

IBM Marketing Operations  
Version 9 Release 0  
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## *System Schema*



**Note**

Before using this information and the product it supports, read the information in "Notices" on page 143.

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

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# Chapter 1. Introduction to the IBM Marketing Operations system schema

This guide is a reference to the table and column structure, content, and semantics of the database system for Marketing Operations.

## For more information

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

*Table 1. Guides in the Marketing Operations documentation set*

If you	See	Audience
<ul style="list-style-type: none"><li>• Plan and manage projects</li><li>• Establish workflow tasks, milestones, and personnel</li><li>• Track project expenses</li><li>• Get reviews and approvals for content</li><li>• Produce reports</li></ul>	<i>IBM Marketing Operations User's Guide</i>	<ul style="list-style-type: none"><li>• Project managers</li><li>• Creative designers</li><li>• Direct mail marketing managers</li></ul>
<ul style="list-style-type: none"><li>• Design templates, forms, attributes, and metrics</li><li>• Customize the user interface</li><li>• Define user access levels and security</li><li>• Implement optional features</li><li>• Configure and tune Marketing Operations</li></ul>	<i>IBM Marketing Operations Administrator's Guide</i>	<ul style="list-style-type: none"><li>• Project managers</li><li>• IT administrators</li><li>• Implementation consultants</li></ul>
<ul style="list-style-type: none"><li>• Create marketing campaigns</li><li>• Plan offers</li><li>• Implement integration between Marketing Operations and Campaign</li><li>• Implement integration between Marketing Operations and IBM Digital Recommendations</li></ul>	<i>IBM Marketing Operations and IBM Campaign Integration Guide</i>	<ul style="list-style-type: none"><li>• Project managers</li><li>• Marketing execution specialists</li><li>• Direct marketing managers</li></ul>
<ul style="list-style-type: none"><li>• Learn about new system features</li><li>• Research known issues and workarounds</li></ul>	<i>IBM Marketing Operations Release Notes</i>	Everyone who uses Marketing Operations
<ul style="list-style-type: none"><li>• Install Marketing Operations</li><li>• Configure Marketing Operations</li><li>• Upgrade to a new version of Marketing Operations</li></ul>	<i>IBM Marketing Operations Installation Guide</i>	<ul style="list-style-type: none"><li>• Software implementation consultants</li><li>• IT administrators</li><li>• Database administrators</li></ul>

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

If you	See	Audience
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 <b>Help &gt; Product Documentation</b> in Marketing Operations, and then download the <code>IBM &lt;version&gt;PublicAPI.zip</code> file	<ul style="list-style-type: none"> <li>IT administrators</li> <li>Database administrators</li> <li>Implementation consultants</li> </ul>
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"> <li>Get help and search or browse the <i>User's, Administrator's, or Installation</i> guides: Click <b>Help &gt; Help for this page</b></li> <li>Access all of the Marketing Operations guides: Click <b>Help &gt; Product Documentation</b></li> <li>Access guides for all IBM Enterprise Marketing Management (EMM) products: Click <b>Help &gt; All IBM EMM Suite Documentation</b></li> </ul>	Everyone who uses Marketing Operations

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## Chapter 2. Account tables overview

The following tables contain information about financial management accounts in IBM Marketing Operations.

### **uap\_accounts**

This table holds the main accounts information.

*Table 2. Columns in the uap\_accounts table*

Name	Datatype	Is PK	Null Option	Is FK	Description
account_id	integer	Yes	NOT NULL	No	Unique ID generated by the system for each account created.
account_code	string (100)	No	NOT NULL	No	Account code/integer.
account_desc	string (1024)	No	NULL	No	Account description.
src_account_id	integer	No	NULL	No	ID of the parent account.
created_date	date	No	NULL	No	Time stamp the account was created. System generated.
created_by	integer	No	NULL	No	User ID of the user who created this account. System generated. Foreign key to uap_users.user_id.
last_mod_date	date	No	NULL	No	Timestamp when the account was last modified. System generated.
modified_by	integer	No	NULL	No	User ID of the user who last modified this account. System generated. Foreign key to uap_users.user_id.
sec_policy_id	integer	No	NULL	No	ID of the security policy for this account. Foreign key to uap_sec_policy.sec_policy_id.
flag_enabled	string (1)	No	NULL	No	
account_name	string (255)	No	NULL	No	

### **uap\_account\_hist**

This table holds data that tracks account information history.

*Table 3. Columns in the uap\_account\_history table*

Name	Datatype	Is PK	Null Option	Is FK	Description
account_id	integer	Yes	NOT NULL	Yes	Unique ID generated by the system for each account created.
seq_no	integer	Yes	NOT NULL	No	
Descriptions	string (1024)	No	NULL	No	
user_id	integer	No	NULL	No	

*Table 3. Columns in the uap\_account\_history table (continued)*

Name	Datatype	Is PK	Null Option	Is FK	Description
last_mod_date	date	No	NULL	No	

## **uap\_account\_users**

*Table 4. Columns in the uap\_account\_users table*

Name	Datatype	Is PK	Null Option	Is FK	Description
account_id	integer	Yes	NOT NULL	Yes	Unique ID generated by the system for each account created.
user_id	integer	Yes	NOT NULL	No	
mem_type_id	integer	Yes	NOT NULL	No	

## **uap\_act\_budget**

*Table 5. Columns in the uap\_act\_budget table*

Name	Datatype	Is PK	Null Option	Is FK	Description
account_id	integer	Yes	NOT NULL	Yes	Unique ID generated by the system for each account created.
budget_id	integer	Yes	NOT NULL	Yes	Unique ID generated by the system for each budget created.

## **uap\_act\_msgboard**

*Table 6. Columns in the uap\_act\_msgboard table*

Name	Datatype	Is PK	Null Option	Is FK	Description
account_id	integer	Yes	NOT NULL	Yes	Unique ID generated by the system for each account created.
msg_id	integer	Yes	NOT NULL	No	
post_datetime	date	No	NULL	No	
user_id	integer	No	NULL	No	
msg_text	string (1024)	No	NULL	No	
recipients	string (512)	No	NULL	No	List of recipients if the message is emailed.

## **uap\_act\_notify**

*Table 7. Columns in the uap\_act\_notify table*

Name	Datatype	Is PK	Null Option	Is FK	Description
event_type	integer	Yes	NOT NULL	No	

*Table 7. Columns in the uap\_act\_notify table (continued)*

Name	Datatype	Is PK	Null Option	Is FK	Description
account_id	integer	Yes	NOT NULL	Yes	Unique ID generated by the system for each account created.
user_id	integer	Yes	NOT NULL	No	
delivery_mask	integer	No	NULl	No	



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## Chapter 3. Approval tables overview

The following tables contain information about approvals, including history, notifications, responses, and approvers and their roles.

### uap\_approvals

The uap\_approvals table is the main table for storing information about the approval processes that are created by users within IBM Marketing Operations.

*Table 8. Columns in the uap\_approvals table*

Name	Datatype	Is PK	Null Option	Is FK	Description
approval_id	integer	Yes	NOT NULL	No	Unique ID generated by the system for each approval item that is created by a user.
name	string (256)	No	NULL	No	Name of the approval process. Size of the column changed to 256 for version 7.4.0.
description	string (1024)	No	NULL	No	Description of the approval.
created_by	integer	No	NULL	No	User ID of the user who created this approval.
create_date	date	No	NULL	No	Date that the approval was created.
submit_date	date	No	NULL	No	Approval submitted date.
approval_date	date	No	NULL	No	Approved date.
completed_date	date	No	NULL	No	Approval completed date.
state_code	string (20)	No	NULL	No	State of the approval. Values: NOT_STARTED, IN_PROGRESS, ON_HOLD, COMPLETED, CANCELLED.
src_object_id	integer	No	NULL	No	Project ID of the project that the approval was created in.
src_wf_step	integer	No	NULL	No	Workflow integer (ID) of the approval that the approval was linked to.
src_object	string (20)	No	NULL	No	Source object type. Value: PROJECT.
sec_policy_id	integer	No	NULL	No	Security policy ID of the security policy for this approval.
status_code	string (20)	No	NULL	No	Status of the approval. Values: PENDING, ACTIVE, FINISHED, SKIPPED.
last_mod_date	date	No	NULL	No	Last modified date.
method	integer	No	NULL	No	Method of the approval. <ul style="list-style-type: none"><li>• 0 = Simultaneous, all approvers approve at the same time</li><li>• 1 = Sequential, approvers approve in sequence</li></ul>
resubmit_count	integer	No	NULL	No	Number of times this approval has been resubmitted.

*Table 8. Columns in the uap\_approvals table (continued)*

Name	Datatype	Is PK	Null Option	Is FK	Description
disposition_all_docs	string (2)	No	NULL	No	<p>Y indicates that the approval owner requires all documents to be dispositioned by the reviewer before the review can be marked complete. N if dispositioning a single document is permitted.</p> <p>This column was added in version 7.5.</p>
reapproval_rule	integer	No	NULL	No	<p>101 - If approval rejected and then resubmitted, approval is processed by all approvers.</p> <p>102 - If approval rejected and then resubmitted, start process with the person who rejected</p> <p>103 - If approval is edited / resubmitted, approval owner selects the approvers who must reapprove. For stand-alone approvals, value is 103 by default.</p> <p><b>Note:</b> Although 103 is stored for stand-alone approvals, in the UI for resubmit all approvers display and the owner can select or clear the approvers. This column is set to 103 for all older (pre- 7.3) approvals.</p> <p>This column was added in version 7.3.</p>
enable_commts_attachmnt	string (2)	No	NULL	No	<p>Y / N: Indicates whether the approvers can add comment attachments when they respond to the approval. This column is set to Y for stand-alone approvals by default. This column is set to N for older (pre- 7.5) approvals.</p> <p>This column was added in version 7.5.</p>
enable_markup	string (2)	No	NULL	No	<p>For workflow approvals, this column stores the value of the enable markup flag that is defined by the project workflow settings for approvals.</p> <p>For stand-alone approvals, this column stores Y or N based on the Marketing Operations-wide enable markup setting.</p> <p>For older (pre- 7.5) approvals, this column contains the Plan-wide enable markup setting made by planUpgrade.jsp.</p> <p>This column was added in version 7.5.</p>

*Table 8. Columns in the uap\_approvals table (continued)*

Name	Datatype	Is PK	Null Option	Is FK	Description
prj_owner_add_rem_approvers	string (2)	No	NULL	No	<p>Y / N: For workflow approvals, indicates whether project owner can add / remove approvers in the approval. Set from approval setup in workflow definition. For older (pre- 7.5) workflow approvals, this flag is set to Y as old workflow approvals do not have any admin-defined review steps.</p> <p>This column was added in version 7.5.</p>
approval_start_date	date	No	NULL	No	This column was added in version 7.5.
approval_task_viewed	string (2)	No	NULL	No	
auto_complete	string (2)	No	NULL	No	Y / N: Flag for auto-completion of approval.
approval_type	integer	No	NULL	No	<p>This column identifies budget and non-budget approvals. The following are valid values.</p> <ul style="list-style-type: none"> <li>• 1 = non-budget approvals</li> <li>• 2 = budget approvals</li> </ul> <p>This column was added in version 8.5.0.</p>

## **uap\_appr\_commt\_attachment**

New master table for comment attachment files added in version 7.5.

*Table 9. Columns in the uap\_appr\_commt\_attachment table*

Name	Datatype	Is PK	Null Option	Is FK	Description
approval_id	integer	No	NOT NULL	Yes	Approval in response to whom this comment attachment was added. PK from uap_approvals.approval_id.
seq_no	integer	No	NULL	No	Sequence number of the comment.
appr_item_resp_id	integer	No	NULL	Yes	Approval item response id. PK from uap_appr_item_response.appr_item_resp_id.
approval_item_seq	integer	No	NULL	Yes	Approval item in response to whom this comment attachment was added. PK from uap_appr_items.
comment_file_id	integer	Yes	NOT NULL	No	Comments file ID.
user_id	integer	No	NOT NULL	Yes	Approver user ID who uploaded this comments file. PK from uap_user.user_id.
create_date	date	No	NOT NULL	No	Date of creation.
orig_file_name	String(1024)	No	NOT NULL	No	Original file name.
orig_file_size	integer	No	NULL	No	Attachment file size.
orig_file_mime	varchar (255)	No	NULL	No	Attachment file mime type. Size increased in version 8.6.0.

---

## **uap\_appr\_deny\_reasons**

Stores items added to the Approval Deny Reasons defined list. For installations that require a reason, users select from this list when they deny an approval. Added in version 9.0.

*Table 10. Columns in the uap\_appr\_deny\_reasons table*

Name	Datatype	Is PK	Null Option	Is FK	Description
deny_reason_id	integer	Yes	NOT NULL	No	Unique identifier that is generated by the system for each item in the list.
name	string (255)	No	NULL	No	Label for the list item.
display	string (1024)	No	NULL	No	Specifies how list items display: alphabetically with Name - Code or numerically with Code - Name.
code	string (50)	No	NULL	No	Identifying code for the list item.
display_no	integer	No	NULL	No	System-supplied number that is used to order the items in the list for display.
flag_enabled	string (1)	No	NULL	No	Indicates whether the list item is enabled and therefore displays as an option in the user interface. 0 = Disabled, 1 = Enabled.

---

## **uap\_tt\_deny\_reasons**

For a project template, stores the specified subset of reasons that users can supply when they deny an approval. Added in version 9.0.

*Table 11. Columns in the uap\_tt\_deny\_reasons table*

Name	Datatype	Is PK	Null Option	Is FK	Description
deny_reason_id	integer	Yes	NOT NULL	Yes	Identifies a reason that is valid for denying an approval from uap_appr_deny_reasons.deny_reason_id.
template_id	integer	Yes	NOT NULL	Yes	Identifies a template from uap_tt_templates.template_id.

---

## **uap\_stdappr\_deny\_reasons**

Stores the specified subset of reasons that users can supply when they deny a stand-alone approval. Added in version 9.0.

*Table 12. Columns in the uap\_stdappr\_deny\_reasons table*

Name	Datatype	Is PK	Null Option	Is FK	Description
deny_reason_id	integer	Yes	NOT NULL	Yes	Identifies a reason that is valid for denying an approval from uap_appr_deny_reasons.deny_reason_id.

## uap\_appr\_item\_hist

Table 13. Columns in the uap\_appr\_item\_hist table

Name	Datatype	Is PK	Null Option	Is FK	Comment
appr_item_seq	integer	Yes	NOT NULL	Yes	Sequence of an approval item. Foreign key to uap_appr_items.
approval_id	integer	Yes	NOT NULL	Yes	ID of an approval item. Foreign key to uap_approvals.
curr_item_seq	integer	Yes	NOT NULL	No	
Descriptions	string (1024)	No	NULL	No	
user_id	integer	No	NULL	Yes	Foreign key to uap_user.
role_order	integer	No	NULL	No	The order of the role in the approval (1 = first, 2 = second, and so on).

## uap\_appr\_item\_response

This table stores the current response status of each item in an approval from each approver. This table was added in version 7.5.

Table 14. Columns in the uap\_appr\_item\_response table

Name	Datatype	Is PK	Null Option	Is FK	Description
appr_item_resp_id	integer	Yes	NOT NULL	No	Approval item response.
approval_id	integer	No	NOT NULL	Yes	Parent approval. PK from uap_approval.
approval_item_seq	integer	No	NOT NULL	Yes	Approval item. PK from uap_appr_items.appr_item_seq.
user_id	integer	No	NOT NULL	Yes	Approver user ID. PK from uap_user.user_id.
status_code	string (20)	No	NULL	No	Response status for current approval item: null or blank / approve / approve with changes / deny.
resp_comments	string (1024)	No	NULL	No	Stores the comments or feedback that is provided by an approver in response to the approval item.
resp_date	Datetime	No	NULL	No	Response date.
deny_reason_id	integer	No	NULL	Yes	Identifies the deny reason that is selected when a user denies an approval. Foreign key to uap_appr_deny_reasons.deny_reason_id. Added in version 9.0.

---

## uap\_appr\_items

This table contains information for individual approval items in an approval process.

Table 15. Columns in the uap\_appr\_items table

Name	Datatype	Is PK	Null Option	Is FK	Description
approval_id	integer	Yes	NOT NULL	Yes	ID of an approval item. Foreign key to uap_approvals.
appr_item_seq	integer	Yes	NOT NULL	No	Sequence of the item (identifier).
create_date	date	No	NULL	No	Date that the item was created.
notes	string (1024)	No	NULL	No	Notes about the item.
item_status	string (20)	No	NULL	No	Status of the item under review (whether it is archived). Valid values are ARCHIVED or null.
user_id	integer	No	NULL	Yes	User who added the item to the approval process. Foreign key to uap_users.
orig_file_name	string (256)	No	NULL	No	Original file name of the uploaded file. Size changed to 256 by version 7.4.0.
markup_file_name	string (20)	No	NULL	No	Markup file name.
orig_file_size	string (10)	No	NULL	No	Size of the original file.
orig_file_mime	string (255)	No	NULL	No	MIME type of the original file. Size increased in version 8.6.0.
last_mod_date	date	No	NULL	No	Date the item was last modified.
object_id	integer	No	NULL	Yes	For marketing objects, the ID of the object. Value is -1 for other objects. Foreign key to uap_mktgobject.mktg_object_id. This column was added in version 7.3.0.
object_type_id	integer	No	NULL	Yes	For marketing objects, the ID of the marketing object type. Value is -1 for other objects. Foreign key into uap_comp_type.comp_type_id. This column was added in version 7.3.0.
enable_markup	string (2)	No	NULL	No	Stores whether current approval item can be marked up (1) or not (0). This column was added in version 7.5.0.
linked_item_id	integer	No	NULL	No	The ID of the line item to which the approval item belongs. This column was added in version 8.5.0.

---

## uap\_appr\_msgboard

Table 16. Columns in the uap\_appr\_msgboard table

Name	Datatype	Is PK	Null Option	Is FK	Description
approval_id	integer	Yes	NOT NULL	Yes	ID of an approval item. Foreign key to uap_approvals.
msg_id	integer	Yes	NOT NULL	No	Unique ID generated by the system for each message on the approval message board.

Table 16. Columns in the uap\_appr\_msgboard table (continued)

Name	Datatype	Is PK	Null Option	Is FK	Description
post_datetime	date	No	NOT NULL	No	Date the message was posted on the approval message board.
user_id	integer	No	NOT NULL	Yes	Unique ID of the user who posted the message. Foreign key to uap_user.
msg_text	string (1024)	No	NULL	No	Text of the message.
recipients	string (512)	No	NULL	No	List of recipients if the message is emailed.

## uap\_appr\_notify

Table 17. Columns in the uap\_appr\_notify table

Name	Datatype	Is PK	Null Option	Is FK	Description
event_type	integer	Yes	NOT NULL	No	
user_id	integer	Yes	NOT NULL	No	
approval_id	integer	Yes	NOT NULL	Yes	ID of an approval item. Foreign key to uap_approvals.
delivery_mask	integer	No	NULL	No	

## uap\_approval\_hist

This table contains data that tracks the history of approval events and actions.

Table 18. Columns in the uap\_approval\_hist table

Name	Datatype	Is PK	Null Option	Is FK	Description
approval_id	integer	Yes	NOT NULL	Yes	Unique ID generated by the system for each approval item that is created by a user. Foreign key to uap_approvals.approval_id.
seq_no	integer	Yes	NOT NULL	No	Sequence (order) of the historical event.
cur_state	string (20)	No	NULL	No	Current state of the approval process after the user completed the action/event. Values: WAITING, APPROVED, APPR_WITH_CHANGES, DENIED
comments	string (1024)	No	NULL	No	Comments that the user made at the time of the action/event
prev_state	string (20)	No	NULL	No	Previous state of the approval process before the user initiated the action/event. Values: WAITING, APPROVED, APPR_WITH_CHANGES, DENIED
last_mod_date	date	No	NULL	No	Time that the modification to the approval occurred.
user_id	integer	No	NULL	No	User ID of the user who initiated the action/event to the approval. Foreign key to uap_users.user_id.

*Table 18. Columns in the uap\_approval\_hist table (continued)*

Name	Datatype	Is PK	Null Option	Is FK	Description
on_behalf_user_id	integer	No	NULL	No	This column was added in version 7.4.0.
appr_item_seq	integer	No	NULL	Yes	<p>appr_item_seq: From uap_appr_items. This column stores the approval item id. It is only updated when an approver responds to an individual item. Comment is stored as: "Approval Item approved / denied / approved w/ changes". If the row represents the approval item response, then cur_state and prev_state represents the state of the approval item and not of the overall approval.</p> <p>comment_file_id: Points to the comment attachments file for the item that is referred to by appr_item_seq. This column is populated only when an approver attaches a comments file in response to the approval item.</p> <p>PK from uap_appr_items.</p>
appr_item_resp_id	integer	No	NULL	Yes	Points to the item response row for the item that is referred to by appr_item_seq. FK from uap_appr_item_response. Here the row in the history table points to the original item response tables row.
round_no	integer	No	NULL	No	When approval is added and started the first time, the round number is 1 and the resubmit count is 0. Each time the approval is resubmitted, the round number increments and the next round of approval starts. The round_no = theresubmit count + 1. Here 1 is added to consider first round of approval.
detailed_history	String	No	NULL	No	This column is updated when there is any change in the reviewer steps. This column is introduced as Clob so that detailed history can be stored in later on.
deny_reason_id	integer	No	NULL	Yes	Identifies the deny reason that is selected when a user denies an approval. Foreign key to uap_appr_deny_reasons.deny_reason_id. Added in version 9.0.

## uap\_approver\_list

This table stores the lists of approvers (reviewers) of an approval process and information about their instructions and responsibilities.

*Table 19. Columns in the uap\_approver\_list table*

Name	Data type	Is PK	Null Option	Is FK	Description
approval_id	integer	Yes	NOT NULL	Yes	Unique ID generated by the system for each approval item that is created by a user. Foreign key to uap_approvals.approval_id.
approver_seq	integer	Yes	NOT NULL	No	Sequence of the approval (identifier).
user_id	integer	No	NULL	Yes	User ID of the user. Foreign key to uap_users.user_id.
appr_order	integer	No	NULL	No	Display order of users.
required	string (1)	No	NULL	No	Whether the approver is required. Values: 'Y' if the approver is required; 'N' or null if not.
instructions	string (1024)	No	NULL	No	Instructions to an approver.
status_code	string (20)	No	NULL	No	Identifies the overall approval status. For example, if approver completes the response by clicking <b>Post Complete Response</b> , that status is updated here.
resp_date	date	No	NULL	No	Date on which complete response is posted.
team_id	integer	No	NULL	No	Team ID: value of -1 indicates that the approver for this item is not a team. This column was added in version 7.4.0.
duration	String(20)	No	NOT NULL	No	Duration for each review step is stored in this column. For old approvals, upgrade is done by planUpgrade.jsp as follows: Find out the number of days (target due date - creation/start date). If the approval method is simultaneous, the duration equals the number of days. If the approval method is sequential, then the duration is (number of days / number of approvers). This column was added in version 7.5.
assign_type	integer	No	NULL	No	Stores the assignment type for the admin defined review step. Used only for workflow approval tasks. For old approvals, this column is blank (null). The possible values for admin defined steps are:  100 - Owner assigned  101 - User / Team  102 - Rule Driven  For stand-alone approvals and approver steps added by the owner on approval, the assignment type is 0.  This column was added in version 7.5.

*Table 19. Columns in the uap\_approver\_list table (continued)*

Name	Data type	Is PK	Null Option	Is FK	Description
rule_id	integer	No	NULL	Yes	This column was added in version 7.5. Points to the rule if assignment type is rule driven. Used only for workflow approval tasks. For old approvals, this column is blank (null). PK from uap_tt_wf_rule.rule_id.
role_id	integer	No	NULL	Yes	Stores the reviewer role, that is, the role that is specified in review step. Used only for workflow approval tasks. PK from uap_roles.role_id. Earlier roles were stored in uap_appr_usr_role and uap_appr_team_role tables. During 7.5 upgrade (planUpgrade.jsp), these values were copied into this new column. <b>Note:</b> uap_appr_usr_role continues to store owner roles. It does not store reviewer roles from 7.5 onwards. Only reviewer roles are migrated to role_id.
deny_reason_id	integer	No	NULL	Yes	Identifies the deny reason that is selected when a user denies an approval. Foreign key to uap_appr_deny_reasons.deny_reason_id. Added in version 9.0.

## **uap\_appr\_role**

*Table 20. Columns in the uap\_appr\_role table*

Name	Datatype	Is PK	Null Option	Is FK	Description
approval_id	integer	Yes	NOT NULL	Yes	ID of an approval item. Foreign key to uap_approvals.
role_id	integer	Yes	NOT NULL	No	Approval role ID.
role_type	integer	No	NULL	No	Role type.

## **uap\_appr\_team\_role**

This table contains details about roles for team approvals. This table was added in version 7.4.0.

*Table 21. Columns in the uap\_appr\_team\_role table*

Name	Datatype	Is PK	Null Option	Is FK	Description
approval_id	integer	Yes	NOT NULL	Yes	ID of an approval item. Foreign key to uap_approvals.
team_id	integer	Yes	NOT NULL	Yes	Team ID.
role_id	integer	Yes	NOT NULL	No	Approval role ID.
role_type	integer	Yes	NOT NULL	No	Role type.

---

## **uap\_appr\_teams**

This table was added in version 7.4.0 and contains details for team approvals.

*Table 22. Columns in the uap\_appr\_teams table*

Name	Datatype	Is PK	Null Option	Is FK	Description
approval_id	integer	Yes	NOT NULL	Yes	Approval ID.
team_id	integer	Yes	NOT NULL	Yes	Team ID.
mem_type_id	integer	Yes	NOT NULL	Yes	

---

## **uap\_appr\_users**

This table contains information about the users who are participating in an approval process.

*Table 23. Columns in the uap\_appr\_users table*

Name	Datatype	Is PK	Null Option	Is FK	Description
approval_id	integer	Yes	NOT NULL	Yes	Unique ID generated by the system for each approval item that is created by a user. Foreign key to uap_approvals.approval_id.
user_id	integer	Yes	NOT NULL	No	User ID of the user. Foreign key to uap_users.user_id.
mem_type_id	integer	Yes	NOT NULL	No	Member type ID of the user in this approval process. Foreign key to uap_member_type.mem_type_id.

---

## **uap\_appr\_usr\_role**

*Table 24. Columns in the uap\_appr\_usr\_role table*

Name	Datatype	Is PK	Null Option	Is FK	Description
approval_id	integer	Yes	NOT NULL	Yes	Unique ID generated by the system for each approval item that is created by a user.
role_id	integer	Yes	NOT NULL	No	Approver role ID.
user_id	integer	Yes	NOT NULL	No	Approver user ID.
role_type	integer	No	NULL	No	Role type.



---

## Chapter 4. Common attachment tables overview

The following tables contain information about common attachments.

---

### uap\_attach

*Table 25. Columns in the uap\_attach table*

Name	Datatype	Is PK	Null Option	Is FK	Description
attach_id	integer	Yes	NOT NULL	No	
attach_folder_id	integer	Yes	NOT NULL	Yes	
parent_obj_id	integer	No	NOT NULL	No	
attach_orig_file	string (255)	No	NULL	No	
attach_note	string (1024)	No	NULL	No	
attach_size	string (100)	No	NULL	No	
attach_date	date	No	NULL	No	
mime_type	string (255)	No	NULL	No	
flag_mcm_item	string (1)	No	NULL	No	
item_id	integer	No	NULL	No	
item_version_seq	integer	No	NULL	No	
user_id	integer	No	NULL	No	
parent_obj_type	string (50)	No	NULL	No	Size increased to 50 by version 7.4.0.
enable	string (1)	No	NULL	No	Defines the markup state of an attachment for the Markup Anywhere feature. Version 7.3 added this column.

---

### uap\_attach\_folder

*Table 26. Columns in the uap\_attach\_folder table*

Name	Datatype	Is PK	Null Option	Is FK	Description
attach_folder_id	integer	Yes	NOT NULL	No	
parent_object_id	integer	No	NOT NULL	No	
parent_obj_type	string (50)	No	NOT NULL	No	Size increased to 50 by version 7.4.0.
folder_name	string (20)	No	NOT NULL	No	
parent_folder_id	integer	No	NOT NULL	No	



---

## Chapter 5. Financial management tables overview

The following tables store information about financial management, including plan, program, and project budgets. This section also contains information about budget line items and budget granularity.

**Note:** For more information about financial management system tables in IBM Marketing Operations, see the *Accounts* and *Invoices* chapters.

---

### uap\_budget\_allocation

This table tracks allocations to various objects for different budget periods in different budget allocation versions. Version 8.2 added this table.

Table 27. Columns in the uap\_budget\_allocation table

Name	Datatype	Is PK	Null Option	Is FK	Description
budget_id	integer	Yes	NOT NULL	No	Budget ID of the object.
budget_alloc_version_id	integer	Yes	NOT NULL	Yes	Budget version to which this allocation belongs. FK reference to uap_budget_alloc_version, budget_alloc_version_id.
budget_period_id	integer	Yes	NOT NULL	Yes	The budget period for which this allocation is being made. FK reference to uap_budget_period, budget_period_id.
budget_amt	float	No	NULL	No	Signals if the budget is self-assigned or comes from parent object.
alloc_amt	float	No	NULL	No	Represents the allocation that is made by an object to its child. This value would always be 0 when budget_amt and line_item_amt are populated.
line_item_amt	float	No	NULL	No	Represents the amount that an object reserves for its own usage out of its budgeted amount.

### alloc\_amt values example

**Note:** The alloc\_amt values are populated for child values of the object, but not for the object itself. For example, a plan with budget\_id 101 and version\_id 121 has a child program with budget\_id 105. An allocation of 1000 is made to the plan and 500 to the child program in all of these quarters: 107, 108, 109, 110. The entries would be as follows.

budget_id	budget_alloc_version_id	budget_period_id	budget_amt	budget_amt	line_item_amt
101	121	107	1000	0	0
101	121	108	1000	0	0
101	121	109	1000	0	0
101	121	110	1000	0	0
105	121	107	0	500	0

<b>budget_id</b>	<b>budget_alloc_version_id</b>	<b>budget_period_id</b>	<b>budget_amt</b>	<b>budget_amt</b>	<b>line_item_amt</b>
105	121	108	0	500	0
105	121	109	0	500	0
105	121	110	0	500	0

---

## uap\_budget\_alloc\_version

This table was added in version 8.2.0.

*Table 28. Columns in the uap\_budget\_alloc\_version table*

<b>Name</b>	<b>Datatype</b>	<b>Is PK</b>	<b>Null Option</b>	<b>Is FK</b>	<b>Description</b>
budget_alloc_version_id	integer	Yes	NOT NULL	No	Primary key for a budget allocation version.
owner_object_id	integer	No	NOT NULL	No	The plan, program, project id that owns this allocation version.
owner_object_type	varchar(50)	No	NOT NULL	No	The object type to which this allocation version belongs: project, program, plan.
fiscal_year	integer	No	NOT NULL	No	The fiscal year for which this version was created.
version_label	varchar(50)	No	NOT NULL	No	The name of the version as provided by the user.
state_code	varchar(20)	No	NOT NULL	No	Status of the version. <ul style="list-style-type: none"> <li>• NON_FINALIZED</li> <li>• ACTIVE</li> <li>• FINALIZED</li> </ul>
approved	integer	No	NULL	No	Indicates whether this budget version is approved. Not used in 8.2.0; reserved for future usage.
created_date	datetime	No	NULL	No	Creation date of this version.
created_by	integer	No	NULL	No	ID of the user who created this version.
last_mod_date	datetime	No	NULL	No	Date of the last modification.
modified_by	integer	No	NULL	No	ID of the user who made the last modification.

---

## uap\_budget\_amt

*Table 29. Columns in the uap\_budget\_amt table*

<b>Name</b>	<b>Datatype</b>	<b>Is PK</b>	<b>Null Option</b>	<b>Is FK</b>	<b>Description</b>
week	integer	No	NOT NULL	No	If budget granularity is not set to week, the value is -1. If the granularity is week, the value is an integer from 0 to 52, denoting the exact week in the fiscal year.
month	integer	Yes	NOT NULL	Yes	
quarter_id	integer	Yes	NOT NULL	Yes	
year	integer	Yes	NOT NULL	Yes	

*Table 29. Columns in the uap\_budget\_amt table (continued)*

Name	Datatype	Is PK	Null Option	Is FK	Description
budget_id	integer	Yes	NOT NULL	Yes	Unique ID generated by the system for each budget created.
forecast_amt	floating pt.	No	NULL	No	
committed_amt	floating pt.	No	NULL	No	
actual_amt	floating pt.	No	NULL	No	
budget_amt	floating pt.	No	NULL	No	
alloc_amt	floating pt.	No	NULL	No	
line_item_amt	floating pt.	No	NULL	No	Used for line item allocations. This column was added in version 7.4.0.

## **uap\_budget\_period**

This table tracks of budget periods across financial year. This table was added in version 8.2.0.

*Table 30. Columns in the uap\_budget\_period table*

Name	Datatype	Is PK	Null Option	Is FK	Description
budget_period_id	integer	Yes	NOT NULL	No	Primary key for a budget period.
fiscal_year	integer	No	NOT NULL	No	The fiscal year.
quarter_id	integer	No	NOT NULL	No	The quarter of the fiscal year; if budget granularity is quarterly, valid values are 0, 1, 2, and 3. If the granularity is not quarterly, the value is -1.
month	integer	No	NOT NULL	No	The month of the fiscal year; if budget granularity is monthly, valid values are 0 through 11. If the granularity is not monthly, the value is -1.
week	integer	No	NOT NULL	No	The week of the fiscal year; if budget granularity is weekly, valid values are 0 through 52. If the granularity is not weekly, the value is -1.
period_granularity	integer	No	NOT NULL	No	A flag that denotes the period granularity. <ul style="list-style-type: none"> <li>• 0 = quarterly</li> <li>• 1 = monthly</li> <li>• 2 = weekly</li> </ul>

**Note:** quarter\_id, month, and week values denote the relative values within a fiscal year, so a month value of 0 does not necessarily mean January. A month value of 0 indicates the first month of the fiscal year. The quarter, month, and week representations in this table are relative and not the absolute calendar values.

---

## uap\_budgets

In general, the budget for an object is a collection of budget amounts for a specific time period. An account has budgets on a monthly basis, while plans, programs, and projects have quarterly budgets. This table contains all budgets across the system (for accounts, plans, programs, and projects).

*Table 31. Columns in the uap\_budgets table*

Name	Datatype	Is PK	Null Option	Is FK	Description
budget_id	integer	Yes	NOT NULL	No	Unique ID generated by the system for each budget created.
budget_period	string (20)	No	NULL	No	Internal description of the budget period.
created_date	date	No	NULL	No	Timestamp when the account was created. System generated.
created_by	integer	No	NULL	No	User ID of the user who created this account. System generated. Foreign key to uap_users.user_id.
last_mod_date	date	No	NULL	No	Timestamp when the account was last modified. System generated.
modified_by	integer	No	NULL	No	User ID of the user who last modified this account. System generated. Foreign key to uap_users.user_id.

---

## uap\_budget\_spend

This table tracks committed, forecasted, and actual spending. This table was added in version 8.2.0.

*Table 32. Columns in the uap\_budget\_spend table*

Name	Datatype	Is PK	Null Option	Is FK	Description
budget_id	integer	Yes	NOT NULL	No	The budget_id of the object for which the spending amount is being tracked.
budget_period_id	integer	Yes	NOT NULL	Yes	The budget_period to which this spending can be attributed. FK reference to uap_budget_period, budget_period_id.
forecast_amt	floating pt.	No	NULL	No	Predicted spending incurred going forward.
committed_amt	floating pt.	No	NULL	No	Represents the amounts that are committed to be spent.
actual_amt	floating pt.	No	NULL	No	Funds already spent.

---

## **uap\_costitem\_ext\_col**

This table stores information about text-only columns that template administrators add to the Budget tab line item tables for programs and projects. This table was added in version 8.0.

*Table 33. Columns in the uap\_costitem\_ext\_col table*

Name	Datatype	Is PK	Null Option	Is FK	Description
ext_col_id	integer	Yes	NOT NULL	No	Unique identifier that is generated by the system for this column.
name	string (150)	No	NOT NULL	No	Label of the column.
status	integer	No	NOT NULL	No	Flag for whether the column is enabled. The following values are valid: <ul style="list-style-type: none"><li>• 1 = Enabled</li><li>• 2 = Disabled</li></ul>

---

## **uap\_costitem\_ext\_col\_val**

This table stores the values that users enter in any additional text-only columns that template administrators add to the Budget tab line item tables for programs or projects. Values that are entered in the standard columns of line item tables are stored in either the uap\_proj\_cost\_item or uap\_prgm\_cost\_item table.

*Table 34. Columns in the uap\_costitem\_ext\_col\_val table*

Name	Datatype	Is PK	Null Option	Is FK	Description
object_type	string (10)	Yes	NOT NULL	No	Type of object that contains the additional column. The possible valid values are program and project.
object_id	integer	Yes	NOT NULL	No	Unique identifier for a program or project.
cost_item_id	integer	Yes	NOT NULL	Yes	Unique identifier for a row in the line items table. Foreign key to uap_proj_cost or uap_prgm_cost.
version_id	integer	Yes	NOT NULL	Yes	Version ID. Foreign key to uap_proj_cost or uap_prgm_cost.
ext_col_id	integer	Yes	NOT NULL	Yes	Unique identifier for the additional column. Foreign key to uap_costitem_ext_col.
value	string (150)	No	NOT NULL	No	Value that is entered by the user in the column.

---

## **uap\_parea\_budget**

*Table 35. Columns in the uap\_parea\_budget table*

Name	Datatype	Is PK	Null Option	Is FK	Description
budget_id	integer	Yes	NOT NULL	Yes	Unique ID generated by the system for each budget created.
plan_parea_id	integer	Yes	NOT NULL	No	
budget_total	floating pt.	No	NULL	No	

*Table 35. Columns in the uap\_parea\_budget table (continued)*

Name	Datatype	Is PK	Null Option	Is FK	Description
forecast_total	floating pt.	No	NULL	No	
actual_total	floating pt.	No	NULL	No	
committed_total	floating pt.	No	NULL	No	
finalized_date	date	No	NULL	No	

---

## uap\_plan\_budget

*Table 36. Columns in the uap\_plan\_budget table*

Name	Datatype	Is PK	Null Option	Is FK	Description
budget_id	integer	Yes	NOT NULL	Yes	Unique ID generated by the system for each budget created.
plan_id	integer	Yes	NOT NULL	No	
budget_total	floating pt.	No	NULL	No	
forecast_total	floating pt.	No	NULL	No	
actual_total	floating pt.	No	NULL	No	
committed_total	floating pt.	No	NULL	No	
finalized_date	date	No	NULL	No	
alloc_total	floating pt.	No	NULL	No	

---

## uap\_prgrm\_budget

*Table 37. Columns in the uap\_prgrm\_budget table*

Name	Datatype	Is PK	Null Option	Is FK	Description
budget_id	integer	Yes	NOT NULL	Yes	Unique ID generated by the system for each budget created.
Program_id	integer	Yes	NOT NULL	No	
budget_total	floating pt.	No	NULL	No	
Forecast_total	floating pt.	No	NULL	No	
actual_total	floating pt.	No	NULL	No	
committed_total	floating pt.	No	NULL	No	
finalized_date	date	No	NULL	No	
alloc_total	integer	No	NULL	No	
line_item_total	floating pt.	No	NULL	No	Version 7.4 added this column.

## uap\_prgrm\_cost

Table 38. Columns in the uap\_prgrm\_cost table

Name	Datatype	Is PK	Null Option	Is FK	Description
program_id	integer	Yes	NOT NULL	No	
cost_item_id	integer	Yes	NOT NULL	No	
version_id	integer	Yes	NOT NULL	No	
cost_item_no	integer	No	NULL	No	
cost_item_desc	string (100)	No	NULL	No	
account_id	integer	No	NULL	Yes	Unique ID generated by the system for each account created.
account_code	string (100)	No	NULL	No	
forecast_amt	floating pt.	No	NULL	No	
committed_amt	floating pt.	No	NULL	No	
expenditure_date	date	No	NULL	No	
created_date	date	No	NULL	No	
created_by	integer	No	NULL	No	
last_mod_date	date	No	NULL	No	
modified_by	integer	No	NULL	No	
cost_cat_id	integer	No	NULL	No	
cost_cat_code	string (100)	No	NULL	No	
approval_id	integer	No	NULL	No	The ID of the approval that is associated with the line item. This column was added in 8.5.0.
approval_status	string(20)	No	NULL	No	The status of the approval that is associated with the line item. This column was added in 8.5.0.
line_item_updated	integer	No	NULL	No	A flag to identify updated line items in the edit session. This column was added in 8.5.0. The following are valid values. <ul style="list-style-type: none"><li>• 1 = the line item is updated</li><li>• 0 = the line item is finalized; not updated</li><li>• -1 = the line item is upgraded</li></ul>

## uap\_proj\_budget

Table 39. Columns in the uap\_proj\_budget table

Name	Datatype	Is PK	Null Option	Is FK	Description
budget_id	integer	Yes	NOT NULL	Yes	Unique ID generated by the system for each budget created.
project_id	integer	Yes	NOT NULL	No	
budget_total	floating pt.	No	NULL	No	
forecast_total	floating pt.	No	NULL	No	
actual_total	floating pt.	No	NULL	No	

*Table 39. Columns in the uap\_proj\_budget table (continued)*

Name	Datatype	Is PK	Null Option	Is FK	Description
committed_total	floating pt.	No	NULL	No	
finalized_date	date	No	NULL	No	

---

## **uap\_proj\_cost**

*Table 40. Columns in the uap\_proj\_cost table*

Name	Datatype	Is PK	Null Option	Is FK	Description
project_id	integer	Yes	NOT NULL	No	
cost_item_id	integer	Yes	NOT NULL	No	
version_id	integer	Yes	NOT NULL	No	
line_item_id	integer	No	NOT NULL	No	A new column added in the 8.2.0.2 patch to uniquely identify line items.
cost_item_no	integer	No	NULL	No	
account_id	integer	No	NULL	Yes	Unique ID generated by the system for each account created.
account_code	string (100)	No	NULL	No	
forecast_amt	floating pt.	No	NULL	No	
committed_amt	floating pt.	No	NULL	No	
expenditure_date	date	No	NULL	No	
created_date	date	No	NULL	No	
created_by	integer	No	NULL	No	
last_mod_date	date	No	NULL	No	
modified_by	integer	No	NULL	No	
cost_cat_id	integer	No	NULL	No	
cost_cat_code	string (100)	No	NULL	No	
cost_item_desc	string (100)	No	NULL	No	
approval_id	integer	No	NULL	No	The ID of the approval associated with the line item. This column was added in 8.5.0.
approval_status	string(20)	No	NULL	No	The status of the approval associated with the line item. This column was added in 8.5.0.
line_item_updated	integer	No	NULL	No	A flag to identify updated line items in the edit session. This column was added in 8.5.0. The following are valid values.  1 = the line item is updated  0 = the line item is finalized; not updated  -1 = the line item is upgraded

---

## **uap\_tt\_budget\_rule**

This table was added in IBM Marketing Operations 8.5.0 to support budget approvals. The table holds the budget rules that are defined in the object templates.

*Table 41. Columns in the uap\_tt\_budget\_rule table*

Name	Datatype	Is PK	Null Option	Is FK	Description
template_id	integer	No	NOT NULL	No	The ID of the template in which the approval rule is defined.
rule_id	integer	No	NOT NULL	No	The ID of the rule that is created in the rules table.

---

## **uap\_quarters**

*Table 42. Columns in the uap\_quarters table*

Name	Datatype	Is PK	Null Option	Is FK	Description
quarter_id	integer	Yes	NOT NULL	No	
year	integer	Yes	NOT NULL	No	
month	integer	Yes	NOT NULL	No	
description	string (100)	No	NULL	No	



---

## Chapter 6. Grid tables overview

The following tables store information about grids.

---

### uap\_user\_grid\_pref

This table stores user preferences for the editable grid component. This table was added in version 7.5.

*Table 43. Columns in the uap\_user\_grid\_pref table*

Name	Datatype	Is PK	Null Option	Is FK	Comment
user_id	integer	Yes	NOT NULL	Yes	User ID of the user that stored the preferences. Primary key from uap_user.
form_id	integer	Yes	NOT NULL	Yes	Form ID of the form that contains the grid. Primary key from uap_tt_map.
tvc_id	string (255)	Yes	NOT NULL	No	A unique identifier that distinguishes among multiple grids on the same form.
pref_mode	string (10)	No	NOT NULL	No	The mode for which preferences were saved. Possible values are view and edit but as of 7.5 only view mode preferences can be saved.
pref_value	string	No	NULL	No	The CLOB column that stores the user preferences value. The user preferences value is stored as XML.

---

### uap\_user\_tvc\_columns

This table was added in version 7.3.

*Table 44. Columns in the uap\_user\_tvc\_columns table*

Name	Datatype	Is PK	Null Option	Is FK	Comment
ref_id	integer	Yes	NOT NULL	No	
tvc_column_id	string (255)	Yes	NOT NULL	No	
order_index	integer	No	NOT NULL	No	
visible	string (1)	No	NULL	No	

---

### uap\_user\_tvc\_pref

This table was added in version 7.3.

*Table 45. Columns in the uap\_user\_tvc\_pref table*

Name	Datatype	Is PK	Null Option	Is FK	Comment
pref_id	integer	Yes	NOT NULL	No	
user_id	integer	No	NOT NULL	No	
form_id	integer	No	NOT NULL	No	

*Table 45. Columns in the uap\_user\_tvc\_pref table (continued)*

Name	Datatype	Is PK	Null Option	Is FK	Comment
tvc_id	string (255)	No	NOT NULL	No	
group_by	string (255)	No	NULL	No	
sort_by	string (255)	No	NULL	No	
sort_order	integer	No	NULL	No	

---

## Chapter 7. Integration tables overview

The following tables store information about integrating IBM Marketing Operations with IBM Campaign.

Custom campaign attributes are stored in the dynamic tables created for the forms that contain the attributes. Information about the Target Cell Spreadsheet is stored in the dynamic table specified by the template creator while creating the TCS.

---

### lkup\_flowchart\_run\_type\_en\_us

This table stores the en\_us display text for each run type received from IBM Campaign. This table was added in version 8.0.

*Table 46. Columns in the lkup\_flowchart\_run\_type\_en\_us table*

Name	Datatype	Is PK	Null Option	Is FK	Description
run_type_id	integer	Yes	NOT NULL	No	Unique identifier for the run type.
run_type_value	string (30)	No	NOT NULL	No	Internal name for the run type.
run_type_text	string (30)	No	NOT NULL	No	Localized display text for the run type.

---

### lkup\_flowchart\_run\_type\_ru\_ru

This table stores the Russian language (ru\_ru) display text for each run type that is received from IBM Campaign. This table was added in version 8.6.

*Table 47. Columns in the lkup\_flowchart\_run\_type\_ru\_ru table*

Name	Datatype	Is PK	Null Option	Is FK	Description
run_type_id	integer	Yes	NOT NULL	No	Unique identifier for the run type.
run_type_value	string (30)	No	NOT NULL	No	Internal name for the run type.
run_type_text	string (50)	No	NOT NULL	No	Localized display text for the run type.

---

### uap\_campaign\_offer\_ref

This table is the junction table between the offer assigned to a row in the Target Cell Spreadsheet and the uap\_campaign\_offers table.

*Table 48. Schema for uap\_campaign\_offer\_ref*

Name	Datatype	Is PK	Null Option	Is FK	Description
dest_offer_gen_id	integer	No	NULL	No	Unique identifier generated by Marketing Operations for the offer. Refers to the uap_campaign_offers table.
src_project_id	integer	No	NULL	No	Unique identifier of the source project.
grid_row_id	integer	No	NULL	No	Unique identifier of the row in the TCS for which the offer is assigned.

---

## uap\_campaign\_offers

This table stores information about offers and offer lists coming from IBM Campaign. The table is populated when a user selects one or more offers from the offer dialog in the Target Cell Spreadsheet and saves the changes. The table is updated when the TCS is published if the publish TCS call returns an updated name for an offer or offer list. This table was added in version 8.0.

Table 49. Schema for uap\_campaign\_offers

Name	Datatype	Is PK	Null Option	Is FK	Description
offer_gen_id	integer	Yes	NOT NULL	No	Unique identifier generated by Marketing Operations for the offer.
uac_offer_id	integer	No	NULL	No	Unique identifier of the offer in Campaign
offer_name	string (200)	No	NULL	No	Name of the offer.
offer_code	string (50)	No	NULL	No	Code of the offer.
offer_type	integer	No	NULL	No	Type of offer: offer or offer list.
partition_id	string (256)	No	NOT NULL	No	Stores the partition of the selected offer. Size increased in version 8.6.0.

---

## uap\_campaign\_std\_attributes

This table stores the values for the default campaign attributes for each campaign project. The table does not have the campaign name or campaign code, which are identical to the project name and project code. (Project name and project code are stored in the table uap\_projects.)

Table 50. Columns in the uap\_campaign\_std\_attributes table

Name	Datatype	Is PK	Null Option	Is FK	Description
project_id	integer	Yes	NOT NULL	Yes	Unique identifier for the campaign project. Foreign key to uap_projects.
description	string (1024)	No	NULL	No	Description of the campaign.
start_date	datetime	No	NULL	No	Start date of the campaign.
end_date	datetime	No	NULL	No	End date of the campaign.
objective	string (1024)	No	NULL	No	Objective of the campaign.
initiative	string (255)	No	NULL	No	Initiative of the campaign.
security_policy_id	integer	No	NULL	No	Unique identifier of the security policy for the campaign.
security_policy_name	string (50)	No	NULL	No	Name of the security policy for the campaign.
campaign_guid					This column is populated after the linked campaign is created in IBM Campaign. The value is returned by Campaign.

---

## **uap\_deleted\_tcs\_rows**

This table stores the cell IDs of published rows in a Target Cell Spreadsheet deleted since the TCS was last published. The next time the TCS is published, IBM Marketing Operations sends the rows in this table for that project to IBM Campaign for deletion. If the deletion is successful, Marketing Operations then deletes those rows from this table.

This table was added in version 8.0.

*Table 51. Schema for uap\_deleted\_tcs\_rows*

Name	Datatype	Is PK	Null Option	Is FK	Description
uap_tcs_cell_id	integer	Yes	NOT NULL	No	Identifier for the deleted cell in the TCS.
uap_project_id	integer	Yes	NOT NULL	No	Unique identifier for the project that contains the TCS.

---

## **uap\_object\_folder**

This table stores the folder IDs for offer folders in systems integrated with IBM Campaign. This table was added in version 8.6.

*Table 52. Schema for uap\_object\_folder*

Name	Datatype	Is PK	Null Option	Is FK	Description
folder_id	integer	Yes	NOT NULL	No	
campaign_folder_id	integer	No	NULL	No	
folder_name	string (765)	No	NOT NULL	No	
description	string (1024)	No	NULL	No	
parent_folder_id	integer	No	NULL	No	
object_type	integer	No	NULL	No	
campaign_sec_policy_id	integer	No	NOT NULL	No	
campaign_sec_policy_name	string (256)	No	NOT NULL	No	
partition_id	string (256)	No	NOT NULL	No	
created_date	date	No	NULL	No	
created_by	integer	No	NULL	No	
last_mod_date	date	No	NULL	No	
modified_by	integer	No	NULL	No	

---

## uap\_offer\_attributes

This table holds the standard offer attributes associated with an offer created in IBM Marketing Operations. It was created in version 8.5.0.

Table 53. Columns in the uap\_offer\_attributes table

Name	Datatype	Is PK	Null Option	Is FK	Description
mktg_object_id	integer	Yes	NOT NULL	No	The internal ID of the marketing object that is assigned to the offer.
campaign_sec_policy_id	integer	No	NOT NULL	No	The ID of the IBM Campaign security policy that is assigned to the offer.
campaign_sec_policy_name	string (256)	No	NULL	No	The name of the IBM Campaign security policy that is assigned to the offer. Version 8.6 increased the size and permitted null values.
offer_code_1	string (40)	No	NULL	No	Offer code 1.
offer_code_2	string (40)	No	NULL	No	Offer code 2.
offer_code_3	string (40)	No	NULL	No	Offer code 3.
offer_code_4	string (40)	No	NULL	No	Offer code 4.
offer_code_5	string (40)	No	NULL	No	Offer code 5.
campaign_offer_id	big integer	No	NULL	No	The ID assigned to the offer by IBM Campaign.
is_approved	integer	No	NULL	No	A flag which specifies whether the offer is approved.
is_offer_list	string (1)	No	NULL	No	Added in version 8.6.0.
is_smart_list	string (1)	No	NULL	No	Added in version 8.6.0.
partition_id	string (256)	No	NULL	No	Added in version 8.6.0.
include_subfolder	integer	No	NULL	No	Added in version 8.6.0.
offer_list_limit	integer	No	NULL	No	Added in version 8.6.0.
cm_client_id	string (100)	No	NULL	Yes	The IBM Digital Recommendations client ID associated with the offer. Foreign key to uap_ml_cm_clients.cm_client_id. Added in version 9.0.
cm_category_id	string (200)	No	NULL		The Digital Recommendations category ID selected for the offer. Added in version 9.0.
cm_category_name	string (200)	No	NULL		The Digital Recommendations category name that is selected for the offer. Added in version 9.0.

---

## uap\_offerlist\_offer

This table was added in version 8.6.0.

Table 54. Schema for uap\_offerlist\_offer

Name	Datatype	Is PK	Null Option	Is FK	Description
mktg_object_id	integer	Yes	NOT NULL	No	
item_id	integer	Yes	NOT NULL	No	

*Table 54. Schema for uap\_offerlist\_offer (continued)*

Name	Datatype	Is PK	Null Option	Is FK	Description
seq_no	integer	No	NOT NULL	No	
search_criteria	string	No	NULL	No	

---

## **uap\_offers\_import**

This table was added in version 8.6.0.

*Table 55. Schema for uap\_offers\_import*

Name	Datatype	Is PK	Null Option	Is FK	Description
offer_import_id	integer	Yes	NOT NULL	No	
job_id	integer	No	NOT NULL	No	
partition_id	string (256)	No	NOT NULL	No	
comp_type	string (50)	No	NOT NULL	No	
campaign_id	integer	No	NOT NULL	No	
umo_id	integer	No	NOT NULL	No	
status	string (20)	No	NULL	No	

---

## **uap\_offers\_job\_import**

This table was added in version 8.6.0.

*Table 56. Schema for uap\_offers\_job\_import*

Name	Datatype	Is PK	Null Option	Is FK	Description
job_id	integer	Yes	NOT NULL	No	
partition_id	string (256)	No	NULL	No	
start_date	date	No	NULL	No	
end_date	date	No	NULL	No	
total_offer_template_count	integer	No	NULL	No	
total_offer_folder_count	integer	No	NULL	No	
total_offer_count	integer	No	NULL	No	
total_offer_list_count	integer	No	NULL	No	
imported_offer_template_count	integer	No	NULL	No	
imported_offer_folder_count	integer	No	NULL	No	
imported_offer_count	integer	No	NULL	No	
imported_offer_list_count	integer	No	NULL	No	
updated_offer_count	integer	No	NULL	No	
updated_offer_list_count	integer	No	NULL	No	
status	string (50)	No	NULL	No	
failure_reason	string (1024)	No	NULL	No	Defaults to null.

---

## **uap\_offers\_job\_messages**

This table was added in version 8.6.0.

*Table 57. Schema for uap\_offers\_job\_messages*

Name	Datatype	Is PK	Null Option	Is FK	Description
job_id	integer	No	NOT NULL	No	
message_code	string (50)	No	NULL	No	
message_level	string (50)	No	NULL	No	
obj_type	string (50)	No	NULL	No	
failed_object	string (1024)	No	NULL	No	
dependent_type	string (50)	No	NULL	No	
dependents	string	No	NULL	No	
message	string	No	NULL	No	

---

## **uap\_tt\_offer\_attributes**

This table was added in version 8.6.0.

*Table 58. Schema for uap\_tt\_offer\_attributes*

Name	Datatype	Is PK	Null Option	Is FK	Description
umo_element_name	string (100)	Yes	NOT NULL	No	
campaign_internal_name	string (100)	No	NOT NULL	No	

---

## **uap\_tt\_offer\_template**

This table holds the offer attributes associated with an offer template in IBM Marketing Operations. It was created in version 8.5.0.

*Table 59. Columns in the uap\_tt\_offer\_template table*

Name	Datatype	Is PK	Null Option	Is FK	Description
template_id	integer	Yes	NOT NULL	No	This column specifies the offer template ID.
offer_code_format_1	string (32)	No	NULL	No	Offer code format 1.
offer_code_format_2	string (32)	No	NULL	No	Offer code format 2.
offer_code_format_3	string (32)	No	NULL	No	Offer code format 3.
offer_code_format_4	string (32)	No	NULL	No	Offer code format 4.
offer_code_format_5	string (32)	No	NULL	No	Offer code format 5.
treatment_code	string (192)	No	NULL	No	The offer treatment code. In version 8.6.0, the size of this column increased.
treatment_code_gen_class	string (750)	No	NULL	No	The treatment code generator for the offer template. In version 8.6.0, the size of this column increased.

Table 59. Columns in the uap\_tt\_offer\_template table (continued)

Name	Datatype	Is PK	Null Option	Is FK	Description
template_published	string (1)	No	NULL	No	A flag that specifies whether the template is published. • Y = yes • N = no
offer_code_pid_class	string (750)	No	NULL	No	The offer code generator for the offer template. In version 8.6.0, the size of this column increased.
campaign_sec_policy_id	integer	No	NULL	No	The ID of the IBM Campaign security policy that is assigned to the offer template.
campaign_template_id	big integer	No	NULL	No	The ID assigned to the template in IBM Campaign.
campaign_sec_policy_name	string (256)	No	NULL	No	The name of the IBM Campaign security policy that is assigned to the offer template. In version 8.6.0, the size of this column increased.
offer_list_template	string (1)	No	NULL	No	Added in version 8.6.0.
coremetrics_integrated_flag	integer	No	NULL	No	Indicates whether optional integration with IBM Digital Recommendations is enabled for the offer template. Added in 9.0.
coremetrics_url	string (200)	No	NULL	No	The URL of an IBM Digital Recommendations instance. Added in 9.0.

## uap\_ml\_cm\_clients

Stores items for the list of Coremetrics® Clients that administrators can import when they enable integration with IBM Digital Recommendations in offer templates. Added in version 9.0.

Table 60. Columns in the uap\_ml\_cm\_clients table

Name	Datatype	Is PK	Null Option	Is FK	Description
cm_client_id	integer	Yes	NOT NULL	Yes	Unique identifier that is generated by the system for each client in the list.
name	string (255)	No	NOT NULL	No	Label for the list item.
code	string (50)	No	NULL	No	The client ID value from a IBM Digital Recommendations installation.
display	string (305)	No	NOT NULL	No	Specifies how list items display: alphabetically with Name - Code or numerically with Code - Name.
display_no	integer	No	NULL	No	System-supplied number that is used to order the items in the list for display.
flag_enabled	string (1)	No	NULL	No	Indicates whether the list item is enabled and included in the user interface or not. 0 = Disabled, 1 = Enabled.

---

## **uap\_tt\_cm\_clients**

This table holds the IBM Digital Recommendations client IDs associated with an offer template in IBM Marketing Operations. Added in version 9.0.

*Table 61. Columns in the uap\_tt\_cm\_clients table*

Name	Datatype	Is PK	Null Option	Is FK	Description
template_id	integer	No	NOT NULL	Yes	Foreign key to uap_tt_templates.template_id. Identifies the offer template.
cm_client_id	string (100)	No	NOT NULL	Yes	Foreign key to uap_ml_cm_clients.cm_client_id. Stores the IBM Digital Recommendations client ID.

---

## Chapter 8. Invoice tables overview

The following tables contain information about invoices.

### uap\_invoices

The uap\_invoices table is the main table for storing invoice summary details.

*Table 62. Columns in the uap\_invoices table*

Name	Datatype	Is PK	Null Option	Is FK	Description
invoice_id	integer	Yes	NOT NULL	No	Unique ID generated by the system for each invoice created.
invoice_no	string (50)	No	NULL	No	Invoice number entered by the user in the GUI.
vendor_id	integer	No	NULL	No	
po_no	string (50)	No	NULL	No	Purchase order number entered in the GUI.
due_date	date	No	NULL	No	Invoice due date, entered by the user.
status_code	string (20)	No	NULL	No	
state_code	string (20)	No	NULL	No	The current state of the invoice. Values: DRAFT, PAYABLE, PAID, CANCELLED
submit_date	date	No	NULL	No	Invoice submitted date, entered by the user.
created_by	integer	No	NULL	No	User ID of the user who created this invoice. System updates this value. Foreign key to uap_users.user_id
created_date	date	No	NULL	No	Invoice created date and time. System updates this value.
last_mod_date	date	No	NULL	No	Invoice last modified date (including invoice line item). System updates this value.
modified_by	integer	No	NULL	No	User ID of the user who last modified this invoice (including invoice line items). System updates this value.
notes	string (1024)	No	NULL	No	
payment_terms	string (1024)	No	NULL	No	
invoice_amount	floating pt.	No	NULL	No	
payable_date	date	No	NULL	No	
paid_date	date	No	NULL	No	
sec_policy_id	integer	No	NULL	No	

---

## uap\_invoice\_hist

Table 63. Columns in the uap\_invoice\_hist table

Name	Datatype	Is PK	Null Option	Is FK	Description
invoice_id	integer	Yes	NOT NULL	Yes	Unique ID generated by the system for each invoice created.
seq_no	integer	Yes	NOT NULL	No	
cur_state	string (20)	No	NULL	No	
Descriptions	string (1024)	No	NULL	No	
prev_state	string (20)	No	NULL	No	
last_mod_date	date	No	NULL	No	
user_id	integer	No	NULL	No	

---

## uap\_invoice\_items

This table stores all invoice line items.

Table 64. Schema for uap\_invoice\_items

Name	Datatype	Is PK	Null Option	Is FK	Description
invoice_id	integer	Yes	NOT NULL	Yes	Unique ID generated by the system for each invoice created. Foreign key to uap_invoices.invoice_id.
src_obj_type	string (20)	No	NULL	No	Invoice item source object type. Values: PROJECT, PROGRAM.
src_obj_id	integer	No	NULL	Yes	Invoice source object internal ID. Foreign key to uap_project.project_id or uap_programs.program_id, depending on whether the entry is a Project or a Program.
src_obj_code	string (100)	No	NULL	No	Invoice source object code. Values match values from uap_projects.project_code and uap_programs.program_code columns, depending on whether the invoice item source object is a Project or Program.
account_id	integer	No	NULL	Yes	Account internal ID. Foreign Key to uap_accounts.account_id.
account_code	string (100)	No	NULL	No	Account code. Values: Match values from ap_accounts.account_code column.
cost_cat_id	integer	No	NULL	Yes	Cost Category internal ID. Foreign Key to uap_cost_cat.cost_cat_id.
cost_cat_code	string (100)	No	NULL	No	Cost Category code. Values: Match values from the uap_cost_cat.cost_cat_code column.
quantity	integer	No	NULL	No	Quantity.
unit_cost	floating pt.	No	NULL	No	Item unit cost.
item_cost	floating pt.	No	NULL	No	Item total cost.

*Table 64. Schema for uap\_invoice\_items (continued)*

Name	Datatype	Is PK	Null Option	Is FK	Description
approval_id	integer	No	NULL	No	The ID of the approval associated with the line item. This column was added in 8.5.0.
approval_status	string(20)	No	NULL	No	The status of the approval associated with the line item. This column was added in 8.5.0.
line_item_updated	integer	No	NULL	No	A flag to identify updated line items in the edit session. This column was added in 8.5.0. The following are valid values. 1 = the line item is updated 0 = the line item is finalized; not updated -1 = the line item is upgraded

---

## **uap\_inv\_msgboard**

*Table 65. Columns in the uap\_inv\_msgboard table*

Name	Datatype	Is PK	Null Option	Is FK	Description
invoice_id	integer	Yes	NOT NULL	Yes	Unique ID generated by the system for each invoice created.
msg_id	integer	Yes	NOT NULL	No	
post_datetime	date	No	NULL	No	
user_id	integer	No	NULL	No	
msg_text	string (1024)	No	NULL	No	
recipients	string (512)	No	NULL	No	List of recipients if the message is emailed.

---

## **uap\_inv\_notify**

*Table 66. Columns in the uap\_inv\_notify table*

Name	Datatype	Is PK	Null Option	Is FK	Description
event_type	integer	Yes	NOT NULL	No	
user_id	integer	Yes	NOT NULL	No	
invoice_id	integer	Yes	NOT NULL	Yes	Unique ID generated by the system for each invoice created.
delivery_mask	integer	No	NULL	No	

---

## **uap\_inv\_rollup**

*Table 67. Columns in the uap\_inv\_rollup table*

Name	Datatype	Is PK	Null Option	Is FK	Description
invoice_id	integer	Yes	NOT NULL	Yes	Unique ID generated by the system for each invoice created.

---

## **uap\_invoice\_users**

This table stores all of the users who are participating in the invoice.

*Table 68. Columns in the uap\_invoice\_users table*

Name	Datatype	Is PK	Null Option	Is FK	Description
invoice_id	integer	Yes	NOT NULL	Yes	Unique ID generated by the system for each invoice created. Indicates the invoice that the user is participating in. Foreign key to uap_invoices.invoice_id
user_id	integer	Yes	NOT NULL	No	User ID of the user. Foreign key to uap_users.user_id.
mem_type_id	integer	Yes	NOT NULL	No	Member type ID of the user for this invoice. Foreign key to uap_member_type.mem_type_id

---

## Chapter 9. List tables overview

The following tables contain information about lists. These tables were added in version 8.6.0.

---

### uap\_list\_column

*Table 69. Schema for uap\_list\_column*

Name	Datatype	Is PK	Null Option	Is FK	Description
column_list_id	integer	Yes	NOT NULL	Yes	Foreign key to uap_list_columns.
column_id	integer	Yes	NOT NULL	No	
column_name	string (40)	No	NULL	No	
tab_order	integer	No	NULL	No	
column_type	string (30)	No	NULL	No	
header_text	string (200)	No	NULL	No	
help_tip	string (200)	No	NULL	No	
style	string (200)	No	NULL	No	
default_sort	string (1)	No	NULL	No	
is_visible	string (1)	No	NOT NULL	No	Defaults to Y.

---

### uap\_list\_columns

*Table 70. Schema for uap\_list\_columns*

Name	Datatype	Is PK	Null Option	Is FK	Description
column_list_id	integer	Yes	NOT NULL	No	
row_style	integer	No	NULL	No	
suppress_chkbox	string (1)	No	NULL	No	
object_type	string (520)	No	NULL	No	
is_visible	string (1)	No	NOT NULL	No	Defaults to Y.

---

### uap\_list\_filter

*Table 71. Schema for uap\_list\_filter*

Name	Datatype	Is PK	Null Option	Is FK	Description
filter_id	integer	Yes	NOT NULL	No	
filter_item_name	string (40)	No	NULL	No	
display	string (200)	No	NULL	No	
item_value	string (200)	No	NULL	No	

*Table 71. Schema for uap\_list\_filter (continued)*

Name	Datatype	Is PK	Null Option	Is FK	Description
item_type	string (1)	No	NULL	No	Valid values are: T = Filter Text A = Filter Attribute
object_type	string (520)	No	NULL	No	
is_visible	string (1)	No	NOT NULL	No	Defaults to Y.

---

## Chapter 10. Managed list tables overview

The following tables contain information about managed lists.

---

### uap\_managed\_list

*Table 72. Columns in the uap\_managed\_list table*

Name	Datatype	Is PK	Null Option	Is FK	Description
list_id	integer	Yes	NOT NULL	No	
list_name	string (255)	No	NULL	No	
list_code	string (20)	No	NULL	No	
list_table	string (50)	No	NULL	No	
key_column	string (50)	No	NULL	No	
description	string (1024)	No	NULL	No	
flag_code_first	string (1)	No	NULL	No	

---

### uap\_ml\_bus\_area

*Table 73. Columns in the uap\_ml\_bus\_area table*

Name	Datatype	Is PK	Null Option	Is FK	Description
bus_area_id	integer	Yes	NOT NULL	No	
name	string (255)	No	NULL	No	
code	string (50)	No	NULL	No	
display	string (1024)	No	NULL	No	
display_no	integer	No	NULL	No	
flag_enabled	string (1)	No	NULL	No	

---

### uap\_ml\_cost\_cat

*Table 74. Columns in the uap\_ml\_cost\_cat table*

Name	Datatype	Is PK	Null Option	Is FK	Description
cost_cat_id	integer	Yes	NOT NULL	No	
name	string (255)	No	NULL	No	
code	string (50)	No	NULL	No	
display	string (1024)	No	NULL	No	
display_no	integer	No	NULL	No	
flag_enabled	string (1)	No	NULL	No	

---

## uap\_ml\_milestone

This table was added in version 8.1.0.

Table 75. Columns in the uap\_ml\_milestone table

Name	Datatype	Is PK	Null Option	Is FK	Description
milestone_id	integer	Yes	NOT NULL	No	Primary key for milestone entry.
code	string (50)	No	NULL	No	User-defined code for the milestone.
name	string (255)	No	NULL	No	Name of the milestone.
display	string (305)	No	NULL	No	Display format of the milestone: name-code or code-name.
display_no	integer	No	NULL	No	Sequence number.
flag_enabled	string(1)	No	NULL	No	1 = enabled; 0 = disabled.

---

## uap\_ml\_roles

Table 76. Columns in the uap\_ml\_roles table

Name	Datatype	Is PK	Null Option	Is FK	Description
role_id	integer	Yes	NOT NULL	No	Unique ID generated by the system for resource role type.
name	string (255)	No	NULL	No	Resource Name.
code	string (50)	No	NULL	No	Resource Code.
display	string (1024)	No	NULL	No	Resource display name.
display_no	integer	No	NULL	No	Display Order.
flag_enabled	string (1)	No	NULL	No	Value = Y if this resource type is enabled. Value = N if this resource type is disabled.

---

## uap\_ml\_vendor

Table 77. Columns in the uap\_ml\_vendor table

Name	Datatype	Is PK	Null Option	Is FK	Description
vendor_id	integer	Yes	NOT NULL	No	
name	string (255)	No	NULL	No	
code	string (50)	No	NULL	No	
display	string (1024)	No	NULL	No	
display_no	integer	No	NULL	No	
flag_enabled	string (1)	No	NULL	No	

---

## Chapter 11. Marketing content management tables overview

The following tables contain information about marketing content management. These tables represent IBM Marketing Operations assets (Digital Asset Management functionality).

---

### umcm\_content\_file

Table 78. Columns in the umcm\_content\_file table

Name	Datatype	Is PK	Null Option	Is FK	Description
file_id	integer	Yes	NOT NULL	No	
file_type	integer	No	NULL	No	
mime_type	string (255)	No	NULL	No	
file_name	string (255)	No	NULL	No	
file_size	string (20)	No	NULL	No	
created_datetime	date	No	NULL	No	

---

### umcm\_folders

Table 79. Columns in the umcm\_folders table

Name	Datatype	Is PK	Null Option	Is FK	Description
folder_id	integer	Yes	NOT NULL	No	
folder_name	string (255)	No	NULL	No	
folder_desc	string (1024)	No	NULL	No	
parent_folder_id	integer	No	NULL	No	
folder_status	string (20)	No	NULL	No	
sec_policy_id	integer	No	NULL	Yes	

---

### umcm\_item\_content

Table 80. Columns in the umcm\_item\_content table

Name	Datatype	Is PK	Null Option	Is FK	Description
item_id	integer	Yes	NOT NULL	Yes	
item_version_seq	integer	Yes	NOT NULL	No	
item_desc	string (1024)	No	NULL	No	
version_label	string (50)	No	NULL	No	
item_keywords	string (255)	No	NULL	No	
created_user_id	integer	No	NULL	No	

*Table 80. Columns in the umcm\_item\_content table (continued)*

Name	Datatype	Is PK	Null Option	Is FK	Description
create_datetime	date	No	NULL	No	
last_mod_user_id	integer	No	NULL	No	
last_mod_datetime	date	No	NULL	No	
expiration_date	date	No	NULL	No	
version_name	string (255)	No	NULL	No	
version_status	string (20)	No	NULL	No	
item_instructions	string (1024)	No	NULL	No	

---

## **umcm\_item\_hist**

*Table 81. Columns in the umcm\_item\_hist table*

Name	Datatype	Is PK	Null Option	Is FK	Description
seq_no	integer	Yes	NOT NULL	No	
item_id	integer	Yes	NOT NULL	Yes	
prev_status	string (20)	No	NULL	No	
curr_status	string (20)	No	NULL	No	
Descriptions	string (1024)	No	NULL	No	
last_mod_date	date	No	NULL	No	
user_id	integer	No	NULL	No	
item_version_seq	integer	No	NULL	No	

---

## **umcm\_item\_files**

*Table 82. Columns in the umcm\_item\_files table*

Name	Datatype	Is PK	Null Option	Is FK	Description
item_id	integer	Yes	NOT NULL	Yes	
item_version_seq	integer	Yes	NOT NULL	Yes	
file_id	integer	Yes	NOT NULL	Yes	

---

## **umcm\_item\_notify**

*Table 83. Columns in the umcm\_item\_notify table*

Name	Datatype	Is PK	Null Option	Is FK	Description
event_type	string (18)	Yes	NOT NULL	No	
user_id	string (18)	Yes	NOT NULL	No	
item_id	integer	Yes	NOT NULL	Yes	

*Table 83. Columns in the umcm\_item\_notify table (continued)*

Name	Datatype	Is PK	Null Option	Is FK	Description
delivery_mask	integer	No	NULL	No	

---

## umcm\_item\_users

*Table 84. Columns in the umcm\_item\_users table*

Name	Datatype	Is PK	Null Option	Is FK	Description
item_id	integer	Yes	NOT NULL	Yes	
item_version_seq	integer	Yes	NOT NULL	Yes	
mem_type_id	integer	Yes	NOT NULL	Yes	
user_id	integer	Yes	NOT NULL	Yes	FK to uap_users.user_id

---

## umcm\_items

*Table 85. Columns in the umcm\_items table*

Name	Datatype	Is PK	Null Option	Is FK	Description
item_id	integer	Yes	NOT NULL	No	
item_name	string (256)	No	NULL	No	Size increased to 256 by version 7.4.0.
item_versions	integer	No	NULL	No	
item_cr_datetime	date	No	NULL	No	
last_mod_datetime	date	No	NULL	No	
parent_folder_path	string(1024)	No	NULL	Yes	
folder_id	integer	No	NULL	Yes	
item_code	string (20)	No	NULL	No	
asset_legacy_ind	integer	No	NOT NULL	No	Added in version 8.1.0 to support identification of legacy and current assets.

---

## uap\_mcm\_annotations

This table stores attributes common to all types of annotations. This table was added in version 7.5.0.

*Table 86. Columns in the uap\_mcm\_annotations table*

Name	Datatype	Is PK	Null Option	Is FK	Description
annotation_id	integer	Yes	NOT NULL	No	ID of the annotation.
author	integer	No	NOT NULL	Yes	User ID of plan user who created the annotation. PK from uap_user.
body	string	No	NOT NULL	No	The text of the annotation.
coordinate_id	integer	No	NOT NULL	Yes	The positioning of this annotation. PK from uap_mcm_coordinates.
heading	string	No	NOT NULL	No	The title of the annotation.

*Table 86. Columns in the uap\_mcm\_annotations table (continued)*

Name	Datatype	Is PK	Null Option	Is FK	Description
created_date	Datetime	No	NOT NULL	No	The date that the annotation was created.
last_modified	Datetime	No	NULL	No	The last date on which the annotation was modified.
last_modified_user	integer	No	NULL	Yes	The user ID of person who last modified the annotation. PK from uap_user.
last_updated_desc	string	No	NULL	No	
active	integer	No	NOT NULL	No	A filter criteria. <ul style="list-style-type: none"><li>• 0=Archived</li><li>• 1=Active</li></ul>
mcm_source_id	string	No	NOT NULL	No	The approval_id + document_id + page no. Each page of the document is a source and can have annotations.
parent_id	integer	No	NOT NULL	No	Annotations can have a hierarchy of nested replies. Each reply points to its parent. The value is -1 for the first (topmost) annotation.
top_most_parent_id	integer	No	NOT NULL	No	This column points to the topmost parent invitation. It is useful to identify all the nested replies of an annotations at the same time, for example, if you need to delete them. The value is -1 for the first (topmost) annotation.
annotation_type	integer	No	NOT NULL	No	<ul style="list-style-type: none"><li>• Note = 1</li><li>• Scribble = 2</li></ul>

---

## **uap\_mcm\_attachments**

Table stores the attachments linked to annotations. Even replies can have attachments. This table was added in version 7.5.0.

*Table 87. Columns in the uap\_mcm\_attachments table*

Name	Datatype	Is PK	Null Option	Is FK	Description
Attachment_id	integer	Yes	NOT NULL	No	The ID of the attachment.
Content_type	string	No	NULL	No	The MIME type of the attachment.
Original_file_name	string	No	NULL	No	The original name of the uploaded file.
Annotation_id	integer	No	NULL	Yes	The annotation to which this attachment belongs. PK from uap_mcm_annotations.

---

## **uap\_mcm\_coordinates**

This table stores the coordinates of annotations that can be positioned. It was added in version 7.5.0.

*Table 88. Columns in the uap\_mcm\_coordinates table*

Name	Datatype	Is PK	Null Option	Is FK	Description
coordinate_id	integer	Yes	NOT NULL	No	The ID of the coordinate.
X	Float	No	NOT NULL	No	The X coordinate.
Y	Float	No	NOT NULL	No	The Y coordinate.
Tau	Float	No	NOT NULL	No	For three-dimensional positioning; this column is not used currently.

---

## **uap\_mcm\_scribble**

This table stores the strokes for annotations of the type scribble (free draw). This table was added in version 7.5.0.

*Table 89. Columns in the uap\_mcm\_scribble table*

Name	Datatype	Is PK	Null Option	Is FK	Description
scribble_id	integer	Yes	NOT NULL	No	The ID of the scribble.
Sigma	string	No	NULL	No	The strokes of the free drawing as a string containing a series of coordinates.
Annotation_id	integer	No	NOT NULL	Yes	The annotation to which this scribble belongs. PK from uap_mcm_annotations.



---

## Chapter 12. Marketing object tables overview

The following tables contain information about marketing objects in IBM Marketing Operations.

All of the tables in this section were added in version 7.3.0.

---

### uap\_comp\_ref

This table contains details about marketing objects that are referenced in other objects (projects or other marketing objects). It contains a row for each reference relationship between any two objects.

*Table 90. Columns in the uap\_comp\_ref table*

Name	Datatype	Is PK	Null Option	Is FK	Description
relation_type_id	integer	Yes	NOT NULL	Yes	Foreign key to uap_relation_type. The following are valid values: <ul style="list-style-type: none"><li>• 1 = Modifies</li><li>• 2 = References</li></ul>
dest_comp_id	integer	Yes	NOT NULL	Yes	Identifier for the destination object for this reference relationship.
src_comp_id	integer	Yes	NOT NULL	Yes	Identifier for the source object for this reference relationship.
src_comp_type_id	integer	Yes	NOT NULL	Yes	Component type for the destination object.
dest_comp_type_id	integer	Yes	NOT NULL	Yes	Component type for the source object.
ref_meta_id	integer	No	NULL	Yes	If the reference is in a grid, the identifier for the grid.
grid_row_id	integer	No	NULL	Yes	If the reference is in a grid, the identifier for the row in the grid that contains the reference.
grid_column_id	string (255)	No	NULL	Yes	If the reference is in a grid, the identifier for the column in the grid that contains the reference.

---

### uap\_comp\_type

This table contains details about the components in the system (business processes and marketing objects). This table contains a row for each custom component type as well as a row for each system-defined object (for example, plan and program). When an administrator creates a marketing object type in IBM Marketing Operations, a new row is added to this table.

*Table 91. Columns in the uap\_comp\_type table*

Name	Datatype	Is PK	Null Option	Is FK	Description
comp_type_id	integer	Yes	NOT NULL	No	Unique identifier that is generated by the system for each component.
name	string (50)	No	NOT NULL	No	Name of the component.

*Table 91. Columns in the uap\_comp\_type table (continued)*

Name	Datatype	Is PK	Null Option	Is FK	Description
code_module	string (50)	No	NOT NULL	No	Type of the component. For built-in components (for example, projects), the value of this column is same as the value of the name column. For marketing objects, the value of this column is components.
status_code	string (20)	No	NOT NULL	No	Status for the object. For example, ENABLED.
flag_has_templates	string (1)	No	NOT NULL	No	Flag for whether this component has any templates defined. • 0 = no templates defined • 1 = templates defined
flag_builtin	string (1)	No	NOT NULL	No	Flag for whether it is a built-in component: • 0 = no (marketing object) • 1 = yes

---

## uap\_mktgobject

This table contains information about each marketing object in the system.

*Table 92. Schema for uap\_mktgobject*

Name	Datatype	Is PK	Null Option	Is FK	Description
mktg_object_id	integer	Yes	NOT NULL	No	Unique identifier generated by the system for each marketing object.
name	string (390)	No	NOT NULL	No	Name of the marketing object. Size increased in version 8.6.0.
description	string (1536)	No	NULL	No	Description of the marketing object. Size increased in version 8.6.0.
template_name	string (50)	No	NOT NULL	No	Name of the template used to create the marketing object.
flag_proj_request	string (1)	No	NOT NULL	No	The following are valid values:  Y project request  N project
object_code	string (100)	No	NOT NULL	No	
sec_policy_id	integer	No	NOT NULL	No	
status_code	string (20)	No	NOT NULL	No	Status of the marketing object. The valid values are ACTIVE and DELETED.
state_code	string (20)	No	NOT NULL	No	State of the marketing object. The valid values depend on the marketing object.
created_by	integer	No	NOT NULL	No	Unique identifier for the user who created the marketing object.
created_date	date	No	NOT NULL	No	Date and time the marketing object was created.
modified_by	integer	No	NOT NULL	No	Unique identifier for the user who last modified the marketing object.

*Table 92. Schema for uap\_mktgobject (continued)*

Name	Datatype	Is PK	Null Option	Is FK	Description
last_mod_date	date	No	NOT NULL	No	Date the marketing object was last modified.
comp_type_name	integer	No	NOT NULL	No	Marketing object type of the marketing object.
parent_folder_id	integer	No	NULL	No	Added in version 8.6.0.

---

## **uap\_mo\_hist**

This table contains details about the history of marketing objects.

*Table 93. Schema for umo\_mo\_hist*

Name	Datatype	Is PK	Null Option	Is FK	Description
mktg_object_id	integer	Yes	NOT NULL	Yes	Unique identifier generated by the system for each marketing object. Foreign key to uap_mktgobject.
seq_no	integer	Yes	NOT NULL	No	Identifier for a history entry. The system increments the seq_no for each new history item.
user_id	integer	No	NOT NULL	Yes	Unique identifier for the user who modified the marketing object. Foreign key to uap_user.
on_behalf_user_id	integer	No	NULL	No	
last_mod_date	date	No	NOT NULL	No	Date the marketing object was last modified.
status_code	string (20)	No	NULL	No	Status of the marketing object.
comments	string (1024)	No	NULL	No	Revision history description.
curr_state	string (20)	No	NULL	No	Current state of the marketing object.
prev_state	string (20)	No	NULL	No	Previous state of the marketing object.

---

## **uap\_mo\_msgboard**

*Table 94. Columns in the uap\_mo\_msgboard table*

Name	Datatype	Is PK	Null Option	Is FK	Description
mtg_id	integer	Yes	NOT NULL	Yes	Unique identifier generated by the system for each marketing object.
msg_id	integer	Yes	NOT NULL	No	Unique identifier generated by the system for marketing object message board messages.
post_datetime	date	No	NOT NULL	No	Date the message was posted.
user_id	integer	No	NOT NULL	Yes	Unique identifier for the user who posted the message. Foreign key to uap_user.
msg_text	string (1024)	No	NULL	No	Text of the message.

*Table 94. Columns in the uap\_mo\_msgboard table (continued)*

Name	Datatype	Is PK	Null Option	Is FK	Description
recipients	string (512)	No	NULL	No	List of recipients if the message was emailed.

---

## uap\_mo\_notify

*Table 95. Columns in the uap\_mo\_notify table*

Name	Datatype	Is PK	Null Option	Is FK	Description
mktg_object_id	integer	Yes	NOT NULL	Yes	Unique identifier generated by the system for each marketing object. Foreign key to uap_mktgobject.
event_type	integer	Yes	NOT NULL	No	
user_id	integer	Yes	NOT NULL	Yes	Foreign key to uap_user.
delivery_mask	integer	No	NOT NULL	No	

---

## uap\_mo\_users

This table contains the basic data for all marketing object users.

*Table 96. Columns in the uap\_mo\_users table*

Name	Datatype	Is PK	Null Option	Is FK	Description
mktg_object_id	integer	Yes	NOT NULL	Yes	Unique identifier generated by the system for each marketing object. Foreign key to uap_mktgobject.
user_id	integer	Yes	NOT NULL	Yes	Internal user ID for a marketing object member. Foreign key to uap_user.
mem_type_id	integer	Yes	NOT NULL	Yes	Marketing object member type role ID. Foreign key to uap_member_type. Valid values are Owner and Participant.

---

## uap\_ref\_instance

This table contains a row for each source and destination object for all reference relationships.

*Table 97. Schema for umo\_ref\_instance*

Name	Datatype	Is PK	Null Option	Is FK	Description
comp_inst_id	integer	Yes	NOT NULL	No	Unique identifier generated by the system for each object instance.
comp_type_id	integer	Yes	NOT NULL	Yes	Identifier for the component type. Foreign key into uap_comp_type.
status_code	string (20)	No	NOT NULL	No	Object status. The valid values are ACTIVE or DELETED.

*Table 97. Schema for umo\_ref\_instance (continued)*

Name	Datatype	Is PK	Null Option	Is FK	Description
name	string (390)	No	NOT NULL	No	Name of the object. Size increased in version 8.6.0.
state_code	string (20)	No	NOT NULL	No	Object state. Valid values depend on the object type.

---

## **uap\_ref\_meta**

*Table 98. Columns in the uap\_ref\_meta table*

Name	Datatype	Is PK	Null Option	Is FK	Description
ref_meta_id	integer	Yes	NOT NULL	No	
template_id	integer	No	NOT NULL	No	
form_id	integer	No	NOT NULL	No	
field_id	string (50)	No	NOT NULL	No	

---

## **uap\_relation\_type**

*Table 99. Columns in the uap\_relation\_type table*

Name	Datatype	Is PK	Null Option	Is FK	Description
relation_type_id	integer	Yes	NOT NULL	No	
name	string (50)	No	NOT NULL	No	



---

## Chapter 13. Metrics tables overview

These tables were added in IBM Marketing Operations version 8.5.0 to support the creation of metrics and metrics templates.

### **uap\_tt\_me\_metrics**

This table holds the metrics created in the metric editor. It was created in IBM Marketing Operations version 8.5.0.

*Table 100. Columns in the uap\_tt\_me\_metrics table*

Name	Datatype	Is PK	Null Option	Is FK	Description
metric_id	integer	Yes	NOT NULL	No	The internal ID of the metric.
internal_name	string (50)	No	NOT NULL	No	The internal name of the metric.
display_key	string (100)	No	NULL	No	The key of the display name of the metric used in the property file for localization.
display_name	string (100)	No	NOT NULL	No	The name of the metric entered by the user.
description_key	string (100)	No	NULL	No	The description key of the metric used in the property file for localization.
description	string (300)	No	NULL	No	The description of the metric entered by the user.
unit_type	string (20)	No	NOT NULL	No	The data type of the metric.
display_format	string (5)	No	NOT NULL	No	The display format for the value of the metric.
precision	integer	No	Not NULL	No	The decimal precision of the value.

### **uap\_tt\_me\_metrics\_dimension**

This table holds metric dimensions created in the metric editor. It was created in IBM Marketing Operations version 8.5.0.

*Table 101. Columns in the uap\_tt\_me\_metrics\_dimension table*

Name	Datatype	Is PK	Null Option	Is FK	Description
dimension_id	integer	Yes	NOT NULL	No	The internal ID of the metric dimension.
internal_name	string (50)	No	NULL	No	The internal name of the metric dimension.
display_key	string (100)	No	NULL	No	The key of the metric dimension used in the property file for localization.
display_name	string (100)	No	NOT NULL	No	The name of the metric dimension entered by the user.
description_key	string (100)	No	NULL	No	The description key of the metric dimension used in the property file for localization.
description	string (300)	No	NULL	No	The description of the metric dimension entered by the user.

*Table 101. Columns in the uap\_tt\_me\_metrics\_dimension table (continued)*

Name	Datatype	Is PK	Null Option	Is FK	Description
type	string (20)	No	NOT NULL	No	The type of the metric dimension. The following are valid values. <ul style="list-style-type: none"><li>• TARGET</li><li>• ACTUAL</li><li>• OTHER</li></ul>
tab_order	integer	No	NULL	No	The display order for the tabs in the metric dimension.

---

## **uap\_tt\_me\_metrics\_group**

This table holds the metric groups created in the metric editor. It was created in IBM Marketing Operations version 8.5.0.

*Table 102. Columns in the uap\_tt\_me\_metrics\_group table*

Name	Datatype	Is PK	Null Option	Is FK	Description
group_id	integer	Yes	NOT NULL	No	The internal ID of the group.
internal_name	string (50)	No	NOT NULL	No	The internal name of the group.
display_key	string (100)	No	NULL	No	The display key of the group used in the property file for localization.
display_name	string (100)	No	NOT NULL	No	The name of the group entered by the user.
description_key	string (100)	No	NULL	No	The description key of the group used in the property file for localization.
description	string (300)	No	NULL	No	The description of the group entered by the user.

---

## **uap\_tt\_me\_metrics\_group\_ref**

This table holds the association of the groups with the template and the group display order. It was created in IBM Marketing Operations version 8.5.0.

*Table 103. Columns in the uap\_tt\_me\_metrics\_group\_ref table*

Name	Datatype	Is PK	Null Option	Is FK	Description
template_id	integer	Yes	NOT NULL	No	The internal ID of the metric template.
group_id	integer	Yes	NOT NULL	No	The internal ID of the associated group.
tab_order	integer	No	NULL	No	The display order for the tabs in the template.

---

## uap\_tt\_me\_metrics\_ref

This table holds association of the metric template groups. It was created in IBM Marketing Operations version 8.5.0.

*Table 104. Columns in the uap\_tt\_me\_metrics\_ref table*

Name	Datatype	Is PK	Null Option	Is FK	Description
template_id	integer	Yes	NOT NULL	No	The internal ID of the metric template.
group_id	integer	Yes	NOT NULL	No	The internal ID of the associated group.
metric_id	integer	Yes	NOT NULL	No	The internal ID of the metric associated with the group in the template.
is_formula	integer	No	NOT NULL	No	Specifies whether the field value is computed internally by a formula or by the user. The following are valid values. <ul style="list-style-type: none"><li>• 1 = computed by formula</li><li>• 0 = user input</li></ul>
formula	string (1000)	No	NULL	No	If is_formula is set to 1, then this column contains the actual formula.
is_planned	integer	No	NOT NULL	No	A flag to specify whether the metric is planned. The following are valid values. <ul style="list-style-type: none"><li>• 1 = Yes</li><li>• 0 = No</li></ul>
is_rollup	integer	No	NOT NULL	No	A flag to specify whether the metric is rolled up. The following are valid values. <ul style="list-style-type: none"><li>• 1 = Yes</li><li>• 0 = No</li></ul>
tab_order	integer	No	NOT NULL	No	The display order of the metrics within the group in the template.

---

## uap\_tt\_me\_metrics\_template

This table holds the metric templates created in the metric editor. It was created in IBM Marketing Operations version 8.5.0.

*Table 105. Columns in the uap\_tt\_me\_metrics\_template table*

Name	Datatype	Is PK	Null Option	Is FK	Description
template_id	integer	Yes	NOT NULL	No	The internal ID of the metrics template.
internal_name	string (50)	No	NOT NULL	No	The internal name of the metrics template.
display_key	string (100)	No	NULL	No	The key of the template display name used in the property file for localization.
display_name	string (100)	No	NOT NULL	No	The name of the metrics template entered by the user.
description_key	string (100)	No	NULL	No	The description key of the template used in the property file for localization.
description	string (300)	No	NULL	No	The description of the metrics template entered by the user.

*Table 105. Columns in the uap\_tt\_me\_metrics\_template table (continued)*

Name	Datatype	Is PK	Null Option	Is FK	Description
type	string (20)	No	NOT NULL	No	<p>The type of the metrics template. The following are valid values.</p> <ul style="list-style-type: none"><li>• 1 = PLAN</li><li>• 2 = PROJECT</li><li>• 8 = PROGRAM</li><li>• -1 = LEGACY</li></ul>

---

## Chapter 14. Miscellaneous tables overview

The following tables store miscellaneous information. This section includes several tables about the IBM Marketing Operations calendar, security, and searches.

### uap\_calendar\_config

This table stores attributes used to control the appearance of the IBM Marketing Operations calendar. Each row determines the settings for a particular user.

*Table 106. Columns in the uap\_calendar\_config table*

Name	Datatype	Is PK	Null Option	Is FK	Description
user_id	integer	Yes	NOT NULL	Yes	ID of the user to whom these calendar settings apply. Foreign key to uap_user.
show_weekends	integer	No	NULL	No	Determines whether to show weekends when displaying the calendar.
first_day_of_week	integer	No	NULL	No	Determines whether the week begins on Sunday (0) or Monday (1).
default_layout	integer	No	NULL	No	Determines the layout of the calendar. The following values are valid. <ul style="list-style-type: none"><li>• 1 = 1-month text calendar</li><li>• 2 = 1-month graphical calendar</li><li>• 3 = 1-week timeline</li><li>• 4 = 1-month timeline</li><li>• 5 = 1-quarter timeline</li><li>• 6 = 1-fiscal year timeline</li><li>• 7 = 1-calendar year timeline</li></ul>
default_entity_type	integer	No	NULL	No	Determines which entities are displayed on the calendar. The following values are valid. <ul style="list-style-type: none"><li>• 1 = plans</li><li>• 2 = projects</li><li>• 8 = programs</li></ul>
default_search	integer	No	NULL	Yes	ID for the saved search used to filter the items displayed on the calendar. Foreign key to uap_search.search_id.
last_mod_date	date	No	NULL	No	Date on which this object was last modified.

## **uap\_cal\_color\_coding**

This table stores information about the attribute used for color coding the calendar.

*Table 107. Columns in the uap\_cal\_color\_coding table*

Name	Datatype	Is PK	Null Option	Is FK	Description
user_id	integer	Yes	NOT NULL	Yes	ID of the user to which these calendar settings apply. Foreign key to uap_user.
entity_type_id	integer	Yes	NOT NULL	Yes	Type of entity used for color coding. The following are valid values. <ul style="list-style-type: none"><li>• 0 = project</li><li>• 1 = programs</li><li>• 2 = plans</li></ul>
cust_attr_id	string (255)	Yes	NOT NULL	Yes	ID of the attribute used for color coding.

## **uap\_cal\_view\_milestones**

This table stores information about displaying milestones on the calendar.

*Table 108. Columns in the uap\_cal\_view\_milestones table*

Name	Datatype	Is PK	Null Option	Is FK	Description
user_id	integer	Yes	NOT NULL	Yes	ID for the user for whom these calendar settings apply. Foreign key to uap_user.
milestone_type	integer	Yes	NOT NULL	Yes	Type of milestone displayed on the calendar. Foreign key to uap_wf_milestones.

## **uap\_event\_cat\_enum**

This table contains details about event categories.

*Table 109. Columns in the uap\_event\_cat\_enum table*

Name	Datatype	Is PK	Null Option	Is FK	Description
Cat_value	integer	Yes	NOT NULL	No	Unique ID for the event category.
Cat_name	string (50)	No	NULL	No	Name of the event category.
Cat_desc	string (100)	No	NULL	No	Description for the event category.

## **uap\_format\_symbols**

This table supports localized date values for the IBM Cognos® monthly and trend project health reports. Added in version 9.0.

*Table 110. Columns in the uap\_format\_symbols table*

Name	Datatype	Is PK	Null Option	Is FK	Description
locale	string (10)	Yes	NOT NULL	Yes	Identifies a supported locale.
category	string (20)	Yes	NOT NULL	Yes	

*Table 110. Columns in the uap\_format\_symbols table (continued)*

Name	Datatype	Is PK	Null Option	Is FK	Description
fs_key	integer	Yes	NOT NULL	Yes	
fs_value	string (50)	No	NOT NULL	No	

---

## **uap\_genids**

*Table 111. Columns in the uap\_genids table*

Name	Datatype	Is PK	Null Option	Is FK	Description
entity_name	string (50)	Yes	NOT NULL	No	
entity_key	string (50)	Yes	NOT NULL	No	
key_value	integer	No	NULL	No	

---

## **uap\_lkup\_manager**

This table stores information for the IBM Marketing Operations Lookup Data Management module. This table was added in version 7.4.1.

*Table 112. Columns in the uap\_lkup\_manager table*

Name	Datatype	Is PK	Null Option	Is FK	Description
map_id	integer	Yes	NOT NULL	No	Unique ID of the form that contains the attribute.
internal_attr_name	string (100)	Yes	NOT NULL	No	Internal name of the attribute that contains the list of values.
value_id	string (100)	Yes	NOT NULL	No	ID of the individual value of the attribute.

---

## **uap\_object\_enum**

*Table 113. Columns in the uap\_object\_enum table*

Name	Datatype	Is PK	Null Option	Is FK	Description
obj_value	integer	Yes	NOT NULL	No	
obj_name	string (50)	No	NULL	No	
obj_desc	string (100)	No	NULL	No	

## uap\_object\_lock

This table stores information to support object locking; persistent object locking is used in clustered IBM Marketing Operations environments. This table was added in version 7.4.0.

*Table 114. Columns in the uap\_object\_lock table*

Name	Datatype	Is PK	Null Option	Is FK	Description
user_id	integer	No	NOT NULL	Yes	The ID of the user who locked this object. Foreign key to uap_user.
object_type	string (50)	Yes	NOT NULL	No	object type; ObjecttypeEnum
object_id	integer	Yes	NOT NULL	Yes	Unique ID of the object. The table to which this is a foreign key depends on the object type.
tab_id	string (50)	Yes	NOT NULL	No	ID of the tab that is locked, for example, summary or tracking. The default value, used when the object does not have tabs, is summary. You can also use this column to uniquely identify the non-tab item.
session_id	string (200)	No	NOT NULL	No	HTTP session ID.
parent_object_type	string (50)	No	NULL		The object type of this object's parent. If this object does not have a parent object, the value of this column is null.
parent_object_id	integer	No	NULL	Yes	The object ID of this object's parent object. The table to which this is a foreign key depends on the object type. If the current object does not have a parent object, the value of this column is -1.
locked_time	string (20)	No	NULL	No	The string value of the system timestamp for the date and time when the object was locked. (The column cannot use datetime because after saving <code>System.currentTimeMillis()</code> to the database, the millisecond part is incorrect.) This column is used to check broken lock.
host_ip	string (15)	No	NULL	No	IP address of the machine on which the IBM Marketing Operations server is running.
plan_server	string (50)	No	NULL	No	Name of the server (for WebLogic) or node (for WebSphere®).
client_ip	string (15)	No	NULL	No	IP address of the client machine that connected to the IBM Marketing Operations server.
lock_owner	string (20)	No	NULL	No	Who requested the lock. Possible values are ui and api.
lock_level	string (20)	No	NULL	No	Level at which to lock the object. Possible values are object and tab. If <code>lock_level="object"</code> , the lock key is object type + object ID. If <code>lock_level="tab"</code> , the lock key is object type + object ID + tab ID.
breakable	string (1)	No	NULL	No	Whether the lock is breakable. Possible values are y and n.

*Table 114. Columns in the uap\_object\_lock table (continued)*

Name	Datatype	Is PK	Null Option	Is FK	Description
display	string (256)	No	NULL	No	
object_independent	string (1)	No	NULL	No	

---

## **uap\_role\_user\_vis**

This table supports limited resource selection. It stores user visibilities for security roles defined in IBM Marketing Operations administration. This table was added in version 7.4.1.

*Table 115. Columns in the uap\_role\_user\_vis table*

Name	Datatype	Is PK	Null Option	Is FK	Description
role_id	integer	Yes	NOT NULL	No	
group_id	integer	Yes	NOT NULL	No	
team_id	integer	Yes	NOT NULL	No	

---

## **uap\_search**

This table stores saved searches.

*Table 116. Columns in the uap\_search table*

Name	Datatype	Is PK	Null Option	Is FK	Description
search_id	integer	Yes	NOT NULL	No	Unique ID generated by the system for each saved search.
search_criteria	string (1000+)	No	NULL	No	Criteria used to make up the saved search. The saved search is stored as an XML string, and its length is arbitrarily large.

---

## **uap\_status**

*Table 117. Columns in the uap\_status table*

Name	Datatype	Is PK	Null Option	Is FK	Description
status_code	string (20)	Yes	NOT NULL	No	
status_desc	string (100)	No	NULL	No	

---

## **uap\_system\_version**

*Table 118. Columns in the uap\_system\_version table*

Name	Datatype	Is PK	Null Option	Is FK	Description
software_version	string (20)	Yes	NOT NULL	No	
database_version	string (20)	Yes	NOT NULL	No	

*Table 118. Columns in the uap\_system\_version table (continued)*

Name	Datatype	Is PK	Null Option	Is FK	Description
database_action	string (20)	Yes	NOT NULL	No	
date_performed	date	Yes	NOT NULL	No	Column changed to not allows nulls in version 7.4.0.

---

## Chapter 15. Non-working days tables overview

The following tables contain information about non-working days.

---

### uap\_blackout\_dates

*Table 119. Columns in the uap\_blackout\_dates table*

Name	Datatype	Is PK	Null Option	Is FK	Description
blackout_id	integer	Yes	NOT NULL	No	Unique ID generated by the system, for each blackout (non-work) date.
type_id	integer	No	NOT NULL	Yes	Unique ID for the blackout category for this blackout date. Foreign key into uap_ml_bd_type.type_id.
name	string (255)	No	NULL	No	Name of the blackout/non-work date.
description	string (1024)	No	NULL	No	Description of the blackout/non-work date.
start_date	date	No	NOT NULL	No	Non-work date start date.
end_date	date	No	NOT NULL	No	Non-work date end date.
last_mod_date	date	No	NOT NULL	No	Last modification date of the item.
is_notified	integer	No	NOT NULL	No	Not currently used.

---

### uap\_ml\_bd\_typ

*Table 120. Columns in the uap\_ml\_bd\_typ table*

Name	Datatype	Is PK	Null Option	Is FK	Description
type_id	integer	Yes	NOT NULL	No	Unique ID generated by the system, for each blackout (non-work) category.
name	string (255)	No	NOT NULL	No	Name of the blackout category.
code	string (50)	No	NULL	No	User-defined code for this blackout category.
display	string (305)	No	NOT NULL	No	Display format for the name and code. Valid values: Name - Code or Code - Name.
display_no	integer	No	NULL	No	Not currently used.
flag_enabled	string (1)	No	NULL	No	Flag that determines whether the category is enabled (1) or disabled (0).



---

## Chapter 16. Out of office tables overview

The following tables contain information about out of office settings. These tables were added in version 8.6.0.

---

### uap\_ooo\_autoadd\_setting

*Table 121. Schema for uap\_ooo\_autoadd\_setting*

Name	Datatype	Is PK	Null Option	Is FK	Description
ooo_autoadd_setting	integer	Yes	NOT NULL	No	System-wide setting for automated addition of out of office delegates to project teams.
modified_date	date	No	NULL	No	Last modification date of the setting.
modified_by	integer	No	NULL	No	User ID of the last person to change the setting.

---

### uap\_outoffice\_hist

*Table 122. Schema for uap\_outoffice\_hist*

Name	Datatype	Is PK	Null Option	Is FK	Description
history_id	integer	Yes	NOT NULL	No	
outoffice_id	integer	No	NOT NULL	No	
owner_id	integer	No	NOT NULL	No	
deligated_user_id	integer	No	NOT NULL	No	
source_object_id	integer	No	NOT NULL	No	
source_object_type	integer	No	NOT NULL	No	
created_date	date	No	NOT NULL	No	

---

### uap\_outoffice\_setting

*Table 123. Schema for uap\_outoffice\_setting*

Name	Datatype	Is PK	Null Option	Is FK	Description
outoffice_setting_id	integer	Yes	NOT NULL	No	Primary key for out of office delegation settings.
is_on	integer	No	NOT NULL	No	Defaults to 0.
user_id	integer	No	NULL	No	User ID of the person setting out of office delegation.
workflow_delegate_user_id	integer	No	NULL	No	User ID of the person delegated to handle workflow and approval tasks.
approval_delegate_user_id	integer	No	NULL	No	User ID of the person delegated to handle stand-alone approvals and budget approvals.

*Table 123. Schema for uap\_outofoffice\_setting (continued)*

Name	Datatype	Is PK	Null Option	Is FK	Description
request_delegate_user_id	integer	No	NULL	No	User ID of the person delegated to handle project requests.
comments	string (255)	No	NULL	No	User-defined text to send with delegated tasks.
status	string (20)	No	NULL	No	
created_date	date	No	NULL	No	Creation date.
modified_date	date	No	NULL	No	Date of the last modification.

---

## Chapter 17. Program tables overview

The following tables contain information about programs.

---

### uap\_programs

Program data consists of base data and user-defined custom attributes data. The base data is saved in the uap\_programs table and user-defined data is saved in user-defined tables.

Name	Datatype	Is PK	Null Option	Is FK	Description
program_id	integer	Yes	NOT NULL	No	Unique ID generated by the system for each program.
name	string (256)	No	NULL	No	Size of the column was changed 256 for version 7.4.0.
description	string (1024)	No	NULL	No	
template_name	string (50)	No	NULL	No	Program template name.
program_code	string (100)	No	NULL	No	
status_code	string (20)	No	NULL	No	Program status. Values: LATE, OVERDUE.
state_code	string (20)	No	NULL	No	Program state. Values: NOT STARTED, IN PROGRESS, ON HOLD, CANCELLED, COMPLETED.
start_date	date	No	NULL	No	Program target start date.
end_date	date	No	NULL	No	Program target end date.
actual_st_date	date	No	NULL	No	Program actual start date.
actual_end_date	date	No	NULL	No	Program actual end date. Note for start_date, end_date, actual_st_date, and actual_end_date: We only use two of these columns. One set is used and overloaded (both forecast and actual stored there) and there is a relationship to the status_code column.
metric_template	string (50)	No	NULL	No	Program metrics template name. Null if the program does not have any metrics.
created_by	integer	No	NULL	No	User who created the program.
created_date	date	No	NULL	No	Date and time when the program was created. System generated.
modified_by	integer	No	NULL	No	User who last modified the program.
last_mod_date	date	No	NULL	No	Date and time when the program was last modified. System generated.
sec_policy_id	integer	No	NULL	No	Project security policy in which the current project is created. The value determines the visibility for the project.
mt_finalized_date	date	No	NULL	No	
mt_mod_date	date	No	NULL	No	

Name	Datatype	Is PK	Null Option	Is FK	Description
budget_alloc_granularity	integer	No	NOT NULL	No	<p>Specifies the budget granularity for the plan.</p> <ul style="list-style-type: none"> <li>• 0 = quarterly</li> <li>• 1 = monthly</li> <li>• 2 = weekly</li> </ul>

---

## uap\_prgrm\_hist

Table 124. Columns in the uap\_prgrm\_hist table

Name	Datatype	Is PK	Null Option	Is FK	Description
Program_id	integer	Yes	NOT NULL	Yes	Unique ID generated by the system for each Program.
seq_no	integer	Yes	NOT NULL	No	Unique ID generated by the system, for each Program Revision history.
user_id	integer	No	NULL	Yes	Program modified by user.
last_mod_date	date	No	NULL	No	Program Last Modified date.
status_code	string (20)	No	NULL	No	Program status.
Descriptions	string (1024)	No	NULL	No	Program Revision History Descriptions.
cur_state	string (20)	No	Null	No	Program current state.
prev_state	string (20)	No	Null	No	Program previous state.

---

## uap\_prgrm\_metrics

Table 125. Columns in the uap\_prgrm\_metrics table

Name	Datatype	Is PK	Null Option	Is FK	Description
program_id	integer	Yes	NOT NULL	Yes	Unique ID generated by the system for each program.
metric_id	string (50)	Yes	NOT NULL	No	
show_as_rollup	string (1)	Yes	NOT NULL	No	
display_name	string (100)	No	NULL	No	
display_order	integer	No	NULL	No	
input_method	string (20)	No	NULL	No	
formula	string (1024)	No	NULL	No	
units	string (20)	No	NULL	No	
display_format	string (20)	No	NULL	No	
metric_precision	integer	No	NULL	No	
description	string (1024)	No	NULL	No	
metric_columns	integer	No	NULL	No	

*Table 125. Columns in the uap\_prgrm\_metrics table (continued)*

Name	Datatype	Is PK	Null Option	Is FK	Description
metric_value1	floating pt.	No	NULL	No	
metric_value2	floating pt.	No	NULL	No	
metric_value3	floating pt.	No	NULL	No	
metric_value4	floating pt.	No	NULL	No	
metric_value5	floating pt.	No	NULL	No	
metric_rollup1	floating pt.	No	NULL	No	
metric_rollup2	floating pt.	No	NULL	No	
metric_rollup3	floating pt.	No	NULL	No	
metric_rollup4	floating pt.	No	NULL	No	
metric_rollup5	floating pt.	No	NULL	No	
metric1_nan	string (20)	No	NULL	No	
metric2_nan	string (20)	No	NULL	No	
metric3_nan	string (20)	No	NULL	No	
metric4_nan	string (20)	No	NULL	No	
metric5_nan	string (20)	No	NULL	No	
grp_id	string(50)	No	NULL	No	
planned_value	floating pt.	No	NULL	No	
planned_nan	string(20)	No	NULL	No	
is_planned_value	string (1)	No	NULL	No	
alloc_total	floating pt.	No	NULL	No	
is_visible	string (1)	No	NULL	No	

---

## **uap\_prgrm\_msgboard**

*Table 126. Columns in the uap\_prgrm\_msgboard table*

Name	Datatype	Is PK	Null Option	Is FK	Description
program_id	integer	Yes	NOT NULL	Yes	Unique ID generated by the system for each program.
msg_id	integer	Yes	NOT NULL	No	Unique ID generated by the system, for the program message board.
post_datetime	date	No	NOT NULL	No	Program message posted date.
user_id	integer	No	NOT NULL	Yes	Message posted by the user. FK to uap_user.user_id.
msg_text	string (1024)	No	NULL	No	Text of the message.
recipients	string (512)	No	NULL	No	List of recipients if the message is emailed.

---

## uap\_prgrm\_mt\_cols

Table 127. Columns in the uap\_prgrm\_mt\_cols table

Name	Datatype	Is PK	Null Option	Is FK	Description
program_id	integer	Yes	NOT NULL	Yes	Unique ID generated by the system for each program.
col_taborder	integer	Yes	NOT NULL	No	Metrics display order.
col_display	string (100)	No	NULL	No	Metric display name.
flag_target	string (1)	No	NULL	No	Flag if this metric is a target.
dimension_type	string (20)	No	NULL	No	Metric dimension type.

---

## uap\_prgrm\_mt\_grps

This table contains details about metric groups for programs.

Table 128. Columns in the uap\_prgrm\_mt\_grps table

Name	Datatype	Is PK	Null Option	Is FK	Description
program_id	integer	Yes	NOT NULL	Yes	Unique ID generated by the system for each program.
grp_id	string (50)	Yes	NOT NULL	No	Metric group ID.
grp_display	string (100)	No	NULL	No	Metric group display name.
grp_display_order	integer	No	NULL	No	Metric group display order.

---

## uap\_prgrm\_mt\_hist

Table 129. Columns in the uap\_prgrm\_mt\_hist table

Name	Datatype	Is PK	Null Option	Is FK	Description
program_id	integer	Yes	NOT NULL	Yes	Unique ID generated by the system for each program.
hist_datetime	date	Yes	NOT NULL	No	
metric_id	string (50)	Yes	NOT NULL	No	
metric_value1	floating pt.	No	NULL	No	
metric_value2	floating pt.	No	NULL	No	
metric_value3	floating pt.	No	NULL	No	
metric_value4	floating pt.	No	NULL	No	
metric_value5	floating pt.	No	NULL	No	
metric_rollup1	floating pt.	No	NULL	No	
metric_rollup2	floating pt.	No	NULL	No	
metric_rollup3	floating pt.	No	NULL	No	
metric_rollup4	floating pt.	No	NULL	No	
metric_rollup5	floating pt.	No	NULL	No	
metric1_nan	string (20)	No	NULL	No	

*Table 129. Columns in the uap\_prgm\_mt\_hist table (continued)*

Name	Datatype	Is PK	Null Option	Is FK	Description
metric2_nan	string (20)	No	NULL	No	
metric3_nan	string (20)	No	NULL	No	
metric4_nan	string (20)	No	NULL	No	
metric5_nan	string (20)	No	NULL	No	

---

## **uap\_prgm\_notify**

*Table 130. Columns in the uap\_prgm\_notify table*

Name	Datatype	Is PK	Null Option	Is FK	Description
program_id	integer	Yes	NOT NULL	Yes	Unique ID generated by the system for each program.
event_type	integer	Yes	NOT NULL	No	
user_id	integer	Yes	NOT NULL	Yes	
delivery_mask	integer	No	NOT NULL	No	

---

## **uap\_prgm\_project**

This table contains information about relationships between programs and their associated projects.

*Table 131. Columns in the uap\_prgm\_project table*

Name	Datatype	Is PK	Null Option	Is FK	Description
program_id	integer	Yes	NOT NULL	No	Unique ID generated by the system for each program. Foreign key to uap_programs.progam_id.
project_id	integer	Yes	NOT NULL	Yes	Unique ID generated by the system for each project. Indicates the ID for a project linked to this program. Foreign key to uap_projects.project_id.
plan_parea_id	integer	No	NULL	No	Plan - program area ID. This value is null if the program is not linked to any program area.
plan_id	integer	No	NULL	No	Plan ID. This value is null if program is not linked to any plan.

---

## uap\_prgrm\_users

This table stores details about the program users.

Table 132. Columns in the uap\_prgrm\_users table

Name	Datatype	Is PK	Null Option	Is FK	Description
program_id	integer	Yes	NOT NULL	Yes	Unique ID generated by the system for each program. Foreign key to uap_programs.progam_id.
user_id	integer	Yes	NOT NULL	Yes	Program team member internal user ID. Foreign key to uap_user.user_id.
mem_type_id	integer	Yes	NOT NULL	Yes	Program member type role ID. Values: Owner, Requestor, Participant, and Observer/Advisor. Foreign key to uap_member_type.mem_type_id.

---

## uap\_user\_pref

This table stores the customizations and preferences selected by IBM Marketing Operations users. For example, each user can select a home or starting screen to display on login.

Table 133. Columns in the uap\_user\_pref table

Name	Datatype	Is PK	Null Option	Is FK	Description
user_id	integer	Yes	NOT NULL	Yes	User identifier. Foreign key into uap_user.
ufolder_id	integer	No	NULL	No	
default_module	string (20)	No	NULL	No	The module this user sees on login to IBM Marketing Operations; for example, Approvals.
default_view	string (20)	No	NULL	No	Default view for the module: list or calendar.
default_cal_opt	string (1)	No	NULL	No	
default_menu_group	string (64)	No	NULL	No	Defines for each user the left menu group which displays upon sign-in. Added in version 7.3.
default_sec_policy	integer	No	NULL	No	ID for the default security policy for this user.
appr_folder_id	integer	No	NULL	No	The approval folder for the user.
hlth_mail_sbscrptn	integer	No	NULL	No	Indicates whether the user subscribes to daily notifications by email for project health status calculations.

---

## Chapter 18. Project tables overview

The following tables contain information about projects.

### uap\_projects

This table stores base data for projects and project requests. (Data that corresponds to user-defined attributes is stored in the user-defined tables.)

**Note:** A row does not have values for both `start_date` and `actual_st_date`, or both `end_date` and `actual_end_date`. Only one set of date columns is used per row. The set that is used is overloaded (contains both forecast and actual dates) and there is a relationship to the `status_code` column.

*Table 134. Columns in the uap\_projects table*

Name	Datatype	Is PK	Null Option	Is FK	Description
project_id	integer	Yes	NOT NULL	No	Unique ID generated by the system for each project and project request.
name	string (256)	No	NULL	No	Name of the project or project request. Version 7.4 increased the size to 256.
description	string (1024)	No	NULL	No	
status_code	string (20)	No	NULL	No	Current status of the project. Valid values are LATE and OVERDUE.
start_date	date	No	NULL	No	Project target start date.
end_date	date	No	NULL	No	Project target end date.
duration	integer	No	NULL	No	
created_by	integer	No	NULL	No	ID of the user who created the project or project request.
created_date	date	No	NULL	No	Date and time the project or project request was created.
modified_by	integer	No	NULL	No	ID of the user who last modified the project or project request.
last_mod_date	date	No	NULL	No	Date when the project or project request was last modified.
pcnt_compl					Added in version 9.0.
flag_anchor					Added in version 9.0.
req_comp_date	date	No	NULL	No	Project request completion date. This column is null if the project request is not completed or if the entry is a project.
wf_steps					Added in version 9.0.

Table 134. Columns in the uap\_projects table (continued)

Name	Datatype	Is PK	Null Option	Is FK	Description
state_code	string (20)	No	NULL	No	<p>Current state of the project or project request.</p> <p>For project requests, the following values are valid.</p> <ul style="list-style-type: none"> <li>• DRAFT</li> <li>• SUBMITTED</li> <li>• RETURNED</li> <li>• ACCEPTED</li> <li>• CANCELLED</li> </ul> <p>For projects, the following values are valid.</p> <ul style="list-style-type: none"> <li>• NOT_STARTED</li> <li>• IN_PROGRESS</li> <li>• ON_HOLD</li> <li>• CANCELLED</li> <li>• COMPLETED</li> </ul>
template_name	string (50)	No	NULL	No	Name of the project template.
metric_template	string (50)	No	NULL	No	Project metric template name. The value for this column is null if the project does not have any metrics.
error_code					Added in version 9.0.
actual_st_date	date	No	NULL	No	Project actual start date.
proj_code	string (100)	No	NULL	No	Added in version 9.0.
flag_proj_request	string (1)	No	NULL	No	<p>Whether it is a project or project request. The following values are valid.</p> <ul style="list-style-type: none"> <li>• Y = project request</li> <li>• N or null = project</li> </ul>
proj_request_id	integer	No	NULL	No	ID of the project request from which this project was created. The value of this column is null if the item is a project request or a project that was not created from a project request.
sec_policy_id	integer	No	NULL	No	Project security policy in which the current project is created. The value determines the visibility for the project.
req_submit_date	date	No	NULL	No	Project request submit date. This column is null until the request is submitted or if the entry is a project.
actual_end_date	date	No	NULL	No	Project actual end date.
campaign_id	integer	No	NULL	No	Added in version 9.0.
mt_mod_date	date	No	NULL	No	Added in version 9.0.
mt_finalized_date	date	No	NULL	No	Added in version 9.0.
mt_import_date	date	No	NULL	No	Added in version 9.0.
parent_project_id	integer	No	NULL	No	For a subproject, this column contains the ID for the (direct) parent project.

*Table 134. Columns in the uap\_projects table (continued)*

Name	Datatype	Is PK	Null Option	Is FK	Description
root_project_id	integer	No	NULL	No	For a subproject, this column contains the ID for the top-level parent project; that is, this highest-level ancestor for the project.
proj_level	integer	No	NULL	No	For a subproject, the number of levels down the hierarchy at which this project occurs. For example, if the project has a single parent project, the value of proj_level is 1.
sec_policy_model	integer	No	NOT NULL	No	Stores the selected security policy model for the project template. <ul style="list-style-type: none"> <li>• 1 = Template Security Model</li> <li>• 2 = User Security Model</li> </ul>
budget_alloc_granularity	integer	No	NOT NULL	No	Specifies the budget granularity for the project. <ul style="list-style-type: none"> <li>• 0 = quarterly</li> <li>• 1 = monthly</li> <li>• 2 = weekly</li> </ul>
health_status	string (32)	No	NULL	Yes	The current health status of the project as calculated by the daily automated batch job. Foreign key to uap_proj_health_daily.health_status. Added in version 9.0.
health_calc_date	datetime	No	NULL	No	The date and time of the last project health calculation. Added in version 9.0.
percentage_complete	float	No	NULL	Yes	The overall completion percentage that is calculated for the project. Foreign key to uap_proj_health_daily. Added in version 9.0.

## **uap\_proj\_attach**

*Table 135. Columns in the uap\_proj\_attach table*

Name	Datatype	Is PK	Null Option	Is FK	Description
attach_id	integer	Yes	NOT NULL	No	Unique ID that is generated by the system for each project attachment.
attach_orig_file	string (255)	No	NULL	No	Original file name of the attachment.
enable	string (1)	No	NULL	No	Defines the markup state for a project attachment for the Markup Anywhere feature. This column was added in version 7.3.

---

## uap\_proj\_folders

Table 136. Columns in the uap\_proj\_folders table

Name	Datatype	Is PK	Null Option	Is FK	Description
proj_folder_id	integer	Yes	NOT NULL	No	Unique ID that is generated by the system for each project attachments category or folder.
Folder_name	string (50)	No	NULL	No	Internal name of the project attachments category or folder.
Parent_folder	integer	No	NULL	No	Unique ID of the parent folder of this project attachments category or folder.
project_id	integer	No	NULL	Yes	Unique ID of the project. Foreign key to uap_projects.

---

## uap\_proj\_hist

This table contains details about the project history.

Table 137. Schema for uap\_proj\_hist

Name	Datatype	Is PK	Null Option	Is FK	Description
seq_no	integer	Yes	NOT NULL	No	Unique number generated by the system for project revision history.
user_id	integer	No	NULL	No	ID of the user who modified the project.
on_behalf_user_id	integer	No	NULL	No	
last_mod_date	date	No	NULL	No	Date on which the project was last modified.
status_code	string (20)	No	NULL	No	Project status
project_id	integer	Yes	NOT NULL	Yes	Unique ID generated by the system for each project or project request.
cur_state	string (20)	No	NULL	No	Current state of the project.
comments	string	No	NULL	No	Comments for recipients.
prev_state	string (20)	No	NULL	No	Previous state of the project.

---

## uap\_proj\_job

This table stores data that is generated by the automated batch jobs that calculate project health scores.

Added in version 9.0 to support features for calculating and displaying an overall project status.

Table 138. Columns in the uap\_proj\_job table

Name	Datatype	Is PK	Null Option	Is FK	Description
job_id	integer	Yes	NOT NULL	No	The unique, identifying number for the job.
job_type	string (50)	Yes	NOT NULL	No	
start_date	datetime	No	NOT NULL	No	Actual start date of the job.

Table 138. Columns in the uap\_proj\_job table (continued)

Name	Datatype	Is PK	Null Option	Is FK	Description
end_date	datetime	No	NULL	No	Actual end date of the job.
tot_proj_count	integer	No	NULL	No	
calc_proj_count	integer	No	NULL	No	
status	string (100)	No	NULL	No	The status of the job: In Progress or Completed.
failure_reason	string (1024)	No	NULL	No	The reason for job failure, if any.

## uap\_proj\_metrics

This table holds metrics for the project, both user-entered and computed by the system.

Table 139. Schema for umo\_proj\_metrics

Name	Datatype	Is PK	Null Option	Is FK	Description
metric_id	string (50)	Yes	NOT NULL	No	Metric ID name.
project_id	integer	Yes	NOT NULL	Yes	Unique ID generated by the system for each project and project request. Foreign key to uap_projects.
display_name	string (100)	No	NULL	No	Metric display name.
display_order	integer	No	NULL	No	Metric display tab order
input_method	string (20)	No	NULL	No	Metric value input method. The following values are valid: USER, COMPUTE, LINK, and ROLLUP.
formula	string (1024)	No	NULL	No	Formula used to compute the metric. The value cannot be null if input_method is COMPUTE. The value is null if input_method is USER.
units	string (20)	No	NULL	No	Metric unit type.
display_format	string (20)	No	NULL	No	Metric value display format.
metric_precision	integer	No	NULL	No	Metric value decimal precision.
description	string (1024)	No	NULL	No	
metric_columns	integer	No	NULL	No	Number of metric dimensions or columns. Maximum number of supported dimensions or columns is 5.
metric_value1	floating pt	No	NULL	No	Metric value 1.
metric_value2	floating pt	No	NULL	No	Metric value 2.
metric_value3	floating pt	No	NULL	No	Metric value 3.
metric_value4	floating pt	No	NULL	No	Metric value 4.
metric_value5	floating pt	No	NULL	No	Metric value 5.
grp_id	string (50)	No	NULL	No	Metric group ID. Foreign key to uap_metric_grps.

*Table 139. Schema for umo\_proj\_metrics (continued)*

Name	Datatype	Is PK	Null Option	Is FK	Description
metric1_nan	string (20)	No	NULL	No	Metric 1 value internal computation errors/conditions saved for display.
metric2_nan	string (20)	No	NULL	No	Metric 2 value internal computation errors/conditions saved for display.
metric3_nan	string (20)	No	NULL	No	Metric 3 value internal computation errors/conditions saved for display.
metric4_nan	string (20)	No	NULL	No	Metric 4 value internal computation errors/conditions saved for display.
metric5_nan	string (20)	No	NULL	No	Metric 5 value internal computation errors/conditions saved for display.
planned_value	integer	No	NULL	No	Planned metric value.
planned_nan	string (20)	No	NULL	No	Planned metric value internal computation errors/conditions saved for display.
is_planned_value	string (1)	No	NULL	No	Indicates whether this metric is a planned value. If this value is Y, then this metric has a planned value.
show_as_rollup	string (1)	No	NULL	No	Indicates whether this metric shows in rollup display table.
is_visible	string (1)	No	NULL	No	Flag if this metric is visible in the UI. If this value is Y, this metric appears in the UI. Otherwise, it is hidden and used for computation purpose.

---

## uap\_metric\_cols

*Table 140. Columns in the uap\_metric\_cols table*

Name	Datatype	Is PK	Null Option	Is FK	Description
project_id	integer	Yes	NOT NULL	Yes	Unique ID generated by the system for each project and project request. Foreign key to uap_projects.
col_taborder	integer	Yes	NOT NULL	No	Metrics display order.
col_display	string (100)	No	NULL	No	Metric display name.
flag_target	string (1)	No	NULL	No	Flag whether this metric is a target.
dimension_type	string (20)	No	NULL	No	Metric dimension type.

---

## uap\_metric\_grps

This table stores details about metric groups.

*Table 141. Columns in the uap\_metric\_grps table*

Name	Datatype	Is PK	Null Option	Is FK	Description
project_id	integer	Yes	NOT NULL	Yes	Unique ID that is generated by the system for each project and project request.
grp_id	string (50)	Yes	NOT NULL	No	ID of the metric group.

*Table 141. Columns in the uap\_metric\_grps table (continued)*

Name	Datatype	Is PK	Null Option	Is FK	Description
grp_display	string (100)	No	NULL	No	Display name for the metric group.
grp_display_order	integer	No	NULL	No	Display order of the metric group.

---

## **uap\_proj\_health\_rule**

This table stores the project health rules added through the user interface.

Added in version 9.0 to support features for calculating and displaying an overall project status.

*Table 142. Columns in the uap\_proj\_health\_rule table*

Name	Datatype	Is PK	Null Option	Is FK	Description
health_rule_id	integer	Yes	NOT NULL	Yes	Foreign key to uap_tt_templates and uap_proj_health_daily.
rule_name	string (100)	No	NOT NULL	No	The supplied identifying name.
description	string (1024)	No	NULL	No	The supplied description.
rule_xml	string (MAX)	No	NULL	No	The XML for the entered rule.
rule_identifier	string (30)	No	NULL	No	
status	string (10)	No	NULL	No	The status of the rule.
created_by	integer	No	NULL	Yes	User ID of the user who created this rule. Foreign key to uap_users.user_id.
creation_date	datetime	No	NULL	No	Time stamp for when the rule was created.
modified_by	integer	No	NULL	Yes	User ID of the user who last modified this rule. Foreign key to uap_users.user_id.
modified_date	datetime	No	NULL	No	Time stamp for when the rule was last modified.

---

## **uap\_proj\_health\_status**

This table stores the labels and colors to associate with the supplied project health status values.

Added in version 9.0 to support features for calculating and displaying an overall project status.

*Table 143. Columns in the uap\_proj\_health\_status table*

Name	Datatype	Is PK	Null Option	Is FK	Description
health_status	string (30)	Yes	NOT NULL	Yes	The internal, predefined status: <ul style="list-style-type: none"><li>• Healthy</li><li>• Warning</li><li>• Critical</li><li>• Unknown</li></ul> Foreign key to uap_proj_health_daily.health_status.
status_label	string (50)	No	NULL	No	The name to display in the user interface for the status.
status_color	string (7)	No	NULL	No	The color to display in the user interface for the status.
status_weightage	integer	No	NULL	No	
is_default	integer	No	NOT NULL	No	Identifies the status to assign by default when the conditions in a health status rule do not resolve to a different rule.
seq_no	integer	No	NOT NULL	No	Identifier for a health status entry. The system increments the seq_no each time a change is made.
modified_by	integer	No	NULL	Yes	User ID of the user who last modified this rule. Foreign key to uap_users.user_id.
modified_date	datetime	No	NULL	No	Time stamp for when the rule was last modified.

## **uap\_proj\_health\_daily**

This table stores the health score for a project as calculated by the daily automated batch job on a specific day.

Added in version 9.0 to support features for calculating and displaying an overall project status.

*Table 144. Columns in the uap\_proj\_health\_daily table*

Name	Datatype	Is PK	Null Option	Is FK	Description
project_id	integer	Yes	NOT NULL	Yes	Foreign key to uap_projects.project_id.
health_rule_id	integer	No	NOT NULL	Yes	Foreign key to uap_proj_health_rule.health_rule_id.
health_status	string (30)	No	NOT NULL	Yes	Foreign key to uap_proj_health_status.health_status.
day	integer	Yes	NOT NULL	No	The day the daily automated batch job ran and computed the project health scores.
month	integer	Yes	NOT NULL	No	The month the daily automated batch job ran and computed the project health scores.
year	integer	Yes	NOT NULL	No	The year the daily automated batch job ran and computed the project health scores.

*Table 144. Columns in the uap\_proj\_health\_daily table (continued)*

Name	Datatype	Is PK	Null Option	Is FK	Description
percent_task_overdue	float	No	NULL	No	Percentage of tasks that the daily automated batch job found to be overdue.
percent_milestone_overdue	float	No	NULL	No	Percentage of milestones that the daily automated batch job found to be overdue.
percent_task_time_overdue	float	No	NULL	No	Percentage of time that tasks were overdue as computed by the daily automated batch job.
percent_milestone_time_overdue	float	No	NULL	No	Percentage of time that milestones were overdue as computed by the daily automated batch job.
percent_budget_overrun	float	No	NULL	No	Total estimated budget less actual expenses in comparison to the total estimated budget as computed by the daily automated batch job.
percent_project_complete	float	No	NULL	No	The completion percentage of the overall project.

---

## **uap\_proj\_health\_monthly**

This table stores health scores and metrics that are calculated for a project during a specific month. Used by the Project Health (Monthly) report.

Added in version 9.0 to support features for calculating and displaying an overall project status.

*Table 145. Columns in the uap\_proj\_health\_monthly table*

Name	Datatype	Is PK	Null Option	Is FK	Description
project_id	integer	Yes	NOT NULL	Yes	Foreign key to uap_projects.project_id.
month	integer	Yes	NOT NULL	No	The month for which the project health computations were made.
year	integer	Yes	NOT NULL	No	The year for which the health computations were made.
percent_healthy	float	No	NULL	No	During the specified month, the percentage of time the Healthy status was given to a project.
percent_warning	float	No	NULL	No	During the specified month, the percentage of time the Warning status was given to project.
percent_critical	float	No	NULL	No	During the specified month, the percentage of time the Critical status was given to project.
percent_default	float	No	NULL	No	During the specified month, the percentage of time the Unknown status was given to project.
health_score	integer	No	NOT NULL	No	The aggregated health score for the project for the indicated month and year.

---

## uap\_proj\_msgboard

Table 146. Columns in the uap\_proj\_msgboard table

Name	Datatype	Is PK	Null Option	Is FK	Description
project_id	integer	Yes	NOT NULL	Yes	Unique ID that is generated by the system for each project and project request. Foreign key to uap_projects.
msg_id	integer	Yes	NOT NULL	No	Unique ID that is generated by the system for each message on the project message board.
post_datetime	date	No	NOT NULL	No	Date the message was posted on the project message board.
user_id	integer	No	NOT NULL	No	Unique ID of the user who posted the message. Foreign key to uap_user.
msg_text	string (1024)	No	NULL	No	Message text.
recipients	string (512)	No	NULL	No	List of recipients if the message is emailed.

---

## uap\_proj\_mtc\_hist

Table 147. Columns in the uap\_proj\_mtc\_hist table

Name	Datatype	Is PK	Null Option	Is FK	Description
metric_id	string (50)	Yes	NOT NULL	Yes	Metric ID name.
project_id	integer	Yes	NOT NULL	Yes	Unique ID generated by the system for each project and project request.
hist_datetime	date	Yes	NOT NULL	No	
metric_value1	floating pt	No	NULL	No	
metric_value2	floating pt	No	NULL	No	
metric_value3	floating pt	No	NULL	No	
metric_value4	floating pt	No	NULL	No	
metric_value5	floating pt	No	NULL	No	
metric1_nan	string (20)	No	NULL	No	
metric2_nan	string (20)	No	NULL	No	
metric3_nan	string (20)	No	NULL	No	
metric4_nan	string (20)	No	NULL	No	
metric5_nan	string (20)	No	NULL	No	

## uap\_proj\_notify

Table 148. Columns in the uap\_proj\_notify table

Name	Datatype	Is PK	Null Option	Is FK	Description
project_id	integer	Yes	NOT NULL	Yes	Unique ID generated by the system for each project and project request. Foreign key to uap_projects.
event_type	integer	Yes	NOT NULL	No	
user_id	integer	Yes	NOT NULL	Yes	
delivery_mask	integer	No	NOT NULL	No	

## uap\_proj\_recp

This table stores recipients settings while creating project requests. This table was added in version 7.5.

Table 149. Schema for uap\_proj\_recp

Name	Datatype	Is PK	Null Option	Is FK	Description
step_id	integer	Yes	NOT NULL	No	Unique identifier generated by the system for each recipient step.
project_id	integer	No	NULL	Yes	Unique identifier for the project that contains this recipient step. Foreign key to uap_projects.
assignment_type	integer	No	NULL	No	Type of assignment.
role_id	integer	No	NULL	Yes	Foreign key to uap_ml_role. Where multiple roles are added.
rule_id	integer	No	NULL	Yes	Foreign key from rule table.
duration	string (1024)	No	NOT NULL	No	Duration for the recipient step.
sequence	integer	No	NOT NULL	No	Sequence of recipient.
required	string (1)	No	NULL	No	Whether recipient is required or optional.
proj_owner	string (1)	No	NULL	No	Whether recipient will become project owner.
instructions	string (1024)	No	NULL	No	Instructions for recipient by admin or by request owner.
submitted_date	date	No	NULL	No	Date on which request is submitted to recipient for response.
accept_deny	string (1)	No	NULL	No	Recipient's reply (accepted or denied) to the project request.
user_comments	string (1024)	No	NULL	No	Comments entered by the recipient while responding to the request.
responded_date	date	No	NULL	No	Date on which recipient submitted the response.
scheduled_due_date	date	No	NULL	No	Due date for the recipient's response. This date is calculated based on the submitted date and the duration of the recipient step.

---

## uap\_proj\_role

Table 150. Columns in the uap\_proj\_role table

Name	Datatype	Is PK	Null Option	Is FK	Description
project_id	integer	Yes	NOT NULL	Yes	Unique ID generated by the system for each project and project request. Foreign key to uap_projects.
role_id	integer	Yes	NOT NULL	Yes	Project request role/type ID. Foreign key to uap_ml_role.
role_type	integer	Yes	NULL	No	Role type.

---

## uap\_proj\_users

This table contains the basic data for all project users.

Table 151. Columns in the uap\_proj\_users table

Name	Datatype	Is PK	Null Option	Is FK	Description
proj_id	integer	Yes	NOT NULL	Yes	Unique ID generated by the system for each project and project request. Foreign key to uap_projects.
user_id	integer	Yes	NOT NULL	Yes	Project team member internal user ID.
mem_type_id	integer	Yes	NOT NULL	Yes	Project member type role ID. Possible values are Owner, Requestor, Participant, and Observer/Advisor. Foreign key to uap_member_type.
team_id	integer	No	NOT NULL	No	Team ID. This column was added in version 7.4.0.
recipient_id	integer	Yes	NOT NULL	Yes	Recipient ID. Foreign key to uap_proj_recip. This column was added in version 7.5.

---

## uap\_proj\_usr\_role

Table 152. Columns in the uap\_proj\_usr\_role table

Name	Datatype	Is PK	Null Option	Is FK	Description
project_id	integer	Yes	NOT NULL	Yes	Unique ID generated by the system for each project and project request.
user_id	integer	Yes	NOT NULL	No	Project role user ID.
Role_id	integer	Yes	NOT NULL	No	Resource type role ID.
Role_type	integer	Yes	NULL	No	Role type.

## **uap\_recip\_setting**

This table stores recipient settings configured by the administrator. This table was added in version 7.5.

*Table 153. Columns in the uap\_recip\_setting table*

Name	Datatype	Is PK	Null Option	Is FK	Description
step_id	integer	Yes	NOT NULL	No	Unique identifier generated by the system for each row in the table.
template_id	integer	No	NOT NULL	Yes	Unique identifier for the template. Foreign key to uap_tt_template.
role_id	integer	No	NULL	Yes	Role ID for the role of the selected recipient. Foreign key to uap_roles.
assignment_id	integer	Yes	NOT NULL	No	The method by which this recipient was assigned the request. The following values are valid:  R Requester Assigned  A Admin Assigned  U Rule Assigned
user_id	integer	No	NULL	No	If recipient was added by admin, then that user ID would be in this column.
team_id	integer	No	NULL	No	If recipient was added by admin, then that team ID would be in this column.
rule_id	integer	No	NULL	Yes	Unique identifier for the rule that assigned the recipient. Foreign key to uap_template_rule.
duration	string (20)	No	NOT NULL	No	Duration for the reviewer step.
required	string (1)	No	NULL	No	Whether the recipient is required or optional.
sequence	integer	No	NOT NULL	No	Sequence of the recipient.
proj_owner	string (1)	No	NULL	No	Whether this recipient will become the project owner.
instructions	string (1024)	No	NULL	No	Instructions for reviewers by admin.

## **uap\_tt\_proj\_req**

This table stores project template request setup data. This table was added in version 7.5.

*Table 154. Columns in the uap\_tt\_proj\_req table*

Name	Datatype	Is PK	Null Option	Is FK	Description
req_setup_id	integer	Yes	NOT NULL	No	Unique identifier generated by the system for each row in the table.
template_id	integer	No	NOT NULL	Yes	Template ID for the project template. Foreign key into uap_tt_template.

*Table 154. Columns in the uap\_tt\_proj\_req table (continued)*

Name	Datatype	Is PK	Null Option	Is FK	Description
description	string (300)	No	NULL	No	The request description of the project template.
reapproval_rule	string (2)	No	NULL	No	Template settings related to the reapproval rule.
add_del_recip	string (2)	No	NULL	No	Template settings related to "add/delete recipients" rights to user.

---

## Chapter 19. Strategic plan tables overview

The following tables contain information about plans.

---

### uap\_plans

*Table 155. Columns in the uap\_plans table*

Name	Datatype	Is PK	Null Option	Is FK	Description
plan_id	integer	Yes	NOT NULL	No	
name	string (256)	No	NULL	No	Size of the column was changed to 256 by version 7.4.0.
description	string (1024)	No	NULL	No	
plan_code	string (100)	No	NULL	No	
sec_policy_id	integer	No	NULL	No	
status_code	string (100)	No	NULL	No	
state_code	string (20)	No	NULL	No	
metric_template	string (100)	No	NULL	No	
Created_date	date	No	NULL	No	
Created_by	integer	No	NULL	No	
last_mod_date	date	No	NULL	No	
modified_by	integer	No	NULL	No	
bus_area_id	integer	No	NULL	No	
fiscal_year	integer	No	NULL	No	
actual_st_date	date	No	NULL	No	Actual start date.
actual_end_date	date	No	NULL	No	Actual end date.
budget_alloc_granularity	integer	No	NOT NULL	No	Specifies the budget granularity for the plan. <ul style="list-style-type: none"><li>• 0 = quarterly</li><li>• 1 = monthly</li><li>• 2 = weekly</li></ul>

---

### uap\_mt\_threshold

Name	Datatype	Is PK	Null Option	Is FK	Description
metric_id	string (50)	Yes	NOT NULL	No	
threshold_id	string (20)	Yes	NOT NULL	No	
min_value	floating pt	No	NOT NULL	No	
max_value	floating pt	No	NOT NULL	No	
color	string (20)	No	NULL	No	

---

## **uap\_parea\_metrics**

Name	Datatype	Is PK	Null Option	Is FK	Description
metric_id	string (50)	Yes	NOT NULL	No	
plan_parea_id	integer	Yes	NOT NULL	Yes	
show_as_rollup	string (1)	Yes	NOT NULL	No	
display_order	integer	No	NULL	No	
input_method	string (20)	No	NULL	No	
formula	string (1024)	No	NULL	No	
display_name	string (100)	No	NULL	No	
units	string (20)	No	NULL	No	
display_format	string (20)	No	NULL	No	
metric_precision	integer	No	NULL	No	
description	string	No	NULL	No	
metric_columns	integer	No	NULL	No	
metric_value1	floating pt	No	NULL	No	
metric_value2	floating pt	No	NULL	No	
metric_value3	floating pt	No	NULL	No	
metric_value4	floating pt	No	NULL	No	
metric_value5	floating pt	No	NULL	No	
metric_rollup1	floating pt	No	NULL	No	
metric_rollup2	floating pt	No	NULL	No	
metric_rollup3	floating pt	No	NULL	No	
metric_rollup4	floating pt	No	NULL	No	
metric_rollup5	floating pt	No	NULL	No	
metric1_nan	string (20)	No	NULL	No	
metric2_nan	string (20)	No	NULL	No	
metric3_nan	string (20)	No	NULL	No	
metric4_nan	string (20)	No	NULL	No	
metric5_nan	string (20)	No	NULL	No	
grp_id	string (50)	No	NULL	No	
planned_value	floating pt	No	NULL	No	
planned_nan	string (20)	No	NULL	No	
is_planned_value	string (1)	No	NULL	No	
is_visible	string (1)	No	NULL	No	

---

## **uap\_parea\_mt\_cols**

Name	Datatype	Is PK	Null Option	Is FK	Description
col_taborder	integer	Yes	NOT NULL	No	Metrics display order.

Name	Datatype	Is PK	Null Option	Is FK	Description
plan_parea_id	integer	Yes	NOT NULL	Yes	
col_display	string (100)	No	NULL	No	Display name of the metric.
flag_target	string (1)	No	NULL	No	Flag if this metric is a target.
dimension_type	string (20)	No	NULL	No	Dimension type of the metric.

---

## uap\_parea\_mt\_grps

Name	Datatype	Is PK	Null Option	Is FK	Description
grp_id	string (50)	Yes	NOT NULL	No	Unique identifier generated by the system for each metric group.
plan_parea_id	integer	Yes	NOT NULL	Yes	
grp_display	string (100)	No	NULL	No	Display name of the metric group.
grp_display_order	integer	No	NULL	No	Display order of the metric group.

---

## uap\_parea\_mt\_hist

Name	Datatype	Is PK	Null Option	Is FK	Description
hist_datetime	date	Yes	NOT NULL	No	
plan_parea_id	integer	Yes	NOT NULL	Yes	
metric_id	string (50)	Yes	NOT NULL	No	
metric_value1	floating pt	No	NULL	No	
metric_value2	floating pt	No	NULL	No	
metric_value3	floating pt	No	NULL	No	
metric_value4	floating pt	No	NULL	No	
metric_value5	floating pt	No	NULL	No	
metric_rollup1	floating pt	No	NULL	No	
metric_rollup2	floating pt	No	NULL	No	
metric_rollup3	floating pt	No	NULL	No	
metric_rollup4	floating pt	No	NULL	No	
metric_rollup5	floating pt	No	NULL	No	
metric1_nan	string (20)	No	NULL	No	
metric2_nan	string (20)	No	NULL	No	
metric3_nan	string (20)	No	NULL	No	
metric4_nan	string (20)	No	NULL	No	
metric5_nan	string (20)	No	NULL	No	

---

## **uap\_plan\_accts**

Name	Datatype	Is PK	Null Option	Is FK	Description
plan_id	integer	Yes	NOT NULL	Yes	
account_id	integer	Yes	NOT NULL	No	

---

## **uap\_plan\_hist**

This table contains details about the plan history.

Name	Datatype	Is PK	Null Option	Is FK	Description
plan_id	integer	Yes	NOT NULL	Yes	Unique identifier generated by the system for each plan.
seq_no	integer	Yes	NOT NULL	No	Unique identifier generated by the system for each plan revision history.
user_id	integer	No	NULL	Yes	Unique identifier of the user who modified the plan.
last_mod_date	date	No	NULL	No	Date on which the plan was last modified.
status_code	string (20)	No	NULL	No	Plan status.
Descriptions	string (1024)	No	NULL	No	Plan revision history descriptions.
cur_state	string (20)	No	NULL	No	Current state of the plan.
prev_state	string (20)	No	NULL	No	Previous state of the plan.

---

## **uap\_plan\_metrics**

Name	Datatype	Is PK	Null Option	Is FK	Description
plan_id	integer	Yes	NOT NULL	Yes	
metric_id	string (50)	Yes	NOT NULL	No	
show_as_rollup	string (1)	Yes	NOT NULL	No	
display_name	string (100)	No	NULL	No	
display_order	integer	No	NULL	No	
input_method	string (20)	No	NULL	No	
formula	string (1024)	No	NULL	No	
units	string (20)	No	NULL	No	
display_format	string (20)	No	NULL	No	
metric_precision	integer	No	NULL	No	
metric_columns	integer	No	NULL	No	
metric_rollup1	floating pt	No	NULL	No	
metric_rollup2	floating pt	No	NULL	No	
metric_rollup3	floating pt	No	NULL	No	

Name	Datatype	Is PK	Null Option	Is FK	Description
metric_rollup4	floating pt	No	NULL	No	
metric_rollup5	floating pt	No	NULL	No	
grp_id	string (50)	No	NULL	No	
planned_value	floating pt	No	NULL	No	
planned_nan	string (20)	No	NULL	No	
description	string	No	NULL	No	
is_planned_value	string (1)	No	NULL	No	
is_visible	string (1)	No	NULL	No	

---

## uap\_plan\_msgboard

Name	Datatype	Is PK	Null Option	Is FK	Description
msg_id	integer	Yes	NOT NULL	No	Unique identifier generated by the system for the message on the Marketing OperationsIBM message board.
plan_id	integer	Yes	NOT NULL	Yes	Unique identifier generated by the system for each plan.
post_datetime	date	No	NULL	No	Date the message was posted to the message board.
user_id	integer	No	NULL	Yes	Unique identifier for the user who posted the message. Foreign key to uap_user.user_id.
msg_text	string (1024)	No	NULL	No	Text of the message.
recipients	string (512)	No	NULL	No	List of recipients if the message is emailed.

---

## uap\_plan\_mt\_cols

Name	Datatype	Is PK	Null Option	Is FK	Description
plan_id	integer	Yes	NOT NULL	Yes	
col_taborder	integer	Yes	NOT NULL	No	
col_display	string (100)	No	NULL	No	
flag_target	string (1)	No	NULL	No	
dimension_type	string (20)	No	NULL	No	

---

## **uap\_plan\_mt\_grps**

This table contains details about metric groups for plans.

Name	Datatype	Is PK	Null Option	Is FK	Description
plan_id	integer	Yes	NOT NULL	Yes	Unique identifier generated by the system for each plan.
grp_id	string (50)	Yes	NOT NULL	No	Identifier for the metric group.
grp_display	string (100)	No	NULL	No	Display name for the metric group.
grp_display_order	integer	Yes	NULL	No	Display order for the metric group.

---

## **uap\_plan\_mt\_hist**

Name	Datatype	Is PK	Null Option	Is FK	Description
hist_datetime	date	Yes	NOT NULL	No	
plan_id	integer	Yes	NOT NULL	Yes	
Metric_id	string (50)	Yes	NOT NULL	No	
Metric_rollup1	floating pt	No	NULL	No	
Metric_rollup2	floating pt	No	NULL	No	
Metric_rollup3	floating pt	No	NULL	No	
Metric_rollup4	floating pt	No	NULL	No	
Metric_rollup5	floating pt	No	NULL	No	

---

## **uap\_plan\_notify**

Name	Datatype	Is PK	Null Option	Is FK	Description
plan_id	integer	Yes	NOT NULL	Yes	
user_id	integer	Yes	NOT NULL	No	
event_type	integer	Yes	NOT NULL	No	
delivery_mask	integer	No	NULL	No	

---

## **uap\_plan\_parea**

Name	Datatype	Is PK	Null Option	Is FK	Description
plan_parea_id	integer	Yes	NOT NULL	No	
plan_id	integer	No	NOT NULL	Yes	
prgm_area_id	integer	No	NOT NULL	Yes	
display_order	integer	No	NULL	No	

---

## **uap\_plan\_prgrm**

Name	Datatype	Is PK	Null Option	Is FK	Description
plan_id	integer	Yes	NOT NULL	Yes	
program_id	integer	Yes	NOT NULL	No	
plan_parea_id	integer	No	NULL	Yes	

---

## **uap\_plan\_user**

Name	Datatype	Is PK	Null Option	Is FK	Description
plan_id	integer	Yes	NOT NULL	Yes	
mem_type_id	integer	Yes	NOT NULL	No	
user_id	integer	Yes	NOT NULL	No	

---

## **uap\_prgm\_area**

Name	Datatype	Is PK	Null Option	Is FK	Description
uap_prgm_area	integer	Yes	NOT NULL	No	
name	string (255)	No	NULL	No	
display	string (1024)	No	NULL	No	
code	string (50)	No	NULL	No	
display_no	integer	No	NULL	No	
flag_enabled	string (1)	No	NULL	No	
attach_file	string (255)	No	NULL	No	Internal file name of the attachment.
attach_note	string (1024)	No	NULL	No	Attachment notes
attach_size	string (20)	No	NULL	No	File size of the attachment.
attach_date	date	No	NULL	No	The date the attachment was added.
mime_type	string (255)	No	NULL	No	MIME type of the attachment file.
flag_mcm_item	string (1)	No	NULL	No	Flag to indicate whether the attachment is from the assets library. A value of Y indicates that the attachment is from the assets library.
item_id	integer	No	NULL	No	Asset ID value. Foreign key to umcm_items.item_id.
item_version_seq	integer	No	NULL	No	Asset version number. Foreign key to umcm_item_content.item_version_seq.
proj_folder_id	integer	No	NULL	Yes	Identifier of the project attachment folder. Foreign key to uap_proj_folders.proj_folder_id.

Name	Datatype	Is PK	Null Option	Is FK	Description
user_id	integer	No	NULL	No	Identifier of the user who added the attachment. Foreign key to uap_user.user_id.

---

## Chapter 20. Team tables overview

The following tables store information about teams.

Unless indicated otherwise, all the tables in this section were added in version 7.3.

---

### uap\_teams

This table contains information about teams.

*Table 156. Columns in the uap\_teams table*

Name	Datatype	Is PK	Null Option	Is FK	Comment
team_id	integer	Yes	NOT NULL	No	Unique team identifier.
name	string (256)	No	NULL	No	Team name as it appears in Marketing Operations. The size of the column was changed to 256 in version 7.4.0.
description	string (256)	No	NULL	No	Text description for the team.
skillsets	string (256)	No	NULL	No	Free form text describing the skills for the team.
status	integer	No	NULL	No	Status of the team. Possible values are as follows: <ul style="list-style-type: none"><li>• 1 = Enabled</li><li>• 2 = Disabled</li><li>• 3 = Deleted</li></ul>

---

### uap\_appr\_teams

This table was added in version 7.4.0 and contains details for team approvals.

*Table 157. Columns in the uap\_appr\_teams table*

Name	Datatype	Is PK	Null Option	Is FK	Description
approval_id	integer	Yes	NOT NULL	Yes	Approval ID.
team_id	integer	Yes	NOT NULL	Yes	Team ID.
mem_type_id	integer	Yes	NOT NULL	Yes	

---

### uap\_proj\_teams

Name	Datatype	Is PK	Null Option	Is FK	Comment
project_id	integer	Yes	NOT NULL	Yes	Unique project identifier. Foreign key into uap_projects.project_id.
team_id	integer	Yes	NOT NULL	Yes	Unique identifier for the team. Foreign key into uap_teams.team_id.

Name	Datatype	Is PK	Null Option	Is FK	Comment
mem_type_id	integer	Yes	NOT NULL	Yes	Member type ID of the team for this project. Foreign key to uap_member_type.mem_type_id.

---

## uap\_proj\_team\_role

Name	Datatype	Is PK	Null Option	Is FK	Comment
project_id	integer	Yes	NOT NULL	Yes	Unique project identifier. Foreign key into uap_projects.project_id.
team_id	integer	Yes	NOT NULL	Yes	Unique identifier for the team. Foreign key into uap_teams.team_id.
role_id	integer	Yes	NOT NULL	No	Unique identifier for the role. Foreign key into uap_ml_role.role_id.
role_type	integer	No	NOT NULL	No	Role type ID.

---

## uap\_team\_history

This table contains details about the history of teams.

Table 158. Columns in the uap\_team\_history table

Name	Datatype	Is PK	Null Option	Is FK	Comment
history_id	integer	Yes	NOT NULL	Yes	Unique ID generated by the system for each edit to a team.
sequence_no	integer	No	NOT NULL	No	Sequence of events for each team.
team_id	integer	No	NOT NULL	Yes	Unique identifier for the team. Foreign key into uap_teams.team_id.
activity	integer	No	NULL	No	ID for the activity that occurred for this event. Values are as follows: <ul style="list-style-type: none"><li>• 1 = team created</li><li>• 2 = team deleted</li><li>• 3 = team edited</li><li>• 4 = team copied</li><li>• 5 = team enabled</li><li>• 6 = team disabled</li></ul>
user_id	integer	No	NULL	Yes	User who modified the marketing object.
field_changed	string (255)	No	NULL	No	Name of the field that was edited.
old_value	string (256)	No	NULL	No	Previous value for the edited field.
new_value	string (256)	No	NULL	No	Replacement value for the edited field.
date_time	date	No	NULL	No	Date the change was made.
on_behalf_user_id	integer	No	NULL	No	This column was added in 7.4.0.

---

## uap\_team\_members

This table lists all team members (and their membership type) for each team in the system.

Name	Datatype	Is PK	Null Option	Is FK	Comment
team_id	integer	Yes	NOT NULL	Yes	Unique identifier for the team. Foreign key into uap_teams.team_id.
user_id	integer	Yes	NOT NULL	Yes	Team member ID. Foreign key to uap_users.user_id.
mem_type_id	integer	Yes	NOT NULL	Yes	Member type ID of the team for this project. Foreign key to uap_member_type.mem_type_id.

---

## uap\_team\_notify

Name	Datatype	Is PK	Null Option	Is FK	Comment
event_type	integer	Yes	NOT NULL	No	
team_id	integer	Yes	NOT NULL	Yes	Unique identifier for the team. Foreign key into uap_teams.team_id.
user_id	integer	Yes	NOT NULL	Yes	Foreign key to uap_users.user_id.
delivery_mask	integer	No	NOT NULL	No	

---

## uap\_team\_object\_routing

New for version 7.4.0. This table contains details about how teams route work.

Name	Datatype	Is PK	Null Option	Is FK	Comment
object_audit_id	integer	Yes	NOT NULL	Yes	Unique ID generated by the system for each team routing model.
object_id	integer	No	NOT NULL	No	Object ID for the object that the team is assigned.
object_type	string (20)	No	NULL	No	Object type of the object on which the team is working.
assigned_to	integer	No	NULL	No	
is_user	integer	No	NULL	No	
user_team_id	integer	No	NULL	No	
routed_by	integer	No	NULL	No	
date_time	date	No	NULL	No	
state	integer		NULL	No	
sequence_no	integer		NULL	No	Sequence of events for each routing model.

---

## **uap\_team\_security\_policy**

This table lists each team and the security policy that applies for that team.

Name	Datatype	Is PK	Null Option	Is FK	Comment
team_id	integer	Yes	NOT NULL	Yes	Unique identifier for the team. Foreign key into uap_teams.team_id
policy_id	integer	Yes	NOT NULL	Yes	Unique identifier for the security policy. Foreign key to uap_sec_policy.sec_policy_id.

---

## **uap\_team\_task\_routing**

Name	Datatype	Is PK	Null Option	Is FK	Description
task_audit_id	integer	Yes	NOT NULL	No	
task_id	integer	No	NOT NULL	No	
assigned_to	integer	No	NULL	Yes	Team ID. Foreign key into uap_teams.team_id.
is_user	integer	No	NULL	No	
user_team_id	integer	No	NULL	No	
routed_by	integer	No	NULL	No	
date_time	date	No	NULL	No	
state	integer	No	NULL	No	
sequence_no	integer	No	NOT NULL	No	

---

## **uap\_team\_work\_model**

This table lists each work routing model used by each team.

*Table 159. Columns in the uap\_team\_work\_model table*

Name	Datatype	Is PK	Null Option	Is FK	Description
team_id	integer	Yes	NOT NULL	Yes	Team identifier for the team. For each work routing model the team uses, there is a row in this table. For example, if team 10001 uses all three work routing models, this table has three rows with the 10001 team_id. Foreign key into uap_teams.team_id.
model	integer	Yes	NOT NULL	No	Describes the work routing model for the team. Values are as follows: <ul style="list-style-type: none"><li>• 1 = Managers can route work to members</li><li>• 2 = Members can accept team-assigned tasks</li><li>• 3 = Members can return team-assigned tasks back to the team</li></ul>

---

## Chapter 21. Template tables overview

The following tables store information about templates and some of the elements which define them, including forms and attributes.

---

### **uap\_tt\_attachments**

This table stores information about each template attachment.

Name	Datatype	Is PK	Null Option	Is FK	Description
attachment_id	integer	Yes	NOT NULL	No	Unique identifier generated by the system for each template attachment.
template_id	integer	No	NULL	Yes	ID for the template that contains the attachment. Foreign key to uap_tt_templates.
attachment_name	string (255)	No	NULL	No	Name of the attachment.
attachment_mime	string (50)	No	NULL	No	MIME type of the attachment file.
attachment_ext	string (20)	No	NULL	No	Attachment file extension (for example, .PDF or .DOC).
folder_id	integer	No	NULL	Yes	ID of the folder that contains the attachment. Foreign key to uap_tt_att_folders.
display_order	integer	No	NULL	No	Order in which this attachment displays in the folder.

---

### **uap\_tt\_att\_folders**

This table stores information about the folders created to contain template attachments.

Name	Datatype	Is PK	Null Option	Is FK	Description
folder_id	integer	Yes	NOT NULL	No	Unique identifier generated by the system for each template attachment folder.
folder_name	string (50)	No	NULL	No	System-generated name of the attachment folder.
folder_display	string (300)	No	NULL	No	Name specified by the creator for the attachment folder.
template_id	integer	No	NULL	Yes	ID for the template that contains this attachment folder. Foreign key to uap_tt_templates.
parent_folder_id	integer	Yes	NULL	Yes	ID of the parent folder or category. Foreign key to uap_tt_att_folders.folder_id.
display_order	integer	No	NULL	No	Folder display order.

---

## **uap\_tt\_data\_map**

This table stores information about the data mapping files in the system.

Name	Datatype	Is PK	Null Option	Is FK	Description
Data_map_id	integer	Yes	NOT NULL	No	Unique identifier for each data mapping file.
Name	string (50)	No	NULL	No	Name of the data mapping file.
type	integer	No	NOT NULL	No	Type of the data map.

---

## **uap\_tt\_export\_tab**

This table defines, for each template in the system, the tab to be exported when the template is exported. This table was added in version 7.4.0.

Name	Datatype	Is PK	Null Option	Is FK	Description
template_id	integer	Yes	NOT NULL	Yes	ID for the template. Foreign key to uap_tt_templates.
tab_name	string (100)	Yes	NOT NULL	No	Name of the tab.

---

## **uap\_tt\_ext\_param**

This table stores the parameters defined for custom links.

Name	Datatype	Is PK	Null Option	Is FK	Description
ext_tool_id	integer	Yes	NOT NULL	Yes	ID for a custom link. Foreign key to uap_tt_ext_tools.
param_name	string (50)	Yes	NOT NULL	No	Name of a parameter.
param_value	string (100)	No	NULL	No	Value of the parameter.

---

## **uap\_tt\_ext\_tools**

This table stores information about the custom links defined in the system.

Name	Datatype	Is PK	Null Option	Is FK	Description
ext_tool_id	integer	Yes	NOT NULL	No	Unique identifier generated by the system for each custom link.
ext_url	string (200)	No	NULL	No	The URL of the custom link.
template_id	integer	No	NULL	Yes	ID of the template that contains the custom link. Foreign key to uap_tt_templates.
name	string (50)	No	NULL	No	Name of the custom link. Used internally.
display	string (50)	No	NULL	No	Display name of the custom link.
description	string (200)	No	NULL	No	Description of the custom link.

Name	Datatype	Is PK	Null Option	Is FK	Description
show_in_req	string (20)	No	NULL	No	Whether this custom link is available in project requests. Valid values are YES and NO.
display_order	integer	No	NULL	No	Order in which this custom link displays.

## uap\_tt\_icons

This table stores information about icons.

Name	Datatype	Is PK	Null Option	Is FK	Description
icon_id	integer	Yes	NOT NULL	No	Unique ID generated by the system for each icon.
name	string (50)	No	NULL	No	Icon display name.
extension	string (20)	No	NULL	No	Icon extension.
listExtension	string (20)	No	NULL	No	Icon list extension.

## uap\_tt\_localized\_text

This table stores display values for all form elements, for example, form groups, grids, and attributes, for all supported locales. This table was added in version 8.0.0.

*Table 160. Columns in the uap\_tt\_localized\_text table*

Name	Datatype	Is PK	Null Option	Is FK	Description
text_id	integer	Yes	NOT NULL	No	Unique identifier that is generated by the system for each row in the table.
text_key	string (300)	No	NOT NULL	No	Internationalization text key.
locale	string (10)	No	NOT NULL	No	A supported locale. The following values are valid. Version 8.5 and 9.0 added languages. <ul style="list-style-type: none"><li>• de_DE</li><li>• en_GB</li><li>• en_US</li><li>• es_ES</li><li>• fr_FR</li><li>• it_IT</li><li>• ja_JP</li><li>• ko_KR</li><li>• pt_BR</li><li>• ru_RU</li><li>• zh_CN</li></ul>
localized_text	string (1024)	No	NULL	No	Display text for this locale.

---

## uap\_tt\_map

This table stores information about each form in your system.

Name	Datatype	Is PK	Null Option	Is FK	Description
map_id	integer	Yes	NOT NULL	No	Unique identifier generated by the system for each form.
map_name	string (50)	No	NULL	No	Name of the form.
table_name	string (50)	No	NULL	No	Name of the database table that stores the answers users enter in the fields of this form.
key_column	string (50)	No	NULL	No	Column that stores the primary key for the table specified in the table_name column.
key_type	string (20)	No	NULL	No	Data type of the column specified in the key_column column.
state	string (50)	No	NULL	No	State of the form. The following are valid values: <ul style="list-style-type: none"><li>• Published</li><li>• Non-Published</li><li>• Temporary</li></ul> This column was added in version 8.0.
root_element	string (100)	No	NULL	No	The only valid value is Details.
description	string (1024)	No	NULL	No	Description of form. This column was added in version 8.0.
user_id	integer	No	NULL	Yes	ID of the user who created the form. Foreign key to uap_user. This column was added in version 8.0.
copy_of	integer	No	NULL	Yes	ID of the form that was copied to make this form. Foreign key to uap_tt_map.map_id. This column was added in version 8.0.
form_type	integer	No	NULL	No	Whether the form is a Target Cell Spreadsheet. This column was added in version 8.0.

---

## uap\_tt\_map\_info

This table saves details about form attributes. This table was added in 8.0.

*Table 161. Columns in the uap\_tt\_map\_info table*

Name	Datatype	Is PK	Null Option	Is FK	Description
map_info_id	integer	Yes	NOT NULL	No	Unique identifier that is generated by the system for each row in the table.
map_id	integer	No	NOT NULL	Yes	ID of the form in which the attribute is used. Foreign key from uap_tt_map table.
group_id	integer	No	NULL	Yes	ID of the attribute group that contains the attribute. Foreign key to uap_tt_map_info_group.map_info_group_id and uap_tt_tvc_info_group.tvc_info_group_id.

Table 161. Columns in the uap\_tt\_map\_info table (continued)

Name	Datatype	Is PK	Null Option	Is FK	Description
label	string (1024)	No	NULL	No	Label of the attribute.
element_name	string (100)	No	NULL	No	Internal name of the attribute.
element_type	string (50)	No	NULL	No	UI type of the attribute.
db_type	string (50)	No	NULL	No	Datatype of the attribute.
db_column_name	string (50)	No	NULL	No	Database column name of the attribute.
max_length	integer	No	NULL	No	Maximum length of the attribute value.
lkup_table	string (100)	No	NULL	No	Name of the database table that supplies values from which users can select for this attribute.
lkup_id_column	string (50)	No	NULL	No	Name of the key column in the lookup table for this attribute.
lkup_desc_column	string (100)	No	NULL	No	Name of the column in the lookup table that stores the values to display to the users.
lkup_sort_column	string (100)	No	NULL	No	Name of the column in the lookup table to use to sort the entries that display to the users.
lkup_sort_colDBType	string (50)	No	NULL	No	Datatype of the sort column in the lookup table. Marketing Operations retrieves this information from the database.
lkup_sortAscending	string (50)	No	NULL	No	Sort order for the lookup table. The following values are valid. <ul style="list-style-type: none"> <li>• 0 = Descending</li> <li>• 1 = Ascending</li> </ul>
formula	string (1024)	No	NULL	No	Formula that is used to calculate the attribute value. (This column applies only to Calculated attributes.)
help_tip	string (1024)	No	NULL	No	Help text for the attribute.
element_message	string (1024)	No	NULL	No	Message to display when the field is required and the user forgets to fill it.
default_value	string (1024)	No	NULL	No	Default value for the attribute.
description	string (1024)	No	NULL	No	Description of the attribute.
is_required	string (1)	No	NULL	No	Whether the attribute is required. Possible values are Y and N.
is_read_only	string (1)	No	NULL	No	Whether the attribute is read-only. Possible values are Y and N.
element_precision	integer	No	NULL	No	Number of digits in the decimal part of the number.
is_dependent	string (1)	No	NULL	No	Whether the attribute is dependent. (This column applies only to single-select - database and multi-select - database attributes.) Possible values are Y and N.

Table 161. Columns in the uap\_tt\_map\_info table (continued)

Name	Datatype	Is PK	Null Option	Is FK	Description
tab_order	integer	No	NULL	No	Order in which the attribute appears on the form.
paramType	integer	No	NULL	No	This column is no longer in use.
modifFlag	string (65)	No	NULL	No	Type of update to perform when a form is republished. The following values are valid. <ul style="list-style-type: none"><li>• 0 = Used in form</li><li>• -3 = Created as local attribute but not placed on form</li></ul>
attribute_type	integer	No	NULL	No	The following values are valid. <ul style="list-style-type: none"><li>• 0 = Local form attribute</li><li>• 1 = Local grid attribute</li><li>• 2 = Global form attribute</li><li>• 3 = Global grid attribute</li><li>• 4 = Global campaign attribute</li><li>• 5 = Global cell attribute</li><li>• 6 = TCS default attribute</li><li>• 7 = TCS read-only attribute</li><li>• 8 = Offer standard attribute</li><li>• 9 = Offer custom attribute</li></ul>
is_enabled	integer	No	NULL	No	Whether a global attribute is enabled. The following values are valid. <ul style="list-style-type: none"><li>• 0 = Disabled</li><li>• 1 = Enabled</li></ul>
url_db_column_name	string (50)	No	NULL	No	Column added in 8.1 for support of the url field in forms.
attribute_behavior	integer	No	NULL	No	Defaults to 0. Added in version 8.6.0.
default_date_value	long	No	NULL	No	Stores the default date value that is supplied for a Date Select attribute in a form definition. Stored as a long millisecond value.

---

## uap\_tt\_map\_info\_dependent

This table stores information about dependent fields. This table was added in version 8.0.

Name	Datatype	Is PK	Null Option	Is FK	Description
map_info_dependent_id	integer	Yes	NOT NULL	No	Unique identifier generated by the system for each row in the table.
map_id	integer	No	NOT NULL	Yes	Unique identifier for the form that contains the attribute. Foreign key to uap_tt_map.
map_info_id	integer	No	NOT NULL	Yes	Unique identifier for the attribute. Foreign key to uap_tt_map_info.
map_info_dependent	string (50)	No	NULL	No	Internal name of the child attribute.

## uap\_tt\_map\_info\_group

This table stores information about attribute groups. This table was added in version 8.0.

Table 162. Columns in the uap\_tt\_map\_info\_group table

Name	Datatype	Is PK	Null Option	Is FK	Description
map_info_group_id	integer	Yes	NOT NULL	No	Unique identifier generated by the system for each attribute group.
map_id	integer	No	NOT NULL	Yes	ID of the form that contains the attribute group. Foreign key from uap_tt_map.
element_name	string (100)	No	NULL	No	Internal name of the group.
tab_order	integer	No	NULL	No	Order in which the group appears on the form.
header	string (200)	No	NULL	No	Display name of the group.
description	string (1024)	No	NULL	No	Description of the group.
column_span	integer	No	NULL	No	Whether the group has a one-column layout or a two-column layout. (This column only applies to form attributes.) The following values are valid: <ul style="list-style-type: none"><li>• 1 = One-column</li><li>• 2 = Two-column</li></ul>
show_group	string (20)	No	NULL	No	Whether to show or hide the group heading on the form. The following values are valid: <ul style="list-style-type: none"><li>• 0 = Hide</li><li>• 1 = Show</li></ul>

## uap\_tt\_map\_info\_option

This table stores the possible values for single-select attributes. This table was added in version 8.0.

Table 163. Schema for uap\_tt\_map\_info\_option

Name	Datatype	Is PK	Null Option	Is FK	Description
map_info_option_id	integer	Yes	NOT NULL	No	Unique identifier generated by the system for each row in the table.
map_id	integer	No	NULL	Yes	ID of the form that contains the single-select attribute. Foreign key to uap_tt_map.
map_info_id	integer	No	NULL	Yes	Unique identifier for the single-select attribute. Foreign key to uap_tt_map_info.
option_value	string (1024)	No	NULL	No	Option value. Size increased in version 8.6.0.
option_display	string (1024)	No	NULL	No	Option display. Size increased in version 8.6.0.
option_order	integer	No	NOT NULL	No	Place in which this option appears in the list of options.

*Table 163. Schema for uap\_tt\_map\_info\_option (continued)*

Name	Datatype	Is PK	Null Option	Is FK	Description
description	string (1536)	No	NULL	No	

---

## uap\_tt\_map\_text

This table associates localized display text for form elements with specific forms.  
This table was added in version 8.0.

Name	Datatype	Is PK	Null Option	Is FK	Description
map_id	integer	Yes	NOT NULL	Yes	ID of a form. Foreign key to uap_tt_map.
text_id	integer	Yes	NOT NULL	Yes	ID of an item of localized text used on the form. Foreign key to uap_tt_localized_text.

---

## uap\_tt\_metrics

This table stores information about each metric in your system.

Name	Datatype	Is PK	Null Option	Is FK	Description
metric_id	string (50)	Yes	NOT NULL	No	Metric ID name.
display_name	string (100)	No	NULL	No	Metric display name.
description	string (300)	No	NULL	No	Metric description.

---

## uap\_tt\_mo\_map\_info

This table stores additional properties of single-select object reference attributes, multi-select object reference attributes, and object attribute field reference attributes. This table was added in version 8.0.

*Table 164. Columns in the uap\_tt\_mo\_map\_info table*

Name	Datatype	Is PK	Null Option	Is FK	Description
mo_map_info_id	integer	Yes	NOT NULL	No	Unique identifier generated by the system for this row.
map_id	integer	No	NOT NULL	Yes	Unique identifier for the form that contains the attribute. Foreign key to uap_tt_map.
map_info_id	integer	No	NOT NULL	Yes	Unique identifier for the attribute. Foreign key to uap_tt_map_info.
mo_type	string (50)	No	NULL	No	Type of marketing object to display to users.
template_name	string (100)	No	NULL	No	Name of the marketing object template to use to create or filter marketing objects associated with this attribute.
reference_attribute	string (200)	No	NULL	No	Internal name of the attribute that references the marketing object.

Table 164. Columns in the uap\_tt\_mo\_map\_info table (continued)

Name	Datatype	Is PK	Null Option	Is FK	Description
attribute_name	string (200)	No	NULL	No	Name of the marketing object attribute referenced by this attribute.
is_auto_create	string (1)	No	NULL	No	Whether to create an empty marketing object when users create an object by using a template that contains this attribute. Possible values are Y and N.
is_modifies	string (1)	No	NULL	No	Whether the form updates the marketing object. Possible values are Y and N.
onClickGoTo	integer	No	NULL	No	Tab to display when user clicks on the object link in the form. The following values are valid: <ul style="list-style-type: none"> <li>• 0 = N/A (Used in form attributes)</li> <li>• 1 = Summary tab</li> <li>• 2 = Analysis tab</li> </ul>

## uap\_tt\_ms\_link

This table stores information about the junction tables used by multi-select database attributes. This table was added in version 8.0.

Name	Datatype	Is PK	Null Option	Is FK	Description
ms_link_id	integer	Yes	NOT NULL	No	Unique identifier generated by the system for each row in the table.
map_id	integer	No	NOT NULL	Yes	ID of the form that contains the multi-select database attribute. Foreign key to uap_tt_map.
map_info_id	integer	No	NOT NULL	Yes	ID of the multi-select database attribute. Foreign key to uap_tt_map_info.
table_name	string (50)	No	NULL	No	Name of the junction table.
key_column	string (50)	No	NULL	No	Key column name.
key_type	string (50)	No	NULL	No	Data type for the key column. Marketing Operations retrieves the data type from the database.
link_key_column	string (50)	No	NULL	No	Link database key column.
link_key_type	string (50)	No	NULL	No	Data type for ms link key column. Marketing Operations retrieves the data type from the database.
root_element	string (100)	No	NULL	No	Name of the multi-select attribute.

---

## **uap\_tt\_m\_templates**

This table stores information about the metrics templates in your system.

Name	Datatype	Is PK	Null Option	Is FK	Description
m_template_id	integer	Yes	NOT NULL	No	Unique ID generated by the system for each metric template.
display	string (100)	No	NULL	No	Metric template display name.
description	string (300)	No	NULL	No	Metric template description.
name	string (50)	No	NULL	No	Metric template ID name.

---

## **uap\_tt\_roles**

This table stores associations between roles and templates.

Name	Datatype	Is PK	Null Option	Is FK	Description
template_id	integer	Yes	NOT NULL	Yes	ID of a template. Foreign key to uap_tt_templates.
role_id	integer	Yes	NOT NULL	No	ID of a role. Foreign key to uap_ml_role.
role_name	string (255)	No	NULL	No	Name of the role.
flag_team_mem	boolean	No	NULL	No	Whether this is a team member role.

---

## **uap\_tt\_rules**

This table stores the rules file; rules files are used to validate grid tabs.

Name	Datatype	Is PK	Null Option	Is FK	Description
rule_file_id	integer	Yes	NOT NULL	No	Unique ID generated by the system for each rules file.
rules_name	string (100)	No	NOT NULL	No	Name of the rules file.

---

## **uap\_tt\_sec\_policy**

Name	Datatype	Is PK	Null Option	Is FK	Description
template_id	integer	Yes	NOT NULL	Yes	
sec_policy_id	integer	Yes	NOT NULL	No	

---

## **uap\_tt\_tab**

This table stores information about template tabs created by administrators.

Name	Datatype	Is PK	Null Option	Is FK	Description
template_id	integer	Yes	NOT NULL	Yes	ID of a template. Foreign key to uap_tt_templates.

Name	Datatype	Is PK	Null Option	Is FK	Description
map_id	integer	Yes	NOT NULL	Yes	ID of a form. Foreign key to uap_tt_map.
tab_order	integer	No	NULL	No	The numerical position for this form in this template.
name	string (100)	No	NULL	No	Internal, system-generated name of the tab.
display	string (100)	No	NULL	No	Display name of the tab.
map_file	string (200)	No	NULL	No	Name of the form.
page_style	string (20)	No	NULL	No	Whether the form displays as a separate tab or as part of the Summary tab. The following values are valid:  summary  tab
show_in_wizard	string (20)	No	NULL	No	Whether this tab displays in the wizard. Possible values are Y and N.
show_in_request	string (20)	No	NULL	No	Whether this tab displays in project requests. Possible values are Y and N.
validation_class	string (200)	No	NULL	No	Grid tabs can have validation; if so, this is the validation class used to validate this grid tab.
rules_file_id	integer	No	NULL	No	Unique ID for the rules file associated with this grid tab. Foreign key into uap_tt_rules table.
display_rule_id	integer	No	NULL	Yes	The display rule specifies the conditions based on which the form is shown expanded to the users; if the rule is not satisfied the form is displayed as collapsed. Foreign key into uap_tt_wf_rule table, rule_id.

## uap\_tt\_templates

This table contains information about each template in your system.

*Table 165. Columns in the uap\_tt\_templates table*

Name	Datatype	Is PK	Null Option	Is FK	Description
template_id	integer	Yes	NOT NULL	Yes	Unique ID generated by the system for each template. Foreign key to uap_tt_denry_reasons.
object_type	integer	No	NULL	No	Marketing Operations object type. Possible values are the standard marketing object types and any custom marketing object types that are defined in the system.
template_name	string (50)	No	NULL	No	Internal, system-generated name of the template.
actual_display	string (50)	No	NULL	No	Default name for the object instance that is created from this template.
folder_name	string (50)	No	NULL	No	Name of the template folder that contains the template.

Table 165. Columns in the uap\_tt\_templates table (continued)

Name	Datatype	Is PK	Null Option	Is FK	Description
folder_icon	string (300)	No	NULL	No	This column is not currently in use.
description	string (1536)	No	NULL	No	Template description. Version 8.6 increased the size.
display	string (192)	No	NULL	No	Display name of this template. Version 8.6 increased the size.
pid_prefix	string (30)	No	NULL	No	Prefix to use in external IDs for object instances that are created from this template.
pid_gen_class	string (100)	No	NULL	No	Name of the Java™ class that is used to generate the algorithm for external IDs for object instances that are created from this template.
validation_class	string (100)	No	NULL	No	Validation Java class name.
use_campaign_code	integer	No	NULL	No	
service_url	string (200)	No	NULL	No	Campaign web service URL.
data_map_file	string (300)	No	NULL	No	This column is not in use currently.
metrics_map_file	string (300)	No	NULL	No	Campaign import metrics map file name.
m_template_id	integer	No	NULL	Yes	ID of the metrics template that is used by this template. Foreign key to uap_tt_m_templates.
workflow_id	integer	No	NULL	Yes	ID of the workflow template that is used by this template. Foreign key to uap_tt_workflows.
camp_folder_id	string (50)	No	NULL	No	
state	integer	No	NULL	No	Template state. The following are valid values. <ul style="list-style-type: none"><li>• 0 = Enabled</li><li>• 1 = Disabled</li><li>• 2 = Deleted</li></ul>
icon_id	integer	No	NULL	Yes	ID of the icon to use for this template. Foreign key to uap_tt_icons.
template_file	string (300)	No	NULL	Yes	IBM Marketing Operations generates the value for this column.
partition_id	string (256)	No	NULL	No	Partition of the IBM Campaign instance in which to create the campaigns for projects that are created from this template. Version 8.6 increased the size.
data_map_id	integer	No	NULL	Yes	ID of the data mapping file for projects that are created from this template. This column is used only for pre- 8.0 integration with Campaign. Foreign key to uap_tt_data_map.
metric_map_id	integer	No	NULL	No	
parent_folder_id	integer	No	NULL	No	ID of the parent template folder.
sec_policy_model	integer	No	NULL	No	This column was added in version 8.0.

*Table 165. Columns in the uap\_tt\_templates table (continued)*

Name	Datatype	Is PK	Null Option	Is FK	Description
campaign_template_type	integer	No	NULL	No	Type of the Campaign template. The following values are valid: <ul style="list-style-type: none"><li>• 0 = Not a Campaign template</li><li>• 1 = Campaign project template that was created before version 8.0</li><li>• 2 = Campaign project template that was created in version 8.0</li></ul> This column was added in version 8.0.
tcs_approval_required	integer	No	NULL	No	This column was added in version 8.2.0. This column indicates whether top-down TCS approval is enforced and correspondingly, whether the <b>Is Approved</b> column is part of the TCS tab of the templates instances. <ul style="list-style-type: none"><li>• 0 = Approval not enforced</li><li>• 1 = Approval enforced</li></ul>
ooo_autoadd_setting	integer	No	NULL	No	Defaults to 0. Added in version 8.6.0.
health_rule_id	integer	No	NULL	Yes	The health rule definition that is associated with the project template. Foreign key to uap_proj_health_rule.health_rule_id. Added in version 9.0.

---

## **uap\_tt\_tool\_tab**

This table contains information about the tabs on which a custom link is available in a template.

Name	Datatype	Is PK	Null Option	Is FK	Description
ext_tool_id	integer	Yes	NOT NULL	Yes	Unique ID generated by the system for each custom link. Foreign key to uap_tt_ext_tools.
map_id	integer	Yes	NOT NULL	Yes	ID of a form. Foreign key to uap_tt_map.
template_id	integer	Yes	NOT NULL	Yes	ID of a template. Foreign key to uap_tt_templates.

---

## **uap\_tt\_tvc**

This table stores information about each grid. This table was added in version 8.0.

*Table 166. Columns in the uap\_tt\_tvc table*

Name	Datatype	Is PK	Null Option	Is FK	Description
tvc_id	integer	Yes	NOT NULL	No	Unique identifier generated by the system for each grid.
map_id	integer	No	NOT NULL	Yes	Unique identifier for the form that contains the grid. Foreign key to uap_tt_map.

Table 166. Columns in the uap\_tt\_tvc table (continued)

Name	Datatype	Is PK	Null Option	Is FK	Description
map_info_group_id	integer	No	NULL	Yes	Unique identifier for the attribute group that contains the grid. Foreign key to uap_tt_map_info_group.
element_name	string (100)	No	NULL	No	Internal name of the grid.
label	string (1024)	No	NULL	No	Display name of the grid.
tablename	string (50)	No	NULL	No	Name of the database table for the grid.
key_column	string (50)	No	NULL	No	Key column of the database table for the grid.
key_type	string (50)	No	NULL	No	Data type of the key column.
viewtype	integer	No	NULL	No	The type of grid. The following values are valid: <ul style="list-style-type: none"> <li>• 0 = Line wrap view</li> <li>• 1 = Line truncate view</li> <li>• 2 = Two line staggered view</li> <li>• 3 = Editable grid view</li> </ul>
pagesize	integer	No	NULL	No	Number of rows per page on the grid UI.
tab_order	integer	No	NULL	No	Tab order of the grid.
parent_filter_column_name	string (100)	No	NULL	No	Name of the column that contains the value on which to filter.
showExportLink	string (1)	No	NULL	No	Indicates whether to show the <b>Export</b> link. Possible values are Y and N.
showGroupByLink	string (1)	No	NULL	No	Indicates whether to show the <b>Group by</b> link. Possible values are Y and N.
showViewLink	string (1)	No	NULL	No	Indicates whether to show the <b>View</b> link. Possible values are Y and N.
defaultSortColumn	string (50)	No	NULL	No	Name of the default sort column for the grid.
dataposturl	string (1024)	No	NULL	No	URL to which to post the data.
is_tcs	integer	No	NULL	No	Whether or not the grid is a TCS. The following values are valid: <ul style="list-style-type: none"> <li>• 0 = Not a TCS grid</li> <li>• 1 = TCS grid</li> </ul>

## uap\_tt\_tvc\_info\_group

This table stores information about attribute groups placed on grids. This table was added in version 8.0.

Table 167. Columns in the uap\_tt\_tvc\_info\_group table

Name	Datatype	Is PK	Null Option	Is FK	Description
tvc_info_group_id	integer	Yes	NOT NULL	No	Unique identifier generated by the system for each row in the table.

Table 167. Columns in the uap\_tt\_tvc\_info\_group table (continued)

Name	Datatype	Is PK	Null Option	Is FK	Description
map_id	integer	No	NOT NULL	Yes	Unique identifier for the form that contains the grid that contains the attribute group. Foreign key to uap_tt_map.
tvc_id	integer	No	NOT NULL	Yes	Unique identifier for the grid that contains the attribute group. Foreign key to uap_tt_tvc.
element_name	string (100)	No	NULL	No	Internal name of the attribute group.
tab_order	integer	No	NULL	No	Tab order of the group.
header	string (200)	No	NULL	No	Display name of the group.
description	string (1024)	No	NULL	No	Description of the group.
show_group	string (20)	No	NULL	No	Whether to show or hide the group name. The following values are valid: <ul style="list-style-type: none"> <li>• 0 = Hide</li> <li>• 1 = Show</li> </ul>

## uap\_tt\_tvc\_map\_info

This table stores additional information about attributes used in grids. This table was added in version 8.0.

Name	Datatype	Is PK	Null Option	Is FK	Description
tvc_map_info_id	integer	Yes	NOT NULL	No	Unique identifier generated by the system for each row in the table.
map_id	integer	No	NOT NULL	Yes	Unique identifier for the form that contains the grid attribute. Foreign key from uap_tt_map.
tvc_id	integer	No	NOT NULL	Yes	Unique identifier for the grid that contains the attribute. Foreign key from uap_tt_tvc.
map_info_id	integer	No	NOT NULL	Yes	Unique identifier for the attribute. Foreign key from uap_tt_map_info.
alignment	integer	No	NULL	No	Alignment for the attribute. Valid values are left, right, and center.
sortType	integer	No	NULL	No	How the attribute values are sorted. Valid values are ascending and descending.
is_sortable	string (1)	No	NULL	No	Whether or not the attribute is sortable. Possible values are Y and N.
can_group_by	string (1)	No	NULL	No	Whether or not the grid can be grouped by this attribute. Possible values are Y and N.
cacheLookupValues	string (1)	No	NULL	No	Whether or not to cache the lookup values for this attribute. Possible values are Y and N.
url_db_column_name	string (50)	No	NULL	No	This column was moved to the base table uap_tt_map_info in version 8.1.0.
objectType	integer	No	NULL	No	This column is not used currently.

Name	Datatype	Is PK	Null Option	Is FK	Description
templateName	string (100)	No	NULL	No	Name of the marketing object template associated with this attribute.
marketingObjectType	string (100)	No	NULL	No	Object type of the marketing objects associated with this attribute.
formattingClass	string (1024)	No	NULL	No	Java class name used for formatting the value. This column only applies to read-only grids.
onClickGoTo	integer	No	NULL	No	Tab of the referenced marketing object that opens when users click the object link created by this attribute.
attributeName	string (100)	No	NULL	No	Name of the marketing object attribute this grid attribute references.
objectIdColumnName	string (100)	No	NULL	No	Name of the object instance ID column for the marketing object this attribute references.
objectTypeColumnName	string (100)	No	NULL	No	Name of the object type column for the marketing object this attribute references.
gridColumnName	string (100)	No	NULL	No	Marketing object form grid column name.
summary_function	integer	No	NULL	No	Added to support the summary function in grids in version 8.1.0.

---

## uap\_tt\_workflow\_template

Name	Datatype	Is PK	Null Option	Is FK	Description
Workflow_id	integer	Yes	NOT NULL	No	
Name	string (50)	No	NOT NULL	No	
Taskcode_prefix	string (100)	No	NULL	No	
Status_flag	integer	Yes	NOT NULL	No	
Created_date	Datetime	No	NULL	No	
Last_mod_date	Datetime	No	NULL	No	

---

## uap\_tt\_workflows

This table stores information about workflow templates.

Name	Datatype	Is PK	Null Option	Is FK	Description
workflow_id	integer	Yes	NOT NULL	No	Unique ID generated by the system for each workflow template.
name	string (50)	No	NULL	No	Workflow template name.
taskcode_prefix	string (100)	No	NULL	No	Used to construct a task code. Task codes are used to uniquely identify tasks, for use with the API.

---

## Chapter 22. Trigger tables overview

The following tables contain information about triggers.

Unless stated otherwise, the tables in this section were added in version 7.3.

---

### uap\_procedure\_binding

This table contains the details for the trigger bindings that are defined in IBM Marketing Operations. This table was added in version 7.4.0.

Name	Datatype	Is PK	Null Option	Is FK	Description
pb_id	integer	Yes	NOT NULL	No	Unique ID for the trigger binding.
name	string (256)	No	NOT NULL	No	
object_type	string (256)	No	NULL	No	
template	string (256)	No	NOT NULL	No	
context_type	string (256)	No	NULL	No	
basic_event_type	string (256)	No	NULL	No	
exclusivo	string (1)	No	NULL	No	Boolean value to indicate whether the trigger binding is exclusive.
procedure_class	string (255)	No	NOT NULL	No	

---

### uap\_trigger\_binding

Name	Datatype	Is PK	Null Option	Is FK	Description
trigger_id	integer	Yes	NOT NULL	Yes	Foreign key into uap_trigger_defn table.
event_type	string (32)	No	NULL	No	
object_type	string (32)	No	NULL	No	
object_id	integer	Yes	NOT NULL	No	

---

### uap\_trigger\_defn

Name	Datatype	Is PK	Null Option	Is FK	Description
trigger_id	integer	Yes	NOT NULL	Yes	Unique ID for a trigger.
trigger_name	string (64)	No	NOT NULL	No	Text name for a trigger.
trigger_desc	string (1024)	No	NULL	No	Text description for a trigger.
event_type	string (32)	No	NULL	No	
object_type	string (32)	No	NULL	No	
condition_class	string (255)	No	NOT NULL	No	
action_class	string (255)	No	NOT NULL	No	

---

## **uap\_trigger\_params**

Name	Datatype	Is PK	Null Option	Is FK	Comment
param_id	integer	Yes	NOT NULL	No	
trigger_id	integer	No	NOT NULL	Yes	Foreign key into uap_trigger_defn table.
param_name	string (255)	No	NOT NULL	No	Text name for a parameter.
param_class	string (255)	No	NOT NULL	No	
param_value	string (1024)	No	NULl	No	

---

## Chapter 23. Workflow tables overview

The following tables contain information about workflows in IBM Marketing Operations.

---

### **uap\_tt\_wf\_rule**

This table stores recipients rules configured by the administrators. This table was added in version 7.5.

Name	Datatype	Is PK	Null Option	Is FK	Description
rule_id	integer	Yes	NOT NULL	No	Unique identifier generated by the system for each recipients rule.
Template_id	integer	No	NULL	Yes	Unique identifier of the template in which this rule is used. Foreign key to uap_tt_template.
rule	string (16)	No	NOT NULL	No	Rule in XML format.

---

### **uap\_wf\_dep**

Project workflow steps can have one or more dependencies within a project workflow

Name	Datatype	Is PK	Null Option	Is FK	Description
wf_no	integer	Yes	NOT NULL	Yes	Unique ID generated by the system for each workflow step or stage. Foreign key to uap_workflow.
dep_seq	integer	Yes	NOT NULL	No	
project_id	integer	No	NULL	Yes	Unique ID generated by the system for each project and project request. Foreign key to uap_projects.
dep_wf_no	integer	No	NULL	No	Workflow step internal number/ID.

---

### **uap\_wf\_milestone**

**Note:** This table is a view created to support Cognos reports.

Name	Datatype	Is PK	Null Option	Is FK	Description
milestone_type	integer	Yes	NOT NULL	No	Unique ID generated by the system for each milestone type.
milestone_desc	string (100)	No	NULL	No	Milestone type description/display name.

---

## uap\_wf\_role

Table 168. Columns in the uap\_wf\_role table

Name	Datatype	Is PK	Null Option	Is FK	Description
wf_no	integer	Yes	NOT NULL	Yes	Unique ID generated by the system for each workflow step or stage. Foreign key to uap_workflow.
role_id	integer	Yes	NOT NULL	Yes	Workflow task resource role/type ID. Foreign key to uap_ml_role.
role_type	integer	Yes	NOT NULL	No	Type of the role. The following values are valid: <ul style="list-style-type: none"><li>• 1 = Team Member/Owner</li><li>• 2 = Reviewer/Recipient</li></ul>
role_order	integer	No	NULl	No	The order of the role in the approval.

---

## uap\_wf\_teams

This table stores information about teams and users assigned to workflow tasks.  
This table was added in version 7.3.

Name	Datatype	Is PK	Null Option	Is FK	Description
wf_no	integer	Yes	NOT NULL	Yes	Unique ID generated by the system for each workflow step or stage. Foreign key to uap_workflow.
team_id	integer	Yes	NOT NULL	Yes	Unique identifier for the team. Foreign key into uap_teams.
user_id	integer	Yes	NOT NULL	Yes	User ID. Foreign key into uap_users.

---

## uap\_wf\_users

Name	Datatype	Is PK	Null Option	Is FK	Description
wf_no	integer	Yes	NOT NULL	Yes	Unique ID generated by the system for each workflow step or stage.
user_id	integer	Yes	NOT NULL	Yes	User ID of a workflow task member. Foreign key to uap_user.

---

## uap\_workflow

This table contains data for project workflow stages and steps.

Table 169. Schema for uap\_workflow

Name	Datatype	Is PK	Null Option	Is FK	Description
wf_no	integer	Yes	NOT NULL	No	Unique identifier generated by the system for each workflow step or stage.

Table 169. Schema for `umo_workflow` (continued)

Name	Datatype	Is PK	Null Option	Is FK	Description
name	string (256)	No	NULL	No	Name of the stage or step. Size of the column was changed to 256 for version 7.4.0.
project_id	integer	No	NULL	Yes	Unique identifier for a project or project request. Foreign key for <code>uap_projects</code> .
display_order	integer	No	NULL	No	
display_id	string (10)	No	NULL	No	Order of the stage or step. This value is used to determine the sort order for the stages.
flag_stage	string (1)	No	NULL	No	Step display integer. This value appears along with the step or stage name in the user interface. (For example, "1.1 Creative Approval Task".)
start_date	date	No	NULL	No	Workflow step start date.
end_date	date	No	NULL	No	Workflow step end date.
flag_anchor	string (1)	No	NULL	No	Anchor date flag.
forecast_st	date	No	NULL	No	Workflow step forecast start date.
forecast_end	date	No	NULL	No	Workflow step forecast end date.
duration	floating pt	No	NULL	No	Workflow step predicted/forecast duration.
actual_duration	floating pt	No	NULL	No	Workflow step actual duration.
pcnt_comp	integer	No	NULL	No	Percent complete.
parent_stage	integer	No	NULL	No	Parent stage if the entry is a step.
flag_link	string (1)	No	NULL	No	Workflow step link flag. The value is Y if the step is linked and null if it is not linked.
link_object	string (20)	No	NULL	No	The type of task (for example, people task or approval).
link_id	integer	No	NULL	No	Workflow step link object ID. If the value for the <code>link_object</code> column is APPROVAL, the value for this column is the approval ID.
status_code	string (20)	No	NULL	No	
state_code	string (20)	No	NULL	No	Status of the stage or task. These values are valid: <ul style="list-style-type: none"> <li>• PENDING</li> <li>• ACTIVE</li> <li>• FINISHED</li> <li>• SKIPPED</li> </ul>
notes	string (1024)	No	NULL	No	
milestone_type	integer	No	NULL	Yes	Workflow step or task milestone type. Foreign key to <code>uap_wf_milestone</code> .
error_code	string (20)	No	NULL	No	Workflow task error code, such as an error in recalculating dependency dates.
effort	string (20)	No	NULL	No	Estimated effort.
actual_effort	string (20)	No	NULL	No	Actual effort.

*Table 169. Schema for umo\_workflow (continued)*

Name	Datatype	Is PK	Null Option	Is FK	Description
scheduling_mask	integer	No	NULL	No	Determines whether a workflow step schedules through weekends, non-work time, or both.
duration_str	string (20)	No	NULL	No	Workflow step predicted/forecast duration in DD-HH-MM format. This column was added in version 7.5.
actual_duration_str	string (20)	No	NULL	No	Workflow step actual duration of the task in DD-HH-MM format. This column was added in version 7.5.
effort_str	string (20)	No	NULL	No	Estimated effort of the task in DD-HH-MM format. This column was added in version 7.5.
actual_effort_str	string (20)	No	NULL	No	Actual effort in DD-HH-MM format. This column was added in version 7.5.
enable_attachment	string (2)	No	NULL	No	Flag to allow attachments to task. This column was added in version 7.5.
required	string (2)	No	NULL	No	Workflow task is required task or not. This column was added in version 7.5.
enforce_dep	string (2)	No	NULL	No	Flag to enforce dependency between workflow task. This column was added in version 7.5.
task_code	string (100)	No	NULL	No	Used to uniquely identify tasks, for use with the SDK. This column was added in version 7.5.
ready_to_start	integer	No	NULL	No	This column was added in version 8.2.0. It identifies whether dependencies are complete. <ul style="list-style-type: none"> <li>• 0 = Not ready to start</li> <li>• 1 = Ready to start</li> </ul>
last_mod_date	datetime	No	NULL	No	This column was added in version 8.5.0. The last updated date for the workflow task.

---

## Chapter 24. User Interface tables overview

The following tables contain information about the user interface. These tables were added in version 8.6.0.

---

### uap\_ui\_column

*Table 170. Schema for uap\_ui\_column*

Name	Datatype	Is PK	Null Option	Is FK	Description
column_id	integer	Yes	NOT NULL	No	
column_name	string (40)	No	NULL	No	
display	string (200)	No	NULL	No	
tooltip	string (200)	No	NULL	No	
object_type	string (520)	No	NULL	No	
is_visible	string (1)	No	NOT NULL	No	Defaults to Y.

---

### uap\_ui\_menu

*Table 171. Schema for uap\_ui\_menu*

Name	Datatype	Is PK	Null Option	Is FK	Description
menu_id	integer	Yes	NOT NULL	No	
menu_name	string (30)	No	NULL	No	
object_type	string (520)	No	NULL	No	
is_visible	string (1)	No	NOT NULL	No	Defaults to Y.

---

### uap\_ui\_menu\_item

*Table 172. Schema for uap\_ui\_menu\_item*

Name	Datatype	Is PK	Null Option	Is FK	Description
menu_id	integer	Yes	NOT NULL	Yes	Foreign key to uap_ui_menu.
menu_item_id	integer	Yes	NOT NULL	No	
menu_item_name	string (40)	No	NULL	No	
tab_order	integer	No	NULL	No	
tab_id	string (30)	No	NULL	No	
style	string (200)	No	NULL	No	
display	string (200)	No	NULL	No	
attribute_id	string (30)	No	NULL	No	
is_grid	string (1)	No	NULL	No	
map_id	string (30)	No	NULL	No	

*Table 172. Schema for uap\_ui\_menu\_item (continued)*

Name	Datatype	Is PK	Null Option	Is FK	Description
item_type	string (20)	No	NULL	No	
is_visible	string (1)	No	NOT NULL	No	Defaults to Y.

---

## **uap\_ui\_tabset**

*Table 173. Schema for uap\_ui\_tabset*

Name	Datatype	Is PK	Null Option	Is FK	Description
tabset_id	integer	Yes	NOT NULL	No	
tabset_name	string (30)	No	NULL	No	
object_type	string (520)	No	NULL	No	
tabset_title	string (60)	No	NULL	No	
is_visible	string (1)	No	NOT NULL	No	Defaults to Y.

---

## **uap\_ui\_tabset\_item**

*Table 174. Schema for uap\_ui\_tabset\_item*

Name	Datatype	Is PK	Null Option	Is FK	Description
tabset_id	integer	Yes	NOT NULL	Yes	Foreign key to uap_ui_tabset.
tabset_item_id	integer	Yes	NOT NULL	No	
tab_order	integer	No	NULL	No	
item_name	string (30)	No	NULL	No	
item_type	string (20)	No	NULL	No	
xpos	integer	No	NULL	No	
width	integer	No	NULL	No	
height	integer	No	NULL	No	
visible	string (1)	No	NULL	No	
divider	string (1)	No	NULL	No	
is_grid	string (1)	No	NULL	No	
selected	string (1)	No	NULL	No	
tab_group	string (30)	No	NULL	No	
display	string (200)	No	NULL	No	
icon_img	string (200)	No	NULL	No	
img_id	string (30)	No	NULL	No	
map_id	string (30)	No	NULL	No	
display_id	string (30)	No	NULL	No	
help_tip	string (200)	No	NULL	No	
discriminator	string (1)	No	NOT NULL	No	
is_visible	string (1)	No	NOT NULL	No	Defaults to Y.

---

## Chapter 25. User management and security tables overview

The following tables store information about user management and security.

---

### uap\_function

This table contains entries for all the functions in the system; each function can be granted, denied, or inherited for a particular security policy. This table was added in version 7.3.

*Table 175. Columns in the uap\_function table*

Name	Datatype	Is PK	Null Option	Is FK	Description
function_id	integer	Yes	NOT NULL	No	Unique identifier for the function.
name	string (50)	No	NULL	No	Internal name of the function.
description	string (100)	No	NULL	No	Display name for the function.
object_fn_cat	string (50)	No	NOT NULL	No	Category of the function. The following are valid values: <ul style="list-style-type: none"><li>• ACCESSIBLE_OPTION</li><li>• ANALYSIS</li><li>• ATTACHMENT</li><li>• BUDGET</li><li>• FOLDERS</li><li>• GENERAL</li><li>• PEOPLE</li><li>• SUMMARY</li><li>• TRACKING</li><li>• WORKFLOW</li></ul>
object_type	string (50)	No	NULL	No	Type of object (for example, project) that uses this function.
display_order	integer	No	NULL	No	Order to display this function on screen when setting permissions.

---

### uap\_mem\_fn\_map

Name	Datatype	Is PK	Null Option	Is FK	Description
mem_type_id	integer	Yes	NOT NULL	Yes	
function_id	integer	Yes	NOT NULL	Yes	
sec_policy_id	integer	Yes	NOT NULL	Yes	

---

## uap\_role\_fn\_map

Name	Datatype	Is PK	Null Option	Is FK	Description
role_id	integer	Yes	NOT NULL	Yes	
function_id	integer	Yes	NOT NULL	Yes	
extd_perm	string (1)	No	NULL	No	

---

## uap\_roles

Name	Datatype	Is PK	Null Option	Is FK	Description
roles_id	integer	Yes	NOT NULL	No	Unique identifier for the role.
role_name	string (50)	No	NULL	No	Name for the role.
role_desc	string (255)	No	NULL	No	Text description for the role.
sec_policy_id	integer	No	NULL	No	Foreign key into uap_sec_policy.sec_policy_id.

---

## uap\_sec\_policy

Table 176. Columns in the uap\_sec\_policy table

Name	Datatype	Is PK	Null Option	Is FK	Description
sec_policy_id	integer	Yes	NOT NULL	No	Unique identifier for the security policy.
name	string (50)	No	NULL	No	Name for the security policy as it appears in Marketing Operations
description	string (255)	No	NULL	No	Text description for the security policy.
policy_type	string (20)	No	NULL	No	Security policy type. The following are valid values: <ul style="list-style-type: none"><li>• S = Global policy</li><li>• C = all other policies</li></ul>
status_code	string (20)	No	NULL	No	Status of the policy. The following are valid values: <ul style="list-style-type: none"><li>• ACTIVE</li><li>• DISABLED</li></ul>

---

## uap\_template\_function

This table stores the template-level functions. These functions map to functions defined in uap\_function. This table was added in version 7.5.

Name	Datatype	Is PK	Null Option	Is FK	Description
Template_function_id	integer	Yes	NOT NULL	No	Template Function ID.
Function_id	integer	No	NOT NULL	Yes	Corresponding function ID in uap_function.
Template_id	integer	No	NOT NULL	Yes	Template ID. Primary key from uap_tt_templates.

Name	Datatype	Is PK	Null Option	Is FK	Description
Object_type	string (100)	No	NOT NULL	No	Object current object type (for example, Project or Request).
Map_id	integer	No	NOT NULL	Yes	ID of the tab. Primary key from uap_tt_map.

---

## uap\_tt\_role\_member\_type\_map

This table was added in version 7.5.

Name	Datatype	Is PK	Null Option	Is FK	Description
Role_id	integer	No	NOT NULL	Yes	Role ID for which mapping is to be stored. Primary key from uap_roles.
Template_id	integer	No	NOT NULL	Yes	Template with which the role is defined. Primary key from uap_tt_template.
Flag_team_mem	string	No	NOT NULL	No	Membership flag.
Object_type	string (100)	No	NOT NULL	No	Object current object type (for example, Project, Request).
Mem_type_id	integer	Yes	NOT NULL	No	Mapping with Member Type ID.

---

## uap\_uf\_crit

Table 177. Columns in the uap\_uf\_crit table

Name	Datatype	Is PK	Null Option	Is FK	Description
ufolder_id	integer	Yes	NOT NULL	Yes	Unique ID generated by the system for each user personalized folder.
seq_no	integer	Yes	NOT NULL	No	User folder search/selection criteria sequence number.
col_name	string (50)	No	NULL	No	Search criteria column name.
col_value	string (255)	No	NULL	No	Search criteria column value.
crit_operator	string (20)	No	NULL	No	Search criteria operator. The valid values are = and LIKE.
crit_logic_op	string (3)	No	NULL	No	Search criteria logical operator. The following are valid values: <ul style="list-style-type: none"> <li>• AND</li> <li>• OR</li> </ul>

---

## uap\_user

A user defined in the planning system. Contains definitions and privileges.

Table 178. Columns in the uap\_user table

Name	Datatype	Is PK	Null Option	Is FK	Description
user_id	integer	Yes	NOT NULL	No	

Table 178. Columns in the uap\_user table (continued)

Name	Datatype	Is PK	Null Option	Is FK	Description
first_name	string (64)	No	NULL	No	Size of the column was increased to 64 in version 8.0.
last_name	string (80)	No	NULL	No	Size of the column was increased to 80 in version 8.0.
login_id	string (200)	No	NULL	No	Size of the column was changed from 20 to 100 in version 7.3. Size of the column was changed from 100 to 200 in version 8.0.
email_id	string (100)	No	NULL	No	
last_mod_date	date	No	NULL	No	
status_code	string (20)	No	NULL	No	The following are valid values: <ul style="list-style-type: none"><li>• ENABLED</li><li>• DISABLED</li><li>• DELETED</li></ul>
locale	string (10)	No	NULL	No	The locale for the user. This column was added in version 7.4.0.

---

## uap\_user\_cal\_opt

Name	Datatype	Is PK	Null Option	Is FK	Description
calendar_type	string (20)	Yes	NOT NULL	No	Value must be one of the CAT_* constants defined in UAPConstants.java.
user_id	integer	Yes	NOT NULL	Yes	
seq_no	integer	Yes	NOT NULL	No	
column_value	string (50)	No	NULL	No	For predefined info, its value is one of the PROJECT_* constants defined in UAListConstants.java.  For milestone types, its value is uap_wf_milestone.milestone_type.
column_type	string (20)	No	NULL	No	

---

## uap\_user\_folders

Table 179. Columns in the uap\_user\_folders table

Name	Datatype	Is PK	Null Option	Is FK	Description
ufolder_id	integer	Yes	NOT NULL	No	Unique ID generated by the system for each user personalized folder.
user_id	integer	No	NOT NULL	Yes	Folder user ID. Foreign key to uap_user.user_id.
name	string (50)	No	NULL	No	Folder name.
description	string (255)	No	NULL	No	Folder description.

Table 179. Columns in the uap\_user\_folders table (continued)

Name	Datatype	Is PK	Null Option	Is FK	Description
folder_type	string (20)	No	NULL	No	Folder type. Possible values are: <ul style="list-style-type: none"><li>• PROJECT</li><li>• PROGRAM</li><li>• PLAN</li></ul>
parent_folder	integer	No	NULL	No	Parent system folder ID. This value refers to the ufolder_id of another row within this table.
sys_folder_id	integer	No	NULL	No	System folder ID. The following values are valid: <ul style="list-style-type: none"><li>• -1 = User saved search</li><li>• 1 = All Projects and Requests</li><li>• 2 = All Active Projects and Requests</li><li>• 3 = My Projects</li><li>• 4 = My Requests</li><li>• 11 = All Programs</li><li>• 12 = Active Programs</li><li>• 13 = My Programs</li><li>• 21 = All Invoices</li><li>• 22 = My Active Invoices</li><li>• 31 = All Plans</li><li>• 32 = Active Plans</li><li>• 41 = All Accounts</li><li>• 42 = Active Accounts</li><li>• 51 = All RFQs</li><li>• 52 = Active RFQs</li></ul>
created_by	integer	No	NULL	Yes	User ID of the user who created the search. Foreign key to uap_user.user_id.

---

## uap\_user\_list

Name	Datatype	Is PK	Null Option	Is FK	Description
column_type	string (20)	Yes	NOT NULL	No	Possible values are list or calendar.
ufolder_id	integer	Yes	NOT NULL	Yes	Unique ID generated by the system for each user personalized folder.
seq_no	integer	Yes	NOT NULL	No	List column sequence number.
column_id	string (50)	No	NULL	No	List column database column ID/name.
tab_order	integer	No	NULL	No	List column display order.
flag_ext_col	string (1)	No	NULL	No	Value = Y if this column is extended/custom database table column. Value = N if this column is a standard/predefined column.

---

## **uap\_user\_menu\_pref**

This table specifies, for each user, the menu and menu item to display as the default when they log in to IBM Marketing Operations. This table was added in version 7.3.

Name	Datatype	Is PK	Null Option	Is FK	Description
user_id	integer	Yes	NOT NULL	No	Unique ID generated by the system for each user.
menu_group_id	string (64)	Yes	NOT NULL	No	User starts with this menu group upon logging in.
default_menu_item	string (64)	No	NOT NULL	No	User sees this menu item as the default upon logging in.

---

## **uap\_user\_roles**

This table maps a user to a security role in a security policy. A user has a row in this table for each security policy in which that user participates.

Name	Datatype	Is PK	Null Option	Is FK	Description
role_id	integer	Yes	NOT NULL	Yes	Foreign key into uap_roles.role_id.
sec_policy_id	integer	Yes	NOT NULL	Yes	Foreign key into uap_sec_policy.sec_policy_id.
user_id	integer	Yes	NOT NULL	Yes	Foreign key into uap_user.user_id.

---

## **uap\_utype\_pref**

Each user can set their starting screen when they view projects. This table stores those preferences. This table was new in version 7.3.

Name	Datatype	Is PK	Null Option	Is FK	Description
user_id	integer	Yes	NOT NULL	Yes	User ID. Foreign key to uap_users.user_id.
type	string (50)	Yes	NOT NULL	Yes	Type of object to start in (for example, project).
startup_folder_id	integer	Yes	NULL	Yes	ID of the folder to start in. (For example, 1 corresponds to All Projects and Requests.) Foreign key into uap_user_folders.ufolder.id.
default_view	string (20)	No	NULL	No	The default view for the Task view (either List or Calendar). This column was added in version 7.4.1.

---

## Chapter 26. User notification tables overview

The following tables contain information about user notifications, including alerts and email.

---

### **uap\_default\_alerts**

This table stores default alert messages for each locale. This table was added in version 7.5.

Name	Datatype	Is PK	Null Option	Is FK	Description
event_id	integer	Yes	NOT NULL	No	Unique identifier for the event.
locale	string (10)	Yes	NOT NULL	No	Locale in which the message is used.
object_type	integer	Yes	NOT NULL	No	Object type of the event.
subject_general	string	No	NOT NULL	No	Subject of the alert message.
subject_exclusive	string	No	NULL	No	Personalized subject of the alert message.
body_general	string	No	NULL	No	Body message of the alert message.
body_exclusive	string	No	NULL	No	Personalized body message of the alert message.

---

### **uap\_cust\_alert\_header\_footer**

This table was added in version 7.5.

Name	Datatype	Is PK	Null Option	Is FK	Description
template_id	integer	Yes	NOT NULL	No	Primary key. Template ID. Primary key from uap_tt_template.
Locale	string (10)	Yes	NOT NULL	No	Primary Key Locale.
Header	string		NULL	No	Header message to be sent with email alert message.
Footer	string	No	NULL	No	Footer message to be sent with email alert message.

---

### **uap\_customized\_alerts**

This table stores the alert messages customized by the user. This table was added in version 7.5.

Name	Datatype	Is PK	Null Option	Is FK	Description
event_id	integer	Yes	NOT NULL	No	Primary key. Event ID.
locale	string (10)	Yes	NOT NULL	No	Primary key. Locale of the message.
template_id	integer	Yes	NOT NULL	Yes	Template ID. Foreign key from uap_tt_template.
object_type	integer	Yes	NOT NULL	No	Primary key. Object type of the event.

Name	Datatype	Is PK	Null Option	Is FK	Description
subject_general	string	No	NOT NULL	No	Subject of the alert message.
subject_exclusive	string	No	NULL	No	Personalized subject of the alert message.
body_general	string	No	NULL	No	Body message of the alert message.
body_exclusive	string	No	NOT NULL	No	Personalized body message of the alert message.

---

## uap\_email\_queue

Table 180. Columns in the uap\_email\_queue table

Name	Datatype	Is PK	Null Option	Is FK	Description
email_id	integer	Yes	NOT NULL	No	Unique identifier for the email message.
notify_id	integer	No	NOT NULL	No	
post_datetime	date	No	NOT NULL	No	Date and time for when the message was posted.
resend_count	integer	No	NOT NULL	No	
resend_datetime	date	No	NOT NULL	No	
resend_status	integer	No	NOT NULL	No	
to_address	string (64)	No	NOT NULL	No	
from_address	string (64)	No	NOT NULL	No	
reply_address	string (1024)	No	NOT NULL	No	
priority_type	integer	No	NOT NULL	No	
subject	string (300)	No	NOT NULL	No	Subject line for the message. The size of the column was changed to 300 in version 7.4.0.
content	string (unlimited)	No	NOT NULL	No	Text content of the message. The size of the column was increased in version 7.3 and again in 7.4.1. The column now supports unlimited text length.
status	string (20)	No	NULL	No	This column was added in version 7.4.0.
plan_server	string (50)	No	NULL	No	For a clustered environment, the name of the server for which the item is queued.

---

## uap\_event\_queue

Table 181. Columns in the uap\_event\_queue table

Name	Datatype	Is PK	Null Option	Is FK	Description
event_id	integer	Yes	NOT NULL	No	
event_type	integer	No	NOT NULL	No	
post_datetime	date	No	NOT NULL	No	
src_object_type	integer	No	NOT NULL	No	

*Table 181. Columns in the uap\_event\_queue table (continued)*

Name	Datatype	Is PK	Null Option	Is FK	Description
src_object_id	integer	No	NOT NULL	No	
user_id	integer	No	NULL	No	
comments	string (unlimited)	No	NULL	No	The size of the column was increased for version 7.4.1. The column now supports unlimited text length.
status	string (20)	No	NULL	No	This column was added in version 7.4.0.
plan_server	string (50)	No	NULL	No	For clustered environments, the name of the server for which the item is queued. This column was added in version 7.4.0.

---

## **uap\_mem\_notify**

Name	Datatype	Is PK	Null Option	Is FK	Description
mem_type_id	integer	Yes	NOT NULL	Yes	
event_type	integer	Yes	NOT NULL	Yes	
delivery_mask	integer	No	NULL	No	

---

## **uap\_member\_type**

This table defines all the member types for system objects. This table was added in version 7.3.

*Table 182. Columns in the uap\_member\_type table*

Name	Datatype	Is PK	Null Option	Is FK	Description
mem_type_id	integer	Yes	NOT NULL	No	Unique identifier for the membership type.
mem_name	string (255)	No	NULL	No	Name of the membership type. Possible values are as follows: <ul style="list-style-type: none"><li>• Approver</li><li>• Manager</li><li>• Owner</li><li>• Participant</li><li>• Recipient</li><li>• Requester</li></ul>
object_type	string (50)	No	NULL	No	The object type corresponding to the membership. For example, a program object has membership types of Owner and Participant.
Template_id	integer	No	NOT NULL	No	Stored the template ID. Default value is -1.

---

## uap\_notifications

This table contains the details for notifications, which are sent as alerts in Marketing Operations.

Table 183. Columns in the uap\_notifications table

Name	Datatype	Is PK	Null Option	Is FK	Description
notify_id	integer	Yes	NOT NULL	No	Unique identifier for the notification.
post_datetime	date	No	NOT NULL	No	Date and time the notification was created.
evt_id	integer	No	NULL	Yes	Identifier of the event that caused the notification.
evt_type	integer	No	NOT NULL	No	Type of the event that caused the notification.
evt_post_datetime	date	No	NOT NULL	No	Date and time the event that caused the notification occurred.
evt_source_type	integer	No	NOT NULL	No	
evt_source_id	integer	Yes	NOT NULL	No	
evt_user_id	integer	No	NULL	No	
evt_comments	string (unlimited)	No	NULL	No	The text of the notification. The size of this column was increased in version 7.4.1 to support unlimited text length.

---

## uap\_notify\_msg

Table 184. Columns in the uap\_notify\_msgs table

Name	Datatype	Is PK	Null Option	Is FK	Description
event_type	integer	Yes	NOT NULL	No	Type of the event.
object_type	integer	No	NULL	No	Object type of the event.
category_type	integer	No	NULL	No	Category of the event.
description	string (100)	No	NULL	No	Message description.
display_order	integer	No	NULL	No	Display order of event.
is_exclusive	integer	No	NULL	No	Does this event support personalization. This column was added in version 7.5.

---

## uap\_ws\_alerts

Table 185. Columns in the uap\_ws\_alerts table

Name	Datatype	Is PK	Null Option	Is FK	Description
notify_id	integer	Yes	NOT NULL	Yes	
post_datetime	date	No	NULL	No	
status	integer	Yes	NOT NULL	No	
source_type	integer	No	NULL	No	
source_id	integer	No	NULL	No	

*Table 185. Columns in the uap\_ws\_alerts table (continued)*

Name	Datatype	Is PK	Null Option	Is FK	Description
message	string (1024)	No	NULL	No	



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