
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>
Keywords	Enter comma-separated keywords for the asset. 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 tell users 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 issues:</p> <ul style="list-style-type: none"> • This field defaults to version 1.0. • Each version that you add, 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 might want users to access the preview file for reasons of security, speed, or convenience. For example, if the source file is an image, you might want to provide a PDF file as the preview so that all users can still view it. IBM recommends that 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 with 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 the following options:


- Adding a watermark to the preview file

- Providing a low-resolution version
- Providing another method to protect the file and prevent copying and saving of the file

Editing an asset

You can edit only assets that are in a draft state.

If you upload a new file while you edit the asset, the system replaces the 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. You can correct the file if you accidentally added the wrong version.

1. Select **Operations > Assets**.
2. Select the library that contains the asset you want to edit.
3. Click the asset that 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.


Adding a version of an asset

You can add a version of an asset instead of replacing the asset.

Note the following issues:

- 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 version of an asset, complete the following steps.

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 41. 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.

Changing the status of assets

Change the status of an asset to move the asset through its lifecycle.

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 **Change Status** and select one of the available statuses transitions from the menu.

Note: You can choose most status transition options with or without comments. If you want to add more information, select a status transition with comments. If you want to change the status with fewer clicks, select a transition without comments.

5. If you chose a status transition with comments, enter comments and click **Continue**.

Viewing an asset

After an asset has a status of Finalized, all authorized users can view and use the asset.

To view an asset, complete the following steps.

1. Select **Operations > Assets**.
2. Select the library that contains the asset you want to view.
3. Click the asset that 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 if you are not sure if this asset is the asset you need.
 - To save the asset file or the preview file and download it to your computer, right-click **Download** or **Preview** and select **Save Target As**. Browse to the location where you want to save the file and click **Save**.
5. When you finish viewing the asset, close the window that contains either the downloaded file or the preview.

Viewing history of an asset

When an asset has a status of Finalized, all users who have permission can view the revision history and download history for the asset. Owners can view the revision history when the asset has any status.

To view the history of an asset, complete the following steps.

1. Select **Operations > Assets**.
2. Select the library that contains the asset that you want to view.
3. Click the asset that 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 that were 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 **Download**.

Adding 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.

To add an asset folder, complete the following steps.

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 and folders from the Asset list page

From the Asset list page, you can delete multiple assets and empty asset folders.

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.
- Asset folders do not have owners. Different owners can own different assets in a folder, so the permission to delete an asset folder is not based on ownership.

To delete an asset or folder from the Asset list page, complete the following steps.


1. Select **Operations > Assets**.
2. Select the library that contains the assets and folders that you want to delete.
3. Select the check boxes next to all the folders and assets that 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.

Deleting an asset from within the asset

As an owner of the asset, you have permission to delete the asset. However, you might have another security role with permission to delete assets only if you inherit that permission from another role. In that case, you cannot delete an asset from the list of assets. You can delete the asset only from within the asset itself.

To delete an asset or folder from within the asset, complete the following steps.

1. Select **Operations > Assets**.
2. Select the library that contains the asset that you want to delete.
3. Click the asset that you want to delete.
4. Click the **Delete Selected Items** icon ().
5. Click **OK** at the confirmation prompt.


Moving assets and folders from the Asset list page

From within any library, you can move assets and folders, if you have the appropriate permissions.

To move assets and folders from the Asset list page, complete the following steps.

1. Select **Operations > Assets**.
2. Select the library that contains the assets and folders that you want to move.
3. Select the check boxes next to all of the folders and assets that you want to move.

To move assets to different locations, repeat this procedure for each 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.

Moving an asset from within the asset

As an owner of the asset, you have permission to move the asset. However, you might have another security role with permission to move assets only if you inherit that move permission from another role. In that case, you cannot move an asset from the list of assets. You can move the asset only from within the asset itself.

To move an asset from within the asset, complete the following steps.

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 coordinates expenses of plans, programs, and projects. After you establish 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.

Marketing Operations tracks budgets of child programs and projects, although these objects can have different owners. For example, a program that is 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. A plan owner, such as a marketing manager, can track expected expenses from child programs, projects, and the plan budget itself, to remain responsive to budgetary needs.

Note: Budgets are available only when the IBM 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 that is broken down into weeks, months, or quarters.

Marketing Operations keeps budget information for the current fiscal year, the next two fiscal years, and any past fiscal years that date 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

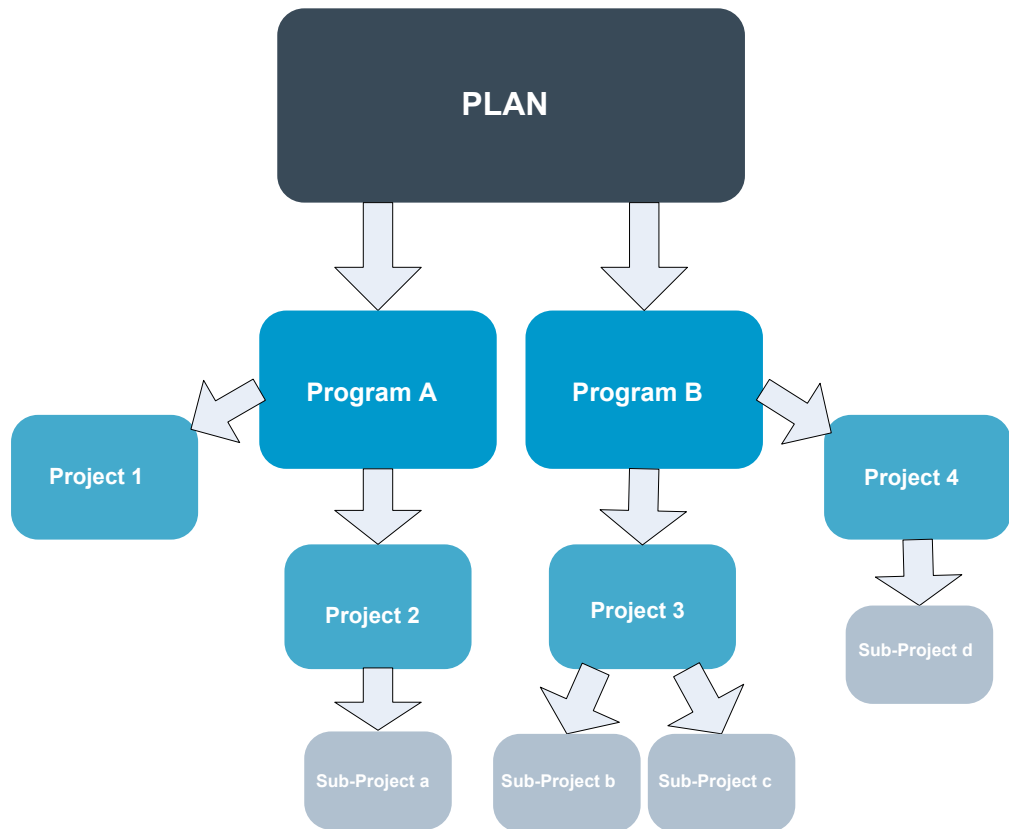
With Marketing Operations, you can break fiscal years into weeks, months, or quarters. When you create a plan, program, or project, choose the wanted increment from the **Budget Granularity** list on the **Summary** tab.

Users cannot 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.

Budget funding

Although you can plan your budget by 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 “Planning budgets from the top down” and “Planning budgets from the bottom up” on page 163.

Note: Since stand-alone programs and projects are not linked to plans, they have their own budgets that you enter directly on their respective budget tabs.

Planning budgets from the top down

Top-down planning is useful if a plan has predictable expenses from year to year.

For example, every year you create a plan that is called New Product Launch that includes trade shows. You can create programs such as Trade show 1 and Trade show 2, and assign funds to each program.

The Trade show 1 program might include a project that is called New Customer Acquisitions. 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.

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 it child projects, which are grandchildren of the plan.
4. Allocate funds from the projects to it child subprojects, which are great-grandchildren of the plan.

Planning budgets from the bottom up

Bottom-up budget funding is useful if you are not sure how much funding to allocate from the plan to the child objects but can forecast line items for programs and projects. After you predict all project expenses, you can roll them up to parent programs and plans.

(See the top-down budget example “Planning budgets from the top down” on page 162.) 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 the expenses for Trade show 1. You can add line item expenses to Trade show 1, if necessary. You can finalize the expenses and roll them up from Trade show 1 to the parent plan, New Product Launch. Start from the bottom-most level and add expenses to projects, programs, and plans until the parent plan accounts for all necessary allocations.

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 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

When you remove links between plans, programs, and projects, the budgets of both parent and child objects are affected.

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 that are 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 that were 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, “Accounts,” on page 183.

Budget views

There are two budget views on all budget tabs.

- Total view () is the default. It displays the total amount that is 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, which is broken down by week, month, or quarter.

Across all budget tabs for a plan, child programs, and 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 that are 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 167.

The Plan Budget tab

The Plan Budget tab displays information about the entire budget and allocations to child programs.

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. It summarizes funds that you expect to spend in the plan and the programs that 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 that is 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 canceled.
- The Actual Total is all funds spent so far on the plan. IBM Marketing Operations calculates the actual amount that is spent through the invoice functions. This total is likely to be much lower than the others due to time lags between planning expenses and 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 was allocated or planned for use, how much remains for additional spending, and how much you might 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. The plan needs more funding to successfully complete the programs.
- In the **Forecast Total** row, the **Remaining** column indicates the amount of money the plan owner has left if current forecasts are accurate. If the figure is negative, the plan needs more funding to succeed at expected costs.
- In the **Committed Total** row, the **Remaining** column indicates how much money the plan owner has 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 are canceled, if 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 is useful for monitoring cash flows, although it is likely lower than the forecast total or committed total remainder due to time lag between planning expenses and paying bills.

Note: 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 under 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: The Budget tabs for programs and projects also include Costs tables that detail 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 is one level down in the plan, program, project hierarchy. While the Plan Budget tab breaks down into information about linked programs, the Program Budget tab breaks down into 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

The top of the Budget tab for projects and programs displays the **Parent Budget(s)**. **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 monitors finances for the entire program. This table summarizes funds that you expect to spend in the program and the projects that it contains.

The Program Budget Summary table is the top table on the Budget tab of a program. In total view, the Program Budget Summary table displays the total budget for the program's entire life. The 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 164.

Project Costs table

The Project Costs table, on the Program Budget tab, lists the total costs that are associated with all of the projects that this program contains.

The Project Costs table 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 165.

Program Line Item Details table

The Program Line Item Details table summarizes line item information that is entered for individual expenses on the program level. These expenses belong to the program itself, not the projects that are linked to it.

The Program Line Item Details table is the third table on the Program Budget tab. This table works with invoices to track spending. For more information about line items and invoices, see “Line item rollups” on page 177.

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: 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 but is one level lower in the hierarchy. While the Program Budget tab breaks down into information about linked projects, the Project Budget tab breaks down to information about any subprojects.

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 the following topics:

- For the Project Budget Summary table, see “Plan Budget Summary table” on page 164.
- For the Subproject Cost Summary table, see “Program Costs table” on page 165.
- For the Project Line Item Details table, see “Program Line Item Details table.”

Budget allocation versions

Budget allocation versions are a powerful tool for financial planning. You can use budget allocation versions 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, you can 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 viewing 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. You can use budget versions 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 167 and "Adding and editing line items" on page 171.

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."

Creating budget versions

Create different budget versions for financial forecasting of different scenarios. Then, you can choose the most appropriate budget by comparing them.

To create budget versions, complete the following steps.

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.

Option	Description
Create a new version	Create a blank allocation version and opens it in edit mode.
Copy Current Version	Copy 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	Copy any version from any fiscal year and open 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 example, if the budget for year D resembles year A, you can copy the year A budget and use it as a starting point.

3. Give the new version a unique, descriptive name.
The 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.

Deleting budget versions

You cannot delete the currently selected, or "in-use", version of the budget. 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."


To delete budget versions, complete the following steps.

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.

Comparing budget versions

You can view allocations for up to six budget versions on the same screen to select the most appropriate version.

To compare budget versions, complete the following steps.

1. Navigate to the version that you want to compare 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. You can show and hide versions by using + and - to isolate specific versions in the comparison.
4. When you finish, click **End Comparison** in the yellow box at the top of the screen.

Marking a budget version "in-use"

The active or finalized budget version of a plan, program, or project is the "in-use" version. IBM Marketing Operations rolls this version down to linked child objects and up to linked parent objects.


Note: To create, edit, delete, update, and mark in-use, you must have the security permissions "edit budget tab."

When you work with budget versions, note the following restrictions:

- 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: When you upgrade to a new version of IBM Marketing Operations, the previous 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.

Allocating funds

A parent plan, program, or project allocates funds down to individual child programs and projects that are contained within it. Plans fund programs, programs fund projects, and projects fund subprojects.

Add and edit allocations on the parent Budget tab. Begin by allocating money to a plan. Then, allocate down the program, project, subproject hierarchy that uses the same procedure.

Note: The "parent" object is the plan, program, or project from which you are allocating funds. A "child" object is the next level down in the plan, program, project, subproject hierarchy. For instance, if you allocate 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 that 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 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 “Adding and editing line items” on page 171.
 - 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 top row displays 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 that is left in the parent object 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: To link additional parent and child objects, use the Summary tab. Then, return to the Budget tab to allocate funds to the new child objects.

Allocating 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 that are associated with the program and any costs that are associated with any projects that are linked to the program.

Note: For stand-alone programs, the fiscal year is assumed to be the current year that is defined by the system clock.

To allocate funds for stand-alone programs and projects, complete the following steps.

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 “Adding and editing 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.

Adding and editing 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, after they are finalized, are rolled up to the accounts affected, providing visibility into budget and cash flow needs for higher-level objects.

Note: Adding line items to one budget version adds them to all budget versions. For more information, see “Budget allocation versions” on page 167.

To add or edit line items, complete the following steps.

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.

4. To edit a line item, double-click it in the **Item Description** column and make your changes.

5. If the line items table contains custom text fields, enter appropriate values.
6. In the **Expenditure Date** field, enter the anticipated date that funds will be spent. Click the arrow to open 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, use separate line items. For example, to track the expense for Printing in May, June, and July, enter one line item for each month.

7. 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.
8. Select a cost category from the **Cost Category** drop-down menu.
9. In the **Committed Amount** field, enter any committed funds that are related to the line item. Leave this field blank if no portion of the line item is committed.
10. In the **Forecast Amount** field, enter the amount that you predict or forecast that the line item will cost.
11. Click **Save and Finish** to save your changes and go to the object Summary tab.

IBM Marketing Operations totals the line items, but they are not rolled into the parent object budget until you finalize them. Finalizing line items can require approval. For more information, see “Finalizing budget line items.”

Finalizing 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.

To finalize line items, they must have an assigned expenditure date.

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 the approval process completes. The first column of the Line Item Details table shows the approval status. For more information, see “Program Line Item Details table” on page 167.

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 167.

1. Add budget line items. For more information, see “Adding and editing line items” on page 171.

Finalize and **Discard Changes** links appear on the Budget tab.

2. Navigate to the object Budget tab and click **Finalize**.
 - For either of the following situations, you are prompted to confirm that you want to finalize your changes:
 - The program or project does not require line item approval.
 - The line item is automatically approved because of rules that your administrator established in the object template.
 - If any or all line items require approval, you are prompted to send an approval. For more information about the approval process, see “Approvals” on page 7

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.

Discarding budget line items

Instead of finalizing budget line item edits, you can discard all changes that you made since the last time you finalized budget line items.

To discard budget line items, complete the following steps.

1. Add budget line items. For more information, see “Adding and editing line items” on page 171.

Finalize and **Discard Changes** links appear on the Budget tab.

2. Click **Discard Changes**.

You are prompted 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. It then restores the previous finalized version of the budget line items. Marketing Operations does not trigger the approval process.

Budget line item approvals

Depending on the rule criteria that your administrator established in the project and program templates, budget line items might be automatically approved or sent through the IBM Marketing Operations approval process.

For example, your administrator might define rules based on the line item 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 wrote these rules in your organization's project and program templates, budget line items must be approved before they are finalized and rolled up to the parent program or plan. Approval can be accomplished either automatically by using the rules or by the assigned approvers. However, if your projects and programs use templates that do not contain budget line item approval rules, line items can be finalized directly on the object Budget tab without an approval process.

Approval status for line items can be seen on the object Budget tab in the second column of the Line Item Details table.

-  = In Progress
-  = On Hold
-  = Canceled
-  = Completed

After an approval is sent, you might 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 might trigger a new approval process.
- When the approval status is in progress, the approval cannot be edited. You must cancel the approval first. For more information, see “Canceling approval processes” on page 109.

Chapter 14. Invoices

In IBM Marketing Operations, you can view all changes that were made to an invoice, including the time and date of the changes and the type of changes made.

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. Different line items can be attributed to different projects, programs, and 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.

Adding an invoice

Use the New Invoice page to add an invoice.

To add an invoice, complete the following steps.

1. Select **Financials > Invoices**. The My Active Invoices page appears by default.
2. Click the **Add Invoice** icon ().
3. Type information in the fields on the New Invoice page.
For more information, see “New Invoice page” on page 176.
4. To add line items, click **Save and Edit Line Items**.
For more information, see “Adding and editing invoice line items” on page 178.

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

The following table describes the fields available on the New Invoice page.

Table 42. Fields on the New Invoice page

Field	Description
Invoice #	Enter an invoice number: <ul style="list-style-type: none">• A number that is 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 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.
Vendor Name	Select a vendor from the drop-down list. IBM Marketing Operations administrators populate this list. If you cannot find a vendor on the list, ask your administrator.
Owner(s)	Click Add/Remove Members to add or remove owners. By default, this field contains the name of the invoice creator.
Security Policy	Select the invoice security policy from the drop-down list. The default value is Global .
Purchase Order #	Enter the purchase order number that is 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.
Invoice Date	Enter the billing date of the invoice or select it on the calendar.
Due Date	Enter the date by which the vendor expects payment or select it on the calendar.
Other Notes	Enter any helpful notes or comments that are related to the invoice.
Payment Terms	Enter any notes about the payment.

Editing invoices

Create invoices and change the status to move invoices through development to Accounts Payable.

1. Select **Financials > Invoices** and select the invoice that you want to edit.
Depending on the status and owner of the invoice, either the My Active Invoices view or the All Invoices view displays.
2. Optional: If your invoice is not in Draft state, click the **Change Status** menu and select **Re-draft**.
3. Edit the fields on the Invoice page as needed.
For more information, see "New Invoice page."
4. Add or edit line items.
For more information, see "Adding and editing invoice line items" on page 178.

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** your changes.

Line item rollups

When you change the status of an invoice to Paid, the invoice line item amount rolls up to the program or project budget and to the account with which you associated it. 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 invoice can be marked Payable. An invoice must be marked Payable before you can change the status of the invoice to Paid and roll 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 included rules in your organization's invoice templates, all invoice line items must be approved, either automatically by using rules or by the assigned approvers. After the invoice is approved, it can be 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 invoice can be marked as Payable without going through an approval process.

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.

IBM Marketing Operations adds or subtracts the invoice line item amount in the **Actual Total** field on the source project or program Budget tab. The **Actual Total** field signifies the amount of funds that are used in the budget. The Actual Total includes all Paid invoices that contain line items that are linked to the project.

For example, if an invoice contains a line item of \$75 that you associate with Project 1, the Actual Total on the Project 1 Budget tab increases by \$75 after the invoice is paid.

If an invoice contains a line item of -\$75 (indicating a credit) that you associate with Project 1, the Actual Total on the Project 1 Budget tab decreases by \$75. If the Actual Total showed \$200 before the credit was applied, it is updated to \$125.

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 designate an account to which you linked the invoice line item.






After the invoice is paid, the invoice line item amount rolls up to 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.

Adding and editing invoice line items

You must add line items to eventually mark the invoice **Payable** and roll expenses up to accounts and budgets.

To add or edit invoice line items, complete the following steps.

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 options 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 click 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

The following table describes the fields available on the Edit Invoice Line Items page.

Table 43. Fields on the Edit Invoice Line Items page

Field	Description
Item Description	Type a description for the line item. Note: The # field populates automatically when you create a line item.
Source Project or Program	Click the drop-down list to search for a project or program with which the invoice line item is associated. In the Select Item dialog, do the following steps: <ol style="list-style-type: none">1. In the Find by name or code field, do one of the following options:<ul style="list-style-type: none">• To find a particular type of item, select either Project or Program.• To search for a specific project or program, enter a search string.• To search for all projects or programs, leave the field blank and click Find.2. Select a project or program from the Search Results list.3. Click Select to close the dialog box and add the selected project or program to the line item. Note: This field is required to move an invoice into the Payable state. When the invoice is in the Paid state, the invoice amount rolls up to the Actual Total field on the source project or program Budget tab.
Source Account	Click the drop-down list to select from all enabled accounts. The funds for this item come from the account you choose. Note: When the invoice is in the Paid state, the invoice amount rolls up to the source account's summary information.
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

In IBM Marketing Operations, invoices can be in the Draft, Canceled, Payable, Under Review, or Paid state.

When you change an invoice from one state to another, you can add comments. IBM Marketing Operations records these comments in the invoice revision history.

Note: You must add comments when you change the invoice status to Paid. When you change an invoice to Paid, you can enter the date on which the invoice was marked Paid.

The following table describes the invoice status types.

Table 44. Invoice status types

Status	Description
Draft	Indicates that the invoice is still being worked on. An invoice is in the Draft state when it is first created. To move an invoice out of the Draft state, you must add line items. If necessary, you can place an invoice in the Draft state by choosing Re-draft Invoice from the Change Status menu.
Canceled	Canceling an invoice is not the same as deleting an invoice. When you cancel an invoice, it is not active but you can still view it in Marketing Operations. Deleting an invoice removes it from the system. When you move an invoice to Canceled, Marketing Operations sends an alert to the invoice owners.
Under Review	Approvers are currently examining the invoice line items. Note: This internal status occurs after you mark an invoice Payable .
Payable	Items on the invoice were reviewed, and the invoice is ready to be sent to Accounts Payable. When you move an invoice to Payable, the owner of the account to which the invoice belongs receives a notification. If your organization uses the invoice approval function, changing an invoice state to Payable triggers the Marketing Operations approval process. The invoice can enter the Under Review state while approvers examine the line items. For more information, see “Invoice Line Item Approvals” on page 177.
Paid	The invoice is 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.

Changing the status of invoices

Change the status of invoices to move them from development to Accounts Payable.


1. Go to the Summary tab for the invoice of which you want to change the status.
2. Click the **Change Status** menu and select a status transition.
3. If you chose a status transition **with comments**, type your comments. Click **Continue** to close the dialog box and apply the new status.

Note: If you select **Canceled** or **Paid**, you cannot change the status of the invoice later. When you change the invoice status to paid, you must use the transition **Mark as Paid with comments**. You can also enter the date on which the invoice was paid.

Deleting 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.

To delete an invoice, complete the following steps.

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 ().

4. Click **OK** to confirm the deletion.

Printing the invoice summary

You can print all information found on your invoice summary page or select certain columns of information to print.

To print the invoice summary, complete the following steps.

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 that you do not want to print.

4. By default, the **Shrink to Fit Landscape Page Width** box is checked. Clear this box 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**.

7. In the Print dialog, select your printer and printer options, and click **Print** to print the selected columns.

Tip: Choose landscape mode for best results.

8. In the preview window, click **Close** to close the print preview.

Chapter 15. Accounts

A top-level IBM Marketing Operations account represents a corporate account that is established by a finance department for tracking and controlling expenditures and cash flows for specific areas of the business. Accounts can have subaccounts.

Key capabilities that are related to accounts include the following items:

- Defining a hierarchy of accounts and subaccounts.
- Funding or allocating money to the account at the beginning of a fiscal period (typically a year), which is 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.

The account Summary page

Access the account Summary tab from the **Financials > Accounts** menu option.

Use the account Summary tab to perform the following tasks:

- View basic account information.
- Review the account summary table. This view-only table that reflects the budgeted, forecasted, committed, and actual amounts for the account. This table also displays remainder amounts.
- Select the fiscal year to view.

Account summary table

The following table describes the Account Summary table.

Table 45. 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	<p>The sum of the following items, as specified in the budget line item Source Account field:</p> <ul style="list-style-type: none">• All forecasted values that are entered into the Forecast Amount field of a finalized project• The program budget line items for which this account is the source account <p>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.</p>
Available	The difference between values in the Budget and Forecast rows.

Table 45. Fields in the Account Summary table (continued)

Field	Description
Committed	<p>The sum of the following items, as specified in the budget line item Source Account field:</p> <ul style="list-style-type: none"> • All committed values that are entered into the Committed Amount field of finalized project • The program budget line items for which this account is the source account <p>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.</p>
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.

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.

Your Marketing Operations administrator configures your fiscal year to the month that you want your account fiscal year to begin. For more information, see the *IBM Marketing Operations Administrator's Guide*.

From the **Account Summary** drop-down list, select the fiscal year to view. You can choose from the current year and the following two years. If budget or invoice line items draw from the account in other years, those years also appear in the list.

Chapter 16. Metrics

Metrics are used for management reports and analysis. View metrics 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 results.
 - 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.

Setting up program and project metrics

Use the wizard to add a program or project and specify the metrics that you want to collect. The results appear on the Tracking page.

Note: This task describes setting up metrics for a program; setting up metrics for a project is similar.

To set up program metrics, complete the following steps.

1. Using the wizard, add a program or project.

When you use the wizard, the Tracking page displays the template tracking information for your program. You cannot change the type of information that is captured on the Tracking page, but you can enter target values for the categories. Depending on how your administrator set up your program templates, the number of columns on the Tracking page can vary.

2. In the **Target** column, enter the target value that you want to achieve by running this program. For example, if the program is a product launch, you might 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.


Editing program and project metrics

When you created your program or project by using the wizard, you entered metrics on the Tracking page. You can then edit any of the values that you entered.

If the program is linked to a plan, or if the project is linked to a program, you must finalize the edits that you made before those edits roll up to the parent object.

Note: This procedure describes editing metrics for a program; editing metrics for a project is similar.

To edit program metrics, complete the following steps.


1. Navigate to the **Tracking** tab of the program whose metrics you would like to edit.
2. Click **Edit** ().
- The Edit Program Tracking page appears.
3. Edit the values that you would like to change.
4. Click **Save and Finish**.

The **Tracking** tab for the program is displayed. The updated metrics appear in the Program Metrics table.

Entering planned values for metrics that roll up

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 you enter planned values for metrics, you work top-down. 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.

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 is displayed.
4. Enter the planned values for the metrics.
5. Click **Save and Finish**.

The values that 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 table describes the views that are available for rollup metrics.


To change the view for rollup metrics, click the **View** icon () and select a view from the drop-down menu.

Table 46. 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
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 that are used in the plan or program.

Importing metrics from a campaign

If your campaign project has a **Tracking** tab, the template creator mapped contact and response metrics in Campaign with metrics in Marketing Operations. You can import the metric data into the campaign project.

You must have the **Analyze campaign** permission in Campaign to import metrics.

To import metrics from a campaign, complete the following steps.

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 that is imported depends on the metrics the template creator defined. IBM Marketing Operations captures and displays the last date of import, which is 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 the 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 that 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 that contains the values.

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.

Note: The **Finalize** link displays only if there are new or changed metric values that have not yet been rolled up.

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 that are 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 reports, add custom attributes, and set up criteria filters.

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 (for plans, programs, and projects)

For more information about 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 click **OK**, the report is sent in the format that is chosen for display.

For example, if you choose PDF and 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 the message.
- **Attachments:** Ensure that **Include the report** is selected.

Note: Do not select **Include a link to the report**. This option is not currently supported.

Filtering data with search and select

You can filter the data in reports in different ways, depending on the report. Use search and select filters to perform a search and then choose which results to use for the report.

Use filters for the following types of data:

- Owners
- Users
- Vendors
- Projects

You can search by project name or project code.

1. Type keywords to search and, optionally, select one of the following search options:
 - Starts with any of these keywords (default)
 - 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 **PR0** or **1001**. Then, select **Contains any of these keywords**.

2. Click **Search**.

The system returns data that matches the search criteria.

3. Use **Insert**, **Remove**, **Select all**, and **Deselect all** to create a list of items for your report. Move the items that you want to appear in your report into the **Choices** list box, as shown in the following example:

The screenshot shows a web interface for searching and selecting projects. At the top, it says "Projects (Optional)". Below that is a "Keywords:" section with the instruction "Type one or more keywords separated by spaces." There is a text input field containing "market" and a "Search" button. Below the search bar is a "Results:" section containing a list of project names and codes: "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)". To the right of this list are two buttons: "Insert" and "Remove". Below the "Results:" list are links for "Select all" and "Deselect all". To the right of the "Results:" list is a "Choices:" section containing a list of project names and codes: "001 Tradeshow Demo (TRS1016)" and "Brand Marketing (CMP1015)". Below the "Choices:" list 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 filters

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 for both options to be selected, which means the system does not filter on dates.

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

The date prompts use active dates. All projects, plans, and programs that are active any time within the specified date range meet the report criteria.

For example, if you specify a date range from January 1, 2015 to March 15, 2015, the following projects meet the criteria:

- Projects starting on or after January 1, 2015, no matter when they end.
- Projects ending on or before March 15, 2015, no matter when they began.

The following projects do not meet the criteria:

- Projects ending before January 1, 2015
- Projects starting after March 15, 2015

Status and type filters

Status and type filters limit reports to include only tasks with the selected status or type.

The filter options are based on the template that was used to create the project. For these filters, select as many options as you want.

Note: Making no selection is equivalent to selecting all options.

Multi-object reports

When the IBM Marketing Operations reports package is installed, you can generate reports from the Analytics Home page.

The following table describes the default reports.

Table 47. 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 47. 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 use 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.

Generating 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.

To generate a Marketing Activity report, complete the following steps.

1. Select **Analytics > Operational Analytics**.
2. In the list of reports, click **Marketing Activity Report**.
A screen appears, which allows 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.

Generating 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 date and status filter options.

To generate an Overdue Milestone report, complete the following steps.

1. Select **Analytics > Operational Analytics**.
2. In the list of reports, click **Overdue Milestone Report**.
A screen appears, which allows you to set filter criteria.
3. Choose start and end dates for the report.
4. Optional: Set filters for Task and Project status.
5. Click **Finish** to create the report.

The report displays a list of milestones, which are grouped by the milestone owner and sorted by project code. The report includes the following columns: Milestone Owner, Project Code, Milestone, Task Number, Status, Task Name, End Date, Forecast/Actual End, Days Late, and Notes.

Generating the Program Tasks and Milestones report

The Program Tasks and Milestones report shows all milestones for projects that are part of the program that is 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.

To generate the Program Tasks and Milestones report, complete the following steps.

1. Select **Analytics > Operational Analytics**.
2. In the list of reports, click **Program Tasks and Milestones**.
A screen appears, which allows you to set filter criteria.
3. Select a program in the **Program** drop-down menu.
4. Optional: 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, which are grouped by project and sorted by date. The report includes 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.

Generating 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.

Note: 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, which allows 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. Optional: On the second filter page, specify any of the following filters:
 - Project owner
 - Project date range
 - Project status
 - Project type: determined based on the template that was 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 is a cross tab of project performance metrics including leads passed, revenue, and ROI (Return on Investment), aggregated over initiative and project type for business units. The sample report 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 that was 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>			
	<i>Credit Card</i>	<i>Insurance</i>	<i>Investment Services</i>	<i>Business Unit Total</i>
<i># Leads Passed (Actual)</i>				
<i>\$ Revenue (Actual)</i>				
<i>ROI (Actual)</i>				
Report Total		520	263 \$1,718.00 76.39%	783 \$1,718.00 -72.26%
Initiative: (No Value)		520		520
Project Type:				
Project Type: Tradeshow		520		520
Project Type: Marketing Collateral Project				
Initiative: Product Launch			263 \$1,718.00 76.39%	263 \$1,718.00 76.39%
Project Type: Database Marketing Campaign			263 \$1,718.00	263 \$1,718.00

Generating the Project Performance Summary report

The standard Project Performance Summary report lists projects alphabetically, with the status, date, and budget information. The custom version lists projects that are grouped by initiative, with budget, cost, revenue, response rate, and lead generation performance data.

Note: Both versions of this report 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 by 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, which allows you to set filter criteria.

3. On the first filter screen, 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. Otherwise, skip to step 5.

4. Optional: On the second filter page, specify any of the following filters:

- Project owner
- Project date range
- Project status
- Project type: determined based on the template that was 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 that are sorted by project name. The custom version is grouped by Initiative. The reports contain the following columns:

Table 48. 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 various budgeting information. These fields are supplied from the budget tab for each project.
Total Revenue	Displays revenue metrics, if defined, for the project.

Table 48. Columns in the Project Performance Summary report (continued)

Column	Description
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, which is 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.

Generating the Resource Task Load report

To generate the Resource Task Load report, complete the following steps.

1. Select **Analytics > Operational Analytics**.
2. In the list of reports, click **Resource Task Load**.
The **Filter Resource Workload** screen appears.
3. Specify any of the following filters:
 - User
 - Projects
 - Project date range
 - Project status
 - Project type: determined based on the template that was used to create the project

All sections on the filter 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 that meet the filter criteria, which are grouped by user. The report includes the following columns from the project Workflow tab:

Table 49. 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.

Table 49. Columns on the Resource Task Load report (continued)

Column	Description
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 the status is In Progress or Completed, and Forecast Start Date is later than Target Start Date. • Overdue: If the 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>

Generating 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.

Note: This report requires the Financial Management Module.

To generate the Vendor Spend Summary report, complete the following steps.

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 that are made available when the IBM Marketing Operations reports package is installed.

Table 50. Default reports: Analysis tab

Report	Description
Revision History	A report that lists the revisions that were 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. Note: 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. Note: This report requires the Financial Management Module.
Detailed Expense Breakout	An example Cognos report for projects that displays a breakout of the project expenses. Note: This report requires the Financial Management Module.
Work Assigned	A report for teams that displays work assignments by team and by team member.

Viewing 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 select **Revision History > Report Type** to display the revision history if another report is displayed.

Note the following options:

- For projects, select **Approval Responses > Report Type** to display the revision history for any approvals that are 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 message 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.

Generating 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 that are scheduled to begin in the future.

To generate the Approval and Compliance Listing report, complete the following steps.

1. Select **Operations > Projects**.
2. From the list of projects, select the project to generate the report for.
3. Navigate to the **Analysis** tab of the project.
4. Select **Report Type > Approval and Compliance Listing**.

The report displays on screen.

This report contains the following information:

Table 51. 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 were received out of the total number expected.
Items Being Approved	Displays a list of the items to be 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 that are linked to the approval.
Status	Displays the status of the approval: <ul style="list-style-type: none">• In Progress: Approval process is active.• On Hold: Approval process is temporarily halted.• Completed: Approval process is completed.• Not Started: Approval process has not been submitted for review.

Generating 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.

Note: This report requires the Financial Management Module.

To generate the Budget Summary by Quarter report, complete the following steps.

1. From the **Operations** menu, select one of the following report options:
 - **Projects**
 - **Programs**

- **Plans**
2. Click the **Analysis** tab.
 3. Select **Report Type > 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** menu.

Data is organized for the selected fiscal year, as follows:

Table 52. 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, such as 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>
Details table	<p>For programs and plans, this table shows budget information that is rolled up from subordinate objects.</p> <ul style="list-style-type: none"> • Rows: For a program report, each 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.

Generating the Detailed Expense Breakout report

The Detailed Expense Breakout report displays the expenses for the selected fiscal quarter.

Note: This report requires the Financial Management Module.

To generate the Detailed Expense Breakout report

1. Select **Operations > Projects**.
2. From the list of projects, select the project to report on.
3. Click the **Analysis** tab of the project.
4. Select **Report Type > 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** menu.

Data is organized for the selected quarter, as follows:

Table 53. 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.

Table 53. Data on the Detailed Expense Breakout report (continued)

Section	Description
Vendors	Displays actual money that is spent per vendor. There is one row per vendor, and the first row presents summary data.

Generating the Work Assigned to Team or Team Member reports

The Work Assigned to Team or Team Member reports display the approvals, projects, project requests, and tasks that are associated with a team as a whole or with a specific team member.

To generate the Work Assigned to Team or Team Member reports, complete the following steps.

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 54. 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 configured the drill-back URL).
Project Name	Displays the project name for projects; clicking the link opens the summary page of the project (if your Report Administrator 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

To manage your dashboards and add portlets to them, click **Dashboard > Create Dashboard**.

You can use dashboards portlets to 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
- Custom portlets allow you to make configurations to show any standard or saved searches

Marketing Operations list portlets

If the Marketing Operations reports package is not installed, you still have access to the Marketing Operations list portlets that are available on your dashboard.

Your system administrator selects the portlets that members of your organization can add to the dashboard. To manage your dashboards and add portlets to them, select **Dashboard > Create Dashboard**.

Table 55. Standard Marketing Operations list portlets


Report	Description
Approvals Awaiting Action	List of approvals that wait for your action.
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. It does not work elsewhere in Marketing Operations. Note: Project health calculations can be made only at 5-minute intervals. • 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. • You can view the summary information for a project on the Summary tab. 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.

Table 55. Standard Marketing Operations list portlets (continued)

Report	Description
Projects Over Budget	Lists all projects that are over budget for the calendar year. Note: This report requires the Financial Management module.

Quick link portlets

Quick links are pre-defined links to IBM Marketing Software products. Some quick links enable users to perform basic actions in the IBM Marketing Software 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.

Table 56. List of quick link portlets

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 Operations IBM Cognos report portlets

The following table describes the Marketing Operations dashboard portlets that are available after the Marketing Operations reports package is installed.

Table 57. Standard Marketing Operations IBM Cognos report portlets

Report	Description
Budget by Project Type	An example IBM Cognos report shows 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 shows 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 shows 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 shows data for active and completed approvals for all In Progress projects in the system.
Manager Task Summary	An example IBM Cognos report shows data for active and completed tasks for all In Progress projects.

Table 57. Standard Marketing Operations IBM Cognos report portlets (continued)

Report	Description
Marketing Financial Position	An example IBM Cognos report shows 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 shows data about all active and completed tasks for the user who is viewing the report in all In Progress projects.
My Approval Summary	An example IBM Cognos report shows data about active and completed approvals for the user who is viewing the report.
Projects by Project Type	An example IBM Cognos report shows 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 shows 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 shows 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.
Spend by Project Type	An example IBM Cognos report shows a 3-D pie chart of the actual amount that is spent per project type in the current calendar year. This report requires the Financial Management module.

Custom portlet to show standard or saved search

To add a custom portlet to one of your dashboard, refer to the “IBM Marketing Platform Administrator's Guide” > Chapter 5. Dashboard management > Custom portlets Before you begin section - for creating the custom portlet with a saved search. Note: The URLs must first be registered.

Get the URL from the list you want to show and append &hideToolbar=true to it. Example: `http://myServer:7001/plan/uapcalendarservlet?cat=commonsearch&func=openSavedSearch&folderid=1&searchid=1&keepSearchDialogOpen=no&refetch=yes&searchResultFlag=no&focusSearchDialogTextField=yes&recreateListHandler=yes&keepCurrentView=no&data=project&launch_context=list&hideToolbar=true`

To avoid any authentication issue, the dashboard must include at least one Marketing Operations list portlet.

Chapter 18. Searches

You can perform simple and advanced searches in IBM Marketing Operations.

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.

Simple searches

You can use the IBM Marketing Software simple search function to search for most objects, including plans, programs, projects, assets, approvals, tasks, and invoices. You can perform these searches by using the **Search** field in the menu bar at the top of the 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

You can use the IBM Marketing Operations advanced search function to specify more complex searches. These searches can be 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 functions.

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, your system administrator did not give you access to the Workflow tab of a project template. Even if you are a member of the project, tasks from the project that is created from that template do not appear in the results of an All Tasks search. However, if one or more tasks from that project are assigned to you, then those projects display regardless of your access rights.

Grid searches

With advanced searches, grid attributes appear in the list of available attributes to add to a search. This search looks for all project templates that are enabled, whether any projects or marketing objects exist that were created from that template.

For example, assume that your system contains the following items:

- A project template named "Trade show", which is enabled.
- A Vendors tab is available for Trade show templates.
- The Vendors tab contains a grid. 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 by choosing a disabled template or **All Disabled** from the advanced search screen.

Object attribute searches

You can search for attributes that are contained in marketing objects that are linked from other marketing objects or from projects.


For example, suppose that you have projects that link to marketing objects that contain an attribute for which you want to search. The projects are of type "Marketing Collateral", which link to marketing objects. These marketing objects are of type "Creatives", which contain an attribute **Cost**, which is the cost of the creative.

From the project page, you can perform an advanced search that returns projects that are based on the criteria you specify about the **Cost** attribute.

Searching a digital asset library

Use the advanced search for assets to search for information in specific fields that the owner provided when they created or modified the assets.

To perform an advanced search of a digital asset library, complete the following steps.


1. Select **Operations > Assets**.
2. Select a digital asset library to search.
3. Click the **Search/Filter** icon ().
The Assets Search screen appears.
4. Complete the fields, depending on what you want to search for.
5. Click **Search**.

The items that meet the search criteria are displayed on the Assets list page.

Searching for objects other than assets

Use the advanced search to search for objects that are not assets.

To perform an advanced search (except for assets), complete the following steps.

1. Open the list page of the object type for which you want to search. For example, open the list page for a project or task.
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 that is 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 your criteria.
9. Optional: 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 complete the search based on your criteria.

Regrouping and reordering search criteria

As you construct search criteria, you can rearrange the grouping and order of any search condition.

To regroup and reorder search criteria, complete the following steps.

1. For the condition you want to move, position the cursor over the number box for the condition.
The cursor changes to a double vertical arrow. 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. The red guide line shows where the condition will be inserted.
3. When 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.

The Not In operator

The operator **Not In** returns all instances of objects that do not have the value of the attribute that is specified in the search or do not include the attribute.

Templates and attributes

IBM Marketing Operations objects (plans, programs, and projects) are created from templates.

Templates have definitions of attributes, such as **brochure_type**. Project instances that are created from the same template can have different values for their attributes. For example, TS001 might have **Tri-fold** defined as its brochure type, and TS002 might have **Bi-fold** defined as its brochure type.

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

For example, if you search for "all fruits that do not have black colored seeds", your search returns fruits that do not have black colored seeds and fruits that are seedless. (Seedless fruits do not have black colored seeds.)

Consider the following example:

- Template1 has the custom tab **Business** that contains the attribute **BusinessUnit**.
- Template2 does not have the **Business** custom tab, so 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.

If you create a search with the following criteria, the search returns Project2, Project3, and Project4 because none of these projects has **BusinessUnit = Insurance**.

[All Templates] -> [BusinessUnit] -> [Not In] -> [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 58. Advanced search options for digital assets

Field	Description
Asset Name	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.

Table 58. Advanced search options for digital assets (continued)

Field	Description
AND OR	Choose a Boolean operator: <ul style="list-style-type: none"> • AND: Returns items that contain all of the words in the Asset Name field. • OR: Returns items that contain any of the words in the Asset Name field.
Asset Code	Search in the Asset Code field of all existing assets. IBM Marketing Operations searches for all codes that contain the string that you enter.
Description	Search for text in the Description field of all the existing assets. IBM Marketing Operations searches all description fields for the characters that you enter.
Status	Select any or all of the statuses to search: Draft, Finalized, or Locked.
Expires Before	Specify a date. IBM Marketing Operations searches for all assets with expiration dates on or before the date that you specify.
Folder Name	Enter part or all of a folder name to search. IBM Marketing Operations searches for all folder names that contain the text string that you enter and searches for assets in that folder.
Keywords	Search in the Keywords field of all assets. IBM Marketing Operations searches for any of the keywords that contain the text string that you enter.
Owners	Select one or more owners to search for assets that belong to the owner.
Version Name	Search in the Version Name field of all assets. IBM Marketing Operations searches for all versions that contain the text string that you enter.
Usage Guidelines	Search in the Usage Guidelines field of all assets. IBM Marketing Operations searches for all usage guidelines that contain the text string that 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 fields.

Table 59. Advanced Search options for other objects

Control	Description
Search for	Enter text to indicate the objects for which you are searching.
Select items	Specify whether the search needs to match all or any of the search criteria. The default is all.

Table 59. Advanced Search options for other objects (continued)

Control	Description
Condition	<p>Construct a search condition by specifying the following options:</p> <ul style="list-style-type: none"> • Select the template on which to base the condition. • Select the attribute for which you want to search. • Select the search operator. • Enter the value for the criteria. <p>For example, search for projects with 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. • Select Contains. • Type Marketing.
Grouping	<p>Construct a grouping for the search results by specifying the following options:</p> <ul style="list-style-type: none"> • Select all or any for the grouping criteria. • Supply the remainder of the grouping criteria as described for constructing the Condition.
Insert a new condition	Insert a new line for entering a condition.
Insert a new grouping	Insert a new line for grouping the search criteria.
Remove selected	Remove any selected conditions or groupings.
Save as	Save your criteria as a named search. IBM Marketing Operations administrators can publish a search by selecting the Publish check box.
Apply	Complete the search based on the criteria that you specified.
Reset	Reset the dialog box to clearing the criteria that you specified.
Close	Close the dialog box without completing the search.

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.

How to access saved searches

After you save a search, you can access the search and rerun it with the same criteria. You can access saved searches in two ways:

- From the **Action** menu on the object list page
- On the list page, 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 you view all projects and requests. If your system contains any published saved searches, they are listed with your unpublished saved searches.

How to set 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. If the sort column in the original search was optional, in the second saved search the sort column reverts to the default. 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 doing the following actions:

1. Changing the sort column and sort order of the list page
2. Accessing the saved search
3. Clicking **Save** to update the search

This option applies only to unpublished searches. To change the sort column and sort order for a published search, an IBM administrator must unpublish the search, change the sort, and republish the search.

Viewing a saved search

You can view all published searches and any unpublished searches that you saved.

To view a saved search, complete the following steps.

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.

Deleting a saved search

You can delete only your own saved searches. You cannot select any other searches.

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 select the search or searches that you want to delete.
3. Click **Delete Selected** to remove your selected searches.

Chapter 19. Alerts and the message board

You can use alerts and the message board both to communicate information to other users of IBM Marketing Operations. Alerts and the message board are available for plans, programs, projects, requests, assets, accounts, approvals, invoices, tasks, teams, and marketing objects.

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.

You can use the message board to communicate information to the other members of the team or to an object owner.

The Alerts page

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 might 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 60. Columns on the Alerts page

Column	Description
Page heading	The number of unread alerts, in parentheses, and the total number of alerts
Check box	Select alerts for a specific action, for example, to mark a group of alerts for deletion. Select the box in the first line, next to the Message Text label, to select all the alerts.
Message text	Text of the alert
Date/Time	The time of the event that triggered the alert

You can perform the following actions from the Alerts page:

Table 61. Controls on the Alerts page

Link/Button	Description
	Select the 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.

Alerts on outside email addresses

You can receive alerts to an email address that is outside the domain of your organization.

If your email address is outside the domain of the organization that has IBM Marketing Operations installed, you need to modify your SMTP server to receive alerts. Add the IP address of the Marketing Operations server to the relay allowed IP address list.

Comments for alerts

Users can add comments to some alerts before the system sends the alerts.

For many events, the system sends alerts that are based on actions that users perform.

For example, when a project owner starts a project, the system sends alerts to project members. Before the system sends the alert, the project owner can add comments to the alert. The system provides a dialog box that contains 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 62. 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.
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 canceled. • 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 canceled.
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 canceled.
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 canceled
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.

Subscribing to alerts for an object

Users who are not administrators can override default settings within a plan, program, project, or project request. By overriding the default, you can control the alerts that each object owner and participant receives.

If there are permissions that are configured for any of the tabs of a project or request, the system filters the alerts. For example, alerts about attachments are not sent to users who do not have access to a project Attachments tab.

1. Open the object for which you want to change alert subscriptions.
2. Click the **Communicate** icon () and select **Subscribe to Alerts**.
3. From the list of alerts, select 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:

Option	Description
Check mark	The user receives the alert or alarm.
Blank	The user does not receive the alert or alarm.
n/a	You did not specify team members for this access level (for example, Program Participant) when you created the object. After you add team members 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 can affect several tasks, members, and dates. You can determine whether users receive detailed or brief alerts about the workflow changes.

Both brief and detailed alerts can be sent through email and within Marketing Operations:

- Brief mode: The notification informs users that changes were made to the workflow. In certain cases, the field that was 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.

Note the following restrictions:

- If a project is set up to deliver detailed alerts to owners and participants, any changes to workflow tasks lead to a detailed alert sent to project owners and affected task members. Brief alerts that are 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 sent to project owners only. Affected task members receive brief alerts.

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**, in the alert subscription window for each project.

Group events that contribute to detailed alerts

Edits that are made to the workflow and a few other actions can lead to task alerts being sent, if a project is set for detailed alerts.

The following table describes the actions that result in alerts:

Table 63. 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.
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 to indicate 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 to indicate changes to the task.

Examples of brief and detailed alerts

The following examples show both brief and detailed alerts.

The following example depicts an email that 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.

The following example depicts an email that 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.

Posting 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.

To post a message on the message board, complete the following steps.

1. Open the list page for the object type of the object for which you want 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 is displayed.

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 another 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.

Chapter 20. Reading 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.

To read a message on the message board, complete the following steps.

1. Open the list page for the object type of the object for which you want 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 displays all the messages on the message board for that object.
4. Click **Close** to exit the message board or click **Post a Comment** 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.

Note: Technical Support does not write or create API scripts. For assistance in implementing our API offerings, contact IBM Professional Services.

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 on 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 Web sites are provided for convenience only and do not in any manner serve as an endorsement of those Web sites. The materials at those Web sites are not part of the materials for this IBM product and use of those Web sites 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
B1WA LKG1
550 King Street
Littleton, MA 01460-1250
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