Informatica

Informatica® Multidomain MDM
10.4.HotFix 1

Data Director User Guide

Informatica Multidomain MDM Data Director User Guide
10.4.HotFix 1
September 2020

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Publication Date: 2021-01-27

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Preface

Use the Informatica® *Multidomain MDM Data Director User Guide* to learn how to create, consume, manage, and monitor master data in Data Director. You can manage business entity records or subject area records. Learn how to manage records, manage relationships between records, and update records.

Informatica Resources

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https://www.informatica.com/services-and-training/customer-success-services/contact-us.html.

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

CHAPTER 1

Introduction

This chapter includes the following topics:

- Data Director Overview, 13
- Key Concepts, 14
- Logging in to Data Director, 19
- User Interface, 20

Data Director Overview

Data Director is a data governance tool. Use Data Director to create, manage, and use the master data that is stored in an MDM Hub Store. Master data is the collection of records that represent the best version of the truth about the people, places, and things that are important to your organization.

A master data domain is an area of data critical to the organization that is managed at the enterprise level to support semantic consistency across the organization. Common master data domains include Customer, Supplier, Location, Channel, Partner, Product, Asset, and General Ledger Account. Multidomain master data is the mastering of critical data across multiple master data domains concurrently. Multidomain MDM encompasses related master data domains that are central to an organization's business and business processes. The observations that arise out of multidomain master data are of significant interest to business executives. For example, in a healthcare organization, the relationships among doctors and healthcare sites might reveal gaps in services.

Your MDM administrator configured the application you use within Data Director. The MDM administrator implemented the master data domains by building data structures with a name that is meaningful for your organization. For example, Patient is an implementation of the Customer master data domain. The data structure relates records within a tree structure, with a root record, nodes, and child records. The MDM administrator can use one or both of the following data structures: business entities and subject areas. Each type of data structure comes with its own set of views for Data Director. Ask the MDM administrator which one is used in your application, and follow the instructions in the matching part.

This guide is organized into two parts that tell you how to use the available views:

- Data Director with Business Entities
- Data Director with Subject Areas

Based on your user role privileges, you can use the application to perform the following activities:

- Add records
- Find and edit records

- Verify that records contain the most reliable data from all source systems
- Identify duplicate records and resolve them by merging the records
- Investigate changes to the data in records
- Unmerge merged records
- Manage relationships between records
- Participate in review processes for new and changed records

Key Concepts

To work effectively in Data Director, you need a basic understanding of Informatica Master Data Management concepts.

Records

When you use Data Director, you are working with master records.

Master Records

A master record contains a root record and multiple child records. In Data Director, the structure and display of the master records depends on the structure defined in either business entities or subject areas.

Root Records

The root record contains the data that identifies the record. For example, the root record for John Smith contains data such as first name, last name, gender, and date of birth.

Child Records

A child record contains data that is associated with a root record. For example, a child record for John Smith might contain addresses while another child record contains phone numbers. Child records can have their own child records.

Active Records

Active records contain approved master data.

Pending Records

When you make a change to a record, the change might need to go through a review workflow before it can be approved as master data. While the record is pending approval, the record is called a *pending record* and you are restricted in the actions that you can perform on a pending record. When the change is approved, the record returns to the active record state.

Source Records

Source records contain the data that MDM used to create the master records that you see in Data Director. Source records are stored in source systems throughout your organization.

Business Entities

Business entities are an implementation of master data domains in your application. For example, the Customer master data domain can be implemented in the following types of business entities: Person, Patient, or Policy Holder.

The business entity data structure maps to the base object tables in the Operational Reference Store database. The base object tables contain all the master records. For example, the root node of a business entity corresponds to the root base object table. A child node in the business entity corresponds to a child base object table. Business entities can have an unlimited depth, though the views that display the child records might not be able to show all levels in a meaningful way beyond a certain depth.

Related Topics:

- "Records" on page 14
- "Adding a Record" on page 35
- "Adding a Person Scenario" on page 34
- "Editing Records" on page 51

Subject Areas

Like business entities, a subject area is an implementation of a master data domain. Subject areas are the original data structure used in Data Director.

The data structure supports three levels: parent, child, and grandchild. The parent level corresponds to the root base object table. The child and grandchild levels are child records.

Note: Some applications for Data Director rely on the subject area data structure and custom code, and therefore have not been migrated to business entities. If you have questions about your application, contact your MDM administrator.

Best Version of the Truth

When you view a record in Data Director, you view master data that is consolidated from source systems in your organization, including Data Director. The MDM Hub loads data from the contributing source systems. The load process uses a trust framework and rules to decide which cells from all the contributing source systems are most likely to contain accurate, up-to-date data. The consolidated record represents the best version of the truth (BVT) that is available across your organization.

Note: A BVT record is also known as master data, a golden profile, or a golden record.

For example, consider a car manufacturer that offers an incentive program to employees to buy cars. To construct BVT customer records, the data steward identifies the contributing source systems as the customer relationship management (CRM) system and the human resources (HR) system. The data steward trusts the employee address and telephone number from the HR system more than the same information in the CRM system, because employees are required to notify the human resources department of any changes to their contact information.

Data Director is a special type of contributing source system. Usually, data stewards set Data Director to the highest trust level of all contributing systems, which means that when a user edits data in Data Director, the edit is preferred over other source systems. You can also choose to override the automated BVT process and select a cell value you know is accurate.

For example, the following table shows data coming from two source systems and from Data Director:

Source	Last Name	First Name	Telephone	Telephone Trust
HR System	Brown	Nancy	555-1235	80
CRM System	Brown	Nancy	null	50
Data Director	Brown	Nancy	**555-1234**	90

Because Data Director has the highest trust score for telephone numbers, the updated telephone number is used. The data steward can add rules that cause the trust value to increase or decrease for a system. For example, if the telephone number is subsequently updated in the HR system, the system might prefer that telephone number because it was updated most recently.

Search and Compare

A best practice in data governance is to check for existing records before adding new records. When you begin adding a record, Data Director (IDD) searches for duplicate records.

You can preview the potential duplicate records as they appear and take one of the following actions:

- If more than one record is a potential match for the record you are adding, you can compare the records side by side. If you find that the records are duplicates, you can initiate a merge.
- If one record matches the record you are adding, you can open the record and begin working with it. In this case, the record that you started adding is discarded.
- If none of the records is a match, you can continue adding the new record.

The MDM administrator configures the fields to use in the search for potential duplicates.

Merge

After you compare records, you can merge records that appear to be duplicated.

When you merge a record, the root records of the merged record are consolidated into a single root record. The child records from each of the root records become child records of the merged root record.

Related Topics:

- "Resolving Duplicate Records" on page 72

Review Processes and Tasks

A review process is an automated business process. When a user adds, edits, merges, or unmerges records, the action can initiate a review process. A review process ensures that business managers or data stewards review and ultimately approve the data before it becomes master data.

Your user role determines whether a change to the master data triggers a review. For example, if your user role permits you to add or edit data but not approve changes, then when you save an edit or merge records, the action triggers a review process.

A review process contains people activities. A people activity is a point in the review process when the process requires human participation. When an instance of a review process reaches a people activity, the review process sends a task notification. Business managers and data stewards receive task notifications in their task inboxes.

Related Topics:

- "Participating in Review Processes" on page 162
- "Example of a Review Process for Edits" on page 162

Business Entity Relationships

A relationship is a connection between two business entities. In Data Director with business entities, you can create hierarchy relationships and network relationships between business entities.

hierarchy relationship

A hierarchy relationship is a connection between two business entity records that is hierarchical. For example, the Informatica business entity the parent of the John Smith business entity.

network relationship

A network relationship is a connection between two related business entity records. For example, the John Smith record is related to the PX100 Keyboard record.

You use the **Hierarchy** tab in the entity tab to investigate hierarchy relationships for a record. You use the **Network** tab in the entity tab to investigate network relationships for a record.

The MDM administrator configures relationships between business entities. You can create relationships between records based on the relationships between business entities.

Hierarchies Manager Relationships

A record can have relationships with other records. When the Hierarchy view is enabled, you can view a graph that shows how a record is related to other records.

You use the **Hierarchy** view to investigate Hierarchy Manager relationships in Data Director with subject areas. You can view hierarchical relationships, such as an employer-employee relationship, as well as relationships that are not hierarchical, such as peer relationships.

Security and User Roles

An MDM administrator creates user roles, configures permissions to resources and privileges for the user roles, and assigns a user role to all user accounts. Based on your job requirements, your access to master data might be different than your colleagues.

Types of security for business entities records

The following types of security exist:

Access to records based on the type of business entity

A user role is granted permission to all types of business entities or some types of business entities. For example, you can see the types of business entities that you have permission to create in the New dialog box. You might have access to the business entities Customer and Product, but someone else might have access to the business entities Product and Supplier.

Actions you can perform on a record

Your user role grants you a set privileges to the records for each type of the business entities. For example, a business user might have permission to read and create Customer records, but a data steward might also be able to delete and merge Customer records. The privileges can be different for different types of business entities.

In Data Director, your user role privileges control the types of actions you can perform:

- **Create**. You can create and save new master records.
- **Read**. You can view master records.
- **Update**. You can edit and save records.
- **Delete**. You can delete master records.
- **Merge**. You can identity and merge duplicate master records.
- **Unmerge**. You can unmerge a previously merged master record.

Access to records when a field contains a specified value

Your user role privileges might be constrained by field filters, which control whether you have access to the master record based on a value in a field. If a record contains a value specified in a field filter, the user roles are allowed or denied access to the record based on the rules that are defined in the filter.

Access to a parent record when a child node has no records

Your user role privileges might be constrained by node filters, which control whether you have access to a parent record when the node contains no child records.

Access to fields in a record

Some fields might be hidden from your user role. For example, a view of a Supplier business entity might show a DUNs number to people in the finance department, but not to people in the line of business.

Values you can input

Some fields might restrict the values that you can select or add based on your user role.

Values in reference entities

Some fields might restrict the values that you can select from a list of common values, such as country or gender, based on your user role.

Losing access to records

You might lose access to a record that you have accessed in the past.

A loss of access can occur under the following circumstances:

- You or someone else makes a change to a field value such that the record is now denied to your user role. For example, you add a European address to a person record and enable the GDPR check box. After you save the change, only the EU data stewards can access the person record.
- The MDM administrator creates new field filters or node filters on a business entity. One or more of the filters contain a rule that denies access to your user role.
- The MDM administrator changed the user role to which you were assigned.
- The MDM administrator modified the privileges for your assigned user role.

Logging in to Data Director

To log in, you need the URL for Data Director and your user credentials. If your organization has created more than one application for Data Director, you also need the name of the application. If you do not have this information, contact your MDM administrator.

Note: If you cannot log in to the application and you are already running another MDM application in the browser, open a new browser window to log in to the application. The issue occurs because the application server that runs the MDM Hub uses the same session ID for both applications.

1. Open a supported browser, such as Chrome.
2. Enter the URL for Data Director. The URL has the following format:

   ```
   http://<MDM Server host name>:<MDM Server port number>/e360/mdm/entity360view/
   ```

   The **Log In** page opens.
3. Enter your user name and password.
4. Click **Log In**.
5. If prompted, select an application.

   The application opens and displays the **Home** page. Your username appears in the application header.

   Tip: From the menu beside your username, you can change your password and change the language of the user interface.

Configuring Microsoft Internet Explorer

If you launch Data Director in Microsoft Internet Explorer, to ensure that the data changes appear in the user interface, configure Microsoft Internet Explorer to reload the web pages. Otherwise, after a data change, you might see the cached data instead of the latest data.

1. Start Microsoft Internet Explorer.
2. Click **Tools** > **Internet options**.
3. On the **General** tab, configure the browsing history settings to check for newer versions of stored web pages every time you visit the web page.

   The settings ensure that the latest version of the Data Director pages appear.

User Interface

The Data Director user interface contains a navigation bar with tabs.

The following image shows the user interface with the **Home** page displayed:

1. Navigation bar
2. Page area
3. Search box
4. User options

The navigation bar contains tabs that link to pages within Data Director. A tab contains a page area with one or more panels. In some tabs, you can switch between different views within the page.

Note: Some tabs might not be visible in Data Director. For example, if the MDM administrator configures an application for Data Director with business entities, the MDM administrator might remove the **Data** tab.

Data Director has the following tabs:

New

Use the **New** tab to create records, and, if configured, import data.

Note: In the **New** window, if you see both the **Business Entity** option and **Subject Area** option, ask the MDM administrator which one to use. The **Business Entity** option opens an entity tab while the **Subject Area** option opens the **Data** tab.

Home

Use the **Home** page as your MDM dashboard. Managers and data stewards can view a list of review tasks in the task inbox. You might see other components, such as social media feeds, external URLs, and charts. The MDM administrator configures the **Home** page.

Task Manager

Business users and task administrators use the **Task Manager** to review changes to business entity records and manage tasks. When you click a task on the **Home** page, the **Task Manager** opens and displays the record associated with the task.

Data

Use the **Data** tab to search for and view subject area records from different perspectives.

Note: If a Data Director application uses business entities and the **Data** tab is hidden, the records open in an entity tab that displays the name of the business entity type.

The Data tab has multiple views:

- To find a subject area record, run a search query from the **Data** tab. Use search tabs to manage and use search queries to find subject area records.

  Note: If a Data Director application uses business entities and the **Data** tab is hidden, use the **Search** tab or **Search** box.
- To view and edit a subject area record, select a record and click **Open**. The record opens in the **Data** view.
- To view the source of the record and pending changes, use the **XREF** view.
- To view past changes to the record, use the **History** view.
- To view a subject area record and potential duplicate records, use the **Match Merge Comparison** view.
- If the subject area record contains effective dates, you can view scheduled changes in the **Effective Periods** view.
- If the Hierarchy Manager is enabled, you can view the subject area record and its related records in the **Hierarchy** view.

Search

When you run a search from the application header, the **Search** tab displays the results of the search. You can open business entity records from the search results.

Entity tabs

In the search results, select a business entity record and open the record in a temporary entity tab. The name on the tab identifies the opened record, usually by the name of the record, but the tab name is configurable. You can view or edit the master data for the record in an entity tab.

Note: If a Data Director application uses subject areas only, the entity tab is unavailable and the records open in the **Data** tab.

In an entity tab, you can open the following views in a tab:

- To view and edit business entity records, use the **Business Entity** view.
- To view the source of the business entity record, use the **Cross-reference Records** view.
- To view past changes to the business entity record, use the **History** view.
- To view a business entity record and potentially duplicate records, use the **Matching Records** view.
- To view the hierarchy relationships for a business entity record, use the **Hierarchy** view.
- To view the network relationships for a business entity record, use the **Network** view.
- If the business entity record contains effective dates, you can view the scheduled changes in the **Timeline** view.

Note: If your MDM administrator created custom record views, you might see different tab names.

Other Tabs

The MDM administrator can configure other tabs.

Additional Pages

The MDM administrator can configure additional pages for a Data Director application that uses the business entity model. Additional pages are custom pages that are associated to a custom tab and display information that is useful to users.

Record Views

Based on how the MDM administrator configured your application for Data Director, you might have more than one way to access master data. When you access master data in Data Director, you use record views. You might have record views for business entities or record views for subject areas.

Usually the MDM administrator configures an application to use either business entities or subject areas. If you do not see the **Data** tab in the navigation bar, you have access to record views for business entities. If you see the **Data** tab, you have access to record views for subject areas.

If the application supports both business entities and subject areas, you have a hybrid application and both types of record views are available. In this case, you see the **Data** tab in the navigation bar. Also, when you use the **New** tab to create records, the **Business Entity** option and the **Subject Area** option appear.

Regardless of how you add a record, the MDM Hub Store saves the record that makes up the business entity or subject area in the same way. A parent record contains the identifying information. Child records contain other types of related information, such as addresses or telephone numbers.

The following table describes differences between records views for Data Director with business entities and record views for Data Director with subject areas:

Elements	Data Director with Business Entities	Data Director with Subject Areas
Access to record view	Use the tabs in an entity tab.	Use the tabs in the **Data** tab.
Data in the record view	Master data Optionally, related data from external sources, such as social media. Optionally, other panels, such as a **Similar Records** panel.	Master data
Core entities representation	Business entities	Subject areasl
Nesting records	Business entities can have an unlimited depth of descendant records.	A subject area can include descendant records up to the grandchild level.
Language in the user interface	You select the language to use. In the application header, select the menu beside your username and select **Change Language**.	You select the language to use. In the application header, select the menu beside your username and select **Change Language**.
Search	Smart search, which performs a full-text search. In the **Search** box in the application header, type your search term. In the **Search** tab, type your search term in the **Search** box. In the **Search** box in the Task Manager, type your search term.	Search queries, which searches for terms by field. Click **Data**, and then use an existing search query or create a new search query.

Elements	Data Director with Business Entities	Data Director with Subject Areas
Supported in Data Director version	10.0 and later	All supported versions
Data Director applications using the record views	Applications developed for Data Director version 10.0 and later. In addition, MDM administrators can update older applications.	Applications developed for Data Director version 9.7.x and earlier. **Note:** Some applications based on subject areas include customizations that cannot be easily converted to business entities.

Related Topics:

- "Data Director with Subject Areas" on page 103

CHAPTER 2

Getting Started

This chapter includes the following topics:

- Getting Started Overview, 24
- Home Page, 25
- Start Page, 28
- Sorting and Filtering Tasks, 28
- Refreshing Data in the Home Page, 30
- Configuring the Columns for the Task Inbox, 30
- Localizing Your User Interface, 30

Getting Started Overview

After you log in to Data Director, you see the **Home** page. The **Home** page is unique to your organization and to your user role.

Based on the **Home** page layout, you might be able to monitor data in reports, monitor social media feeds, run a search in an embedded search engine, and organize your task inbox.

Related Topics:

- "Adding Business Entity Records" on page 33
- "Editing Records" on page 51
- "Resolving Duplicate Records" on page 72
- "Establishing the Best Version of the Truth" on page 82
- "Investigating Data Changes" on page 86
- "Investigating Hierarchies and Relationships" on page 142
- "Participating in Review Processes" on page 162

Home Page

Use the **Home** page as a data monitoring dashboard. A **Home** page can contain charts that display information about your master data and display lists of available tasks in the task inbox. The **Home** page can also contain content from other external sources, such as Twitter or a search engine.

Note: The MDM administrator configures the **Home** pages by user role. If you and a colleague have different user roles, your page might look different from your colleague's page.

Charts

A **Home** page can contain charts. Charts visually display information about business entity records, tasks, and other types of information.

You can select data in a chart and navigate to a drilldown chart that provides another layer of data granularity. You can select data in a chart and then navigate to another interface in Data Director that shows the relevant records or tasks.

Note: Your MDM administrator configures your charts, including links to drilldown charts or other interfaces, the look and feel of charts, and the source data used in charts. Contact your MDM administrator to request changes to your charts.

The following image shows a chart that displays the number of tasks based on the status of tasks:

Social Media Feeds

A **Home** page can include social media feeds. Social media feeds can help you keep up with your organization's social media presence.

For example, the following image shows Twitter feed:

Search Engine and External URLs

A **Home** page can include an embedded search engine or other external URLs. With embedded external URLs, you can access the internet without leaving Informatica Data Director. For example, you might search for the internet for more information about a business entity or monitor competitor offerings.

The following image shows an embedded Bing search engine:

Task Inbox

A task is a request to participate in a review process. For example, you might need to approve a new record or review changes to a record. You receive task notifications in the task inbox. By default, the task inbox

displays the tasks based on the first quick filter. For example, if the first quick filter is My Open Tasks, the task inbox lists all your open tasks.

The following image shows the task inbox with the My Closed Tasks filter selected:

1. Quick filters
2. Column filter
3. Refresh icon
4. Table Settings icon

The following table describes the elements in the task inbox:

Inbox Element	Description
Filters	Filters the tasks based on the filter criteria. You can use the following types of filters alone or in combination: - Quick filters. Filters the tasks based on the predefined filter that you select. - Column filters. Filters the tasks based on the task properties that are visible in the list.
View All	Displays the details of all the listed tasks in the Task Manager.
Refresh icon	Updates the contents of the task inbox.
Table Settings icon	Opens a dialog box where you can configure the columns for each quick filter listed in the task inbox.
Task Title	A link that displays a short description of the review task. To review the record and take action on the task, click the task title. The task opens in the Task Manager and displays the associated record in the review panel. If your role permits it, you can edit the record from this view before taking action on the task.
ID	Instance ID of the review process that generated the task.
Type	Name of a people activity within the process.
Priority	Priority of the task. The task priority can be Low, Normal, or High. When generating tasks, the review process assigns the same priority to all tasks of the same type.
Due Date	Date the task is due. The review process calculates a default due date based on the task creation date plus a predefined time period. The due date of each task is prefixed with one of the following colored dots: - Green. Indicates that the task is not overdue. - Red. Indicates that the task is overdue. - Amber. Indicates that the task will be overdue in the next 24 hours.

Inbox Element	Description
Status	Status of the task can be Open or Closed. When the task status is Open, you can view the record associated with the task.
Owner	Name of the signed-in user.
Creator	Name of the user who created the task.
Creation Date	Date on which the user created the task.

Start Page

If the **Data** tab is enabled for your environment and a **Home** page is not configured for your role, use the **Start** page as a data monitoring dashboard. The **Start** page contains a list of review tasks in the task inbox.

The following image shows the **Start** page with the default task inbox:

If the Task Manager is not enabled, when you click a task, the task opens in the **Data** tab. If the Task Manager is enabled, the task opens in the Task Manager.

Sorting and Filtering Tasks

You can sort and filter the list of tasks in the task inbox. For example, you might want to review edited records before you review merge proposals.

The task inbox contains quick filters and column filters. You can use these filters in combination to get specific results. For example, to see high priority tasks assigned to you, select the **My Open Tasks** quick filter and set the Priority column filter to `High`. In logical terms, filters are joined by the AND operator.

Note: You can set one column filter at a time. For example, you can narrow your list to Organizations and then further restrict the results to show only the Merge tasks for organizations.

1. In the navigation bar, click **Home**.

   The task inbox appears.

2. To sort the list of tasks by a field, click the column heading with that field name.
   For example, to sort tasks by task type, click the **Task Type** column heading.

Sorts the tasks based on the values in the selected column. An up arrow beside the column heading indicates that the values are sorted in ascending order. A down arrow indicates descending order.

Note: By default, the task inbox sorts tasks case insensitively. If the number of tasks to sort is more than the value of the `CompositePagerTotalRecords` property, case-sensitive sorting is database dependent. For more information about the `CompositePagerTotalRecords` property, see the *Multidomain MDM Data Director Implementation Guide*.

3. To filter the list of tasks, set filter criteria in any order.
   - To filter tasks by the most commonly used criteria, select one of the following quick filters:

Filter	Description
My Open Tasks	Shows your open tasks.
My Closed Tasks	Shows the tasks that you closed.
All Tasks	Shows all the closed, claimed, and unclaimed tasks that are assigned to your user group.
All Unclaimed Tasks	Shows all the unclaimed tasks that are assigned to your user group.
All Closed Tasks	Shows all the tasks that the users in your user group closed.
All Claimed Tasks	Shows all the tasks that the users in your user group claimed.

   - To filter tasks based on the values of column headings, enter appropriate values for the following column headings:

Column	Description
Task Title	Shows tasks that contain the specified text. Enter the text that you want to search for in the task titles.
ID	Shows the tasks based on the value that you enter.
Type	Shows tasks with the selected task type. Select a task type from the list, such as **Final Review** or **Merge**.
Priority	Shows tasks with the selected priority, such as **High**. Select a priority from the list.
Due Date	Shows tasks that are overdue or due in a specific period. Select a due date option from the list.
Status	Shows tasks with the selected status, such as **Open** or **Closed**. Select a status from the list.
Owner	Shows tasks that are assigned to the user. Enter a user name.
Creator	Shows tasks that the specified user created.
Creation Date	Shows tasks that are created during a specific period of time. Select a creation date option from the list, such as **Last 7 days** or **Custom range**.

4. To remove filters, click the **Clear Filter** icon.

Refreshing Data in the Home Page

Before you perform an analysis of the data in the **Home** page, refresh the components to ensure that they display current data. You can refresh all components at the same time, or you can refresh some of the components individually.

Note: Third-party components might refresh themselves periodically. If so, the refresh rate depends on the API provided by the third-party component. For more information, contact the MDM administrator.

Perform one of the following tasks:

- To refresh all the components in the page, refresh your browser instance.
- To refresh only the task inbox, click the **Refresh** icon.
- To refresh a chart with current data, click **Recalculate**.

Configuring the Columns for the Task Inbox

By default, the task inbox displays the columns that the administrator configured for all the quick filters. For each quick filter, you can add or remove the available columns.

1. In the navigation bar, click **Home**.

   The task inbox appears.
2. Select a quick filter for which you want to configure the columns.
3. Click **Table Settings**.

   The **Table Settings** dialog box appears.
4. To add a column heading, in the **Available Fields** section, select a field and click **Add**.
5. To remove a column heading, in the **Selected Fields** section, select a field, and click **Remove**.
6. Click **OK**.

Localizing Your User Interface

You can display all elements of the Data Director user interface in another language. All elements of the user interface are localized in the selected language. The localized elements are menus, buttons, navigation links, labels, error messages, and metadata.

1. Login to Data Director, and if prompted, select your application.

2. From the application header, click your user name, select **Change Language**, and select a language.

   The Data Director user interface displays the selected language.

Part I: Data Director with Business Entities

This part contains the following chapters:

- Adding Business Entity Records, 33
- Finding Records, 38
- Editing Records, 51
- Importing Bulk Data, 60
- Resolving Duplicate Records, 72
- Establishing the Best Version of the Truth, 82
- Investigating Data Changes, 86
- Investigating Relationships, 89
- Investigating Data Change Events for Effective Periods, 99

CHAPTER 3

Adding Business Entity Records

This chapter includes the following topics:

- Adding Records Overview, 33
- Adding a Person Scenario, 34
- Adding an Organization Scenario, 34
- Adding a Record, 35
- Adding a Record with Data from DaaS Provider, 37

Adding Records Overview

To add records based on a business entity, use the **New** tab with the **Business Entity** option and select a business entity.

Note: In the **New** window, if you see both the **Business Entity** option and **Subject Area** option, ask the MDM administrator which one to use. The **Business Entity** option opens an entity tab while the **Subject Area** option opens the **Data** tab.

The MDM administrator defines the business entities, including the data and structure. The administrator also designs the layout of the record view that opens when you create a record. Your application can have one or more record views.

You might see the following panels in your record view when you create a record:

Record Details panel

The main panel in the record view is the data entry form. Required fields have a red line.

Similar Records panel

If the record view contains the **Similar Records** panel, as you enter data in required fields, Data Director generates a list of similar records for your review. Review the similar records before finishing the form. If you find the record already exists, you can edit the existing record instead of adding a new record. If you are uncertain whether a similar record is the same record that you want to add, continue adding the new record. If you add a duplicate record, Data Director can find and consolidate matching records for you.

DaaS Providers panel

If the record view contains the **DaaS Providers** panel, you can specify some basic information, such as the display name, and send the information in a request to a DaaS provider. The DaaS provider searches its database and returns a list of matching records. You can preview the data for each record. You can compare two or more records and specify which of the records you want to use to create the record.

Data Validation in the Business Entity View

When a user adds or changes data in the **Business Entity** view, Data Director checks the data against metadata and, optionally, validation rules. The metadata defines the expected format for the data, such as the data type or the number of characters permitted. The validation rules are cleanse rules or Informatica Data Quality rules.

Note: If your MDM administrator created a custom view for this purpose, the name of the view might be different.

Validation processes run at the field level, section level, and entity level:

- Field level. When you add or edit data in a field in the **Business Entity** view, a client-side validation process verifies that the data satisfies the metadata. For example, when you enter a date in a Date field and then navigate away from the field, the process verifies that you entered the date in the expected date format.
- Section level. When you apply all changes in a section in the **Business Entity** view, a client-side validation process verifies that all data satisfies the metadata and that the required fields contain data.
- Entity level. When you save a record in the **Business Entity** view, a server-side validation process verifies that data satisfies the metadata, the cleanse validation rules, and the Informatica Data Quality rules.

If user input does not satisfy the metadata or the validation rules, you see messages about the problems with the data.

Adding a Person Scenario

You are an insurance agent for a large insurance company. You have a new customer, Anthony Lomax, on the phone. You want to add Mr. Lomax as a record.

To add Anthony Lomax, you perform the following steps:

1. In the navigation bar, click **New**. Select **Person** as the business entity type, and then click **OK**.
2. In the **Last Name** field, you type Lomax. In the **First Name** field, you type Anthony.
3. In the **Similar Records** panel, you see a potential duplicate, so you open the similar record.

   Note: The **Similar Records** panel only appears if the MDM administrator has configured the application to display the panel.
4. You confirm with Mr. Lomax that he is not the same person as the existing Anthony Lomax, and then close the similar record.
5. You finish adding Mr. Lomax's information in the form.

Adding an Organization Scenario

You are with the marketing department of a company. You have a new customer, Time Warner which is an organization. You want to add Time Warner as an Organization business entity record.

To add Time Warner, you perform the following steps:

1. In the navigation bar, click **New**. Select **Organization** as the business entity type, and then click **OK**.
2. Fill In the required fields for the DaaS provider. In the **Display Name** field, type Time Warner. The **Display Name** field is a required field.

3. Select the DaaS provider and click **Go**.
4. Review the search results that the DaaS provider returns. You compare two or more records in the search results.
5. Select the records that are a potential match and click **Use this** to create the record.
6. If you do not find any potential matches, you close the search results, add data in the data entry form and click **Save** to create the record.

Adding a Record

To add a record that uses the business entity model, start from the **New** tab in the navigation bar and select the type of business entity.

1. In the navigation bar, click **New**. In the **New** window, select a business entity type, and then click **OK**.

   An entity tab opens and displays the data entry form for the business entity. A red line on a field indicates a required field.

2. For each required field in the form, click the field, and type a value.

   Note: You can use the following conventions when adding text:

   - Type the complete search string or the search string with the asterisk wildcard character (*) for the record that you want to find. You can use the wildcard character at the end of the search string or in between the search string. For example, if you want to search for John, you can specify `Jo*` or `J*n`.
   - If the search is configured to suggest search strings, type a few characters of the search string, and select one of the suggested values as the search string.

     Note: The values are suggested when you search within a single business entity type.

   If the search string includes any of the following special characters, add a backslash as a prefix to the special character: + , - , & , || , ! , ( ) , { } , [ ] , ^ , " , ~ , ? , : , \ . If you do not add a backslash as a prefix to each special character, the search might return no results or incorrect results. For example, if you want to search for `AT&T`, the search string must be `AT\&T`.

   The following image shows a sample data entry form for a Person business entity. The required fields are filled in.

   1 Navigation menu

   2 Required field indicator

   3 Changed field indicator

3. If the **Similar Records** panel contains a list of similar records, review them.

Note: The **Similar Records** panel only appears if the MDM administrator has configured the application to display the panel.

a. In the **Similar Records** panel, click the information icon beside the name of a record.

b. Check the other data values to see if the record is the same as the one you are adding.

- If it is the same record, click **Use this record**. When prompted for confirmation, click **Yes, proceed**. The work-in-progress record is discarded and the tab closes. The selected record opens in an entity tab. You can edit data as required.
- If it is not the same record, click **Close**.
- To review child records for the previewed record without discarding the work-in-progress entity, click **View Business Entity**. The previewed record opens in an entity tab.

c. Review other similar records in the same way.

d. If a record does not exist, return to the tab containing the work-in-progress record.

4. In the data entry form, add data in the optional fields.

a. Fill in the fields.

b. Optionally, add an image. Type a valid URL in the image field.

Note: For best results, use an image that is a maximum of 200 x 200 pixels. For images, the MDM Hub stores the URL, not the file. If the location of the file changes, you must update the URL.

c. Click the **Apply** icon.

5. If the data entry form includes sections for child records, add child records to the sections.

a. In the navigation menu, click a section name, such as **Address** or **Phone**.

The view scrolls to the selected section.

b. Click the **Create Child Record** icon.

Fields appear where you can enter data.

c. You can switch between a table view and a form view of the fields. Click the **Form** icon or the **Table** icon.

d. Fill in the fields.

The following image shows a sample **Phone** section in the form view:

1 **Table** icon. Click to view the fields within a table.

2 **Form** icon. Click to view the fields within a form.

3 **Create Child Record** icon. Click to add a child record to the selected record.

e. Click the **Apply** icon.

6. After you finish adding data, click **Save**.

A message confirms that the record was created successfully. If your user role permits you to save data without a review, the application saves the record to the MDM Hub Store as an active record. Otherwise, the application saves the record as a pending record and initiates the review process associated with your role.

Adding a Record with Data from DaaS Provider

When you have Data as a Service (DaaS) integrated with the MDM Hub and configured for a business entity, the DaaS Providers panel lists the DaaS providers. Use the data provided by a DaaS provider to add your record. To add a record, start from the **New** tab and select the type of business entity.

1. In the navigation bar, click **New**. In the **New** window, select a business entity type, and then click **OK**.
2. Fill in the required fields for the DaaS provider.
   For example, in the **Display Name** field, type `Time Warner`.
3. Move your cursor out of the **Display Name** field.

   You can now select a DaaS provider.
4. In the **DaaS Provider** panel, request information about the record from a DaaS service provider.
   a. Select the DaaS provider you want to use, and then click **Go**.

      The DaaS provider returns the search results based on the display name of the organization.
   b. Investigate if a record in the search result is the one you want to add.
      1. Select the record and click **Preview**.
      2. If the data values do not match the record that you want to add, click **Go back**.
      3. Review all records in the same way.
   c. Optionally, if you want to compare two or more records, select the records, and then click **Compare**.

      The **Compare** page displays the data from the selected records.
5. Based on the result of the previous step, perform one of the following actions:
   - To add the data from the DaaS provider, select one or more entities from the search results or from the Compare page, and then click **Use this**. All entities are merged to form a single record. Continue with this record.
   - If the DaaS provider does not return results that match the entity you want to create, return to the tab containing the work-in-progress record, fill in the details, and click **Save**.

CHAPTER 4

Finding Records

This chapter includes the following topics:

- Finding Records Overview, 38
- Using the Search Box to Find Records, 40
- Using Queries to Find Records, 43
- Managing Queries, 47
- Migrating and Sharing Saved Queries, 48
- Filtering Child Records, 49

Finding Records Overview

To find a record, you can either enter a search text in a search box or use a query form. The search results show the most important details of the records. You can see more details by opening the records.

You can use the search box to search and filter records. However, to repeatedly perform the same search and filter operation, it is efficient to create and save a query.

Use the search box to perform a full-text search. Use a search query, which is a search form, to specify a criteria for your search.

When you use queries, you can search within a specific business entity for which the query is created. Whereas, when you use the search box, depending on your environment, in addition to searching within a business entity, you might be able to search across all business entities.

Note: The search options that you see depend on what was configured by the MDM administrator. You must have the required privileges for the business entities within which you want to search for records.

Search Page

When you perform a search from the **Search** box in the application header, the **Search** page appears in the **Search** tab. A search returns a list of records that satisfy the search criteria.

Use the **Search** page to review the search results. You can expand a record in a search result to view the summary of record details. To refine the search results, you can use filters.

You can group the records that appear in search results based on the business entity types. If you group records, you can look for records in the relevant business entity type groups.

The following image shows a sample **Search** page:

1. Results total
2. Search Results panel
3. Actions menu
4. Search box
5. Filter panel

The **Search** page includes the following sections:

Results total

Displays the total number of results found based on the search string that you enter in the **Search** box.

Search Results panel

Displays the total number of results found and lists the records that are part of the search results. You can group the records listed in the search results by business entity type.

Actions menu

Displays actions that you can perform on the record. For example, you can open the record in a view, such as the **Business Entity** view, or you can create a task for the entity.

Note: If your MDM administrator created a custom view for this purpose, the name of the view might be different.

Filter panel

Displays the filter criteria to filter the search results. Use filters to refine the search results based on the filter criteria that you select or enter a value for. You can hide the **Filter** panel if you do not need to filter the search results.

Filter criteria

Filter properties that you can select or enter a value for to refine search results.

Queries Page

Use the **Queries** page to create and run queries. A query returns a list of records that satisfy the criteria that you specify.

To open the **Queries** page, click the **Queries** tab. If you have a default query, the default query opens. If not, the **Saved Queries** panel appears, and you can create a query or select a saved query.

After you run a query, the **Search Results** panel lists the records that satisfy the search criteria.

The following table describes the user interface elements of the **Queries** page:

User interface element	Description
Query panel	Lists the saved queries or the query that is open. The query that you create appears in the query panel.
Run	Runs the query that is open.
Save	Saves a query.
Back to Saved Queries	Displays the saved queries in the **Saved Queries** panel.
Query Results panel	Lists the records that satisfy the query criteria.

Using the Search Box to Find Records

You can use the search box to perform search for records. You might want to search for records that you want to view, edit, or delete.

Your Data Director application must be configured to use Elasticsearch. When your application is configured to use Elasticsearch, you can search for records within a single business entity.

To find a record, enter a complete or partial search string in the Search box. A search string can include keywords, numbers, and operators. Stopwords, such as `a`, `an`, `of`, and `with`, are ignored in the search process.

You can use the wildcard operators `*` and `?` in the search strings. The `*` wildcard operator is a placeholder that matches zero or more characters. The `?` wildcard operator matches a single character.

The following table lists example search strings and explains how they function:

Example Search String	Search Behavior
John	Searches for records that contain `John`, such as `John`, `John Smith`, `John Anderson`, and `John Anderson Smith`.
John Smith	Searches for records that contain `John` or `Smith` or both `John` and `Smith`, such as `John Smith` and `John Anderson Smith`.
John Anderson Smith	Searches for records that contain at least two of the terms that constitute the search string, such as `John Smith`, `John Anderson`, and `John Anderson Smith`. When more than two terms constitute a search string, at least `n-1` terms are present in the search results. In this example, at least `3-1 = 2` terms are present in the search results.

Example Search String	Search Behavior
John*	Searches for records that contain a value that starts with `John`, such as `Johnson` and `Johnny`.
Jo*n	Searches for records that start with `Jo` and ends with `n`, such as `Johansson` and `Jordan`.
Al?k	Searches for records with a single character between `Al` and `k`, such as `Alek` and `Alok`.
Ale?	Searches for records with a single character after `Ale`, such as `Alek` and `Alex`.
Smith-Jones	Searches for records that contain both `Smith` and `Jones`, such as `Smith-Jones` and `Smith Jones`.
Dave&Smith	Searches for records that contain `Dave&Smith`, which contain the special character `&`. You can search for records that contain special characters, such as `&`, `+`, `=`, and `~`.
The Washington Post	Ignores the stopword `The` and searches for records that contain `Washington`, `Post`, or both `Washington` and `Post`.

Finding Records in an Elasticsearch Environment

Use the search box to find a record.

1. In the **Search** box, select a type of business entity from the list.

   Tip: The Search list contains the types of business entities that you have permission to view. If the list is empty, contact your MDM administrator to request permission.
2. In the **Search** box, perform one of the following tasks:
   - Type the complete search string or the search string with the asterisk wildcard character (*) for the record that you want to find. You can use the wildcard character at the end of the search string or in between the search string. For example, if you want to search for John, you can specify `Jo*` or `J*n`.
   - If the search is configured to suggest search strings, type a few characters of the search string, and select one of the suggested values as the search string.

     Note: The values are suggested when you search within a single business entity type.

   If the search results must contain the words in the search string, add the `+` operator before each search word.
3. Click the **Search** icon.

   The search results appear in the **Search Results** panel.
4. To refine the search results, you can apply filters.

Filtering Records

After you perform a search, you can refine the search results by using filters. For example, you can refine the search results for John Smith by filtering the results by the city name, Toronto.

1. Perform a search.

   The search results appear in the **Search Results** panel in the **Search** page.
2. In the **Filter** panel, select or enter a value for the filter criteria that you require.

Note: For a date and time field, you can specify the date in the filter, but not the time. The filter uses the default time as 00:00:00 UTC. Some numeric filters might appear in the scientific notation, even though the search results display the values in the decimal notation. For example, the filter might display 10544444.6 as 1.05444446E7.

3. Click **Apply**.

   The search results contain only the records that match the filters that you applied.

4. To clear all the filter criteria, click **Clear All**.

Viewing and Opening a Record in an Elasticsearch Environment

You can open records from the **Search Results** panel in the **Business Entity** view, or any record view. Before you open a record, you can preview the record. The preview appears in the **Record Preview** window and can display up to ten levels of records, which includes both parent and child record levels.

1. From the **Search Results** panel, select the record that you want to open.

   Note: A description with the prefix [Pending] means that the record has pending changes that are not yet approved. You can open the record, but you cannot make further changes until the review and approval process ends.

2. To verify that you have the correct record, click the **Show Preview** icon.

   The **Record Preview** displays the record details.

3. To open the record, click the **Open in a new window** icon.

   The record opens in the **Business Entity** view. You can view and edit the record that is open.

4. If you want to open the record in any other view, click the **More Actions** icon, and then select **Record Details**. Select the tab that you want to view.

   Note: The tabs that appear in the open record depend on the Data Director configuration and your user role privileges.

   The following views might be available in the Data Director application:

View	Description
Matching Records	View the records that match the record that you opened. You can identify and resolve duplicate records.
Cross-reference Records	View the records that contribute to the best version of the truth of a record. You can unmerge a record that was merged with another record.
History	View data changes over the lifespan of the record. You can identify the data events that changed the data.
Hierarchy	View a tree diagram that shows the hierarchy relationships for the record. You can add, edit, and delete hierarchy relationships for the selected record.
Network	View a network diagram that shows how a record is related to other records. You can add, edit, and delete related relationships for the selected record.

   The record opens in the view that you select.

Using Queries to Find Records

Use a search query, when you want to repeatedly perform the same search and filter operation. When you use search queries, you specify a criteria for your search. You might want to use queries to find records that you want to view, edit, or delete.

To create and manage queries, use the **Queries** page. You can create a query to search for records based on a specific business entity. To reuse the query that you create, save the query. If you use a query frequently, you can set it as the default query.

When you create a query with a lookup field that is dependent on other lookup fields, these other lookup fields are automatically included in the query. For example, the City lookup field is dependent on the State and Country lookup fields. When you create a query to include only the City lookup field, the State and Country lookup fields are automatically included in the query.

Types of Queries

You can use a basic or an extended query.

If a basic query does not return the results you are looking for, use an extended query. An extended query can find records that are missed by the basic query.

Basic Queries

Basic queries use simple text comparisons to find records that contain the query values. You can use text and the wildcard character (*) to query values.

The wildcard characters are special search symbols that you can use in basic queries to specify a text pattern instead of specific characters. You can use the asterisk (*) wildcard character to increase your chances of finding the records that you want. The wildcard characters are useful when you do not know the exact text or want to search for similar text.

The following table lists example search strings and explains how they function:

Example Query String	Query Behavior
John Smith	Queries for records that contain `John`, `Smith`, or any variations of `John` or `Smith` as a field value.
"John Smith"	Queries for records that contain `John Smith` or any variations of `John Smith` as a field value.
John*	Queries for records that contain a value that starts with `John`. For example, `Johnson` or `Johnny`.
Jo*n	Queries for records that start with `Jo` and end with `n`. For example, `Johansson` or `Jordan`.
*	Returns all the records.

Note: Basic query is not case sensitive in Microsoft SQL Server environments.

Extended Queries

Extended queries use matching logic and match-enabled attributes to find records that contain the query values. You must enable a match rule set to use with extended queries.

Extended query results include fuzzy matches, which are more reliable. Fuzzy matches take into account spelling variations, and other differences to ensure that matching data that are not identical are not missed. For example, an extended query can match variations of the word "Street", such as "St." and "St".

Note: The extended queries use match rule sets. If an MDM administrator edits or deletes a match rule set from the Hub Console, the related queries are deleted from the Data Director application.

When you use extended queries, ensure that the following conditions are met:

- The business entity has match-enabled attributes.
- The match rule set used by the query is configured by the MDM administrator to use the **Enable Search by Rules** option in the Hub Console.

Creating a Query

You can create a query to search for records within a specific business entity. You are the owner of the queries that you create.

1. In the navigation bar, click **Queries**.
2. In the **Saved Queries** panel, click the **Add** icon.

   The **New Query** dialog box appears.
3. From the **Business Entity** list, select the business entity within which you want to perform the search.
4. Select a query type.

Query Type	Description
Basic	Uses simple text comparisons to find records that contain the query values.
Extended	Uses matching logic and match-enabled attributes to find records that contain the query values.

5. If you selected the extended query type, from the **Match Rule Set** list, select a match rule set.

   Select the **Default** match rule set only when a suitable match rule set does not appear in the list. A match rule is generated based on the values that you specify.

   The fields available for the selected match rule set appear.
6. Select the fields that you want to include as the search criteria for the query.

   The fields that you selected appear in the **Selected Fields** section.
7. In the **Selected Fields** section, drag to rearrange the sequence of the fields.

   The fields appear in the query form in the sequence that you set.
8. Specify the search results options.
   a. To make the query case sensitive, enable the **Case sensitive** option.
   b. To show pending records in the search results, enable the **Show pending records** option.
   c. To sort search results, from the **Sort By** list, select a field name by which you want the search results sorted.
   d. Select the sort order of the query to be ascending or descending.

9. Click **OK**.

   The query is created and opens on the Queries page.

10. To save the query for reuse, click **Save**.

    The **Save Query** dialog box appears.

11. Enter a query name and description.

12. If you want to use the query as a default query, enable **Set as my default**.

    The default query is the query that appears when you open the **Queries** tab.

13. If you want to share the query with other users, enable **Share with all**.

    By default, you own the query that you create. Other users cannot edit the queries that you own.

14. Click **Save**.

    The query is saved and appears on the **Saved Queries** panel.

You can run the query that you created, or save the query and run it when needed.

Running a Query

You can run a query to find records. To run a query that is not saved, enter the search criteria, and then run the query. To run a saved query, first, open the query.

1. In the **Saved Queries** panel, open the query that you want to run.
   a. If a default query is open, but you want to run a saved query, click the **Back** icon to navigate to the **Saved Queries** page.
   b. Expand the business entity to which the query belongs.
   c. Click the query name.

      The query form appears.
2. Enter the search criteria for the record that you want to find.
3. Click **Run**.

   The query results appear in the **Search Results** panel.

Viewing Query Results

After you run a query, you can view the query results that appear in the **Search Results** panel.

You can open records from the **Search Results** panel. Before you open a record, you can preview the record. The preview appears in the **Record Preview** window.

The **Record Preview** and the **Business Entity** view can display the parent records and up to ten levels of child records. The top two child record levels are expanded. To view the child record levels that are deeper, expand the record levels.

You can customize the results to view only the fields that are significant to your purpose. Also, you can export the results to a CSV file.

Opening Records from Query Results

After you run a query to find records, you can open the records from the **Search Results** panel.

1. From the **Search Results** panel, select the record that you want to open.

2. Optionally, to verify that you have the correct record, preview the record.
   a. Click the **Show Preview** icon.

      The **Record Preview** displays the record details.
   b. After you preview the record, click **Close**.
3. To open the record, click the **Open in a new window** icon.

   The record opens in the **Business Entity** view. You can view and edit the record.
4. If you want to open the record in any other view, click the **More Actions** icon, and then select **Record Details**. Select the tab that you want to view.

   Note: The tabs that appear in the open record depend on the Data Director configuration and your user role privileges.

   The following views might be available in the Data Director application:

View	Description
Matching Records	View the records that match the record that you opened. You can identify and resolve duplicate records.
Cross-reference Records	View the records that contribute to the best version of the truth of a record. You can unmerge a record that was merged with another record.
History	View data changes over the lifespan of the record. You can identify the data events that changed the data.
Hierarchy	View a tree diagram that shows the hierarchy relationships for the record. You can add, edit, and delete hierarchy relationships for the selected record.
Network	View a network diagram that shows how a record is related to other records. You can add, edit, and delete related relationships for the selected record.

   The record opens in the view that you select.

Customizing Query Results

You can customize the query results that appear in the **Search Results** panel to include only the fields that you want to view.

1. From the **Search Results** panel, click the **Settings** icon.

   The **Customize Query Columns** dialog box appears.
2. Select the fields that you want to display in the **Search Results** panel.
3. Optionally, change the order in which you want the fields to appear in the search results.
4. Click **OK**.

   The **Customize Query Columns** dialog box closes. The query results include only the fields that you selected.

Exporting Query Results

If you want to view the query results in a CSV file, export the query results to a CSV file.

▶ Export the query results to a CSV file.

- To export all the fields, including the fields that do not appear on the **Search Results** panel, click **Actions** > **Export All Fields**.
- To export only the fields that appear on the **Search Results** panel, click **Actions** > **Export Current Fields**.

  Note: Before you export the query results, you can customize the results that appear on the **Search Results** panel to include only the fields that you want to export.

Managing Queries

After you save queries, you might want to modify a query or delete a query that you do not need.

To manage queries, you can perform the following tasks:

- Edit a saved query.
- Delete a saved query.
- Save an existing query as a new query.

Note: The extended queries use match rule sets. If an MDM administrator edits or deletes a match rule set from the Hub Console, the related queries are deleted from the Data Director application.

Editing a Saved Query

Use the **Saved Queries** panel to edit queries. You can edit any query that you own. You own the queries that you create or import into your environment.

1. In the **Saved Queries** panel, expand the business entity, and click the query.

   The query opens.
2. Click **Actions** > **Edit Query**.

   The **Edit Query** dialog box appears.
3. Edit the query as required.

   You can make the following changes to the query:
   - Add fields.
   - Remove fields.
   - Enable the query to be case-sensitive.
   - Select a field name by which the query result must be sorted.
   - Set the sort order to ascending or descending.
4. Click **OK**.

   The query is updated. You can save or run the query.
5. Save or run the query.

Deleting a Saved Query

For each business entity, you can delete the queries that you own.

1. In the **Saved Queries** panel, expand the business entity.

2. Select the query, and then click **Actions** > **Delete**.

   The delete confirmation dialog box appears.

3. To delete the query, click **Yes**.

   The query is deleted.

Saving an Existing Query as a New Query

Instead of starting from scratch, you can use an existing query to create more queries. You can either select or open an existing query, and then save the it as a new query.

1. In the **Saved Queries** panel, select the query that you want to save as a new query.
2. Click **Actions** > **Save As**.

   The **Save As** dialog box appears.

3. Enter a unique name and description for the query.
4. Optionally, enable any of the following query options:
   - Set as my default. The query becomes the default query.
   - Share with all. The query is shared with other users.
5. Click **Save**.

   A copy of the query is saved with the new name, and the query opens.

6. Optionally, modify the new query.
   a. Click **Actions** > **Edit**.
   b. Edit the query as required.

      You can make the following changes to the query:

      - Add fields.
      - Remove fields.
      - Enable the query to be case-sensitive.
      - Select a field name by which the query result must be sorted.
      - Set the sort order to ascending or descending.

   c. Click **OK**.

      The query is saved with the changes.

Migrating and Sharing Saved Queries

When an MDM administrator migrates a Data Director configuration from one environment to another, the saved queries are not migrated. You need to export the queries from the source Data Director application and then import the queries into the target Data Director application.

You can migrate all the saved queries in the application or migrate individual saved queries. When you migrate queries, if the target application contains queries that have the same names as the queries in the source application, the queries are renamed. For example, if a query with the name `PersonQuery` already exists in the target environment, the query is renamed to `PersonQuery 1`.

Also, you can share the saved queries with other users, who can import the queries into their application. You are the owner of the queries that you import into your application.

Migrating and Sharing all the Saved Queries

To migrate all the saved queries, export the queries from the source Data Director application and then import the queries into the target Data Director application. Also, you can share all the saved queries with other users, who can import the queries into their environment.

1. From the **Saved Queries** panel header, click the **Export** icon.

   A `Queries.json` file, which contains all the saved queries, is downloaded to the default download location.
2. Import the JSON file into the target application.
   a. Copy the downloaded JSON file to an accessible location in the target application environment.
   b. From the **Saved Queries** panel header, click the **Import** icon.
   c. Locate and import the queries JSON file.

   All the saved queries are migrated to the target environment.

Migrating and Sharing a Single Saved Query

To migrate a saved query, export the query from the source Data Director application and then import the query into the target Data Director application.

1. From the source application, export the query that you want to migrate.
   a. In the **Saved Queries** panel, expand the business entity to which the query to export belongs.
   b. Select the query, and click **Actions** > **Export**.

   A `Queries.json` file, which contains the saved query, is downloaded to the default download location.
2. Import the JSON file into the target application.
   a. Copy the JSON file to an accessible location in the target application environment.
   b. In the target application, from the **Saved Queries** panel header, click the **Import** icon.
   c. Locate and import the JSON file.

   The saved query is migrated to the target environment.

Filtering Child Records

In a Business Entity view, you can filter the child records based on field values. Filters are enabled when the number of records in a child record section exceeds four records. Even though the child records might be listed in multiple pages, the filters are applied to the entire set of child records.

When you navigate away from the Business Entity view, the filters are cleared. When you switch between the form and table views, the filters persist.

Note: In the form view, when you filter by date, the records are filtered by date but not by time.

1. Expand a child record section.
2. Click the **Filter** icon.

The filter fields appear.

3. Enter the filter criteria, and press the **Enter** key.

   The filters are applied, and the records that satisfy all the filter criteria are displayed.

CHAPTER 5

Editing Records

This chapter includes the following topics:

- Editing Records Overview, 51
- Editing a Single Record, 51
- Edit Multiple Records, 53
- Adding and Editing Related Records, 55
- Deleting a Record, 58

Editing Records Overview

You can add or make changes to information in records. You can change a single record or multiple records. To change records, search for the record, and open the records in the Business Entity view.

If your user role permits it, you can edit data or delete records. When you save changes, based on your user role, a review process might be initiated. In this case, Data Director saves the requested changes in a pending record until the review process ends. If the review ends in an approval, Data Director applies the change from the pending record to the active records.

Editing a Single Record

You might want to add or make changes to the information in a single record.

You might want to add information or make changes to the information in a single record. To make changes to a single record, search for the record, and open the record in the **Business Entity** view.

If your user role permits it, you can edit or delete a single record. When you save changes to a record, a review process might automatically initiate depending on your user role. In this case, Data Director saves the requested changes in a pending record until the review process ends. If the review ends in an approval, Data Director applies the change from the pending record to the active records.

Scenario for Editing a Record

A customer named John Smith reports that he did not receive the product that you mailed to him. You want to check his address, correct errors, and redirect the product to the correct address.

You find the record for John Smith, which you select and open to view the address. You find that the address has an incorrect postal code. After you correct the address, you close and save the record. You ensure that you resend the product to the correct address.

Editing a Record

If your user role includes the edit permission, you can edit a record in the active state.

Note: You cannot edit a record that is in the pending state because the record has changes that are pending approval. You must wait until the review and approval process ends.

1. From the **Search Results** panel of the **Search** page, open the record that you want to edit.

   The record opens in a record view.
2. If the view is not your preferred view for editing, you can select a different tab.
3. Click **Edit**.

   Tip: If the button is disabled, either you do not have permission to edit the record or the record has changes that are pending approval.

   The following image shows the record for John James Smith in edit mode:

4. Edit the data in the root record as required.
   a. Click anywhere in the top section.

      The section becomes editable.
   b. Edit the data.
5. Edit the data in child records as required.
   a. Expand the child section.

b. Click the **Edit** icon.

   The section becomes editable.

c. Edit the data.

d. Click the **Apply** icon.

6. Click **Save**.

   If your user role permits you to save data without a review, the application saves the record to the MDM Hub Store as active records. Otherwise, the application saves the record as a pending record and initiates the review process associated with your role.

Edit Multiple Records

You can perform a bulk edit to replace one value in a certain field with another value across multiple records. Use the **Find and Replace** option on the search screen to perform a bulk edit.

For example, a hospital reports that multiple patient records include the wrong gender identity. You want to confirm which records are affected and correct the errors.

You find the affected records and determine the values to replace. After you verify the change, you inform the hospital that you updated the records.

After users update records in Data Director, the change triggers a review workflow process.

Your MDM administrator must enable permissions for your user role to perform bulk edit operations.

Editing Multiple Records

If your user role includes the bulk edit permission, you can edit multiple records in the active state.

Note: You cannot edit a record that is in the pending state because the record has changes that are pending approval. You must wait until the review and approval process ends.

1. From the **Search** panel of the **Search** page, search for records that you want to change.

   The records appear in the **Search Results** panel.

   Note: You can also use the Queries panel to search for previously searched records.

2. In **Filters** select filters to narrow down your search results.

   The **Search Results** panel displays the records that are directly related to the values that you input in the **Filters** panel.

3. Click the Find and Replace icon.

   The **Find and Replace** window opens.

4. In the **Find in:** drop-down list, select a column and enter the value to find in the column.

The following image shows how to select a column and enter the search value, Adam:

Note: To use the Find and Replace operation for lookup and dependant lookup fields, you must enter a value in both fields. For example, if you want to replace the Country lookup field and the State dependent lookup field, you must enter a search value in the lookup and dependent lookup fields.

5. Click **Find**.

   The search results show only the records that match the specified value.
   The following image shows the search results.

6. In the **Replace with:** field, enter the new value.
7. Click **Replace All**.

   A message confirms that you want to replace the records.
8. Click **Replace All**.

   A message displays the number of records replaced.

Viewing the Status of a Bulk Edit

You can use the Job Monitor to review the status of current and past bulk edit jobs.

1. From the navigation menu, select **Job Monitor**.
2. Click the **Bulk Edit** tab.

   The bulk edit jobs are organized with the most recent job at the top of the list.
3. Find the job with the current date and time.

4. Review the job status. The following table shows the possible statuses.

Status Message	Description
Success	All records updated successfully
In progress	Records are updating
Warning	Not all records updated successfully
Error	Bulk edit job failed to initialize

5. If the job ends with warnings, expand the job details and click the number in the **Failed** column.

   A description of the errors appear in a .CSV file.

6. Correct the errors and run the bulk edit job again.

Trigger the Bulk Edit Review Process

After you perform a bulk edit, the records update instantly. However, your MDM administrator can set up a workflow process to review and approve the records you want to replace. Any change to the records trigger a review process and saves the requested changes as pending for approval in the Task Manager.

Your MDM administrator or a user with privileges, such as, a manager, must claim and approve the records pending for approval. You cannot edit records pending for approval in the Task Manager.

The MDM administrator can also configure a bulk edit task to trigger a batch job. If the records to replace are below the value set by your MDM administrator, a batch job does not trigger. If the records to replace are above the value set by your MDM administrator, a batch jobs triggers.

For example, your MDM administrator sets one thousand records as the maximum value to trigger a batch job. If you update one thousand records or more, a batch job triggers. If you update less than one thousand records, a batch job does not trigger and the records update instantly.

Adding and Editing Related Records

Business entity relationships describe the affiliation between two entities. The MDM Hub supports one-to-many and many-to-many relationships between business entities, in addition to hierarchical relationships between records in the same business entity. You can add, view, edit, and manage relationships between a business entity and the records related to the business entity.

In the Related Records panel, you can see the business entities that you have permission to view. To create relationships between different types of business entities, your user role must include the edit permission for both types of business entities.

When a relationship exists between two entities, you can add related records to a business entity. For example, `Organization employs Person` is a relationship that exists between the Organization and Person business entities. You can add Person records or employees as related records to the Organization. The Related Records panel lists the business entities that are directly related to the business entity that is open in the Business Entity view.

Note: If you do not see the Related Records panel when you edit a business entity, contact the MDM administrator.

Scenario for Adding and Editing Related Records

A relationship is configured between the Organization and the Person business entity types, such that an organization employs persons. You have an organization, Informatica, to which you want to add the employees. John Smith is an employee of Informatica.

You search for the record for Informatica. You open the record. You search for the record for John Smith. You add John Smith as a related record to Informatica. After an appraisal, John Smith has a different job title and salary. You must update the relationship details to reflect the change. You open the record for Informatica and select the relationship between Informatica and John Smith. You update the relationship details.

Adding a Related Record

When a record has relationships configured, you can add related records to records. Search for and open the record in the **Business Entity** view. Search for the related record that you want to add as a related record and add the record in the **Related Records** panel.

Note: The **Related Records** panel must be present in the **Business Entity** view. To create relationships between different types of business entities, your user role must include the edit permission for both types of business entities.

1. From the **Search Results** panel in the **Search** page, select the record to which you want to add the related records.
2. Open the record.

   The **Related Records** panel displays the records that are directly related to the record you open. There might be more than one **Related Records** panel.
3. In the **Related Records** panel, click **New**.

   The **Relationships** dialog box opens.
4. Select the relationship type.
5. In the **Search** box, type the complete search string or the search string with the asterisk wildcard character (*) for the record that you want to find.
6. Click **Search**.

   The following image shows the search results and the filter panel:

7. In the **Filters** panel, select a value for the filter criteria that you require.
8. Click **Apply Filter**.

   The revised search results appear in the **Search Results** panel based on the filters you set.

   The following image shows the filtered records:

9. Select the record that you want to add as related record and click **Select**.
10. If the relationship has additional attributes, specify the additional attributes.

    For example, for a PersonOwnsAutomobile relationship, you might have to specify the mileage and price.
11. Click **Apply**.

    The record is added as related record and appear in the **Related Records** panel.

The following image shows the related records in the **Related Records** panel:

Viewing Related Records

You can view the related records in the **Related Records** panel. Each related record in the component is a link that you can open in the **Business Entity** view.

Note: If your MDM administrator created a custom view for this purpose, the name of the view might be different.

1. From the **Search Results** panel in the **Search** page, select the record.

2. Open the record.

   The related records are listed in the **Related Records** panel.

Deleting a Related Record

You can delete the relationship between a record and a related record. Search for the record and then delete the related record in the **Related Records** panel.

1. From the **Search Results** panel in the **Search** page, select the record that you want to edit.
2. Open the record.

   The **Related Records** panel displays the records that are directly related to the record you open. There might be more than one **Related Records** panel.
3. Select the related record that you want to delete, and then click the **Delete** icon.

   A confirmation box appears.
4. Click **Yes**.

   Data Director deletes the relationship between the record and the related record and no longer displays the related record in the **Related Records** panel.

Editing the Relationship Details

You can edit the details of the relationship between a record and the related record. You can edit the additional attributes associated with the relationship. Search for the record and edit the relationship from the **Related Records** panel.

1. From the **Search Results** panel in the **Search** page, select the record that you want to edit.
2. Open the record.

   The **Related Records** panel displays the records that are directly related to the record you open. There might be more than one **Related Records** panel.
3. In the **Related Records** panel, select the related record that you want to edit, and then click the **Edit** icon.
4. Edit the additional attributes, and then click **Apply**.

   For example, assume that job title and salary are two attributes associated with the OrganizationEmploysPerson relationship. After an appraisal, you might edit the job title and salary for that Person record to reflect the changes.

Deleting a Record

If your user role includes the delete permission, you can delete records in the active state. You cannot delete a record that is in the pending state because the record is part of a workflow and is pending approval.

1. From the **Search Results** panel in the **Search** page, select the record that you want to delete.
2. Open the record.
3. Click **Actions** > **Delete**.

   A confirmation box appears.

4. Click **Yes**.

   Data Director marks the record as deleted and no longer displays the record, but does not remove the record from the database.

CHAPTER 6

Importing Bulk Data

This chapter includes the following topics:

- Import Bulk Data Overview, 60
- Import Bulk Records, 61
- Import Bulk Relationships, 61
- Update Records, 62
- Field Mapping, 62
- Preview Records, 64
- Importing Data, 65
- Trigger the New File Import Review Process, 67
- File Import Summary Report, 67
- Match New Records with Existing Records, 68

Import Bulk Data Overview

You can import data and relationships in bulk from an Excel or a CSV source file into Data Director. Data with unicode characters, such as, Chinese, Japanese and Korean are supported. You can import up to 10000 records at a time. However, your administrator can increase or decrease the maximum number of records to import in the properties file.

Before you import new data and relationships, the system identifies and maps the best target fields based on the columns in the source file or the value of existing records. You can compare the target fields and the source file and accept or reject the system suggested mapping.

After the import operation is complete, it generates an import summary that shows the number of imported and rejected records. If your user role permits, Data Director saves the imported records as active records. Otherwise, if your user role is configured to trigger a review process, Data Director saves the imported records as pending records and initiates the review process associated with your role.

Import Bulk Records

You can import data with multiple business entities from an Excel or CSV source file. The import process helps you to create or update multiple primary records in a single operation. You can stop the import at any point while it is in progress. However, you cannot roll back the imported records.

Importing file names with special characters are not supported. For example, you cannot import the following file: My:File.csv. The following special characters are not supported: / \ * ? % : | " < >

The following image shows the New File Import window with a CSV file imported:

The file properties populate based on the file you select to import. You can edit the import file properties. See the 'Importing Data' topic on page 64.

Import Bulk Relationships

You can import relationships in bulk and define new relationships. You can select previously mapped relationships or manually define relationships between business entities. For example, you can define a relationship between a Person business entity and a SecurePerson business entity.

The following image shows how you can define relationships in the Relationship panel:

The system assigns icons to the mapped relationship fields. The icons indicate the level of confidence associated with each mapped relationship. You can accept or reject the mapped relationship based on the confidence indicators.

For more information about confidence levels, see the 'Mapping Fields' topic on page 61.

Update Records

You can import data to update existing parent records, update child records and add child records. For example, you want to update a primary address field and add a secondary address to the record. You must import data to update the parent record and add the secondary address as a new child record.

Before you import data to update parent records, add the row ID primary key or the source key in the source file. To update child records, add the parent row ID, child row ID or the child cross reference primary key in the source file. To update cross reference records, add the cross reference primary key in the source file.

Note: When you import a file to update records using the source key and the source system, you must enter a value in all required fields. If you do not enter a value in the required fields, an error displays.

Field Mapping

You can map columns from your source file to suitable business entities and relationships in Data Director.

The following image shows the source columns and the identified business entities:

Confidence icons are assigned to the most suitable business entities. The icons indicate the level of confidence associated with each business entity. You can accept or reject the business entities based on the confidence indicators.

The following table describes the confidence icons:

Confidence Icon	Description
	Indicates a high level of confidence. All source columns are mapped to the business entities. You can manually review and accept the mapping.
	Indicates a medium level of confidence. All source columns are mapped to the business entities with a moderate level of confidence. You can manually review and accept or reject the mapping.
	Indicates a low level of confidence. All source columns are mapped to the business entities with a low level of confidence. You should reject the mapping.

Setting Default Values

You can use the additional settings option to set default values for target fields. If a source field contains a null value, the target field is populated with the default value.

For example, you have set the default value for the social security target field to populate as 111-11-1111. If the social security source field does not contain any value, the system populates the social security target field with the default value of 111-11-1111.

You can also set a default value for the Date Format target field. For example, you set the default value as YYYY-MM-DD. If the source field has the date format as DD-MM-YYYY, the system populates the date format to the default value of YYYY-MM-DD.

Filtering Target Fields

You can use filters to view the required target fields and source columns.

The following table lists the filter options:

Filter Option	Description
Mapped	Displays all mapped source columns and target fields
Unmapped	Displays all unmapped source columns and target fields
User Mapped	Displays all user mapped source columns and target fields
Auto Mapped	Displays all system mapped source columns and target fields
All	Displays all source columns and target fields

Filtering Source Rows

You can use the Filter Source Rows option to filter and manually map source rows to the target business entities or relationships. For example, the source file contains a CreditCard source row and you need to map this row to the correct target business entity. Drag and drop the CreditCard source row to the Filter Source Rows panel. A list of target business entities display with Credit Card as one of the options. You can map the CreditCard source row to the Credit Card target business entity.

1. In the **New File Import** panel, under **Map Fields**, click the filter icon.

   The **Filter Source Rows** box appears.

2. From the source columns, drag and drop a source row to the **Filter Source Rows** box.

   The source row appears in the Filter Source Rows box.

3. In the text box, enter a filter condition and click **Apply**.

   The target business entities appear based on the filter conditions you enter.

Preview Records

Before you complete the import file operation, you can preview the records to import.

Click the **Show Preview** icon to view details of the records to import. You can view the applicable root, parent, child, lookup and dependent lookup fields.

The following image shows the **Record Preview** panel with the records to import:

Importing Data

You can import data in bulk into Data Director. The import operation allows you to import multiple records and relationships from a source file into Data Director.

1. In the left navigation pane, click **New File Import**.

   The **New File Import** page opens.

2. To select the file to import, drag and drop a CSV or Excel source file or click **Browse** and select the source file.

   The source file data uploads.

   Note: You cannot import file names with special characters.

3. Click **Next**.

   The source file with the imported data displays.

4. In the **File Properties** panel, specify the following import file properties:

Property	Description
Delimiter	Character that represents the break between data values in the import file. Select a predefined delimiter or select **Other** to define a custom delimiter.
Text Qualifier	Symbols used in the file to enclose a string.
Code Page	Select the unicode encoding standard.

Property	Description
Import Data from Line	Select the row of the source file you want to import data from.
Column Header in Row 1	Select the row header number you want a column.
Regional Settings	Set the date and time formats based on your geographical location.
Date Pattern	Date format for the date fields in the import file.
Decimal Separator	Decimal separator. Choose a comma or a period. Default is a period.
Thousand Separator	Thousand separator. Choose no separator, a comma, or a period. Default is no separator.

5. Click **Next**.

   The **Map Fields** page displays the source file data, the system suggested targets and the confidence indicators.

6. You can perform the following actions:

   a. To accept the system suggested mapping, click **Accept**. The suggested mapping appears under the Business Entity.

   b. To reject the system suggested mapping, click **Reject**.

   c. To partially accept the system suggested mapping, select the checkbox next to the business entities and click **Accept**.

7. Expand the business entities or relationships to review the list of mapped target fields. Filter the mapped target fields to view how the target fields were mapped.

   a. Click the **Show** drop down list.

      A list of filter options appear. Select one of the following options:

Filter Option	Description
Mapped	Displays all mapped source columns and target fields.
Unmapped	Displays all unmapped source columns and target fields.
User Mapped	Displays all user mapped source columns and target fields.
Auto Mapped	Displays all system mapped source columns and target fields.
All	Displays all source columns and target fields.

8. Click **Next**.

   The **Preview and Import** screen opens.

9. To specify the source system you want to import from, select an option from the **Source System** drop down.

   Note: If you see a preview error in any field, your source file might have an invalid value. For example, if a social security number field contains alphanumeric characters, a preview error appears. You must correct all preview errors in the original source file and import the file again.

10. You can preview the records before you import the file. Click **Show Preview**.

11. Click **Import**.

    After the import process is complete, the My Jobs window displays the number of imported records, rejected records and unprocessed records.

12. To download the list of rejected records as a CSV file, click **Download**.

Trigger the New File Import Review Process

After you import a new file with bulk data, a review process triggers and saves the requested changes as pending records in the Task Manager. Your MDM administrator or a user with the correct privileges, such as, a manager, must claim and approve the pending records. You cannot edit records pending for approval in the Task Manager.

All bulk import tasks trigger a batch job. The MDM administrator must configure the maximum value of a bulk import task to trigger a batch job. For example, your MDM administrator sets one thousand records as the maximum value to trigger a batch job. If you import one thousand records or more, a batch job triggers. If you import less than one thousand records, a batch job does not trigger and the records are imported instantly.

File Import Summary Report

When you import data and relationships into Data Director, the import operation generates a summary report. In the navigation bar, click **My Jobs** to view the list of imported files.

The following image shows the My Jobs page with the list of imported files:

1. File Name
2. Start Date
3. End Date
4. Job Type
5. Status
6. Results

You can expand the file to view results of the imported file.

The following image shows a sample import summary report:

The following table describes the elements of the Results field:

Elements	Description
Total	Total number of records imported.
Persisted	Number of imported records persisted without errors.
Load Errors	Number of rejected records not imported due to load errors.
Parsing Errors	Number of rejected records not imported due to parsing errors.

The import operation writes rejected records to an Excel or CSV file. You can download rejected records, update the records with the correct data and re-import the corrected records.

Match New Records with Existing Records

Before you import a file, you can perform a match to compare the records you import with existing records. The match process identifies duplicate and unmatched records. You can select to import the matched records, unmatched records or import all records.

Match Rule Sets

A match rule set contains a logical set of match rules. Match rules define the criteria for the match process to determine whether two records are duplicates. Based on the requirements and the purpose of the match, the MDM Hub administrators configure match rule sets in the MDM Hub Console. The ad hoc match process uses a match rule set to identify the duplicate records.

For more information about Match Rule Sets, see the *Informatica Multidomain MDM Version 10.4 Hub Configuration Guide*.

Matching Records

You can import data in into Data Director and perform an ad hoc match to compare new records with the existing records.

1. In the navigation pane, click **Ad Hoc Match.**

   The **Ad Hoc Match** page opens.

2. To select the file you want to import, drag and drop a CSV or an Excel file.

3. Optionally, you can click **Browse**.
4. Click **Next**.

   The **File Properties** page opens.
5. In the **File Properties** panel, specify the following ad hoc match properties:

Property	Description
Import from Sheet	Select the source file name. This option is applicable only for Excel files.
Import Data from Line	Select the row of the source file you want to import data from.
Has Column Headers	Select to display table headers for each column
Column Header in Row	Enter the header number of the row that you want a column.
Regional Settings	Select this option if records contain international characters.
Date Pattern	Date format for the date fields in the import file.
Decimal Separator	Decimal separator. Choose a comma or a period. Default is a period.
Thousand Separator	Thousand separator. Choose no separator, a comma, or a period. Default is no separator.

6. Click **Next**.

   The **Map Fields** page displays the source file data, the system suggested targets and the confidence indicators.
7. You can perform the following actions:
   a. To accept the system suggested mapping, click **Accept**. The suggested mapping appears under the Business Entity.
   b. To reject the system suggested mapping, click **Reject**.
   c. To partially accept the system suggested mapping, select the checkbox next to the business entities and click **Accept**.
8. Expand the business entities or relationships to review the list of mapped target fields. You can filter the mapped target fields to view how the target fields were mapped.
   a. Click the **Show** drop down list.

      A list of filter options appear. Select one of the following options:

Filter Option	Description
Mapped	Displays all mapped source columns and target fields.
Unmapped	Displays all unmapped source columns and target fields.
User Mapped	Displays all user mapped source columns and target fields.

Filter Option	Description
Auto Mapped	Displays all system mapped source columns and target fields.
All	Displays all source columns and target fields.

9. Click **Next**.

   The **Preview Match Results**screen appears.

10. To select the match rule set, click the **Match Rule Set** drop down.

    The source file data appears in the Preview Match Results panel.

11. You can preview the records before you import the file. Click **Show Preview**.
12. Click **Match**.

    The match job completes.

13. After the match process is complete, click the **My Jobs** window to display the match results.
14. To download the list of matched records as an Excel or CSV file, click **Download**.

Match Results

When you perform an ad hoc match, Data Director generates the match results that contain details of the matched, unique, skipped and all records. You can review the match results to determine whether to import the system suggested records.

The match results show the following information:

- Number of matched records
- Number of unique records
- Skipped records
- All records

The following image shows the sample match results and a list of matched records:

The following table describes the tabs of the Match Results panel:

Tab Name	Description
Matching Records	Lists the input records and the existing matched records as matched pairs and assigns a confidence level. For example, an import record with the last name 'Smith' and an existing record with the last name 'Smith' are assigned a 100% confidence level and paired together. You can click the confidence level score to view the match rules applied.
Unique Records	Lists the unmatched input records.
Skipped	Lists the records that are not processed by the system.
All Records	Lists the matched, unmatched and skipped records.

You can download the match reports as a Microsoft Excel file or a CSV file that lists the matched, unique and all records.

CHAPTER 7

Resolving Duplicate Records

This chapter includes the following topics:

- Resolving Duplicate Records Overview, 72
- Scenario for Duplicate Records, 76
- Resolving Duplicate Records, 76
- Resolving Duplicate Child Records in a Single Record, 80

Resolving Duplicate Records Overview

Your organization might have data that originates in multiple systems, resulting in duplicate, hard to merge records. To resolve the duplicate records, you can use the **Matching Records** view in Data Director. You can identify the duplicates, and merge the best version of the data into a single master record.

Note: If your MDM administrator created a custom view for this purpose, the name of the view might be different.

When you merge duplicate records, you can preview what the merged record would look like. If you are satisfied with the preview, you can merge the records.

You must have the required privileges to view and merge the records. You can see only the business entities for which you have the required privileges. To request additional role privileges, contact your MDM administrator.

Matching Records View

You can resolve duplicate records by using the basic **Matching Records** view or the advanced **Matching Records** view. Your application might have one or both the **Matching Records** views configured.

Basic Matching Records View

You can use the basic **Matching Records** view to merge only the duplicate parent records.

The following image shows a sample basic **Matching Records** view:

Advanced Matching Records View

You can use the advanced **Matching Records** view to merge the duplicate parent and child records.

The following image shows a sample advanced **Matching Records** view that is displaying the parent-level records:

The following image shows a sample advanced **Matching Records** view that is displaying the child-level records:

Matching Records and Match Rules

Data Director depends on match rules to determine the matching records. An MDM administrator configures match rules based on the data characteristics and the requirements for matching and merging records.

The match rules determine whether the matching records have identical values or similar values. Also, match rules determine the records that are automatically merged and the records that appear on the **Matching Records** view.

For example, consider a match rule that is based on addresses. Based on the match rule, John Smith and Jane Smith are identified as matching records, because they share the same address. Though their address is the same, they are unique people. Their records are not duplicates and must not be merged.

The records that appear on the **Matching Records** view have a match score associated with them. The match scores are based on the match rules. A high match score indicates that the record is a close match. A low match score indicates that the record is a distant match.

Note: When a match job runs, the matching records are identified. If a match job was not run recently, the **Matching Records** view might not contain all the possible matches. If you upgrade from an earlier version, the match scores are set to null for the existing matching records. The match scores are displayed only for the new matches.

For more information about match rules, see the *Multidomain MDM Configuration Guide*.

Best Version Of the Truth and Trust Scores

Best version of the truth is the result of merging the most trustworthy field values from the duplicate records. Data Director uses trust scores to evaluate and determine the most trustworthy field values. When you prepare to merge duplicate records, you can finalize the best version of the truth.

You can finalize the best version of the truth by promoting or overriding the values in the **Merge Preview** column with values that you think are correct. For the values that you override to take effect, the MDM administrator must have configured trust for the Admin system. When you merge records, if child-level records with values that you override are also being merged, an additional cross-reference record, which is called an edit record might be created or updated. An edit record is created or updated when you override values in the **Merge Preview** column. The edit record contains only the field values that you override.

To identify an edit record, look for the following field values:

- Source system. The value is `Admin`.
- Source primary key. The value is generated by the MDM Hub and is the same as the Record ID or has the format `SYS:<number>`.

If trust is configured for your environment, the records that appear on the **Matching Records** view have trust scores associated with the fields for which trust is enabled. Trust scores are a measure of the relative trustworthiness associated with field values based on their source system, change history, and other business rules. Trust scores range from zero to 100. A field value with a higher trust score is more trustworthy than a field value with a lower trust score.

For more information about the best version of the truth and trust scores, see the *Multidomain MDM Configuration Guide*.

Merging Duplicate Records

To resolve duplicates, you merge the records that you identify as duplicates. When you merge duplicate records, a single master record is created.

The records that you want to merge consist of a parent record level and might consist of multiple child record levels. The child records can have a one-to-one or a one-to-many relationship with the parent record. For example, John Smith's record consists of name, date of birth, and gender details at the parent record level. The child record level includes addresses, email, and phone numbers.

Note: IDD application developers define the parent-to-child relationships when they define the structure of a business entity.

When you merge records, the duplicate parent records merge into a single parent record. If the records to merge have child records, you need to identify your scenario and act accordingly.

The following table describes the child record scenarios, the related actions, and the results of each action:

Child Record Scenario	Action	Result
Duplicate child records with one-to-one relationship	Automatic merge.	The one-to-one child records from each parent record automatically become the child record of the merged parent record.
Some duplicate child records with one-to-many relationship	Select duplicate child records to merge.	The duplicate child records merge to become the child record of the merged parent record. The child records that are not selected become the child records of the merged parent record.
Unique child records with one-to-many relationship	Automatic inheritance.	The child records from each of the parent records become the child records of the merged parent record.

Example

Let's consider merging three duplicate records, where each record has a parent-level with name, date of birth, and gender details. The child record level includes the home address and phone numbers.

The following image shows how the three person records are merged:

Scenario for Duplicate Records

You work for an insurance organization. A customer, Paula Laine, calls to review her home insurance policy. You ask Ms. Laine for her policy number, and enter the policy number in the **Search** box.

In the search results, you select the record that contains the policy number, and open the record in the **Business Entity** view. You confirm a few personal details and then answer Ms. Laine's questions about her policy.

After you answer her questions, you ask Ms. Laine if she has any other policies. Ms. Laine tells you that she has an automobile policy registered with a subsidiary of your organization. You enter the automobile policy number in the **Search** box, and the search returns the record that contains the automobile policy. You verify that the personal data matches the data in the other record.

After you end the conversation, you open the record that contains the home policy in the **Matching Records** view. From the similar records, you select the entity that contains the automobile policy. You click **Preview** and verify that both policies appear in the Policies section. In addition, you can see that the merged record is more complete overall, with data such as Ms. Laine's middle name and her mobile phone number coming from different source records. When you are satisfied that the merge preview represents the best version of the truth, you start the merge process.

Resolving Duplicate Records

Use the **Matching Records** view to identify duplicate records. You can resolve the duplicate records by merging them. To merge records, your user role must include the merge permission.

You can resolve the duplicate records by using the basic **Matching Records** view or the advanced **Matching Records** view. Use the basic **Matching Records** view when you want to merge only the duplicate parent

records. To merge the duplicate parent and child records, use the advanced **Matching Records** view. Your application might have one or both the **Matching Records** views configured.

Note: If your MDM administrator created a custom view for this purpose, the name of the view might be different.

By Using the Basic Matching Records View

To resolve duplicate records using the basic **Matching Records** view, perform the following tasks:

1. Identify duplicate parent records.
2. Finalize the best version of the truth for parent records.
3. If child records exist, identify duplicate child records.
4. Finalize the best version of the truth for child records.
5. Merge duplicate records.

By Using the Advanced Matching Records View

To resolve duplicate records using the advanced **Matching Records** view, perform the following tasks:

1. Identify duplicate parent records.
2. Finalize the best version of the truth for parent records.
3. Merge duplicate records.

Identifying Duplicate Parent Records

To identify duplicate records, open the target record in the **Matching Records** view. The target record appears along with the matching records in the **Matching Records** view. Start by identifying duplicates at the parent record level.

1. Open the target record, and then select the **Matching Records** tab.

   Note: The tabs that appear in the open record depend on the Data Director configuration and your user role privileges.

   The matching records appear in the **Matching Records** view.
2. For the advanced **Matching Records** view only. Optionally, view only the records that satisfy a specific match rule.
   a. Click the **Filter** tab.
   b. Select **Specify a match rule**.
   c. Click in the field and select the match rule from the list.
3. If duplicate records that you want to merge with the target record are missing in the **Matching Records** view, manually add the records.

   If you use queries to find records that you want to add, the queries must be created before you perform this step.
   a. Click **Add Candidate**.

      The search user interface appears.
   b. Find and select the records that you want to add.
   c. Click **Select**.

      The records are added to the **Matching Records** view.

4. Optionally, to show more information that might be helpful in determining duplicates, click **Show**, and select the options.

Option	Description
System fields	Displays system fields. This option is not available in the basic **Matching Records** view.
Selected records	Displays only the records that you select for merging. This option is not available in the basic **Matching Records** view.
Trust scores	Displays trust scores for all the trust-enabled fields. Trust settings are managed by the MDM administrator.

5. Identify the duplicate records that you want to merge with the target record.
   a. Compare the data of each matching record with the target record.
   b. Select the duplicate records.

      Note: You cannot select records if your user role does not include permission to merge the records. To request changes to your role privileges, contact your MDM administrator.

      The **Merge Preview** column shows the result of merging the records.
6. Optionally, remove records that you do not want to merge or are not duplicates.
   a. To remove a manually added record from the **Matching Records** view, from the **Actions** menu of the record, click **Remove Candidate**.
   b. To remove a system matched record from the **Matching Records** view and dissociate it as a match of the target record, from the **Actions** menu of the record, click **Not a match**.

      When you dissociate a matching record, the record does not automatically match again.

Finalizing the Best Version Of the Truth

After you identify the duplicate records that you want to merge, finalize the best version of the truth. The **Merge Preview** column in the **Matching Records** view displays the best version of the truth based on the trust scores. You can finalize the best version of the truth by promoting or overriding the values in the **Merge Preview** column with values that you think are correct.

1. Review the values in the **Merge Preview** column.
2. If an incorrect value is displayed in the **Merge Preview** column, review the values for the field in the matching records, and perform one of the following actions:

Action	Description
Click the correct value	The correct value appears in the **Merge Preview** column. Data Director promotes the correct value over the incorrect value.
Enter the correct value in the **Merge Preview** column	Data Director overrides the incorrect value with the value that you enter in the **Merge Preview** column. **Note:** You can only edit fields for which you have edit privileges.

Identifying Duplicate Child Records

If you use the advanced **Matching Records** view, you can identify the duplicate child records by reviewing the child records and their descendant records in the **Matching Records** view. Select a target child record with

which you compare the child records of other parent records. Select the duplicate child records that you want to merge.

Note: As you work with the child records, you might find data that makes you decide that a parent record is not a duplicate. You can return to the record overview and clear the check box for that parent record. The data in the **Merge Preview** column is refreshed.

1. In the **Navigate** panel, expand a node and select a child record as the target record.

   The target child record appears next to the Merge Preview column. The remaining child records appear in the other columns.

   Tip: If the record shows a pending status, the record cannot be merged with other records.
2. Select the duplicate child records that you want to merge with the target child record.

   Tip: If the record shows a pending status, you cannot select the record to merge with other records.

   The **Merge Preview** column shows the result of merging the target child record with the duplicate child records.
3. If the target child record can be further expanded, then expand the record and select the node that is exposed.

   All the fields of the child records are displayed.
4. Repeat the process on the remaining child records. Optionally, you can perform the same process on descendant records.
5. Click **Merge**.
6. In the **Merge Duplicates** dialog box, confirm the merge.

   A manual merge request is saved in an internal change list.

Merging Duplicate Records

After you identify the duplicate records and finalize the best version of the truth, you can merge the duplicate records.

1. Optionally, preview the result of merging the records.
   a. Click **Preview**.

      The **Record Preview** appears.

   b. Review the record.

   c. To return to the **Matching Records** view, click **Back**.
2. Merge the duplicate records manually or queue the duplicate records for an Automerge job.
   - To manually merge the duplicate records, click **Merge**.

     Based on your user role privileges, one of the following actions occur:

User Role Privilege	Result
Requires a review process to merge records	The duplicate records that you selected go through the merge review workflow. The records remain in the active state, but the records are merged only after the merge proposal is approved.
Does not require a review process to merge records	The duplicate records that you selected are merged into a single record and remain in the active state.

- To automatically merge the duplicate records, click the **Actions** menu, and then click **Queue for Merge**.

  The records are queued for merge, and the records merge when the Automerge job runs. The Automerge job is run by the MDM administrator.

  Note: If your user role does not have the privileges to merge records, the **Queue for Merge** menu item is not available.

Related Topics:

- "Establish the Best Version of the Truth" on page 83
- "Identifying Duplicate Parent Records" on page 77

Resolving Duplicate Child Records in a Single Record

To resolve duplicate child records within a single record, open the record in the **Matching Records** view. Do not select any other records.

1. Open the record that has duplicate child records, and then select the **Matching Records** tab.

   Note: The tabs that appear in the open record depend on the Data Director configuration and your user role privileges.

   The record appears in the **Matching Records** view.
2. In the **Navigate** panel, expand a node and select a child record as the target record.

   The target child record appears next to the **Merge Preview** column. The remaining child records appear in the other columns.
3. Select the duplicate child records that you want to merge with the target child record.

   The **Merge Preview** column shows the result of merging the target child record with the duplicate child records. The most trustworthy field values are highlighted. The highlighted values appear in the Merge Preview column.
4. Review the values in the **Merge Preview** column.
5. If an incorrect value is displayed in the **Merge Preview** column, review the values for the field in the matching records, and perform one of the following actions:

Action	Description
Click the correct value	The correct value appears in the **Merge Preview** column. Data Director promotes the correct value over the incorrect value.
Enter the correct value in the **Merge Preview** column	Data Director overrides the incorrect value with the value that you enter in the **Merge Preview** column. **Note:** You can only edit fields for which you have edit privileges.

6. Repeat the process on the remaining child records. Optionally, you can perform the same process on descendant records.
7. Merge the duplicate records manually or queue the duplicate records for an Automerge job.
   - To manually merge the duplicate records, click **Merge**.

Based on your user role privileges, one of the following actions occur:

User Role Type	Outcome
Requires a review process to merge records	The duplicate records that you selected go through the merge review workflow. The records remain in the active state, but the records are merged only after the merge proposal is approved.
Does not require a review process to merge records	The duplicate records that you selected are merged into a single record and remain in the active state.

- To automatically merge the duplicate child records, click the **Actions** menu, and then click **Queue for Merge**.

  The child records are queued for merge, and the records merge when the Automerge job runs. The Automerge job is run by the MDM administrator.

  Note: If your user role does not have the privileges to merge records, the **Queue for Merge** menu item is not available.

CHAPTER 8

Establishing the Best Version of the Truth

This chapter includes the following topics:

- Master Records and the Best Version of the Truth, 82
- Scenario, 83
- Establish the Best Version of the Truth, 83
- Understand Manual Updates to a Master Record, 84
- Unmerge Cross-reference Records, 85

Master Records and the Best Version of the Truth

Master records in the MDM Hub maintain the best version of the truth. The MDM Hub consolidates the most trustworthy data from several source systems into each master record to achieve the best version of the truth.

The MDM Hub stores source data in cross-reference records. In the **Cross-reference Records** view, a data steward can examine these cross-reference records and investigate which source data contributes to the master record. Data stewards can then make adjustments to how source data is consolidated to ensure that the master record represents the best version of the truth.

The MDM Hub calculates a trust score for the fields in the cross-reference records. The trust calculation is based on settings and rules that are establish by an administrator. For more information about configuring the rules that govern trust score calculations, see the *Multidomain MDM Configuration Guide*.

Note: If your MDM administrator created a custom view for this purpose, the name of the view might be different.

Scenario

A data steward investigates why customer data in a master record does not represent the best version of the truth.

The phone number for a customer has recently changed to 555-5555. None of the cross-reference records contain this phone number, so the data steward selects the phone number field in the master record and enters the correct phone number.

A master record for a customer record shows the middle name of a customer as 'Stacy'. In fact, the correct spelling of the middle name is 'Stacey'. The data steward sees that a cross-reference record contains the correct spelling but does not contribute to the master record. The data steward selects the field with the correct spelling as the contributor to the master record.

The master record that represents Joe Smith actually contains two cross-reference records that represent customers who are not Joe Smith. The data steward unmerges these two mismatched cross-reference records from the master record representing Joe Smith. Master records are created from the unmerged cross-reference records.

Establish the Best Version of the Truth

Data stewards can use the **Cross-reference Records** view to examine the composition of the master record. Data stewards can then make adjustments to ensure the master record genuinely represents the best version of the truth.

Note: If your MDM administrator created a custom view for this purpose, the name of the view might be different.

If the most trusted fields do not contain the best data, a data steward can perform the following actions to establish the best version of the truth:

Action	Description	How-to
Enter the correct value	If the correct value does not exist in any cross-reference record, a data steward can enter the correct value in the master record.	Click the incorrect value in the Master Record column, and then enter the correct value. Press Enter, and then click Save.
Select the correct contributing field	If the field with the highest trust score does not contain the best version of the truth, a data steward can select the field that does contain the correct data to contribute the data to the master record.	Click the field that contains the correct data. Click Save
Remove mismatched source data	If a cross-reference record should not be associated with a particular master record, a data steward can unmerge the cross-reference record. A new master record is created from the unmerged cross-reference record.	Select the checkbox for the cross-reference records that contain the mismatched data, and then click **Unmerge**. For more information about unmerging, see "Unmerge Cross-reference Records" on page 85.

The following image shows the ways in which data stewards can establish the best version of the truth:

1. Enter the correct value
2. Select the correct contributing field
3. Select a cross-reference record to unmerge

Understand Manual Updates to a Master Record

In the **Cross-reference Records** view, the highlighted cells indicate the values with the highest trust score. You can manually update a value, regardless of the trust score for the field. When you manually update a value in the master record, the Master Record column shows the changed value. The cell highlight continues to identify the value with the highest trust score.

For example, consider a gender code field with the possible values: UNKNOWN, MALE, and FEMALE. In the following image, the gender code in the Master Record column is UNKNOWN, but the most trusted value is MALE:

1. The value in the master record is UNKNOWN.
2. The most trusted value (80%) is MALE.

The value in the Master Record column is the updated value of UNKNOWN. In the Admin column, the value UNKNOWN has a trust score of 45, because a validation rule downgrades the trust score whenever the value of the Gender Cd field is UNKNOWN.

Tip: Another way to update a value in the master record is to call the Put API with the `TrustOverrideField` parameter. After the update, the Put process recalculates the best version of the truth for all fields except the field with the trust override.

Unmerge Cross-reference Records

If a cross-reference record should not be associated with a particular master record, a data steward can unmerge the cross-reference record. A new master records is created from the unmerged cross-reference record.

The following illustration shows the unmerge behaviour when a cross-reference record is unmerged from a master record that is comprised of five cross-reference records:

CHAPTER 9

Investigating Data Changes

This chapter includes the following topics:

- Investigating Data Changes Overview, 86
- Investigating Data Changes Scenario, 86
- Comparing Data Before and After Events, 87

Investigating Data Changes Overview

You can compare the best version of the truth at different moments in time for a particular record. If you suspect that the data in the record has changed inappropriately, you can use the **History** view to identify the data event that caused the data change.

The **History** view displays a chronology of data changes over the lifespan of the record. You can view the data that existed in the record at any point in time in the chronology. View the data before a data event and after a data event to determine if the event caused the inappropriate data change. A data event is any action that changes the data in a record, such as an edit or a merge operation.

Investigating Data Changes Scenario

A customer reports that he recently changed his email address and he wants to confirm that you have his current contact details. You look in the **History** view for the record that represents this customer.

The customer stated that he changed his address in October of the current year, so you look for data events in the **History** view chronology that occurred around that time. You see that multiple data events occurred in October for the record that represents the customer. You navigate to the Email child record and compare the data before and after the data events. You see that the new email address for the customer was added. After further investigation, you see that the middle name of the customer was added.

Note: If your MDM administrator created a custom view for this purpose, the name of the view might be different.

Comparing Data Before and After Events

Use the **History** view to compare changes to master data.

1. With the record open, select the **History** tab.

   Note: The tabs that appear in the open record depend on the Data Director configuration and your user role privileges.

   The **History** view opens. Changes to the record appear on the timeline.

2. Optionally, select filters to show or hide different types of events.

3. Optionally, select a time unit to group data events. To do this, click **Options** and choose a different timescale. For example, select **M** to select a monthly timescale.

   The following image shows data events grouped under the month of October:

4. Click the event labeled **Email**.

   The event details panel shows the record details before and after the event and the time when the record was updated. In this example, the email address has changed from jsmith@example.com to jxsmith88@example.com.

5. Click the event labeled **SMITH, JOHN**.

   The following image shows that the display name of the record changed from John Smith to John Xavier Smith.

CHAPTER 10

Investigating Relationships

This chapter includes the following topics:

- Investigating Relationships Overview, 89
- User Interfaces, 89
- Managing Hierarchy Relationships, 92
- Managing Network Relationships, 95

Investigating Relationships Overview

You can view how records are related to one another by viewing the relationships for records. You can create and manage two types of relationships: hierarchy relationships and network relationships. Hierarchy relationships define parent-child relationships between records, while network relationships define related records.

User Interfaces

Use Data Director interfaces to manage hierarchy relationships and network relationships for a record.

Hierarchy View

The **Hierarchy** view displays the hierarchy relationships for the open record. Use the **Hierarchy** view to view, create, and manage relationships.

You can submit your hierarchy changes for review and approval. When you edit a hierarchy, your changes are highlighted in the **Hierarchy** view.

You can view the hierarchies for a record, including the hierarchy relationships in each hierarchy. You can view the hierarchy for an effective date, or compare the current version of the hierarchy with a version at another date. You can also export the hierarchy.

The following image shows a sample **Hierarchy** view for a record:

1. Hierarchy panel
2. Relationship panel

Hierarchy Panel

The following table lists the user interface elements of the hierarchy panel:

User Interface Element	User Interface Element
Hierarchy tabs	Shows hierarchies to which the record belongs.
Graph	Shows the tree of hierarchy relationships for the open record based on the selected hierarchy.

A record can belong to multiple hierarchies. If you define a default hierarchy for the hierarchy component, the Hierarchies panel loads the default hierarchy for the record. Otherwise, the Hierarchies panel loads the list of hierarchies to which the record belongs.

Relationship Panel

The following table lists the user interface elements of the relationship panel:

User Interface Element	Description
Related tab	Shows the parent and child relationships for the open record based on the selected hierarchy tab.
Quick View tab	Optional. Shows a condensed summary of the record details for the open record. **Note:** Your MDM administrator configures the **Quick View** tab. Contact your MDM administrator to configure the view.

Network View

The **Network** view displays all relationships for the open record, including network relationships and hierarchy relationships. Use the **Network** view to view, create, and manage network relationships and to view hierarchy relationships.

You can view the network of relationships for a record for an effective date. You can show, hide, and filter relationships and records in the network graph. You can also export the network graph.

The following image shows a sample **Network** view for a record:

1. Network panel
2. Relationship panel

Network Panel

The network panel contains the canvas, which shows the network of relationships for the open record. You can expand, collapse, and rearrange nodes on the canvas. You can also add relationships and records to the network.

Relationship Panel

The following table lists the user interface elements of the relationship panel:

User Interface Element	Description
Active tab	Shows the active network relationships for the open record based on the effective date.
Inactive tab	Shows the inactive network relationships for the open record based on the effective date.
Quick View tab	Optional. Shows a condensed summary of the record details for the open record. **Note:** Your MDM administrator configures the **Quick View** tab. Contact your MDM administrator to configure the view.

Managing Hierarchy Relationships

A record can belong to multiple hierarchies. A hierarchy contains hierarchy relationships between records. For example, the John Smith record might be part of the Organization hierarchy and the Household hierarchy.

Use the **Hierarchy** view to view and manage hierarchy relationships for a record. For example, when you view the John Smith record, you might see that the record belongs to the Organization hierarchy and the Household hierarchy. In the Organization hierarchy for the John Smith record, there is a hierarchy relationship from the Informatica record to the United States record, and then a hierarchy relationship from the United States record to the John Smith record.

You can compare the current version of hierarchy relationships with another date. You can set the start or end date of a relationship. If you want to see more information about a record, you can use the **Quick View** tab or open the record in an entity tab.

Opening a Record in the Hierarchy View

Use the **Hierarchy** view to examine the hierarchy relationships between the open record and other records.

To open a record in the **Hierarchy** view, perform one of the following actions:

- In the **Search** tab search results, click the **More Options** icon and select **Hierarchy**.
- In the **Query** tab search results, click the **More Options** icon and select **Hierarchy**.
- In the record view that displays an opened record, click **Hierarchy**.

Viewing Records and Relationships in a Hierarchy

View records and relationships in a hierarchy by expanding or collapsing nodes, viewing the parent and child relationships for a record, and viewing the relationship properties.

1. To navigate the hierarchy, click the arrow icon beside nodes to expand or collapse nodes.

   The child relationships for the selected nodes show or hide.
2. To view the parent relationships and child relationships for a record, select a node on the canvas.

   The **Related** tab displays the parent relationships and child relationships for the selected record.
3. To filter the relationships, in the relationships panel, click the **Filter** icon, and then add filters.

   The list of relationships in the relationships panel updates.

Adding a Hierarchy Relationship

To add a hierarchy relationship to a hierarchy, find the record to which you want to configure a relationship, and then define the relationship.

1. In the **Hierarchy** view, hover over a node on the canvas, and then click the **Add New Relationship to Selected Entity** icon.

   The **Add Related Records** window appears.
2. To find the record to which you want to create a relationship, perform the following actions:
   a. In the relationship list, select a relationship.
   b. Run a query to find a related record.

c. In the search results, select a record and then click **Select**.

   Tip: To select multiple records, press **Ctrl** and select records.

3. Optionally, define the attributes of the relationship.
4. Click **Save**.

You added a hierarchy relationship to a record. The record appears in the hierarchy as a child of the selected node.

When you are done editing the hierarchy, you submit your changes for approval. For more information, see "Submitting Hierarchy Changes" on page 95.

Deleting a Hierarchy Relationship

Delete a hierarchy relationship that you no longer need.

If a hierarchy relationship is no longer active, you can set the end date for a relationship. For more information, see "Setting Today as the End Date for a Hierarchy Relationship" on page 93.

▶ In the **Hierarchy** view, hover over a node on the canvas, and then click the **Delete Selected Relationship** icon.

The hierarchy relationship to the record no longer appears in the hierarchy. In the relationships panel, the deleted relationship is highlighted in red.

When you are done editing the hierarchy, you submit your changes for approval. For more information, see "Submitting Hierarchy Changes" on page 95.

Editing the Relationship Properties of a Hierarchy Relationship

Edit the relationship fields or the start or end date of the relationship.

1. In the **Hierarchy** view, to edit the properties of a relationship, perform one of the following actions:
   a. Hover over a node on the canvas and click the **Edit Selected Relationship** icon.
   b. Select a node on the canvas. In the relationships panel, hover over a relationship, click the **More Actions** icon, and then select **Edit**.

   The **Edit Relationship** panel opens.
2. Optionally, edit the relationship fields.

   Note: Your MDM administrator configures the available relationship fields for the relationship. Contact your MDM administrator to change the fields.
3. Optionally, edit the start date or end date of the relationship.
4. Click **Apply**.

Setting Today as the End Date for a Hierarchy Relationship

Configure today as the end date for a relationship to indicate the relationship as inactive.

1. In the **Hierarchy** view, select a node on the canvas.
2. In the relationships panel, hover over a relationship, click the **More Actions** icon, and then select **Set Today as End Date**.

Comparing with Effective Date or History Date

Compare the current version of the hierarchy with a version of the hierarchy at another effective date or history date.

1. In the **Hierarchy** view, click the **Compare** icon.

   The **Compare from** panel and **Compare to** panel appear.
2. In the **Compare to** panel, select the type of date.
3. Select a date.
4. Click **Compare**.

In the **Compare from** panel, the current version of the hierarchy and hierarchy relationships appear. In the **Compare to** panel, the version of the hierarchy and hierarchy relationships for the selected date appears. Changes are highlighted.

The following table explains the highlights:

Highlight	Indicates
Green	New relationship
Yellow	Edited relationship
Red	Deleted relationship

Viewing Records from the Hierarchy View

You can open a record in the entity tab to view the record details.

1. In the **Hierarchy** view, select a node on the canvas.
2. In the relationships panel, hover over a relationship, click the **More Actions** icon, and then select **Open**.

   The record opens in an entity tab.

Exporting a Hierarchy

Export all nodes in the hierarchy or export only the expanded nodes in the hierarchy to a CSV file.

Note: Your MDM administrator configures the fields included in the export. Contact your MDM administration to change your export settings.

1. In the **Hierarchy** view, click the **Export** icon.
2. Select one of the following export options:

Option	Description
All	Export all nodes in the hierarchy, including collapsed nodes.
Expanded	Export expanded nodes in the hierarchy.

3. Save the CSV file.

Submitting Hierarchy Changes

When you are done making changes to a hierarchy, submit your changes.

1. In the **Hierarchy** view, click **Submit**.

   The **Submit Hierarchy Changes** window appears.

2. Review your changes.

   The following table explains the highlights:

Highlight	Indicates
Green	New relationship
Yellow	Edited relationship
Red	Deleted relationship

3. Click **Accept**.

If your user role permits you to save data without a review, the application saves the hierarchy. Otherwise, the application saves the hierarchy changes as a pending changes and initiates the review process associated with your role. For example, a workflow is triggered and a hierarchy task is created for managers to approve or reject your changes.

Managing Network Relationships

You can view the network of relationships for a record. For example, the John Smith record might be related to the X100 Keyboard record. The Informatica record might be related to the John Smith record because Informatica employs John Smith.

Use the **Network** view the hierarchy relationships and network relationships for a record. You can also create additional network relationships in the **Network** view.

You can view the network of relationships for a record for an effective date. You can set the start or end date of a relationship. If you want to see more information about a record, you can use the **Quick View** tab or open the record in an entity tab.

Opening a Record in the Network View

Use the **Network** view to examine the network relationships and hierarchy relationships between the open record and other records.

To open a record in the **Network** view, perform one of the following actions:

- In the **Search** tab search results, click the **More Options** icon and select **Network**.
- In the **Query** tab search results, click the **More Options** icon and select **Network**.
- In the record view that displays an opened record, click **Network**.

Viewing Records and Relationships in the Network

View records and relationships in a network by expanding or collapsing nodes, viewing active and inactive relationships, or showing or hiding relationships on the canvas.

1. To expand a node, double-click on the node.
2. To filter the business entities or relationships in the network graph, click the **Filter** icon, and then add filters.
3. To filter the relationships, in the **Active** tab, click the **Filter** icon, and then add filters.
4. To view relationships in the network for an effective date, in the **Effective Date** field, select a date.
5. To hide relationships in the canvas, in the **Active** tab, hover over a row, click the **More Actions** icon, and then click **Hide on Canvas**.

   The relationship is hidden in the canvas, and the **Shown on Canvas** icon disappears in the row.
6. To show relationships in the canvas, in the **Active** tab, hover over a row, click the **More Actions** icon, and then click **Show in Canvas**.

   The relationship appears in the canvas, and the **Shown on Canvas** icon appears in the row.

Adding a Network Relationship to a Record

To add a network relationship to a hierarchy, find the record to which you want to configure a relationship, and then define the relationship.

1. In the **Network** view, hover over a node on the canvas, and then click the **Add** icon.

   The **Add Related Records** window appears.
2. To find the record to which you want to create a relationship, perform the following actions:
   a. In the relationship list, select a relationship.
   b. Run a query to find a related record.
   c. In the search results, select a record and then click **Select**.

      Tip: To select multiple records, press **Ctrl** and select records.
3. Optionally, define the attributes of the relationship.
4. Click **Save**.

You added a network relationship to a record. The relationship and record appears in the network.

Adding a Record to the Network

Add a related record to the network.

1. In the **Network** view, click the **Add Business Entity Record** icon in the toolbar.

   The saved queries window opens.
2. Run a query to find a related record.
3. Select a record and then click **Select**.

The record node appears in the **Network** view. The **Edit Relationship** panel appears for you to define the relationship. Or, create a network relationship to the record.

Next, create a network relationship to the record.

Creating a Relationship between Records in the Network

Add a network relationship to an unconnected record in the network.

1. In the **Network** view, hover over a node, and then click the **Arrow** icon.
2. Drag and release the arrow on a record node to which you want to create a relationship.

   The **Edit Relationship** panel opens.
3. Optionally, if there are relationship fields, specify the relationship attributes.
4. Optionally, if timeline is enabled, configure the start date or end date.

Setting Today as the End Date for a Network Relationship

Configure today as the end date for a relationship to indicate the relationship as inactive.

1. In the **Network** view, select a node in the canvas.
2. In the relationships panel, hover over a relationship, click the **More Actions** icon, and then select **Set Today as End Date**.

Deleting a Network Relationship

Delete a network relationship that you no longer need.

- In the **Network** view, hover over a node on the canvas, and then click the **Delete Selected Relationship** icon.

Editing the Relationship Properties of a Network Relationship

Edit the relationship fields or the start or end date of the relationship.

1. In the **Network** view, to edit the properties of a relationship, select a node in the canvas.
2. In the relationships panel, hover over a relationship, click the **More Actions** icon, and then select **Edit**.

   The **Edit Relationship** panel opens.
3. Optionally, edit the relationship fields.

   Note: Your MDM administrator configures the available relationship fields for the relationship. Contact your MDM administrator to change the fields.
4. Optionally, edit the start date or end date of the relationship.
5. Click **Apply**.

Viewing Records from the Network View

You can open a record in the entity tab to view the record details.

1. In the **Network** view, select a node on the canvas.
2. In the relationships panel, hover over a relationship, click the **More Actions** icon, and then select **Open**.

   The record opens in an entity tab.

Exporting a Network

Export an image of the network.

Note: Your MDM administrator configures the fields included in the export. Contact your MDM administration to change your export settings.

1. In the **Network** view, click the **Export Graph** icon.
2. Save the PNG file.

CHAPTER 11

Investigating Data Change Events for Effective Periods

This chapter includes the following topics:

- Investigating Data Change Events for Effective Periods Overview, 99
- Investigating Data Change Events Scenario, 99
- Viewing Data Change Events, 100
- Adding Data Change Events, 101
- Removing Data Change Events, 102

Investigating Data Change Events for Effective Periods Overview

A data change event is a change to data such as marital status, address, and phone number that is effective for a time period. Records can have multiple data change events. Use the **Timeline** view to investigate data change events of records.

The changes to data result in new effective periods or updates to an existing or a future effective period. You can use the **Timeline** view to view changes to data over a period of time. Also, you can add and remove data change events to and from the timeline. To manage the data change events, use the **Business Entity** view or the **Data** view.

Note: The **Timeline** view is available only to customers who upgraded from the subject area model to the business entity model. If timeline is enabled for base objects in the MDM Hub Store, the **Timeline** view is available for business entities that belong to the base objects.

Investigating Data Change Events Scenario

Your organization wants to renew and also offer a new insurance package to Alex Sam. To offer a suitable package, you need to investigate the data change events for the record for Alex Sam.

You open the record for Alex Sam in the Timeline view. You specify a specific point in time for which you want to view the data change events for Alex Sam. The data change events that occurred up to the date you specify appear in the Timeline view. You select data change events and view the details. You find that in the

past, Alex Sam was single and went by the name Alex Johns. You now have the information that will help you offer a suitable insurance package that will benefit Alex and the organization.

Viewing Data Change Events

You can view the data change events for a record in the **Timeline** view.

1. From the Data view, click **Effective Periods**.

   The record opens in the **Timeline** view. The data change events of the record that occur up to the current date appear in the view.

2. Optionally, to identify the data change events that occurred up to a specific point in time other than the current date, use the calendar to select a date range using the **From:** and **To:** fields.

   The data change events that occur up to the specified point in time for the record appear in descending order.

   The following image shows the data change events that occurred from July 01, 2019 up to January 03, 2020 for the record, Adam, Mary:

3. To select a time unit to group data events, click **Options** and choose a different timescale. For example, select **Y** to select a yearly timescale or select **M** to select a monthly timescale.

The following image shows the data events that occurred from the month of January 2019 up to July 2019:

4. To view the existing values of a data event for a specific date, click the event, and then click **Open for Effective Date**.

   The data event opens in the Data view and displays the existing values for the specified effective date.

   The following image shows the existing data event values for Adam, Mary that is effective on October 01, 2019:

Adding Data Change Events

You can add the data change events of a child record to the timeline in the **Timeline** view.

1. Open a record in the **Timeline** view.
2. To view the child record, click the child record tab.

   The data change events for the child record appear.
3. Select the data change event that you want to add to the timeline, and then click **Add Record to Timeline**.

   The data change event of the child record is added to the timeline.

Removing Data Change Events

You can remove data change events for a child record from the timeline in the **Timeline** view.

1. Open a record in the **Timeline** view.
2. Optionally, to identify the data change events that occurred up to a specific point in time other than the current date, use the calendar in the **History date up to** field to select a date.

   The data change events that occur up to the specified point in time for the record appear.
3. To move into view the portion of the timeline that has the data change events that you want to inspect, enter a date range or use the slider.
4. To remove a data change event, right-click the event, and then click **Remove record from timeline**.

   The data change event is removed from the timeline.

Part II: Data Director with Subject Areas

This part contains the following chapters:

- Adding Subject Area Records, 104
- Investigating Data Changes in the History View (Legacy), 107
- Merging Records in the Matches View, 112
- Unmerging Records in the XREF View, 118
- Search Queries from the Data Tab, 124
- Working with Records in the Data Tab, 135
- Investigating Hierarchies and Relationships, 142
- Investigating Timeline Data in the Effective Periods View, 146
- Importing Data, 149

CHAPTER 12

Adding Subject Area Records

This chapter includes the following topics:

- Adding Records in the Data View Overview, 104
- Creating Records in the Data View, 105

Adding Records in the Data View Overview

To create records based on a subject area, use the **New** tab with the **Subject Area** option and select a subject area.

Note: To use the **New** tab, your user role must include the Create permission for subject areas.

Note: In the **New** window, if you see both the **Business Entity** option and **Subject Area** option, ask the MDM administrator which one to use. The **Business Entity** option opens an entity tab while the **Subject Area** option opens the **Data** tab.

Example of Adding Subject Areas in the Data View

You are an insurance agent for a large insurance company. You have a new customer, Anthony Lomax, on the phone. You want to add Mr. Lomax to the database.

To add Anthony Lomax, you perform the following steps:

1. You check for an existing record by running a search. The search returns no results.
2. In the navigation bar, click **New**. In the **New** window, select **Person** as the subject area.
3. In the Data view, you type in Mr. Lomax's information in the form.

Creating Records in the Data View

To add a record based on a subject area, start from the **New** tab and select the subject area. The MDM administrator defines the subject areas and the types of data that you need to enter for the subject area.

1. In the navigation bar, click **New**. In the **New** window, select a subject area.
   For example, the application for an insurance company defines a Person subject area within a Customer subject area group. To add Anthony Lomax as a customer, a business user clicks **New** and then selects **Customer** > **Person**.

   The **Data** tab contains a **New Person** tab with an empty data entry form. A field name with a red asterisk indicates a required field.
2. For each required field, click the field and type the value.
3. For each optional field for which you have data, click the field and type the value.
4. Optionally, type the URL to an image file in the **image_url** field. For best results, link to an image that is a maximum of 200 x 200 pixels.

   Note: For images, the MDM Hub stores the URL, not the file. If the location of the file changes, you must update the URL.

   The following image shows some data for a record:

5. Click **Apply**.

   The application validates the data. If there are errors, correct them.
6. Add data to sections in the **Data** view.
   a. Expand a section, such as **Address** or **Telephones**.
   b. Click the **Add** icon.
   c. Fill in the fields.

The following image shows the **Telephones** section:

d. Click **Apply**.

7. If you need to change the value of a field, click the **Edit** icon, edit the fields, and click **Apply**.
8. After you finish adding data, save the data.
   - If your user role permits you to save data without a review, click **Save**. The application saves the record to the MDM Hub Store in active records.
   - Otherwise, click **Send for Approval**. In the **Create Task** dialog box, review the task details, edit the details as required, and click **OK**. The application saves the record in pending records and initiates a review process.

CHAPTER 13

Investigating Data Changes in the History View (Legacy)

This chapter includes the following topics:

- Investigating Data Changes Overview, 107
- Opening the History View, 108
- Viewing Data Events in the History View, 108
- Comparing Data Before and After Data Events, 110

Investigating Data Changes Overview

You can compare the best version of the truth at different moments in time for a particular record. If you suspect that the data in the record has changed inappropriately, you can use the **History** view to identify the data event that caused the data change.

The **History** view displays a chronology of data changes over the lifespan of the record. You can view the data that existed in the record at any point in time in the chronology. View the data before a data event and after a data event to determine if the event caused the inappropriate data change. A data event is any action that changes the data in a record, such as an edit or a merge operation.

Scenario for Investigating Data Changes

A customer reports that they recently began receiving electricity bills for a property that does not belong to them. You suspect that the record that represents this customer was updated inappropriately. You look in the **History** view for the customer to determine which data event caused the problem.

The customer stated that the billing issue started in June of the current year, so you look for data events in the **History** view chronology that occurred around that time. You see that the record was merged in June. You compare the data before the merge and after the merge. A record for customer Joe Smith was merged with a record for customer John Smith. These records should be two distinct records because they represent two different customers.

Opening the History View

Use the **History** view to investigate changes to master data.

To open a record in the **History** view, perform the following action:

1. In a **Search** tab that displays the search results, select a record. Click **Open**.

   The record opens in the **Data** view.

2. Click the **History** icon.

   The **History** view opens.

Viewing Data Events in the History View

You can view the data changes that a record has undergone in the **History** view. Data events appear in descending order.

1. Open a record in the **History** view.

   The changes to the record up to the current date appear.
   The following image shows the history of data change events that occurred from January 01, 2008 up to June 07, 2020 for the record, Dunn, Samuel:

2. To view additional details about the history of the data change events, expand the data event.

The following image shows the expanded data change events for the record, Dunn, Samuel:

3. Optionally, to identify the data change events that occurred up to a specific point in time other than the current date, use the calendar to select a date range using the **From:** and **To:** fields.

   The history of data change events that occurred up to the specified point in time for the record appear in descending order.

4. Use filters to show or hide different types of events.

   The following image shows the available filters:

Comparing Data Before and After Data Events

You can view the best version of the truth for a record at a specific points in time, and then compare the differences. View the data before and after a data event to determine how the data event affected the data in the record.

1. Open the record in the **History** view.

   Changes to the record appear on the timeline.

2. Optionally, select filters to show or hide different types of events.

3. Optionally, select a time unit to group data events. To do this, click **Options** and choose a different timescale. For example, select **M** to select a monthly timescale.

   The following image shows data events grouped under the month of October:

4. Click the event labeled **Email**.

   The event details panel shows the record details before and after the event and the time when the record was updated. In this example, the email address has changed from jsmith@example.com to jxsmith88@example.com.

5. Click the event labeled **SMITH, JOHN**.

   The following image shows that the display name of the record changed from John Smith to John Xavier.

CHAPTER 14

Merging Records in the Matches View

This chapter includes the following topics:

- Merging Records Overview, 112
- Opening the Match Merge Comparison View, 114
- Selecting Merge Candidates, 114
- Overriding the Merge Preview Results, 115
- Sending a Merge Proposal for Review, 116

Merging Records Overview

You can merge two or more records that contain data for the same record, such as a customer, into a single consolidated record. The record that results from the merge represents the best version of the truth for that record.

Before you merge similar records, you can view the matches for the record in the **Matches** view. When you open a record in the **Matches** view, the SearchMatch API searches for matching records based on the match columns and rule definitions. The IDD application displays the matching record that the SearchMatch API retrieves and the matching record from the matches table.

When you merge record, the root records of the record are consolidated into a single root record. The child records from each of the root records become child records of the merged root record.

The following image shows the effect of a merge on the root records and child records:

You can open a record in the **Match Merge Comparison** view. You can view similar record that are potential matches. You can then select records that are potential matches as merge candidates. You can preview the result of a merge between the record and the merge candidates that you select.

If you want to change the winning field value, select a winning field from a different record or manually enter a new value for a field. After you are satisfied that the values in the Merge Preview column are the most correct, you can send the proposed merge for approval.

Example of Merging Records

You are on the phone with a customer. When you open the record, you see similar records that potentially represent the same customer. You select potential matches as merge candidates, and then preview the result of the merge.

The merge preview looks good, except that you confirm with the customer that the following values are incorrect:

- The records contain two different birth dates for the customer: 23 June 1970 and 19 June 1970. Informatica Data Director selects 23 June 1970 as the correct birthday, but the customer's birthday is 19 June 1970. You manually select 19 June 1970 as the correct birth date.
- The customer mentions that the spelling of the first name that you have on file is incorrect. You override the merge result for the first name and manually enter the correct spelling.

After you are satisfied that the merge preview represents the best version of the truth, you send the proposed merge for review.

Opening the Match Merge Comparison View

Use the **Match Merge Comparison** view to investigate records with similar data.

▶ To open a record in the **Match Merge Comparison** view, perform one of the following actions:

- In a **Search** tab that displays search results, select two or more records. Click **Actions** > **Compare**.
- Open a record and click the **Matches** icon.

The **Match Merge Comparison** view opens. Potential matches for the record appear with a merge preview.

Selecting Merge Candidates

You can use the **Match Merge Comparison** view to see if Data Director has identified any records that potentially match another record. You can then select the potential matches as merge candidates.

The **Match Merge Comparison** view displays the values for the record to which you are comparing in the left hand column. Any records that are potential matches appear in columns to the right of the current record. The merge preview shows the values for the record that would result if you merged the current record with any records that you have selected as merge candidates. When the **Match Merge Comparison** view first appears, the potential matches are not selected as merge candidates.

1. In the **Match Merge Comparison** view, review the values in the potential matches.
2. Select the check box for each record that you determine is a duplicate of the current record.

	JOSHI,ALOK	1. JOSHI,ALOK Match Score: 100
General	current record	IDL, 12
Name Prefix Cd	DR	DR
First Name *	ALOK	ALOK
Middle Name		E
Last Name *	JOSHI	JOSHI

The Merge Preview column displays the record that would result from a merge of the current record and the records that you selected as merge candidates. The highlighted fields contribute data to the preview of the merged record.

	JOSHI,ALOK	1. JOSHI,ALOK Match Score: 100	2. JOSHI,ALOK Match Score: 100	3. JOSHI,ALOK Match Score: 100	Merge Preview
General	current record	IDL, 12	IDL, 12	IDL, 12	3 Candidates
Name Prefix Cd	DR	DR			DR
First Name *	ALOK	ALOK	ALOK	ALOK	ALOK
Middle Name		E			E
Last Name *	JOSHI	JOSHI	JOSHI	JOSHI	JOSHI
Generation Suffix Cd					
Birthdate			19/Jun/2015		19/Jun/2015
Gender Cd	FEMALE	FEMALE	FEMALE		FEMALE
Tax ID					
Display Name	ALOK JOSHI	ALOK JOSHI	ALOK JOSHI	ALOK JOSHI	ALOK JOSHI
Preferred Phone	555 (666-6666)		555 (444-4444)		555 (444-4444)

Overriding the Merge Preview Results

Informatica Data Director determines which field contains the best version of the truth based on the trust score of the field. The field with the highest trust score is considered the most trustworthy. The trust calculations are configured in the MDM Hub Console. You can manually select or enter a value to override the trust calculation.

1. In the Merge Preview column, move the pointer over the right-side of a field to reveal the **Trust Override** button.

2. Click the **Trust Override** button.

   A dialog box opens. The name of the field appears in the title bar of the dialog box.

3. To choose the value that is the most trustworthy, select the value.

4. To enter a new value, select the empty field, and then enter the new value.

5. Click **OK**.

The values you selected and entered are considered to be the most trustworthy and appear in the preview of the merged record.

Sending a Merge Proposal for Review

After you are satisfied with the merge results that appear in the Merge Preview column, you can send the merge proposal for review.

1. Ensure you are satisfied with the results in the Merge Preview column.
2. Click **Actions** > **Create Merge Task**.

   The **Create Task** dialog box opens.
3. In the **Title** field, enter a meaningful title for the merge task.

   For example, enter `Merge A. Joshi`.

4. Change any default task attributes.
5. Optionally, add comments or attachments for the task reviewer.

   Note: The **File Attachments** section is available only if your IDD global properties are configured to enable attachments for tasks. For more information, see the *Multidomain MDM Data Director Implementation Guide*.
6. Click **OK**.

A merge review process begins.

CHAPTER 15

Unmerging Records in the XREF View

This chapter includes the following topics:

- Unmerging Records Overview, 118
- Opening the XREF View, 121
- Sending an Unmerge Proposal for Review, 122

Unmerging Records Overview

You can unmerge a record that was merged with another record. Use the **XREF** view to see the records that contribute to the best version of the truth for a record. If you identify a cross-reference record that should not be merged with the record, you can unmerge the record if you have permission or you can create an unmerge task. You can unmerge the cross-reference record only or you can unmerge the cross-reference record with lineage.

When you unmerge the cross-reference record only, the child records that were associated with the cross-reference record you unmerge continue to be associated with the merged record.

The following image shows the result when you unmerge the cross-reference record only:

When you unmerge the cross-reference record with lineage, the child records are associated with the unmerged record, just as they were before the merge.

The following image shows the result when you unmerge the cross-reference with lineage:

You can unmerge record in the **XREF** view. The cross-reference view shows the best version of the truth for the record and the cross-reference records that have merged with the record. The cross-reference records are organized by the source system from which they originated. The highlighted fields show which values contribute to the best version of the truth. You can select a cross-reference record and create an unmerge task for the record to be unmerged from the record.

The following image shows the **XREF** view:

1. Best version of the truth
2. Contributing cross-reference records

Example of Unmerging Record

You realize that two records should not be merged into a single record. You want to undo the merge operation.

You look at the record in the **XREF** view to see which cross-reference records should be unmerged. One cross-reference record represents Joe Smith and the other cross-reference record represents John Smith. The child record contains address information that applies to Joe Smith. You create an unmerge task and recommend to the task reviewer that the cross-reference record be unmerged with lineage. Unmerge with lineage associates the appropriate address records with the unmerged record.

Opening the XREF View

Use the **XREF** view to unmerge merged records. You can also view the source systems and pending cross-reference records.

- To open a record in the **XREF** view, open a record and click the **XREF** icon.

  The **XREF** view opens. Fields display the master data for the selected record. The source systems connected to the record appear below the fields.

Sending an Unmerge Proposal for Review

Use the **XREF** view to examine the cross-reference records that are consolidated into a record. You can select a cross-reference record to unmerge.

1. View the record in the **XREF** view.
2. Examine the cross-reference records in the lower half of the view. Identify the cross-reference record to unmerge.

   You can click the **Details** tab to view child record data.
3. Right-click the cross-reference record and select **Create Unmerge Task**.

   The **Create Task** dialog box opens.
4. In the **Title** field, enter a meaningful title for the merge task.

For example, enter `Unmerge Joe Smith from John Smith`.

5. Change any default task attributes.
6. Optionally, add comments or attachments for the task reviewer.

   Note: The **File Attachments** section is available only if your IDD global properties are configured to enable attachments for tasks. For more information, see the *Multidomain MDM Data Director Implementation Guide*.
7. Click **OK**.

   An unmerge review process begins.

CHAPTER 16

Search Queries from the Data Tab

This chapter includes the following topics:

- Search Queries from the Data Tab Overview, 124
- Types of Searches, 124
- Basic and Extended Search Queries, 125
- Advanced Search Queries, 127
- Search Results, 130
- Saved Search Queries, 131

Search Queries from the Data Tab Overview

Use the **Search Form** to run a search query in the **Data** tab. When you run a query, a search tab opens with the search results. Each search tab is labeled by the search query name, so that you can distinguish each search action. You can open multiple search tabs to perform different types of data search within subject areas and across subject area groups.

You can search using any of the following search types: Basic, Extended, and Advanced. The current search criteria is displayed at the top of your search results for easy reference. If you use a query frequently, consider setting this as your default query. Depending on your environment, in addition to searching with a subject area, you might be able to search across all subject areas within a subject area group.

Types of Searches

In the **Data** tab, you can perform the following types of searches:

- Basic Search. Search text, with or without a wildcard.
- Extended Search. Search match-enabled attributes. Supports fuzzy logic matching.
- Advanced Search. Search using a query statement.

Basic Search

Basic Search uses simple text comparisons to retrieve data based on your search criteria. Basic Search is case sensitive, so you must be careful to use uppercase letters and lowercase letters in the way you expect

them to appear in the master data. You can use a wildcard character in place of a character that could be either uppercase or lowercase. Example: `%upplies`.

Note:

- In Microsoft SQL Server environments, Basic Search is not case sensitive.
- In Microsoft SQL Server environments, you cannot use square brackets ([]) and a like operator in a search request. To use square brackets in a search query, enclose the first square bracket ([) in an extra pair of square brackets ([[]). For example, to look for a record that starts with a first name like `%[ABC123]%`, use the following search query:

  ```
  first_name like '%[[]ABC123]%'
  ```

Consider using a Basic Search in the following circumstances:

- You can get reliable results by providing exact text matches and wildcard patterns (or lookup values) in your search criteria.
- You need to search on all available attributes.

Extended Search

Extended Search uses matching logic and match-enabled attributes to search for records. Extended Search is not case sensitive.

Consider using an Extended Search in the following circumstances:

- You want to expand your search because you did not get the expected results from a Basic Search.
- You want to search using fuzzy logic, which can make reliable matches by taking into account spelling variations, possible misspellings, and other differences that can make matching data non-identical. For example, using fuzzy logic, you can match on variations of the word "Street", such as "St." or "St".

If you use Extended Search, note the following restrictions:

- Fewer attributes might be available to search on. For Extended Search, you can search only on attributes that are configured as match-enabled attributes. On the Search tab, attributes that are not match-enabled are unavailable (grayed out) for search.
- If Extended Search is not available (grayed out) on the **Search** tab, it means that the selected subject area or subject area group does not have an available match-enabled attribute.
- On the **Search** tab, one attribute (identified by an asterisk) is always required.

Note:

- To optimize results and performance, you must define extended searches appropriately.
- When running an Extended Search, you can view the match score for the searched query. You can use the match score to determine how proximate the search result is when compared to the searched query. The maximum value for a match score is 100.

Advanced Search

Use the **Advanced Query Builder** to construct complex query statements.

Basic and Extended Search Queries

You can easily switch between constructing a Basic Search or an Extended Search query.

Wildcards in Basic Search

In your search criteria for Basic Search, wildcards are special search symbols that allow you to specify a text pattern instead of specific characters. You would use wildcards to increase your chances of finding the data you want, particularly if you did not know the exact text or were searching for text that is very similar.

Note: Wildcards are used in Basic Search only. They are not needed in Extended Search because searching is fuzzy by default.

IDD allows you to use two different wildcard characters

- asterisk (*)
- percent sign (%)

Their usage and effect on search is identical. These characters are interchangeable, so you can use either one.

You can use wildcards in two different ways:

Wildcard Represents	Description

Placeholder for all characters to the end	The search looks for the characters to the left of the wildcard, and accepts any characters thereafter. For example, if you specified the following search criteria for First Name:
	`Mar*`
	or
	Mar%
	IDD could return results for:
	`Mary`, `Mark`, `Marilyn`, `Marty`

Placeholder for a single character	The search accepts any single character in the position of the wildcard. For example, if you specified the following search criteria for First Name:
	`T*m`
	or
	To*
	IDD could return results for:
	`Tim`, `Tom`

Tip: When using wildcards in Basic Search, make sure that you have positioned the wildcard character correctly. Incorrect placement can yield unexpected search results.

Specify Search Criteria

After you have an open query on the **Search** tab, you can specify the search criteria that describes the data you are looking for.

- You must specify search criteria for any required attribute, which is indicated by an asterisk (*).
- If Extended Search is not available (grayed out), it means that the selected subject area does not have available match-enabled attributes.
- If you select Extended Search, only match-enabled attributes will be available. Unavailable attributes are grayed out. You will not be able to specify search criteria for unavailable attributes.
- For Basic Search, you can use wildcards to specify text patterns for searching.
- If a selected attribute is configured as a lookup (for example, a list of countries), you will see a drop-down list of values to search on.

Note:

- For a timeline-enabled primary object, you can perform a search query for an effective date by specifying the search criteria and the effective date in the **Search** workspace.
- If you are performing a search for a timeline-enabled record and if the effective period is blank, the data in the search result is based either on the current effective date or from the base object value.
- To clear the search criteria, select **Reset** from the **Actions** menu. To clear the selection in a drop-down list, click DELETE or BACKSPACE.

Creating Basic or Extended Queries

To create a query, open the **Search Form**.

1. To open the **Search Form**, in the navigation bar, click **Data**.
2. If the **Search Form** is not visible, click **Search Form**.
3. From the **Actions** menu, click **New** > **Standard** for Basic and Extended queries.
4. In the **Query Builder** window, select the subject area or subject area group through which you want to search.
5. Expand the **Available Attributes** list and select the attributes that you want to include as search criteria for this query.

   Based on how the application developer configured Informatica Data Director, you can search for data that is outside the selected subject area or subject area group, such as cross-reference data or other subject areas.
6. In the **Added Attributes** list, rearrange the sequence of the attributes so that they appear in the order you want in the search query screen.
7. If available, select the attribute by which you want the results table sorted, and specify a sort order of ascending or descending.
8. Click **OK**.

   The query appears in the **Search** tab.
9. To use the query again, save the query before you build or open another query.

Advanced Search Queries

Use the **Advanced Query Builder** to construct complex queries using free form query text. Advanced Search provides capabilities for specify search conditions that go beyond the capabilities of standard (basic and extended) queries. Advanced search criteria are used in the query's SQL WHERE clause.

Advanced Search uses SQL syntax and supports:

- Logical operators - AND/OR/NOT
- EXIST, NOT EXISTS, and COUNT conditions
- Comparisons operators range comparison (=, >, <, >=, <=, BETWEEN)

Be sure to validate your query syntax. You cannot save a query with invalid syntax.

Logical Operators

Use logical operators when a search query contains multiple conditions.

The following table describes the operators that you can use and provides an example for each operator:

Operator	Description	Example
AND	Evaluates two conditional expressions and: - Returns TRUE if both conditions are TRUE. - Returns FALSE if either condition is FALSE - Otherwise returns UNKNOWN.	`MATCH_PATH_COMPONENT.C_MT_ADDRESS|CITY_NAME = 'New York' AND COLUMN.C_PARTY| ORGANIZATION_NAME = 'Informatica LLC'`
OR	Evaluates two conditional expressions and: - Returns TRUE if either condition is TRUE. - Returns FALSE if both conditions are FALSE. - Otherwise, returns UNKNOWN.	`MATCH_PATH_COMPONENT.C_MT_ADDRESS|CITY_NAME = 'London' OR MATCH_PATH_COMPONENT.C_MT_ADDRESS|CITY_NAME = 'Paris'`
NOT	Negates the conditional expression that follows. - Returns TRUE if the following condition is FALSE. - Returns FALSE if the following condition is TRUE. - If it is UNKNOWN, it remains UNKNOWN.	`MATCH_PATH_COMPONENT.C_MT_ADDRESS| COUNTRY_CODE = 'USA' and NOT MATCH_PATH_COMPONENT.C_MT_ADDRESS|CITY_NAME = 'Los Angeles'`

Conditional Operators

Use conditional operators to restrict your search results based on a supported condition.

The following table describes the operators that you can use and provides an example for each operator:

Operator	Description	Example
EXISTS	Returns true if at least one row meets the specified condition in the subquery. NOT EXISTS is also a valid construct.	`EXISTS(C_MT_PERSON_DETAILS, MATCH_PATH_COMPONENT.C_MT_PERSON_DETAILS| BIRTH_CITY = 'NEW YORK')`
COUNT	Returns the number of rows that meet the specified condition.	`COUNT(C_MT_ADDRESS, MATCH_PATH_COMPONENT.C_MT_PARTY_ADDRESS_REL| ADDRESS_TYPE = 'Shipping')`

Comparison Operators

Use comparison operators when you want to restrict the search results based on the values for the attribute you search on.

The following table describes the operators that you can use and provides an example for each operator:

Operator	Description	Example
=	equals	`MATCH_PATH_COMPONENT.C_MT_CUSTOMER|ACCOUNT_CD = '123456879'`
>	greater than	`MATCH_PATH_COMPONENT.C_MT_ADDRESS|POSTAL_CD > 42000`
<	less than	`MATCH_PATH_COMPONENT.C_MT_ADDRESS|POSTAL_CD < 30000`
>=	greater than or equals	`MATCH_PATH_COMPONENT.C_MT_CUSTOMER|SALES >= 1000000`
<=	less than or equals	`MATCH_PATH_COMPONENT.C_MT_CUSTOMER|SALES <= 1000000`
BETWEEN	between two values (inclusive)	`MATCH_PATH_COMPONENT.C_MT_ADDRESS|POSTAL_CD BETWEEN 94000 AND 96000`

Date Syntax in Advanced Search Queries

You must use the correct syntax to ensure a query returns the expected results when the query contains date system columns.

All date system columns, such as the CREATE_DATE column, have a granularity of milliseconds. If you use the '=' comparison operator in a query, you must specify the date to a granularity of milliseconds.

For example, the following query does not return results for records created on August 23, 2013 because it does not specify a date with a granularity of milliseconds:

```
Person.CREATE_DATE = '23/Aug/2013'
```

To run a query for a specific date without specifying a granularity of milliseconds, you can run a query on a range for that date.

For example, the following query returns records created on August 23, 2013:

```
Person.Create Date >= '23/Aug/2013' AND Person.Create Date < '24/Aug/2013'
```

Creating Advanced Search Queries

To create an advance query, use the **Advanced Query Builder**.

1. In the navigation bar, click **Data**.

   In the **Data** tab, a new tab opens with the **Search Form** displayed.
2. From the **Actions** menu, select **New** > **Advanced**.

   The **Advanced Query Builder - New Query** dialog box opens.
3. Select the subject area that you want to search from the **Subject Area** list.
4. Select the attributes that you want to include in the search from the **Available Attributes** field.
   - To include a count for the attribute in your results, click **Insert COUNT**.

- To check for the existence of data, click **Insert EXISTS**.

When you select an attribute, the attribute appears in the **Query Filter Criteria** field.

5. Add logical operators, conditional operators, and comparison operators to the query as required.
6. Optionally, select a sort option from the **Sort Results By** list and select an ascending or descending sort order.
7. Optionally, enable **Case Insensitive** search.
8. To verify the query syntax, click **Validate Query**.
   - If the query contains syntax errors, the **Query Validation Error** dialog box opens with a description of the syntax errors. Click **Close**, correct all syntax errors, and then revalidate the query.
   - If the query does not contain syntax errors, a message confirms that the query is valid. Click **Close**.
9. Click **OK**. IDD revalidates the query to ensure no query syntax errors exist.

   If IDD does not detect syntax errors, a search tab opens in the **Data** tab.
   If IDD detects syntax errors, the **Query Validation Error** dialog box opens. Resolve the query issues and then click **OK** again.
10. Click **Run Search**.

    The query results appear in the **Search** tab.

Example of an Advanced Search Query

```
COLUMN.C_PARTY|LAST_NAME like 'H%'
MATCH_PATH_COMPONENT.C_MT_PERSON_DETAILS|REMARKS is not NULL
COLUMN.C_PARTY|GENDER_CD = 'M'
```

Search Results

After you run a search, the search results appear in a search tab. You can open a business entity from the search results. You can also export search results.

Opening Records from Search Results

To investigate a record, you can select it from the search results and open the record in the **Data** tab. You search by using the search form in the **Data** tab, by clicking **Queries**, or by using the **Search** box in the header.

When you open a record that is timeline-enabled, specify an effective period for which to view the record. The default value in the field for the effective date is the current date. If you leave the effective date field empty, all the record versions are opened.

1. Search for the record.
2. In the search results, select the record.
3. Open the record in one of the following views:

View	Description
Data	To view and edit the record, click **Open**.

View	Description
Matches	To compare the record with potentially duplicate records, click **Actions** > **Compare**.
Hierarchy	To view a diagram of the relationships between records, click **Open Hierarchy**.
Business Entity	To view and edit the record in context with other sources of information about the record, click **Entity View**.

4. If prompted, specify the effective period that you want to investigate.

   The record opens in the view.

Related Topics:

- "Resolving Duplicate Records" on page 72

Exporting Search Results

If available in your environment, you can export all or selected search results to a CSV file.

- To export all results, click **Actions** > **Export** > **All Results**.
- To export some of the results, press the **Ctrl** key and click the records. Click **Actions** > **Export** > **Selected Results**.

Saved Search Queries

Consider saving the search queries that you expect to reuse.

To run a query, you must first open it so that it appears in the search form. You can open any available query in the list of saved queries. Available queries are queries that you have created, in addition to queries that others have made public.

You must have read privileges on the columns in the query, read privileges on the subject area, and read privileges on the package that is configured as the search package in the configuration manager tool for the subject area.

Saving Search Queries

To save a query so you can use it again, save it in the query builder. When you save a query, Informatica Data Director recognizes you as the owner of the query.

1. On the Search tab, select **Save** from the **Actions** menu. If you want to save it under a different name, click **Save As** instead.
2. In the Save window, you can specify a different query name.
3. Indicate whether you want to make this your default query.
4. Depending on your environment and role, you might have the option to mark this query as Public, which allows others to use it as well.
5. Click **Save.**

Running Saved Search Queries

You run saved search queries from the **Search Form**.

1. At the top of the **Search Form**, select **Saved Queries**.
2. Select a saved query or use the default query.
3. Click **Open Query**.
4. Enter values in the fields if required for your search.
5. Click **Run Search**.

   The search results appear.

Viewing Details About Saved Queries

You can view query details, such as creation date and owner.

1. At the top of the **Search Form**, select **Saved Queries**.
2. Pause over a query.
   A popup window displays information about the query.

Setting Your Default Query

The default query is the query that appears when you open a Search tab. Usually, the default query is the query that you expect to use most frequently in your job. Each user can set their own default query.

By default, no default query is defined. You must explicitly designate the saved query that you want to use. You can change the default query later if you find that you are using another query more frequently.

1. At the top of the **Search Form**, select **Saved Queries**.
2. Select the query that you want to designate as the default query.
3. From the **Actions** menu, click **Set As Default**.
   The query name changes to a bold font.

Renaming Saved Queries

If you created a saved query, you can change the name of the query.

1. At the top of the **Search Form**, select **Saved Queries**.
2. Right-click the query name, and then click **Rename**.
3. Type a different name.
4. Click **Save**

Editing Saved Queries

To change a query that you created, you can edit it and save the changes. You cannot edit queries that you do not own.

1. Open the query that you want to edit.
2. From the **Actions** menu in the search form, click **Edit**.
3. In the **Query Builder** window, make the changes you want.

4. Click **OK**.
5. Save your changes.

Deleting Saved Queries

It is a best practice to delete queries you no longer need. You must be the creator of the query to be able to delete it.

1. At the top of the **Search Form**, select **Saved Queries**.
2. Right-click the query name, and then click **Delete Query**.

Sharing Saved Queries

You can share queries with colleagues by making the queries public or by sharing a bookmark link.

Making Saved Queries Public

Any Informatica Data Director user can use saved public queries. Only the owner can change their public queries.

1. In the **Search Form**, select **Saved Queries**.
2. Right-click the saved query, and then click **Mark as Public / Private**.
3. To ensure that the query is public, pause on the query. In the popup window, verify that the **Visibility** setting is set to **Public**.

Sharing Query Bookmarks

To share a specific query with colleagues, copy the bookmark link and paste it in a text or email. When the user follows the bookmark link, the Informatica Data Director opens, prompts the user to log in, and then displays the bookmarked search query.

1. In the Search Form, open the query you want to share.
2. From the **Actions** menu, click **Show Bookmark**.
3. Copy the bookmark link. Share the link with another user.

   The user can follow the link to view the query.

Exporting Saved Queries

When you migrate an Informatica Data Director configuration from one environment to another, the saved search queries are not migrated. You can export the saved queries to the target environment if you need to use them.

1. Open the Search Form, and then select **Saved Queries**.
2. Right-click the query that you want to export, and then click **Export Queries**.

The query XML file is downloaded to your browser's default download location.

Importing Saved Queries

When you migrate an Informatica Data Director configuration from one environment to another, the saved search queries are not migrated. You can import the saved queries from the source to the target environment.

If a query has the same name as the query that is being imported and is owned by the same user, the import process overwrites the query. If a query has the same name as the query that is being imported but is a public query that is owned by another user, the import process creates a version of the query with the same name for the user that imports the query.

If a query has errors, the import process ignores the queries. When queries are ignored, the message Some of the queries were not imported appears. To view the errors, check the Hub server log files.

1. At the top of the **Search Form**, select **Saved Queries**.
2. Right-click in the **Search Form**, and then click **Import Queries**.
3. In the **Import Queries** dialog box, click **Browse**. Select the XML file that contains the saved queries.
4. Click **Import**.

CHAPTER 17

Working with Records in the Data Tab

This chapter includes the following topics:

- Working with Records in the Data Tab Overview, 135
- Opening Records from Search Results, 136
- Creating Filters for Child Records, 137
- Switching Between Form and Table View, 138
- Viewing System Columns, 138
- Copying a Record, 138
- Editing Data In Records, 139
- Editing Effective Periods, 139
- Adding an Effective Period, 140
- Display Aggregated Period for Timeline-Enabled Record, 140
- Investigating a Record, 140
- Deleting a Record, 141

Working with Records in the Data Tab Overview

Use the **Data** tab to investigate records.

From the **Data** view in the **Data** tab, you can review and edit records. You can also use the left navigation icons to view the history of a record, its cross-reference records, and possible merge candidates.

You can use the **Search Form** in the **Data** view to find records. For more information about searching from the **Data** tab, see "Search Queries from the Data Tab Overview" on page 124.

Pending Records in the Data Tab

A pending record contains data that is pending approval.

In the Data tab, pending records are treated in the following ways:

- In search results, records with pending records appear in the results.

- In the **Data** view, when you open a newly created record that is pending approval, the view contains the pending data in the parent record and all its child records.
- In the **Data** view, when you open a record with pending changes to the parent record, the view contains the approved data, not the pending changes.
- In the **Data** view, when you open a record with pending changes to child records, the view contains the approved data, not the pending changes.
- In the **Data** view, when you open a record with new pending child records, the view does not contain the new pending child records.

Opening Records from Search Results

To investigate a record, you can select it from the search results and open the record in the **Data** tab. You search by using the search form in the **Data** tab, by clicking **Queries**, or by using the **Search** box in the header.

When you open a record that is timeline-enabled, specify an effective period for which to view the record. The default value in the field for the effective date is the current date. If you leave the effective date field empty, all the record versions are opened.

1. Search for the record.
2. In the search results, select the record.
3. Open the record in one of the following views:

View	Description
Data	To view and edit the record, click **Open**.
Matches	To compare the record with potentially duplicate records, click **Actions** > **Compare**.
Hierarchy	To view a diagram of the relationships between records, click **Open Hierarchy**.
Business Entity	To view and edit the record in context with other sources of information about the record, click **Entity View**.

4. If prompted, specify the effective period that you want to investigate.

   The record opens in the view.

Related Topics:

- "Resolving Duplicate Records" on page 72

Creating Filters for Child Records

In the child tab, if there are multiple child records, you can filter the child records based on the column name and its values to view only a specific (or subset) of entries. All the filters created in the data view are only temporary for that session, when the record is closed, you will lose all the created filters.

Filtering option is only available for One:Many and Many:Many child relationships. Also, if multiple filter conditions are applied, the result contains all the records that satisfy the AND condition and if multiple conditions are set for the same column, the result contains all the records that satisfy the OR condition.

1. In the **Data** view, click the child tab and click the **Filter** button.

   The **Filter** dialog box appears.

2. In the **Column** drop-down list, select a column value.

   Note:

   - Only column names of strings and numbers data types are supported for display in the **Column** drop-down list.
   - Lookup values are not displayed in the **Column** drop-down list.

3. Select one of the following filter conditions from the drop-down list:

Available for Data Type	Condition	Description
Strings and Numbers	=	Column value must be equal to the filter criteria
Strings and Numbers	!=	Column value must not be equal to the filter criteria
Numbers	>	Column value must be greater than the filter criteria
Numbers	<	Column value must be lesser than the filter criteria
Numbers	>=	Column value must be greater than or equal to the filter criteria
Numbers	<=	Column value must be lesser than or equal to the filter criteria
Strings and Numbers	Is NULL	Column value must be null for inclusion in the filter results
Strings and Numbers	Is not NULL	Column value must not be null for inclusion in the filter results
Strings	Starts with	Column value must start with the filter criteria
Strings	Ends with	Column value must end with the filter criteria
Strings	Contains	Column value must contain the filter criteria
Numbers	Between	Column value must be between the filter criteria

4. In the **Value** field, enter a filter criteria.

5. If you want to create an additional filter condition, click the add button (green plus button).

   Note: If you want to delete a filter condition, click the delete button (red cross button).

6. Click **Apply**.

   Note: If you want to clear filter, click the **Clear Filter** button.

Switching Between Form and Table View

In certain cases, you can switch between two different views of data:

- *Form View* shows a single record, with the record attributes displayed vertically, like a paper form. Click **Switch to Form View** if you want to isolate your investigation to a single record.
- *Table View* shows a list of records (one or more) in a tabular form. Each row in the table represents a separate record. Click **Switch to Table View** to see a summary list of all the associated records.

Note:

- For subject area children, the default view (form or table) may vary depending on how your IDD is configured.
- For the selected child record, only associated grandchild records are displayed either in form or table view.

Viewing System Columns

To view system columns for the record that appears in the **Data** view, select **System Columns** from the **Actions** menu. Data Director opens a window that displays the system column details.

You can view system columns to view record metadata, such as the date on which the record was created, who created the record, and the row ID.

Copying a Record

You can copy a parent record and some of its children to create a record that is similar to an existing record. You cannot copy a timeline-enabled record.

1. In the **Data** tab, open the record in the **Data** view.
2. Click **Actions** > **Copy**.
3. In the new record window, change the attribute data you want.
4. Select **Save** or **Send for Approval**, as applicable.

Editing Data In Records

You can edit data in a record. When you edit data, you cannot change the effective period for the record.

1. Open a record for which you want to edit the data.

   You cannot edit a record that is in the pending state because it is part of a workflow and is pending approval.
2. Click **Actions** > **Edit Data**.
3. Edit the data.
4. Click **Apply**.

   The fields that you edit appear highlighted.
5. Click **Save**.

   Data Director writes the changes to the database.

Editing Effective Periods

To correct an incorrect effective period, edit the effective period of the record. You can edit the effective periods for records for which you track data change events. When you edit the effective period for a record, Data Director saves the record with the changed effective period.

1. Open the record version for which you want to edit the effective period.

   You cannot edit a record that is in the pending state because it is part of a workflow and is pending approval.

   a. Open the record that has the effective period that you want to edit.

   b. Click the **Show Effective Periods** link for the record.

   c. In the **Effective Date** field, use the date chooser to select a date that is within the effective period that you want to edit.

   d. Click **Apply**.

      The record version that is valid for the effective period that you want to edit opens.
2. Click **Actions** > **Edit Period Dates**.
3. In the **Edit Effective Period** date fields, use the date chooser to select the correct start date and end date of the effective period.
4. Select the primary and child records that you want to include in the record version that you update.
5. Click **Save**.

   Data Director saves the record version with the updated effective period.

Adding an Effective Period

You can add a record version that is applicable for a new effective period. The effective period that you add must be adjacent to the existing effective period. You can add effective periods to records for which you track data change events.

1. Open a record for which you want to add an effective period.
2. Select the record version that you want to copy to the new effective period.
3. Click **Actions** > **Create New Period**.
4. In the **Create New Effective Period** date fields, use the date chooser to select the effective start and end dates.
5. Select the primary and child records that you want to include in the new record version.
6. Click **Save**.

   Data Director creates a new record version with the effective period that you specify.

Display Aggregated Period for Timeline-Enabled Record

For a timeline-enabled record, you can click the link **Show Effective Periods** to view the calculated aggregated period of effective periods for the record. Aggregated period is the time period where the data of the record does not change for any of the object (parent, children, and grandchildren). It is the intersection of all the effective periods for the record.

For example, if you save the effective period for the parent record for a time period 01-May-2012 to 31-May-2012 and then you save the effective period of the child record of the same record for a time period 01-May 2012 to 15-May-2012. The aggregated period for the record as on 01-May-2012 is 01-May 2012 to 15-May-2012.

Note:

- The link **Show Effective Periods** is available after the **Save** operation is completed.
- In the Data view, after you click the link **Show Effective Periods**, you can view the effective start date and effective end date of the object (parent, children, and grandchildren).
- The aggregated period displayed for the record is directly related to the date selected in the **Effective Date** field.

Investigating a Record

In the **Data** tab, you can change your view of the record. You can view the history of a record, its cross-reference records, its possible merge candidates, and a diagram of related records.

1. Open the record in the **Data** view.
2. If prompted, specify the effective period that you want to investigate.
3. Based on your investigation path, select one of the following views:

- To view and edit the record, click the **Data** icon. The **Data** view opens.
- To view pending changes, click the **XREF** icon. The **XREF** view opens.
- To view a history of changes to the record, click the **History** icon. The **History** view opens.
- To compare the record with potentially duplicate record, click the **Matches** icon. The **Match Merge Comparison** view opens.
- To view a diagram of the relationships within and between records, click the **Open Hierarchy** button. The **Hierarchy** view opens.
- To view and edit the record in context with other sources of information about the record, click the **Entity View** button. An entity tab opens. The tab displays the name of the record.

Deleting a Record

You can delete a record that you want to remove. To delete the record displayed in the **Data** view, select **Delete** from the **Actions** menu.

Data Director marks the record as deleted and no longer displays the record, but does not remove the record from the database. When you delete a parent record, Data Director does not mark the child records as deleted. When you delete a timeline-enabled record, Data Director marks the record as deleted for all the effective periods.

CHAPTER 18

Investigating Hierarchies and Relationships

This chapter includes the following topics:

- Investigating Relationships Overview, 142
- User Interfaces, 142
- Managing Relationships, 143

Investigating Relationships Overview

A record can have relationships with other records. When the Hierarchy view is enabled, you can view a graph that shows how a record is related to other records.

Use the **Hierarchy** view to investigate relationships and the related records.

Note: If your MDM administrator created a custom view for this purpose, the name of the view might be different.

User Interfaces

Use Data Director interfaces to manage relationships for a record.

Note: The Hierarchy view displays the relationship of records in the network layout.

Hierarchy View

The **Hierarchy** view displays all relationships for the open record. Use the **Hierarchy** view to view, create, and manage relationships and to view hierarchy relationships.

You can view the relationships for a record. You can show, hide, and filter relationships and records in the network layout. You can also export the relationships that appear in the network layout.

The following image shows a sample **Hierarchy** view for a record:

1. Network panel.
2. Relationship panel.

Network Panel

The network panel contains the canvas, which shows the relationships for the open record. You can expand, collapse, and rearrange nodes on the canvas. You can also add relationships and records.

Relationship Panel

The relationship panel shows the business entities and the relationships for the open record. You can filter records, add business entities and relationship fields.

Managing Relationships

You can view the network of relationships for a record. For example, the person business entity, Sam Dunn has a bank account with the organization business entity, Bank of America. The Informatica record Sam Dunn is related to Bank of America.

Use the **Hierarchy** view to view network relationships for a record. You can also create additional network relationships in the **Hierarchy** view.

Note: When you create or update relationships, the Hierarchy view does not immediately persist the relationships. All updates to relationships accumulate. You must click the Submit button to update relationships or the Discard button to discard the relationship updates.

Opening a Record in the Hierarchy View

Use the **Hierarchy** view to examine the hierarchy relationships between the open record and other records.

To open a record in the **Hierarchy** view, perform one of the following actions:

- In the **Data** tab, select one or more records and click **Open Hierarchy**.
- In the **Query** tab search results, open a record and click **Open Hierarchy**.
- In the record view that displays an opened record, click **Network**.

Viewing Records and Relationships

To view records and relationships, expand nodes on the canvas.

1. To expand a node, double-click on the node.
2. To filter the business entities or relationships in the network graph, click the **Filter** icon, and then add filters.

Adding a Relationship to a Record

To add a relationship, find the record to which you want to configure a relationship, and then define the relationship.

1. In the **Hierarchy** view, hover over a node on the canvas, and then click the **Add** icon.

   The **Search** window appears.
2. To find the record to which you want to create a relationship, perform the following actions:
   a. Run a search query to find a related record.
   b. In the search results, select a record or multiple records.
3. Click **Add to Canvas**.

   The **Add Relationship** panel appears.
4. Enter the relationship attributes and click **Save**.

   The relationship and record appear in the **Hierarchy** view.

   Note: You can use the undo or redo button in the canvas to apply or revert your changes.

Adding a New Record

Add a new record to the network layout.

1. In the **Hierarchy** view, click the **New Entity** button.

   The new entity window opens in the **Data** view.
2. Enter the new entity attributes and click **Save**.

   The new entity appears in the **Hierarchy** view.

Next, create a relationship to the record.

Creating a Relationship between Records

Add a relationship to an unconnected record in the network layout.

1. In the **Hierarchy** view, hover over a node, and then click the **Arrow** icon.
2. Drag and release the arrow on a record node to which you want to create a relationship.

   The **Edit Relationship** panel opens.
3. Optionally, if there are relationship fields, specify the relationship attributes.
4. Optionally, if timeline is enabled, configure the start date or end date.

Deleting a Relationship

Delete a relationship that you no longer need.

- In the **Hierarchy** view, hover over a node on the canvas, and then click the **Delete** icon.

Show or Hide a Network Relationship

You can hide or show a relationship on the canvas.

1. In the **Network** view, select a node in the canvas.
2. To hide a relationship, hover over a relationship, click the **More Actions** icon, and then select **Hide on Canvas**.

   The relationship disappears from the canvas.
3. To show a relationship, hover over a relationship, click the **More Actions** icon, and then select **Show on Canvas**.

   The relationship appears on the canvas.

Editing the Relationship Properties

Edit the relationship fields or the start or end date of the relationship.

1. In the **Hierarchy** view, to edit the properties of a relationship, select a node in the canvas.
2. In the relationships panel, hover over a relationship, click the **More Actions** icon, and then select **Edit**.

   The **Edit Relationship** panel opens.
3. Edit the relationship properties.
4. Optionally, you edit the **Relationship Start Date** and the **Relationship End Date** fields.

Exporting a Hierarchy

Export an image of the hierarchy.

1. In the **Hierarchy** view, click the **Export Graph** icon.
2. Save the PNG file.

CHAPTER 19

Investigating Timeline Data in the Effective Periods View

This chapter includes the following topics:

- Investigating Data Change Events for Effective Periods Overview, 146
- Opening the Effective Periods View, 147
- Viewing Data Change Events, 147

Investigating Data Change Events for Effective Periods Overview

A data change event is a change to data such as marital status, address, and phone number that is effective for a time period. Records can have multiple data change events. Use the **Effective Periods** view to investigate data change events of records.

The changes to data result in new effective periods or updates to an existing or a future effective period. You can use the **Effective Periods** view to view changes to data over a period of time. Also, you can add and remove data change events to and from the timeline. To manage the data change events, use the **Data** view.

Note: If timeline is enabled for base objects in the MDM Hub Store, the **Effective Periods** view is available for those base objects.

Example of Viewing Data Change Events

Your organization wants to renew and also offer a new insurance package to Adam Mary. To offer a suitable package, you need to investigate the data change events for the business entity Adam Mary.

You open the business entity for Adam Mary in the Effective Periods view. You specify a specific point in time for which you want to view the data change events for Adam Mary. The data change events that occurred up to the date you specify appear in the view. You select data change events and view the details. You find that in the past, Adam Mary was single and went by the name Alex Mary. You now have the information that will help you offer a suitable insurance package that will benefit Adam Mary and the organization.

Opening the Effective Periods View

Use the **Effective Periods** view to investigate data with effective dates.

Note: This view is available only if your administrator enabled the timeline feature.

To open a record in the **Effective Periods** view, perform the following action:

1. In a **Search** tab that displays the search results, select a record. Click **Open**.

   The record opens in the **Data** view.
2. Click the **Effective Periods** icon.

   The **Effective Periods** view opens.

Viewing Data Change Events

You can view the data change events for a record in the **Effective Periods** view.

1. Open a record in the **Effective Periods** view.

   The data change events of the record that occurred to the current date appear in the view.
2. Optionally, to identify the data change events that occurred up to a specific point in time other than the current date, use the calendar to select a date range using the **From:** and **To:** fields.

   The data change events that occurred up to the specified point in time for the record appear in descending order.

   The following image shows the data change events that occurred from July 01, 2019 up to January 03, 2020 for the record, Adam, Mary:

3. To select a time unit to group data events, click **Options** and choose a different timescale. For example, select **Y** to select a yearly timescale or select **M** to select a monthly timescale.

The following image shows the data events that occurred from the month of January 2019 up to July 2019:

4. To view the existing values of a data event for a specific date, click the event, and then click **Open for Effective Date**.

   The data event opens in the Data view and displays the existing values for the specified effective date.

   The following image shows the existing data event values for Adam, Mary that is effective on October 01, 2019:

CHAPTER 20

Importing Data

This chapter includes the following topics:

- Data Import Overview, 149
- Enabling Data Import in the MDM Hub Server, 150
- Importing the Data Import Template, 151
- Importing Source Data from a File, 151

Data Import Overview

An MDM administrator can permit authorized users to import data from a source file by using Data Director. You can import up to 10,000 records from a single source file.

Note: The data import feature is available only when you use Data Director with subject areas.

You import data to perform the following tasks:

- Create multiple primary, child, and grandchild records in a single bulk operation.
- Update multiple primary, child, and grandchild records in a single bulk operation.

To import data, you need the source file and a data import template. The data import template contains import profiles that map the data in the source file to columns in base object tables.

Data Director does not perform a match for duplicates operation for the data that you import.

Source File

You import data from a source file.

You can use one of the following file formats to contain your source data:

- `.csv`. A flat file with the data separated by a delimiter, such as a comma.
- `.xlsx`. A Microsoft Excel workbook with the data organized by columns in a spreadsheet.

Data Import Template

The data import template describes how the data in a source file maps to the columns in the base object tables in the Operational Reference Store. To create a data import template, you require familiarity with the structures of both the source file and the Operational Reference Store schema.

The data import template is an XML configuration file that contains the import profiles that Data Director uses to import data. An import profile defines the mapping between the structure of the data in the source file and the user-defined columns in a base object table. You define a separate import profile for each subject area.

In an import profile, you can specify the format for date and numeric fields. To specify the format, follow the Java `SimpleDateFormat` pattern for date fields and the Java `DecimalFormat` pattern for numeric fields.

The Resource Kit includes a sample template file and a sample source file. You can find the files in the following location: `<MDM Hub installation directory>/hub/resourcekit/samples/BDD/import`

Data Import Example

For example, a data steward wants to import customer records from a Microsoft Excel spreadsheet. In the spreadsheet, column 1 contains first names and column 2 contains last names.

The Operational Reference Store contains a base object table called C_PARTY that has columns for the first name and the last name. The IDD application defines a Person subject area.

The data steward asks the MDM administrator to create a data import template to match the organization of the data in the source file. In the template, the developer defines an import profile for the Person subject area with the following mappings:

- Map column 1 in the source file to the FIRST_NAME column in the C_PARTY base object.
- Map column 2 in the source file to the LAST_NAME column in the C_PARTY base object.

The following code sample shows the import profile for this example:

```
<?xml version="1.0" encoding="UTF-8"?>
<DataImportTemplateConfig xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
                          xsi:noNamespaceSchemaLocation="data-import-template.xsd">
    <ImportProfile name="IMPORT_SA_PERSON" displayName="Import profile for SA Person"
                subjectArea="Person" effectivePeriodStart="6" effectivePeriodEnd="7"
                effectiveDateFormat="dd.MM.yyyy">
  <PrimaryObject>
      <Column index="1">C_PARTY|FIRST_NAME</Column>
      <Column index="2">C_PARTY|LAST_NAME</Column>
                ...
     </PrimaryObject>
    </ImportProfile>
</DataImportTemplateConfig>
```

Enabling Data Import in the MDM Hub Server

To be able to import data, the **Data Import** option must appear in the **New** window. If the option appears, you can skip this step.

If the **Data Import** menu item is missing, ask the MDM administrator to enable the `cmx.dataview.enabled=true` property in the Hub Server properties file. For more information about Hub Server properties, see the *Multidomain MDM Configuration Guide*.

1. Stop the application server that hosts the Hub Server.

2. Navigate to the following location:

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

3. Open the `cmxserver.properties` file and set the following property: `cmx.dataview.enabled=true`
4. Save the file.
5. Start the application server.

Importing the Data Import Template

From the IDD Configuration Manager, an MDM administrator imports the data import template into the Data Director (IDD) application. The import process validates the template.

1. Log in to the IDD Configuration Manager.
2. Select the application.
3. Click **Import** > **Import to existing IDD application**.

   The **Import to existing IDD application** window opens.
4. From the **Configuration type** list, select **Data Import Template**.
5. Click **Browse** and select the XML file that contains the data import template.
6. Click **Import**.

   The import process validates the template. The **Validation Result** window opens and displays any errors.
7. If there are validation errors, resolve the errors in the template and then re-import the template.
8. In the **Validation Result** window, click **OK**.

Importing Source Data from a File

Use the import wizard to import the data from the source file to the Operational Reference Store. Data Director uses the Services Integration Framework Put API to import the data.

Important: You cannot roll back changes after you start the import process.

1. In the navigation bar, click **New**. Select **Data Import** and the type of subject area.

   Note: If you do not see the **Data Import** option, the IDD application is not configured to show the option and enable data import. Contact the MDM administrator.

   The **General** page of the import wizard opens.
2. If the template contains more than one import profile, select the import profile that you want to use from the list.
3. Click **Browse** and select the source file.
4. Click **Next**.

   The **Import Properties** page opens.

5. If the source file is a `.csv` file, specify the following properties:

Property	Description
Delimiters	Specify the character that represents the break between data values in the source file.
Code page	Specify the character encoding to use to interpret the data in the source file.
Text qualifier	If quotes appear around text strings, specify the type of quotes.

6. If the source file is an `.xlsx` file, from the **Worksheet name** list, select the worksheet that contains the data.
7. To control what data is imported from the source file, set the following properties:

Property	Description
Header	If you want to omit the first line or row because it contains headings rather than data, select **First line is header**.
Start value import at line	If you want to start the import somewhere other than the first line or row, enter the line number.

8. Review the preview of the data.
9. Click **Next**.

   The **Import Progress** page opens.
10. Click **Start**.

    The import process starts. When the import process ends, a message appears.

    Note: For worksheets, the process attempts to import rows that contain data, rows that are empty but formatted, and rows that are empty but appear between rows that contain data. Data Director rejects the empty rows without processing them.
11. Click **Finish**.

Part III: Tasks and Reviews

This part contains the following chapters:

- Tasks, 154
- Participating in Review Processes, 162
- Managing Tasks, 175
- Review Processes Reference, 186

CHAPTER 21

Tasks

This chapter includes the following topics:

- Tasks Overview, 154
- Task Manager, 154
- Potential Owners, 159
- Potential Task Actions, 160
- Finding Tasks, 160

Tasks Overview

A task is an activity that must be completed, such as reviewing an edited record, reviewing a merge proposal, or approving a new record. A workflow consists of multiple tasks linked together.

Tasks are generated by review processes. A review process is an automated business process. When a user adds, edits, merges, or unmerges records, the action can initiate a review process. A review process ensures that business managers or data stewards review and ultimately approve the data before it becomes master data.

A task includes the task details and the associated record that requires review. Tasks require you to take an action, such as accepting or rejecting edits to a record, merging records, or unmerging records. You can work on a task by claiming the task. You can manage tasks by performing task administration actions, such as assigning, releasing, or editing tasks. You can also manage tasks by taking an actions, such as accepting or rejecting.

Note: If you require different task types, triggers, or workflows, contact your MDM administrator. The MDM administrator can edit your task configurations.

Task Manager

Use the Task Manager to organize, claim, and resolve tasks that are generated by review processes. You can also perform task administration actions, such as assigning, releasing, or editing tasks.

To go to the Task Manager, in the navigation bar, click **Task Manager**. Alternatively, you can click the title of a task from the task inbox in the **Home** page. In this case, the Task Manager displays the selected task and the associated record.

The following image shows the Details View of the Task Manager with two tasks selected:

1. Selected list
2. Custom filters
3. Quick filters tabs
4. View
5. Search

The following table describes the user interface elements of the Task Manager:

User Interface Element	Description
Selected list	Performs task administration action on the selected tasks. To use the **Selected** list, select the check box beside multiple tasks. You can perform the following task administration actions: - Assign - Release - Edit - Claim - Task actions, such as Accept, Reject, or Disclaim **Note:** The available task administration actions depend on your selected tasks and the ActiveVOS workflows.
Custom filters	Filters the tasks based on the filters that you select. To use custom filters, click the **Filters** icon, and then add filters. You can use any combination of the following filters: - Business Entity - Hierarchies - Creation Date - Due Date - Owner - Priority - Task Title - Task Type

User Interface Element	Description
View	Shows the list of tasks in the Details View or List View. To toggle the views, use the **Details View** or **List View** icons in the Task Manager toolbar.
Quick filter tabs	Shows tasks based on the predefined filter criteria for the tab. Use one of the following filters: - My Assigned Tasks. Shows your open assigned tasks. - My Closed Tasks. Shows the tasks that you closed. - Available Tasks. Shows all unassigned tasks that are available to your user group. - All Assigned Tasks. Shows all the tasks that the users in your user group are assigned. - All Closed Tasks. Shows all the tasks that the users in your user group closed. - All Tasks. Shows all the closed, assigned, and unassigned tasks that are available to your user group. - Tasks Created by Me. Shows the tasks that you created.
Search	Searches the tasks for the search text.

Details View

The Details View displays a list of tasks and the record associated to the selected task. The tasks are filtered based on the quick filters. You can further filter the tasks by using custom filters and search terms.

The following image shows a task selected in the Details View in the Task Manager:

1. Task panel
2. Review panel

Task Panel

The task panel lists tasks based on the quick filter, custom filters, and search term. You can only view the task panel in the Details View.

When you open the Task Manager from the navigation bar, the task panel displays the tasks filtered by the first quick filter. When you open a task from the task inbox of the **Home** page, the task panel displays only the details of the selected task.

The following table lists the details that the task panel can display:

Task Detail	Description
Task Title	A link that displays a short description of the review task. To review the record and take action on the task, click the task title. The task opens in the Task Manager and displays the associated record in the review panel. If your role permits it, you can edit the record from this view before taking action on the task.
Type	Name of a people activity within the process.
Priority	Priority of the task. The task priority can be Low, Normal, or High. When generating tasks, the review process assigns the same priority to all tasks of the same type.
Task Status and Due Date	Status of the task and the date the task is due. Status of the task can be Open or Closed. When the task status is Open, you can view the record associated with the task. The review process calculates a default due date based on the task creation date plus a predefined time period. The due date of each task is prefixed with one of the following colored dots: - Green. Indicates that the task is not overdue. - Red. Indicates that the task is overdue. - Amber. Indicates that the task will be overdue in the next 24 hours.
Owner	Name of the signed-in user.
ID	Instance ID of the review process that generated the task.
Submitted Date and Creator	Name of the user who created the task, and the date on which the user created the task.

Note: If you require different task details, contact your MDM administrator. The MDM administrator can update the application to display the relevant task details.

Review Panel

Use the review panel to review the changed record, the comments added to the task, and the workflow diagram. The content of the review panel differs based on the type of change that was made to the record.

Note: If you are a task administrator, you might not have permissions to review the changes in the review panel.

The following table describes the elements in the review panel:

Element	Description
Record Details	Displays the details of the record associated with the task.
Comments	Displays a list of comments added to the task.
Workflow Diagram	Displays a graphical representation of the process flow associated with the task. You can view the workflow diagram only if you have the ActiveVOS abAdmin role assigned.
Task Details	Displays the task details in edit mode.
Actions	Actions that you can perform on the task. The possible actions depend on the task definitions in the review process. Sample actions can be Approve, Reject, and Disclaim.
More Actions	Additional actions that you can perform on the task.
Edit	Opens the record in edit mode.
Open	Opens the record in a separate tab.

List View

The List View displays a list of tasks filtered based on the quick filters. You can further filter the tasks by using custom filters and search terms.

The following image shows the Task Manager with a task selected in the List View:

The following table lists the details that the task list can display:

Task Detail	Description
Task Title	A link that displays a short description of the review task. To review the record and take action on the task, click the task title. The task opens in the Task Manager and displays the associated record in the review panel. If your role permits it, you can edit the record from this view before taking action on the task.
Type	Name of a people activity within the process.
Priority	Priority of the task. The task priority can be Low, Normal, or High. When generating tasks, the review process assigns the same priority to all tasks of the same type.
Task Status and Due Date	Status of the task and the date the task is due. Status of the task can be Open or Closed. When the task status is Open, you can view the record associated with the task. The review process calculates a default due date based on the task creation date plus a predefined time period. The due date of each task is prefixed with one of the following colored dots: - Green. Indicates that the task is not overdue. - Red. Indicates that the task is overdue. - Amber. Indicates that the task will be overdue in the next 24 hours.
Owner	Name of the signed-in user.
ID	Instance ID of the review process that generated the task.
Submitted Date and Creator	Name of the user who created the task, and the date on which the user created the task.

Note: If you require different task details, contact your MDM administrator. The MDM administrator can update the application to display the relevant task details.

Potential Owners

A potential owner is an user who belongs to a user group that can work on a task. The potential owners for a task depend on the selected task and your task definitions.

To work on a task, you claim the task. You can only claim tasks for which you are a potential owner. The **Available Tasks** tab of the Task Manager shows all the unassigned tasks for which you are a potential owner.

You can assign or reassign tasks to users who are potential owners of the task. When you assign or reassign multiple tasks, the possible assignees are the potential owners shared by all the selected tasks.

For example, you might want to reassign a review task for the John Smith record and a merge task for the Jane Smith record. The potential owners for review tasks are users assigned the Data Steward role, Manager role, or Senior Manager role. The potential owners for merge tasks are users assigned the Manager role and Senior Manager role. When reassigning these tasks together, the potential owners are users assigned the Manager role or Senior Manager role.

If you are assigning or reassigning a variety of tasks, there might be no potential owners shared by all the tasks. To increase the amount potential owners, manage tasks of the same task type. For example, you might want to manage merge tasks.

Note: If you and your colleagues require different user roles, task definitions, workflow triggers, or ActiveVOS workflows, contact your MDM administrator. The MDM administrator can change your configurations.

Potential Task Actions

A potential task action is an action that can be performed on a task. The potential task actions for a task depend on the selected task and your ActiveVOS workflows.

When you are working on multiple tasks, the potential task actions are the task actions shared by all the selected tasks. For example, you might be reviewing merge and unmerge tasks related to the John Smith record. The potential task actions for merge tasks are Merge, Cancel, and Disclaim. The potential task actions for unmerge tasks are Unmerge, Cancel, and Disclaim. When you take an action on these tasks together, the potential task actions are Cancel and Disclaim.

If you reviewing a variety of tasks, there might be no potential task actions shared by all the tasks. To increase the amount of task actions, review tasks of the same task type. For example, you might want to review and take an action on merge tasks.

Note: If you and your colleagues require different user roles, task definitions, workflow triggers, or ActiveVOS workflows, contact your MDM administrator. The MDM administrator can change your configurations.

Finding Tasks

You can use quick filters, custom filters, or search in the Task Manager to find tasks to work on or manage. The task panel updates as you select quick filters, add custom filters, and enter search terms.

For example, you might want to find high priority tasks related to the Peter Smith record. To find these tasks, you might use the **Available Tasks** quick filter, add a custom filter for priority, and search for Peter Smith.

The following image shows an example of how you might find a task:

Note: To use the **Search** box in the Task Manager, your Data Director application with business entities must be configured to use Elasticsearch. Contact your MDM administrator to enable Elasticsearch and configure searchable fields.

CHAPTER 22

Participating in Review Processes

This chapter includes the following topics:

- Participating in Review Processes Overview, 162
- Claiming a Task, 163
- Resolving a Task, 164
- Organizing Work on Tasks, 172

Participating in Review Processes Overview

When a business user changes data in Data Director, the change might trigger a review process. A review process is an automated business process workflow that notifies business managers and data stewards when changes are ready for their review.

Note: If the Task Manager is not enabled in your application, your user role might not have permission to participate in a review process. In some cases, the review process might not be required in your environment.

The type of review process depends on how the MDM administrator configured your application and whether the default review processes are in use. By default, there are different review processes for edits, merges, and unmerges.

Example of a Review Process for Edits

The staff in the Finance department use Data Director to keep supplier banking information up to date. A supplier representative contacts a Finance staff member and requests a change to the supplier's banking information.

In the Finance department, each Data Director user credential includes one of the following user roles:

- User. Staff members have permission to add and change records, but the changes must go through a review process before the master data is updated.
- Manager. A manager is a type of business user with additional permissions. A manager reviews changes, but cannot approve changes. If a manager agrees with a change, he escalates it to a senior manager.
- SrManger. A senior manager is a type of manger with additional permissions. A senior manager reviews changes and has the authority to approve them.

A staff member edits the supplier data as requested by the supplier representative. The following steps describe what happens during the review process.

1. A staff member changes the banking information of the supplier and saves the change. In the MDM Hub Store, the state of the supplier records changes from active to pending. The proposed edit is saved in a cross-reference record. The save action initiates the review process.
2. An instance of a review process starts and begins executing activities.
3. When the review process reaches the first people activity, it generates a task notification for managers. For example, in the default review process, the first people activity is Review No Approve. All managers with the role of Manager receive a task notification in the task inbox with the task type of Review No Approve.
4. A manager claims the task. The task is assigned to the manager and the task disappears from the task inboxes of the other managers.
5. The manager opens the supplier record, reviews the edit, and agrees with the edit. The manager resolves the task by clicking Escalate.
6. The review process marks the task as complete, and follows the Escalate flow to the next activity.
7. When the review process reaches the next people activity, the process generates a task notification for senior managers. For example, in the default review process, the second people activity is Final Review. All senior managers with the role of SrManager receive a task notification in the task inbox with the task type of Final Review.
8. A senior manager claims the task. The task is assigned to the senior manager and the task disappears from the task inboxes of the other senior managers.
9. The senior manager opens the supplier record, reviews the edit, and agrees with the edit. The senior manager resolves the task by clicking Approve.
10. The review process marks the task as complete, and follows the Approve flow. The review process notifies the MDM Hub that the change is approved, and then the review process ends. The MDM Hub changes the banking information in the supplier banking record. The supplier records change to the active state.

Claiming a Task

Multiple users can share the same reviewer role. To work on a task, you must claim the task to ensure that other users cannot work on the task while you work on it. Before you can claim a task, check for comments or attachments.

1. Click **Task Manager**.

   The task panel contains a list of tasks.
2. Click **Available Tasks**.

   The task panel lists all the unassigned tasks for your user group.
3. Select a task that you want to claim.

   The record appears in the review panel.
4. Optionally, review the task details, comments, attachments.
   a. Click the **Comments** tab, and then review the comments.
   b. Click **Task Details**.

c. Review the details of the task, such as the priority and due date.

d. Download attachments in the **File Attachments** section.

e. Click **Cancel**.

5. Click **Claim**.

The task panel updates. The task appears in the **My Assigned Tasks** tab. Your user name appears in the **Owner** field of the task.

Resolving a Task

You resolve a task by reviewing the new or changed record and then taking an action. The possible actions depend on the task definitions in the review process.

Reviewing an Edited Record

When you open a task to review an edited record, the fields that contain edited values are marked.

In the MDM Hub Store, the proposed edits are contained in a cross-reference record that is set to the pending state.

1. In the task inbox of the **Home** page, click a task that is a request to review an edited record.

   The record opens in the review panel of the Task Manager.

   Note: If you open an unassigned task, be sure to claim it before you start work.

2. Optionally, review the task details, comments, attachments.

   a. Click the **Comments** tab, and then review the comments.

   b. Click **Task Details**.

   c. Review the details of the task, such as the priority and due date.

   d. Download attachments in the **File Attachments** section.

   e. Click **Cancel**.

3. Look for highlighted fields and decide if the edits are valid.

4. If you see a typographical error or an incorrect value for which you know the correct value, click **Edit**, and edit the field.

   Note: The next step depends on whether you have enough information to resolve the task or if you think someone else should assess it.

5. To resolve the task, click an appropriate action button, or click **More Actions** and select one of the following actions:

Action	Description
Approve	If you agree with the edits and the task type permits you to approve changes, click **Approve**. The ActiveVOS® Server marks the related Final Review people activity as completed and performs the next activity in the process.

Action	Description
Escalate	If you agree with the edits, 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.
Reject	If you disagree with the one or more edits, click **Reject** and type an explanation in the Comment box. The ActiveVOS Server notifies the person who edited the record. **Note:** If a source system updates the rejected record, the record goes through the approval process again.
<Other>	If you see other options in the menu, then your organization uses a custom business process. If the purpose of the option is not clear and your role permits access to the ActiveVOS console, you can open the process to understand the workflow. Otherwise, contact the person who created the business process.

The task is closed.

6. To change the ownership of the task without resolving the task, click an appropriate action button, or click **More Actions** and select one of the following actions:

Action	Description
Reassign	To ask another person to review the proposed changes, click **Reassign**, select the user, and type an explanation in the Comment box. The task is reassigned to the selected person. **Note:** If this option is not available, click **Task Details** and select the user from the **Assignee** list.
Disclaim	To return the task to the pool of available tasks, click **Disclaim** and type an explanation in the Comment box. Someone with the same role needs to take action on the task. **Note:** If this option is not available, use the **Release** button.
Release	To return the task to the pool of available tasks, click **Release** and type an explanation in the Comment box. **Note:** The release action is a task administration action. To release multiple tasks, from the **Selected** list, select **Release**.

The task remains open, but is no longer assigned to you.

7. If prompted, add comments or attachments to provide additional information.

   Note: Whether you are prompted and required to add a comment or attachment depends on the Data Director configuration. A red line appears to indicate required fields.

Related Topics:

- "Claiming a Task" on page 163
- "Task Manager" on page 154

Reviewing a New Record

When you open a task to review a new record, all field values in the record need to be validated. If you are one reviewer in a progressive multiple step review process, validate only the fields that you are responsible for validating.

In the MDM Hub Store, the parent record and child records are in the pending state until the new record is approved.

1. In the task inbox of the **Home** page, click a task that is a request to review a new record.

   The record opens in the review panel of the Task Manager.

   Note: If you open an unassigned task, be sure to claim it before you start work.
2. Optionally, review the task details, comments, attachments.
   a. Click the **Comments** tab, and then review the comments.
   b. Click **Task Details**.
   c. Review the details of the task, such as the priority and due date.
   d. Download attachments in the **File Attachments** section.
   e. Click **Cancel**.
3. Determine if the values in the record meet your business requirements.

   Note: The next step depends on whether you have enough information to resolve the task or you think someone else should assess it.
4. To resolve the task, click an appropriate action button, or click **More Actions** and select one of the following actions:

Action	Description
Approve	If you think the record is acceptable, and the task type permits you to approve it, click **Approve**. The ActiveVOS Server marks the related Final Review people activity as completed and performs the next activity in the process.
Escalate	If you think the record is acceptable, 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.
Reject	If you disagree with the one or more values, click **Reject** and type an explanation in the Comment box. The ActiveVOS Server notifies the person who added the record. **Note:** If a source system updates the rejected record, the record goes through the approval process again.
<Other>	If you see other options in the menu, then your organization uses a custom business process. If the purpose of the option is not clear and your role permits access to the ActiveVOS console, you can open the process to understand the workflow. Otherwise, contact the person who created the business process.

   The task is closed.

5. To change the ownership of the task without resolving the task, click an appropriate action button, or click **More Actions** and select one of the following actions:

Action	Description
Reassign	To ask another person to review the proposed changes, click **Reassign**, select the user, and type an explanation in the Comment box. The task is reassigned to the selected person. **Note:** If this option is not available, click **Task Details** and select the user from the **Assignee** list.
Disclaim	To return the task to the pool of available tasks, click **Disclaim** and type an explanation in the Comment box. Someone with the same role needs to take action on the task. **Note:** If this option is not available, use the **Release** button.
Release	To return the task to the pool of available tasks, click **Release** and type an explanation in the Comment box. **Note:** The release action is a task administration action. To release multiple tasks, from the **Selected** list, select **Release**.

   The task remains open, but is no longer assigned to you.

6. If prompted, add comments or attachments to provide additional information.

   Note: Whether you are prompted and required to add a comment or attachment depends on the Data Director configuration. A red line appears to indicate required fields.

Related Topics:

- "Claiming a Task" on page 163
- "Task Manager" on page 154

Reviewing a Merge Task

When you open a task to review a merge task, the primary record appears beside the records that are selected for the merge.

1. In the task inbox of the **Home** page, click a task that is a request to review a merge proposal.

   The record opens in the review panel of the Task Manager.

   Note: If you open an unassigned task, be sure to claim it before you start work.

2. Optionally, review the task details, comments, attachments.
   a. Click the **Comments** tab, and then review the comments.
   b. Click **Task Details**.
   c. Review the details of the task, such as the priority and due date.
   d. Download attachments in the **File Attachments** section.
   e. Click **Cancel**.

3. Review the merge preview and determine if the merge is valid. The fields that appear in the merge preview are highlighted.

   Note: The next step depends on whether you have enough information to resolve the task or if you think someone else should assess it.

4. If required, make changes to the proposed merge task.
   a. To change the proposed merge task, perform any of the following tasks:

Task	Procedure
Add records that you want to merge.	Click **Add Candidate**. You can search for records and add the records to the view.
Remove records that you do not want to merge.	From the **Actions** menu, select an option: - **Remove Candidate**. Removes a manually added record from the review panel. - **Not a Match**. Removes a system matched record from the review panel and dissociates it as a match of the target record.
Finalize the best version of the truth.	Select the field with the correct value or enter the correct value in the **Merge Preview** column.

   b. Click **Update**.

      The merge task is updated.

5. To resolve the task, select one of the following actions:

Action	Description
Merge	If you agree with the merge proposal and the task type permits you to approve changes, click **Merge**. The ActiveVOS Server marks the related Merge people activity as completed and performs the next activity in the process.
Cancel	If you disagree with the merge proposal, click **Cancel** and type an explanation in the Comment box. The ActiveVOS Server notifies the person who proposed the merge.
<Other>	If you see other options in the menu, then your organization uses a custom business process. If the purpose of the option is not clear and your role permits access to the ActiveVOS console, you can open the process to understand the workflow. Otherwise, contact the person who created the business process.

   The task is closed.

6. To change the ownership of the task without resolving the task, click an appropriate action button, or click **More Actions** and select one of the following actions:

Action	Description
Reassign	To ask another person to review the proposed changes, click **Reassign**, select the user, and type an explanation in the Comment box. The task is reassigned to the selected person. **Note:** If this option is not available, click **Task Details** and select the user from the **Assignee** list.
Disclaim	To return the task to the pool of available tasks, click **Disclaim** and type an explanation in the Comment box. Someone with the same role needs to take action on the task. **Note:** If this option is not available, use the **Release** button.

Action	Description
Release	To return the task to the pool of available tasks, click **Release** and type an explanation in the Comment box. **Note:** The release action is a task administration action. To release multiple tasks, from the **Selected** list, select **Release**.

The task remains open, but is no longer assigned to you.

7. If prompted, add comments or attachments to provide additional information.

   Note: Whether you are prompted and required to add a comment or attachment depends on the Data Director configuration. A red line appears to indicate required fields.

Related Topics:

- "Claiming a Task" on page 163
- "Task Manager" on page 154
- "Resolving Duplicate Records" on page 76

Reviewing an Unmerge Task

When you open a task to review an unmerge tasks, a preview shows the result of the unmerge.

1. In the task inbox of the **Home** page, click a task that is a request to review an unmerge proposal.

   The unmerge preview for the record appears in the review panel of the Task Manager.

   Note: If you open an unassigned task, be sure to claim it before you start work.
2. Optionally, review the task details, comments, attachments.
   a. Click the **Comments** tab, and then review the comments.
   b. Click **Task Details**.
   c. Review the details of the task, such as the priority and due date.
   d. Download attachments in the **File Attachments** section.
   e. Click **Cancel**.
3. Review the unmerge preview and determine if the unmerge is warranted. The fields that appear in the preview are highlighted.

   Note: The next step depends on whether you have enough information to resolve the task or if you think someone else should assess it.
4. To resolve the task, click an appropriate action button, or click **More Actions** and select one of the following actions:

Action	Description
Unmerge	If you agree with the unmerge proposal and the task type permits you to approve changes, click **Unmerge**. The ActiveVOS Server marks the related Unmerge people activity as completed and performs the next activity in the process.
Cancel	If you disagree with the unmerge proposal, click **Cancel** and type an explanation in the Comment box. The ActiveVOS Server notifies the person who proposed the unmerge.

Action	Description
<Other>	If you see other options in the menu, then your organization uses a custom business process. If the purpose of the option is not clear and your role permits access to the ActiveVOS console, you can open the process to understand the workflow. Otherwise, contact the person who created the business process.

The task is closed.

5. To change the ownership of the task without resolving the task, click an appropriate action button, or click **More Actions** and select one of the following actions:

Action	Description
Reassign	To ask another person to review the proposed changes, click **Reassign**, select the user, and type an explanation in the Comment box. The task is reassigned to the selected person. **Note:** If this option is not available, click **Task Details** and select the user from the **Assignee** list.
Disclaim	To return the task to the pool of available tasks, click **Disclaim** and type an explanation in the Comment box. Someone with the same role needs to take action on the task. **Note:** If this option is not available, use the **Release** button.
Release	To return the task to the pool of available tasks, click **Release** and type an explanation in the Comment box. **Note:** The release action is a task administration action. To release multiple tasks, from the **Selected** list, select **Release**.

The task remains open, but is no longer assigned to you.

6. If prompted, add comments or attachments to provide additional information.

   Note: Whether you are prompted and required to add a comment or attachment depends on the Data Director configuration. A red line appears to indicate required fields.

Related Topics:

- "Claiming a Task" on page 163
- "Task Manager" on page 154

Reviewing a Hierarchy Task

Review the proposed changes to a hierarchy by marking the changes that you want to accept and reject, and then performing a task action.

1. In the Task Manager, select a task that is a request to review an edited hierarchy.

   The record opens in the review panel of the Task Manager.

   Note: If you open an unassigned task, be sure to claim it before you start work.

2. Optionally, review the task details, comments, attachments.
   a. Click the **Comments** tab, and then review the comments.
   b. Click **Task Details**.
   c. Review the details of the task, such as the priority and due date.
   d. Download attachments in the **File Attachments** section.

e. Click **Cancel**.

3. Review the changes in the hierarchy.
4. To accept or reject the proposed changes, click the appropriate icon beside the change:

Option	Description
Accept icon	Accept the proposed change to the hierarchy.
Reject icon	Reject the proposed change to the hierarchy.

By default, all changes are mark as accepted.

5. To resolve the task, click an appropriate action button, or click **More Actions** and select one of the following actions:

Option	Description
Approve	If you think the proposed changes that you accepted and rejected are acceptable, click **Approve**. The ActiveVOS Server marks the related people activity as completed and performs the next activity in the process.
Cancel	If you think the proposed changes are no longer needed, click **Cancel**. The ActiveVOS Server closes the task.
Reject	If you want to send the proposed changes back for further review, click **Reject**. The ActiveVOS Server marks the related people activity as completed and sends the task back to the requester. The task displays the proposed changes that you marked as accept and reject.
Release	To return the task to the pool of unassigned tasks, click **Release** and type an explanation in the **Comment** box. Someone with the same role needs to take action on the task.

Reviewing a Rejected Hierarchy Task

Review the proposed changes that were marked as accept and reject in the rejected hierarchy task.

1. In the Task Manager, select a task that is a request to review an edited hierarchy.

   The record opens in the review panel of the Task Manager.

   Note: If you open an unassigned task, be sure to claim it before you start work.
2. Optionally, review the task details, comments, attachments.
   a. Click the **Comments** tab, and then review the comments.
   b. Click **Task Details**.
   c. Review the details of the task, such as the priority and due date.
   d. Download attachments in the **File Attachments** section.
   e. Click **Cancel**.
3. Review the changes that were marked as accept and reject in the hierarchy.

4. To resolve the task, perform one of the following actions:

Option	Description
Submit	If you think the proposed changes are acceptable, click **Submit**.
Cancel	If you think the proposed changes are no longer needed, click **Cancel**. The ActiveVOS Server closes the task.
Open	If you want to modify the proposed changes, click **Open**. Propose changes to the hierarchy and submit your changes for review.

Organizing Work on Tasks

When you have a long list of tasks, you can organize tasks by sorting and filtering the list, changing task properties, and assigning tasks to others.

For example, you might want to work on the tasks that have the highest priority or on the tasks that are due soonest. After you filter the list of tasks, you might find tasks that need a higher priority or that can be postponed. You can edit the task properties to better reflect the urgency within the business to resolve tasks. And, if you have the authority to assign tasks to managers, you can assign the task to a manager from the task properties.

Related Topics:

- "Task Manager" on page 154

Editing a Task

As you work with tasks, you might decide that some task properties need to be changed. For example, if changes are made to the record of an important client, you might want to increase the priority of the review task. Or, if you plan to be away and want to finish a set of tasks before you leave, you can change the due dates for the tasks to represent a date before your planned absence.

1. Click **Task Manager**.

   The task panel contains a list of tasks.
2. In the task panel, select the task you want to edit.
3. In the review panel, click **Task Details**.

   The following image shows the **Task Details** dialog box:

4. Edit one or more of the following fields to change the task properties:

Field	Description
Task Title	Enter a title that is more meaningful to you. A good title includes at least the name of the record and the change that initiated the review.
Priority	Select a priority that reflects the urgency within the business to resolve this change.
Due Date	Select a due date that reflects the urgency within the business to resolve the change.
Assignee	Reassign this task to someone else.
File Attachment	Attach files to provide additional information about the task. Attachments appear in the **Task Details** dialog box. **Note:** The **File Attachment** field is available only if the task supports attachments.
Add Comment	Add comments to explain edits to the task properties and to track questions and answers about the task. Comments appear in the **Comments** tab.
Assign Back to Pool	Return the task to the pool of unassigned tasks so that other users can claim the task. **Note:** The **Assign Back to Pool** button is available only if the task belongs to another user.

5. Click **Save**.

Assigning Your Task to Another User

If the **Assignee** list is enabled in the **Edit Task** dialog box, you can reassign tasks.

Note: If you want to enable reassignments, contact your MDM administrator. The MDM administrator must implement a business process management (BPM) adapter that supports reassignments.

1. Click **Task Manager**.

   The task panel contains a list of tasks.
2. Select **My Assigned Tasks**.

   The task panel lists your assigned tasks.
3. In the task panel, select the task that you want to assign to another user.

   The record appears in the review panel.
4. To provide additional information about the task, click **Task Details**, and then add a comment or a file attachment.

   Note: If you do not have the options for comments or attachments, contact your MDM administrator to request that they enable comments and attachments.
5. To assign the task, select the user from the **Assignee** list.
6. Click **Save**.

Assigning a Task Back to the Pool

When a user in your user group is not available, you can send the user's tasks to the pool of unassigned tasks so that other users can claim them. The option to assign the tasks back to the pool is available only if the task belongs to another user.

1. Click **Task Manager**.

   The task panel contains a list of tasks.
2. In the task panel, select the task that you want to send to the pool.

   The record appears in the review panel
3. In the review panel, click **Task Details**.
4. Click **Assign Back to Pool**.

Disclaiming a Task

If you claim or are assigned a task that you feel would be better handled by someone else, you can disclaim the task. Disclaimed tasks return to the pool of unassigned tasks.

1. Click **Task Manager**.

   The task panel contains a list of tasks.
2. In the task panel, select an assigned task that you want to disclaim.

   The record appears in the review panel
3. In the review panel, click **More Actions** > **Disclaim**.
4. If prompted, add comments or attachments to provide additional information.

   Note: Whether you are prompted and required to add a comment or attachment depends on the Data Director configuration. A red line appears to indicate required fields.

CHAPTER 23

Managing Tasks

This chapter includes the following topics:

- Managing Tasks Overview, 175
- Claiming Tasks, 176
- Resolving Tasks, 176
- Organizing Work on Tasks, 183

Managing Tasks Overview

You can manage tasks associated to business entity records by performing task administration actions. You can claim, assign, release, or edit tasks. Or, you can take an action on tasks, such as accept, reject, or disclaim. For example, you might want to release tasks claimed by an user on vacation or edit the priority of tasks related to the John Smith record.

The task administration actions that you can perform depend on your role and task definitions. Users assigned the Task Administrator role can manage all tasks, while other users can only manage tasks available to their user role.

If you are assigned multiple roles, you might be able to perform more task administration actions. For example, if you are assigned the Data Steward role and the Task Administrator role. You can manage tasks available to Data Stewards, and you can also manage all tasks as a task administrator.

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: - Assign - Release - Edit
Other user roles	Users can perform the following task administration actions on tasks available to their user role: - Claim Users can perform the following task administration actions on tasks based on whether they are assigned the tasks: - Release - Edit - Task actions, such as Accept, Reject, or Disclaim **Note:** The available task actions depend on the selected tasks and your ActiveVOS workflows.

Note: If you and your colleagues require different user roles, task definitions, workflow triggers, or ActiveVOS workflows, contact your MDM administrator. The MDM administrator can change your configurations.

Claiming Tasks

Claim tasks that you want to work on. This ensures that other users cannot work on the tasks while you work on them.

1. Click **Task Manager**.

   The task panel contains a list of tasks.
2. Click **Available Tasks**.

   The task panel lists all the unassigned tasks for your user group.
3. Optionally, to find tasks to manage, use custom filters or search.
   - Click the **Filters** icon, and then add filters.
   - In the search box, enter a search term, and then click the search icon.

   For more information, see "Finding Tasks" on page 160.
4. Select a task and review the task details, comments, and attachments.
   a. Click the **Comments** tab, and then review the comments.
   b. Click **Task Details**.
   c. Review the details of the task, such as the priority and due date.
   d. Download attachments in the **File Attachments** section.
   e. Click **Cancel**.
5. Repeat step 4 to find additional tasks that you want to claim.
6. Select the check box beside the tasks that you want to manage.

   The **Selected** list appears.
7. From the **Selected** list, select **Claim**.

The task panel updates. The tasks appear in the **My Assigned Tasks** tab. Your user name appears in the **Owner** field of the tasks.

Resolving Tasks

You can resolve tasks by reviewing tasks and then taking an action. The possible actions that you can perform depends on the selected tasks and your ActiveVOS workflows.

When you resolve multiple tasks, you can only take an action that is shared by all the selected tasks. To increase the amount of possible actions that you can perform, review tasks of the same task type.

For more information about the possible actions, see "Potential Task Actions" on page 160.

Reviewing Edited Records

Review edited records and then resolve the tasks by taking an action. If you cannot resolve the tasks, disclaim the tasks to return the tasks to the pool of available tasks. Or, if you know another user who can resolve the tasks, reassign the tasks to that user.

Before you begin, claim the tasks that you want to work on.

When you review tasks for edited tasks, the fields that contain edited values are marked.

1. Click **Task Manager**.

   The task panel contains a list of tasks.

2. Click **My Assigned Tasks**.

   The task panel lists your assigned tasks.

3. Optionally, to find tasks to manage, use custom filters or search.

   - Click the **Filters** icon, and then add filters.
   - In the search box, enter a search term, and then click the search icon.

   For more information, see "Finding Tasks" on page 160.

4. Select a task and review the edited record in the review panel.

   a. Look for highlighted fields and decide if the edits are valid.

   b. If you see a typographical error or an incorrect value for which you know the correct value, click **Edit**, and edit the field.

5. Repeat step 4 for each edited record that you want to review.

6. Select the check box beside the tasks for which you want to take an action.
   For example, you select the check box beside the tasks with edits that you want to approve.

   The **Selected** list appears.

7. From the **Selected** list, click **More Actions...**.

   The **More Actions...** dialog box appears.

8. To resolve the tasks, select one of the following actions:

Option	Description
Approve	If you agree with the edits and the task types permits you to approve changes, click **Approve**. The ActiveVOS® Server marks the related Final Review people activity as completed and performs the next activity in the process.
Escalate	If you agree with the edits, but the task types 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.
Reject	If you agree with the edits, but the task types 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.
<Other>	If you see other options, then your organization uses a custom business process. If the purpose of the option is not clear and your role permits access to the ActiveVOS console, you can open the process to understand the workflow. Otherwise, contact your MDM administrator.

   The ta

   Note: Only the potential task actions shared by all the tasks appear. For more information, see "Potential Task Actions" on page 160.

sks are closed.

9. To change the ownership of the tasks without resolving the tasks, select one of the following actions:

Action	Description
Reassign	To ask another person to review the proposed changes, click **Reassign**, select the user, and type an explanation in the Comment box. The tasks are reassigned to the selected person. **Note:** If this option is not available, close the **More Actions...** dialog box. From the **More Actions...**, select **Edit**, and then select the user from the **Assignee** list.
Disclaim	To return the tasks to the pool of available tasks, click **Disclaim** and type an explanation in the Comment box. Users with the same role can take action on the tasks.

Note: Only the potential task actions shared by all the tasks appear. For more information, see "Potential Task Actions" on page 160.

The tasks remain open, but are no longer assigned to you.

10. If prompted, add comments or attachments to provide additional information.

Note: Whether you are prompted and required to add a comment or attachment depends on the Data Director configuration. A red line appears to indicate required fields.

The task panel updates. Based on your changes, some tasks might not appear in the task panel.

Reviewing New Records

Review new records and then resolve the tasks by taking an action. If you cannot resolve the tasks, disclaim the tasks to return the tasks to the pool of available tasks. Or, if you know another user who can resolve the tasks, reassign the tasks to that user.

Before you begin, claim the tasks that you want to work on.

When you review tasks for new records, all field values in the new record need to be validated.

1. Click **Task Manager**.

   The task panel contains a list of tasks.

2. Click **My Assigned Tasks**.

   The task panel lists your assigned tasks.

3. Optionally, to find tasks to manage, use custom filters or search.

   - Click the **Filters** icon, and then add filters.
   - In the search box, enter a search term, and then click the search icon.

   For more information, see "Finding Tasks" on page 160.

4. Select a task and determine if the values in the record meet your business requirements.
5. Repeat step 4 for each new record that you want to review.
6. Select the check box beside the tasks for which you want to take an action.
   For example, you select the check box beside the tasks for new records that you want to approve.

   The **Selected** list appears.

7. From the **Selected** list, click **More Actions...**.

   The **More Actions...** dialog box appears.

8. To resolve the tasks, select one of the following actions:

Note: Only the potential task actions shared by all the tasks appear. For more information, see "Potential Task Actions" on page 160.

Option	Description
Approve	If you think the records are acceptable, and the task types permits you to approve it, click **Approve**. The ActiveVOS Server marks the related Final Review people activity as completed and performs the next activity in the process.
Escalate	If you think the records are acceptable, but the task types do 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.
Reject	If you disagree with the one or more values in the records, click **Reject** and type an explanation in the Comment box. The ActiveVOS Server notifies the person who added the record. **Note:** If a source system updates the rejected record, the record goes through the approval process again.
<Other>	If you see other options, then your organization uses a custom business process. If the purpose of the option is not clear and your role permits access to the ActiveVOS console, you can open the process to understand the workflow. Otherwise, contact your MDM administrator.

The tasks are closed.

9. To change the ownership of the tasks without resolving the tasks, select one of the following actions:

Action	Description
Reassign	To ask another person to review the proposed changes, click **Reassign**, select the user, and type an explanation in the Comment box. The tasks are reassigned to the selected person. **Note:** If this option is not available, close the **More Actions...** dialog box. From the **More Actions...**, select **Edit**, and then select the user from the **Assignee** list.
Disclaim	To return the tasks to the pool of available tasks, click **Disclaim** and type an explanation in the Comment box. Users with the same role can take action on the tasks.

Note: Only the potential task actions shared by all the tasks appear. For more information, see "Potential Task Actions" on page 160.

The tasks remain open, but are no longer assigned to you.

10. If prompted, add comments or attachments to provide additional information.

Note: Whether you are prompted and required to add a comment or attachment depends on the Data Director configuration. A red line appears to indicate required fields.

The task panel updates. Based on your changes, some tasks might not appear in the task panel.

Reviewing Merge Tasks

Review merge tasks and then resolve the tasks by taking an action. If you cannot resolve the tasks, disclaim the tasks to return the tasks to the pool of available tasks. Or, if you know another user who can resolve the tasks, reassign the tasks to that user.

Before you begin, claim the tasks that you want to work on.

When you review a merge task, the primary record appears beside the records that are selected for the merge.

1. Click **Task Manager**.

   The task panel contains a list of tasks.

2. Click **My Assigned Tasks**.

   The task panel lists your assigned tasks.

3. Optionally, to find tasks to manage, use custom filters or search.

   - Click the **Filters** icon, and then add filters.
   - In the search box, enter a search term, and then click the search icon.

   For more information, see "Finding Tasks" on page 160.

4. Select a merge task, and then review the merge task and determine if the merge is valid. The fields that appear in the merge preview are highlighted.

5. If required, make changes to the proposed merge task.

   a. To change the proposed merge task, perform any of the following tasks:

Task	Procedure
Add records that you want to merge.	Click **Add Candidate**. You can search for records and add the records to the view.
Remove records that you do not want to merge.	From the **Actions** menu, select an option: - **Remove Candidate**. Removes a manually added record from the review panel. - **Not a Match**. Removes a system matched record from the review panel and dissociates it as a match of the target record.
Finalize the best version of the truth.	Select the field with the correct value or enter the correct value in the **Merge Preview** column.

   b. Click **Update**.

      The merge task is updated.

6. Repeat steps 4 through 5 for each merge task that you want to review.

7. Select the check box beside the tasks for which you want to take an action.
   For example, you select the check box beside the merge tasks that you want to approve.

   The **Selected** list appears.

8. From the **Selected** list, click **More Actions...**.

   The **More Actions...** dialog box appears.

9. To resolve the tasks, select one of the following actions:

   Note: Only the potential task actions shared by all the tasks appear. For more information, see "Potential Task Actions" on page 160.

Option	Description
Merge	If you agree with the merge proposals and the task types permits you to approve changes, click **Merge**. The ActiveVOS Server marks the related Merge people activity as completed and performs the next activity in the process.

Option	Description
Cancel	If you disagree with the merge proposals, click **Cancel** and type an explanation in the Comment box. The ActiveVOS Server notifies the person who proposed the merge.
<Other>	If you see other options, then your organization uses a custom business process. If the purpose of the option is not clear and your role permits access to the ActiveVOS console, you can open the process to understand the workflow. Otherwise, contact your MDM administrator.

The tasks are closed.

10. To change the ownership of the tasks without resolving the tasks, select one of the following actions:

Action	Description
Reassign	To ask another person to review the proposed changes, click **Reassign**, select the user, and type an explanation in the Comment box. The tasks are reassigned to the selected person. **Note:** If this option is not available, close the **More Actions...** dialog box. From the **More Actions...**, select **Edit**, and then select the user from the **Assignee** list.
Disclaim	To return the tasks to the pool of available tasks, click **Disclaim** and type an explanation in the Comment box. Users with the same role can take action on the tasks.

Note: Only the potential task actions shared by all the tasks appear. For more information, see "Potential Task Actions" on page 160.

The tasks remain open, but are no longer assigned to you.

11. If prompted, add comments or attachments to provide additional information.

Note: Whether you are prompted and required to add a comment or attachment depends on the Data Director configuration. A red line appears to indicate required fields.

The task panel updates. Based on your changes, some tasks might not appear in the task panel.

Reviewing Unmerge Tasks

Review unmerge tasks and then resolve the tasks by taking an action. If you cannot resolve the tasks, disclaim the tasks to return the tasks to the pool of available tasks. Or, if you know another user who can resolve the tasks, reassign the tasks to that user.

Before you begin, claim the tasks that you want to work on.

When you review an unmerge task, a preview shows the result of the unmerge.

1. Click **Task Manager**.

   The task panel contains a list of tasks.

2. Click **My Assigned Tasks**.

   The task panel lists your assigned tasks.

3. Optionally, to find tasks to manage, use custom filters or search.

   - Click the **Filters** icon, and then add filters.
   - In the search box, enter a search term, and then click the search icon.

   For more information, see "Finding Tasks" on page 160.

4. Select an unmerge task, and then review the unmerge preview and determine if the unmerge is warranted. The fields that appear in the preview are highlighted.

5. Repeat step 4 for each unmerge task that you want to review.
6. Select the check box beside the tasks for which you want to take an action.
   For example, you select the check box beside the unmerge tasks that you want to approve.

   The **Selected** list appears.
7. From the **Selected** list, click **More Actions...**.

   The **More Actions...** dialog box appears.
8. To resolve the tasks, select one of the following actions:

   Note: Only the potential task actions shared by all the tasks appear. For more information, see "Potential Task Actions" on page 160.

Option	Description
Unmerge	If you agree with the unmerge proposals and the task types permits you to approve changes, click **Unmerge**. The ActiveVOS Server marks the related Unmerge people activity as completed and performs the next activity in the process.
Cancel	If you disagree with the unmerge proposals, click **Cancel** and type an explanation in the Comment box. The ActiveVOS Server notifies the person who proposed the unmerge.
<Other>	If you see other options, then your organization uses a custom business process. If the purpose of the option is not clear and your role permits access to the ActiveVOS console, you can open the process to understand the workflow. Otherwise, contact your MDM administrator.

   The tasks are closed.
9. To change the ownership of the tasks without resolving the tasks, select one of the following actions:

Action	Description
Reassign	To ask another person to review the proposed changes, click **Reassign**, select the user, and type an explanation in the Comment box. The tasks are reassigned to the selected person. **Note:** If this option is not available, close the **More Actions...** dialog box. From the **More Actions...**, select **Edit**, and then select the user from the **Assignee** list.
Disclaim	To return the tasks to the pool of available tasks, click **Disclaim** and type an explanation in the Comment box. Users with the same role can take action on the tasks.

   Note: Only the potential task actions shared by all the tasks appear. For more information, see "Potential Task Actions" on page 160.

   The tasks remain open, but are no longer assigned to you.
10. If prompted, add comments or attachments to provide additional information.

    Note: Whether you are prompted and required to add a comment or attachment depends on the Data Director configuration. A red line appears to indicate required fields.

The task panel updates. Based on your changes, some tasks might not appear in the task panel.

Organizing Work on Tasks

You can organize tasks by assigning tasks to users, reassigning tasks to other users, or releasing tasks to the pool of available tasks. Also, you can edit the details of tasks, including the task title, due date, priority, comments, and attachments.

For example, you might want to reassign tasks that are assigned to an user on vacation to another user. Or, you might want to change the priority of tasks related to John Smith to high priority.

Assigning Tasks

Assign tasks to users who can work on the tasks. For example, you might want to assign tasks related to the John Smith record to a user with knowledge about the record.

1. Click **Task Manager**.

   The task panel contains a list of tasks.
2. Click **Available Tasks**.

   The task panel lists all the unassigned tasks for your user group.
3. Optionally, to find tasks to manage, use custom filters or search.
   - Click the **Filters** icon, and then add filters.
   - In the search box, enter a search term, and then click the search icon.

   For more information, see "Finding Tasks" on page 160.
4. Select the check box beside the tasks that you want to manage.

   The **Selected** list appears.
5. From the **Selected** list, select **Assign**.

   The **Assign** dialog box appears.
6. From the **Assignee** list, select a user who you want to assign the tasks.

   Note: The **Assignee** list contains the potential owners shared by all selected tasks. For more information, see "Potential Owners" on page 159.
7. Optionally, add a comment.
8. Click **Assign**.

The task panel updates. The tasks appear in the **My Open Tasks** tab for the assigned user. The user name of the assignee appears in the **Owner** field of the tasks.

Reassigning Tasks

Reassign tasks to other users who can work on the tasks. If you are a task administration, you might want to reassign tasks claimed by an user that is unable to work on the tasks. You can only reassign tasks to users who are potential owners of the tasks.

1. Click **Task Manager**.

   The task panel contains a list of tasks.
2. To reassign your assigned tasks, click **My Assigned Tasks**.

   The task panel lists all your assigned tasks.
3. To reassign assigned tasks, click **All Assigned Tasks**.

The task panel lists all assigned tasks.

4. Optionally, to find tasks to manage, use custom filters or search.
   - Click the **Filters** icon, and then add filters.
   - In the search box, enter a search term, and then click the search icon.

   For more information, see "Finding Tasks" on page 160.
5. Select the check box beside the tasks that you want to manage.

   The **Selected** list appears.
6. From the **Selected** list, select **Assign**.

   The **Assign** dialog box appears.
7. From the **Assignee** list, select a user to which you want to reassign the tasks.

   Note: The **Assignee** list contains the potential owners shared by all selected tasks. For more information, see "Potential Owners" on page 159.
8. Optionally, add a comment.
9. Click **Assign**.

The task panel updates. The reassigned tasks appear in the **My Open Tasks** tab for the assigned user. The user name of the assignee appears in the **Owner** field of the tasks.

Releasing Tasks

Release assigned tasks to the pool of available tasks so other users can work on the tasks. For example, you might want to release tasks that you cannot complete before the due date. If you are a task administrator, you might want to release all tasks assigned to an user on vacation.

1. Click **Task Manager**.

   The task panel contains a list of tasks.
2. To release your tasks, click **My Assigned Tasks**.

   The task panel lists all your assigned tasks.
3. To release all assigned tasks, click **All Assigned Tasks**.

   The task panel lists all assigned tasks.
4. Optionally, to find tasks to manage, use custom filters or search.
   - Click the **Filters** icon, and then add filters.
   - In the search box, enter a search term, and then click the search icon.

   For more information, see "Finding Tasks" on page 160.
5. Select the check box beside the tasks that you want to manage.

   The **Selected** list appears.
6. From the **Selected** list, select **Release**.

   The **Release** dialog box appears.
7. Optionally, add a comment.
8. Click **Claim**.

The task panel updates. The tasks appear in the **Available Tasks** tab for users who are potential owners of the tasks. Those users can claim and work on the tasks.

Editing Task Details

You can edit the details of tasks, such as increasing the priority or changing the due date.

1. Click **Task Manager**.

   The task panel contains a list of tasks.
2. To edit your assigned tasks, select **My Assigned Tasks**.

   The task panel lists your assigned tasks.
3. To edit all available tasks, select **All Available Tasks**.

   The task panel lists all available tasks.
4. Optionally, to find tasks to manage, use custom filters or search.
   - Click the **Filters** icon, and then add filters.
   - In the search box, enter a search term, and then click the search icon.

   For more information, see "Finding Tasks" on page 160.
5. From the **Selected** list, select **Edit**.

   The **Edit** dialog box appears.
6. Edit one or more of the following fields to change the task properties of the selected tasks:

Field	Description
Task Title	Enter a title that is more meaningful to you. A good title includes at least the name of the record and the change that initiated the review.
Priority	Select a priority that reflects the urgency within the business to resolve this change.
Due Date	Select a due date that reflects the urgency within the business to resolve the change.
Assignee	Reassign this task to someone else. **Note:** Only potential owners shared by all the selected tasks appear. For more information, see "Potential Owners" on page 159.
File Attachment	Attach files to provide additional information about the task. Attachments appear in the **Task Details** dialog box. **Note:** The **File Attachment** field is available only if the task supports attachments.
Add Comment	Add comments to explain edits to the task properties and to track questions and answers about the task. Comments appear in the **Comments** tab.

7. Click **Save**.

The task panel updates. You can view the edited task details in the **Task Details** dialog box for each task. Based on your changes, some tasks might not appear in the task panel.

CHAPTER 24

Review Processes Reference

This chapter includes the following topics:

- Review Processes Reference Overview, 186
- Update With Approval Workflow, 187
- One Step Approval Workflow, 187
- Two Step Approval Workflow, 188
- Merge Workflow, 188
- Unmerge Workflow, 188

Review Processes Reference Overview

A review process is an automated business process. When a user adds, edits, merges, or unmerges records, the action can initiate a review process. A review process ensures that business managers or data stewards review and ultimately approve the data before it becomes master data.

Your user role determines whether a change to the master data triggers a review. For example, if your user role permits you to add or edit data but not approve changes, then when you save an edit or merge records, the action triggers a review process.

Multidomain MDM ships with the following default review processes:

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

Note: If you see different process names or task types in your task inbox, someone in your organization has changed the review processes or created custom processes.

The following sections describe the purpose of each review process and identify the people activities within each process. To view an entire process, open the process in the ActiveVOS Console.

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.

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