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New Features (10.0.0 HotFix 1)

- Informatica MDM Hub
- Informatica Data Director

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New Features (10.0.0)

- Informatica MDM Hub
- Informatica Data Director
- Resource Kit

Changes (10.0.0)

- Informatica MDM Hub

Release Tasks (10.0.0)

- Informatica MDM Hub
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Preface

The Informatica MDM Multidomain Edition 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 Informatica MDM Multidomain Edition Release Guide is written for users of Informatica MDM Multidomain Edition. This guide assumes that you have knowledge of the features for which you are responsible.

Informatica Resources

Informatica My Support Portal

As an Informatica customer, the first step in reaching out to Informatica is through the Informatica My Support Portal at https://mysupport.informatica.com. The My Support Portal is the largest online data integration collaboration platform with over 100,000 Informatica customers and partners worldwide.

As a member, you can:

- Access all of your Informatica resources in one place.
- Review your support cases.
- Search the Knowledge Base, find product documentation, access how-to documents, and watch support videos.
- Find your local Informatica User Group Network and collaborate with your peers.

Informatica Documentation

The Informatica Documentation team makes every effort to create accurate, usable documentation. If you have questions, comments, or ideas about this documentation, contact the Informatica Documentation team through email at infa_documentation@informatica.com. We will use your feedback to improve our documentation. Let us know if we can contact you regarding your comments.

The Documentation team updates documentation as needed. To get the latest documentation for your product, navigate to Product Documentation from https://mysupport.informatica.com.

Informatica Product Availability Matrixes

Product Availability Matrixes (PAMs) indicate the versions of operating systems, databases, and other types of data sources and targets that a product release supports. You can access the PAMs on the Informatica My Support Portal at https://mysupport.informatica.com.
Informatica Web Site

You can access the Informatica corporate web site at https://www.informatica.com. The site contains information about Informatica, its background, upcoming events, and sales offices. You will also find product and partner information. The services area of the site includes important information about technical support, training and education, and implementation services.

Informatica How-To Library

As an Informatica customer, you can access the Informatica How-To Library at https://mysupport.informatica.com. The How-To Library is a collection of resources to help you learn more about Informatica products and features. It includes articles and interactive demonstrations that provide solutions to common problems, compare features and behaviors, and guide you through performing specific real-world tasks.

Informatica Knowledge Base

As an Informatica customer, you can access the Informatica Knowledge Base at https://mysupport.informatica.com. Use the Knowledge Base to search for documented solutions to known technical issues about Informatica products. You can also find answers to frequently asked questions, technical white papers, and technical tips. If you have questions, comments, or ideas about the Knowledge Base, contact the Informatica Knowledge Base team through email at KB.Feedback@informatica.com.

Informatica Support YouTube Channel

You can access the Informatica Support YouTube channel at http://www.youtube.com/user/INFASupport. The Informatica Support YouTube channel includes videos about solutions that guide you through performing specific tasks. If you have questions, comments, or ideas about the Informatica Support YouTube channel, contact the Support YouTube team through email at supportvideos@informatica.com or send a tweet to @INFASupport.

Informatica Marketplace

The Informatica Marketplace is a forum where developers and partners can share solutions that augment, extend, or enhance data integration implementations. By leveraging any of the hundreds of solutions available on the Marketplace, you can improve your productivity and speed up time to implementation on your projects. You can access Informatica Marketplace at http://www.informaticamarketplace.com.

Informatica Velocity

You can access Informatica Velocity at https://mysupport.informatica.com. Developed from the real-world experience of hundreds of data management projects, Informatica Velocity represents the collective knowledge of our consultants who have worked with organizations from around the world to plan, develop, deploy, and maintain successful data management solutions. If you have questions, comments, or ideas about Informatica Velocity, contact Informatica Professional Services at ips@informatica.com.

Informatica Global Customer Support

You can contact a Customer Support Center by telephone or through the Online Support.

Online Support requires a user name and password. You can request a user name and password at http://mysupport.informatica.com.
Part I: Version 10.1.0

This part contains the following chapter:

• **New Features and Changes (10.1.0), 14**
New Features and Changes (10.1.0)

This chapter includes the following topics:

- New Features (10.1.0), 14
- Changes (10.1.0), 19

New Features (10.1.0)

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:

<table>
<thead>
<tr>
<th>Environment</th>
<th>Description</th>
<th>Tools</th>
</tr>
</thead>
<tbody>
<tr>
<td>Informatica MDM</td>
<td>You use MDM components. You do not use Informatica Data Director or Business Entity Services.</td>
<td>Hub Console</td>
</tr>
</tbody>
</table>
| 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.

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

### 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-0RCL-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 *Informatica MDM Multidomain Edition 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 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` property 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 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.

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.
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 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 10.1 Configuration Guide.

Changes (10.1.0)

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 (10.1.0)
Changes to Terms

In this release, some terms were changed.

The following table contains the old and new terms:

<table>
<thead>
<tr>
<th>Old Term</th>
<th>New Term</th>
</tr>
</thead>
<tbody>
<tr>
<td>composite object</td>
<td>business entity</td>
</tr>
<tr>
<td>composite service</td>
<td>business entity service</td>
</tr>
<tr>
<td>Entity 360</td>
<td>Entity 360 framework</td>
</tr>
<tr>
<td>Entity 360 View</td>
<td>Entity View</td>
</tr>
<tr>
<td>360 View</td>
<td>Entity View</td>
</tr>
</tbody>
</table>

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 10.1, these menus were renamed to be more meaningful.

The following table summarizes the changes to the menus:

<table>
<thead>
<tr>
<th>Pre-version 10.0 Menus</th>
<th>Version 10.0 Menus</th>
<th>Version 10.1 Menus</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>n/a</td>
<td>New BE</td>
<td>Create</td>
<td>Create a business entity in the <strong>Entity view</strong>.</td>
</tr>
<tr>
<td>New</td>
<td>New SA</td>
<td>Create in Data View</td>
<td>Create records in a subject area in the <strong>Data view</strong>. In 10.1, if you hide the <strong>Data view</strong>, this menu is also hidden. Use the <strong>Create</strong> menu instead.</td>
</tr>
<tr>
<td>Queries</td>
<td>Queries</td>
<td>Queries</td>
<td>Use the search functions in the <strong>Data view</strong>. In 10.1, if you hide the <strong>Data view</strong>, this menu is also hidden. Use the <strong>Search</strong> box instead.</td>
</tr>
</tbody>
</table>

Navigation Menu in the Entity View

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.

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

Form View for the Sections in the Entity View

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 Informatica Data Director User Guide*. 
Hierarchy Canvas

In the Hierarchy canvas, the node text wraps to the next line instead of being truncated.

Service URL

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 10.1.0 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

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:

<table>
<thead>
<tr>
<th>Property</th>
<th>Replacement</th>
</tr>
</thead>
<tbody>
<tr>
<td>activevos.merge.workflow.operation.name</td>
<td>None</td>
</tr>
<tr>
<td>activeos.workflow.basicSecure</td>
<td>ActiveVOS security is handled at the application server level. A trusted user enables ActiveVOS to interact securely with the MDM Hub.</td>
</tr>
<tr>
<td>cmx.idd.data_import_enabled</td>
<td>None</td>
</tr>
<tr>
<td>solr.allNodesAliveSleepTimeout</td>
<td>None</td>
</tr>
<tr>
<td>Property</td>
<td>Replacement</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>-------------</td>
</tr>
<tr>
<td>teamworks.merge.workflow.guid</td>
<td>None</td>
</tr>
<tr>
<td>zk.allNodesAliveRetries</td>
<td>None</td>
</tr>
</tbody>
</table>
Part II: Version 10.0.0

This part contains the following chapters:

- New Features and Enhancements (10.0.0 Hot Fix 2), 25
- New Features, Changes, and Release Tasks (10.0.0 Hot Fix 1), 38
- New Features, Changes, and Release Tasks (10.0.0), 41
CHAPTER 2

New Features and Enhancements
(10.0.0 Hot Fix 2)

This chapter includes the following topics:

- New Features (10.0.0 HotFix 2), 25
- Changes (10.0.0 HotFix 2), 32
- Release Tasks (10.0.0 HotFix 2), 36

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.

For more information, 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:

![Entity View](http://www.retiando.eu/user_files/doctor.png)

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:

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:

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 IDDConfig_ActiveVOS_BE.xml file in <infadm 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 <infadm 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 Informatica MDM Multidomain Edition Informatica Data Director - Informatica 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.
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.

- **taskId**
  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:

```xml
<tasks includeUnassignedTasks="true">
<!-- Task Definitions -->
  <taskType taskId="IDDMergeTask" name="AVOSMerge" displayName="Merge"
    creationType="MERGE">
    <description>Merge two records together.</description>
  </taskType>

  <taskType taskId="IDDUnmergeTask" name="AVOSUnmerge" displayName="Unmerge"
    creationType="UNMERGE">
    <description>Unmerge an XREF record from a Base Object record.</description>
  </taskType>

  <taskType taskId="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 taskId="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 taskId="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:

```xml
<tasks includeUnassignedTasks="true">
  <!-- Task Definitions -->
  <taskType taskId="AVOSBeMerge" displayName="AVOSBeMerge" creationType="MERGE">
    <description>Merge two records together.</description>
  </taskType>
  <taskType taskId="AVOSBeUnmerge" displayName="AVOSBeUnmerge" creationType="UNMERGE">
    <description>Unmerge an XREF record from a Base Object record.</description>
  </taskType>
  <taskType taskId="AVOSBeFinalReview" displayName="AVOSBeFinalReview" creationType="NONE">
    <description>Update a record and require the user to go through an approval process before completing the task.</description>
  </taskType>
  <taskType taskId="AVOSBeNotification" displayName="AVOSBeNotification" creationType="NONE">
    <description>Notification step in the workflow</description>
  </taskType>
  <taskType taskId="AVOSBeReviewNoApprove" displayName="AVOSBeReviewNoApprove" 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 taskId="AVOSBeUpdate" displayName="AVOSBeUpdate" 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:

```xml
<tasks includeUnassignedTasks="true">
  <taskType creationType="MERGE" dataUpdateType="ACTIVE" defaultApproval="false" displayName="Merge Workflow" displayType="NORMAL" name="MergeWorkflow" pendingBVT="false" taskId="IDDMergeTask">
    <description>Merge two records together.</description>
  </taskType>
  <taskType creationType="UNMERGE" dataUpdateType="ACTIVE" defaultApproval="false" displayName="Unmerge Workflow" displayType="NORMAL" name="UnmergeWorkflow" pendingBVT="false" taskId="IDDUnmergeTask">
    <description>Unmerge an XREF record from a Base Object record.</description>
  </taskType>
  <taskType creationType="NONE" dataUpdateType="ACTIVE" defaultApproval="false" displayName="One Step Approval Workflow" displayType="NORMAL" name="OneStepApprovalWorkflow" pendingBVT="false" taskId="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" taskId="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="IDDDUpdateWithApprovalTask">
  <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 `<infamdn 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:cod cachet otal=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:

```xml
<tasks includeUnassignedTasks="true">  
<!-- Task Definitions -->  
<taskType taskTypeId="1DDMergeTask" name="AVOSMerge" displayName="Merge" creationType="MERGE">  
<description>Merge two records together.</description>  
</taskType>
```

For more information, see the Informatica MDM Multidomain Edition 10.0.0 HotFix 2 Installation Guide.
<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>
CHAPTER 3

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), 38

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.
New Features, Changes, and Release Tasks (10.0.0)

This chapter includes the following topics:

- New Features (10.0.0), 41
- Changes (10.0.0), 44
- Release Tasks (10.0.0), 44

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:

Security 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:

**IDD2COC$Converter.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:\infamdm installation directory\\hub \resourcekit\samples\COS\n
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 10.0.0, the application server memory settings for all application servers must be set to the following parameters before installing or upgrading MDM Multidomain Edition:

**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`

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.
Part III: Version 9.7.1

This part contains the following chapters:

- New Features and Enhancements (9.7.1), 47
- Informatica MDM Hub Changes (9.7.1), 57
- Informatica Data Director Changes (9.7.1), 62
CHAPTER 5

New Features and Enhancements (9.7.1)

This chapter includes the following topics:

- Version 9.7.1 HotFix 5, 47
- Version 9.7.1 HotFix 4, 49
- Version 9.7.1 HotFix 3, 51
- Version 9.7.1 HotFix 2, 52
- Version 9.7.1 HotFix 1, 54
- Version 9.7.1, 55

Version 9.7.1 HotFix 5

Informatica MDM Hub

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

Parallel Processing of JMS Messages

You can configure the publish process to process JMS messages in parallel, and to enhance the performance of the publish process.

To configure parallel processing of JMS messages, add the following properties to the cmxserver.properties file:

```
mq.data.change.threads
    Number of threads to use to process JMS messages during the publish process.

mq.data.change.batch.size
    Specifies the number of JMS messages to process in each batch for the publish process.

mq.data.change.timeout
    Specifies the amount of time allowed to process the JMS messages.
```

For more information, see the Informatica MDM Multidomain Edition Version 9.7.1 HotFix 5 Configuration Guide.
Tokenization Process Performance Optimization

To optimize the performance of the tokenization process, you can configure the following properties related to the JDBC loader in the `cmxcleanse.properties` file:

- `com.informatica.mdm.loader.JdbcLoader.noOfThreads`
  Specifies the number of threads that the JDBC loader can use during the tokenization process.

- `com.informatica.mdm.loader.LoaderThread.insertBlockSize`
  Specifies the block size that each thread of the JDBC loader can handle during the tokenization process.

For more information, see the Informatica MDM Multidomain Edition Version 9.7.1 HotFix 5 Configuration Guide.

Performance Optimization of a SearchMatch Request

To optimize the performance of a SearchMatch request, set these properties to an optimal value in the `<MDM Hub Installation Directory>/hub\cleanse\resources\cmxcleanse.properties` file:

- `cmx.server.match.searcher.database.worker.multithreaded`
  Set the property to true to use multiple parallel threads to process the search ranges.

- `cmx.server.match.searcher.dbfiltered.max.key.size`
  Specifies the DBFILTERED threshold. The DBFILTERED feature is invoked when the SearchMatch record has a SSA_KEY that is less than or equal to the value of the `cmx.server.match.searcher.dbfiltered.max.key.size` property.

- `cmx.server.match.searcher.resultset.size`
  Specifies the resultset size of a SearchMatch database query.

Informatica AddressDoctor Version 5.8

Informatica MDM version 9.7.1 HotFix 5 supports Informatica AddressDoctor version 5.8.

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:

- `proactiveMatchResultSort`
  Configures the sort order in which the potential matches appear in 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 9.7.1 HotFix 5 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.


Version 9.7.1 HotFix 4

Informatica MDM Hub

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

Oracle Database 12c JDBC Driver Support

You can use the Oracle Database 12c JDBC driver for the database configuration of the MDM Multidomain Edition.

JBoss Enterprise Application Platform 6.2.4 Support

You can deploy the MDM Hub on JBoss Enterprise Application Platform 6.2.4.

WebSphere Application Server V8.5.5 Fix Pack 5 Support

You can deploy the MDM Multidomain Edition on WebSphere Application Server V8.5.5 Fix Pack 5.

Operating System Support

The MDM Multidomain Edition is supported on Windows Server 2012 R2 on Intel x86-64 (64 bit).

AddressDoctor Version 5.7.0 Support

You can use AddressDoctor Version 5.7.0 with the MDM Hub.

IBM DB2 Database Backup

You can configure the MDM Multidomain Edition for IBM DB2 to perform the following tasks during an online database backup:

- Run batch jobs concurrently with an online database backup by overriding a TRUNCATE statement with a DELETE statement for the duration of an online backup.
- Run Tokenize batch jobs and SIF APIs in parallel by overriding a TRUNCATE statement with a DELETE statement when row-level locking is enabled for an Operational Reference Store.

For more information, see the Informatica MDM Multidomain Edition Version 9.7.1 HotFix 4 Configuration Guide.
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 9.7.1 HotFix 4 Configuration Guide.

Message Triggers

To configure message triggers, when you select the Merging data, base object updated event, you can select specific columns that when changed trigger messages.

For more information about message triggers, see the Informatica MDM Multidomain Edition Version 9.7.1 HotFix 4 Configuration Guide.

Load Jobs in IBM DB2

In an IBM DB2 environment, you can configure load jobs with multiple lookup tables to run more quickly.

For more information, see the Informatica MDM Multidomain Edition Version 9.7.1 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:

force_https

Specifies whether a preconfigured load-balanced service URL makes service calls through https instead of http.

<IDD application name>:orsDefaultCalendarTime

Specifies the default time in a 24-hour format in the calendar in an Informatica Data Director application.

isEffectiveDateIncluded

Specifies whether to include the Effective Date field for search queries in the Informatica Data Director.


Resource Kit

This section describes new features and enhancements to the Resource Kit.

ActiveVOS Projects

The BPM sample folder contains a new ActiveVOS project.

The file MDMWorkflow.zip in the folder <infamdn installation directory>\hub\resourcekit\samples \BPM\ActiveVOS contains the MDMWorkflow project and the CommonMDM project. The MDMWorkflow
The project contains predefined business process execution language definitions and predefined roles. The CommonMDM project contains supporting resources.

**Important:** Do not use the file INFA_MDM.zip that is located in the same folder. The INFA_MDM project is obsolete and does not work with Informatica MDM Multidomain Edition version 9.7.1 HotFix 4.

For more information, see the Informatica MDM Multidomain Edition Version 9.7.1 HotFix 4 Informatica Data Director - Informatica ActiveVOS Integration Guide.

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### Version 9.7.1 HotFix 3

#### Informatica MDM Hub

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

**Upgrade with Zero Downtime**

You can upgrade a production environment with zero downtime.

For information about upgrading with zero downtime, see the Informatica MDM Multidomain Edition Version 9.7.1 HotFix 3 Upgrading with Zero Downtime Guide.

#### Oracle Database 12c Support

MDM Multidomain Edition is available for Oracle Database 12c.

#### Oracle WebLogic Server 12c Support

You can deploy the MDM Multidomain Edition on Oracle WebLogic Server 12c.

#### Custom MDM Hub Master Database User Name

In the IBM DB2 environment, you can create a custom MDM Hub Master Database user name. The default is cmx_system.

For more information about custom MDM Hub Master Database user name, see the Informatica MDM Multidomain Edition Version 9.7.1 HotFix 3 Installation Guide.

#### Custom Operational Reference Store User Name

In the IBM DB2 environment, you can create a custom Operational Reference Store user name. The default is the same as the Operational Reference Store schema name.

For more information about custom Operational Reference Store user names, see the Informatica MDM Multidomain Edition Version 9.7.1 HotFix 3 Installation Guide.

#### Security Access Manager

In the Security Access Manager, when you assign users to specific groups, the user list that appears is in an alphabetic order.
Tokenization
You can run tokenization in multi-threaded mode.

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

Microsoft Internet Explorer 11 Support
You can run the Informatica Data Director application in Microsoft Internet Explorer 11 on Microsoft Windows 8.1.

Hierarchy View
You can configure the Hierarchy view to allow users to show inactive relationships for all entities in the Hierarchy view.

For more information, see the Informatica MDM Multidomain Edition Version 9.7.1 HotFix 1 Informatica Data Director Implementation Guide.

Multi-threaded Queries
You can configure queries to load through multiple threads. Multi-threaded queries load faster and lead to faster searches.

For more information, see the Informatica MDM Multidomain Edition Version 9.7.1 HotFix 3 Informatica Data Director Implementation Guide.

Version 9.7.1 HotFix 2

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

Collection of MDM Environment Information
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 Informatica DiscoveryIQ for MDM environment information collection, see the Informatica MDM Multidomain Edition Version 9.7.1 HotFix 2 Configuration Guide.

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 9.7.1 HotFix 2 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 9.7.1 HotFix 2 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 9.7.1 HotFix 2 Configuration Guide.

Repository Table Column

Effective in version 9.7.1 HotFix 2, the TIMELINE_FILL_ON_GAP column is added to the C_REPOS_TABLE of the Operational Reference Store. The TIMELINE_FILL_ON_GAP value maintains the contiguity of record versions during a load job.

Hard Delete Detection

You can detect hard deletes in Microsoft SQL Server environments.

For more information about detecting hard deletes, see the MDM Multidomain Edition Version 9.7.1 HotFix 2 Configuration Guide.

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 9.7.1 HotFix 2 Informatica Data Director User Guide.

User Exits
You can determine the timeline edit mode when you use a user exit during a save or send for approval operation. You can also determine the state of the Update Existing Period check box when you use a user exit during a save or send for approval operation.

For more information, see the Informatica MDM Multidomain Edition Version 9.7.1 HotFix 2 Informatica Data Director Implementation Guide.

Version 9.7.1 HotFix 1
This section describes new features and enhancements in version 9.7.1 HotFix 1.

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

Language Display
You can configure Informatica Data Director to display all the elements of the interface in Russian.

For more information, see the Informatica MDM Multidomain Edition Version 9.7.1 HotFix 1 Informatica Data Director Implementation Guide.

Data Security Filters for Child Objects
You can configure the dataSecurity parameter in the BDDConfig.xml file for one-to-many child objects and many-to-many child objects.

For more information, see the Informatica MDM Multidomain Edition Version 9.7.1 HotFix 1 Informatica Data Director Implementation Guide.

Data Security Filters for Inherited Roles
You can configure data security filters for inherited roles that descend from a parent role. To configure the data security filters for inherited roles, set the affectFilter attribute for the securityFilter parameter in the BDDConfig.xml file.

For more information, see the Informatica MDM Multidomain Edition Version 9.7.1 HotFix 1 Informatica Data Director Implementation Guide.
Data View

You can configure the `tabsExpandByDefault` property to show the expanded view of child details in the Data View.

For more information, see the Informatica MDM Multidomain Edition Version 9.7.1 HotFix 1 Informatica Data Director Implementation Guide.

Hierarchy View Search Page

On the Data View Search page, you can select the number of records to display from a list.

For more information, see the Informatica MDM Multidomain Edition Version 9.7.1 HotFix 1 Informatica Data Director User Guide.

Hierarchy View

You can configure the Hierarchy view to allow users to show inactive relationships for all entities in the Hierarchy view.

For more information, see the Informatica MDM Multidomain Edition Version 9.7.1 HotFix 1 Informatica Data Director Implementation Guide.

Matches View

You can configure the `needLoadChildOnOpen` property to hide child records in the Relationships tab when you open a record in the Matches view to increase performance.

For more information, see the Informatica MDM Multidomain Edition Version 9.7.1 HotFix 1 Informatica Data Director Implementation Guide.

Version 9.7.1

This section describes new features and enhancements in version 9.7.1.

Informatica MDM Hub

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

Data Encryption

You can configure data encryption to ensure that sensitive data in the MDM Hub implementation is secure. You can store sensitive data in the database in encrypted form and transfer it to the Hub Server, the Process Server, and Informatica Data Director in the encrypted form.

For more information, see the Informatica MDM Multidomain Edition Version 9.7.1 Configuration Guide.

Proximity Search

You can perform a proximity search to find records that are within the geocode radius that you specify. To configure proximity search, the MDM Hub provides the `Geocode` field name for fuzzy match columns.

For more information, see the Informatica MDM Multidomain Edition Version 9.7.1 Configuration Guide.
ORS-specific APIs
You can see the status of repository objects for which you want to generate APIs in the SIF Manager tool. You can also select specific repository objects for which you want to generate APIs. When the MDM Hub generates and deploys the ORS-specific APIs, it generates a unique version ID.

For more information, see the Informatica MDM Multidomain Edition Version 9.7.1 Configuration Guide.

Multiple EJB Clients for the Hub Console
You can choose a JBoss EJB client that you want to use for the Hub Console. Configure the EJB client in the cmxserver.properties file.

For more information, see the Informatica MDM Multidomain Edition Version 9.7.1 Installation Guide.

Locking
You can use the Hub Console to identify users that have acquired a lock in the MDM Hub.

For more information, see the Informatica MDM Multidomain Edition Version 9.7.1 Configuration Guide.

WebSphere Administrative Security
You can configure WebSphere administrative security to control MDM Hub access to the WebSphere administrative console.

For more information, see the Informatica MDM Multidomain Edition Version 9.7.1 Installation Guide.

WebSphere Application Server Version 8.5.5 Support
You can deploy the MDM Multidomain Edition on WebSphere Application Server Version 8.5.5.

Batch Unmerge
You can run the ExecuteBatchUnmerge SIF API to perform a batch unmerge.

For more information, see the Informatica MDM Multidomain Edition Services Integration Framework Guide.

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

Merge for Timeline-enabled Entities
You can merge timeline-enabled entities for effective dates other than the current date.

For more information, see the Informatica MDM Multidomain Edition Version 9.7.1 Informatica Data Director User Guide.
Chapter 6

Informatica MDM Hub Changes (9.7.1)

This chapter includes the following topics:

- Deprecated SIF APIs, 57
- Tokenize and Merge Process Optimization Properties, 58
- DiscoveryIQ, 58
- PowerCenter Custom Transformation for MDM, 58
- Database Proxy Role, 58
- Proxy Role, 59
- SIF APIs, 59
- Staging Table System Columns, 59
- Batch Unmerge, 59
- IBM DB2 Setup, 60
- SIF Manager User Interface, 60
- User Exit Services Integration Framework API, 60
- Address Field Fuzzy Matching, 60
- Post-merge User Exit, 60
- Pre-unmerge User Exit, 61
- Post-unmerge User Exit, 61
- Secure Sockets Layer Protocol for WebSphere, 61
- Validation in PUT Request, 61

Deprecated SIF APIs

Effective in version 9.7.1 HotFix 4, the following SIF APIs are deprecated:

- Link
- Link2
Tokenize and Merge Process Optimization Properties

Effective in version 9.7.1 HotFix 4, to optimize the tokenize and merge process, configure the following optimization properties in the \texttt{cmxcleanse.properties} file:

\begin{itemize}
  \item \texttt{cmx.server.stripDML.blockSize}
    \begin{itemize}
      \item Number of records that the MDM Hub processes in each block during the tokenize process.
    \end{itemize}
  \item \texttt{cmx.server.stripDML.noOfThreadsForInsert}
    \begin{itemize}
      \item Number of threads that the MDM Hub uses to insert records into the match key tables.
    \end{itemize}
  \item \texttt{cmx.server.stripDML.noOfThreadsForUpdate}
    \begin{itemize}
      \item Number of threads that the MDM Hub uses to update records in the match key tables.
    \end{itemize}
  \item \texttt{cmx.server.stripDML.noOfThreadsForDelete}
    \begin{itemize}
      \item Number of threads that the MDM Hub uses to delete records from the match key tables.
    \end{itemize}
\end{itemize}

Previously, to optimize the tokenize and merge process, you could configure the following properties in the \texttt{cmxcleanse.properties} file:

\begin{itemize}
  \item \texttt{cmx.server.batch.sql.block_size}
  \item \texttt{cmx.server.batch.strp_ins_threads_per_job}
  \item \texttt{cmx.server.batch.strp_upd_threads_per_job}
  \item \texttt{cmx.server.batch.strp_del_threads_per_job}
\end{itemize}

For more information about the tokenize process, see the \textit{Informatica MDM Multidomain Edition Version 9.7.1 HotFix 4 Configuration Guide}.

DiscoveryIQ

Effective in version 9.7.1 HotFix 3, DiscoveryIQ is renamed to Product Usage Toolkit.

PowerCenter Custom Transformation for MDM

Effective in version 9.7.1 HotFix 3, the PowerCenter Custom Transformation for MDM is available.

In version 9.6.1, the PowerCenter Custom Transformation for MDM was available on request for Oracle only.

Database Proxy Role

Effective in version 9.7.1 HotFix 3, for the MDM Multidomain Edition for IBM DB2, you can create a database proxy role that has the privileges to create and drop schema objects.

In version 9.7.1 HotFix 2, the database proxy role did not have the privileges to create and drop schema objects.
Proxy Role

Effective in version 9.7.1 HotFix 2, you can use proxy roles for MDM Multidomain Edition for IBM DB2. You can use alternative database users, who are not Operational Reference Store users, to access and change the metadata in the MDM Hub.

In version 9.6.1, proxy role was not supported. Prior to version 9.6.1, you could create a proxy role for IBM DB2 in the IBM DB2 database. Previously, only Operational Reference Store users could access and change the metadata in the MDM Hub.

SIF APIs

Effective in version 9.7.1 HotFix 2, added elements 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.

Staging Table System Columns

Effective in version 9.7.1 HotFix 2, 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.

Batch Unmerge

Effective in version 9.7.1, the Unmerge batch job is based on Java code. You must run the ExecuteBatchUnmerge SIF API to perform a batch unmerge.

Previously, in versions 9.6.0, 9.6.1, and 9.7.0, the Unmerge batch job was unavailable. In versions 9.5.1 and earlier, the Unmerge batch job was based on PL/SQL stored procedures.
IBM DB2 Setup

Effective in version 9.7.1, if you use IBM DB2 with the MDM Hub, do not enable the Oracle-compatibility mode.

Previously, to use the MDM Hub with IBM DB2, you had to enable the Oracle-compatibility mode.

SIF Manager User Interface

Effective in version 9.7.1, to find objects that are out of sync with the generated ORS-specific APIs, use the Refresh Object Status button on the SIF API Manager tab of the SIF Manager tool.

Previously, you used the Find Out of Sync Objects button to find objects that were out of sync with the ORS-specific APIs that you generated.

User Exit Services Integration Framework API

Effective in version 9.7.1, you do not need to specify an Operational Reference Store ID and a user name when you create a User Exit Services Integration Framework API request.

Previously, you had to specify an Operational Reference Store ID and a user name when you created a User Exit Services Integration Framework API request.

Address Field Fuzzy Matching

Effective in version 9.7.1, to prevent potential overmatching, the match process only considers transposition errors when the Address_Part1 field contains 10 or more characters. For example, 'PO Box 38' does not match 'PO Box 83', but '13 Capital Street' matches '31 Capital Street'.

Previously, the match process considered transposition errors regardless of the number of characters in the address field.

Post-merge User Exit

Effective in version 9.7.1, the post-merge user exit uses the following method:

```java
void processUserExit(UserExitContext userExitContext, Map<String, List<String>> baseObjectRowIds) throws Exception;
```

Previously, the post-merge user exit used the following method:

```java
void processUserExit(UserExitContext userExitContext, List<String> baseObjectRowIds) throws Exception;
```
Pre-unmerge User Exit

Effective in version 9.7.1, the pre-unmerge user exit uses the following method:

```java
void processUserExit(UserExitContext userExitContext, Set<UnmergeKey> unmergeKeys) throws Exception;
```

Previously, the pre-unmerge user exit used the following method:

```java
void processUserExit(UserExitContext userExitContext, String rowidSystem, String pkeySourceObject) throws Exception;
```

Post-unmerge User Exit

Effective in 9.7.1, the post-unmerge user exit uses the following method:

```java
void processUserExit(UserExitContext userExitContext, Set<PostUnmergeResponse> responses) throws Exception;
```

Previously, the post-unmerge user exit used the following method:

```java
void processUserExit(UserExitContext userExitContext, String rowidObject) throws Exception;
```

Secure Sockets Layer Protocol for WebSphere

Effective in version 9.7.1, you can launch the Hub Console with the URL https://<Hub host>:<port>/cmx/ to secure the WebSphere network connection between the Hub Console and the Hub Server with the Secure Sockets Layer (SSL) protocol. Launch the Hub Console with the URL http://<Hub host>:<port>/cmx/ to disable the SSL protocol.

Previously, to secure the WebSphere network connection between the Hub Console and the Hub Server with the SSL protocol, you set cmx.websphere.ssl.enabled to true in the cmxserver.properties file. The cmx.websphere.ssl.enabled parameter is deprecated in version 9.7.1.

Validation in PUT Request

Effective in version 9.7.1, if you use a PUT request to specify a column as untrustworthy, the MDM Hub recalculates trust for all other cross-referenced columns in the base object.

Previously, the MDM Hub reduced trust only for the base object column specified in the PUT request.
CHAPTER 7

Informatica Data Director Changes (9.7.1)

This chapter includes the following topics:

- Editing Task Details, 62
- MDM Hub Sample for ActiveVOS Workflow, 62
- Claiming Tasks, 63
- ActiveVOS Integration, 63
- Informatica Data Director User Interface, 64
- Effective Date Field, 64
- Match Comparison Panel, 64

Editing Task Details

Effective in version 9.7.1 HotFix 6, if an ActiveVOS task is claimed, only the owner of the task can edit the task details. If the task owner is unavailable, you can reassign the task through the ActiveVOS Central. To log in to ActiveVOS Central, the user must have the ActiveVOS role abAdmin and also have the appropriate Security Access Manager roles.

Previously, users could edit task details that were assigned to them without claiming them.

MDM Hub Sample for ActiveVOS Workflow

Effective in version 9.7.1 HotFix 6, the IDDConfigAV.xml configuration file in the Resource Kit enables you to use the MDM Hub sample with the ActiveVOS workflow.

For more information, see the Informatica MDM Multidomain Edition Version 9.7.1 HotFix 6 Resource Kit Guide.
Claiming Tasks

Effective in version 9.7.1 HotFix 5, users must claim a task to approve, reject, or cancel it.
Previously, users could approve, reject, or cancel the tasks without claiming them.

ActiveVOS Integration

Effective in 9.7.1 HotFix 4, the presentation parameters have changed in the file MDMWorkflow.zip that is located in <infamdm installation directory>resourcekit\samples\BPM\ActiveVOS.

The following table describes the presentation parameters that have changed:

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Type</th>
<th>Expression</th>
</tr>
</thead>
<tbody>
<tr>
<td>title</td>
<td>string</td>
<td>let $in := $ProcessTaskRequest/mdmavxsd:INFATask/mdmavxsd:title/text()</td>
</tr>
<tr>
<td></td>
<td></td>
<td>return</td>
</tr>
<tr>
<td></td>
<td></td>
<td>substring(concat($in, $out ), (1 + (string-length($in )) * xsd:int((string-length($out) &gt; 0))), string-length($out) + (string-length($in )) * xsd:int((string-length($out) = 0))))</td>
</tr>
<tr>
<td>dueDate</td>
<td>string</td>
<td>let $in := $ProcessTaskRequest/mdmavxsd:INFATask/mdmavxsd:dueDate/text()</td>
</tr>
<tr>
<td></td>
<td></td>
<td>let $out := abxht:getOutput('processTaskResponse')/mdmavxsd:INFATask/mdmavxsd:dueDate/text()</td>
</tr>
<tr>
<td></td>
<td></td>
<td>return</td>
</tr>
<tr>
<td></td>
<td></td>
<td>xsd:dateTime(substring(concat($in, $out ), (1 + (string-length($in )) * xsd:int((string-length($out) &gt; 0))), string-length($out) + (string-length($in )) * xsd:int((string-length($out) = 0))))</td>
</tr>
<tr>
<td>mdmTaskType</td>
<td>string</td>
<td>$ProcessTaskResponse/mdmavxsd:INFATask/mdmavxsd:taskType/mdmavxsd:name/text()</td>
</tr>
</tbody>
</table>

The following table describes the presentation parameters that are new:

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Type</th>
<th>Expression</th>
</tr>
</thead>
<tbody>
<tr>
<td>taskDataPriority</td>
<td>string</td>
<td>let $in := $ProcessTaskRequest/mdmavxsd:INFATask/mdmavxsd:taskData/mdmavxsd:priority</td>
</tr>
<tr>
<td></td>
<td></td>
<td>let $out := abxht:getOutput('processTaskResponse')/mdmavxsd:INFATask/mdmavxsd:taskData/mdmavxsd:priority</td>
</tr>
<tr>
<td></td>
<td></td>
<td>return</td>
</tr>
<tr>
<td></td>
<td></td>
<td>substring(concat($in, $out ), (1 + (string-length($in )) * xsd:int((string-length($out) &gt; 0))), string-length($out) + (string-length($in )) * xsd:int((string-length($out) = 0))))</td>
</tr>
<tr>
<td>workflowVersion</td>
<td>string</td>
<td>$StartRequest/mdmavxsd:INFATask/mdmavxsd:workflowVersion/text()</td>
</tr>
</tbody>
</table>

For more information, see the Informatica MDM Multidomain Edition Upgrade Guide.
Informatica Data Director User Interface

Effective in version 9.7.1 HotFix 2, to edit data in entities, use the Edit Data option from the Actions menu.

Previously, you used the Edit option from the Actions menu to edit data.

Effective Date Field

Effective in version 9.7.1 HotFix 2, the default value of the effective date field that appears when you open an entity for which you track data change events is the current date.

Previously, the default value of the effective date field was null.

Match Comparison Panel

Effective in version 9.7.1, the match comparison panel appears in the Matches view for the following situations:

- When you save an entity that you created.
- When you compare search results.
- When you find duplicates in the Hierarchy view.
- When you drag to merge entities in the Hierarchy view.
- When you view a merge task.

Previously, the Potential Matches dialog box appeared.
Part IV: Version 9.7.0

This part contains the following chapters:

- **New Features and Enhancements (9.7.0), 66**
- **Informatica MDM Hub Changes (9.7.0), 68**
CHAPTER 8

New Features and Enhancements (9.7.0)

This chapter includes the following topic:

- Version 9.7.0

Version 9.7.0

This section describes new features and enhancements in version 9.7.0.

Informatica MDM Hub

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

Language Display

You can configure the MDM Hub for Oracle, IBM DB2, and Microsoft SQL Server to display all the elements of the interface in simplified Chinese.

User Exits

You can use user exits to call SIF APIs.

For more information, see the Informatica MDM Multidomain Edition Version 9.7.0 Configuration Guide.

IBM DB2 Tablespaces

You can create large tablespaces in the IBM DB2 environment.

Informatica Data Director

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

User Interface

The Informatica Data Director user interface contains updates to the look and feel. The user interface is more consistent with other Informatica web-based tools. A match comparison panel allows you to more easily
compare matched records. A merge preview panel shows you the results of a merge of the selected candidates.

For more information, see the Informatica MDM Multidomain Edition Version 9.7.0 Informatica Data Director User Guide.

CMXSERVER.LOG

The cmxserver.log file records each log in and log out of the Informatica Data Director application and the Informatica Data Director Configuration Manager.

For more information about the cmxserver.log file, see the Informatica MDM Multidomain Edition Version 9.7.0 Configuration Guide.

Global Properties

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

searchForDuplicatesBeforeTaskDialog

Specifies if the Potential Duplicates dialog box appears before or after you send a task for approval.

For more information, see the Informatica MDM Multidomain Edition Version 9.7.0 Informatica Data Director Implementation Guide

Charts

Effective in version 9.7.0, you can use iLog software to display charts in the Start workspace.

For more information, see the Informatica MDM Multidomain Edition Informatica Data Director Implementation Guide version 9.7.0.
CHAPTER 9

Informatica MDM Hub Changes (9.7.0)

This chapter includes the following topics:

- Custom Validation Rules, 68
- Tokenization, 68
- User Exits, 68
- Hard Delete Detection, 69
- Proxy User, 69
- Data Load Properties, 69

Custom Validation Rules

Effective in version 9.7.0, you can use custom validation rules in the MDM Multidomain Edition for Oracle.

Tokenization

Effective in version 9.7.0, base object records to be tokenized are identified by their ROWID_OBJECT values updated in the dirty table, which is a system table associated with the base object.

Previously, base object records to be tokenized were identified by the values in the Dirty_IND column of the base object.

User Exits

Effective in version 9.7.0, PL/SQL based user exits are available only for existing Oracle customers, who upgrade from version 9.5.x or earlier.

Previously, PL/SQL based user exits were available for Oracle and IBM DB2 environments.

If you upgrade from version 9.5.x or earlier, you can use the existing Oracle PL/SQL based user exits. To create new user exits, create projects in Java.
Hard Delete Detection

Effective in version 9.7.0, you can use the Post Landing and Post Stage Java user exits in the Oracle environment to detect hard deletes.

Previously, you had to implement them as PL/SQL based user exits to detect hard deletes.

Proxy User

Effective in version 9.7.0, you can use proxy users for MDM Multidomain Edition for Oracle if you upgrade from releases earlier than version 9.6.1. You can use the Security Access Manager workbench in the Hub Console to create proxy users.

In version 9.6.1, proxy users were not supported. Prior to version 9.6.1, you could create proxy users for Oracle in the Oracle database.

If you upgrade from a version earlier than 9.6.1, you can use the Security Access Manager workbench in the Hub Console to create proxy users.

Data Load Properties

Effective in version 9.7.0, for Oracle and IBM DB2 environments the default values of the cmx.server.tokenize.file_load and cmx.server.tokenize.loader_batch_size data load properties in the cmxcleanse.properties file are true.

Previously, for Oracle and IBM DB2 environments the default values of the cmx.server.tokenize.file_load and cmx.server.tokenize.loader_batch_size data load properties in the cmxcleanse.properties file were false.
Part V: Version 9.6.1

This part contains the following chapters:

- **New Features and Enhancements (9.6.1), 71**
- **Informatica MDM Hub Changes (9.6.1), 74**
- **Informatica Data Director Changes (9.6.1), 79**
CHAPTER 10

New Features and Enhancements (9.6.1)

This chapter includes the following topics:

- Version 9.6.1 HotFix 1, 71
- Version 9.6.1, 72

Version 9.6.1 HotFix 1

This section describes new features and enhancements in version 9.6.1 HotFix 1.

Informatica MDM Hub

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

Timeline Granularity

You can configure timeline granularity to display period start and end dates in year, month, day, hour, minute, or seconds.

For more information, see the Informatica MDM Multidomain Edition Version 9.6.1 HotFix 1 Configuration Guide.

Informatica MDM Hub Security

You can secure access to the Informatica MDM Hub capabilities at the JBoss application server level.

For more information, see the Informatica MDM Multidomain Edition Version 9.6.1 HotFix 1 Installation Guide for JBoss.
Version 9.6.1

Informatica MDM Hub

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

Language Display

You can configure the MDM Hub for Oracle to display all the elements of the interface in Korean.

Data Load Properties for the Tokenization and Match Process

You can add the following properties to the cmxcleanse.properties file to specify the method of data load and the batch size for tokenization and matching:

- **cmx.server.tokenize.file_load**
  - Specifies whether to use an intermediate file to load data into the database for tokenization.

- **cmx.server.tokenize.loader_batch_size**
  - Maximum number of insert statements to send to the database during direct load of the tokenization process.

- **cmx.server.match.file_load**
  - Specifies whether to use an intermediate file to load data into the database for matching.

- **cmx.server.match.loader_batch_size**
  - Maximum number of insert statements to send to the database during direct load of the match process.

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

Multi-threaded Batch Jobs

Effective in version 9.6.1, every batch job that you run in the MDM Hub is multi-threaded. The MDM Hub no longer acquires row-level locks on dependent objects. Instead, the MDM Hub uses batch locks for the dependent objects.

Previously, you could configure batch jobs that were not multi-threaded to run in parallel. Now you must configure multi-threaded batch jobs on multiple child base objects to run serially in the MDM Hub.

For more information about multi-threaded batch jobs, see the *Informatica MDM Multidomain Edition Version 9.6.1 Configuration Guide*.

Thread Count and Batch Size Properties for Batch Jobs

You can configure the following properties in the cmxserver.properties file to specify the number of threads to use and the block size to process for multi-threaded batch jobs:

- **cmx.server.batch.threads_per_job**
  - Number of threads that the MDM Hub uses to process the load, recalculate BVT, and revalidate batch jobs.

- **cmx.server.batch.load.block_size**
  - Maximum number of records to process in each block for the load job.
cmx.server.batch.recalculate.block.size

Maximum number of records to process in each block for the recalculate BVT and revalidate jobs.

For more information, see the *Informatica MDM Multidomain Edition Version 9.6.1 Configuration Guide*.

**ActiveVOS Workflow Adapter**

You can use the ActiveVOS workflow adapter to manage business processes.

For more information, see the *Informatica MDM Multidomain Edition Informatica Data Director - Informatica ActiveVOS Integration Guide*.

**Data Import Template**

You can specify the format for date fields and numeric fields in the data import template.

For more information, see the *Informatica MDM Multidomain Edition Version 9.6.1 Informatica Data Director User Guide*.

**Informatica Data Director**

**Global Properties**

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

- **shouldDisableSearchFieldIfDependentFieldAbsence**
  
  Specifies if the dependent lookup field is disabled on the search form when the parent lookup field is not present on the search form or the parent lookup field has no value.

For more information, see the *Informatica MDM Multidomain Edition Version 9.7.0 Informatica Data Director Implementation Guide*. 
CHAPTER 11

Informatica MDM Hub Changes (9.6.1)

This chapter includes the following topics:

- **Automerge, 75**
- **Default Values, 75**
- **Reject Table, 75**
- **VERSION_SEQ Column in Stage Table, 75**
- **API Behavior, 76**
- **Put API Trust Calculations, 76**
- **Source Key Length, 76**
- **Metadata Manager, 76**
- **Child Record Foreign Key History, 76**
- **Automerge History, 77**
- **Custom Validation Rules, 77**
- **Execution Sequence of Validation Rules, 77**
- **Link Style Base Objects, 77**
- **Survivorship of Data During Merge, 77**
- **PowerCenter Custom Transform for MDM, 77**
- **MDM Hub Resource Kit for IBM DB2, 78**
- **Tool Access, 78**
- **Zero Downtime, 78**
Automerge

Effective in version 9.6.0, the Automerge batch job is always multi-threaded. You can use the cmx.server.automerge.threads_per_job parameter and the cmx.server.automerge.block_size parameter in cmxserver.properties to configure the number of threads and the block size.

Previously, you could use the multi_thread_batch_ind column in the C_REPOS_TABLE to enable or disable multi-threading. You could use the batch_thread_count column and the batch_chunk_size column in the C_REPOST_TABLE to configure the number of threads and the block size.

Default Values

Effective in version 9.6.0, the default value for cmx.server.provider.userprofile.cacheable in the cmxserver.properties file is true.

Previously, the default value was false. When you upgrade to 9.6.0, the values for cmx.server.provider.userprofile.cacheable are not upgraded to reflect the new default value.

Reject Table

Effective in version 9.6.0, Informatica MDM Hub increases performance by rejecting a record when it first encounters a reason to reject the record. The reject table describes one reason why the MDM Hub rejected a record. If there is more than one reason for the MDM Hub to reject a record, the reject table describes the first reason that the MDM Hub encounters.

Previously, a rejected record could appear in the reject table multiple times. The rejected record appeared in the reject table for each error that prevented the MDM Hub from loading the record.

VERSION_SEQ Column in Stage Table

Effective in version 9.6.0, the value of VERSION_SEQ must be 1 for base objects that are not timeline-enabled. If the value is not 1, MDM Hub does not load the record.

Previously, the VERSION_SEQ could be null for base objects that are not timeline-enabled.
API Behavior

Effective in version 9.6.0, bigDecimalValue values in the API response maintain the decimal precision that you configure for the column. For example, if you define a column as NUMBER(10,1) and the value to return is 22.4, the API returns <bigDecimalValue>22.4</bigDecimalValue>.

Previously, bigDecimalValue values in the API response would not return a decimal, even if you configured the column for decimal precision. For example, if you defined a column as NUMBER(10,1) and the value to return is 22.4, the API returned <bigDecimalValue>22</bigDecimalValue>.

Put API Trust Calculations

Effective in version 9.6.0, when the Put API updates a base object, Informatica MDM Hub recalculates the trust score for all columns in the base object.

Previously, when the Put API updated a base object, Informatica MDM Hub only recalculated the trust scores for the base object columns that the Put API updated.

Source Key Length

Effective in version 9.6.0, the source key that the CleansePut API and the Put API generates when you set generateSourceKey to true is 15 characters long. You must configure foreign key columns in the landing table column to be large enough to accommodate a source key of this size.

Previously, the CleansePut API and the Put API generated a shorter source key that could be accommodated by a landing table column size of 14 characters.

Metadata Manager

Effective in version 9.6.0, Metadata Manager is renamed to Repository Manager.

Child Record Foreign Key History

Effective in version 9.6.1, the MDM Hub creates a record in the history table for each merge operation.

Previously, the MDM Hub created one record in the history table for all updates to the foreign key of a child record.
Automerge History

Effective in version 9.6.1, the automerge batch job creates a record in the history table for each merge operation.

Previously, the automerge batch job created one record in the history table for each automerge process, irrespective of the number of merges that occur during the automerge process.

Custom Validation Rules

Effective in version 9.6.1, custom validation rules cannot be used.

Execution Sequence of Validation Rules

Effective in version 9.6.1, the MDM Hub applies the validation rule with the highest downgrade percentage to downgrade trust of a column.

Previously, the validation rule that was last in the sequence was applied irrespective of its downgrade percentage.

Link Style Base Objects

Effective in version 9.6.1, link style base objects are not available.

Previously, you could choose between link style and merge style base objects.

Survivorship of Data During Merge

Effective in version 9.6.1, the incoming load update is not a factor for the MDM Hub to determine the survivorship of cell values of records.

Previously, incoming load update was the third factor in the order of precedence that the MDM Hub used to determine the survivorship of cell values of records.

PowerCenter Custom Transform for MDM

Effective in version 9.6.1, the PowerCenter Custom Transform for MDM is available only on request.

If you require the PowerCenter Custom Transform for MDM, contact Informatica Global Customer Support. The PowerCenter Custom Transform for MDM is available for Oracle only.
MDM Hub Resource Kit for IBM DB2

Effective in version 9.6.1, the MDM Hub Resource Kit for IBM DB2 is available for Windows only, but will be available for Linux in a future release.

Tool Access

Effective in version 9.6.1, you can use the Tool Access manager in the MDM Hub Console to grant access to batch groups and the Informatica Data Director configuration manager to users that are not administrators. Previously, only administrators could access batch groups and the Informatica Data Director configuration manager.

Zero Downtime

Effective in version 9.6.1, upgrading with zero downtime is not supported, but will be available in a future release.

Proxy Users

Effective in version 9.6.1, proxy users are not supported, but will be available in a future release.

User Exits

Effective in version 9.6.1, you must configure Java based user exits in the Oracle, and IBM DB2 environments. Previously, you could configure user exits that were based on PL/SQL.
CHAPTER 12

Informatica Data Director Changes (9.6.1)

This chapter includes the following topic:

- Reports, 79

Reports

Effective in version 9.6.1, Jaspersoft reporting software displays reports in the Informatica Data Director dashboard. A data mart serves report data to Jaspersoft.

Previously, Informatica Data Director used iLogs software displayed charts in the dashboard.
Part VI: Version 9.6.0

This part contains the following chapters:

- **New Features and Enhancements (9.6.0), 81**
- **Informatica MDM Hub Changes (9.6.0), 82**
New Features and Enhancements (9.6.0)

This chapter includes the following topic:

- Version 9.6.0

Version 9.6.0

This section describes new features and enhancements in version 9.6.0.

Microsoft SQL Server Support

MDM Multidomain Edition is available for Microsoft SQL Server. You can deploy the MDM Multidomain Edition on JBoss. MDM Multidomain Edition 9.6.0 is for Microsoft Windows only.
Chapter 14

Informatica MDM Hub Changes (9.6.0)

This chapter includes the following topics:

- Interaction ID, 82
- Cleanse Match Server, 82
- Database Logging Support, 82
- User Exit Support, 83
- Reset Links Support, 83

Interaction ID

Effective in version 9.6.0, the interaction ID is maintained in the MDM Hub code. To get the next available interaction ID, make a SIF API request with an empty string (""") for the interactionId value.

Previously, the interaction ID was maintained in the Oracle database. You could get the next available interaction ID with the NEXTVAL sequence value.

Cleanse Match Server

Effective in version 9.6.0, the Cleanse Match Server is referred to as the Process Server.

Previously, the Process Server was called the Cleanse Match Server.

Database Logging Support

Effective in version 9.6.0, the MDM Hub handles database responses, warnings, and errors differently. The Hub Server writes database messages to the application server log. Previously, database logging occurred on the database layer of the MDM Hub.

By default, the cmxserver.log file contains logging information. For more information about application server log configuration, see the Informatica MDM Multidomain Edition Configuration Guide.
User Exit Support

Effective in version 9.6.0, the MDM Hub offers limited support for user exits based on stored procedures.

User exits based on stored procedures are supported only for customers that migrate from MDM Hub versions earlier than 9.6.0.

**Oracle**

User exits are not supported for Oracle customers that install MDM Hub versions later than 9.6.0.

**Microsoft SQL Server**

User exits are not supported for Microsoft SQL Server customers.

**IBM DB2**

User exits are not supported for IBM DB2 customers that install MDM Hub versions later than 9.6.0. IBM DB2 customers that upgrade from MDM Hub versions earlier than 9.6.0, contact Informatica Global Customer Support.

Reset Links Support

Effective in version 9.6.0, the Reset Links batch job in the Hub Console is deprecated.
Part VII: Version 9.5.1

This part contains the following chapters:

- **New Features and Enhancements (9.5.1), 85**
- **Informatica MDM Hub Changes (9.5.1), 93**
- **Informatica Data Director Changes (9.5.1), 94**
CHAPTER 15

New Features and Enhancements (9.5.1)

This chapter includes the following topics:

- Version 9.5.1 HotFix 8, 85
- Version 9.5.1 HotFix 7, 86
- Version 9.5.1 HotFix 6, 86
- Version 9.5.1 HotFix 5, 87
- Version 9.5.1 HotFix 4, 88
- Version 9.5.1 HotFix 3, 88
- Version 9.5.1 HotFix 2, 89
- Version 9.5.1 HotFix 1, 90
- Version 9.5.1, 91

Version 9.5.1 HotFix 8

This section describes new features and enhancements in version 9.5.1 HotFix 8.

Informatica MDM Hub

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

WebSphere Application Server Version 7.0.0.31 Support

You can deploy the MDM Multidomain Edition on WebSphere Application Server Version 7.0.0.31.

Oracle Version 11.2.0.4 Support

You can configure the MDM Multidomain Edition for Oracle version 11.2.0.4.

Operating System and Browser Support

The Hub Console is supported on Mac OS X Mavericks (10.9) and Safari 7.
Informatica Data Director

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

GBID Column in the Subject Area Layout

You can configure Informatica Data Director to include a global business identifier (GBID) column in the subject area layout.

For more information about how to configure subject areas, see the *Informatica MDM Multidomain Edition Informatica Data Director Implementation Guide*.

Global Properties

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

maxXrefSearchReturnCount

Determines the maximum number of cross references that the Search Request API returns in Informatica Data Director.

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

Operating System and Browser Support

The Informatica Data Director application is supported on Mac OS X Mavericks (10.9) and Safari 7.

Version 9.5.1 HotFix 7

There are no new features and enhancements in version 9.5.1 HotFix 7.

Version 9.5.1 HotFix 6

This section describes new features and enhancements in version 9.5.1 HotFix 6.

Informatica Data Director

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

Data Security Filters for Child Objects

You can configure the dataSecurity parameter in the BDDConfig.xml file for one-to-many child objects and many-to-many child objects.

For more information, see the *Informatica MDM Multidomain Edition Version 9.5.1 HotFix 6 Informatica Data Director Implementation Guide*.
Data Security Filters for Inherited Roles

You can configure data security filters for inherited roles that descend from a parent role. To configure the data security filters for inherited roles, set the affectFilter attribute for the securityFilter parameter in the BDDConfig.xml file.

For more information, see the Informatica MDM Multidomain Edition Version 9.5.1 HotFix 6 Informatica Data Director Implementation Guide.

Global Properties

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

allowDsEmptyChildren

Determines if users can view child records when you configure a security filter on a grandchild column, but there are no grandchild records.

For more information, see the Informatica MDM Multidomain Edition Version 9.5.1 HotFix 6 Informatica Data Director Implementation Guide.

Service URL

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 9.1.0 Informatica Data Director Implementation Guide.

Version 9.5.1 HotFix 5

This section describes new features and enhancements in version 9.5.1 HotFix 5.

Informatica Data Director

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

Global Properties

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

search_empty_date

Specifies if the search dialog box that appears when you create a child record has an empty effective date field.

For more information, see Informatica MDM Multidomain Edition Informatica Data Director Implementation Guide version 9.5.1 HotFix 5.
Version 9.5.1 HotFix 4

This section describes new features and enhancements in version 9.5.1 HotFix 4.

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:

- \texttt{alwaysUpdateExistingPeriod}
  
  Specifies if \texttt{Update Existing Period} is enabled by default.
  
  Specifies if the user can enable and disable the \texttt{Update Existing Period} check box. If the user cannot enable or disable the \texttt{Update Existing Period} check box, \texttt{Update Existing Period} remains enabled.

- \texttt{updateExistingPeriodByDefault}
  
  Specifies if the \texttt{Update Existing Period} check box is enabled by default.

For more information, see \textit{Informatica MDM Multidomain Edition Informatica Data Director Implementation Guide} version 9.5.1 HotFix 4.

Effective Periods

You can enable the \texttt{Update Existing Period} check box to decrease the duration of an effective period.

For more information, see \textit{Informatica MDM Multidomain Edition Informatica Data Director User Guide} version 9.5.1 HotFix 4.

Version 9.5.1 HotFix 3

This section describes new features and enhancements in version 9.5.1 HotFix 3.

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:

- \texttt{handleUserExitBeforeShowingDialog}
  
  Specifies when Informatica Data Director calls the SendForApprovalHandler user exit.

- \texttt{subjectAreaCopyDisabled}
  
  Disables the \texttt{Copy} option in the \texttt{More Actions} tab for subject area screens in Informatica Data Director.
Determines the percentage minimum width of search result columns.

For more information, see *Informatica MDM Multidomain Edition Informatica Data Director Implementation Guide* version 9.5.1 HotFix 3.

**Version 9.5.1 HotFix 2**

This section describes new features and enhancements in version 9.5.1 HotFix 2.

**Informatica MDM Hub**

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

**Certifications**

The Hub Console is certified on Mac OS X 10.8.2 and Safari 6.0.1.

**Informatica Data Director**

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

**Certifications**

Informatica Data Director is certified on Mac OS X 10.8.2 and Safari 6.0.1.

**Global Properties**

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

`mail.smtp.sender`

Specifies the email address of the task notification email sender.

For more information, see *Informatica MDM Multidomain Edition Informatica Data Director Implementation Guide* version 9.5.1 HotFix 2.

**External Link Action Parameters**

You can use the following parameters with the external link action element when you configure user interface extensions:

**EffectiveDate**

Specifies in long format the effective date in milliseconds.

**LOCALHOST**

Specifies the local host value in the external link URL.

**LOCALPORT**

Specifies the local port value in the external link URL.
Version 9.5.1 HotFix 1

This section describes new features and enhancements in version 9.5.1 HotFix 1.

Informatica MDM Hub

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

Language Display

You can configure the MDM Hub to display all the elements of the interface in German.

State Management Override System

You can configure a source system as a state management override system to override the hub states of contributing records from other systems.

If the hub state of a cross-reference record is set as deleted by the state management override system, the MDM Hub marks the record as deleted even if it has contributors from other source systems that are in the active state.

Informatica Data Director

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

Import Data

You use Informatica Data Director to import data from Microsoft Excel into Informatica MDM Hub.

Informatica Data Director uses the SIF PUT API to import the data. You import data to perform the following tasks:

• Create multiple primary, child, and grandchild objects in a single bulk operation.
• Update multiple primary, child, and grandchild objects in single bulk operation.

Global Properties

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

hmInactiveRelationshipsAvailable

   Enables users to view inactive relationships in Hierarchy Manager.

maxImportThreads

   Specifies the maximum number of threads to use during data import.

openDashboardAfterTaskClose

   Displays the Dashboard instead of the Data View after you complete a task action.
writeBOM

Exports Informatica Data Director search results to a UTF-8 encoded CSV file with a byte order mark.

Relationship End Date Management

You can change relationship end dates regardless of the source system when the MDM Hub has the state management overriding system enabled.

You must bind Informatica Data Director to the MDM Hub system that has the state management overriding system enabled.

Inactive Relationships in Hierarchy Manager Canvas

You can configure Hierarchy Manager to display inactive relationships in the Hierarchy Manager canvas. When you view a hierarchy for an effective date, you can see the inactive relationships for that date in addition to relationships that are active for that date.

Hierarchy View Relationship Table Records

You can set the maximum record count to limit the number of records that the Informatica Data Director Hierarchy View relationship table displays.

For more information, see *Informatica MDM Multidomain Edition Informatica Data Director version 9.5.1 HotFix 1 Implementation Guide*.

Version 9.5.1

This section describes new features and enhancements in version 9.5.1.

Informatica MDM Hub

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

Language Display

You can configure the MDM Hub to display all the elements of the interface in Japanese.

Informatica Data Director

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

Language Display

You can change the user interface of the Informatica Data Director to a different language. Informatica Data Director displays all the elements of the interface such as control buttons, forms, menus, and navigation links in the selected language.
Global Properties
You can use the following global properties to control the run-time behavior of the Informatica Data Director application.

asyncChildLoading Property
Explicitly load the child record in the Data View when you open the entity.

CSVColumnSeparator Property
When you export data, choose to use a tab, semicolon, or space as the delimiter in the file where the data is exported.

View Entity Details
When you open a record, the navigation bar on the left pane provides a list of views to access various details of an entity. The navigation bar on the left pane gives you quick and easy access to the detailed information contained in that part of the entity. You can access the parent, child and grandchild record, Cross Reference data, History data, Hierarchy data and Effective Periods data of the entity.

Data View Layout
Data View provides a tablet layout of parent, children, and grandchildren objects in expandable panes. Data View has a larger area for history management and cross-reference record management.
Chapter 16

Informatica MDM Hub Changes (9.5.1)

This chapter includes the following topics:

- Readiness Script, 93
- Security Access Manager, 93

Readiness Script

Effective in version 9.5.1 HotFix 2, the readiness report that is generated by readiness script readiness_start.sql generates warnings of user columns in duplicate hierarchy relationship base objects.

Download the latest readiness script from https://tsftp.informatica.com.

Previously, the readiness report did not identify these issues. For more information, see Informatica MDM Multidomain Edition Version Upgrade Guide.

Effective in version 9.5.1, the readiness report that the readiness script readiness_start.sql generates identifies foreign key data issues that prevent a successful upgrade.

Previously, the readiness report identified foreign key data issues even if the issues did not affect the upgrade.

Security Access Manager

Effective in version 9.5.1 HotFix 8, when you assign users to specific groups in the Security Access Manager, the users list is in an alphabetic order.

Previously, when you assigned users to specific groups in the Security Access Manager, the user list was in a random order.
Informatica Data Director Changes (9.5.1)

This chapter includes the following topics:

- **Data View, 94**
- **Update Cell Data, 94**
- **Timeline Enablement for Foreign Key Child Relationship Base Objects, 95**
- **Potential Duplicates, 95**

### Data View

Effective in version 9.5.1 HotFix 4, you can configure which child subject area expands by default when you open a record in data view.

Previously, the first child subject area expanded by default.

### Update Cell Data

Effective in version 9.5.1 HotFix 2, you can right-click a cross-reference cell and select "Use This Value Instead" for trust-enabled columns.

Previously, you could select "Use This Value Instead" even for columns that did not have trust enabled.
Timeline Enablement for Foreign Key Child Relationship Base Objects

Effective in 9.5.1 HotFix 1, you can enable and disable timeline for Hierarchy Manager foreign key child relationship base objects. The MDM Hub does not enable timeline for foreign key child relationship base objects by default.

Previously, the MDM Hub enabled timeline for foreign key child relationship base objects and you could not disable timeline for these base objects.

Potential Duplicates

Effective in version 9.5.1 Emergency Bug Fix 1, Informatica Data Director displays the Potential Duplicates dialog box for a potential duplicate record after you click OK on the Create Task dialog box.

Previously, Informatica Data Director displayed the Potential Duplicates dialog box before it displayed the Create Task dialog box.
Part VIII: Version 9.5.0

This part contains the following chapters:

- New Features and Enhancements (9.5.0), 97
- Informatica MDM Hub Changes (9.5.0), 100
NEW FEATURES AND ENHANCEMENTS (9.5.0)

This chapter includes the following topic:

- Version 9.5.0.97

Version 9.5.0

This section describes new features and enhancements in version 9.5.0.

Informatica MDM Hub

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

Timeline

Effective in version 9.5.0, you can enable timelines for base objects to allow you to give data and relationships an effective period. The data only contributes to the base object Best Version of the Truth (BVT) for the period that the data is effective.

Hierarchy Manager relationship base objects are timeline-enabled by default. Each change in the start or end date of the effective period results in the creation of a new XREF record. In previous versions of Hierarchy Manager, a change in the start or end date updates the existing XREF record.
Timeline-Related Changes to the Database

Effective in version 9.5.0, the relationship base objects are converted to timeline-enabled relationship base objects during the upgrade process.

Timeline is enabled for all Hierarchy Manager relationship objects. During the upgrade process, the following changes are made:

- The values in Rel_Start_Date and Rel_End_Date relationship base object columns are copied into the new Period_Start_Date and Period_End_Date XREF relationship base object columns. The following changes occur during the upgrade:
  - The time component of the Rel Date columns is truncated when it is copied to the Period Date columns because the period of effectiveness is based only on the day, month, and year. Time data is not used to determine the period of effectiveness.
  - If the Rel_Start_Date and the Rel_End_Date columns have a range that is not valid, the Period_Start_Date and Period_End_Date columns upgrade with a value of 1-Jan-0001.
  - The Rel_Start_Date and the Rel_End_Date columns are deprecated as system columns. However, the Rel_Start_Date and the Rel_End_Date columns will be available after the migration as user columns unless they are dropped.

- The values in the Rel_Start_Date and Rel_End_Date columns in the cross-reference history table are not copied into the new Period_Start_Date and Period_End_Date columns in the cross-reference history tables. The relationship history view does not show the relationship start dates and relationship end dates for changes made prior to the upgrade to version 9.5.

- The Rel_Start_Date and Rel_End_Date columns are removed from Hierarchy Manager packages.

- The mappings to the Rel_Start_Date and Rel_End_Date columns are updated to point to the Period_Start_Date and Period_End_Date XREF columns for Hierarchy Manager relationship base objects.

- Prior to version 9.5, each effective period of a relationship had a dedicated base object record. If you upgrade from a version earlier than 9.5, during the upgrade, these base object records are merged into a single record, with an XREF record created for each effective period. The MDM Hub merges duplicate records based on core hierarchy relationship columns. The base object records are merged and tracked using the HMRG table using the HM_MIG tag in the ROWID_MATCH_RULE column. Do not unmerge these base objects records. If these relationship base object records are unmerged, the incorrect effective period of the relationship might be displayed in Hierarchy Manager.

- During the upgrade, the MDM Hub automerges the Hierarchy Manager relationship base objects. You may have fewer Hierarchy Manager relationship base object records after the upgrade than you had before the upgrade.

SIF APIs

The following SIF APIs have been added:

GetXrefForEffectiveDate

The GetXrefForEffectiveDate API retrieves multiple XREF records for the specified effective date.

GetEffectivePeriods

The GetEffectivePeriods API retrieves the aggregate effective period for the specified base object record.

You must repackage services implemented with Informatica MDM Hub using the latest version of the SIF client libraries.
Load Batch Job

Effective in version 9.5.0, the Hub adds the Period_Start_Date and Period_End_Date columns to stage tables for timeline-enabled base object.

Pattern for Administration System XREFs

The pattern created for administration system XREFs as a result of edits is SYS0:ROWID_OBJECT, where ROWID_OBJECT is the identifier of the record being updated.

Note: When an administration system creates XREFs with the SYS0:ROWID_OBJECT pattern for PKEY_SRC_OBJECT and the PUT_UPDATE_MERGE_IND=1, the XREF is considered to be the result of an edit and is deleted during Unmerge.
Chapter 19

Informatica MDM Hub Changes (9.5.0)

This chapter includes the following topics:

- Child Base Object Foreign Key, 100
- Cross Reference Table System Columns, 100
- Hierarchy Manager Relationship Columns, 101
- SIF APIs, 101

Child Base Object Foreign Key

Effective in version 9.5.0, the child base object record foreign key contains the parent base object ROWID_OBJECT value and the child XREF record foreign key contains the parent XREF ROWID_XREF value.

If you are upgrading from a version earlier than 9.5.0 to a version that is 9.5.0 or later, the upgrade process changes the data types from `CHAR(14)` to `NUMBER(38)` to accommodate the change in foreign key values.

Previously, the child base object record foreign key and child XREF record foreign key contained the parent base object ROWID_OBJECT value.

Cross Reference Table System Columns

Effective in version 9.5.0, system columns are introduced to the cross-reference tables to replace the functionality of the HFKM, HMXR, and HUID tables and to permit versioning. These system columns enable the Informatica MDM Hub to track data history more efficiently. The HFKM, HMXR, and HUID tables are deprecated.

The following system columns are added to the cross-reference tables:

**ORIG_ROWID_OBJECT**

Contains the original ROWID_OBJECT value.

Previously, the SRC_ROWID_OBJECT column in the HMXR table contained the original ROWID_OBJECT value.
<GBID>_GOV
Contains the original GBID value.
Previously, the HUID table contained the original GBID value.

STG_ROWID_TABLE
Contains the ROWID_TABLE value of the staging table containing the lookup configuration that was used when the cross-reference record was loaded.

S_<foreign key column name> Shadow Column
Shadow columns named S_<foreign key column name> exist for all foreign key columns and contain the foreign key lookup value.
Previously, shadow columns existed only for foreign key columns that used PKEY_SRC_CODE as a lookup value.

PERIOD_START_DATE
Contains the start date of an effective period of a record.

PERIOD_END_DATE
Contains the end date of an effective period of a record.

Hierarchy Manager Relationship Columns
Effective in version 9.5.0, the REL_START_DATE and REL_END_DATE are replaced by PERIOD_START_DATE and PERIOD_END_DATE columns.

SIF APIs
Effective in version 9.5.0, the following SIF APIs have changed:

DescribeSiperianObjectResponse
The VersioningEnabled indicator is included in the response.

FlagForAutomerge
If the request is for a record that does not exist in the match table, the record is created in the match table and the AUTOMERGE_IND is set to 1.

GetRequest
Added elements for specifying Effective Date and History Date element.

GetBVTRequest
Added elements for specifying Effective Date and History Date element.

PreviewBVTRequest
Added elements for specifying Effective Date and History Date element.

PutRequest
Added elements for specifying the Period Start Date and Period End Date.
The response returns the ROWID_XREF.

**CleansePutRequest**

Added elements for specifying the Period Start Date and Period End Date.

The response returns the ROWID_XREF.

**Restore**

Added elements for specifying the Period Start Date and Period End Date.

Added the ROWID_XREF element.

**Promote**

Added elements for specifying the Period Start Date and Period End Date.

Added the ROWID_XREF element.

**SearchQueryRequest**

Added the Effective Date element.

You must repackaged services implemented with Informatica MDM Hub using the latest version of the SIF client libraries.