



Informatica® Multidomain MDM
10.3 HotFix 2

Release Guide

Informatica Multidomain MDM Release Guide
10.3 HotFix 2
December 2019

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Preface

The *Multidomain MDM Release Guide* lists new features and enhancements, behavior changes between versions, and tasks you might need to perform after you upgrade from a previous version. The guide is written for users of Informatica® Multidomain MDM. This guide assumes that you have knowledge of the features for which you are responsible.

Informatica Resources

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

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Informatica Product Availability Matrices

Product Availability Matrices (PAMs) indicate the versions of the operating systems, databases, and types of data sources and targets that a product release supports. You can browse the Informatica PAMs at <https://network.informatica.com/community/informatica-network/product-availability-matrices>.

Informatica Velocity

Informatica Velocity is a collection of tips and best practices developed by Informatica Professional Services and based on real-world experiences from hundreds of data management projects. Informatica Velocity represents the collective knowledge of Informatica consultants who work with organizations around the world to plan, develop, deploy, and maintain successful data management solutions.

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You can contact a Global Support Center by telephone or through the Informatica Network.

To find your local Informatica Global Customer Support telephone number, visit the Informatica website at the following link:

<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.

Part I: Version 10.3

This part contains the following chapters:

- [New Features and Changes \(10.3 HotFix 2\), 14](#)
- [New Features and Changes \(10.3 HotFix 1\), 18](#)
- [New Features and Changes \(10.3\), 25](#)

CHAPTER 1

New Features and Changes (10.3 HotFix 2)

This chapter includes the following topics:

- [New Features \(10.3 HotFix 2\), 14](#)
- [Changes \(10.3 HotFix 2\), 15](#)

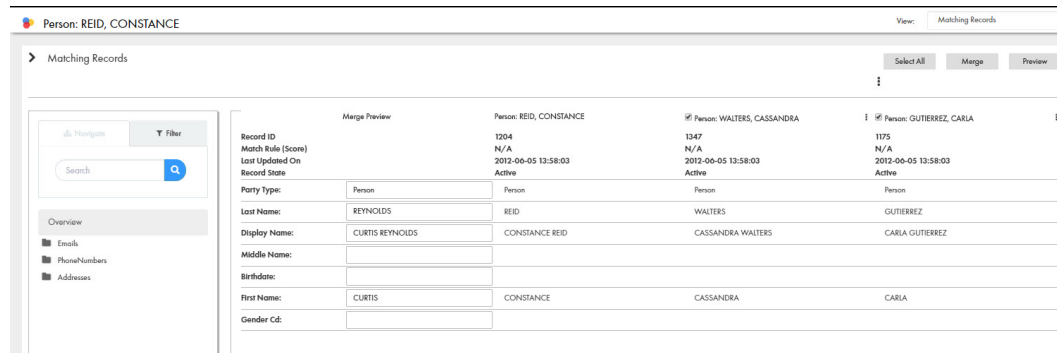
New Features (10.3 HotFix 2)

This section describes new features in version 10.3 HotFix 2.

Select Multiple Records in the Matching Records View

In the **Matching Records** view, you can click the **Select All** button to select multiple records.

The following image shows the **Matching Records** view with the **Select All** button:

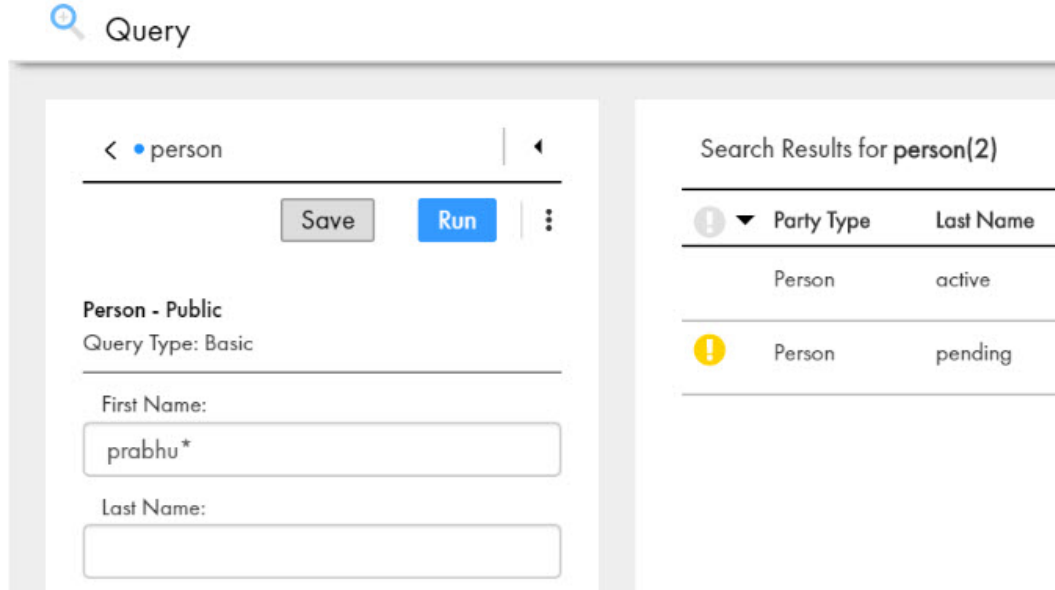


Previously, in the **Matching Records** view, you had to select one record at a time.

Pending Records Icon in the Search Results

When you perform a search in Data Director (Entity 360), the search results display active and pending records. An icon displays next to all pending records. You can sort all pending records.

The following image shows the pending record icon next to records with pending status:



Previously, Data Director (Entity 360) displayed all active and pending records together and you could not sort records.

Informatica Address Doctor Version 5.16

Informatica MDM Multidomain Edition supports Informatica AddressDoctor version 5.16.

Changes (10.3 HotFix 2)

Enhanced Read Database Cleanse Function

The Read Database cleanse function supports concurrent data mapping when the process server is configured to run in a multi-threaded environment.

Query Search with Special Characters

You can perform a query search with special characters. The search results display all records that contain special characters. Use the special characters at the beginning, end or in between the query search string. For example, if you want to search for James, you can specify Ja\$@! or !\$%ES.

SSL Connection to Oracle Databases

Connections to the Oracle database are secured with a Secure Socket Layer (SSL).

In the `c_repos_database.connect_url` table, configure the following connection URL:

```
jdbc:oracle:thin:@(DESCRIPTION=(ADDRESS=(PROTOCOL=TCPS)(HOST=localhost)(PORT=2484))
(CONNECT_DATA=(SERVICE_NAME=orcl)))
```

In previous releases, you configured the `c_repos_database.connect_url` table, with the following connection URL:

```
jdbc:oracle:thin:@localhost:1521:orcl
```

Smart Search Stores Latest Search Entity

You can use smart search to filter records and select a business entity in a user login session. When you login to a new user session, the search results display the filter value of the previous login session.

Java Virtual Machine Settings

To connect Data Director and Entity 360 applications to the MDM Hub Server, configure the Java Virtual Machine (JVM) by setting the following Java options:

Fully Qualified Domain Name

If your environment uses the HTTPS communication protocol and the security certificate is issued to a Fully Qualified Domain Name (FQDN), configure the Java Virtual Machine (JVM) by setting the following Java option:

-De360.mdm.host

Specify the FQDN displayed in the security certificate.

Connection Protocol

For the Entity 360 application to connect to the MDM Hub Server, configure the Java Virtual Machine (JVM) by setting the following Java options:

-De360.connection.channel

Specifies the communication protocol the Entity 360 application uses to communicate with the MDM Hub Server. Specify whether the communication protocol to use is EJB, HTTP or HTTPS. Default is - `De360.connection.channel=http`. Ensure you set the supporting application server host property - `De360.connection.channel=http`. Ensure you set the supporting application server host property - `De360.mdm.host` and application server port property - `De360.mdm.port` to the default values.

You must set the following application server host and port Java options:

-De360.mdm.host

Entity 360 application server host. Specify the host used by the Java option.

-De360.mdm.port

Entity 360 application server port. To avoid conflicts, it is recommended to use the default port for the JVM.

For more information about JVM settings, see the *Informatica Multidomain MDM Version 10.3 HotFix 2 Installation Guide* and *Informatica Multidomain MDM Version 10.3 HotFix 2 Upgrade Guide*.

Data Encryption

Effective in version 10.3 HotFix 2, encrypted match columns can securely participate in fuzzy match and fuzzy search operations. Configure the match fields required for these operations in the data encryption properties file.

Previously, encrypted match columns did not participate in fuzzy match operations.

For more information, see the *Informatica Multidomain MDM Version 10.3 HotFix 2 Configuration Guide*.

CHAPTER 2

New Features and Changes (10.3 HotFix 1)

This chapter includes the following topics:

- [Oracle Database 18c Support, 18](#)
- [Red Hat JBoss Enterprise Application Platform 7.1 Support, 18](#)
- [IBM WebSphere Version 9.0 Fix Pack 10 Support, 19](#)
- [Red Hat OpenJDK 8 Support for JBoss, 19](#)
- [Informatica ActiveVOS Version 9.2.4.5 Support, 19](#)
- [Date Format, 19](#)
- [Copy a Business Entity or Business Entity View, 20](#)
- [Custom Task Action Messages, 21](#)
- [Provisioning Tool Performance Enhancement, 21](#)
- [Message Trigger Enhancement, 21](#)
- [Save Handler User Exit Enhancement, 21](#)
- [Hub Server Properties, 22](#)
- [Global Properties, 22](#)
- [Java Virtual Machine Settings for Smart Search with Solr \(for JBoss\), 23](#)
- [Changes \(10.3 HotFix1\), 23](#)

Oracle Database 18c Support

Oracle Database 18c is supported for Multidomain MDM 10.3 HotFix 1.

Red Hat JBoss Enterprise Application Platform 7.1 Support

You must deploy Multidomain MDM on Red Hat JBoss Enterprise Application Platform (EAP) 7.1. The end of maintenance support by Red Hat for JBoss EAP 6.x is June 2019. Informatica recommends that you upgrade

to JBoss EAP 7.1 and Multidomain MDM 10.3 HotFix 1 for continued support, bug fixes, and security patches from Red Hat. Multidomain MDM 10.3 HotFix 1 does not support JBoss EAP versions earlier than 7.1.

IBM WebSphere Version 9.0 Fix Pack 10 Support

You must deploy Multidomain MDM on IBM WebSphere Application Server Version 9.0 Fix Pack 10. Multidomain MDM 10.3 HotFix 1 does not support WebSphere versions earlier than 9.0 Fix Pack 10.

Red Hat OpenJDK 8 Support for JBoss

You can run Multidomain MDM 10.3 HotFix 1 on Red Hat OpenJDK 8 in a JBoss application server environment.

Read the Product Availability Matrix (PAM) for information about the supported platforms for Red Hat OpenJDK 8. You can access PAMs at

<https://network.informatica.com/community/informatica-network/product-availability-matrices>.

Informatica ActiveVOS Version 9.2.4.5 Support

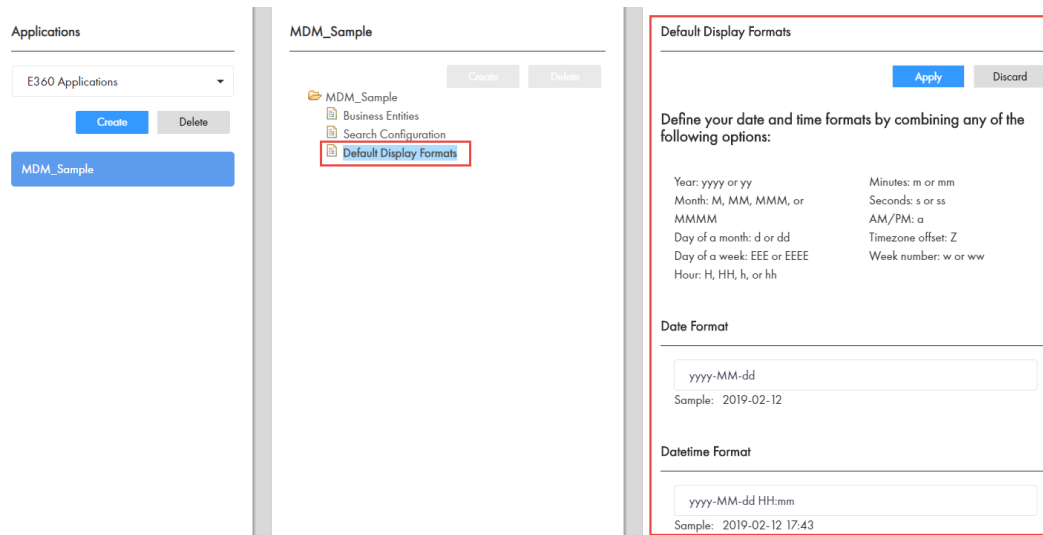
Informatica ActiveVOS 9.2.4.5 is supported for Multidomain MDM 10.3 HotFix 1.

Date Format

You can use the Application Editor in the Provisioning tool to configure the default date format used by the Data Director application. Also, you can configure the display format as Date or Datetime for specific date

fields in the business entity and reference entity model. The configured date formats appear in all the record views.

The following image shows the date format fields in **Default Display Formats** panel of the **Applications** page:



Previously, to configure the default date format, you created a `bundleE360.properties` file that contained the default date format property.

For more information, see the *Informatica Multidomain MDM Version 10.3 HotFix 1 Provisioning Tool Guide*.

Copy a Business Entity or Business Entity View

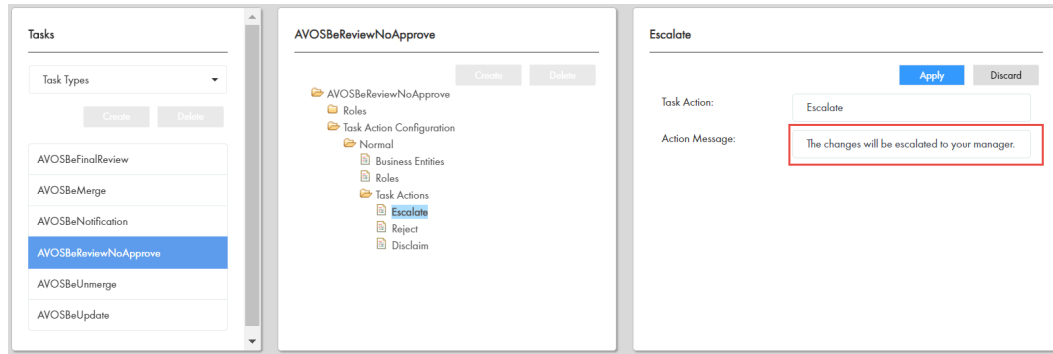
You can copy a business entity or a business entity view and save it with a unique name. The copy inherits the entire model from the original business entity or business entity view. In the copy, you can add, edit, and remove fields from the model as required.

For more information about copying business entities and business entity views, see the *Informatica Multidomain MDM Version 10.3 HotFix 1 Provisioning Tool Guide*.

Custom Task Action Messages

You can customize the messages that appear when tasks are triggered in Data Director. You can also localize the messages.

The following image shows the **Action Message** field with a custom message:



For more information about configuring and localizing custom task action messages, see the *Multidomain MDM Version 10.3 HotFix 1 Provisioning Tool Guide*.

Provisioning Tool Performance Enhancement

The performance of the Provisioning tool is enhanced by improving the response time. Changes made in the Provisioning tool are saved and published within a minute.

Message Trigger Enhancement

When a cross-reference record is restored, the MDM Hub can trigger a message to be placed in the JMS message queues. To set up message triggers for an event that restores a cross-reference record, use the Schema Manager. In the **Events** section of the **Message Triggers** page, select **Restore**, which is the new event included in the section.

For more information, see the *MDM Multidomain Edition Version 10.3 HotFix 1 Configuration Guide*.

Save Handler User Exit Enhancement

In Save Handler user exits, you can use the `getChangedChildren` method to return modified or added child or grandchild records in a specified base object.

The user exit returns all records that were added, deleted, or updated. You can select the type of changes returned by the user exit. For example, the user exit can return a combination of removed and updated children records.

Hub Server Properties

You can use the following Hub Server properties to control the run-time behavior of the MDM Hub.

Configure the Hub Server properties in the `cmxserver.properties` file.

com.siperian.dsapp.mde.common.idd2cocs.Many2ManyChild.name.version

Must be added manually. During an upgrade from a version before 10.3, when MDM administrators generate the business entity schema, the uppercase characters in some child-level subject area names change to lowercase. To preserve the case, set the property to `10.2`.

cmx.server.put.autopopulate.missing.user.columns.bo.list

Must be added manually. Set the property when the Nullable property is disabled for the base object columns.

When the Nullable property is disabled for columns, if a record is updated in Data Director or during a SIF PUT operation, a cross-reference record is created with values only for the updated fields. All the other cross-reference record fields, including the fields that must not be null, have null values. During the best version of the truth (BVT) calculation for the record, null values can be the winner for fields that must not be null, and an error occurs.

To ensure that the BVT calculation takes into account the fields that must not be null, set the property value to a comma-separated list of the names of base objects that have columns with the Nullable property disabled. When the property is set, the MDM Hub updates the null values in the cross-reference record with values from the associated base object. This ensures that during BVT calculation, null values are not the winner for fields that must not be null.

cmx.server.enrichcopager.thread_pool

Must be added manually. Sets the number of threads the EnrichCoPager property uses from the thread pool to perform parallel ReadCO operations. Default is 30. If you set the number of threads to 1, the property is disabled.

cmx.server.enrichcopager.min_rec_for_multithreading

Must be added manually. Sets the minimum number of records to return before the EnrichCoPager property uses multithreading. Default is 2.

For more information about setting Hub Server properties, see the *Informatica Multidomain MDM Version 10.3 HotFix 1 Configuration Guide*.

Global Properties

You can use the following global property to control the run-time behavior of the Informatica Data Director application:

deleteMovedRelInExplorerView

Determines whether to delete the old relationship when you create a new relationship in Hierarchy Manager explorer view. Set to `false` to give the relationship an end date.

For more information, see the *Informatica Multidomain MDM Version 10.3 HotFix 1 Informatica Data Director Implementation Guide*.

Java Virtual Machine Settings for Smart Search with Solr (for JBoss)

If you want to configure smart search with Solr for the MDM Hub that you deploy in a JBoss environment, configure the Java Virtual Machine (JVM) by setting the Java options for smart search.

Set the following Java options for smart search:

-Dmdm.ps.zk.node

Required if you want to use smart search with Solr. Set this Java option on the JVM for the Process Server that is intended to be the ZooKeeper server. Set to `true`.

-Dmdm.ps.search.node

Required if you want to use smart search with Solr. Set this Java option on the JVMs for the Process Servers that will have search processing enabled and function as Solr servers. Set it to `true`.

-Dsearch.service.port

Required if you want to use smart search with Solr. Required if you want to install multiple Process Servers on the same machine but on different JVMs and enable smart search on all the Process Servers on the machine. This Java option specifies the port used by the JVM for the search service. To avoid port conflicts, use the default port for the JVM of one Process Server, and set this Java option to the relevant port numbers for the JVMs of the remaining Process Servers.

For more information about JVM settings, see the *Informatica Multidomain MDM Version 10.3 HotFix 1 Installation Guide* and *Informatica Multidomain MDM Version 10.3 HotFix 1 Upgrade Guide*.

Changes (10.3 HotFix1)

Search with Apache Solr is Deprecated

Effective in version 10.3, the search functionality in Data Director that used Apache Solr is deprecated. Informatica will drop support for search with Solr in a future release. You can use search with Elasticsearch to find records in Data Director. Elasticsearch is an open-source, full-text search engine.

You must configure search with Elasticsearch, which is packaged with the MDM Hub installer. You can set up Elasticsearch as a single node cluster or as a multi-node cluster to provide distributed indexing and search. For a smooth transition, the APIs that were supported for search with Apache Solr are supported for search with Elasticsearch.

Task Inbox

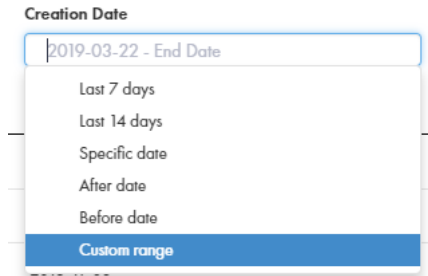
Effective in version 10.3 HotFix 1, you can filter tasks in the task inbox based on creation date.

You can select one of the following creation date options from the list:

- Last 7 days
- Last 14 days
- Specific date

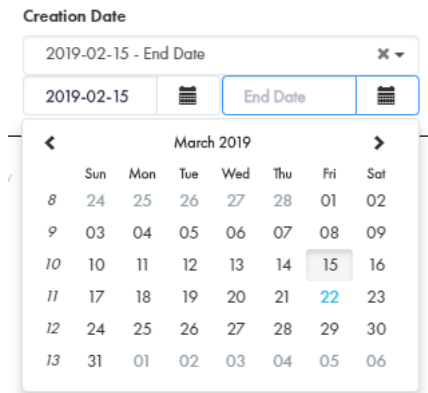
- After date
- Before date
- Custom range

The following image shows the **Creation Date** filter options:



To filter tasks based on a date range, use the **Custom range** option.

The following image shows the **Custom range** filter option with the start of the range set to 2019-02-15:



Previously, the filter option for the Creation Date column was disabled.

Related Records Component

Effective in version 10.3 HotFix 1, in the Provisioning tool, a single Related Records component replaces both the Related Records (Edit Mode) and Related Records (View Mode) components. In the new Related Records component, you can configure whether records open in view mode or edit mode. You can also configure whether the relationship direction is honored.

Previously, you had to choose which component to use. Only the Related Records (Edit Mode) component was configurable. The Related Records (View Mode) component was the default, but it was not configurable and it ignored the relationship direction.

For more information about configuring the Related Records component, see the *Multidomain MDM Version 10.3 HotFix 1 Provisioning Tool Guide*.

Resource Kit Change

In the Resource Kit, the AssignUsersToDatabase script supports uppercase characters in user names.

Previously, the tool enforced lowercase characters only.

CHAPTER 3

New Features and Changes (10.3)

This chapter includes the following topics:

- [MDM Multidomain Edition is now Multidomain MDM, 25](#)
- [New Features for Data Director with Business Entities, 25](#)
- [New Features for Data Director with Subject Areas, 33](#)
- [Hub Server Properties Introduced in Version 10.3, 34](#)
- [Process Server Properties Introduced in Version 10.3, 35](#)
- [Global Properties, 36](#)
- [Changes \(10.3\), 36](#)

MDM Multidomain Edition is now Multidomain MDM

Effective in version 10.3, the product name has changed to *Informatica Multidomain MDM*.

New Features for Data Director with Business Entities

This release of Multidomain MDM includes the following new features for Data Director with business entities.

Search and Queries for Business Entities

You can configure Data Director to allow users to find business entity records either by using queries or search. Also, you can configure the use of queries or search for manually adding records to record views. Use the Provisioning tool to configure Data Director.

Queries

You can now use queries to perform the following tasks:

- Use queries to find records. You can create, save, and edit queries.
- Use wildcards to search for records.

- Perform a fuzzy search or an exact search. You can configure whether the results of a query are case sensitive or not.
- Configure a basic query or an extended query to find records that contain the query values. The basic queries use simple text comparisons to find records. Extended queries use matching logic and match-enabled attributes to find records.
- Export the current or all the columns in a query result to a CSV file.
- Customize the query results to display the columns that you want to view.
- Use the Provisioning tool to configure the views that you want to use for displaying the query results.

For more information, see the *Multidomain MDM Version 10.3 Data Director User Guide* and the *Multidomain MDM Version 10.3 Provisioning Tool Guide*.

Search

You can now use search to perform the following tasks:

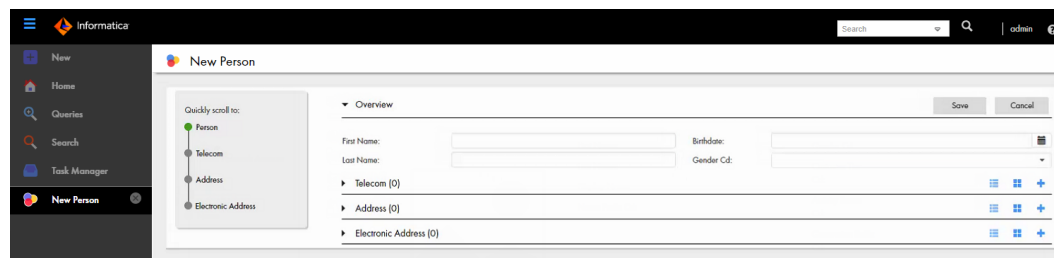
- Use wildcards to search for records.
- Perform a fuzzy search or an exact search. The results of an exact search are not case sensitive.
- Export the current or all the columns in a search result to a CSV file.
- Customize the search results to display the columns that you want to view.
- Use the Provisioning tool to configure the views that you want to use for displaying the search results.

For more information, see the *Multidomain MDM Version 10.3 Data Director User Guide* and the *Multidomain MDM Version 10.3 Provisioning Tool Guide*.

Updated Look and Feel for Data Director

Data Director uses a navigation bar with vertical tabs. You can now use the **New** tab to add records. The task inbox, Task Manager, and record views are streamlined.

The following image shows the updated look and feel of the navigation bar with an entity tab open:

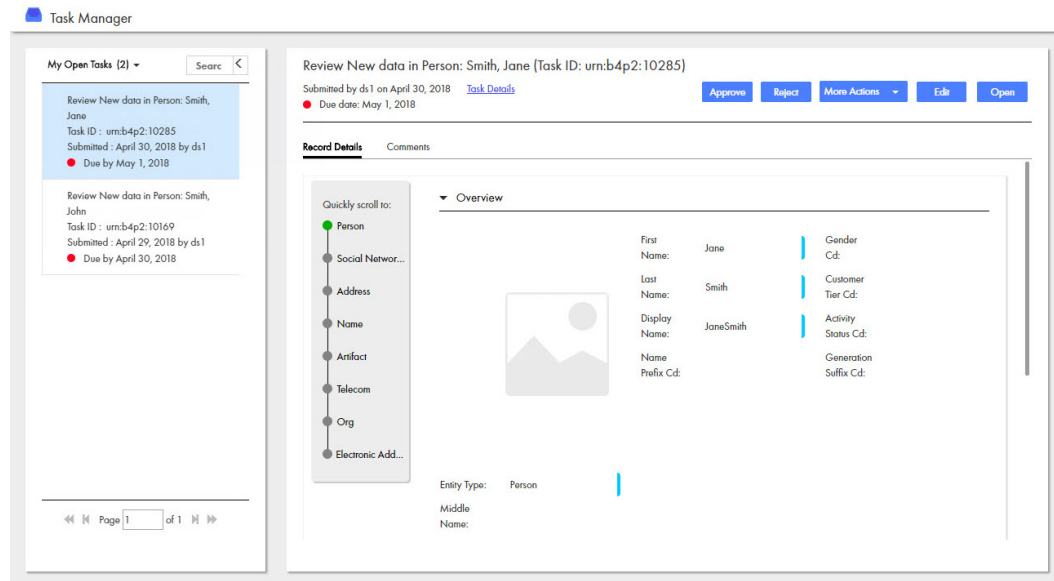


Previously, Data Director had horizontal tabs. You used the **Create** menu in the application header.

Task Manager

The task panel and the review panel appear side-by-side so you can easily manage and view tasks. Also, the **Comments** tab appears in the review panel. You can view all comments about the task in the **Comments** tab.

The following image shows the updated look and feel of the Task Manager:

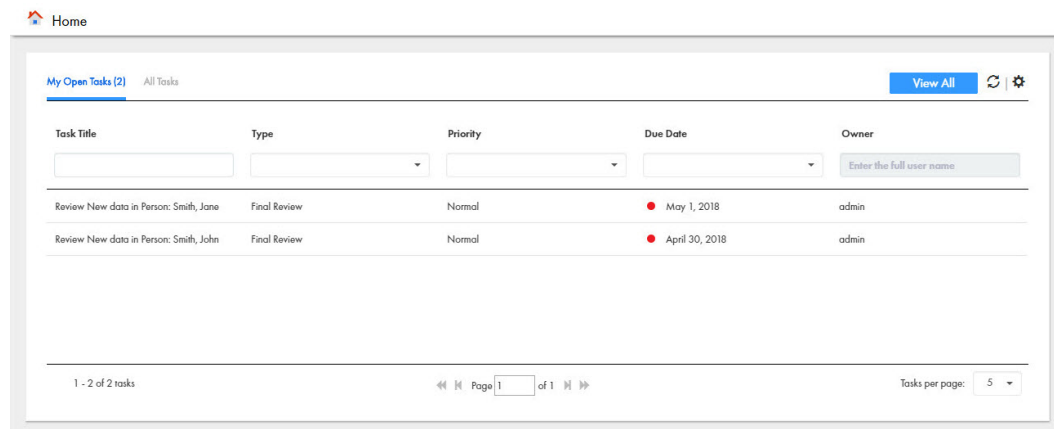


Previously, the task panel appeared above the review panel. Also, comments appeared in the **All Comments** box in the **Task Details** dialog box.

Task Inbox

The task inbox is streamlined so you can filter and find tasks to work on.

The following image shows the updated look and feel of the task inbox:



For more information, see the *Informatica Multidomain MDM Version 10.3 Data Director User Guide*.

Localization of Data Director

In Data Director with business entities, you can display elements of the user interface in any supported language. As the MDM administrator, you can localize metadata, labels, error messages, and lookup tables. Data Director supports the following languages:

- English US
- English UK
- Portuguese

- French
- Spanish
- German
- Russian
- Japanese
- Mandarin
- Korean

Localizing Metadata

You can localize metadata elements of the Data Director user interface to display the language of your choice. Examples of metadata elements are menu names, field names, tasks and business entity names.

To localize metadata, in the Provisioning tool, download the *besMetadata.properties* zip file and edit the *bundle.properties* file for the language that you want to display. For example, for French localization, edit the *bundle_fr.properties* file. To localize task actions and task types, you must manually edit the values in the *besMetadata.properties* file by using the *taskaction.<action name>* format.

Localizing Label and Error Messages

You can localize labels and error messages of Data Director to display the language of your choice. To localize labels and error messages, you must run the *LocalizationSetup* script from the Resources Toolkit. The script is part of the MDM Hub installation package.

For more information about localizing labels and error messages, see the *Multidomain MDM Version 10.3 Provisioning Tool Guide*.

Localizing Lookup Tables

All lookup tables support localization. For example, the Gender, Country, and State lookup tables are mapped to the corresponding Gender, Country and State localization lookup tables.

For more information about localizing metadata, labels, error messages, and lookup tables, see the *Multidomain MDM Version 10.3 Provisioning Tool Guide*.

Record View Layouts

You can design custom record view layouts to replace the **Matching Records** view, the **Hierarchy** view, and the **History** view. You can also replace the layouts for review tasks, merge tasks, and unmerge tasks.

To design a custom view, use the Provisioning tool. Create a record view layout, and specify a name, purpose, and users who can access the custom view. Then add components to the layout to build the custom view.

In Data Director, the custom views appear in the **View** list. The custom views for tasks appear in the Task Manager in Data Director.

In the custom record view for merging duplicate records and viewing record history, you can choose to display either the full business entity or a business entity view, which is a subset of fields from the business entity. Previously, these record views were default views and displayed the full business entity.

You can choose to configure the basic **Matching Records** view or the advanced **Matching Records** view for a business entity. The basic **Matching Records** view lets you merge only the duplicate parent records. The advanced **Matching Records** view lets you merge the duplicate parent and child records. You can configure one or both the **Matching Records** views for your application.

Previously, you could only design custom record view layouts to replace the default entity view.

For more information about designing record view layouts, see the *Informatica Multidomain MDM Version 10.3 Provisioning Tool Guide*.

Hiding the Default Record Views

In the Provisioning tool, you can configure a Data Director application to hide the default record views in the **View** list.

The default record views are enabled by default so that users can view and manage records in Data Director. After you design custom views, you can choose to hide the default record views to reduce confusion for your end users.

Previously, you could not hide the default record views in Data Director.

Note: When you upgrade Multidomain MDM, the **View** list contains the default record views by default.

For more information about the default record views, see the *Informatica Multidomain MDM Version 10.3 Provisioning Tool Guide*.

Similar Records Component

You can use the Similar Records component to search for similar records when you create new records. You can decide whether you want to use search or queries to display records in the Similar Records component. You can configure exact or fuzzy queries.

Previously, you could only configure search with the Similar Records component.

For more information about the Similar Records component, see *Multidomain MDM Version 10.3 Provisioning Tool Guide*.

Matching Records View

The **Matching Records** view is enhanced to make it easier for you to identify and resolving duplicate records.

The following enhancements are made to the Matching Records view:

You can now perform the following tasks:

- Resolve duplicates using the basic **Matching Records** view or the advanced **Matching Records** view. The basic **Matching Records** view lets you merge only the duplicate parent records. The advanced **Matching Records** view lets you merge the duplicate parent and child records. You can configure Data Director to have one or both the **Matching Records** views.
- Show information that might help you in determining duplicates, such as trust scores, and display only the records that you select for merging.
- View the match rule details for the matching records.
- Use breadcrumbs that are added to the matching records to identify the parent of the records to be merged.
- If duplicate records are missing from the **Matching Records** view, you can manually add the records to the view. To find the records that you want to add, use search or queries.
- Remove records that you do not want to merge or are not duplicates.
- Queue records for an automatic merge.
- Finalize the best version of the truth by promoting or overriding the values that you think are correct.
- Before you merge the records, you can preview the result of merging the records.

For more information, see the *Multidomain MDM Version 10.3 Data Director User Guide*.

Cross-reference Records View

The **Cross-reference Records** view includes breadcrumbs to help you identify the parent records of a cross-reference record. The last record listed in the breadcrumbs trail is the immediate parent of the record that is open in the **Cross-reference Records** view.

Task Manager

If you have the ActiveVOS abAdmin role assigned, you can see the workflow details of a task in the Task Manager. You can also assign a task that belong to another user of your user group back to the pool so that a different user can claim it.

For more information about the Task Manager, see the *Multidomain MDM Version 10.3 Data Director User Guide*.

Merge Tasks

The reviewer of a merge task can update the merge task during the review process.

In the review panel, reviewers can perform the following actions that are possible in the **Matching Records** view:

- Add duplicate records that you want to merge.
- Remove records that you do not want to merge.
- Finalize the best version of the truth by selecting fields with correct values or by entering the correct values.

For more information about merge tasks, see the "Participating in Review Processes" chapter in the *Multidomain MDM Version 10.3 Data Director User Guide*.

Attach Files to Records

When you add or edit a record, you can attach files as the child records to the record. Use the Provisioning tool to configure a business entity field with FileAttachment as the data type. You can then use the business entity field to attach files in a Data Director application.

For more information about the FileAttachment data type, see the *Multidomain MDM Version 10.3 Provisioning Tool Guide*.

Attach Files to Tasks

You can attach files to tasks. When tasks are configured to support attachments, you can attach a file to any task that you can view. Files attached to tasks appear in the task details, and user that can view the task can view the attachment.

For more information about attaching files to tasks, see the *Informatica Multidomain MDM Version 10.3 Data Director User Guide*.

Comments and Attachments for Tasks

You can configure whether users must add a comment or attachment when they trigger a workflow or perform task actions. To configure the comment and attachment settings, use the Provisioning tool.

Previously, users could add comments to tasks, but you could not require users to add comments.

Workflow Triggers

You can configure a workflow trigger to prompt users for comments, attachments, or both. For example, you can configure the unmerge task trigger so that users must add a comment when they trigger unmerge tasks.

Task Types

You can configure a task type to prompt users for comments, attachments, or both. You can also allow users to attach files from the **Task Details** dialog box. For example, you can configure review tasks so that reviewers must add a comment and attachment when they reject a proposed change to a business entity record. You can configure merge tasks so that reviewers can attach files when they edit the task details.

For more information about comment and attachment for tasks, see the *Informatica Multidomain MDM Version 10.3 Provisioning Tool Guide*.

Security for Business Entities

You can apply MDM Hub user roles to manage access to records based on business entities. You can also use data filters to manage access to records based on the values in the fields and user roles. If you want to restrict the values that can be added to a field, you can create a list of default values for the field.

For more information about the security options, see the *Multidomain MDM Version 10.3 Provisioning Tool Guide*.

User Roles and Business Entities

A business entity is a data structure with a root base object and child base objects. When you assign user role permissions to base objects and other resources in the MDM Hub Console, the record views in Data Director inherit the permissions. For example, if you grant the read permission to a user role on the base objects, the user has the same access to business entity records.

If you already have permissions assigned to user roles, you do not need to do anything else to enable the security on business entities. After you upgrade, Data Director automatically reflects the results of the user role permissions.

User Roles and REST APIs

The APIs are enhanced to support MDM Hub user roles. In all cases, a user must have permission to read a record before the other permissions are processed. The user role permissions are inherited by the business entity, and then the field filters can be used to restrict access to records based on the value in a field.

The following REST APIs return the user role privileges in the <operations> element for objects and relationships:

- GetMetadata
- ListMetadata

For information about how security enhancements affect Data Director, see [“Security for Business Entities” on page 31](#).

For details about the API enhancements for security and data filters, see the *Multidomain MDM Version 10.3 Business Entity Services Guide*.

Data Filters with User Roles

You can create data filters on fields in a business entity and assign user roles to those filters. Based on the value in the field within a record, the user might or might not be able to see the entire record. You can also

create filters on nodes to determine whether a user should have access to the parent record when the node is empty.

Note: This feature is similar to data security filters for subject areas, however data filters for business entities are case insensitive.

Tasks with User Roles

User role privileges apply to the workflow tasks that you create for business entities. A user can take an action on tasks for which they have role privileges. For example, a user can take action on a merge task only if their user role includes the merge privilege.

Default Values for Business Entities

You can add default values to fields. In Data Director, a single default value appears in the field. A list of default values appears as a drop-down list.

User Interface Enhancements for Security

When an MDM administrator creates user role privileges, the privileges affect the Data Director user interface. For example, if a user does not have access to a business entity, that user cannot see the business entity or its records.

The following table summarizes the role privileges for business entities and describes how the privileges affect the behavior of the Data Director user interface:

Business Entity Action	Data Director Behavior
Create records	In the New menu, you can see only the types of business entities for which you have permission to create records.
Read records	You can view the records for the business entities that you have permission to read. Other records are inaccessible.
Update records	In a record view, the Edit button is enabled when you have permission to edit business entity records. Otherwise, the Edit button is not visible.
Delete records	The Delete icon is enabled when you have permission to delete business entity records.
Search for records	When searching for business entities by using smart search, search filters and search results contain only the business entity types that you have permission to view.
Merge and unmerge records	In the Matching Records view, the Merge button and the check boxes at the top of each record are enabled when you have permission to merge and unmerge records. If you add records to the view, the search filters and search results contain records only for the business entities that you have permission to view.

The business entity views inherit the same role privileges as the business entity. For example, if you choose to include a sensitive field in a business entity view, only the users with the role privilege for the record can view or edit it. For information about how user role privileges translate to business entities and business entity views, see the *Multidomain MDM Version 10.3 Provisioning Tool Guide*.

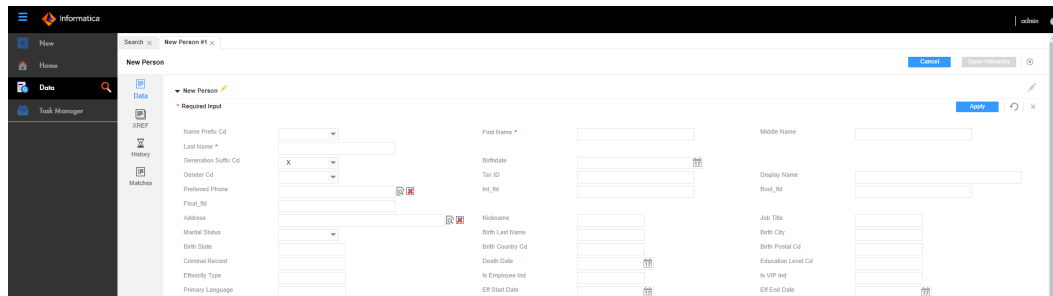
New Features for Data Director with Subject Areas

This release of Multidomain MDM includes the following new features for Data Director with subject areas.

Updated Look and Feel for Data Director

Data Director uses a navigation bar with vertical tabs. You can now use the **New** tab to add records. The task inbox and Task Manager are streamlined.

The following image shows the updated look and feel of the navigation bar with the **Data** tab open:

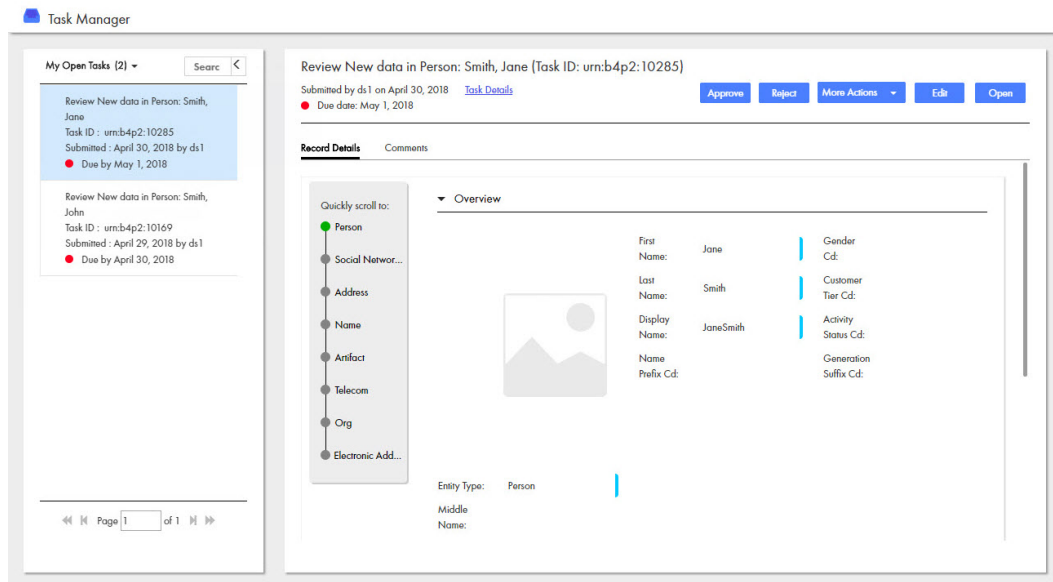


Previously, Data Director had horizontal tabs. You used the **Create** menu in the application header.

Task Manager

The task panel and the review panel appear side-by-side so you can easily manage and view tasks. Also, the **Comments** tab appears in the review panel. You can view all comments about the task in the **Comments** tab.

The following image shows the updated look and feel of the Task Manager:

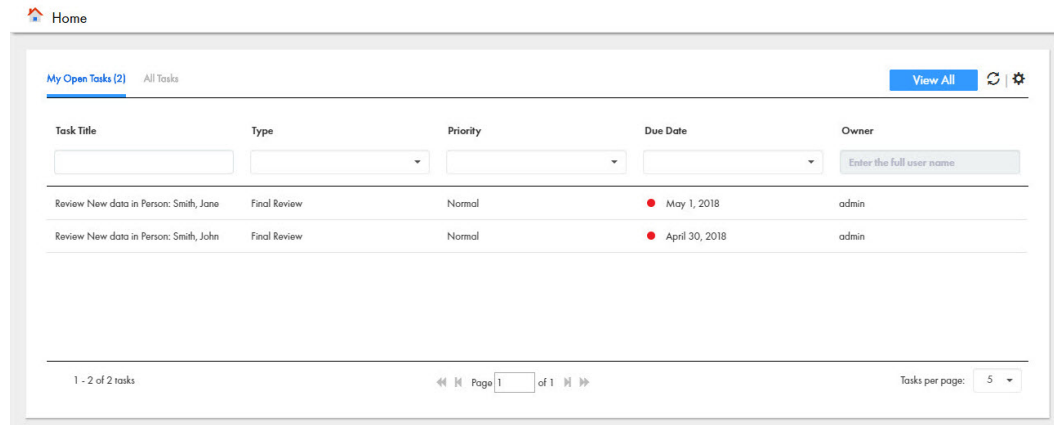


Previously, the task panel appeared above the review panel. Also, comments appeared in the **All Comments** box in the **Task Details** dialog box.

Task Inbox

The task inbox is streamlined so you can filter and find tasks to work on.

The following image shows the updated look and feel of the task inbox:



For more information, see the *Informatica Multidomain MDM Version 10.3 Data Director User Guide*.

Attach Files to Tasks

You can attach files to tasks. When tasks are configured to support attachments, you can attach a file to any task that you can view. Files attached to tasks appear in the task details, and user that can view the task can view the attachment.

For more information about attaching files to tasks, see the *Informatica Multidomain MDM Version 10.3 Data Director User Guide*.

Hub Server Properties Introduced in Version 10.3

You can use the following Hub Server properties to control the run-time behavior of the MDM Hub.

Configure the Hub Server properties in the `cmxserver.properties` file.

cmx.server.selective.bvt.enabled

By default, a Put or Cleanse Put call applies BVT calculations to all fields in a record instead of updating only the fields specified in the SIF request. To specify that the MDM Hub only applies BVT calculation to fields that are part of the SIF request, set this property to `true`. Default is `false`.

cmx.file.allowed_file_extensions

Lists the extensions of files that you can attach to a record or task in the Data Director application. By default, you can attach `.pdf` and `.jpg` files. When you specify multiple extensions, separate each value by a comma.

For example, `cmx.file.allowed_file_extensions=pdf,jpg,png,txt,zip,exe`.

cmx.file.max_file_size_mb

Specifies the size limit of files that you can attach in the Data Director application.

Note: Data Director applications that use the subject area data model have a static size limit of 20 MB. If you specify a size limit greater than 20 MB, Data Director applications that use the subject area data model uphold the static size limit of 20 MB. Data Director applications that use the business entity data model uphold the size limit defined in the `cmx.file.max_file_size_mb` property.

cmx.server.attachment.temp.ttl_minutes

Number of minutes after a file is created in the TEMP storage before it expires. Set to 0 to prevent files from expiring. Default is 60.

cmx.ss.engine

Required if you want to use the Elasticsearch engine for search. Manually add the property and set to `es`.

ex.max.conn.per.host

Sets the maximum number of Elasticsearch nodes that you want to connect to the host. Set to the number of Elasticsearch cluster nodes on the host.

ex.max.threads

Sets the maximum number of threads that you want the Apache asynchronous non-blocking receiver to use for each node in the Elasticsearch cluster. Default is 1.

Change the value only when suggested by Informatica Global Customer Support.

es.index.refresh.interval

Sets the interval, in seconds, for Elasticsearch to commit the changes to the data after an Initially Index Smart Search Data batch job is run. The data is available for search after this time interval. Default is 30.

This property impacts the high indexing volume encountered during initial indexing. Change the value only when suggested by Informatica Global Customer Support.

ssl.keyStore

Required if you use the HTTPS port of the application server to configure the Hub Server. Manually add the property. Absolute path and file name of the keystore file.

ssl.keyStore.password

Required if you use the HTTPS port of the application server to configure the Hub Server. Manually add the property. Plain text password for the keystore file.

ssl.trustStore

Required if you use the HTTPS port of the application server to configure the Hub Server. Manually add the property. Absolute path and file name of the truststore file.

ssl.trustStore.password

Required if you use the HTTPS port of the application server to configure the Hub Server. Manually add the property. Plain text password for the truststore file.

For more information about setting Hub Server properties, see the *Multidomain MDM Version 10.3 Configuration Guide*.

Process Server Properties Introduced in Version 10.3

You can use the following Process Server properties to control the run-time behavior of the MDM Hub.

You can configure the Process Server properties that are related to search with Elasticsearch in the `cmxcleanse.properties` file.

cmx.ss.engine

Required if you want to use the Elasticsearch engine for search. Manually add the property and set to `es`.

ex.max.conn.per.host

Sets the maximum number of Elasticsearch nodes that you want to connect to the host. Set to the number of Elasticsearch cluster nodes on the host.

ex.max.conn.per.host

Sets the maximum number of Elasticsearch nodes that you want to connect to the host. Set to the number of Elasticsearch cluster nodes on the host.

es.index.refresh.interval

Sets the interval, in seconds, for Elasticsearch to commit the changes to the data after an Initially Index Smart Search Data batch job is run. The data is available for search after this time interval. Default is 30.

This property impacts the high indexing volume encountered during initial indexing. Change the value only when suggested by Informatica Global Customer Support.

For more information about setting the Process Server properties, see the *Multidomain MDM Version 10.3 Configuration Guide*.

Global Properties

You can use the following global properties to control the run-time behavior of the Data Director application:

minModalWidth

Determines the minimum width in pixels of the **Search** window. Default is 1100.

Changes (10.3)

Terminology Changes

The following terms have changed in this version:

New	Explanation	Replaces	Where?
Home page	The customizable dashboard that contains the task inbox and other components.	Start page	Data Director
Record	An instance of a business entity. For example, John Smith is a record, while Person is the business entity.	Business Entity	Data Director
Record views	Any view of one or more records in Data Director.	entity view	Data Director, Provisioning tool

New	Explanation	Replaces	Where?
Record view layout	A Data Director user interface layout that you can design to view and manage records or tasks in Data Director.	entity view layout	Provisioning tool
Search	The keyword search functionality in Data Director. To search for records, you can enter keywords in a search box.	Smart Search	Data Director, Provisioning tool
New tab	A tab in the navigation bar that you can use to create records.	Create menu or Create in Data View menu	Data Director

Search with Apache Solr is Deprecated

Effective in version 10.3, the search functionality in Data Director that used Apache Solr is deprecated. Informatica will drop support for search with Solr in a future release. You can use search with Elasticsearch to find records in Data Director. Elasticsearch is an open-source, full-text search engine.

You must configure search with Elasticsearch, which is packaged with the MDM Hub installer. You can set up Elasticsearch as a single node cluster or as a multi-node cluster to provide distributed indexing and search. For a smooth transition, the APIs that were supported for search with Apache Solr are supported for search with Elasticsearch.

Task Inbox

Effective in version 10.3, you can configure the columns and the filters that you want to view in the task inbox. Use the Provisioning Tool to configure the columns and the filters for the task inbox.

The task inbox contains the following filters:

- My Open Tasks
- My Closed Tasks
- All Tasks
- All Unclaimed Tasks
- All Closed Tasks
- All Claimed Tasks

Previously, you could not configure the columns and filters for the task inbox, and the task inbox contained only My Tasks and Available Tasks as the filters.

For more information about configuring the task inbox, see the *Multidomain MDM 10.3 Provisioning Tool Guide*.

Task Manager

Effective in version 10.3, you can configure the fields that you want to view in the task panel of the Task Manager. Use the Provisioning Tool to configure the fields for the task panel.

The task panel contains the following filters:

- My Open Tasks
- My Closed Tasks
- All Tasks
- All Unclaimed Tasks
- All Closed Tasks
- All Claimed Tasks

Previously, the task panel contained only My Tasks and Available Tasks as the filters.

For more information about configuring the Task Manager, see the *Multidomain MDM Version 10.3 Provisioning Tool Guide*.

Resource Kit

Effective in version 10.3, the following items are removed from the Resource Kit directory and the *Multidomain MDM Resource Kit Guide*:

- WsCodeGenPlugin sample
- Jaspersoft templates

Part II: Version 10.2

This part contains the following chapters:

- [New Features and Changes \(10.2 HotFix 4\), 40](#)
- [New Features and Changes \(10.2 HotFix 3\), 41](#)
- [New Features and Changes \(10.2 HotFix 2\), 43](#)
- [New Features and Changes \(10.2 HotFix 1\), 47](#)
- [New Features and Changes \(10.2\), 53](#)

CHAPTER 4

New Features and Changes (10.2 HotFix 4)

This chapter includes the following topics:

- [New Features \(10.2 HotFix 4\), 40](#)
- [Changes \(10.2 HF4\), 40](#)

New Features (10.2 HotFix 4)

This section describes new features in version 10.2 HotFix 4.

Informatica ActiveVOS Version 9.2.4.5

Informatica Multidomain MDM version 10.2 HotFix 4 supports Informatica ActiveVOS version 9.2.4.5.

If you upgrade from an earlier version of Multidomain MDM, ensure that you install ActiveVOS version 9.2.4.5.

Changes (10.2 HF4)

MDM Multidomain Edition is now Multidomain MDM

Effective in versions 10.2 HotFix 4 and 10.3, the product name has changed to *Informatica Multidomain MDM*.

CHAPTER 5

New Features and Changes (10.2 HotFix 3)

This chapter includes the following topics:

- [New Features \(10.2 HotFix 3\), 41](#)
- [Changes \(10.2 HotFix 3\), 42](#)

New Features (10.2 HotFix 3)

Java Virtual Machine Settings for Smart Search

If you want to configure smart search for the MDM Hub, configure the Java Virtual Machine (JVM) by setting the Java options for smart search.

Set the following Java options for smart search:

-Dmdm.ps.zk.node

Required if you want to use smart search with Solr. Set this Java option on the JVM for the Process Server that is intended to be the ZooKeeper server. Set to `true`.

-Dmdm.ps.search.node

Required if you want to use smart search with Solr. Set this Java option on the JVMs for the Process Servers that will have search processing enabled and function as Solr servers. Set it to `true`.

-Dsearch.service.port

Required if you want to use smart search with Solr. Required if you want to install multiple Process Servers on the same machine but on different JVMs and enable smart search on all the Process Servers on the machine. This Java option specifies the port used by the JVM for the search service. To avoid port conflicts, use the default port for the JVM of one Process Server, and set this Java option to the relevant port numbers for the JVMs of the remaining Process Servers.

REST API Enhancements

When you use REST APIs to create or update child records, you can add the child records in the same POST request. Previously, you had to make two requests.

When you use REST APIs to add a child record, you can point to a specific parent record. Previously, you could not specify a parent record in the request.

Message Trigger Enhancement

When a cross-reference record is restored, the MDM Hub can trigger a message to be placed in the JMS message queues. To set up message triggers for an event that restores a cross-reference record, use the Schema Manager. In the **Events** section of the **Message Triggers** page, select **Restore**, which is the new event included in the section.

For more information, see the *MDM Multidomain Edition Version 10.2 HotFix 3 Configuration Guide*.

Changes (10.2 HotFix 3)

Resource Kit Change

In the Resource Kit, the AssignUsersToDatabase script supports uppercase characters in user names.

Previously, the tool enforced lowercase characters only.

CHAPTER 6

New Features and Changes (10.2 HotFix 2)

This chapter includes the following topics:

- [New Features \(10.2 HotFix 2\), 43](#)
- [Changes \(10.2 HotFix 2\), 46](#)

New Features (10.2 HotFix 2)

Oracle WebLogic Server 12.2.1.3 Support

You can deploy MDM Multidomain Edition on Oracle WebLogic Server 12.2.1.3.

Oracle WebLogic T3S Protocol Support

You can use the Oracle WebLogic T3S protocol for communications between WebLogic and MDM Multidomain Edition.

For information about setting up WebLogic T3S, see the *Informatica MDM Multidomain Edition Version 10.2 HotFix 2 Security Guide*.

Process Server Properties

You can use the following Process Server properties to control the run-time behavior of the MDM Hub.

Configure the Process Server properties in the `cmxcleanse.properties` file.

cmx.server.stripDML.useDeleteInsertLock

Runs tokenization as part of a match job or a tokenization API call when a base object has a large number of records.

cmx.server.load.nonsmos.sourcesystem.enddate.like.smos

Sets the relationship end-date of a system that is not a State Management Override System (SMOS) to be the same as that of an SMOS.

For more information about setting Hub Server properties, see the *Informatica MDM Multidomain Edition Version 10.2 HotFix 2 Configuration Guide*.

Hub Server Properties

You can use the following Hub Server properties to control the run-time behavior of the MDM Hub.

Configure the Hub Server properties in the `cmxserver.properties` file.

cmx.server.selective.bvt.enabled

By default, a Put or Cleanse Put call applies BVT calculations to all fields in a record instead of updating only the fields specified in the SIF request. To specify that the MDM Hub only applies BVT calculation to fields that are part of the SIF request, set this property to `true`. Default is `false`.

com.informatica.mdm.message.queue.max.bytes.threshold

You can create a maximum limit for messages sent to the message queue. To specify the maximum size in bytes of messages sent to the message queue, set this property. If a message exceeds the specified size, the message is not sent and the message status is set to Failed.

cmx.server.load.nonsmos.sourcesystem.enddate.like.smos

Sets the relationship end-date of a system that is not a State Management Override System (SMOS) to be the same as that of an SMOS.

cmx.server.override_orstitle

When you log in to Informatica Data Director (IDD), the dashboard displays a long title of all the subject areas that have tasks for the current user. To display a preferred default title when you log in to IDD, set the `cmx.server.override_orstitle` property to a preferred title in the `cmxserver.properties` file.

For example, if you set the property to `All Subject Areas`, the title appears as **Tasks for All Subject Areas** onscreen.

cmx.server.task.grouppotentialmergebyruleid

Specifies that a manual match task that generates multiple matches creates multiple task entries with the same ROWID. You can set the property to `false` to create one task for each match entry.

cmx.web.console.session.download.timeout

Specifies the amount of time in minutes that you want to allow for launching the Hub Console after user authentication. Default is 5. The Java Network Launch Protocol (JNLP) resources that the Hub Console requires must download within the specified time. If the JNLP resources fail to download within the specified time, users must reauthenticate to download the JNLP resources.

For more information about setting Hub Server properties, see the *Informatica MDM Multidomain Edition Version 10.2 HotFix 2 Configuration Guide*.

Grouping of Hub Servers and Process Servers

You can create logical groups of Hub Servers and Process Servers by grouping Java Virtual Machines (JVMs). When you deploy the Hub Server and Process Server applications in a JVM group, all communication between the applications stays within the group. To group JVMs, you assign a group ID to each JVM in the MDM Hub environment.

For more information, see the *Informatica MDM Multidomain Edition Version 10.2 HotFix 2 Installation Guide*.

Global Properties

You can use the following global properties to control the run-time behavior of the Informatica Data Director application:

deleteMovedRelInExplorerView

Determines whether to delete the old relationship when you create a new relationship in Hierarchy Manager explorer view. Set to `false` to give the relationship an end date.

enableSaveForPeriodDialogForHmRel

Enables the effective period dialog box that appears when you update a Hierarchy Manager-enabled record in IDD. Set to `false` to disable the effective period dialog box.

enableTaskAttachments

Specifies whether users can attach files to tasks when using the legacy views and Informatica BPM (ActiveVOS) Subject Area Workflows with Data Director. Set to `true` to enable attachments and to show the **File Attachments** section in the **Task Details** dialog box and in the **Create Task** dialog box.

hideSystemColumnsInResult

Specifies whether the system columns appear in the search results. Set to `true` to hide the system columns in IDD search results.

overrideTextAreaColumnOrder

If you configure a column as a text area in a subject area, the text area column always appears at the bottom of the layout regardless of column order.

Set to `false` to ensure that text area columns appear in their specified order in a layout. Set to `true` to ensure that text area columns in a subject area appear at the bottom of the layout regardless of column order.

For more information, see the *Informatica MDM Multidomain Edition Version 10.2 HotFix 2 Informatica Data Director Implementation Guide*.

Save Handler User Exit Enhancement

In Save Handler user exits, you can use the `getChangedChildren` method to return modified or added child or grandchild records in a specified base object.

The user exit returns all records that were added, deleted, or updated. You can select the type of changes returned by the user exit. For example, the user exit can return a combination of removed and updated children records.

Date Format Enhancement

You can change the default date format used by the calendar in the Entity 360 framework.

To change the default date format, use a text editor to create a `bundleE360.properties` file that contains the property `DATE_TIME_LONG_FORMAT`. Then add the `bundleE360.properties` file to the following location:

```
<distribution directory>\hub\server\resources\entityE360
```

Note: If it does not already exist, create the `entityE360` directory.

For more information, see the *Informatica MDM Multidomain Edition Version 10.2 HotFix 2 Provisioning Tool Guide*.

Start Workspace Enhancements

To help you prioritize tasks, the Start workspace has a **Create date** column that displays the date a task was created. The Start workspace also has an **Owner** column that displays the current owner of a task.

Configuration Automation Tools Enhancements

You can delete a single user in the MDM Hub Master Database, and synchronize a single user in the LDAP server with the MDM Hub roles.

You can use the following properties to automate user management:

Property	Description
MDM.new.user.email<n>	Email address of the user that you want to create.
LDAP.attribute_name.for.user.email	Synchronizes the email address of a user from the LDAP server to the Operational Reference Store.
LDAP.attribute_name.for.username	Synchronizes attributes other than a common name or a user ID from the LDAP server to the Operational Reference Store.
LDAP.strip_slashes_from_usernames	Removes slashes from user names such as <code>Boyd\</code> to make the synchronization process work.
LDAP.cleanup.before.sync	Removes the users that are assigned in an Operational Reference Store before synchronizing users with roles.

Changes (10.2 HotFix 2)

User Exit Enhancement

Effective in version 10.2 HotFix 2, you can set effective periods in the Hierarchy Manager user exits.

Previously, you could only set effective periods in the Save Handler user exit.

Hub State Indicator is Not Putable

Effective as of version 10.1 HF2, the system column HUB_STATE_IND cannot be set as putable. The change was not announced in that release.

In the *Informatica MDM Multidomain Edition Version 10.2 HF2 Configuration Guide*, the list of exceptions for the property Putable is updated to include HUB_STATE_IND.

CHAPTER 7

New Features and Changes (10.2 HotFix 1)

This chapter includes the following topics:

- [New Features \(10.2 HotFix 1\), 47](#)
- [Changes \(10.2 HotFix 1\), 51](#)

New Features (10.2 HotFix 1)

History View Enhancements

Improved the usability of the History view by adding the following record fields:

Last Update Date

Displays the date the record was most recently updated.

Updated By

Displays the name of the user that updated the record.

Also, the change details in the History view include the first and last names of the user that made the change.

Previously, only the user name that was configured in the Hub Console appeared in the change details. To display more meaningful names in the change details, launch the Hub Console and update the user definitions to include the first and last names.

For more information about configuring users, see the *Informatica MDM Multidomain Edition Version 10.2 HotFix 1 Configuration Guide*.

Restricting Access to Business Entities

In the Provisioning tool, you can configure IDD applications to have business entities that are not visible to all users within the Entity 360 framework. If you want to hide specific business entities for security reasons, clear the **Visible** check box when you configure a business entity in an IDD application.

Previously, all business entities in an IDD application were visible to all users in the Entity 360 framework.

For more information about configuring IDD applications, see the *Informatica MDM Multidomain Edition Version 10.2 HotFix 1 Provisioning Tool Guide*.

Populating a Foreign Key Column

In the foreign key column for a business entity, you can browse and select a related business entity from a list of related business entities. The selected business entity must be searchable.

Previously, you had to manually enter the ROWID of a business entity in the foreign key column.

Additionally, when you generate a business entity schema, the Provisioning tool generates business entity lookup fields.

For more information about lookups, see the *Informatica MDM Multidomain Edition Version 10.2 HotFix 1 Provisioning Tool Guide*.

Performance Optimization of a SearchQuery Request

A SearchQuery request can return results that contain pending data changes to a base object.

Previously, query results timed out if a base object contained pending changes.

For more information, see the *Informatica MDM Multidomain Edition Version 10.2 HotFix 1 Services Integration Framework Guide*.

Batch Group Job History

In the Batch Group tool in the Hub Console, you can specify the number of days of history to process for a batch group job log. By default, logs for batch jobs consider all history, but you can reduce the number of days considered.

To specify the number of days of history to process for a batch group job log, set the `cmx.server.jobControl.noOfDays` property in the `cmxserver.properties` file.

For more information, see the *Informatica MDM Multidomain Edition Version 10.2 HotFix 1 Configuration Guide*.

Disabling Message Queue Polling

In a multinode environment, you can disable message queue polling for individual nodes. To disable message queue polling, set the `mq.data.change.monitor.thread.start` property to `false` in the `cmxserver.properties` and `cmxcleanse.properties` files.

You can confirm the operation of message queue polling while in DEBUG mode.

- On nodes where the value of `mq.data.change.monitor.thread.start` is `false`, the message **Monitoring is disabled** appears in the logs.
- On nodes where the value of `mq.data.change.monitor.thread.start` is `true`, the message **Data changes monitoring started** appears in the logs.

By default, message queue polling is enabled on all Java virtual machines where an MDM Hub EAR file is deployed. When you use multiple poller threads for data change monitoring and for publishing messages, the messages might not publish in the correct sequence. To control the sequence in which the messages are published, use a single poller thread.

Global Properties

You can use the following global properties to control the run-time behavior of the Informatica Data Director application:

bulkexportloadsize

Sets the maximum number of records to load for each thread when you export data to a Microsoft Excel file.

exportusingmultithread

Enables multithreading for data export to a Microsoft Excel file.

CompositePagerTotalRecords

Maximum number of ActiveVOS tasks that Informatica Data Director sorts. By default, Informatica Data Director sorts ActiveVOS tasks that are not case sensitive. If there are more than the value of `CompositePagerTotalRecords` to sort, case-sensitive sorting is database dependent. If the database is Microsoft SQL Server, the sorting is not case sensitive. If the database is Oracle or IBM DB2, the sorting is case sensitive.

convert2DigitYearTo4Digit

Enables the adjustment of a two-digit year entry to a four-digit year entry.

enableCreateBEMenuGrouping

Specifies whether you can define logical groups based on subject areas for the **Create** menu for business entities. The property is required if you have a large number of subject areas.

expandDropDownListShowFullValue

Enables expansion of the drop-down list in the **Search** tab for lookup records.

qrytaskidfromprocessidtotalretry

Number of attempts that Informatica Data Director makes to reload an ActiveVOS task.

qrytaskidfromprocessidwaitintrvmillis

Number of milliseconds that Informatica Data Director waits before attempting to reload an ActiveVOS task.

proactiveMatchResultSort

Configures the sort order in which the potential matches appear in the Informatica Data Director application.

For more information, see the *Informatica MDM Multidomain Edition Version 10.2 HotFix 1 Informatica Data Director Implementation Guide*.

MDM Support Tools

The MDM Support tools are a collection of tools in the Hub Console. Use the tools to gather configuration information, track user configurations, replicate issues, run system health checks, and simulate matches.

The MDM Support tools contain the following tools:

Configuration Support Manager (CSM) Tool

The Configuration Support Manager (CSM) tool enables you to generate a CSM report. The report gathers configuration information from the Hub Server, Process server, and database server, which helps to troubleshoot issues.

User Migration Tool

The User Migration tool enables you to create or update multiple MDM Hub user accounts. You can also migrate user accounts and user-to-role assignments from one MDM Hub environment to another.

Match Analysis Tool

The Match Analysis tool assesses issues related to tokenization in the MDM Hub. The tool also provides a health check for the MDM Hub environment.

Match Simulator Tool

The Match Simulator tool tests undermatching and overmatching scenarios in the MDM Hub. The tool reduces the manual effort involved in troubleshooting matching issues.

For more information about the MDM Support tools, see the *Informatica MDM Multidomain Edition Version 10.2 HotFix 1 Resource Kit Guide*.

Performance Optimization of a Batch Unmerge Job

During an Unmerge batch job, the MDM Hub optimizes performance of the batch job by limiting BVT calculation of child foreign key records.

Previously, unmerge batch jobs of base objects with a large volume of cross-reference records and multiple child records could fail with an out of memory error message.

Option to Export a Single Record from Search Results

You can set up privileges for roles to only allow the export of a single record from the Informatica Data Director Search Results page.

Restricting low-level users to export only one record at a time prevents the inadvertent export of entire data sets. To restrict privileges to single record export, use the Roles tool in the Security Access Manager in the Hub Console. Enable the privilege EXPORT_PROFILE/ExecuteSingleRow for a selected role.

Previously, you could set privileges for roles to either allow export of selected rows or all rows.

For more information about roles and users, see the *Informatica MDM Multidomain Edition Version 10.2 HotFix 1 Configuration Guide*.

Business Entity Services Enhancements

The following business entity services are added to help manage pending merge tasks:

PendingMerge

Creates a pending merge task in the BPM workflow. Adds or removes _MTCH records from a pending merge task. Use to update a pending merge task.

PromoteMerge

Promotes a pending merge task based on the task data from the BPM workflow. Use to find all pending merge tasks for a specific interaction ID.

For more information, see the *Informatica MDM Multidomain Edition Version 10.2 HotFix 1 Business Entity Services Guide*.

Message ID for Legacy XML JMS Messages

JMS messages in the legacy XML format include a MESSAGE_ID attribute.

For more information, see the *Informatica MDM Multidomain Edition Version 10.2 HotFix 1 Configuration Guide*.

WebSphere Application Server V8.5.5 Fix Pack 11 Support

You can deploy the MDM Multidomain Edition on WebSphere Application Server V8.5.5 Fix Pack 11.

Informatica AddressDoctor Version 5.10

Informatica MDM Multidomain Edition supports Informatica AddressDoctor version 5.10.

Internet Protocol Version 6

Informatica MDM Multidomain Edition supports Internet Protocol version 6 (IPv6).

Changes (10.2 HotFix 1)

Proxy Role

Effective in version 10.2 HotFix 1, the Operational Reference Store that you create contains a proxy role.

Previously, the proxy role had been deprecated. Due to demand, the proxy role has been reinstated.

Jaspersoft Removed from the Resource Kit

Effective in version 10.2 HotFix 1, Jaspersoft is not included in the MDM Multidomain Edition Resource Kit.

Customers wishing to integrate dashboards into Informatica Data Director are recommended to rather use their corporate business intelligence tool of choice, or to use Highcharts or other charting tools. Any report that can be embedded in an iFrame can be embedded in a start page or Entity360 page in Informatica Data Director.

Allow Null Update Property

Effective in version 10.2 HotFix 1, all processes that calculate the best version of the truth treat null values the same way. Previously, some processes ignored the **Allow Null Update** property in the staging table and used the **Apply Null Values** property in the base object table.

When a source system contributes a null value for a column, a process refers to the setting of the **Allow Null Update** property for that column in the staging table.

- If the **Allow Null Update** property is enabled on the column, the process can write the null value to the base object record.
- If the **Allow Null Update** property is disabled on the column, the process downgrades the trust for the null value.

- If a process cannot resolve the setting of the **Allow Null Update** property in a staging table, the process uses the setting for the **Apply Null Values** property in the base object table.

For more information about the **Allow Null Update** property, see the *Informatica MDM Multidomain Edition Version 10.2 HotFix 1 Configuration Guide*.

BeMDMWorkflow ActiveVOS Project

Effective in version 10.2 HotFix 1, the BeMDMWorkflow project in the Resource Kit has changed to resolve an issue with task inbox filtering.

Previously, the BeMDMWorkflow project in the Resource Kit caused an issue with task inbox filtering.

If you upgrade from an earlier version, redeploy the BeMDMWorkflow project after you upgrade. If you have customized the workflows, use ActiveVOS Designer to add the following code within the TaskFilter complex type in the `cs.wsdl` file:

```
<xsd:element minOccurs="0" name="overdueOnly" type="xsd:boolean" />
```

For more information, see the *Informatica MDM Multidomain Edition 10.2 HotFix 1 Upgrade Guide*.

Obsolete Process Server Properties

Effective in version 10.2 HotFix 1, the following Process Server properties are obsolete:

Obsolete Property	Change in Behavior for Version 10.2 HotFix 1
<code>com.informatica.mdm.overrideNullable</code>	When a source system contributes a null value, you cannot override how a process calculates the most trustworthy value. The method that a process uses to handle null values has changed. For more information, see “Allow Null Update Property” on page 51 .
<code>com.informatica.mdm.promoteNullable</code>	When a source system that contributes a null value for a column has multiple staging tables, processes ignore the Allow Null Update property in all the staging tables. Instead, processes use the setting of the Apply Null Values property in the base object record.

If an obsolete property remains in the properties file after you upgrade, the property is ignored. You can safely remove the property from the file.

CHAPTER 8

New Features and Changes (10.2)

This chapter includes the following topics:

- [New Features \(10.2\), 53](#)
- [Changes \(10.2\), 60](#)

New Features (10.2)

Hub Server Properties for Informatica Data Director

You can add the following property to the `cmxserver.properties` file to configure Informatica Data Director:

`cmx.e360.match_xref.view.enabled`

Determines if the Entity 360 framework Matching Records view and Cross-reference view appear. If `true`, the Entity 360 framework view appears. If `false`, the legacy views appear. During installation, the default is `true`. During upgrade of existing software, the default is `false`.

Note: The Entity 360 framework Cross-reference view supports tree unmerge. For linear unmerge support, continue to use the legacy Cross-reference view.

Password Hashing

The MDM Hub uses a password hashing method to protect user passwords. The MDM Hub master database stores the user passwords in hashed form. When users log in to the MDM Hub, their request is encrypted with a combination of public and private keys. To authenticate users, the MDM Hub decrypts their request and compares the value with the hashed value retrieved from the master database.

The hashing algorithm is a concatenation of the password string and multiple randomly generated values. The default algorithm used for password hashing is SHA3. However, you can also configure a custom hashing algorithm. You configure the hashing implementation class during installation of the MDM Hub. Alternatively, you can configure the hashing implementation class through the Hub Server properties in the `cmxserver.properties` file.

Password hashing replaces Blowfish encryption in the MDM Hub.

For more information about password hashing, see the *Informatica MDM Multidomain Edition Version 10.2 Security Guide* and the *Informatica MDM Multidomain Edition Version 10.2 Configuration Guide*.

Security Configuration Utility

The security configuration utility helps you to manage some of the security settings in an MDM Hub implementation. With the utility, you can reset the passwords of MDM Hub users, change the hashing algorithm used in the MDM Hub, and change the certificate provider. You can also use the security configuration utility to update the customer hashing key that is used to create the hashing algorithm.

To get the security configuration utility, contact Informatica Global Customer Support.

Provisioning Tool Enhancement

The user interface of the Provisioning tool is enhanced to facilitate ease of use. The user interface includes simple user input fields that replace complex XML configurations.

For more information about the Provisioning tool, see the *Informatica MDM Multidomain Edition Version 10.2 Provisioning Tool Guide*.

Layout Designer

You can use the Layout Designer in the Provisioning tool to design layouts for the Informatica Data Director Start page and the Entity views. To design a layout, you select a layout template in the Layout Designer, and then drag and assemble the components that you want in the layout.

For more information about the Layout Designer, see the *Informatica MDM Multidomain Edition Version 10.2 Provisioning Tool Guide*.

DaaS Provider Component

Use the DaaS Provider component to search an external data service for information about a business entity. You require an existing relationship with the third-party data as a service provider.

Integration with Data as a Service Providers

You can enrich and augment your business entity data with the data from third-party data providers. You can integrate the MDM Hub with Data as a Service (DaaS) providers to access data that is reliable, accurate, and complete.

Use the Provisioning tool to configure the integration with the DaaS providers. You can specify the business entity fields that you want to populate with the data from the DaaS providers.

In the Informatica Data Director, use the DaaS Providers component to request a DaaS provider for data. You can search for records, compare the results, and select the entities that you want to convert and merge into a business entity record.

For more information about configuring the integration with DaaS providers, see the *Informatica MDM Multidomain Edition Version 10.2 Provisioning Tool Guide*.

Many-to-Many Relationships

You can use the Provisioning tool to configure many-to-many relationships between business entities. You can add additional attributes associated with a business entity relationship.

In the Informatica Data Director, use the Related Records component to add, edit, and delete relationships for business entities.

For more information about configuring many-to-many relationships, see the *Informatica MDM Multidomain Edition Version 10.2 Provisioning Tool Guide*.

External Callouts for Business Entity Services

You can configure external callouts for business entity services to execute custom logic, validation, and transformation of business entity data. You can configure callouts for specific steps in the business entity services.

For more information about configuring external callouts, see the *Informatica MDM Multidomain Edition Version 10.2 Provisioning Tool Guide*.

Cross-reference Records View

Use the Cross-reference Records view to establish the best version of the truth for business entities. The view is built on the Entity 360 framework.

Data stewards can use the Cross-reference Records view to examine the lineage of the full business entity, including all child entities, and can now unmerge child records. Data stewards can then make adjustments to ensure the master record genuinely represents the best version of the truth.

If you install MDM Multidomain Edition version 10.2, the view is enabled by default. If you upgrade from a previous version, set the `cmx.e360.match_xref.view.enabled` property in the `cmxserver.properties` file to `true` to enable the view. The view supports tree unmerge. For linear unmerge support, continue to use the IDD XREF view. During installation, the default is set to `true`. During upgrade of existing software, the default is set to `false`.

For more information, see the *Informatica MDM Multidomain Edition Version 10.2 Informatica Data Director User Guide*.

History View

Use the History view to review changes to the data in chronological order. The view is built on the Entity 360 framework.

The History view displays a chronology of data changes over the lifespan of the business entity. You can view the data that existed in the business entity 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 an inappropriate data change. A data event is any action that changes the data in a business entity, such as an edit or a merge operation.

For more information, see the *Informatica MDM Multidomain Edition Version 10.2 Informatica Data Director User Guide*.

Matching Records View

Use the Matching Records view to identify and resolve duplicate records. The view is built on the Entity 360 framework.

By default, the Matching Records view contains the target business entity plus any business entities that satisfied a match rule. You can also search for business entities that did not satisfy a match rule, and add those entities to the view.

Compare the root records of the similar business entities and select the ones that you think are duplicates. Then compare the child records and descendant records in the business entities. If you find duplicate sibling records at any level, you can select the records to include in the merge process. Before you start the merge process, you can preview the merged business entity.

Note: If you need to override a value, edit the business entity in the Cross-reference Records view. Overrides are not available from the Matching Records view.

If you install MDM Multidomain Edition version 10.2, the view is enabled by default. If you upgrade from a previous version, set the `cmx.e360.match_xref.view.enabled` property in the `cmxserver.properties` file to `true` to enable the view.

For more information, see the *Informatica MDM Multidomain Edition Version 10.2 Informatica Data Director User Guide*.

Merge Cascade for Descendant Records

When you use business entity model, the merge process runs a merge cascade on the child and descendant records.

- At the root level, the merge process merges the data in the root records of the business entities.
- At a child level, when the parent-to-child relationship is a one-to-one relationship, the merge process merges the sibling child records. After the merge process handles a child record, it tries to merge each level of descendant records using the same merge strategy.
- At any level, when the parent-to-child relationship is a one-to-many relationship, you can select sibling records to merge in the **Matching Records** view.

The merged business entity contains the merged root record, the merged sibling records, and all the child records and descendant records that were not merged.

For more information, see the description of the merge process in the *Informatica MDM Multidomain Edition Version 10.2 Informatica Data Director User Guide*.

Timeline View

You can use the Timeline view to view changes to data over a period of time. The Timeline view is available only to customers who upgraded from the subject area model to the business entity model.

For more information about the Timeline view, see "Investigating Data Change Events for Effective Periods" in the *Informatica MDM Multidomain Edition Version 10.2 Informatica Data Director User Guide*.

Business Entity Services for DaaS

You can use business entity services to request data from a DaaS provider and create business entity records. You can import business entity data and update changes to the business entity data. Use REST APIs to read, search, import, and update business entity data.

For more information about the REST APIs for DaaS, see the *Informatica MDM Multidomain Edition Version 10.2 Business Entity Services Guide*.

Business Entity Services for Managing Relationships

You can use business entity services to manage business entity relationships. Use REST APIs to create, read, update, and delete relationships between business entities.

For more information about the REST APIs to manage relationships, see the *Informatica MDM Multidomain Edition Version 10.2 Business Entity Services Guide*.

Enhancements for Business Entity Services

With the introduction of the new views based on the Entity 360 framework, the business entity services have been enhanced to support the views and new functionality.

The following table summaries the enhancements to the business entity services:

Business Entity Service	Elements and Attributes	Request	Response
MergeBE	<ul style="list-style-type: none"> - MERGE element - contentMetadata=MERGE - contentMetadata=BVT 	<ul style="list-style-type: none"> - Control how descendant records merge - Specify how to merge descendant records - Specify which record wins in a merge 	
PreviewMergeBE	<ul style="list-style-type: none"> - contentMetadata=[MERGE BVT] - MERGE element 	<ul style="list-style-type: none"> - Control when descendant records match 	
ReadBE	<ul style="list-style-type: none"> - contentMetadata=BVT - historyDate 	<ul style="list-style-type: none"> - Specify which record wins in a merge - Specify the date for which you want to retrieve history data 	<ul style="list-style-type: none"> - Business entity data for the specified date
WriteBE	<ul style="list-style-type: none"> - MATCH element - MERGE element 	<ul style="list-style-type: none"> - Control when descendant records match - Control when descendant records merge 	
GetRelated	<ul style="list-style-type: none"> - entityLabel - relationshipLabel - entityType - relationshipType 	<ul style="list-style-type: none"> - Filter by entity label - Filter by relationship label - Filter by comma-separated list of entities - Filter by comma-separated list of relationships 	<ul style="list-style-type: none"> - List of records related to a specified root record based on the relationships configured and the filters applied
ListHistoryEvents	<ul style="list-style-type: none"> - historyPeriod - granularity 	<ul style="list-style-type: none"> - Specify the date range for which you want to retrieve the data - Specify level of detail to group history 	<ul style="list-style-type: none"> - Business entity data for the specified date - Groups of history events
GetHistoryEventDetails	<ul style="list-style-type: none"> - eventID 	<ul style="list-style-type: none"> - Specify ID of the history event 	<ul style="list-style-type: none"> - History event details

Extract BVT Versions

You can get the best version of the truth for a range of effective periods for timeline-enabled base objects. Run the Extract BVT Versions batch job in the Batch Viewer tool in the MDM Hub Console, or run the executeBatchExtractBTVersions SIF API.

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

Dirty Index Indicator

When you update the searchable field properties, some of the indexes might become outdated and dirty. You can run the Initially Index Smart Search Data batch job to clean the outdated indexes. The Batch Viewer tool of the MDM Hub Console displays a warning icon for a child business entity node when the node requires reindexing.

For more information about the warning icon, see the *Multidomain MDM Configuration Guide*.

Sorting the Search Results

When you use the Search Business Entity REST web service, you can sort the search results in the ascending or descending order by multiple fields.

For more information about the Search Business Entity REST web service, see the *Multidomain MDM Provisioning Tool Guide*.

WebSphere Application Server V8.5.5 Fix Pack 8 Support

You can deploy the MDM Multidomain Edition on WebSphere Application Server V8.5.5 Fix Pack 8.

Oracle GoldenGate 12 Support

Use Oracle GoldenGate version 12.1.2.1 with MDM Multidomain Edition.

If you have an Oracle environment and upgrade from 9.0.1 or 9.1.0 to a more recent version of MDM Multidomain Edition, you must update the Oracle GoldenGate software. For more information, see the *Informatica MDM Multidomain Edition Version 9.7.1 HotFix 7 Upgrading with Zero Downtime Guide*.

ActiveVOS Database Connection Details

The ActiveVOS[®] database connection is validated when you install or upgrade embedded ActiveVOS.

When you install or upgrade embedded ActiveVOS during the MDM Multidomain Edition installation or upgrade, ActiveVOS database connection details are saved in the `build.properties` file.

In IBM DB2 environments, before you upgrade, add the ActiveVOS database connection properties to the `build.properties` file in `<MDM Hub installation directory>/hub/server/bin`.

The following sample shows the ActiveVOS database connection properties with sample entries:

```
activevos.db.type=db2
activevos.db.server=localhost
activevos.db.port=50000
activevos.db.user=AVOS
activevos.db.dbname=INFA102
activevos.db.schemaname=AVOS
activevos.db.jdbc.url=jdbc:db2://localhost:50000/INFA102
activevos.b4p.url=http://localhost:9080/active-bpel/services/AeB4PTaskClient-
taskOperations
```

Resource Kit

The `BESExternalCall` folder contains sample Java code to implement custom logic and validation for business entity services. You can configure external callouts for certain steps in the business entity

execution logic. To use external callouts, you must build the `bes-external-call.ear` file and deploy it on the application server.

The `BESExternalCall` folder contains a sample `custom-logic-service.wsdl` file with the XML Schema Definition (XSD) for the external callouts. Use the WSDL file to understand the external services, operations, methods, and the data types that the service methods exchange. Use the Ant build file, `build.xml`, in the `BESExternalCall` folder to build the `bes-external-call.ear` file.

For more information about configuring and deploying the external web services, see the *Multidomain MDM Provisioning Tool Guide* and the *Multidomain MDM Business Entity Services Guide*.

Documentation

This section describes significant changes to the MDM Multidomain Edition documentation set in version 10.2.

Informatica MDM Multidomain Edition Infrastructure Planning Guide - NEW

The *Informatica MDM Multidomain Edition Infrastructure Planning Guide* contains information required to plan the infrastructure and the architecture of the MDM Hub environment. The guide contains sample installation topologies to help you understand and decide on an installation topology. The guide is intended for use by infrastructure planners, Master Data Management solution architects, and business managers.

Informatica MDM Multidomain Edition Informatica Data Director User Guide - RESTRUCTURED

The guide has two versions:

- For new customers, the *Informatica MDM Multidomain Edition Informatica Data Director User Guide* describes the views that are based on the Entity 360 framework and the business entity data model.
- For upgrading customers, the *Informatica MDM Multidomain Edition Informatica Data Director User Guide (with Legacy Views)* contains all the content from the *Informatica MDM Multidomain Edition Informatica Data Director User Guide* plus the content about the legacy IDD views that are based on the subject area data model.

Informatica MDM Multidomain Edition Informatica Entity 360 Framework Guide - RETIRED

The *Informatica MDM Multidomain Edition Informatica Entity 360 Framework Guide* is retired. The *Informatica MDM Multidomain Edition Provisioning Tool Guide* contains information about the features that were described in this guide.

Informatica Platform Log

The MDM Hub generates `informatica-mdm-platform.log`, which stores configuration log messages for Informatica platform processes.

The `informatica-mdm-platform.log` file appears in the following directory:

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

Changes (10.2)

License File

Effective in version 10.2, the license file for MDM Multidomain Edition has been updated.

Note: If you upgrade, request the latest license file when you request the software for MDM Multidomain Edition version 10.2.

Email Address for MDM Hub Users

Effective in version 10.2, MDM Hub users must supply a valid email address. Previously, an email address was optional.

Note: If you upgrade, ensure that you associate a valid email address with previously created users in the Hub Console.

For more information about editing supplemental user information, see the *Informatica MDM Multidomain Edition Version 10.2 Security Guide*.

Preserving Source System Keys

Effective in version 10.2, when the option to preserve source system keys is enabled, source system keys are preserved for initial data loads and for all subsequent data loads.

Previously, when the option to preserve source system keys was enabled, source system keys were preserved for initial data loads only.

Metadata Caching

Effective in version 10.2, the MDM Hub uses Infinispan for metadata caching.

Previously, the MDM Hub used JBoss Cache for metadata caching.

Layout Editor

Effective in version 10.2, in the Provisioning tool, the Layout Editor is replaced by the Layout Designer.

For more information about the Layout Designer, see the *Informatica MDM Multidomain Edition Version 10.2 Provisioning Tool Guide*.

Unmerge

Effective in version 10.2, if you configure a role to trigger a task and configure the same role to process the task, an error occurs and the task is not processed.

Merge Tasks

Effective in version 10.2, a new Matching Records view is available to process merge tasks that use the Business Entity-based

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

Any merge tasks created prior to version 10.2 open in the legacy Match view, regardless of the `cmx.e360.match_xref.view.enabled` setting. If you enable the Entity 360 framework, merge tasks that are created in version 10.2 are opened in the Entity 360 framework Matching Records view.

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

Transformations

Effective in version 10.2, you cannot configure the platform transformations to cleanse, standardize, and validate data in business entities.

Previously, you could configure the platform transformations to cleanse, standardize, and validate data in business entities.

If you upgrade from an earlier version, to use the platform transformations that you configured, add an IDQ library in the Cleanse Functions tool of the MDM Hub Console. You can then use the cleanse functions in the library in place of the platform transformations. The cleanse functions in the IDQ library can call the web services associated with the platform transformations.

Resource Kit

Effective in version 10.2, to help build custom web services and workflows, the Resource Kit contains the following additional files:

- The `informatica-bpm-adapter.jar` and `siperian-server-pkiutil.jar` files are additional SiperianClient library classes that you can use to build custom web services that interact with the MDM Hub.
- The `avossdk.zip` file contains the ActiveVOS Orchestration project and an associated library. If you want to develop a workflow for the MDM Hub, import the Orchestration project into ActiveVOS Designer. This creates a template workflow project in which you can implement custom workflows.

For more information, see the *Informatica MDM Multidomain Edition Version 10.2 Resource Kit Guide*.

Business Entities in the Pending State

Effective in version 10.2, when you run a smart search, the search results include business entities that have records in the pending state. The pending state means that previous changes are going through a review and approval process.

In IDD, in the search results, business entities with pending changes have the prefix [Pending] in the Description field. If you open a pending business entity in a view, a pending icon appears near the business entity name. You cannot update a business entity that is in the pending state.

MDM App for iPads and iPhones is Deprecated

The Informatica MDM Mobile Multidomain Edition for Apple® devices, also known as the MDM app, is deprecated. To make it easier for customers and partners to create mobile MDM sites or apps in a world of device diversity, we are creating responsive interfaces built on modern web standards such as HTML5, Angular.js, and Bootstrap.

Business Entity Schema Generation

Effective in version 10.2, the business entity schema is generated when users click the **Publish** button in the Provisioning tool.

Previously, users had to click the **Generate BES** button to generate the business entity schema before clicking the **Publish** button.

For more information, see the *Multidomain MDM Provisioning Tool Guide*.

Proxy Role

The proxy role is not supported in version 10.2. A proxy role is a pre-defined role that you can use to configure a proxy user. The proxy role has read and execute privileges. You cannot change these privileges.

If you require a proxy role, you must apply 10.2 EBF 2 or 3, or upgrade to 10.2 HotFix 1.

Part III: Version 10.1

This part contains the following chapters:

- [Changes \(10.1 HotFix 6\), 64](#)
- [New Features and Enhancements \(10.1 HotFix 5\), 65](#)
- [New Features and Changes \(10.1 HotFix 4\), 69](#)
- [New Features and Changes \(10.1 HotFix 3\), 71](#)
- [New Features and Changes \(10.1 HotFix 2\), 73](#)
- [New Features and Changes \(10.1 HotFix 1\), 76](#)
- [New Features and Changes \(10.1\), 80](#)

CHAPTER 9

Changes (10.1 HotFix 6)

This section describes changes in version 10.1 HotFix 6.

Resource Kit: Configuration Automation Tools

Effective in version 10.1 HotFix 6, the `AssignUsersToDatabase` script has been updated to work with user names that contain uppercase characters.

Previously, the script required user names to be in lowercase.

Oracle Multitenant with Pluggable Databases

You can use Oracle Pluggable Databases for the MDM Hub Master Databases and Operational Reference Stores.

CHAPTER 10

New Features and Enhancements (10.1 HotFix 5)

This chapter includes the following topics:

- [New Features \(10.1 HotFix 5\), 65](#)
- [Changes \(10.1 HotFix 5\), 67](#)

New Features (10.1 HotFix 5)

This section describes new features in version 10.1 HotFix 5.

Informatica MDM Hub

This section describes new features and enhancements to Informatica MDM Hub.

Grouping Hub Servers and Process Servers

You can configure a logical grouping of Hub Servers and Process Servers. If you group a set of Hub Servers and Process Servers together, all communication between the servers stays within the group. To group a Hub Server and Process Server together, assign a group ID to each Java Virtual Machine in the MDM Hub implementation.

For more information, see the *Informatica MDM Multidomain Edition Version 10.0.0 HotFix 5 Installation Guide* and the *Informatica MDM Multidomain Edition Version 10.0.0 HotFix 5 Upgrade Guide*.

Informatica ActiveVOS Version 9.2.4.3

Informatica MDM version 10.0.0 HotFix 5 supports Informatica ActiveVOS version 9.2.4.3.

Hub Server Properties

You can use the following Hub Server properties to control the run-time behavior of the MDM Hub.

Configure the Hub Server properties in the `cmxserver.properties` file.

cmx.bes.write.alwaystokenize

By default, the MDM Hub does not tokenize updated records in the following scenarios:

- If you update the parent record or child record for an exact match column.
- If you update a child column that is configured as an exact match column in the parent table.

To specify that the MDM Hub always tokenizes updated records in these scenarios, set this property to `true`. Default is `false`.

cmx.server.selective.bvt.enabled

By default, a Put or Cleanse Put call applies BVT calculations to all fields in a record instead of updating only the fields specified in the SIF request. To specify that the MDM Hub only applies BVT calculation to fields that are part of the SIF request, set this property to `true`. Default is `false`.

com.informatica.mdm.message.queue.max.bytes.threshold

You can create a maximum limit for messages sent to the message queue. To specify the maximum size in bytes of messages sent to the message queue, set this property. If a message exceeds the specified size, the message will not be sent and the message status set to Failed.

For more information about setting Hub Server properties, see the *Informatica MDM Multidomain Edition Version 10.0.0 HotFix 5 Configuration Guide*.

Process Server Property for Tokenization in Match Jobs

You can specify that the MDM Hub runs tokenization when there is a match job or a tokenization API call on a large number of records. Set the `cmx.server.stripDML.useDeleteInsertLock` Process Server property to run tokenization during a match job on a larger number of records.

For more information, see the *Informatica MDM Multidomain Edition Version 10.0.0 HotFix 5 Configuration Guide*.

Informatica Data Director

This section describes new features and enhancements to Informatica Data Director.

Save Handler User Exit Enhancement

In Save Handler user exits, you can use the `getChangedChildren` method to return modified or added child or grandchild records in a specified base object.

The user exit returns all records that were added, deleted, or updated. You can select the type of changes returned by the user exit. For example, the user exit can return a combination of removed and updated children records.

Global Properties

You can use the following global properties to control the run-time behavior of the Informatica Data Director application:

deleteMovedRelInExplorerView

Determines whether to delete the old relationship when you create a new relationship in Hierarchy Manager explorer view. Set to `false` to give the relationship an end date.

enableSaveForPeriodDialogForHmRel

Enables the effective period dialog box that appears when you update a Hierarchy Manager-enabled record in IDD. Set to `false` to disable the effective period dialog box.

hideSystemColumnsInResult

Specifies whether the system columns appear in the search results. Set to `true` to hide the system columns in IDD search results.

For more information, see the *Informatica MDM Multidomain Edition Version 10.0.0 HotFix 5 Informatica Data Director Implementation Guide*.

Date Format Enhancement

You can change the default date format used by the calendar in the Entity 360 framework.

To change the default date format, use a text editor to create a `bundleE360.properties` file that contains the property `DATE_TIME_LONG_FORMAT`. Then add the `bundleE360.properties` file to the following location:

```
<distribution directory>\hub\server\resources\entityE360
```

Note: If it does not already exist, create the `entityE360` directory.

For more information, see the *Informatica MDM Multidomain Edition Version 10.0.0 HotFix 5 Informatica Provisioning Tool Guide*.

Changes (10.1 HotFix 5)

This section describes changes in version 10.1 HotFix 5.

Proxy Role

Effective in HotFix 5, the Operational Reference Store that you create contains a proxy role.

Previously, the proxy role had been deprecated. Due to demand, the proxy role has been reinstated.

User Exit Enhancement

Effective in HotFix 5, you can set effective periods in Hierarchy Manager user exits.

Previously, you could only set effective periods in the Save Handler user exit.

Changes to the Guides

Effective in HotFix 5, all the guides in the Informatica® MDM Multidomain Edition documentation set reflect the new Informatica brand and have an updated copyright page.

The following guides contain content related to new and changed features in this release:

- *Informatica MDM Multidomain Edition Version 10.0.0 HotFix 5 Release Notes*
- *Informatica MDM Multidomain Edition Version 10.0.0 HotFix 5 Release Guide*
- *Informatica MDM Multidomain Edition Version 10.0.0 HotFix 5 Installation Guide*
- *Informatica MDM Multidomain Edition Version 10.0.0 HotFix 5 Upgrade Guide*

- *Informatica MDM Multidomain Edition Version 10.0.0 HotFix 5 Configuration Guide*
- *Informatica MDM Multidomain Edition Version 10.0.0 HotFix 5 Provisioning Tool Guide*
- *Informatica MDM Multidomain Edition Version 10.0.0 HotFix 5 Informatica Data Director Implementation Guide*
- *Informatica MDM Multidomain Edition Version 10.0.0 HotFix 5 Resource Kit Guide*

The remaining guides in the documentation set are unchanged from earlier releases and retain their version numbers.

CHAPTER 11

New Features and Changes (10.1 HotFix 4)

This chapter includes the following topics:

- [New Features \(10.1 HotFix 4\), 69](#)
- [Changes \(10.1 HotFix 4\), 70](#)

New Features (10.1 HotFix 4)

This section describes new features in version 10.1 HotFix 4.

Informatica MDM Hub

This section describes new features and enhancements to Informatica MDM Hub.

Batch Group Job History

In the Batch Group tool in the Hub Console, you can specify the number of days of history to process for a batch group job log. By default, logs for batch jobs consider all history, but you can reduce the number of days considered.

To specify the number of days of history to process for a batch group job log, set the `cmx.server.jobControl.noOfDays` property in the `cmxserver.properties` file.

For more information, see the *Informatica MDM Multidomain Edition Version 10.0.0 HotFix 4 Configuration Guide*.

Informatica Data Director

This section describes new features and enhancements to Informatica Data Director.

Global Properties

You can use the following global properties to control the run-time behavior of the Informatica Data Director application:

CompositePagerTotalRecords

Maximum number of ActiveVOS tasks that Informatica Data Director sorts case-insensitively. By default, Informatica Data Director sorts ActiveVOS tasks case insensitively. If there are more than the value of `CompositePagerTotalRecords` to sort, case-sensitive sorting is database dependent. If the database is Microsoft SQL Server, the sorting is case insensitive. If the database is Oracle or IBM DB2, the sorting is case sensitive.

convert2DigitYearTo4Digit

Enables the adjustment of a two-digit year entry to a four-digit year entry.

expandDropDownListShowFullValue

Enables expansion of the drop-down list in the **Search** tab for lookup records.

qrytaskidfromprocessidtotalretry

Number of attempts that Informatica Data Director makes to reload an ActiveVOS task.

qrytaskidfromprocessidwaitintrvlmillis

Number of milliseconds that Informatica Data Director waits before attempting to reload an ActiveVOS task.

proactiveMatchResultSort

Configures the sort order in which the potential matches appear in the Informatica Data Director application.

For more information, see the *Informatica MDM Multidomain Edition Version 10.0.0 HotFix 4 Informatica Data Director Implementation Guide*.

History View Enhancements

Improved the usability of the History view by adding the following fields to a record:

Last Update Date

Displays the date the record was most recently updated.

Updated By

Displays the name of the user that updated the record.

Start Workspace Enhancements

To help you prioritize tasks, the Start workspace has a **Create date** column that displays the date a task was created. The Start workspace also has an **Owner** column that displays the current owner of a task.

Changes (10.1 HotFix 4)

There are no other changes for version 10.1 HotFix 4.

CHAPTER 12

New Features and Changes (10.1 HotFix 3)

This chapter includes the following topics:

- [New Features \(10.1 HotFix 3\), 71](#)
- [Changes \(10.1 HotFix 3\), 72](#)

New Features (10.1 HotFix 3)

This section describes new features in version 10.1 HotFix 3.

Informatica MDM Hub

This section describes new features and enhancements to Informatica MDM Hub.

Timeline Extract Job

The timeline extract job can keep the history of rejected records. When you run the timeline extract job, the MDM Hub sends the rejected records to a reject table. To process the rejected records, run the timeline extract job again.

For more information, see "Using Timeline Extract" in the *Informatica MDM Multidomain Edition Version 10.1 HotFix 3 Configuration Guide*.

Hub Server Property for Cloud Deployments

You can specify the communication protocol to use with the Java Network Launch Protocol (JNLP) file that launches the MDM Hub Console in a cloud deployment. You set the `cmx.appserver.jnlp.protocol` Hub Server property to specify the communication protocol.

For more information, see the *Informatica MDM Multidomain Edition Version 10.1 HotFix 3 Configuration Guide*.

Informatica Data Director

This section describes new features and enhancements to Informatica Data Director.

Language Display

You can configure Informatica Data Director to display custom action names in the **More Actions** menu to appear in a localized language. To localize the custom action names, add the custom action name and localized value pairs to the internationalization message bundles.

For more information, see the *Informatica MDM Multidomain Edition Version 10.1 HotFix 3 Informatica Data Director Implementation Guide*.

Global Properties

You can use the following global properties to control the run-time behavior of the Informatica Data Director application:

bulkexportloadsize

Sets the maximum size of the load for each thread when you export data to a Microsoft Excel file.

exportusingmultithread

Enables multithreading for data export to a Microsoft Excel file.

enableCreateBEMenuGrouping

Specifies whether you can define logical groups based on subject areas for the Create menu for business entities. The property is required if you have a large number of subject areas.

For more information, see the *Informatica MDM Multidomain Edition Version 10.1 HotFix 3 Informatica Data Director Implementation Guide*.

Multiple Task Actions Support

You can configure an ActiveVOS workflow to allow reviewers to perform multiple actions on a task without closing the Task tab. For each task action where you want to support multiple actions without closing the Task tab, set the `closeTaskViewproperty` to `false`.

For more information, see the *Informatica MDM Multidomain Edition Version 10.1 HotFix 3 Informatica Data Director Implementation Guide*.

Changes (10.1 HotFix 3)

This section describes changes in version 10.1 HotFix 3.

BeMDMWorkflow ActiveVOS Project

Effective in version 10.1 HotFix 3, the BeMDMWorkflow project in the Resource Kit has changed to resolve an issue with task inbox filtering.

Previously, the BeMDMWorkflow project in the Resource Kit caused an issue with task inbox filtering.

If you upgrade from an earlier version, redeploy the BeMDMWorkflow project after you upgrade. If you have customized the workflows, use ActiveVOS Designer to add the following code within the TaskFilter complex type in the `cs.wsd1` file:

```
<xsd:element minOccurs="0" name="overdueOnly" type="xsd:boolean" />
```

For more information, see the *Informatica MDM Multidomain Edition 10.1 HotFix 3 Upgrade Guide*.

CHAPTER 13

New Features and Changes (10.1 HotFix 2)

This chapter includes the following topics:

- [New Features \(10.1 HotFix 2\), 73](#)
- [Changes \(10.1 HotFix 2\), 74](#)

New Features (10.1 HotFix 2)

This section describes new features in version 10.1 HotFix 2.

Informatica MDM Hub

This section describes new features and enhancements to Informatica MDM Hub.

Specifying Primary Key Columns for Hard Delete Detection

When you create a unique primary key by concatenating values from multiple source columns, the hard delete detection (HDD) process looks at the inputs to the function and monitors all the input source columns. You can now override this behavior by listing the columns to monitor in the hard delete detection repository table.

For example, you create a custom function with many inputs. Within the custom function, some of the source columns are inputs to a concatenate function that creates the unique primary key. Other source columns pass through the custom function unchanged. The HDD process cannot see what happens within a custom function. Therefore, the HDD process monitors all the inputs to the custom function. You want the HDD process to monitor only the source columns that contribute to the primary key.

To focus the HDD process on the subset of source columns that contribute to the primary key, configure the C_REPOS_EXT_HARD_DEL_DETECT repository table. Add an HDD_LANDING_PKEY_COLUMNS column, and insert a comma-separated list of the column names.

For more information, see "Specifying the Primary Key Columns for Hard Delete Detection" in the *Informatica MDM Multidomain Edition Version 10.1 HotFix 2 Configuration Guide*

Informatica Data Director

This section describes new features and enhancements to Informatica Data Director.

Search Queries

You can build search queries to include package columns that are not part of a subject area. Search results can display all the package columns that you use to build a query.

Changes (10.1 HotFix 2)

This section describes changes in version 10.1 HotFix 2.

Allow Null Update Property

Effective in version 10.1 HotFix 2, all processes that calculate the best version of the truth treat null values the same way. Previously, some processes ignored the **Allow Null Update** property in the staging table and used the **Apply Null Values** property in the base object table.

When a source system contributes a null value for a column, a process refers to the setting of the **Allow Null Update** property for that column in the staging table.

- If the **Allow Null Update** property is enabled on the column, the process can write the null value to the base object record.
- If the **Allow Null Update** property is disabled on the column, the process downgrades the trust for the null value.
- If a process cannot resolve the setting of the **Allow Null Update** property in a staging table, the process uses the setting for the **Apply Null Values** property in the base object table.

For more information about the **Allow Null Update** property, see the *Informatica MDM Multidomain Edition Version 10.1 HotFix 2 Configuration Guide*.

Obsolete Properties

Effective in version 10.1 HotFix 2, the following Hub Server properties are obsolete:

Obsolete Property	Change in Behavior for Version 10.1 HotFix 2
<code>cmx.server.batch.load.analyze_threshold_rate</code>	There is no equivalent in this version.

Effective in version 10.1 HotFix 2, the following Process Server properties are obsolete:

Obsolete Property	Change in Behavior for Version 10.1 HotFix 2
<code>com.informatica.mdm.overrideNullable</code>	When a source system contributes a null value, you cannot override how a process calculates the most trustworthy value. The method that a process uses to handle null values has changed. For more information, see “Allow Null Update Property” on page 74 .
<code>com.informatica.mdm.promoteNullable</code>	When a source system that contributes a null value for a column has multiple staging tables, processes ignore the Allow Null Update property in all the staging tables. Instead, processes use the setting of the Apply Null Values property in the base object record.

If an obsolete property remains in the properties file after you upgrade, the property is ignored. You can safely remove the property from the file.

Hub State Indicator is Not Putable

Effective in version 10.1 HF2, the system column HUB_STATE_IND cannot be set as putable.

CHAPTER 14

New Features and Changes (10.1 HotFix 1)

This chapter includes the following topics:

- [New Features \(10.1 HotFix 1\), 76](#)
- [Changes \(10.1 HotFix 1\), 78](#)

New Features (10.1 HotFix 1)

This section describes new features in version 10.1 HotFix 1.

Informatica MDM Hub

This section describes new features and enhancements to Informatica MDM Hub.

Enhancements to the Read and List Business Entity Services

Effective in version 10.1 HotFix 1, you can specify the sort order for the child elements when you use the Read business entity service to retrieve the details of a root record. You can specify the sort order when you use the List business entity service to retrieve lookup values.

Use the parameter `order` to specify the sort order.

For more information about the `order` parameter, see the *Informatica MDM Multidomain Edition 10.1 HotFix 1 Business Entity Services Guide*.

Option to Suppress Links in the Business Entity Services Responses

Effective in version 10.1 HotFix 1, you can suppress parent-child links in the responses of the Read and Search business entity services. Use the parameter `suppressLinks` to suppress the links in the responses.

For more information about the `suppressLinks` parameter, see the *Informatica MDM Multidomain Edition 10.1 HotFix 1 Business Entity Services Guide*.

Allow Null Update Property

Effective in version 10.1 HotFix 1, you can change how the load process sets the Allow Null Update property when there is a mixture of values for the Allow Null Update property in the contributing staging tables. You

can also control how the load process sets the Allow Null Update property for multiple staging tables with the same source system.

For more information, see "Customize the Behavior of the Allow Null Update Property" in the *Informatica MDM Multidomain Edition Version 10.1 HotFix 1 Configuration Guide*.

Informatica Data Director

This section describes new features and enhancements to Informatica Data Director.

Global Properties

Effective in version 10.1 HotFix 1, you can use the following global property to control the run-time behavior of the Informatica Data Director application:

showShadowColumns

Specifies whether to show shadow columns in the Cross-reference View.

For more information, see the *Informatica MDM Multidomain Edition Version 10.1 HotFix 1 Informatica Data Director Implementation Guide*.

User Authentication and Password Encryption

Effective in version 10.1 HotFix 1, you can configure authentication for URLs in Informatica Data Director. When authentication is enabled, when users log in, they pass their user name and password as part of the URL in Informatica Data Director. You can also configure Informatica Data Director to pass the user name and password in an encrypted format.

For more information, see the *Informatica MDM Multidomain Edition Version 10.1 HotFix 1 Informatica Data Director Implementation Guide* and the *Informatica MDM Multidomain Edition Version 10.1 HotFix 1 Configuration Guide*.

Entity View Enhancements

Improved the usability of the Entity View by adding the following enhancements:

- You can collapse the section that contains the root record of the entity.
- You can switch to edit mode by clicking in the fields.
- In sections that contain child records, when you are in Table View you can sort the columns.

Table View for Child Records

Effective in version 10.1 HotFix 1, you can specify the number of columns that you want to show in the table view for child records and grandchild records.

By default, the table view contains up to 20 columns plus 5 hidden columns. You can change the global default value by setting the `tableMaxColumns` parameter in the `C_REPOS_DS_PREF_DETAIL`.

For more information, see the *Informatica MDM Multidomain Edition Version 10.1 HotFix 1 Informatica Data Director Implementation Guide*.

Custom Views

Effective in version 10.1 HotFix 1, you can create a custom view in the Entity 360 framework to display views of the master data that are beneficial to business users. To configure a custom view, use the Layout Editor in the Provisioning tool to configure the view layout and then add the custom view to the view menu.

For more information about configuring custom views, see the *Informatica MDM Multidomain Edition Version 10.1 HotFix 1 Provisioning Tool Guide*.

Changes (10.1 HotFix 1)

This section describes changes in version 10.1 HotFix 1.

SAM Privileges

Effective in version 10.1 HotFix 1, to see the New drop-down menu in IDD, you must assign create privileges on the subject area of the associated base object. Use the Security Access Manager in the Hub Console to assign privileges.

Previously, to see the New drop-down menu in IDD, you only had to assign read privileges on the subject area of the associated base object.

Fill on Gap

Effective in version 10.1 HotFix 1, for timeline-enabled base objects, you can enable the **Fill on gap** property in the Hub Console. You set the property for the base object in the associated staging table. Previously, you could only enable the **Fill on gap** property through the C_REPOS_TABLE for the associated staging table.

Preserving Source System Keys

Effective in version 10.1 HotFix 1, when the option to preserve source system keys is enabled, source system keys are preserved for initial data loads and for all subsequent data loads.

Previously, when the option to preserve source system keys was enabled, source system keys were preserved for initial data loads only.

Removed INFA_MDM.zip File

Effective in version 10.1 HotFix 1, the obsolete file INFA_MDM.zip was removed. The MDMWorkflow.zip file contains the current ActiveVOS workflows.

Task Manager Enhancement

Effective in version 10.1 HotFix 1, in the Task Manager, the task inbox spans the width of the browser window so that the column data is easier to read. When you review a task, the review panel opens below the task inbox. Previously, the panels were displayed side-by-side.

Merge Task Enhancement

Effective in version 10.1 HotFix 1, after you merge records from the Merge Preview, you see confirmation of the merge. Previously, a blank page was displayed.

Matches View Enhancement

Effective in version 10.1 HotFix 1, in the Matches View, you can highlight the rows with matched attributes by selecting the **Show Matched Rows** check box. Previously, the rows were not highlighted.

Business Entity Schema

Effective in version 10.1 HotFix 1, the business entity schema is updated to support pagination for sorted search results. You must regenerate the business entity schema after you upgrade.

CHAPTER 15

New Features and Changes (10.1)

This chapter includes the following topics:

- [New Features \(10.1\), 80](#)
- [Changes \(10.1\), 86](#)

New Features (10.1)

This section describes new features in version 10.1.

Provisioning Tool

The Provisioning tool is a tool to create business entity models and configure the Entity 360 framework. To create a business entity model, you create a root node and then establish relationships between nodes. These relationships are based on foreign key constraints that you define using the Hub Console. After you build the business entity model and configure the nodes you can publish the configuration to the MDM Hub.

Technical specialists can use the Provisioning tool to perform the following tasks:

- Use the graphic user interface to configure the business entity model. An XML editor is provided so you can configure the XML files directly for all configurations related to business entities.
- Use the graphic user interface to configure the properties for each node. For example, you can configure search properties and display names.
- Publish XML configuration files to the MDM Hub. The Repository Manager validates the configuration and reports any errors. You do not need to upload BLOB files to a repository table manually.

Informatica MDM Multidomain Edition technical specialists can use the Provisioning tool to perform the following activities:

- Create a business entity model. For implementation with custom user interfaces only. You cannot create a business entity model if you implement business entities in Informatica Data Director (IDD).
- Create a reference entity. For implementation with custom user interfaces only. You cannot create a reference entity if you implement business entities in Informatica Data Director.
- Configure the business entity nodes.
- Configure the search properties for each node in the business entity model.
- Generate the XML files for the following configurations:
 - REST services

- Write business entity service
- Search
- Configure the XML files for Entity 360 framework configuration.
- Configure the XML files for BPM tasks.
- Configure the XML files for business entity view and the transformation service.
- Publish the configuration files to the MDM Hub.

For more information, see the *Informatica MDM Multidomain Edition version 10.1 Provisioning Tool Guide*.

When to Use the Configuration Tools

Based on your environment, you use a different set of configuration tools.

The following table describes the types of environments and identifies which tools you use:

Environment	Description	Tools
Informatica MDM	You use MDM components. You do not use Informatica Data Director or Business Entity Services.	Hub Console
Informatica MDM with Informatica Data Director	You use MDM components. You also use Informatica Data Director to create a standard user interface for business users. Note: This option is supported for upgrade customers who want to maintain the behavior of existing IDD applications, including custom tabs and user exits.	1. Hub Console 2. IDD Configuration Manager
Informatica MDM with Informatica Data Director and the Entity 360 Framework	You use MDM components. You also use Informatica Data Director with the Entity 360 framework enabled.	1. Hub Console 2. IDD Configuration Manager 3. Provisioning tool
Informatica MDM with Business Entity Services	You use MDM components. You also use business entity services to make calls to the MDM Hub from a custom application.	1. Hub Console 2. Provisioning tool

Differences Between Versions of Informatica Data Director

In previous versions of Informatica Data Director (IDD), data was organized around subject areas and aggregated into subject area groups. IDD used the subject area definition to determine how to treat each foreign key relationship in an Operational Reference Store (ORS).

In the latest version of IDD, data is organized around business entities. A business entity can be anything that has significance to an organization. For example, your organization might define a business entity type of Person. The customer John Smith is a business entity of type Person. In the MDM Hub Store, a business entity corresponds to a record in a base object table.

The following table describes some of the differences between the versions of IDD, depending on whether you use subject areas or you use business entities.

IDD with Subject Areas	IDD with Business Entities
Subject area depth is limited to three levels	Business entity depth is unlimited
n/a	Entity 360 framework
Custom workspaces through IDD configuration file	Custom Start workspaces available in Entity 360 framework
Static lookups are supported	Lookups supported through reference entities
User exits are supported	Server-side cleansing and validation
Import Master Data	Import Master Data is not available in version 10.1.0

Business Entity Views and Transformations

You can use the business entity views to expose the data in a business entity to your users in multiple ways and in formats suitable for the users. Business entity views provide a separation of low-level business entity and user interface related views. You can transform a business entity to a business entity view and a business entity view back to a business entity.

You can use the business entity views XML to define the business entity views and the transformation configuration XML to define the transformation of a business entity to a business entity view and back. You can use the Provisioning tool to manually define the business entity views and the transformation configuration XML.

For more information about business entity views and transformations, see the *Informatica MDM Multidomain Edition version 10.1 Provisioning Tool Guide*.

REST API Business Entity Service Calls

You can operate on multiple child branches at various depths in a single REST API business entity service request.

The following URL sample shows how to make a REST API read request to get the Person record with row ID 1242, the address detail from the Address child branch, and the email records from the Email child branch:

```
http://localhost:8080/cmx/cs/localhost-ORCL-DS_UI1/Person/1242?children=Address/Address_Details_1,Email
```

For more information, see the *Informatica MDM Multidomain Edition version 10.1 Business Entity Services Guide*.

Resource Kit

You can run the database performance testing utility to test the performance of the database for the MDM Hub. The database testing utility is included in the Resource Kit.

For more information, see the *Informatica MDM Multidomain Edition version 10.1 Resource Kit Guide*.

Hub Server Properties for the Tokenization and Match Process

You can add the following properties to the `cmxserver.properties` file to configure the tokenization and match process:

cmx.server.strp_clean.execution_mode

Configures the scope of operation of the background cleanup process on the match key table.

cmx.server.strp_clean.ors

Specifies the names of the Operational Reference Stores on which the background cleanup process must run to delete match tokens that are not valid.

cmx.server.strp_clean.strp

Specifies the Operational Reference Store and base object combinations for which the background cleanup process must run to clean up match key tables.

cmx.server.strp_clean.delete_records_count

Specifies the number of records to clean up from the match key table.

cmx.server.strp_clean.retry_sec

Specifies the time duration in seconds for which you want the MDM Hub to search for records with match tokens that are not valid in the match key table.

cmx.server.strp_clean.threads_count

Specifies the number of threads that the MDM Hub uses when it searches for records with match tokens that are not valid in the match key table.

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

Process Server Properties for the Tokenization and Match Process

You can add the following properties to the `cmxcleanse.properties` file to configure the tokenization and match process:

cmx.server.stripDML.blockSize

Configures the number of records that the MDM Hub processes in each block.

cmx.server.stripDML.noOfThreadsForDelete

Configures the number of threads that the MDM Hub uses to delete records from the match key tables.

cmx.server.stripDML.noOfThreadsForInsert

Configures the number of threads that the MDM Hub uses to insert records into the match key tables.

cmx.server.stripDML.noOfThreadsForUpdate

Configures the number of threads that the MDM Hub uses to update records in the match key tables.

cmx.server.stripDML.useUpdate

Specifies whether or not the match tokens must be marked as not valid instead of deleting them.

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

Informatica Data Director New Features

This section describes new features and enhancements to Informatica Data Director.

Hide the Data Workspace in Informatica Data Director

When you enable the Entity 360 framework for Informatica Data Director (IDD) applications, IDD users edit and manage master data from an entity workspace instead of from the Data workspace. You can reduce confusion for IDD users by hiding the Data workspace and the related user interface elements for all IDD applications. You hide the workspace by setting the `cmx.dataview.enabled` in the `cmxserver.properties` file.

In a new installation, the Data workspace is hidden by default. When upgrading, if the `cmx.dataview.enabled` property was not specified, the Data workspace is shown. If this property was specified, the IDD applications continue to respect the pre-upgrade setting. For more information, see "Hub Server Properties" in the *Multidomain MDM Configuration Guide*.

Wildcard Search

You can use the asterisk wildcard character (*) with the search string to perform a wildcard search. 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`.

Search String Suggestions

You can configure smart search to suggest search strings based on the strings that you type. You can select one of the suggested values as the search string.

For more information about configuring smart search to suggest search strings, see the *Informatica MDM Multidomain Edition Configuration Guide*.

Jaspersoft Report in Start Workspace

If you use the business intelligence tool Jaspersoft to develop and analyze reports, you can display the reports in the Entity 360 framework for IDD. You can configure the Start workspace to display Jaspersoft reports.

For more information about Jaspersoft report configuration, see the *Informatica MDM Multidomain Edition version 10.1 Provisioning Tool Guide*.

Related Tasks

The Related Tasks component in the Task Manager inbox displays related tasks for a selected task.

Note: Related tasks only display tasks that are created in the BE-ActiveVOS adapter.

For more information, see the *Informatica MDM Multidomain Edition version 10.1 Provisioning Tool Guide*.

Global Properties

You can use the following global property to control the run-time behavior of the Informatica Data Director application:

maxXrefSearchReturnCount

Specifies the maximum number of cross-reference records that a search request returns in Informatica Data Director.

For more information, see the *Informatica MDM Multidomain Edition Version 10.1 Informatica Data Director Implementation Guide*.

Upgrade with Zero Downtime

When you need to upgrade Informatica MDM software but stakeholders require uninterrupted access to master data in the MDM Hub Store, you can use the zero downtime feature. While the primary Hub Store is offline for software updates, a secondary duplicate Hub Store stores changed data and responds to requests for master data.

Note: Informatica MDM uses Oracle GoldenGate for database replication.

Zero downtime is supported for Hub Stores that reside within IBM DB2 databases or within Oracle databases.

- IBM DB2. For more information, see the *Informatica MDM Multidomain Edition for IBM DB2 Version 10.1 Zero Downtime Installation Guide*.
- Oracle. For more information, see the *Informatica MDM Multidomain Edition for Oracle Version 10.1 Zero Downtime Installation Guide*.

ActiveVOS Task Migration Script

You can run a migration script to populate pre-10.1 ActiveVOS tasks with the correct presentation parameters. To work with ActiveVOS tasks that were created before MDM Multidomain Edition version 10.1, regularly run the migration script. If you do not run the migration script, the tasks do not appear in the Task Manager. Regularly run the migration script until all the tasks that were created before you upgraded to version 10.1 are processed.

For more information, see the *Informatica MDM Multidomain Edition version 10.1 Upgrade Guide*.

Suggester REST API

You can use the Suggester REST API to return a list of related terms for a search string, based on the data present in your database. Use the API to accept the characters that you type in a user interface field and return suggestions to autocomplete what you type.

For more information about the Suggester REST API, see the *Informatica MDM Multidomain Edition 10.1 Business Entity Services Guide*.

Enhancements to the Search Business Entity REST API

You can use the Search Business Entity API to perform a fielded search on the indexed values in a searchable root business entity and in all the child records. You can now use facets and filters to view a subset of the search results.

For more information about the Search Business Entity REST API, see the *Informatica MDM Multidomain Edition 10.1 Business Entity Services Guide*.

Reserved Key Words for IBM DB2

In IBM DB2 environments, the reserved key words MDMNODE and MDMLIAS are used for database creation. You cannot use these words as column names in IBM DB2 environments:

For more information, see the *Informatica MDM Multidomain Edition Version 10.1 Configuration Guide*.

Changes (10.1)

This section describes changes in version 10.1.

Informatica LLC

Effective August 2015, in all Informatica products and documents, the term “Informatica Corporation” has been replaced with the term “Informatica LLC”. Any occurrence of the term “Informatica Corporation” in current products or documentation should read “Informatica LLC”.

Changes to Terms

In this release, some terms were changed.

The following table contains the old and new terms:

Old Term	New Term
composite object	business entity
composite service	business entity service
Entity 360	Entity 360 framework
Entity 360 View	Entity View
360 View	Entity View

Secured Connection Between a Process Server and the Hub Server

When you configure a Process Server in the Hub Console, you can set a property to enable a secured connection with the Hub Server. In the Add/Edit Process Server dialog box, select **Enable Secured Connection (HTTPS)** to enable the secured connection.

In previous releases, you configured a secured connection by setting the `Is Secured` field to 1 in the `C_REPOS_CLEANSE_MATCH_SERVER` table.

Tokenization Process

Effective in version 10.1.0, the MDM Hub generates or updates match tokens when base object records are marked dirty.

The base object records are marked dirty if all of the following conditions are met:

- An update affects match columns in a base object.
- The best version of the truth (BVT) of a match column after the update is different from the old value.

Previously, base object records were marked dirty whenever there was any update to a base object record.

Searchable Field Properties

Effective in version 10.1.0, you can use the Provisioning tool to configure the searchable field properties.

Previously, you used a change list or manually updated the C_REPOS_CO_CS_CONFIG repository database table.

Informatica Data Director Changes

This section describes changes to Informatica Data Director.

Menu Changes

With the introduction of the Entity 360 framework, the menu items in the header changed.

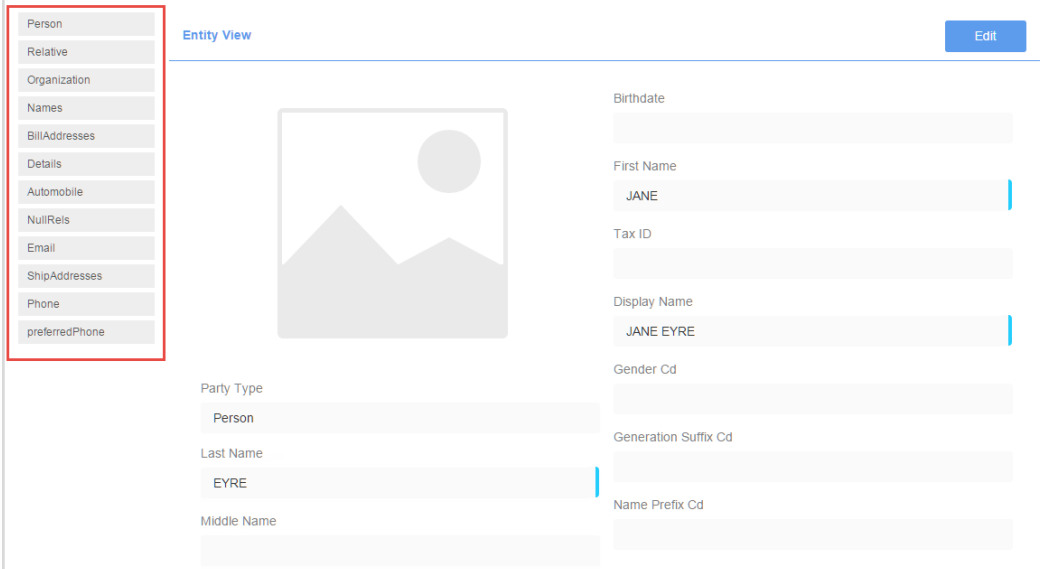
Effective in version 10.0, the **New** menu was renamed to **New SA**, and another menu was added named **New BE**. Effective in version 10.0.0 HotFix 3, these menus were renamed to be more meaningful.

The following table summarizes the changes to the menus:

Pre-version 10.0 Menus	Version 10.0 Menus	Version 10.0.0 HotFix 3 Menus	Description
n/a	New BE	Create	Create a business entity in the Entity view .
New	New SA	Create in Data View	Create records in a subject area in the Data view . In 10.0.0 HotFix 3, if you hide the Data view , this menu is also hidden. Use the Create menu instead.
Queries	Queries	Queries	Use the search functions in the Data view . In 10.0.0 HotFix 3, if you hide the Data view , this menu is also hidden. Use the Search box instead.

Navigation Menu in the Entity View

Effective in version 10.0.0 HotFix 3, when you view a business entity in the Entity view, a navigation menu appears on the left. Click a section name in the navigation menu to scroll to that section in the Entity view.



The screenshot shows the 'Entity View' interface. On the left, a navigation menu is highlighted with a red box, listing sections: Person, Relative, Organization, Names, BillAddresses, Details, Automobile, NullReIs, Email, ShipAddresses, Phone, and preferredPhone. The main area displays a form for a person entity. The form includes a profile picture placeholder, a 'Party Type' dropdown set to 'Person', and fields for 'Last Name' (EYRE) and 'Middle Name'. On the right, there are fields for 'Birthdate', 'First Name' (JANE), 'Tax ID', 'Display Name' (JANE EYRE), 'Gender Cd', 'Generation Suffix Cd', and 'Name Prefix Cd'. An 'Edit' button is located in the top right corner.

For more information, see "Adding a Business Entity" in the *Informatica MDM Multidomain Edition Version 10.0.0 HotFix 3 Informatica Data Director User Guide*.

Form View for the Sections in the Entity View

Effective in version 10.0.0 HotFix 3, when you view a business entity in the Entity view, the root record appears at the top of the view and its child records appear in sections below the root record. The root record is displayed in form view. For sections, you can switch the view of the child records between a table view and a form view.

For more information, see "Adding a Business Entity" in the *Informatica MDM Multidomain Edition Version 10.0.0 HotFix 3 Informatica Data Director User Guide*.

Hierarchy Canvas

Effective in version 10.0.0 HotFix 3, in the Hierarchy canvas, the node text wraps to the next line instead of being truncated.



Service URL

Effective in version 10.0.0 HotFix 3, you can specify the service URL format that Informatica Data Director generates for SIF calls.

Add the following text to the `cmxserver.properties` file to specify the service URL:

```
referer.url=http://<local host>:<port number>
```


For more information, see the *Informatica MDM Multidomain Edition Version 10.0.0 HotFix 3 Informatica Data Director Implementation Guide*.

Multiple Match Indexes

The multiple match indexes feature, which was introduced in a HotFix for version 9.7.1, is not supported in version 10.0.0 or later.

Validation of Changes to the Schema

Effective in version 10.0.0 HotFix 3, if you make any changes to the schema in the Hub Console, such as adding a column to a base object, metadata validation generates a warning. Each change that you make to the schema causes dummy metadata validation and adds an entry to the C_REPOS_MET_VALID_RESULT table.

Obsolete Hub Server Properties

In this release, some Hub Server properties are not used. If the obsolete properties remain in the `cmxserver.properties` file after you upgrade, the properties are ignored. You can safely remove them from the file.

The following properties are obsolete:

Property	Replacement
<code>activevos.merge.workflow.operation.name</code>	None
<code>activevos.workflow.basicSecure</code>	ActiveVOS security is handled at the application server level. A trusted user enables ActiveVOS to interact securely with the MDM Hub.
<code>cmx.idd.data_import_enabled</code>	None
<code>solr.allNodesAliveSleepTimeout</code>	None
<code>teamworks.merge.workflow.guid</code>	None
<code>zk.allNodesAliveRetries</code>	None

Part IV: Version 10.0.0

This part contains the following chapters:

- [New Features and Changes \(10.0.0 HotFix 5\), 91](#)
- [New Features and Enhancements \(10.0.0 Hot Fix 4\), 95](#)
- [New Features and Enhancements \(10.0.0 Hot Fix 3\), 97](#)
- [New Features and Enhancements \(10.0.0 Hot Fix 2\), 111](#)
- [New Features, Changes, and Release Tasks \(10.0.0 Hot Fix 1\), 124](#)
- [New Features, Changes, and Release Tasks \(10.0.0\), 127](#)

CHAPTER 16

New Features and Changes (10.0.0 HotFix 5)

This chapter includes the following topics:

- [New Features \(10.0.0 HotFix 5\), 91](#)
- [Changes \(10.0.0 HotFix 5\), 93](#)

New Features (10.0.0 HotFix 5)

This section describes new features in version 10.0.0 HotFix 5.

Informatica MDM Hub

This section describes new features and enhancements to Informatica MDM Hub.

Grouping Hub Servers and Process Servers

You can configure a logical grouping of Hub Servers and Process Servers. If you group a set of Hub Servers and Process Servers together, all communication between the servers stays within the group. To group a Hub Server and Process Server together, assign a group ID to each Java Virtual Machine in the MDM Hub implementation.

For more information, see the *Informatica MDM Multidomain Edition Version 10.0.0 HotFix 5 Installation Guide* and the *Informatica MDM Multidomain Edition Version 10.0.0 HotFix 5 Upgrade Guide*.

Informatica ActiveVOS Version 9.2.4.3

Informatica MDM version 10.0.0 HotFix 5 supports Informatica ActiveVOS version 9.2.4.3.

Hub Server Properties

You can use the following Hub Server properties to control the run-time behavior of the MDM Hub.

Configure the Hub Server properties in the `cmxserver.properties` file.

cmx.bes.write.alwaystokenize

By default, the MDM Hub does not tokenize updated records in the following scenarios:

- If you update the parent record or child record for an exact match column.
- If you update a child column that is configured as an exact match column in the parent table.

To specify that the MDM Hub always tokenizes updated records in these scenarios, set this property to `true`. Default is `false`.

cmx.server.selective.bvt.enabled

By default, a Put or Cleanse Put call applies BVT calculations to all fields in a record instead of updating only the fields specified in the SIF request. To specify that the MDM Hub only applies BVT calculation to fields that are part of the SIF request, set this property to `true`. Default is `false`.

com.informatica.mdm.message.queue.max.bytes.threshold

You can create a maximum limit for messages sent to the message queue. To specify the maximum size in bytes of messages sent to the message queue, set this property. If a message exceeds the specified size, the message will not be sent and the message status set to Failed.

For more information about setting Hub Server properties, see the *Informatica MDM Multidomain Edition Version 10.0.0 HotFix 5 Configuration Guide*.

Process Server Property for Tokenization in Match Jobs

You can specify that the MDM Hub runs tokenization when there is a match job or a tokenization API call on a large number of records. Set the `cmx.server.stripDML.useDeleteInsertLock` Process Server property to run tokenization during a match job on a larger number of records.

For more information, see the *Informatica MDM Multidomain Edition Version 10.0.0 HotFix 5 Configuration Guide*.

Informatica Data Director

This section describes new features and enhancements to Informatica Data Director.

Save Handler User Exit Enhancement

In Save Handler user exits, you can use the `getChangedChildren` method to return modified or added child or grandchild records in a specified base object.

The user exit returns all records that were added, deleted, or updated. You can select the type of changes returned by the user exit. For example, the user exit can return a combination of removed and updated children records.

Global Properties

You can use the following global properties to control the run-time behavior of the Informatica Data Director application:

deleteMovedRelInExplorerView

Determines whether to delete the old relationship when you create a new relationship in Hierarchy Manager explorer view. Set to `false` to give the relationship an end date.

enableSaveForPeriodDialogForHmRel

Enables the effective period dialog box that appears when you update a Hierarchy Manager-enabled record in IDD. Set to `false` to disable the effective period dialog box.

hideSystemColumnsInResult

Specifies whether the system columns appear in the search results. Set to `true` to hide the system columns in IDD search results.

For more information, see the *Informatica MDM Multidomain Edition Version 10.0.0 HotFix 5 Informatica Data Director Implementation Guide*.

Date Format Enhancement

You can change the default date format used by the calendar in the Entity 360 framework.

To change the default date format, use a text editor to create a `bundleE360.properties` file that contains the property `DATE_TIME_LONG_FORMAT`. Then add the `bundleE360.properties` file to the following location:

```
<distribution directory>\hub\server\resources\entityE360
```

Note: If it does not already exist, create the `entityE360` directory.

For more information, see the *Informatica MDM Multidomain Edition Version 10.0.0 HotFix 5 Informatica Provisioning Tool Guide*.

Changes (10.0.0 HotFix 5)

This section describes changes in version 10.0.0 HotFix 5.

Proxy Role

Effective in HotFix 5, the Operational Reference Store that you create contains a proxy role.

Previously, the proxy role had been deprecated. Due to demand, the proxy role has been reinstated.

User Exit Enhancement

Effective in HotFix 5, you can set effective periods in Hierarchy Manager user exits.

Previously, you could only set effective periods in the Save Handler user exit.

Changes to the Guides

Effective in HotFix 5, all the guides in the Informatica[®] MDM Multidomain Edition documentation set reflect the new Informatica brand and have an updated copyright page.

The following guides contain content related to new and changed features in this release:

- *Informatica MDM Multidomain Edition Version 10.0.0 HotFix 5 Release Notes*
- *Informatica MDM Multidomain Edition Version 10.0.0 HotFix 5 Release Guide*
- *Informatica MDM Multidomain Edition Version 10.0.0 HotFix 5 Installation Guide*
- *Informatica MDM Multidomain Edition Version 10.0.0 HotFix 5 Upgrade Guide*

- *Informatica MDM Multidomain Edition Version 10.0.0 HotFix 5 Configuration Guide*
- *Informatica MDM Multidomain Edition Version 10.0.0 HotFix 5 Provisioning Tool Guide*
- *Informatica MDM Multidomain Edition Version 10.0.0 HotFix 5 Informatica Data Director Implementation Guide*
- *Informatica MDM Multidomain Edition Version 10.0.0 HotFix 5 Resource Kit Guide*

The remaining guides in the documentation set are unchanged from earlier releases and retain their version numbers.

CHAPTER 17

New Features and Enhancements (10.0.0 Hot Fix 4)

This chapter includes the following topics:

- [New Features \(10.0.0 HotFix 4\), 95](#)
- [Changes \(10.0.0 HotFix 4\), 96](#)

New Features (10.0.0 HotFix 4)

This section describes new features in version 10.0.0 HotFix 4.

Informatica MDM Hub

This section describes new features and enhancements to Informatica MDM Hub.

Batch Group Job History

In the Batch Group tool in the Hub Console, you can specify the number of days of history to process for a batch group job log. By default, logs for batch jobs consider all history, but you can reduce the number of days considered.

To specify the number of days of history to process for a batch group job log, set the `cmx.server.jobControl.noOfDays` property in the `cmxserver.properties` file.

For more information, see the *Informatica MDM Multidomain Edition Version 10.0.0 HotFix 4 Configuration Guide*.

Informatica Data Director

This section describes new features and enhancements to Informatica Data Director.

Global Properties

You can use the following global properties to control the run-time behavior of the Informatica Data Director application:

CompositePagerTotalRecords

Maximum number of ActiveVOS tasks that Informatica Data Director sorts case-insensitively. By default, Informatica Data Director sorts ActiveVOS tasks case insensitively. If there are more than the value of `CompositePagerTotalRecords` to sort, case-sensitive sorting is database dependent. If the database is Microsoft SQL Server, the sorting is case insensitive. If the database is Oracle or IBM DB2, the sorting is case sensitive.

convert2DigitYearTo4Digit

Enables the adjustment of a two-digit year entry to a four-digit year entry.

expandDropDownListShowFullValue

Enables expansion of the drop-down list in the **Search** tab for lookup records.

qrytaskidfromprocessidtotalretry

Number of attempts that Informatica Data Director makes to reload an ActiveVOS task.

qrytaskidfromprocessidwaitintrvlmillis

Number of milliseconds that Informatica Data Director waits before attempting to reload an ActiveVOS task.

proactiveMatchResultSort

Configures the sort order in which the potential matches appear in the Informatica Data Director application.

For more information, see the *Informatica MDM Multidomain Edition Version 10.0.0 HotFix 4 Informatica Data Director Implementation Guide*.

History View Enhancements

Improved the usability of the History view by adding the following fields to a record:

Last Update Date

Displays the date the record was most recently updated.

Updated By

Displays the name of the user that updated the record.

Start Workspace Enhancements

To help you prioritize tasks, the Start workspace has a **Create date** column that displays the date a task was created. The Start workspace also has an **Owner** column that displays the current owner of a task.

Changes (10.0.0 HotFix 4)

There are no other changes for version 10.0.0 HotFix 4.

CHAPTER 18

New Features and Enhancements (10.0.0 Hot Fix 3)

This chapter includes the following topics:

- [New Features \(10.0.0 HotFix 3\), 97](#)
- [Changes \(10.0.0 HotFix 3\), 105](#)

New Features (10.0.0 HotFix 3)

This section describes new features in version 10.0.0 HotFix 3.

Informatica MDM Hub

This section describes new features and enhancements to Informatica MDM Hub.

Timeline Extract Job

The timeline extract job can keep the history of rejected records. When you run the timeline extract job, the MDM Hub sends the rejected records to a reject table. To process the rejected records, run the timeline extract job again.

For more information, see "Using Timeline Extract" in the *Informatica MDM Multidomain Edition Version 10.0.0 HotFix 3 Configuration Guide*.

Hub Server Property for Cloud Deployments

You can specify the communication protocol to use with the Java Network Launch Protocol (JNLP) file that launches the MDM Hub Console in a cloud deployment. You set the `cmx.appserver.jnlp.protocol` Hub Server property to specify the communication protocol.

For more information, see the *Informatica MDM Multidomain Edition Version 10.0.0 HotFix 3 Configuration Guide*.

Specifying Primary Key Columns for Hard Delete Detection

When you create a unique primary key by concatenating values from multiple source columns, the hard delete detection (HDD) process looks at the inputs to the function and monitors all the input source columns. You can now override this behavior by listing the columns to monitor in the hard delete detection repository table.

For example, you create a custom function with many inputs. Within the custom function, some of the source columns are inputs to a concatenate function that creates the unique primary key. Other source columns pass through the custom function unchanged. The HDD process cannot see what happens within a custom function. Therefore, the HDD process monitors all the inputs to the custom function. You want the HDD process to monitor only the source columns that contribute to the primary key.

To focus the HDD process on the subset of source columns that contribute to the primary key, configure the C_REPOS_EXT_HARD_DEL_DETECT repository table. Add an HDD_LANDING_PKEY_COLUMNS column, and insert a comma-separated list of the column names.

For more information, see "Specifying the Primary Key Columns for Hard Delete Detection" in the *Informatica MDM Multidomain Edition Version 10.0.0 HotFix 3 Configuration Guide*

Enhancements to the Read and List Business Entity Services

You can specify the sort order for the child elements when you use the Read business entity service to retrieve the details of a root record. You can specify the sort order when you use the List business entity service to retrieve lookup values.

Use the parameter `order` to specify the sort order.

For more information about the `order` parameter, see the *Informatica MDM Multidomain Edition Version 10.0.0 HotFix 3 Business Entity Services Guide*.

Option to Suppress Links in the Business Entity Services Responses

You can suppress parent-child links in the responses of the Read and Search business entity services. Use the parameter `suppressLinks` to suppress the links in the responses.

For more information about the `suppressLinks` parameter, see the *Informatica MDM Multidomain Edition Version 10.0.0 HotFix 3 Business Entity Services Guide*.

Allow Null Update Property

You can change how the load process sets the Allow Null Update property when there is a mixture of values for the Allow Null Update property in the contributing staging tables. You can also control how the load process sets the Allow Null Update property for multiple staging tables with the same source system.

For more information, see "Customize the Behavior of the Allow Null Update Property" in the *Informatica MDM Multidomain Edition Version 10.0.0 HotFix 3 Configuration Guide*.

Resource Kit

You can run the database performance testing utility to test the performance of the database for the MDM Hub. The database testing utility is included in the Resource Kit.

For more information, see the *Informatica MDM Multidomain Edition Version 10.0.0 HotFix 3 Resource Kit Guide*.

Hub Server Properties for the Tokenization and Match Process

You can add the following properties to the `cmxserver.properties` file to configure the tokenization and match process:

cmx.server.strp_clean.execution_mode

Configures the scope of operation of the background cleanup process on the match key table.

cmx.server.strp_clean.ors

Specifies the names of the Operational Reference Stores on which the background cleanup process must run to delete match tokens that are not valid.

cmx.server.strp_clean.strp

Specifies the Operational Reference Store and base object combinations for which the background cleanup process must run to clean up match key tables.

cmx.server.strp_clean.delete_records_count

Specifies the number of records to clean up from the match key table.

cmx.server.strp_clean.retry_sec

Specifies the time duration in seconds for which you want the MDM Hub to search for records with match tokens that are not valid in the match key table.

cmx.server.strp_clean.threads_count

Specifies the number of threads that the MDM Hub uses when it searches for records with match tokens that are not valid in the match key table.

For more information, see the *Informatica MDM Multidomain Edition Version 10.0.0 HotFix 3 Configuration Guide*.

Process Server Properties for the Tokenization and Match Process

You can add the following properties to the `cmxcleanse.properties` file to configure the tokenization and match process:

cmx.server.stripDML.blockSize

Configures the number of records that the MDM Hub processes in each block.

cmx.server.stripDML.noOfThreadsForDelete

Configures the number of threads that the MDM Hub uses to delete records from the match key tables.

cmx.server.stripDML.noOfThreadsForInsert

Configures the number of threads that the MDM Hub uses to insert records into the match key tables.

cmx.server.stripDML.noOfThreadsForUpdate

Configures the number of threads that the MDM Hub uses to update records in the match key tables.

cmx.server.stripDML.useUpdate

Specifies whether or not the match tokens must be marked as not valid instead of deleting them.

For more information, see the *Informatica MDM Multidomain Edition Version 10.0.0 HotFix 3 Configuration Guide*.

Suggester REST API

You can use the Suggester REST API to return a list of related terms for a search string, based on the data present in your database. Use the API to accept the characters that you type in a user interface field and return suggestions to autocomplete what you type.

For more information about the Suggester REST API, see the *Informatica MDM Multidomain Edition Version 10.0.0 HotFix 3 Business Entity Services Guide*.

Enhancements to the Search Business Entity REST API

You can use the Search Business Entity API to perform a fielded search on the indexed values in a searchable root business entity and in all the child records. You can now use facets and filters to view a subset of the search results.

For more information about the Search Business Entity REST API, see the *Informatica MDM Multidomain Edition Version 10.0.0 HotFix 3 Business Entity Services Guide*.

Reserved Key Words for IBM DB2

In IBM DB2 environments, the reserved key words MDMNODE and MDMALIAS are used for database creation. You cannot use these words as column names in IBM DB2 environments:

For more information, see the *Informatica MDM Multidomain Edition Version 10.0.0 HotFix 3 Configuration Guide*.

Provisioning Tool

The Provisioning tool is a tool to create business entity models and configure the Entity 360 framework. To create a business entity model, you create a root node and then establish relationships between nodes. These relationships are based on foreign key constraints that you define using the Hub Console. After you build the business entity model and configure the nodes you can publish the configuration to the MDM Hub.

Technical specialists can use the Provisioning tool to perform the following tasks:

- Use the graphic user interface to configure the business entity model. An XML editor is provided so you can configure the XML files directly for all configurations related to business entities.
- Use the graphic user interface to configure the properties for each node. For example, you can configure search properties and display names.
- Publish XML configuration files to the MDM Hub. The Repository Manager validates the configuration and reports any errors. You do not need to upload BLOB files to a repository table manually.

Informatica MDM Multidomain Edition technical specialists can use the Provisioning tool to perform the following activities:

- Create a business entity model. For implementation with custom user interfaces only. You cannot create a business entity model if you implement business entities in Informatica Data Director (IDD).
- Create a reference entity. For implementation with custom user interfaces only. You cannot create a reference entity if you implement business entities in Informatica Data Director.
- Configure the business entity nodes.
- Configure the search properties for each node in the business entity model.
- Generate the XML files for the following configurations:
 - REST services

- Write business entity service
- Search
- Configure the XML files for Entity 360 framework configuration.
- Configure the XML files for BPM tasks.
- Configure the XML files for business entity view and the transformation service.
- Publish the configuration files to the MDM Hub.

For more information, see the *Informatica MDM Multidomain Edition Version 10.0.0 HotFix 3 Provisioning Tool Guide*.

When to Use the Configuration Tools

Based on your environment, you use a different set of configuration tools.

The following table describes the types of environments and identifies which tools you use:

Environment	Description	Tools
Informatica MDM	You use MDM components. You do not use Informatica Data Director or Business Entity Services.	Hub Console
Informatica MDM with Informatica Data Director	You use MDM components. You also use Informatica Data Director to create a standard user interface for business users. Note: This option is supported for upgrade customers who want to maintain the behavior of existing IDD applications, including custom tabs and user exits.	1. Hub Console 2. IDD Configuration Manager
Informatica MDM with Informatica Data Director and the Entity 360 Framework	You use MDM components. You also use Informatica Data Director with the Entity 360 framework enabled.	1. Hub Console 2. IDD Configuration Manager 3. Provisioning tool
Informatica MDM with Business Entity Services	You use MDM components. You also use business entity services to make calls to the MDM Hub from a custom application.	1. Hub Console 2. Provisioning tool

Informatica Data Director

This section describes new features and enhancements to Informatica Data Director.

Differences Between Versions of Informatica Data Director

In previous versions of Informatica Data Director (IDD), data was organized around subject areas and aggregated into subject area groups. IDD used the subject area definition to determine how to treat each foreign key relationship in an Operational Reference Store (ORS).

In the latest version of IDD, data is organized around business entities. A business entity can be anything that has significance to an organization. For example, your organization might define a business entity type of Person. The customer John Smith is a business entity of type Person. In the MDM Hub Store, a business entity corresponds to a record in a base object table.

The following table describes some of the differences between the versions of IDD, depending on whether you use subject areas or you use business entities.

IDD with Subject Areas	IDD with Business Entities
Subject area depth is limited to three levels	Business entity depth is unlimited
n/a	Entity 360 framework
Custom workspaces through IDD configuration file	Custom Start workspaces available in Entity 360 framework
Static lookups are supported	Lookups supported through reference entities
User exits are supported	Server-side cleansing and validation
Import Master Data	Import Master Data is not available in version 10.0.0 HotFix 3

Business Entity Views and Transformations

You can use the business entity views to expose the data in a business entity to your users in multiple ways and in formats suitable for the users. Business entity views provide a separation of low-level business entity and user interface related views. You can transform a business entity to a business entity view and a business entity view back to a business entity.

You can use the business entity views XML to define the business entity views and the transformation configuration XML to define the transformation of a business entity to a business entity view and back. You can use the Provisioning tool to manually define the business entity views and the transformation configuration XML.

For more information about business entity views and transformations, see the *Informatica MDM Multidomain Edition Version 10.0.0 HotFix 3 Provisioning Tool Guide*.

REST API Business Entity Service Calls

You can operate on multiple child branches at various depths in a single REST API business entity service request.

The following URL sample shows how to make a REST API read request to get the Person record with row ID 1242, the address detail from the Address child branch, and the email records from the Email child branch:

```
http://localhost:8080/cmx/cs/localhost-ORCL-DS_UI1/Person/1242?children=Address/Address_Details_1,Email
```

For more information, see the *Informatica MDM Multidomain Edition Version 10.0.0 HotFix 3 Business Entity Services Guide*.

Multiple Task Actions Support

You can configure an ActiveVOS workflow to allow reviewers to perform multiple actions on a task without closing the Task tab. For each task action where you want to support multiple actions without closing the Task tab, set the `closeTaskViewproperty` to `false`.

For more information, see the *Informatica MDM Multidomain Edition Version 10.0.0 HotFix 3 Informatica Data Director Implementation Guide*.

Hub Preference Property

You can use the `enableCreateBEMenuGrouping` Hub preference property to set logical create menu groups based on subject area groups.

For more information, see "Adding Groups Within the Create Menus" in the *Informatica MDM Multidomain Edition Version 10.0.0 HotFix 3 Informatica Data Director Implementation Guide*.

Search Queries

You can build search queries to include package columns that are not part of a subject area. Search results can display all the package columns that you use to build a query.

Language Display

You can configure Informatica Data Director to display custom action names in the **More Actions** menu to appear in a localized language. To localize the custom action names, add the custom action name and localized value pairs to the internationalization message bundles.

For more information, see the *Informatica MDM Multidomain Edition Version 10.0.0 HotFix 3 Informatica Data Director Implementation Guide*.

Global Properties

You can use the following global properties to control the run-time behavior of the Informatica Data Director application:

bulkexportloadsize

Sets the maximum size of the load for each thread when you export data to a Microsoft Excel file.

exportusingmultithread

Enables multithreading for data export to a Microsoft Excel file.

enableCreateBEMenuGrouping

Specifies whether you can define logical groups based on subject areas for the Create menu for business entities. The property is required if you have a large number of subject areas.

showShadowColumns

Specifies whether to show shadow columns in the Cross-reference View.

For more information, see the *Informatica MDM Multidomain Edition Version 10.0.0 HotFix 3 Informatica Data Director Implementation Guide*.

User Authentication and Password Encryption

You can configure authentication for URLs in Informatica Data Director. When authentication is enabled, when users log in, they pass their user name and password as part of the URL in Informatica Data Director. You can also configure Informatica Data Director to pass the user name and password in an encrypted format.

For more information, see the *Informatica MDM Multidomain Edition Version 10.0.0 HotFix 3 Informatica Data Director Implementation Guide* and the *Informatica MDM Multidomain Edition Version 10.0.0 HotFix 3 Configuration Guide*.

Entity View Enhancements

Improved the usability of the Entity View by adding the following enhancements:

- You can collapse the section that contains the root record of the entity.
- You can switch to edit mode by clicking in the fields.
- In sections that contain child records, when you are in Table View you can sort the columns.

Table View for Child Records

You can specify the number of columns that you want to show in the table view for child records and grandchild records.

By default, the table view contains up to 20 columns plus 5 hidden columns. You can change the global default value by setting the `tableMaxColumns` parameter in the `C_REPOS_DS_PREF_DETAIL`.

For more information, see the *Informatica MDM Multidomain Edition Version 10.0.0 HotFix 3 Informatica Data Director Implementation Guide*.

Custom Views

You can create a custom view in the Entity 360 framework to display views of the master data that are beneficial to business users. To configure a custom view, use the Layout Editor in the Provisioning tool to configure the view layout and then add the custom view to the view menu.

For more information about configuring custom views, see the *Informatica MDM Multidomain Edition Version 10.0.0 HotFix 3 Provisioning Tool Guide*.

Hide the Data Workspace in Informatica Data Director

When you enable the Entity 360 framework for Informatica Data Director (IDD) applications, IDD users edit and manage master data from an entity workspace instead of from the Data workspace. You can reduce confusion for IDD users by hiding the Data workspace and the related user interface elements for all IDD applications. You hide the workspace by setting the `cmx.dataview.enabled` in the `cmxserver.properties` file.

In a new installation, the Data workspace is hidden by default. When upgrading, if the `cmx.dataview.enabled` property was not specified, the Data workspace is shown. If this property was specified, the IDD applications continue to respect the pre-upgrade setting.

For more information, see "Hub Server Properties" in the *Informatica MDM Multidomain Edition Version 10.0.0 HotFix 3 Configuration Guide*.

Wildcard Search

You can use the asterisk wildcard character (*) with the search string to perform a wildcard search. 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`.

Search String Suggestions

You can configure smart search to suggest search strings based on the strings that you type. You can select one of the suggested values as the search string.

For more information about configuring smart search to suggest search strings, see the *Informatica MDM Multidomain Edition Version 10.0.0 HotFix 3 Configuration Guide*.

Jaspersoft Report in Start Workspace

If you use the business intelligence tool Jaspersoft to develop and analyze reports, you can display the reports in the Entity 360 framework for IDD. You can configure the Start workspace to display Jaspersoft reports.

For more information about Jaspersoft report configuration, see the *Informatica MDM Multidomain Edition Version 10.0.0 HotFix 3 Provisioning Tool Guide*.

Related Tasks

The Related Tasks component in the Task Manager inbox displays related tasks for a selected task.

Note: Related tasks only display tasks that are created in the BE-ActiveVOS adapter.

For more information, see the *Informatica MDM Multidomain Edition Version 10.0.0 HotFix 3 Provisioning Tool Guide*.

Changes (10.0.0 HotFix 3)

This section describes changes in version 10.0.0 HotFix 3.

Informatica LLC

Effective August 2015, in all Informatica products and documents, the term “Informatica Corporation” has been replaced with the term “Informatica LLC”. Any occurrence of the term “Informatica Corporation” in current products or documentation should read “Informatica LLC”.

Changes to Terms

In this release, some terms were changed.

The following table contains the old and new terms:

Old Term	New Term
composite object	business entity
composite service	business entity service
Entity 360	Entity 360 framework
Entity 360 View	Entity View
360 View	Entity View

Business Entity Services Guide

Effective in version 10.0.0 HotFix 3, the *Informatica MDM Multidomain Edition Composite Services Guide* was renamed to the *Informatica MDM Multidomain Edition Business Entity Services Guide*.

Menu Changes

With the introduction of the Entity 360 framework, the menu items in the header changed.

Effective in version 10.0, the **New** menu was renamed to **New SA**, and another menu was added named **New BE**. Effective in version 10.0.0 HotFix 3, these menus were renamed to be more meaningful.

The following table summarizes the changes to the menus:

Pre-version 10.0 Menus	Version 10.0 Menus	Version 10.0.0 HotFix 3 Menus	Description
n/a	New BE	Create	Create a business entity in the Entity view .
New	New SA	Create in Data View	Create records in a subject area in the Data view . In 10.0.0 HotFix 3, if you hide the Data view , this menu is also hidden. Use the Create menu instead.
Queries	Queries	Queries	Use the search functions in the Data view . In 10.0.0 HotFix 3, if you hide the Data view , this menu is also hidden. Use the Search box instead.

Navigation Menu in the Entity View

Effective in version 10.0.0 HotFix 3, when you view a business entity in the Entity view, a navigation menu appears on the left. Click a section name in the navigation menu to scroll to that section in the Entity view.

The screenshot shows the 'Entity View' for a person. On the left, a navigation menu is highlighted with a red box, listing sections: Person, Relative, Organization, Names, BillAddresses, Details, Automobile, NullRels, Email, ShipAddresses, Phone, and preferredPhone. The main area contains a form with the following fields:

- Birthdate
- First Name: JANE
- Tax ID
- Display Name: JANE EYRE
- Gender Cd
- Generation Suffix Cd
- Name Prefix Cd
- Party Type: Person
- Last Name: EYRE
- Middle Name

For more information, see "Adding a Business Entity" in the *Informatica MDM Multidomain Edition Version 10.0.0 HotFix 3 Informatica Data Director User Guide*.

Form View for the Sections in the Entity View

Effective in version 10.0.0 HotFix 3, when you view a business entity in the Entity view, the root record appears at the top of the view and its child records appear in sections below the root record. The root record

is displayed in form view. For sections, you can switch the view of the child records between a table view and a form view.

For more information, see "Adding a Business Entity" in the *Informatica MDM Multidomain Edition Version 10.0.0 HotFix 3 Informatica Data Director User Guide*.

Service URL

Effective in version 10.0.0 HotFix 3, you can specify the service URL format that Informatica Data Director generates for SIF calls.

Add the following text to the `cmxserver.properties` file to specify the service URL:

```
referer.url=http://<local host>:<port number>
```

For more information, see the *Informatica MDM Multidomain Edition Version 10.0.0 HotFix 3 Informatica Data Director Implementation Guide*.

Hierarchy Canvas

Effective in version 10.0.0 HotFix 3, in the Hierarchy canvas, the node text wraps to the next line instead of being truncated.



BeMDMWorkflow ActiveVOS Project

Effective in version 10.0 HotFix 3, the BeMDMWorkflow project in the Resource Kit has changed to resolve an issue with task inbox filtering.

Previously, the BeMDMWorkflow project in the Resource Kit caused an issue with task inbox filtering.

If you upgrade from an earlier version, redeploy the BeMDMWorkflow project after you upgrade. If you have customized the workflows, use ActiveVOS Designer to add the following code within the TaskFilter complex type in the `cs.wsdl` file:

```
<xsd:element minOccurs="0" name="overdueOnly" type="xsd:boolean" />
```

For more information, see the *Informatica MDM Multidomain Edition Version 10.0.0 HotFix 3 Upgrade Guide*.

Allow Null Update Property

Effective in version 10.0.0 HotFix 3, all processes that calculate the best version of the truth treat null values the same way. Previously, some processes ignored the **Allow Null Update** property in the staging table and used the **Apply Null Values** property in the base object table.

When a source system contributes a null value for a column, a process refers to the setting of the **Allow Null Update** property for that column in the staging table.

- If the **Allow Null Update** property is enabled on the column, the process can write the null value to the base object record.

- If the **Allow Null Update** property is disabled on the column, the process downgrades the trust for the null value.
- If a process cannot resolve the setting of the **Allow Null Update** property in a staging table, the process uses the setting for the **Apply Null Values** property in the base object table.

For more information about the **Allow Null Update** property, see the *Informatica MDM Multidomain Edition Version 10.0.0 HotFix 3 Configuration Guide*.

Obsolete Properties

Effective in version 10.0.0 HotFix 3, the following Hub Server properties are obsolete:

Obsolete Property	Change in Behavior for Version 10.0.0 HotFix 3
<code>cmx.server.batch.load.analyze_threshold_rate</code>	There is no equivalent in this version.
<code>activevos.merge.workflow.operation.name</code>	None
<code>activevos.workflow.basicSecure</code>	ActiveVOS security is handled at the application server level. A trusted user enables ActiveVOS to interact securely with the MDM Hub.
<code>cmx.idd.data_import_enabled</code>	None
<code>solr.allNodesAliveSleepTimeout</code>	None
<code>teamworks.merge.workflow.guid</code>	None
<code>zk.allNodesAliveRetries</code>	None

Effective in version 10.0.0 HotFix 3, the following Process Server properties are obsolete:

Obsolete Property	Change in Behavior for Version 10.0.0 HotFix 3
<code>com.informatica.mdm.overrideNullable</code>	When a source system contributes a null value, you cannot override how a process calculates the most trustworthy value. The method that a process uses to handle null values has changed. For more information, see “Allow Null Update Property” on page 107 .
<code>com.informatica.mdm.promoteNullable</code>	When a source system that contributes a null value for a column has multiple staging tables, processes ignore the Allow Null Update property in all the staging tables. Instead, processes use the setting of the Apply Null Values property in the base object record.

If an obsolete property remains in the properties file after you upgrade, the property is ignored. You can safely remove the property from the file.

SAM Privileges

Effective in version 10.0.0 HotFix 3, to see the New drop-down menu in IDD, you must assign create privileges on the subject area of the associated base object. Use the Security Access Manager in the Hub Console to assign privileges.

Previously, to see the New drop-down menu in IDD, you only had to assign read privileges on the subject area of the associated base object.

Fill on Gap Property

Effective in version 10.0.0 HotFix 3, for timeline-enabled base objects, you can enable the **Fill on gap** property in the Hub Console. You set the property for the base object in the associated staging table. Previously, you could only enable the **Fill on gap** property through the C_REPOS_TABLE for the associated staging table.

Preserving Source System Keys

Effective in version 10.0.0 HotFix 3, when the option to preserve source system keys is enabled, source system keys are preserved for initial data loads and for all subsequent data loads.

Previously, when the option to preserve source system keys was enabled, source system keys were preserved for initial data loads only.

Removed INFA_MDM.zip File

Effective in version 10.0.0 HotFix 3, the obsolete file INFA_MDM.zip was removed. The MDMWorkflow.zip file contains the current ActiveVOS workflows.

Task Manager Enhancement

Effective in version 10.0.0 HotFix 3, in the Task Manager, the task inbox spans the width of the browser window so that the column data is easier to read. When you review a task, the review panel opens below the task inbox. Previously, the panels were displayed side-by-side.

Merge Task Enhancement

Effective in version 10.0.0 HotFix 3, after you merge records from the Merge Preview, you see confirmation of the merge. Previously, a blank page was displayed.

Matches View Enhancement

Effective in version 10.0.0 HotFix 3, in the Matches View, you can highlight the rows with matched attributes by selecting the **Show Matched Rows** check box. Previously, the rows were not highlighted.

Business Entity Schema

Effective in version 10.0.0 HotFix 3, the business entity schema is updated to support pagination for sorted search results. You must regenerate the business entity schema after you upgrade.

Secured Connection Between a Process Server and the Hub Server

Effective in version 10.0.0 HotFix 3, when you configure a Process Server in the Hub Console, you can set a property to enable a secured connection with the Hub Server. In the Add/Edit Process Server dialog box, select **Enable Secured Connection (HTTPS)** to enable the secured connection.

In previous releases, you configured a secured connection by setting the `Is Secured` field to 1 in the C_REPOS_CLEANSE_MATCH_SERVER table.

Tokenization Process

Effective in version 10.0.0 HotFix 3, the MDM Hub generates or updates match tokens when base object records are marked dirty.

The base object records are marked dirty if all of the following conditions are met:

- An update affects match columns in a base object.
- The best version of the truth (BVT) of a match column after the update is different from the old value.

Previously, base object records were marked dirty whenever there was any update to a base object record.

Searchable Field Properties

Effective in version 10.0.0 HotFix 3, you can use the Provisioning tool to configure the searchable field properties.

Previously, you used a change list or manually updated the C_REPOS_CO_CS_CONFIG repository database table.

Multiple Match Indexes

The multiple match indexes feature, which was introduced in a HotFix for version 9.7.1, is not supported in version 10.0.0 or later.

Validation of Changes to the Schema

Effective in version 10.0.0 HotFix 3, if you make any changes to the schema in the Hub Console, such as adding a column to a base object, metadata validation generates a warning. Each change that you make to the schema causes dummy metadata validation and adds an entry to the C_REPOS_MET_VALID_RESULT table.

CHAPTER 19

New Features and Enhancements (10.0.0 Hot Fix 2)

This chapter includes the following topics:

- [New Features \(10.0.0 HotFix 2\), 111](#)
- [Changes \(10.0.0 HotFix 2\), 118](#)
- [Release Tasks \(10.0.0 HotFix 2\), 121](#)

New Features (10.0.0 HotFix 2)

This section describes new features in version 10.0.0 HotFix 2.

Informatica MDM Hub

This section describes new features and enhancements to Informatica MDM Hub.

Batch Jobs

The MDM Hub batch jobs can run in parallel on all the child base objects that are in the match path of the parent base object.

For more information about batch jobs, see the *Informatica MDM Multidomain Edition Version 10.0.0 HotFix 2 Configuration Guide*.

Representational State Transfer Composite Service Calls

You can make Representational State Transfer (REST) composite service calls to perform Hub related operations and manage tasks.

Use the REST APIs to perform the following operations:

- Retrieve the metadata, content metadata, and lookup data of composite objects.
- Merge and unmerge records.
- Retrieve related and matched records.
- Update and delete matched records.
- Create, update, and search for tasks and perform tasks.

For more information about REST APIs, see the *Informatica MDM Multidomain Edition 10.0.0 HotFix 2 Composite Services Guide*.

Simple Object Access Protocol Composite Service Calls

You can use Simple Object Access Protocol (SOAP) APIs to access all composite services as web services. You can make SOAP calls to create, update, delete, and search for records in a composite object. You can retrieve the metadata, content metadata, and lookup data of composite objects. You can perform operations, such as merge, unmerge, and match records. You can also make SOAP calls to create, update, and search for tasks and perform tasks.

For more information about SOAP APIs, see the *Informatica MDM Multidomain Edition 10.0.0 HotFix 2 Composite Services Guide*.

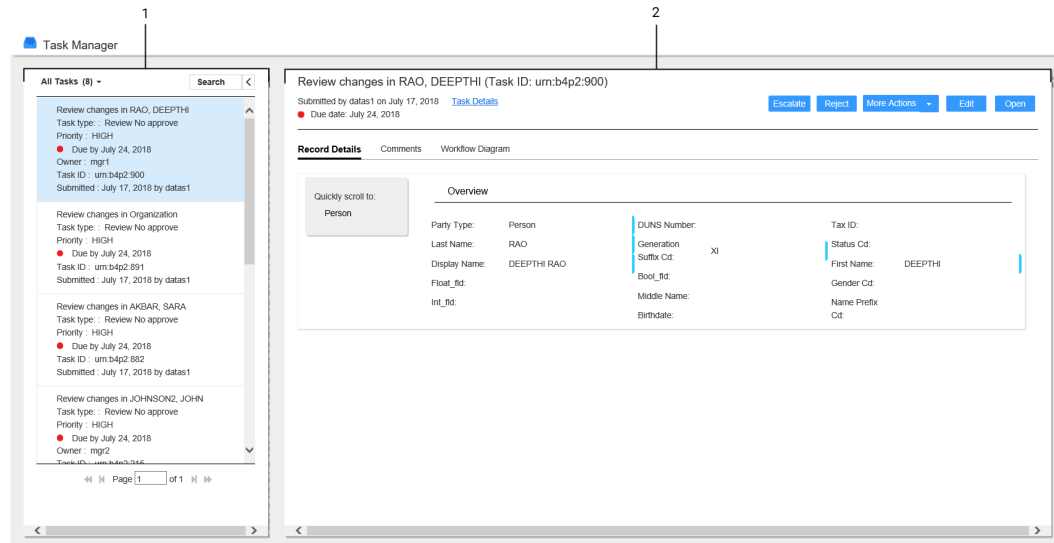
Informatica Data Director

This section describes new features and enhancements to Informatica Data Director.

Task Manager

Use the Task Manager to organize, claim, review, and resolve tasks. In the task inbox, review your tasks and all unclaimed tasks. Click a task to open the associated business entity in a review panel to the right of the task inbox. In the review panel, review pending changes and take action on the review task. The Task Manager replaces the Tasks workspace that was present in previous versions.

The following image shows the **Task Manager** with a task selected:



1. Task inbox.
2. Review panel.

The Task Manager is part of the Entity 360 framework. To enable the Entity 360 framework in Informatica Data Director, set the `cmx.e360.view.enabled` parameter in `cmxserver.properties` to `true`. For more information about enabling the Entity 360 framework, see the *Informatica MDM Multidomain Edition 10.0.0 HotFix 2 Informatica Data Director Implementation Guide*.

For more information about the Task Manager, see the *Informatica MDM Multidomain Edition 10.0.0 HotFix 2 Informatica Data Director User Guide*.

Task Inbox

The new task inbox is a composite object component that can be added to or removed from an Entity 360 page. By default, the task inbox appears in the Start workspace and in the Task Manager. The task inbox supports tasks that arrive through the BE-AVOS adapter or the SA-AVOS adapter. The BE-AVOS adapter is a new BPM adapter that supports the composite object model. The SA-AVOS adapter is the legacy BPM adapter that supports the subject area model.

Task Inbox Filters

In the task inbox, you can show tasks based on filters. Use the quick filter at the top to switch between My Tasks and Available Tasks. Use the column filters to filter the list by an attribute, such as task type, priority, due date, status, or owner.

Business Entities

You can create and edit business entities in the Entity 360 view.

When you add or edit business entities, the Hub Server validates the data you enter according to the business rules that you configured.

For example, if you enter an address in an incorrect format, the MDM Hub validates the address and replaces it with the address correctly formatted.

For more information, see the *Informatica MDM Multidomain Edition 10.0.0 HotFix 2 Informatica Data Director User Guide*.

Linked Images

You can display linked images in the Entity 360 view. You can update the image URL in the Entity 360 view to change the linked image.

The following image shows an image URL and the linked image in the Entity 360 view:



For more information, see the *Informatica MDM Multidomain Edition 10.0.0 HotFix 2 Informatica Data Director User Guide*.

Logging

All messages, errors, and full stack traces are stored in cmxserver.log in the application server.

For more information, see the *Informatica MDM Multidomain Edition 10.0.0 HotFix 2 Informatica Data Director Implementation Guide*.

Smart Search

You can enter search strings in English, Japanese, Korean, or Chinese. A smart search request searches the fields that match the language of the search string.

For more information about smart search, see the *Informatica MDM Multidomain Edition 10.0.0 HotFix 2 Configuration Guide*.

ActiveVOS

This section describes new ActiveVOS features in version 10.0.0 HotFix 2.

Automatic Task Assignment

To configure task assignment for the ActiveVOS workflow adapter that is based on composite objects, configure task assignment in the Informatica Data Director configuration file. The user can either assign the task directly or allow the Task Manager to assign tasks to users.

The following image shows the automatic task assignment option in the **Edit Task** dialog box:

The image shows a dialog box titled "Edit Task: Review changes in RED,ANNA". The dialog contains several fields: "Task Title" with the value "Review changes in RED,ANNA"; "Priority" set to "Normal"; "Due Date" set to "2015/08/10"; "Task Type" set to "Review No approve"; and "Subject Area" set to "Person". A red box highlights the "Assign to" dropdown menu, which is currently set to "(Auto assign)". Below these fields is an "Add Comment" section with a text area containing "Type Comment". Underneath is a list of "All Comments(1)" showing a comment from "admin" dated "Mon, 10 Aug 2015 02:30:57 GMT" with the text "Created a basic business entity for this customer." At the bottom right, there are "Save" and "Cancel" buttons.

For more information, see the For more information, see the *Informatica MDM Multidomain Edition 10.0.0 HotFix 2 Informatica Data Director Implementation Guide*.

Automatic Task Assignment Configuration Parameter

You can configure the time that automatic task assignment waits to start after the MDM Hub initializes. If you do not configure a delay, an error can occur when you create tasks.

The following parameter is added to `cmxserver.properties`:

```
sip.task.assignment.start.delay=10
```

The value of `sip.task.assignment.start.delay` is the time in minutes that automatic task assignment waits to start after the MDM Hub initializes. Default is 10 minutes.

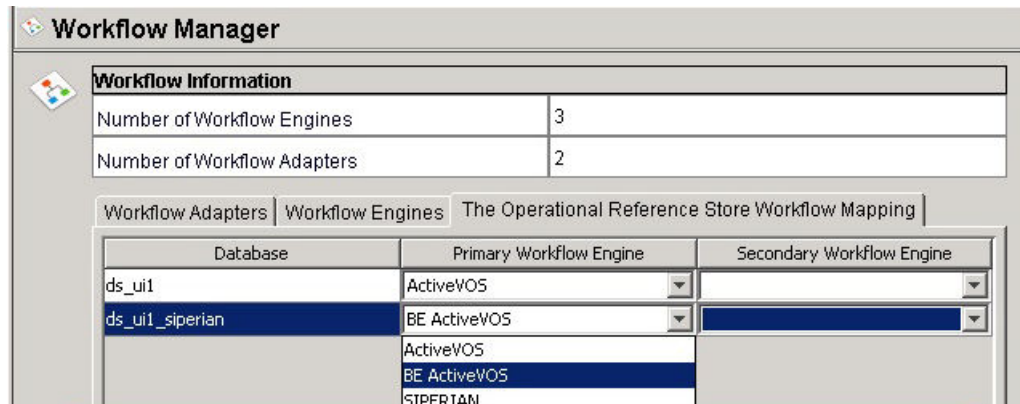
For more information, see the *Informatica MDM Multidomain Edition 10.0.0 HotFix 2 Configuration Guide*.

ActiveVOS Workflow Adapter based on Composite Objects

You can configure a workflow engine to use the ActiveVOS workflow adapter that is based on composite objects. The ActiveVOS workflow adapter based on composite objects operates using composite services. You must use the ActiveVOS workflow adapter based on composite objects as the primary workflow engine to configure automatic task assignment and direct task assignment. The name of the ActiveVOS workflow adapter based on composite objects is `BE ActiveVOS`.

Informatica recommends that you use the composite object ActiveVOS workflow engine as the primary workflow engine. Workflow engines based on third-party BPM adapters or the Siperian adapter are deprecated. Informatica will continue to support the deprecated adapters, but they will become obsolete and Informatica will drop support in a future release.

The following image shows the ActiveVOS workflow adapter based on composite objects selected as the primary workflow for the `ds_ui1_siperian` ORS:



For more information, see the *Informatica MDM Multidomain Edition 10.0.0 HotFix 2 Configuration Guide* and the *Informatica MDM Multidomain Edition 10.0.0 HotFix 2 Upgrade Guide*.

Direct Task Assignment

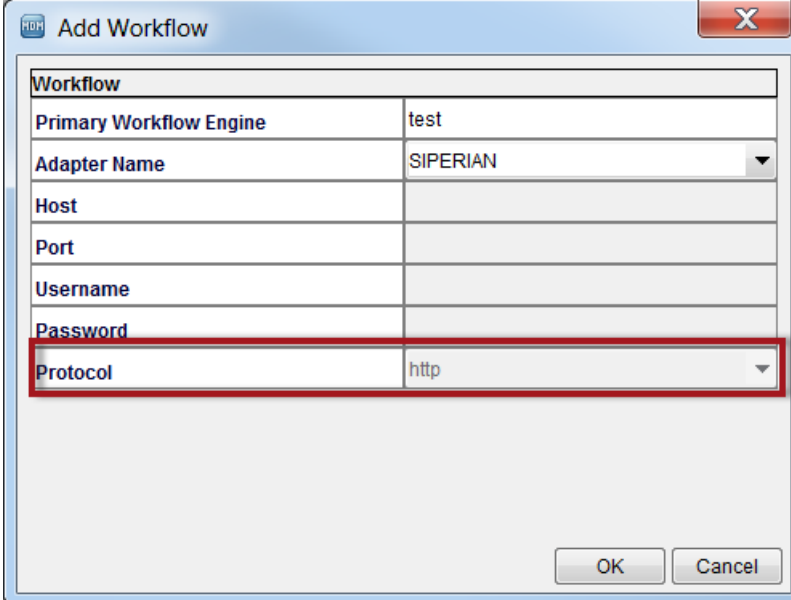
You can assign a task to a specific user. When you assign a task, Informatica Data Director displays a list of the users to whom you can assign the task. Use the ActiveVOS workflow adapter that is based on composite objects to enable direct task assignment. Direct task assignment is not available for the ActiveVOS workflow adapter that is based on subject areas.

For more information, see the *Informatica MDM Multidomain Edition 10.0.0 HotFix 2 Informatica Data Director Implementation Guide*.

Secure Communication

ActiveVOS can use the HTTP Secure (HTTPS) protocol to securely communicate with the MDM Hub. A new parameter is available in the Hub Console Workflow Manager to set the workflow engine communication protocol to http or https.

The following image shows the protocol parameter in the Add Workflow dialog box:



Workflow	
Primary Workflow Engine	test
Adapter Name	SIPERIAN
Host	
Port	
Username	
Password	
Protocol	http

For more information, see the *Informatica MDM Multidomain Edition 10.0.0 HotFix 2 Upgrade Guide*.

Task Assignment Configuration in Informatica Data Director Configuration File

You can configure task assignment for each subject area in the Informatica Data Director Configuration file.

The following code sample shows task assignment configuration for a subject area:

```
<taskAssignmentConfig task="Update">
  <securityRole roleUid="DataSteward" />
</taskAssignmentConfig>
<taskAssignmentConfig task="ReviewNoApprove">
  <securityRole roleUid="Manager" />
</taskAssignmentConfig>
<taskAssignmentConfig task="FinalReview">
  <securityRole roleUid="SrManager" />
</taskAssignmentConfig>
<taskAssignmentConfig task="Notification">
  <securityRole roleUid="DataSteward" />
</taskAssignmentConfig>
<taskAssignmentConfig task="Merge">
  <securityRole roleUid="DataSteward" />
</taskAssignmentConfig>
<taskAssignmentConfig task="Unmerge">
  <securityRole roleUid="DataSteward" />
</taskAssignmentConfig>
```

Resource Kit

This section describes new Resource Kit features in version 10.0.0 HotFix 2.

Sample Informatica Data Director Configuration

You can use the `IDDCConfig_ActiveVOS_BE.xml` file in `<MDM Hub installation directory>\hub\resourcekit\samples\BDD\` to set up the Informatica Data Director application. The file contains task configuration for the Informatica ActiveVOS workflow adapter that is based on composite objects. The file is configured for the sample schema that is included in the Resource Kit.

For more information, see the *Informatica MDM Multidomain Edition 10.0.0 HotFix 2 Resource Kit Guide*.

ActiveVOS Projects

The BPM sample folder contains ActiveVOS projects for the ActiveVOS workflow adapter that is based on composite objects.

The file `BeMDMWorkflow.zip` in the folder `<MDM Hub installation directory>\hub\resourcekit\samples\BPM` contains the `BeMDMWorkflow` project and the `BeCommonMDM` project. The `BeMDMWorkflow` project contains predefined business process execution language definitions and predefined roles. The `BeCommonMDM` project contains supporting resources. The projects work with the ActiveVOS workflow adapter that is based on composite objects.

For more information, see the *Multidomain MDM Data Director - ActiveVOS Integration Guide*.

Changes (10.0.0 HotFix 2)

This section describes changes in version 10.0.0 HotFix 2.

Schema Tool User Interface

Effective in version 10.0.0 HotFix 2, you use the **Allow missing child records** option to indicate whether parent records must undergo matching based on the existence of records in child base objects. The option is in the **Add Path Component** dialog box of the Schema tool.

Previously, you used the **Check for missing children** option to indicate whether parent records must undergo matching based on the existence of records in child base objects.

Entity 360 Default Configuration

If you do not configure the layout or components for the Entity 360 view, Informatica Data Director generates a default configuration for you.

For more information, see the *Informatica MDM Multidomain Edition 10.0.0 HotFix 2 Informatica Data Director Implementation Guide*.

Send for Approval

Effective in version 10.0 HotFix 2, a user does not need to click Send for Approval when they create or update a business entity. When a user creates or updates a business entity, a default approval workflow is triggered upon clicking save.

Previously, users had to decide whether to click Save or to click Send for Approval.

ActiveVOS

This section describes changes to ActiveVOS in version 10.0.0 HotFix 2.

Task Configuration in Informatica Data Director Configuration File

Effective in version 10.0.0 HotFix 2, the function of the task configuration parameters in the Informatica Data Director configuration file has changed. If you use the ActiveVOS workflow adapter, update the IDD configuration file after you upgrade.

You can configure the following task parameters in the Informatica Data Director configuration file:

taskType

Describes the task type.

taskTypeID

The process name.

name

The taskType name. The name must be the same as the name of the task in the ActiveVOS workflow configuration.

You can use the following code to configure the tasks for the ActiveVOS adapter based on subject areas in the Informatica Data Director configuration file:

```
<tasks includeUnassignedTasks="true">
<!-- Task Definitions -->
  <taskType taskTypeId="IDDMergeTask" name="AVOSMerge" displayName="Merge"
creationType="MERGE">
  <description>Merge two records together.</description>
</taskType>

  <taskType taskTypeId="IDDUnmergeTask" name="AVOSUnmerge" displayName="Unmerge"
creationType="UNMERGE">
  <description>Unmerge an XREF record from a Base Object record.</description>
</taskType>

  <taskType taskTypeId="IDDOneStepApprovalTask" name="AVOSFinalReview"
displayName="Final review" creationType="NONE">
  <description>Update a record and require the user to go through an approval process
before completing the task.
  </description>
</taskType>

  <taskType name="Notification" displayName="Notification" creationType="NONE">
  <description>Notification step in the workflow</description>
</taskType>

  <taskType taskTypeId="IDDTwoStepApprovalTask" name="AVOSReviewNoApprove"
displayName="Review no approve"
creationType="NONE" defaultApproval="true">
  <description>Update a record and require the user to go through an approval process
before completing the task.
  </description>
</taskType>

  <taskType taskTypeId="IDDUpdateWithApprovalTask" name="Update" displayName="Update"
creationType="CREATE">
  <description>Update a record and do not require the user to go through an approval
process before completing
the task. The approval step is optional.
  </description>
</taskType>
</tasks>
```

You can use the following code to configure ActiveVOS tasks based on composite objects in the Informatica Data Director configuration file:

```
<tasks includeUnassignedTasks="true">
<!-- Task Definitions -->
  <taskType taskTypeId="BeMergeTask" name="AVOSBeMerge" displayName="Merge"
creationType="MERGE">
    <description>Merge two records together.</description>
  </taskType>

  <taskType taskTypeId="BeUnmergeTask" name="AVOSBeUnmerge" displayName="Unmerge"
creationType="UNMERGE">
    <description>Unmerge an XREF record from a Base Object record.
    </description>
  </taskType>

  <taskType taskTypeId="BeOneStepApprovalTask" name="AVOSBeFinalReview"
displayName="Final review" creationType="NONE">
    <description>Update a record and require the user to go through an approval process
before completing the task.
    </description>
  </taskType>

  <taskType name="AVOSBeNotification" displayName="Notification" creationType="NONE">
    <description>Notification step in the workflow</description>
  </taskType>

  <taskType taskTypeId="BeTwoStepApprovalTask" name="AVOSBeReviewNoApprove"
displayName="Review no approve"
creationType="NONE" defaultApproval="true">
    <description>Update a record and require the user to go through an approval process
before completing the task.
    </description>
  </taskType>

  <taskType taskTypeId="BeUpdateWithApprovalTask" name="AVOSBeUpdate"
displayName="Update" creationType="CREATE">
    <description>Update a record and do not require the user to go through an approval
process before completing
the task. The approval step is optional.
    </description>
  </taskType>
</tasks>
```

Previously, you could use the following code to configure ActiveVOS tasks based on subject areas in the Informatica Data Director configuration file:

```
<tasks includeUnassignedTasks="true">
  <taskType creationType="MERGE" dataUpdateType="ACTIVE" defaultApproval="false"
displayName="Merge Workflow" displayType="NORMAL" name="MergeWorkflow"
pendingBVT="false" taskTypeId="IDDMergeTask">
    <description>Merge two records together.</description>
  </taskType>

  <taskType creationType="UNMERGE" dataUpdateType="ACTIVE" defaultApproval="false"
displayName="Unmerge Workflow" displayType="NORMAL" name="UnmergeWorkflow"
pendingBVT="false" taskTypeId="IDDUnmergeTask">
    <description>Unmerge an XREF record from a Base Object record.</description>
  </taskType>
</tasks>

<taskType creationType="NONE" dataUpdateType="ACTIVE" defaultApproval="false"
displayName="One Step Approval Workflow" displayType="NORMAL"
name="OneStepApprovalWorkflow" pendingBVT="false" taskTypeId="IDDOneStepApprovalTask">
  <description>Update a record and require the user to go through an approval process
before completing the task.</description>
</taskType>

  <taskType creationType="NONE" dataUpdateType="ACTIVE" defaultApproval="false"
displayName="Two Step Approval Workflow" displayType="NORMAL"
name="TwoStepApprovalWorkflow" pendingBVT="false" taskTypeId="IDDTwoStepApprovalTask">
```



```
<description>Update a record and require the user to go through an approval process
before completing the task.</description>
</taskType>

<taskType creationType="CREATE" dataUpdateType="ACTIVE" defaultApproval="true"
displayName="Update With Approval Workflow" displayType="NORMAL"
name="UpdateWithApprovalWorkflow" pendingBVT="false"
taskTypeId="IDDUpdateWithApprovalTask">
  <description>Update a record and do not require the user to go through an approval
process before completing the task. The approval step is optional.</description>
</taskType>
```

Trusted User

Effective in version 10.0.0 HotFix 2, a trusted user facilitates secure communication between the MDM Hub and ActiveVOS. When the MDM Hub sends a request to ActiveVOS, the request contains the credentials of the trusted user.

Previously, the MDM Hub sent requests to ActiveVOS that contained the credentials of the MDM Hub user that performed the task.

Smart Search

Effective in version 10.0 HotFix 2, the filter values that you enter in the Search workspace are not case sensitive.

Previously, the filter values were case sensitive.

Upgrade

This section describes changes to upgrade behavior in version 10.0.0 HotFix 2.

The build.properties File

Effective in version 10.0.0 HotFix 2, the upgrade process updates the `build.properties` file located in `<MDM Hub installation directory>\hub\server\bin`.

Previously, the upgrade process did not update the `build.properties` file.

Deprecated SIF APIs

Effective in version 10.0 HotFix 2, the following SIF APIs are deprecated:

- Link
- Link2

Release Tasks (10.0.0 HotFix 2)

This section describes the release tasks in version 10.0.0 HotFix 2.

Entity 360

This section describes release tasks for Entity 360 in version 10.0.0 HotFix 2.

Performance Optimization

To improve performance significantly for Entity 360 and Informatica Data Director, add the following parameter to the application server Java virtual machine:

- On JBoss, add the option for JIT code cache size.
`-XX:ReservedCodeCacheSize=256m`
- On WebLogic, add the option for JIT code cache size.
`-XX:ReservedCodeCacheSize=256m`
- On WebSphere, add the option for reserved code cache size.
`-XX:codecachetotal=256m`

For more information, see the *Informatica MDM Multidomain Edition 10.0.0 HotFix 2 Installation Guide*.

ActiveVOS

This section describes release tasks for ActiveVOS in version 10.0.0 HotFix 2.

Create a Trusted User

Effective in version 10.0.0 HotFix 2, a trusted user facilitates secure communication between the MDM Hub and ActiveVOS. When the MDM Hub sends a request to ActiveVOS, the request contains the credentials of the trusted user.

Before you upgrade the MDM Hub Server, you must create a user with the role of abTrust in the application server. The user with the abTrust role is trusted by the MDM Hub and by ActiveVOS. If you do not configure a trusted user, ActiveVOS cannot authenticate requests from the MDM Hub.

To add a user with the abTrust role to the application server, see the *Informatica MDM Multidomain Edition Version 10.0.0 HotFix 2 Upgrade Guide*.

Update the IDD Configuration for the ActiveVOS Adapter based on Subject Areas

To use the ActiveVOS workflow adapter based on subject areas with the Task Manager, update the Informatica Data Director configuration file. If you do not update the Informatica Data Director configuration file, you cannot use the Task Manager to create tasks.

The following code sample shows how to configure ActiveVOS tasks based on subject areas in the Informatica Data Director configuration file:

```
<tasks includeUnassignedTasks="true">
<!-- Task Definitions -->
<taskType taskTypeId="IDDMergeTask" name="AVOSMerge" displayName="Merge"
creationType="MERGE">
<description>Merge two records together.</description>
</taskType>

<taskType taskTypeId="IDDUnmergeTask" name="AVOSUnmerge" displayName="Unmerge"
creationType="UNMERGE">
<description>Unmerge an XREF record from a Base Object record.</description>
</taskType>

<taskType taskTypeId="IDDOneStepApprovalTask" name="AVOSFinalReview"
displayName="Final review" creationType="NONE">
```

```

    <description>Update a record and require the user to go through an approval process
before completing the task.
    </description>
  </taskType>

  <taskType name="Notification" displayName="Notification" creationType="NONE">
    <description>Notification step in the workflow</description>
  </taskType>

  <taskType taskTypeId="IDDTwoStepApprovalTask" name="AVOSReviewNoApprove"
displayName="Review no approve"
creationType="NONE" defaultApproval="true">
    <description>Update a record and require the user to go through an approval process
before completing the task.
    </description>
  </taskType>

  <taskType taskTypeId="IDDUppdateWithApprovalTask" name="Update" displayName="Update"
creationType="CREATE">
    <description>Update a record and do not require the user to go through an approval
process before completing
the task. The approval step is optional.
    </description>
  </taskType>
</tasks>

```

CHAPTER 20

New Features, Changes, and Release Tasks (10.0.0 Hot Fix 1)

This chapter includes the following topic:

- [New Features \(10.0.0 HotFix 1\), 124](#)

New Features (10.0.0 HotFix 1)

This section describes new features in version 10.0.0 HotFix 1.

Informatica MDM Hub

This section describes new features and enhancements to Informatica MDM Hub.

Product Usage Toolkit

You can configure MDM Multidomain Edition to send customer support management files containing information about your MDM environment to Informatica.

For more information about configuring the Product Usage Toolkit for MDM environment information collection, see the *Informatica MDM Multidomain Edition Version 10.0.0 HotFix 1 Configuration Guide*.

Note: In Informatica MDM Multidomain Edition Version 9.7.0 HotFix 2, the Product Usage Toolkit was called DiscoveryIQ.

Timeline Rules

When you use a load or put operation on a base object for which you track data change events, the MDM Hub enforces the following new timeline rules:

- When the data in an existing cross-reference record changes, the record is updated but a new record version is not generated.
- When the effective period of the existing cross-reference record changes, the record is updated but a new record version is not generated.
- When a cross-reference record with a new effective period is added for a record, a new record version is generated.

For more information about the timeline rules, see the *Informatica MDM Multidomain Edition Version 10.0.0 HotFix 1 Configuration Guide*.

Load Multiple Versions of a Record In a Batch Job

You can load multiple versions of a record from a staging table to the cross-reference table of a base object in one batch job.

To load multiple versions of a record, configure contiguity of effective periods of records in the base object. Also, sequence the versions of a record during the load to the base object, by setting the `cmx.server.batch.load.smart_resequencing` property to `true`. You set the `cmx.server.batch.load.smart_resequencing` property in the `cmxserver.properties` file.

For more information about loading multiple versions of a record in a batch job, see the *Informatica MDM Multidomain Edition Version 10.0.0 HotFix 1 Configuration Guide*.

Decrease the Effective Periods of Record versions in Batch Jobs

You can decrease the effective periods of record versions by maintaining contiguity of record versions in a batch job.

For more information about decreasing effective periods of record versions, see the *Informatica MDM Multidomain Edition Version 10.0.0 HotFix 1 Configuration Guide*.

Staging Table System Columns

Effective in version 10.0.0 HotFix 1, system columns are added to the staging tables to enhance the MDM Hub capability to track data change events.

The following system columns are added to the staging tables:

PERIOD_REFERENCE_TIME

Specifies a reference date within an effective period to identify a record version that needs to be updated.

TIMELINE_ACTION

Specifies the action to perform on a record version during the load process.

SIF APIs

Effective in version 10.0.0 HotFix 1, elements are added to the Put and cleansePut SIF APIs. The elements specify the timeline actions, reference time for an effective period, and fills gaps between record versions.

Previously, the elements to specify the timeline actions, reference time for an effective period, and to fill gaps between record versions were not available.

Informatica Data Director

This section describes new features and enhancements to Informatica Data Director.

Informatica Data Director User Interface

The Informatica Data Director user interface contains the following new options in the **Action** menu to edit and add record versions:

Edit Data

Use to edit data in an existing record, you cannot change the effective period for the record.

Edit Period Dates

Use to edit the effective period for a record.

Create New Period

Use to add a record version that is applicable for a new effective period.

For more information, see the *Informatica MDM Multidomain Edition Version 10.0.0 HotFix 1 Informatica Data Director User Guide*.

Smart Search

Smart search uses the SolrCloud feature of Apache Solr to improve the performance of the search requests. SolrCloud uses a cluster of Solr servers to provide distributed indexing and search. The performance results can vary based on your environment and the smart search configuration.

For more information about smart search, see the *Informatica MDM Multidomain Edition Version 10.0.0 HotFix 1 Configuration Guide*.

Entity 360 Lookup Links

In the Entity 360 data view, you can configure the lookup values to link to the lookup composite object. Users can click the lookup value to view the lookup composite object.

For more information about configuring lookup links, see the *Informatica MDM Multidomain Edition Informatica Data Director Version 10.0.0 HotFix 1 Implementation Guide*.

CHAPTER 21

New Features, Changes, and Release Tasks (10.0.0)

This chapter includes the following topics:

- [New Features \(10.0.0\), 127](#)
- [Changes \(10.0.0\), 129](#)
- [Release Tasks \(10.0.0\), 130](#)

New Features (10.0.0)

This section describes new features in version 10.0.0.

Informatica MDM Hub

This section describes new features and enhancements to Informatica MDM Hub.

Languages

The following new features related to languages are available:

- When you launch the Hub Console, you can choose to display the elements of the user interface in any supported localized language.
- You can configure the MDM Hub to display all elements of the interface in Spanish and Brazilian Portuguese.

For more information about languages, see the *Informatica MDM Multidomain Edition Version 10.0.0 Installation Guide*.

Multiple MDM Hub Master Database

You can configure multiple MDM Hub Master Databases in a single database instance. If you configure more than one MDM Hub Master Database, install an MDM Hub instance for each MDM Hub Master Database.

For more information about multiple MDM Hub Master Database configuration, see the *Informatica MDM Multidomain Edition Version 10.0.0 Installation Guide*.

Informatica Platform Staging

You can integrate the MDM Hub with Informatica platform to run the stage process by using the Data Integration Service.

For more information about the Informatica platform staging, see the *Informatica MDM Multidomain Edition Version 10.0.0 Configuration Guide*.

Informatica ActiveVOS Server

You can install and use the ActiveVOS Server as your workflow engine. Your fulfillment email includes a link to the installer, and the MDM Multidomain Edition package includes a license for the ActiveVOS Server. When you install the ActiveVOS Server as part of the Hub Server installation, the installer performs an embedded installation of ActiveVOS Server. The embedded installation configures an MDM Identity Service for ActiveVOS and deploys predefined MDM workflows and roles to the ActiveVOS Server.

For more information, see the *Informatica MDM Multidomain Edition Installation Guide*.

Composite Objects

A composite object consists of a nested structure of base objects. Composite objects are required to view all the information that relates to the root base object in Entity 360 view. Composite objects in the MDM Hub are conceptually the same as subject areas in Informatica Data Director.

Composite Services

You can make composite service calls to create, update, delete, and search for composite object records. You can make Representational State Transfer (REST) composite service calls or Enterprise JavaBean (EJB) composite service calls.

For more information about composite services, see the *Informatica MDM Multidomain Edition Version 10.0.0 Composite Services Guide*.

Dynamic Data Masking

Dynamic Data Masking is a data security product that operates between the MDM Hub and a database to prevent unauthorized access to sensitive information. Dynamic Data Masking intercepts requests sent to the database and applies data masking rules to the request to mask the data before it is sent back to the MDM Hub.

For more information about Dynamic Data Masking, see the Dynamic Data Masking documentation on the Informatica My Support Portal:

<https://mysupport.informatica.com/product-documents.jspa?containerType=14&containerID=2333>.

Security Guide

The *Informatica MDM Multidomain Edition Security Guide* contains information about security in the MDM Hub. Previously, security for the MDM Hub was documented in the *Informatica MDM Multidomain Edition Configuration Guide*.

Informatica Data Director

This section describes new features and enhancements to Informatica Data Director.

Smart Search

You can perform a smart search to find data within a specific collection or all the collections of composite objects based on a search string. The Informatica Data Director application displays the matching fields that can be searched and displayed. The results are ranked based on how closely the results match the search string. You can apply filters to narrow down the results. You can view the details of a result in the Entity 360 view, the data view, and the hierarchy view.

Languages

You can configure Informatica Data Director to display all elements of the interface in Spanish and Brazilian Portuguese.

Entity 360 View

You can use the Entity 360 view to display the records in a composite object. You can see all levels of records in the Entity 360 view. You can configure the layout of the components in the Entity 360 view. You can configure the Entity 360 view to display additional information that relates to the composite object records such as matches and related records. Entity 360 view is disabled by default.

Global Properties

You can use the following global properties to control the run-time behavior of the Informatica Data Director application:

IDD2COCSCConverter.prefixCoNames

When the Informatica Data Director configuration is converted to a composite object configuration, determines if a prefixed subject area name is used for the composite object name.

For more information, see the *Informatica MDM Multidomain Edition Version 10.0.0 Informatica Data Director Implementation Guide*

Resource Kit

This section describes new features and enhancements to the Resource Kit.

Java and JavaScript Code Samples for Making Composite Service Calls

You can use the Java code samples to run Enterprise Java Bean (EJB) composite service calls. You can use the JavaScript code samples to run Representational State Transfer (REST) composite service calls.

The code samples are in the following Resource Kit location: `C:\<MDM Hub installation directory>\hub\resourcekit\samples\COS\`

For more information about the code samples, see the *Informatica MDM Multidomain Edition Version 10.0.0 Resource Kit Guide*.

Changes (10.0.0)

This section describes changes in version 10.0.0.

Informatica MDM Hub

This section describes changes to Informatica MDM Hub in version 10.0.0.

Application Server Memory Settings

Effective in version 10.0, the application server memory settings for all application servers must be set to the following parameters before installing or upgrading MDM Multidomain Edition.

Note: Effective in version 10.2, you can omit the following deprecated Java options: `-XX:PermSize` and `-XX:MaxPermSize`.

JBoss and Weblogic

```
-Xms2048m -Xmx4096m -Xss2000k -XX:PermSize=256m -XX:MaxPermSize=1024m
```

WebSphere

```
-Xms2048m -Xmx4096m -Xmso2048m -Xss2000k -XX:PermSize=256m -XX:MaxPermSize=1024m
```

Previously, the application server memory settings were set to the following parameters:

JBoss

```
-Xms1024m -Xmx4096m -XX:PermSize=256m -XX:MaxPermSize=1024m
```

WebLogic

```
-Xmx4096m -XX:PermSize=256m -XX:MaxPermSize=1024m
```

WebSphere

```
-XX:MaxPermSize=512m -XX:PermSize=128m -Xss2000k
```

Custom MDM Hub Master Database User Name

Effective in version 10.0.0, you can create a custom MDM Hub Master Database user name. The default is `cmx_system`.

Previously, you could create a custom MDM Hub Master Database user name only in the IBM DB2 environment.

For more information about custom MDM Hub Master Database user name, see the *Informatica MDM Multidomain Edition Version 10.0.0 Installation Guide*.

Release Tasks (10.0.0)

This section describes the release tasks in version 10.0.0.

Informatica MDM Hub

This section describes release task for Informatica MDM Hub in version 10.0.0.

Proxy Role

Effective in version 10.0.0, the Operational Reference Store that you create does not contain a proxy role.

If you upgrade to version 10.0.0, the existing proxy roles convert to ordinary roles that you can delete.

Siperian BPM Workflow Engine

Effective in version 10.0.0, the Siperian BPM workflow engine is deprecated. Previously, the Siperian BPM workflow engine was the default workflow engine in the MDM Hub. Informatica recommends that you install the ActiveVOS Server as part of the Hub Server installation. The ActiveVOS Server is the new default workflow engine.

You can continue to use Siperian BPM with this release. Before you upgrade, make a note of the settings defined for the Siperian BPM workflow engine. After you upgrade, define a Siperian BPM workflow engine with the same name and settings that you used in the previous release. Verify that the Operational Reference Stores use the Siperian BPM workflow engine.

If you want to switch workflow engines, first you need to close open tasks. You cannot migrate open tasks from one workflow engine to another.

You have the following options for moving from Siperian BPM to ActiveVOS Server:

- Before you upgrade to this release, close all open tasks. After you upgrade, all upgraded Operational Reference Stores use the ActiveVOS Server as the workflow engine. You need to update your IDD applications to use ActiveVOS Server task definitions.
- If you want to move to ActiveVOS Server after upgrading to this release, you can switch workflow engines after the upgrade. When you are ready to switch, close all open tasks. For each Operational Reference Store, change the workflow engine from Siperian BPM to the ActiveVOS Server. Update your IDD applications to use ActiveVOS Server task definitions.

For instructions, see *Informatica MDM Multidomain Edition Version 10 HotFix 1 Informatica Data Director Implementation Guide*.

EJP Protocol for Services Integration Framework Requests

Effective in version 10.0.0, the EJB2 protocol is obsolete and you must use EJB3 protocol to communicate with the MDM Hub through the Services Integration Framework (SIF) requests. If you use the EJB protocol to communicate with the MDM Hub through the Services Integration Framework (SIF) requests, perform the following tasks:

1. Replace the existing SiperianClient library classes with the latest version of the SiperianClient library classes.

The `siperian-api.jar` file located in the following directories contains the SiperianClient library classes:

- `<Resource Kit Installation Directory>\sdk\sifsdk\lib`
- `<MDM Hub Installation Directory>\hub\server\lib`

2. If you use custom JNDI lookup methods, update the lookup methods so that the methods conform to the EJB3 conventions.

Informatica Data Director

This section describes release tasks for Informatica Data Director in version 10.0.0.

Charts

Effective in version 10.0.0, ILOG charts are not supported for new customers or existing customers who previously licensed IBM ILOG chart software.

Informatica recommends that you use Jaspersoft software to graphically represent data in Informatica Data Director.

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