



Informatica® Multidomain MDM
10.4.HotFix 2

ActiveVOS® Setup Guide

Informatica Multidomain MDM ActiveVOS® Setup Guide
10.4.HotFix 2
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Preface

See the Informatica® *Multidomain MDM ActiveVOS Setup Guide* to learn about ActiveVOS, the default workflow engine for Informatica Multidomain MDM. Understand how to configure workflow tasks and triggers. Ensure that updates to records and hierarchy relationships move through a change-approval workflow.

Informatica Resources

Informatica provides you with a range of product resources through the Informatica Network and other online portals. Use the resources to get the most from your Informatica products and solutions and to learn from other Informatica users and subject matter experts.

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To find online support resources on the Informatica Network, visit <https://network.informatica.com> and select the eSupport option.

CHAPTER 1

MDM and Embedded ActiveVOS

This chapter includes the following topics:

- [MDM and ActiveVOS Overview, 7](#)
- [How MDM Concepts Map to ActiveVOS Concepts, 8](#)
- [MDM Workflows and Task Types, 9](#)
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- [Monitor Workflow Progress in the ActiveVOS Console, 23](#)

MDM and ActiveVOS Overview

You can ensure that updated entity data goes through a change-approval workflow before the updated records contribute the Best Version of the Truth (BVT) records. For example, a business process might require that a senior manager review and approve updates to customer data before it becomes master data.

To support a change-approval workflow, the MDM Hub and Data Director (IDD) integrate with the ActiveVOS[®] Server. Predefined MDM workflows, task types, and roles enable the components to synchronize with one another.

The components support a change-approval workflow in the following ways:

- The MDM Hub manages a state on the records in the base object tables that have state management enabled. Unapproved records have a pending state, while approved records have an active state.
- In IDD applications, authorized business users change entity data and can send updates for approval.
- The ActiveVOS Server runs activities within the MDM workflows and creates tasks for business managers and data stewards.

Example

Your business process requires that a senior manager review and approve updates to customer data before it becomes master data. The IDD application and the MDM environment are configured to use the ActiveVOS Server as the default workflow engine.

The predefined One Step Approval Workflow defines a business process that requires one senior manager to review and approve updates. The following steps summarize what happens when a data steward initiates the One Step Approval Workflow:

1. In an IDD application, a data steward updates a customer entity and sends the update for approval.
2. In the MDM Operational Reference Store, the records enter a pending state.
3. The ActiveVOS Server begins running activities in its One Step Approval Workflow process.
4. When the ActiveVOS Server reaches the Final Review people activity, the server creates a task for senior managers.
5. In the IDD application, all senior managers receive the task in their Task Inboxes. The task links to the updated customer entity.
6. If a senior manager approves the update, the following events occur:
 - In IDD, the task is completed.
 - The ActiveVOS Server marks the Final Review people activity as complete and runs the next activity in the One Step Approval Workflow process.
 - In the MDM Operational Reference Store, the approved records enter an active state.
 - In the MDM Hub, the approved records contribute to the BVT records.

How MDM Concepts Map to ActiveVOS Concepts

The Hub Server installation deploys MDM workflows and tasks to the ActiveVOS Server as processes and people activities.

An MDM workflow corresponds to a process or process flow in Informatica ActiveVOS. A process defines the activities in a business process and the paths of execution through the activities. If you have the user privileges, you can see a graphical representation of the process flow in the ActiveVOS Console by using a process diagram. You can also monitor task-completion in the process diagram.

An MDM task corresponds to a people activity in Informatica ActiveVOS. A people activity is a special type of activity that requires human interaction. For example, a business manager might need to approve updates to customer information before those updates can become master data. A people activity is partially defined by an ActiveVOS task. An ActiveVOS task includes people assignments and other details. An ActiveVOS task is not executable outside a people activity.

MDM Workflows and Task Types

The predefined MDM workflows and task types are deployed to the ActiveVOS Server as processes and people activities.

You can choose from the following workflow processes:

- Update With Approval Workflow
- One Step Approval Workflow
- Two Step Approval Workflow
- Merge Workflow
- Unmerge Workflow

Update With Approval Workflow

In the Update With Approval Workflow process, a data steward reviews the changed entity before either canceling the update or sending the update through a two-step approval process.

The following table summarizes the people activities within the process:

People Activity	Role Assigned	Description
Update	DataSteward	A data steward reviews the update and either cancels the update or sends it through a two-step approval process.
Review No Approve	Manager	A manager reviews an update and either rejects it or sends it on for Final Review.
Final Review	SrManager	A senior manager reviews the update and either rejects it or approves it.
Notification	DataSteward	If approved, the data steward receives a notification that the update is approved.

One Step Approval Workflow

The One Step Approval Workflow process requires one senior manager to review and then approve or reject the update.

The following table summarizes the people activities within the process:

People Activity	Role Assigned	Description
Final Review	SrManager	A senior manager reviews an update and either approves it or rejects it.
Notification	DataSteward	If the update is approved, the record is flagged for promotion and the data steward is notified.
Update	DataSteward	If the update is rejected, the data steward is notified and can cancel the update.

Two Step Approval Workflow

The Two Step Approval Workflow process requires at least two business managers to participate in the review and approval process.

The following table summarizes the people activities within the process:

People Activity	Role Assigned	Description
Review No Approve	Manager	A manager reviews an update and either rejects it or escalates it to Final Review.
Final Review	SrManager	A senior manager reviews the update and either approves it or rejects it.
Notification	DataSteward	If approved, the record is flagged for promotion and the data steward is notified.
Update	DataSteward	If rejected, the data steward is notified and can cancel the update.

Merge Workflow

When you select merge candidates, you can create a task that initiates the Merge Workflow process in the ActiveVOS Server.

The following table describes the people activity within the process:

People Activity	Role Assigned	Description
Merge	DataSteward	A data steward reviews the candidates and either merges the records or cancels the action.

Unmerge Workflow

When you unmerge records, you can create a task that initiates the Unmerge Workflow process in the ActiveVOS Server.

The following table describes the people activity within the process:

People Activity	Role Assigned	Description
Unmerge	DataSteward	A data steward reviews the candidate and either unmerges the records or cancels the action.

Install the ActiveVOS Server with the MDM Hub Server

You install the ActiveVOS Server as part of the process of installing Multidomain MDM. You also install the ActiveVOS Server as part of the process of upgrading Multidomain MDM if you have an older version of

ActiveVOS installed. The bundled ActiveVOS Server license activates the ActiveVOS Server, the ActiveVOS Console, and ActiveVOS Central.

Note: If you want to extend this license to include the ActiveVOS Designer, contact your Informatica Sales Representative.

For more information, see the *Multidomain MDM Installation Guide* and the *Multidomain MDM Upgrade Guide*.

Configure an Informatica Data Director Application

When you create an Informatica Data Director (IDD) application, the default task type IDs are for Siperian BPM. After you configure your application, you need to replace the default task type definitions with the ActiveVOS task type definitions. Then you can set a default workflow.

Creating an Application for Data Director

The process to create and configure a Data Director application is outside the scope of this document. To learn how to create an application, see the *Multidomain MDM Data Director Implementation Guide* and the *Multidomain MDM Data Director Configuration Manager Online Help*.

The Resource Kit contains the following sample ActiveVOS-enabled IDD applications that work with the mdm_sample Operational Reference Store:

- `IDDConfig_ActiveVOS.xml` sets up the Data Director application for the sample schema that is included in the Resource Kit. The file contains task configuration for the Informatica ActiveVOS workflow adapter that is based on subject areas.
- `IDDConfig_ActiveVOS_BE.xml` sets up the Data Director application for the sample schema that is included in the Resource Kit. The file contains task configuration for the Informatica ActiveVOS workflow adapter that is based on business entities.

Note: You must configure a default approval workflow trigger for the sample schema. You must also configure a task templates and task triggers for the merge workflow and the unmerge workflow.

Deploying the Informatica Data Director Application

To deploy the Informatica Data Director (IDD) application, use the IDD Configuration Manager to set the IDD application state to limited deployment or full deployment. For information about deploying the IDD application, see the IDD Configuration Manager online help.

When you deploy the IDD application, the custom resources required for ActiveVOS workflows become available in the MDM Hub Security Access Manager.

Configure the MDM Hub

To configure the MDM Hub, you need to perform the following steps:

1. Configure the user roles that are required by the ActiveVOS business processes.
2. Assign user roles to business managers.
3. Enable state management on the base object tables in the Operational Reference Store.

4. Map the Operational Reference Store to the ActiveVOS workflow engine.

Configure User Roles

To ensure that MDM can authenticate users with the ActiveVOS Server, the same user roles must exist in the MDM Hub, Data Director, and the ActiveVOS Server. You assign these user roles to users in the MDM Hub, and the Security Access Manager manages user access to all components.

You can assign multiple roles to users. Role privileges are cumulative, so users who have multiple roles receive the combined privileges associated with each role. For example, you might assign a user the Data Steward role, the abAdmin role, and the abadmin role. The user receives the combined workflow and task administration privileges associated with each role.

The following table lists the required user roles, identifies the workflow actions, and lists task administration actions that are associated with the role:

User Role	Workflow Actions	Task Administration Actions
DataSteward	Update, Merge, Unmerge, Notification	Users can perform the following actions on tasks available to their user role: <ul style="list-style-type: none"> - Claim - Release - Edit - Task actions, such as Accept, Reject, or Disclaim Note: The available task actions depend on your role and ActiveVOS workflows.
Manager	Review No Approve	Users can perform the following actions on tasks available to their user role: <ul style="list-style-type: none"> - Claim - Release - Edit - Task actions, such as Accept, Reject, or Disclaim Note: The available task actions depend on your role and ActiveVOS workflows.
SrManager	Final Review	Users can perform the following actions on tasks available to their user role: <ul style="list-style-type: none"> - Claim - Release - Edit - Task actions, such as Accept, Reject, or Disclaim Note: The available task actions depend on your role and ActiveVOS workflows.

User Role	Workflow Actions	Task Administration Actions
abAdmin	-	Users can perform the following actions on all tasks: <ul style="list-style-type: none"> - Assign - Release - Edit Note: Users can manage tasks for default approval and unmerge ActiveVOS workflows.
abadmin	-	Users can perform the following actions on all tasks: <ul style="list-style-type: none"> - Assign - Release - Edit Note: Users can manage tasks for default merge ActiveVOS workflows.

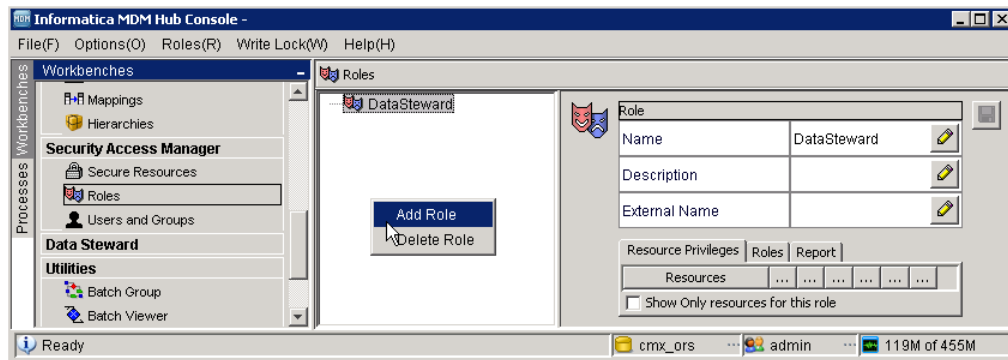
Note: If you use ActiveVOS for business process management, the user roles must not contain spaces.

To enable the task administration privileges for the abAdmin and abadmin roles, you must configure the Task Administrator role in the Provisioning tool. For more information, see the *Multidomain MDM Provisioning Tool Guide*.

Creating the Required Roles

To create the DataSteward, Manager, and SrManager roles, use the Hub Console Roles tool. After you deploy the Informatica Data Director application, you can assign the appropriate privileges to the custom resources. To receive ActiveVOS workflow tasks, users must belong to at least one of the user roles for workflows.

1. In the Hub Console, connect to the target Operational Reference Store.
2. In the Security Access Manager workbench, click **Roles**.
3. Acquire a write lock.
4. Right-click the **Roles** navigation panel and select **Add Role**.



5. Enter DataSteward in the **Name** field, and click **OK**.
6. Add the Manager and SrManager roles in the same way.

Assigning Privileges to the MDM Hub Roles

Assign the appropriate privileges to the MDM Hub roles after you deploy the Informatica Data Director (IDD) application. To assign privileges to the MDM Hub roles, use the Roles tool in the MDM Hub Console.

1. In the Security Access Manager workbench, click **Roles**.
2. Acquire a write lock.
3. Select the **DataSteward** role.
4. Assign the appropriate permissions to each resource.
To ensure that users belonging to a role can be assigned tasks that the MDM Hub generates, you must assign read, create, update, and merge permissions to all content metadata resources for the applicable base objects.
5. Assign the appropriate permissions to each custom resource.
6. Click **Save**.
7. Assign permissions to the **Manager** and **SrManager** roles in the same way.

Configure User Accounts

Before you assign roles to user accounts, ensure that you have MDM Hub user accounts for all the business users who need to participate in workflows. If required, add new user accounts for business users. If you add new users, add the same users to the container in the application server.

After you have the user accounts, assign the roles to the users. You must assign each of the roles to at least one person. You can assign the same role to more than one person.

Adding User Accounts

If some business users do not have MDM Hub user accounts, create the user accounts.

Before you begin, you might want to review an existing MDM Hub user account to see which authentication type is in use in the Informatica MDM environment.

1. In the Hub Console, start the Users tool.
2. Acquire a write lock.
3. Click the **Users** tab.
4. Click the **Add user** button.
The Users tool displays the **Add User** dialog box.
5. Enter a first, middle, and last name for the user.
6. Enter the user name for the user.
This is the name entered when the user logs in to the Hub Console.
7. Enter an email address for the user.
Task notifications for the user are sent to this email address.
8. Enter the email address for the user.
Task notification emails are sent to this email address.
9. Enter the default database for the user, which is the Operational Reference Store that contains the supplier master data.
10. Enter and verify a password for the user.

Note: Passwords must comply with the password standard for the application server that is used in the MDM environment.

11. Choose the type of authentication.
 - Select the **Use external authentication** check box if your MDM Hub implementation uses authentication through a third-party security provider.
 - Clear the **Use external authentication** check box if you want to use the internal authentication in the MDM Hub.
12. Click **OK**.

The Users tool adds the new user to the list of users on the **Users** tab.

Assigning User Roles

Assign each of the predefined workflow user roles to business managers or data stewards.

1. In the Security Access Manager workbench, click **Users and Groups**.
2. Click the **Assign Users/Groups to Role** tab.
3. Select a user role for workflows and click **Edit**.

The **Assign Users to Role** dialog box opens.
4. Select the users or user groups who require this role and click **OK**.
5. Assign the remaining workflow roles to users.

Enabling State Management

For each base object table that contains records that can be updated through an Data Director application, you need to enable state management.

1. In the Model workbench, click **Schema**.
2. Acquire a write lock.
3. In the Schema tool, select a base object table that contains records that can be updated through the application.
4. Click the **Advanced** tab.
5. Select the **Enable State Management** check box.
6. To keep track of when cross-reference records belonging to the base object change state from PENDING to ACTIVE, select the **History of Cross-Reference Promotion** check box.

Setting the Primary and Secondary Workflow Adapters

To migrate to the BE ActiveVOS workflow adapter, select the BE ActiveVOS workflow engine as the primary workflow engine. The name of the workflow adapter for business entities is `BE ActiveVOS`. You can process existing tasks with the secondary workflow engine but you cannot create tasks. Do not select the same workflow engine for the primary and secondary workflow engines.

If you have not previously used Multidomain MDM with embedded ActiveVOS, select the `BE ActiveVOS` adapter as the primary workflow adapter. You do not need to select a secondary workflow adapter to process existing tasks.

Note: If your Data Director application uses subject areas, continue to use the `Informatica ActiveVOS` adapter as the primary workflow engine.

When you add a workflow engine, it becomes the primary workflow engine and the existing primary workflow engine becomes the secondary workflow engine. If you have an existing secondary workflow engine, the workflow engine is dropped from the Operational Reference Store and the tasks are removed from the task inbox.

1. In the **Configuration** workbench, click **Workflow Manager**.
2. Acquire a write lock.
3. Select the **Workflow Engine** tab, and ensure that the following BE ActiveVOS workflow adapter information is correct:
 - ActiveVOS Server host
 - ActiveVOS Server port
 - username of trusted user
 - password of trusted user
 - protocol for communication between the MDM Hub and the ActiveVOS Server
4. Select the **Operational Reference Store Workflow Mapping** tab.
The table in the tab contains all the Operational Reference Store databases in the Hub Store.
5. In the **Primary Workflow Engine** column, select the workflow engine for the BE ActiveVOS workflow adapter.
6. In the **Secondary Workflow Engine** column, select a workflow engine.

Configuring ActiveVOS Properties

The `cmxserver.properties` file contains a set of properties related to ActiveVOS. All properties have a default value. You do not need to set them unless the default value does not work in your environment.

The following table describes the ActiveVOS properties that you can configure in `cmxserver.properties`:

Property Name	Description
<code>activevos.merge.workflow.service.name</code>	Name of the service for all MDM service calls to ActiveVOS. Default is <code>IDDMergeTask</code> .
<code>activevos.workflow.startup.timeout.seconds</code>	Number of seconds ActiveVOS waits to create a task for the process and return a task ID. Default is <code>10</code> .
<code>cmx.e360.BPMProcess.view.enabled</code>	Indicates whether to display the workflow diagram associated with the tasks in the Task Manager for the users with the ActiveVOS <code>abAdmin</code> role assigned. Set to <code>true</code> to display the workflow diagram. Default is <code>false</code> .
<code>cmx.e360.BPMProcess.view.autologout.seconds</code>	Number of seconds for an ActiveVOS session to remain active when you access the workflow diagram in the Task Manager. The session ends after the specified time period. Default is <code>30</code> .

Configure Tasks

You can configure tasks to ensure changes to records and hierarchies move through an approval workflow. You can configure the task template, workflow triggers, task types to meet your business requirements. For

example, you might want changes by Data Stewards to trigger a workflow, or you might want to create tasks to review new records and edited records. Also, you might want to specify the default title or priority for tasks.

You can perform the following task configurations:

Task template

You can configure task templates so that a task is created with specific properties. For example, you can specify that when a trigger launches a workflow, the tasks have a particular title, priority, due date, and task status.

Workflow triggers

You configure workflow triggers so the appropriate ActiveVOS[®] workflow is launched after certain events in Data Director. You can configure whether users must add comments or attachments when they trigger workflows.

Task types

You can configure task types so that specific user roles can claim or be assigned tasks. You can create task action configurations for each task type. You can configure whether users must add a comment, attach a file, or reassign tasks when they perform task actions.

Task Administrator role

You can configure the Task Administrator role and map the MDM Hub role with privileges to manage all tasks to the Task Administrator role. For example, if you use the default ActiveVOS workflows, map the abAdmin MDM Hub role to the Task Administrator role.

Task Type Configuration

The task type configuration establishes which roles can claim or be assigned tasks. The name of the task type corresponds to the `mdmavxsd:name` presentation parameter in the ActiveVOS workflow.

Task Type Configuration Example for Final Review Task

The ActiveVOS workflows include activities that require people to make decisions to move the records to the next stage in the workflow.

The Final Review activity occurs in the following default workflows:

- One step approval
- Two step approval
- Update with approval

You can configure which roles can be assigned these tasks, and for which business entities. For example, you want to allow any user with the role of Manager to be assigned a final review task.

The following code shows how to configure the task type for the example:

```
<taskType name="AVOSBeFinalReview">
  <role name="Manager"/>
</taskType>
```

Task Template Configuration

The task template establishes the default title, priority, due date, comment, and status of a task. You can configure multiple task templates so that different triggers create tasks with different templates.

The task template configuration consists of the following parameters:

Title

The task display label.

Example 1

You want the task title to be <business entity name>: <source record display name><source record row ID> merges to <target record display name><target record row ID>.

Enter the following value for title: Merge {taskRecord[1].label} into {taskRecord[0].label}.

Where

- taskRecord[N] is the (N+1)th business entity node in the TaskData.getTaskRecords() list
- taskRecord[1] is the source record
- taskRecord[0] is the target record
- label is the value of taskFormat in the business entity labelFormat configuration.

Example 2

You want the task title to be Review changes in <record label>.

Enter the following value for title: Review changes in {taskRecord[0].label}.

Where

- taskRecord[0] is the target record.
- label is the value of taskFormat in the business entity labelFormat configuration.

Priority

The task priority.

The following table describes the possible task priorities:

Priority	Description
HIGH	The task has a high priority.
NORMAL	The task has a medium priority. Default is NORMAL.
LOW	The task has a low priority.

Due Date

The amount of time from the day that the task is created that the task is due.

The following table describes the components of the due date syntax:

Type of Parameter	Description	Values
sign	Determines if the due date is set to a date after the task is created or before the task is created.	If +, the due date is determined by adding time to the date the task is triggered. If -, the due date is determined by subtracting time from the date the task is triggered.
number	The amount of units to add or subtract from the current date when establishing the due date.	Any integer value.
unit	The number of days, weeks, or months that the due date is from the date the task is triggered.	If d, the specified number of days determines the due date. If w, the specified number of weeks determines the due date. If m, the specified number of months determines the due date.

Comment

Populates the task comment field. Optional.

Workflow Trigger Example for Update with Approval Workflow

You want to configure a workflow trigger for the Update with Approval workflow. You want the workflow to launch when a user of any role creates or updates any business entity. You want the tasks to have the properties that you defined in the DefaultApproval task template.

The following code shows the workflow trigger configuration for the example:

```
<trigger name="DefaultApproval">
  <startWorkflow process="BeUpdateWithApprovalTask" taskKind="REVIEW"
taskTemplate="DefaultApproval" firstTaskType="AVOSBeUpdate"/>
  <event name="CreateBE"/>
  <event name="UpdateBE"/>
  <role name="*" />
</trigger>
```

Task Template Example for Merge

You want the merge trigger to create tasks with a normal priority that are due one week after the task is triggered with a status of Open. The title of the tasks is "<business entity name>: <source record display name><source record row ID> merges to <target record display name><target record row ID>".

The following code shows the task template configuration for the example:

```
<taskTemplate name="MergeTaskGenerator">
  <title>{taskRecord[0].label}: {taskRecord[1].displayName}
  {taskRecord[1].rowidObject} merges to
  {taskRecord[0].displayName} {taskRecord[0].rowidObject}</title>
  <priority>NORMAL</priority>
  <dueDate>+1w</dueDate>
  <comment>Merge task autogenerated by Hub.</comment>
  <status>OPEN</status>
</taskTemplate>
```

Where:

- `taskRecord[1]` is the source record
- `taskRecord[0]` is the target record

Configuring Workflow Triggers

Workflow triggers determine which task workflows are launched after create, update, or merge events.

Note: If you configure a role to trigger an unmerge task, do not assign the same user role as reviewer.

To configure workflow triggers, perform the following steps:

1. Create a workflow trigger, and configure whether users must add a comment or attachment to the triggered task.
2. Configure events for the workflow trigger.
3. Configure which roles and business entities trigger workflows.

Workflow Trigger Example for Update with Approval Workflow

You want to configure a workflow trigger for the Update with Approval workflow. You want the workflow to launch when a user of any role creates or updates any business entity. You want the tasks to have the properties that you defined in the DefaultApproval task template.

The following code shows the workflow trigger configuration for the example:

```
<trigger name="DefaultApproval">
  <startWorkflow process="BeUpdateWithApprovalTask" taskKind="REVIEW"
  taskTemplate="DefaultApproval" firstTaskType="AVOSBeUpdate"/>
  <event name="CreateBE"/>
  <event name="UpdateBE"/>
  <role name="*" />
</trigger>
```

Workflow Trigger Example for Merge

You want to configure a workflow trigger for merge events that are generated by the MDM Hub. The role name of SYSTEM is reserved for merge tasks that are triggered by the MDM Hub. You want the merge tasks to be populated by the properties defined in the MergeTaskGenerator task template.

The following code shows the workflow trigger configuration for the example:

```
<trigger name="Matched">
  <startWorkflow process="BeMergeTask" taskKind="MERGE"
  taskTemplate="MergeTaskGenerator" firstTaskType="AVOSBeMerge"/>
  <event name="MatchedBE"/>
  <role name="SYSTEM"/>
</trigger>
```

Initiate Approval Workflows

To use an MDM workflow that is managed by the ActiveVOS Server, a data steward initiates the workflow from the Data Director application.

You can initiate an MDM workflow in the context of any of the following data changes:

- Updating an entity

- Merging records
- Unmerging a record

Sending an Update for Approval Through ActiveVOS

When you add or edit an entity in an Data Director (IDD) application, you can send the update through an approval workflow that is coordinated by the ActiveVOS Server. The type of approval workflow used depends on the workflow that was selected by your IDD application developer.

1. In the IDD Data workspace, add or edit an entity.
2. Click **Apply**.
3. Click **Send for Approval**.

The Create Task dialog box opens with default values for all task attributes.

4. In the Title field, replace the default title with a meaningful title for this workflow.
For example, if you are adding a person, include the name of the person in the title, such as *Adding Jane Jones*.
5. In the Task Type field, you can see the name of the approval workflow that is initiated.
6. Change other default task attributes as required.
7. Click **OK**.

The ActiveVOS Server begins executing activities. When the ActiveVOS Server reaches the first people activity, it creates an IDD task of the correct task type. The ActiveVOS Server assigns the task to the users who have the role associated with that task type. For example, if the people activity is Review No Approve, the users with the Manager role receive a task notification in their IDD Task Inboxes. The task includes the Title you specified and has a task type of Review No Approve.

Sending Merge Candidates for Approval Through ActiveVOS

Instead of merging selected entities immediately in Data Director (IDD), you can send the suggested merge candidates through an approval workflow that is coordinated by the ActiveVOS Server.

1. In the IDD Data workspace, select **Matches** and select the merge candidates as usual.
2. Click **Actions** and select **Create Merge Task**.

The Create Task dialog box opens with default values for all task attributes.

3. In the Title field, replace the default title with a meaningful title for this workflow.
For example, include the name of the person in the title, such as *Merging M Singh*.
4. In the Task Type field, ensure that **Merge Workflow** is selected.
5. Change any other default task attributes as required.
6. Click **OK**.

The ActiveVOS Server begins executing activities. When the ActiveVOS Server reaches the first people activity, the ActiveVOS Server creates an IDD Merge task. Everyone with the DataSteward role receives a task notification in their IDD Task Inboxes. The task notification includes the Title that you specified and has a task type of Merge.

Sending an Unmerge Candidate for Approval Through ActiveVOS

Instead of unmerging a merged entity immediately in Data Director (IDD), you can send the unmerge candidate through an approval workflow that is coordinated by the ActiveVOS Server.

1. In the IDD Data workspace, select **XFEF** and select the unmerge candidate as usual.
2. Click **Actions** and select **Create Unmerge Task**.

The Create Task dialog box opens with default values for all task attributes.

3. In the Title field, replace the default title with a meaningful title for this workflow.
For example, include the name of the person in the title, such as *Unmerging M Singh*.
4. In the Task Type field, ensure that **Unmerge Workflow** is selected.
5. Change other default task attributes as required.
6. Click **OK**.

The ActiveVOS Server begins executing activities. When the ActiveVOS Server reaches the first people activity, the ActiveVOS Server creates an IDD Unmerge task. Everyone with the DataSteward role receives a task notification in their IDD Task Inboxes. The task includes the Title that you specified and has a task type of Unmerge.

Review an Update

If your role requires you to review or approve updates, you receive task notifications about the updates in your IDD Task Inbox. Open a task to review the entity that changed.

By default, the Task Inbox appears at the top of the Start workspace, with a title that begins *Tasks For*.

1. In the Task Inbox, select a task.
2. To let other people with the same role know that you are working on a task, right-click the task and select **Claim Task**.
3. Click **Open Task**.

The entity associated with the task opens in the Data tab. The record state for the entity is set to PENDING. Icons indicate which areas contain the updated data.

4. For each area with a change icon, review all changed data to see if the changes meet your business standards.
5. Based on the results of your review, click **Task Actions** and select an appropriate action.
 - If you agree with the update and the task type permits you to approve updates, click **Approve**. The ActiveVOS Server marks the related Final Review people activity as completed and performs the next activity in the process.
 - If you agree with the update, but the task type does not permit approval at this point in the workflow, click **Escalate**. The ActiveVOS Server marks the related Review No Approve people activity as completed and performs the next activity in the process.
 - If you disagree with the update, click **Reject** and type an explanation in the Comment box. The task is reassigned to the person who initiated the update.
 - If you think that you are the wrong person to assess the validity of this update, click **Disclaim** and type an explanation in the Comment box. Someone with the same role needs to take action on the task.

Monitor Workflow Progress in the ActiveVOS Console

If you have user privileges for the ActiveVOS Console, you can see the progress on an active workflow.

You use the Active Process Detail Page to display the progress within the context of a process flow. For more information about the Active Process Detail Page, open the online help.

1. In the Task Inbox, note the task type.
2. Launch the ActiveVOS Console.
3. On the top menu, click **Monitor**.
4. In the left menu, expand **Process Monitoring** and click **Active Processes**.
5. Select the active process with the same task type.

The Active Process Detail Page opens with the selected process displayed.

6. On the Process tab, review the process flow on the canvas.

An arrowhead points to the current activity. Checkmarks indicate the completed activities.

Note: If you have the ActiveVOS abAdmin role assigned, you can see the workflow details of a task in the Task Manager. You can also assign a task that belongs to another user of your user group back to the pool so that a different user can claim it. To display the workflow diagram associated with the tasks in the Task Manager, you must configure the `cmx.e360.BPMProcess.view.enabled` property in the `cmxserver.properties` file. Set to `true` to display the workflow diagram. Default is `false`.

CHAPTER 2

Configuring Tasks

This chapter includes the following topics:

- [Configuring Tasks Overview, 24](#)
- [Configuring Task Templates, 25](#)
- [Configuring Workflow Triggers, 26](#)
- [Configuring Task Types, 29](#)
- [Task Administrator Role, 34](#)
- [Descriptive Task Titles, 35](#)
- [Default Task Configuration, 36](#)
- [Changing the Approver for Tasks, 38](#)

Configuring Tasks Overview

You can configure tasks to ensure changes to records and hierarchies move through an approval workflow. You can configure the task template, workflow triggers, task types to meet your business requirements. For example, you might want changes by Data Stewards to trigger a workflow, or you might want to create tasks to review new records and edited records. Also, you might want to specify the default title or priority for tasks.

You can perform the following task configurations:

Task template

You can configure task templates so that a task is created with specific properties. For example, you can specify that when a trigger launches a workflow, the tasks have a particular title, priority, due date, and task status.

Workflow triggers

You configure workflow triggers so the appropriate ActiveVOS[®] workflow is launched after certain events in Data Director. You can configure whether users must add comments or attachments when they trigger workflows.

Task types

You can configure task types so that specific user roles can claim or be assigned tasks. You can create task action configurations for each task type. You can configure whether users must add a comment, attach a file, or reassign tasks when they perform task actions.

Task Administrator role

You can configure the Task Administrator role and map the MDM Hub role with privileges to manage all tasks to the Task Administrator role. For example, if you use the default ActiveVOS workflows, map the abAdmin MDM Hub role to the Task Administrator role.

Configuring Task Templates

To configure a task template, set the default task properties, such as the task title, due date, and priority. When ActiveVOS creates tasks, the tasks are created with the specified properties.

1. Click **Business Entity > Tasks**, and then select **Templates**.
2. Click **Create**.
3. In the properties panel, enter the template properties.
 - a. In the **Name** field, enter the template name.
 - b. In the **Title** field, enter the title format for task title.

Title Example 1

You want the task title to be `<business entity name>: <source record display name><source record row ID> merges to <target record display name><target record row ID>`.

Enter the following value for title: `Merge {taskRecord[1].label} into {taskRecord[0].label}`.

Where

- `taskRecord[N]` is the (N+1)th business entity node in the `TaskData.getTaskRecords()` list
- `taskRecord[1]` is the source record
- `taskRecord[0]` is the target record
- `label` is the value of the task format in the business entity label format configuration.

Title Example 2

You want the task title to be `Review changes in <record label>`.

Enter the following value for title: `Review changes in {taskRecord[0].label}`.

Where

- `taskRecord[0]` is the target record.
- `label` is the value of the task format in the business entity label format configuration.

- c. Select a task priority.

The following table describes the possible task priorities:

Priority	Description
HIGH	The task has a high priority.
NORMAL	The task has a medium priority. Default is NORMAL.
LOW	The task has a low priority.

- d. In the **Due Date** field, enter the amount of time from the day that the task is created that the task is due.

The following table describes the due date syntax:

Type of Parameter	Description	Values
sign	Determines if the due date is set to a date after the task is created or before the task is created.	If +, the due date is determined by adding time to the date the task is triggered. If -, the due date is determined by subtracting time from the date the task is triggered.
number	The amount of units to add or subtract from the current date when establishing the due date.	Any integer value.
unit	The number of days, weeks, or months that the due date is from the date the task is triggered.	If <i>d</i> , the specified number of days determines the due date. If <i>w</i> , the specified number of weeks determines the due date. If <i>m</i> , the specified number of months determines the due date.

- e. Optionally, in the **Comment** field, enter the text that populates the task comment field.
f. Optional, in the **Status** field, select the status of the task.

The following table describes the possible task statuses:

Status	Description
OPEN	The task status is Open. Default is OPEN.

4. Click **Apply**.

Configuring Workflow Triggers

Workflow triggers determine which task workflows are launched after create, update, or merge events.

Note: If you configure a role to trigger an unmerge task, do not assign the same user role as reviewer.

To configure workflow triggers, perform the following steps:

1. Create a workflow trigger, and configure whether users must add a comment or attachment to the triggered task.
2. Configure events for the workflow trigger.
3. Configure which roles and business entities trigger workflows.

Step 1. Create a Workflow Trigger

To create a trigger to launch a workflow, specify a name for the trigger, the workflow to start, and the trigger properties. If you use Data Director with business entities, you can also specify whether users are prompted for comments or attachments.

1. Click **Business Entity > Tasks**, and then select **Triggers**.
2. Click **Create**.
3. In the properties panel, enter the trigger name.
The Repository Manager refers to the name when reporting trigger validation errors.
4. Select **Start Workflow** so that the event trigger launches a workflow. If you do not select **Start Workflow**, changes are made directly to the data without first going through a review process.
5. Configure the following parameters:

Parameter	Description														
Template	The name of the task template to use when the task is created.														
Task Type	The first People Activity in the workflow.														
Task Kind	Can be Merge, Unmerge, Hierarchies, or Review.														
Process	<p>The name of the ActiveVOS service. Corresponds to the Partner Links Service property in the ActiveVOS PDD file.</p> <p>The following tables shows the service names for the default business entity workflows:</p> <table border="1"> <thead> <tr> <th>Business Entity Workflow</th> <th>Service</th> </tr> </thead> <tbody> <tr> <td>BeMergeWorkflow</td> <td>BeMergeTask</td> </tr> <tr> <td>BeUnmerge</td> <td>BeUnmergeTask</td> </tr> <tr> <td>BeOneStepApproval</td> <td>BeOneStepApprovalTask</td> </tr> <tr> <td>BeTwoStepApproval</td> <td>BeTwoStepApprovalTask</td> </tr> <tr> <td>BeUpdateWithApproval</td> <td>BeUpdateWithApprovalTask</td> </tr> <tr> <td>HierarchyOneStepApproval</td> <td>HierarchyOneStepApprovalTask</td> </tr> </tbody> </table>	Business Entity Workflow	Service	BeMergeWorkflow	BeMergeTask	BeUnmerge	BeUnmergeTask	BeOneStepApproval	BeOneStepApprovalTask	BeTwoStepApproval	BeTwoStepApprovalTask	BeUpdateWithApproval	BeUpdateWithApprovalTask	HierarchyOneStepApproval	HierarchyOneStepApprovalTask
Business Entity Workflow	Service														
BeMergeWorkflow	BeMergeTask														
BeUnmerge	BeUnmergeTask														
BeOneStepApproval	BeOneStepApprovalTask														
BeTwoStepApproval	BeTwoStepApprovalTask														
BeUpdateWithApproval	BeUpdateWithApprovalTask														
HierarchyOneStepApproval	HierarchyOneStepApprovalTask														

- To control whether users must attach a file and whether users are prompted for attachments, select one of the following options from the **Attachment** field:

Option	Description
Disabled - Do not prompt users (Default)	Users are not prompted for attachments. Attachments are disabled.
Optional - Prompt users	Users are prompted for attachments, but they can choose whether to attach a file.
Required - Prompt users	Users are prompted for attachments and must attach a file.

Note: When using Data Director with subject areas, users are never prompted for attachments.

- To control whether users must add a comment and whether users are prompted for comments, select one of the following options from the **Comment** field:

Option	Description
Optional - Do not prompt users (Default)	Users are not prompted for comments. To add a comment, users can open the Task Details dialog box.
Optional - Prompt users	Users are prompted for comments, but they can choose whether to add a comment.
Required - Prompt users	Users are prompted for comments and must add a comment.

Note: When using Data Director with subject areas, users are never prompted for comments.

- Click **Apply**.

Step 2. Configure Events for a Workflow Trigger

Associate the event in Data Director with the workflow trigger. You can configure more than one event for a trigger.

- Click **Business Entity > Tasks**, and then select **Triggers**.
- Select the trigger.
- In the tree view panel, select **Events**, and then click **Create**.
- In the properties panel, from the **Event** list, select one of the following events:

Event name	Description
CreateBE	Occurs when a user creates a record.
UpdateBE	Occurs when a user updates a record.
MatchedBE	Occurs when the MDM Hub identifies two records as a match.
MergeBE	Occurs when a user merges records.

Event name	Description
UnMergeBE	Occurs when a user unmerges records.
ModifyHierarchy	Occurs when a user modifies a hierarchy.

5. Click **Apply**.
6. Repeat step [3](#) to [5](#) for additional events.

Step 3. Configure Roles for a Workflow Trigger

The trigger that applies to events depends on the role of the user who performs the triggering action.

1. Click **Business Entity > Tasks**, and then select **Triggers**.
2. Select the trigger.
3. In the tree view panel, select **Roles**, and then click **Create**.
4. In the properties panel, from the **Role** list, select the MDM Hub role.
5. Click **Apply**.
6. Optionally, configure additional roles.

Configuring Task Types

You can create task types and configure which user roles can claim or be assigned tasks. For each task type, you can create task action configurations. Task action configurations control whether users must add a comment, attach a file, or reassign the task when performing a task action. Also, you can configure custom messages for task actions that appear when task actions are triggered.

To configure task types, perform the following actions:

1. Create a task type, and configure whether users can attach files when they edit the task details.
2. Configure the user roles that can claim or be assigned tasks.
3. Create task action configurations, and configure the comment, attachment, reassignment settings, and custom message for the task action.

Step 1. Create a Task Type

Create a task type and configure whether users can add an attachment when they edit the task details.

1. Click **Business Entity > Tasks**, and then select **Task Types**.
2. Click **Create**.
3. In the properties panel, enter the name of an ActiveVOS task in the **Name** field.

The name must match the `mdmavxsd:name` value defined in the `mdmavxsd:taskType` expression of the setup script that is before a People Activity in the workflow `.bpel` file.

The following table describes the task names for the default business entity workflows:

Task Name (mdmavxsd:name)	People Activity Description	Associated Workflows
AVOSBeMerge	Data steward reviews the candidates and either merges the records or cancels the action.	Merge
AVOSBeUnMerge	Data steward reviews the candidate and either unmerges the record or cancels the action.	Unmerge
AVOSBeNotification	If approved, the record is flagged for promotion and the data steward is notified.	Update with approval One step approval Two step approval
AVOSBeReviewNoApprove	Manager reviews an update and either rejects it or sends it on for Final Review.	Update with approval Two step approval
AVOSBeFinalReview	Senior manager reviews the update and either rejects it or approves it.	Update with approval One step approval Two step approval
AVOSBeUpdate	Data steward reviews the update and either cancels the update or sends it through a two-step approval process.	Update with approval One step approval Two step approval
HierarchyFinalReview	Senior manager reviews the update and either rejects it or approves it.	Hierarchy one step approval

4. Optionally, in the **Label** field, enter a label for the task type.
5. To support attachments when users edit the task details, select the **Enable File Attachments in Task Details** check box.
6. Click **Apply**.
The **Roles** and **Task Action Configuration** folders appear in the tree view panel.
7. Publish the changes to the MDM Hub.
 - a. Click **Publish**.
A confirmation dialog box appears that prompts you to publish or review the changes.
 - b. Review the changes or publish without a review.
 - To publish without a review, click **Publish**.
 - To publish after a review, click **Review Changes** and follow the instructions that appear on the screen.

Step 2. Configure Roles for a Task Type

You can configure the user roles that are allowed to review tasks and the type of business entity records that a role can review.

User roles must have the proper MDM Hub privileges to allow users to process tasks. For more information about granting privileges to roles, see the *Multidomain MDM Security Guide*.

Note: If you configure a role to trigger an unmerge task, do not assign the same user role as reviewer.

1. Click **Business Entity > Tasks**, and then select **Task Types**.
2. Select the task type.
3. Select roles that can claim or be assigned the task.
 - a. In the tree view panel, select **Roles**, and then click **Create**.
 - b. In the properties panel, from the **Role** list, select an MDM Hub user role.
 - c. Click **Apply**.
The role appears in the tree view panel.
 - d. Optionally, create additional roles.
4. Configure the type of business entity records that a role can access.
 - a. In the tree view panel, select a role.
 - b. Select **Business Entities**, and then click **Create**.
 - c. In the properties panel, from the **Business Entity** list, select a business entity.
 - d. Click **Apply**.
The business entity appears in the Roles folder.
 - e. Optionally, configure additional business entities for the role.
5. Publish the changes to the MDM Hub.
 - a. Click **Publish**.
A confirmation dialog box appears that prompts you to publish or review the changes.
 - b. Review the changes or publish without a review.
 - To publish without a review, click **Publish**.
 - To publish after a review, click **Review Changes** and follow the instructions that appear on the screen.

Step 3. Create Task Action Configurations for a Task Type

You can configure whether users must add a comment, attach a file, or reassign the task when they perform a task action. You can create multiple task action configurations with different comment, attachment, and reassignment settings for each configuration.

1. Click **Business Entity > Tasks**, and then select **Task Types**.
2. Select the task type.
3. In the tree view panel, select **Task Action Configuration**, and then click **Create**.
4. Specify a name for the task action configuration and configure whether users are prompted for comments or attachments.
 - a. In the properties panel, enter a name for the task action configuration in the **Name** field.
For example, to design a task action configuration for the Disclaim action, enter `Disclaim`.

- b. To control whether users must attach a file and whether users are prompted for attachments, select one of the following options from the **Attachment** field:

Option	Description
Disabled - Do not prompt users (Default)	Users are not prompted for attachments. Attachments are disabled.
Optional - Prompt users	Users are prompted for attachments, but they can choose whether to attach a file.
Required - Prompt users	Users are prompted for attachments and must attach a file.

- c. To control whether users must add a comment and whether users are prompted for comments, select one of the following options from the **Comment** field:

Option	Description
Optional - Do not prompt users (Default)	Users are not prompted for comments. To add a comment, users can open the Task Details dialog box.
Optional - Prompt users	Users are prompted for comments, but they can choose whether to add a comment.
Required - Prompt users	Users are prompted for comments and must add a comment.

- d. Click **Apply**.

The subfolder for the task action configuration appears in the tree view panel.

5. Optionally, configure task actions.

Note: If you do not configure task actions, the task action configuration applies to all task actions.

- a. In the tree view panel, select the subfolder for the task action configuration.

The **Business Entities**, **Roles**, and **Task Actions** nodes appear.

- b. Select **Task Actions**, and then click **Create**.

- c. In the properties panel, enter the name of a task action in the **Task Action** field. The name must match the task action names defined in the ActiveVOS workflow.

For example, to associate the Disclaim action with the task action configuration, enter *Disclaim*.

The following table describes task actions for the default task types:

Task Actions	Description	Task Type
Approve	User agrees with the proposed changes.	AVOSBeFinalReview
Cancel	User disagrees with the proposed changes.	AVOSBeMerge AVOSBeUpdate AVOSBeUnMerge

Task Actions	Description	Task Type
Disclaim	User can no longer work on the task.	AVOSBeFinalReview AVOSBeMerge AVOSBeReviewNoApprove AVOSBeUpdate AVOSBeUnMerge
Escalate	User agrees with the proposed changes and wants to send them for approval.	AVOSBeReviewNoApprove
Merge	User agrees with the merge preview.	AVOSBeMerge
Reject	User disagrees with the proposed changes.	AVOSBeFinalReview AVOSBeReviewNoApprove
Submit for Approval	User agrees with the proposed changes and submits the proposed changes for approval.	AVOSBeUpdate
Unmerge	User agrees with the unmerge preview.	AVOSBeUnMerge

- d. Optionally, in the Action Message field, enter a message that appears when the task action is triggered.

If you do not enter a message, the default message associated with the task action appears when the task action is triggered.

The default messages have the following format:

You are about to <task action name> this task.

Example: You are about to cancel this task.

- e. Click **Apply**.

The task action node appears.

- f. Optionally, configure additional task actions.

6. Optionally, select business entities to associate with the task action.

Note: If you do not select business entities, the task action configuration applies to all types of business entity records.

- In the tree view panel, select **Business Entities**, and then click **Create**.
- In the properties panel, from the **Business Entity** list, select a type of business entity.
- Optionally, select additional types of business entities.
- Click **Apply**.

The business entity node appears.

7. Optionally, select user roles to associate with the task action.

Note: If you do not select roles, the task action configuration applies to all roles.

- In the tree view panel, select **Roles**, and then click **Create**.
- In the properties panel, in the **Roles** list, select a role.
- Click **Apply**.

- The role node appears.
- d. Optionally, create additional roles.
8. Publish the changes to the MDM Hub.
- a. Click **Publish**.
A confirmation dialog box appears that prompts you to publish or review the changes.
 - b. Review the changes or publish without a review.
 - To publish without a review, click **Publish**.
 - To publish after a review, click **Review Changes** and follow the instructions that appear on the screen.

Task Administrator Role

Data Director users can manage multiple tasks by performing task administration actions, such as assigning, releasing, or editing tasks. All users can manage tasks available to their user role, while users assigned the Task Administrator role can manage all tasks. For example, users can release their assigned tasks, while task administrators can release all assigned tasks.

Task administrators cannot work on tasks or view task details. If you assign users multiple roles, they might be able to manage tasks, work on tasks, and view task details. For example, you can assign an user the following MDM Hub roles: Data Steward, abAdmin, and abadmin. The user can work on and manage tasks available to Data Stewards and manage all tasks as a task administrator. For more information about the MDM Hub roles, see the *Multidomain MDM Configuration Guide*.

To use the Task Administrator role, you enable the role and specify the MDM Hub role that you want to map to the Task Administrator role.

The following table lists the task administration actions available to user roles:

User Role	Task Administration Actions
Task Administrator	Users can perform the following task administration actions on all tasks: <ul style="list-style-type: none"> - Assign - Release - Edit
Other user roles	Users can perform the following task administration actions on tasks available to their user role: <ul style="list-style-type: none"> - Claim Users can perform the following task administration actions on tasks based on whether they are assigned the tasks: <ul style="list-style-type: none"> - Release - Edit - Task actions, such as Accept, Reject, or Disclaim <p>Note: The available task actions depend on the selected tasks and your ActiveVOS workflows.</p>

Configuring the Task Administrator Role

You can use the Provisioning tool to configure the Task Administrator role and specify the MDM Hub role that you want to map to the Task Administrator role.

Before you begin, if you are using the default ActiveVOS workflows, you must create the abAdmin and abadmin MDM Hub roles in the MDM Hub.

Important: To ensure users can perform task administration actions on all tasks for all workflows, you must assign both the abAdmin and abadmin MDM Hub roles to users.

1. Log in to the Provisioning tool.
2. From the **Database** list, select the database to which you want to associate your configurations.
3. Click **Business Entity > Tasks**.
4. In the Tasks panel, select **Task Administrator Role**, and then click **Create**.
5. In the properties panel, enter `TaskAdministrator` in the **Name** field.
6. Select the **Enable Task Administrator role** check box.
7. From the **MDM Hub Role** list, select the MDM Hub role that you want to map to the Task Administrator role.

If you are using the default ActiveVOS workflows, select **abAdmin**. If you are using custom ActiveVOS workflows, select the MDM Hub role that you use for business administration in ActiveVOS.

8. Click **Apply**.

The changes are saved but are not published to the MDM Hub.

9. Publish the changes to the MDM Hub.

- a. Click **Publish**.

A confirmation dialog box appears that prompts you to publish or review the changes.

- b. Review the changes or publish without a review.

- To publish without a review, click **Publish**.
- To publish after a review, click **Review Changes** and follow the instructions that appear on the screen.

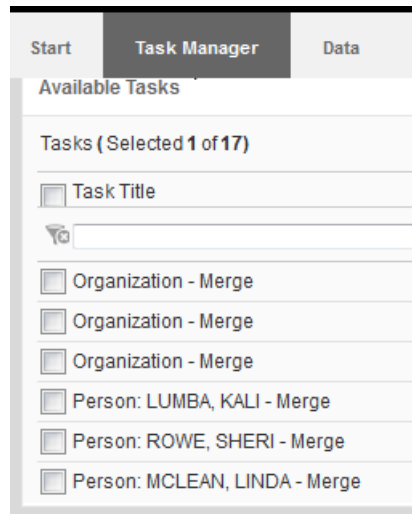
You configured the Task Administrator role. Users assigned the mapped MDM Hub role can perform task administration actions on all tasks in Data Director.

Descriptive Task Titles

You can configure descriptive task titles for each business entity on the Modeling page.

For example, you can configure a task title that displays the business entity type, the display name of the business entity record, and the task type. Data stewards and business managers can more easily differentiate between tasks when the tasks have a descriptive task title.

The following image shows generic task titles for the Organization business entity and descriptive task titles for the Person business entity:



Configuring Descriptive Task Titles

To configure descriptive task titles, edit the `Task Format` business entity attribute.

1. Click **Business Entity > Modeling**, and then select **Business Entities**.
2. Select the business entity.
For example, click **Person**.
3. In the tree view panel, expand **labelFormat** and then click **LabelFormatType**.
4. In the properties panel, enter the descriptive task title in the **Task Format** field.
For example, enter `{label}: {lastName}, {firstName}`.
5. Click **Apply**.
The changes are saved but are not published to the MDM Hub.

Default Task Configuration

A default task configuration generates if you do not create a task configuration in the Provisioning tool. You can modify the default task configuration to meet your business needs.

The following task configuration generates by default:

Task type configuration

The following table describes the default comment and attachment settings and roles assigned to process each task type:

Task Type	Role	Comment	Attachment
AVOSBeUnMerge	DataSteward	Optional - Do not prompt users	Disabled - Do not prompt users
AVOSBeMerge	DataSteward	Optional - Do not prompt users	Disabled - Do not prompt users
AVOSBeFinalReview	SrManager	Optional - Do not prompt users	Disabled - Do not prompt users
AVOSBeNotification	DataSteward	Optional - Do not prompt users	Disabled - Do not prompt users
AVOSBeUpdate	DataSteward	Optional - Do not prompt users	Disabled - Do not prompt users
AVOSBeReviewNoApprove	Manager	Optional - Do not prompt users	Disabled - Do not prompt users

Trigger configuration

The following table describes the default triggers:

Trigger	Event	Role	Other Information
DefaultApproval	CreateBE and UpdateBE	All roles	-
Default Merge	MergeBE	All roles	-
Default UnMerge	UnMergeBE	All roles	-
Matched	UnMergeBE	System	start workflow process: BeMergeTask task kind: MERGE task template: MergeTaskGenerator or first task type: AVOSBeMerge

Task template configuration

The following table describes the configuration for the default task templates:

Task Type	Title	Priority	Due Date	Comment	Status
DefaultApproval	Review changes in {taskRecord[0].label}	Normal	+7d	-	Open
MergeTaskGenerator	{taskRecord[0].label} - Merge	Normal	+7d	Merge task autogenerated by Hub.	Open

Changing the Approver for Tasks

If you change the role of the approver for tasks, the change applies to new tasks only. To process existing tasks, configure a default trigger for the previous approver.

1. Click **Business Entity > Tasks**, and then select **Triggers**.
2. Click **Create**.
3. In the properties panel, enter `DefaultApproval` in the **Name** field, and then click **Apply**.
4. Create an event.
 - a. In the tree view panel, select **Events**, and then click **Create**.
 - b. In the properties panel, select an event from the **Event** list, and then click **Apply**.
5. Associate the previous role with the `DefaultApproval` trigger.
 - a. In the tree view panel, select **Roles**, and then click **Create**.
 - b. In the properties panel, select the role from the **Role** list, and then click **Apply**.
6. Optionally, specify the business entities to which the trigger applies.
 - a. In the tree view panel, expand the **Role** node.
 - b. Expand the node for the previous role.
 - c. Select **Business Entities**, and then click **Create**.
 - d. In the properties panel, select the business entity to which the trigger applies from the **Business Entity** field.
 - e. Repeat steps [4](#) to [5](#) for any other business entities to which the trigger applies.
7. Click **Apply**.

The changes are saved but are not published to the MDM Hub.
8. Click **Publish**.

CHAPTER 3

Running the Migration Script

To work with ActiveVOS tasks that were created before Multidomain MDM version 10.1, run the migration script to populate the tasks with the required presentation parameters. If you do not run the migration script, you cannot see the tasks in the Task Manager. Routinely run the script until all the tasks are complete.

Note: To run the script, you can use a properties file. If you do not want to store passwords in a properties file, you can run the script with the properties in the command.

1. Create an MDM Hub user that belongs to all roles involved in task management. The out-of-the-box roles are DataSteward, Manager, and SrManager.

The ActiveVOS migration utility requires that you create a user that belongs to all task management roles.

Note: After the migration, the tasks are assigned to the same users that the tasks were assigned to before the upgrade.

You can run the script with the properties in a file or with the properties on the command line.

2. To run the script with a properties file, perform the following steps.

- a. Open the following file in a text editor:

```
<MDM Hub installation directory>\hub\server\bin\build.properties
```

- b. Add the following properties to the `build.properties` file.

Property	Description
<code>avos.jdbc.database.driver.jar</code>	Path to the JAR file that contains the JDBC driver for ActiveVOS database. This parameter is populated during the Hub Server installation without the avos prefix in <code><infamd installation directory>\conf\avos.install.properties</code> .
<code>avos.jdbc.database.driver.class</code>	JDBC driver class for ActiveVOS database. This parameter is populated during the Hub Server installation without the avos prefix in <code><infamd installation directory>\conf\avos.install.properties</code> .
<code>avos.jdbc.database.url</code>	ActiveVOS database connection URL. This parameter is populated during the Hub Server installation without the avos prefix in <code><infamd installation directory>\conf\avos.install.properties</code> .

Property	Description
avos.jdbc.database.username	ActiveVOS database user name. This parameter is populated during the Hub Server installation without the avos prefix in <infamdm installation directory>\conf\avos.install.properties.
avos.jdbc.database.password	ActiveVOS database password.
avos.ws.protocol	The protocol for the ActiveVOS server connection. Can be http or https.
avos.ws.host	Host name of the application server where ActiveVOS runs.
avos.ws.port	Port number of the application server connection.
avos.ws.trusted.username	User name of the trusted user. Note: The trusted user is created as part of the Multidomain MDM installation and upgrade process.
avos.ws.trusted.password	Password for the trusted user. Note: The trusted user is created as part of the Multidomain MDM installation and upgrade process.
avos.hub.username	MDM Hub user that belongs to all roles involved in task management. The out-of-the-box roles are DataSteward, Manager, and SrManager.
avos.ws.pagesize	Number of tasks processed in one database transaction and batch-loaded from ActiveVOS.
avos.ws.statuses	Optional. Comma-separated list of ActiveVOS task statuses to be processed. For example, READY or IN_PROGRESS. By default all tasks are processed.

- c. Open a command prompt.
 - d. Navigate to the following directory:


```
<MDM Hub installation directory>/hub/server/bin
```
 - e. Run the MDM Hub Master Database upgrade script with the following command:
 - On UNIX. `sip_ant.sh migrate-avos-sa-tasks`
 - On Windows. `sip_ant.bat migrate-avos-sa-tasks`
3. To run the script with the properties on the command line, perform the following steps.
- a. Open a command prompt.
 - b. Navigate to the following directory:


```
<MDM Hub installation directory>/hub/server/bin
```


- c. Run the MDM Hub Master Database upgrade script with the properties in the command. For example, you can run the following command:

- On UNIX.

```
sip_ant.sh migrate-avos-sa-tasks -Davos.jdbc.database.password=!!cmx!!  
-Davos.ws.protocol=http -Davos.ws.host=localhost -Davos.ws.port=8080 -  
Davos.ws.pagesize=100  
-Davos.ws.trusted.username=avos -Davos.ws.trusted.password=avos -  
Davos.hub.username=admin
```

- On Windows.

```
sip_ant.bat migrate-avos-sa-tasks -Davos.jdbc.database.password=!!cmx!!  
-Davos.ws.protocol=http -Davos.ws.host=localhost -Davos.ws.port=8080 -  
Davos.ws.pagesize=100  
-Davos.ws.trusted.username=avos -Davos.ws.trusted.password=avos -  
Davos.hub.username=admin
```

4. Run the script on a regular schedule.
5. After all the tasks for the subject area workflow adapter are processed, you do not need to run the script and you can delete the user.

CHAPTER 4

Frequently Asked Questions

How do I access the Matching Records view and Cross-reference view for business entities?

In the `cmxserver.properties` file, set `cmx.e360.match_xref.view.enabled` to `true`. During installation, the default is `true`. During upgrade of existing software, the default is set to `false`. To use these views, you must use the ActiveVOS workflow adapter based on business entities.

If I use the Subject Area-based ActiveVOS workflow adapter, which view do I use to create merge and unmerge tasks?

If you use the Subject Area-based ActiveVOS workflow adapter, use the legacy Matches view and the legacy XREF view. Set `cmx.e360.match_xref.view.enabled` to `false` to use these legacy views to create tasks. When you upgrade to version 10.2, `cmx.e360.match_xref.view.enabled` is `false` by default.

How do you process existing merge tasks?

Any merge tasks created prior to version 10.2 open in the legacy Match view. If you enable the Entity 360 framework, merge tasks that are created in version 10.2 are opened in the Matching Records view for business entities.

How do you process unmerge tasks?

All unmerge tasks open in the Cross-reference Records view for business entities, regardless of the `cmx.e360.match_xref.view.enabled` setting.

How do you process review tasks?

All review tasks are processed in the Entity view for business entities.

If I use the business entity ActiveVOS workflow adapter, which task inbox should I use?

Use the Entity 360 framework task inbox when configuring the Data Director user interface for the **Home** page. If you use the legacy task inbox with the business entity ActiveVOS workflow adapter, an error occurs.

Can a role that triggers an unmerge workflow also be the role that approves the unmerge task?

No. Ensure that the role that you configure for the unmerge trigger is not the same role that you configured to process the merge task.

In the default ActiveVOS workflows, what happens when a user escalates a task, declaims a task, or sends a task for approval?

When a user escalates a task, declaims a task, or sends a task for approval, the Edit Task dialog opens to allow the user to assign the task. After the Edit Task dialog closes, the task is escalated, declaimed, or sent for approval.

How do I change the default ActiveVOS workflow behavior?

Purchase ActiveVOS Designer to create customized workflows.

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