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Talend MDM Web User Interface

User Guide

5.1_a

Talend MDM Web User Interface : User Guide

Adapted for Talend MDM Web User Interface v5.1.x release.

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Preface

1. General information

1.1. Purpose

This User Guide explains how to manage *Talend MDM Web User Interface* functions in a normal operational context.

Information presented in this document applies to *Talend MDM Web User Interface* releases beginning with **5.1.x**.

1.2. Audience

This guide is for data stewards and business users of *Talend MDM Web User Interface*.

The layout of GUI screens provided in this document may vary slightly from your actual GUI.

1.3. Typographical conventions

This guide uses the following typographical conventions:

- text in **bold:** window and dialog box buttons, field names, keyboard keys, menus and menu items,
- text in **[bold]:** titles of dialog boxes, wizard, windows and pages,
- text in `courier`: system parameters typed in by the user,
- text in *italics*: file, schema, column, row, variable names and text typed in by users,
- The icon indicates an item that provides additional information about an important point. It is also used to add comments related to a table or a figure,
- The icon indicates a message that gives information about the execution requirements or recommendation type. It is also used to refer to situations or information the end-user need to be aware of or pay special attention to.

2. History of changes

The table below lists changes made in the *Talend MDM Web User Interface* User Guide.

Version	Date	History of Change
v5.0_a	12/12/2011	Updates in the *Talend MDM Web User Interface* User Guide include: -Gathered the information about Smart View and put it in the new section: How to open a smart view process of a data record in an entity -New sections about how to export/import the search results from the Data Browser page. -Big modifications through all the chapters to reflect the new look and feel. -Updated documentation to reflect new product names. For further information on these changes, see the Talend website. -Deprecated features (composite view and reports) are grouped in the new Appendix: Deprecated features.
v5.0_b	13/02/2012	Regenerated the *Talend MDM Web User Interface* User Guide for version 5.0_b
v5.1_a	03/05/2012	Updates in the *Talend MDM Web User Interface* User Guide include: -Added description of *administrator* user role. -Updated description of how to search entities in a data container.

3. Feedback and Support

Your feedback is valuable. Do not hesitate to give your input, make suggestions or requests regarding this documentation or product and find support from the **Talend** team, on **Talend**'s Forum website at:

http://talendforge.org/forum

Chapter 1. Introducing Talend MDM

This chapter introduces Master Data Management as the means to manage shared data in an enterprise

It gives an overview of Talend MDM, a model-driven solution introduced by **Talend**. Talend MDM has been specifically developed to address the challenges of governing, creating and managing master data for all types of organizations where data is hosted under various formats in various systems and can be extremely volatile.

1.1. Introducing Master Data Management

Most large enterprises have a heterogeneous application portfolio, with fragments of often inaccurate, incomplete and inconsistent data residing in various application. Companies wanting a consistent view of their customer base often struggle to reconcile data across numerous operational systems. These issues cause intelligent decision making to be difficult. The heart of these problems lies in the handling of shared data.

Master Data Management (MDM) is a comprehensive method of enabling an enterprise to link all of its critical data to one "master file" that provides a common point of interest. Examples of master data include customer, product, location, employee, organizational unit. Data that is not shared between functions within an organization is not master data.

MDM has emerged as a means to more efficiently manage shared data, eliminate redundancy, and create the "single version of the truth."

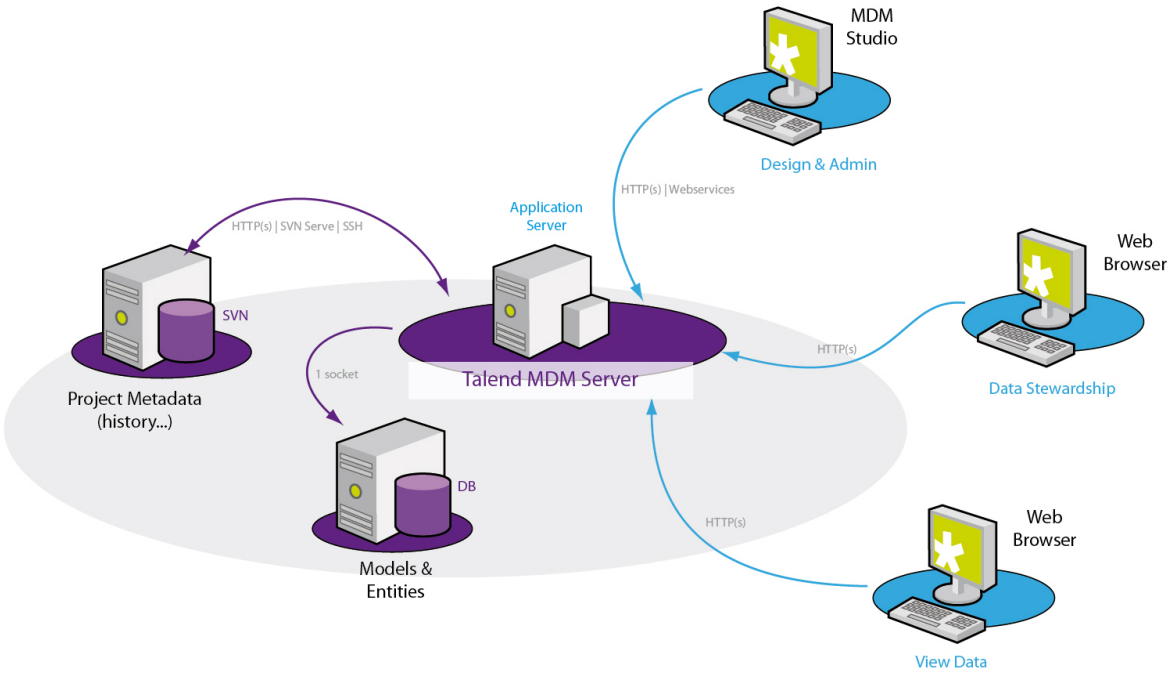
1.2. Overview of Talend MDM

Talend MDM has all the core features a user needs for an MDM application: advanced modeling, model-driven dynamic web interface, event triggering etc.

It is a model-driven solution easily adaptable to specific business needs and it is quick to implement. It provides a complete set of features for mastering, governing and integrating data throughout the enterprise.

Talend MDM groups all master data of the company in a central hub. This standardized repository provides, via the use of Data Models, the prerequisites against which data and updates are validated.

The chart below illustrates the main building blocks of Talend MDM.



The list below describes the main building blocks of Talend MDM:

- The MDM Studio - where administrators can setup and operate a centralized master data repository. They can build data models that employ the necessary business and data rules to create single master copy of the master data. This master data will be propagated back to target and source systems.

- Central XML repository - where the master data is stored.
- Shared repository - based on an SVN server, this is where project metadata is stored.
- The web-based interface - where business users and data stewards can search, display or edit master data handled by the MDM Studio.

Building blocks available to your use differ depending on the MDM edition you have.

1.3. User interfaces for data governance

Talend MDM provides the processing layers that ensure the right people have the right tools to centrally model and manipulate master data. This key capability comprises the relevant features involved in master data governance and stewardship.

Data governance is the process of defining the rules that master data has to follow. Data stewardship is the process of making sure that the data follows those rules. This means that it is necessary to have both a governance function, to demonstrate that the right controls are in place, and a stewardship function, to ensure that the controls are enforced.

In Talend MDM, master data governance and stewardship processes are available through two different user interfaces. The first is an administration tool called *Talend Open Studio for MDM*. The second is a web-based interface called *Talend MDM Web User Interface*.

Users of *Talend Open Studio for MDM* can set the governance rules . For more information about available administration tasks, see *Talend Open Studio for MDM* Administrator Guide.

Users of *Talend MDM Web User Interface*, can carry out any manual intervention necessary to make sure that the master data is clean, consistent, and accurate. For more information, see Chapter 3, *Authoring and collaboration*.

Chapter 2. Getting Started With the Web User Interface

This chapter introduces *Talend MDM Web User Interface*. It provides a short description of the Web User Interface and guides you through the basics for accessing it.

2.1. Logging into the Web User Interface

Talend MDM Web User Interface is a web-based application that enables the business user or the data steward to view, retrieve and manipulate master data stored in the central XML repository.

Before logging on to *Talend MDM Web User Interface*, check that the following have been carried out:

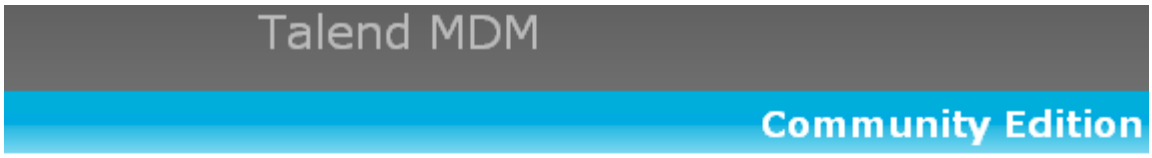
- The MDM server is up and running,
- The web server URL has been provided to you by the MDM administrator allowing you to open the server authentication page,
- Either a login and password have been provided to you by the MDM administrator or a manager has allowed you access to *Talend MDM Web User Interface*. The default user authentication information is `user/user`.
- You have an Internet browser such as Internet Explorer or Mozilla Firefox, for example. Chrome is not supported for the time being.

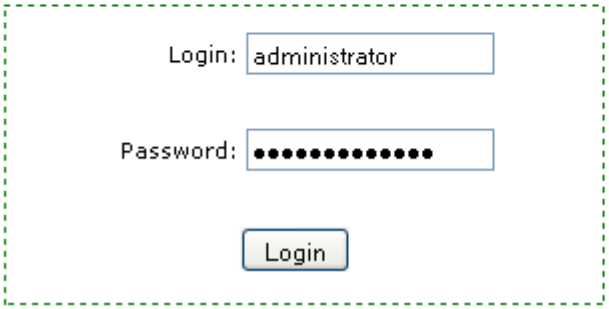
To log in to *Talend MDM Web User Interface*, do the following:

1. Open your web browser.
2. Enter the web server URL in the web browser and then click → to open the authentication page of *Talend MDM Web User Interface*.

   The web server address is structured as follows:

   ```
   -http://[server address]:8080/talendmdm/secure/
   -http://localhost:8080/talendmdm/secure/
   ```

3. On the authentication page, enter your login and password in the corresponding fields.

   The default administrator authentication information is *administrator/administrator*, and the default user authentication information is *user/user*.

4. Click **Login**.

   Your web browser opens on the selected master data Version with a welcome page.

The welcome page provides you with direct links to getting started pages in the Web user interface such as **[Data Browser]** and **[Journal]**.

Here, you can view, retrieve and manage master data in the selected master data Version. You can also carry out some management procedures using the different options in the **Menu** panel.

For detailed information about master data management procedures from *Talend MDM Web User Interface*, see Chapter 3, *Authoring and collaboration*, Chapter 4, *Other management procedures* .

2.2. Describing the Web User Interface

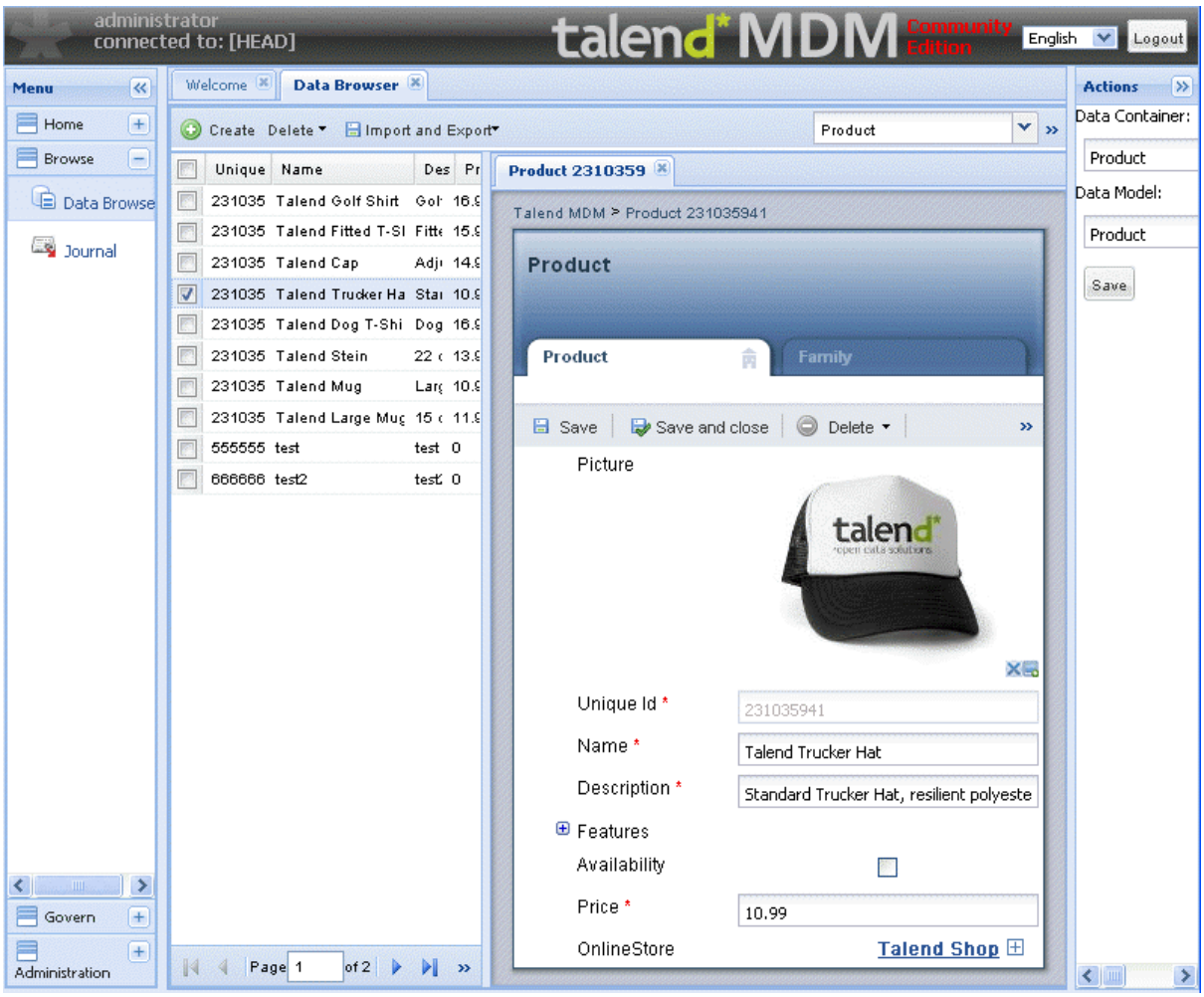
Talend MDM Web User Interface is the interface for searching, displaying or editing master data handled by the MDM Studio.

Users of the *Talend MDM Web User Interface* can carry out any manual intervention necessary to make sure that the master data is clean, consistent, and accurate.

2.2.1. The web page and navigation principles

The *Talend MDM Web User Interface* web page is divided into:

- a banner on top of the page which indicates the Talend MDM edition you are connecting to. A logout button and a language list are also displayed.
- a collapsible panel on the right which lists the data containers and data models created in *Talend Open Studio for MDM*.
- a collapsible panel on the left which lists the menu items.
- a workspace in the center where you can open different pages and carry out the manual intervention necessary to make sure that the master data is clean, consistent, and accurate.



From the **Actions** panel to the right, you can select the data container and data model you want to access. All viewable items or data records pertain to both a data container and a data model. For more information, see Section 3.1, “Accessing data containers and data models”.

From the **Menu** panel to the left, you can click any of the tabs to display the list of items grouped under the tab. Then you can click any of the listed menu items to open a corresponding page. For more information, see Section 2.2.2, “The Menu panel”.

The table below describes the available buttons and management options in the **Menu** panel, banner and **Actions** panel of *Talend MDM Web User Interface*.

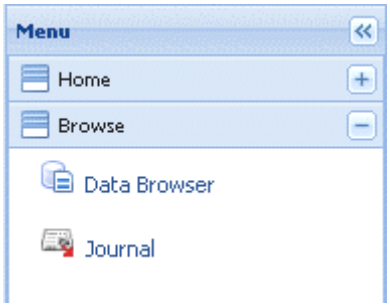
Tab	Item	Description
Home	Welcome	Provides you with direct links to getting started pages in the Web user interface such as **Data Browser** and **Journal**.
	Recycle bin	Contains items which have been deleted using the **Logical delete** button at the bottom of the **[Data Browser]** page. For further information, see Section 3.3.5, “How to delete a data record from an entity”.
Browse	Data Browser	Allows users to search, add or edit items or data records in the data container selected. For further information, see Section 3.2, “Browsing a single entity in a data container”.
	Journal	Lists all logs on accessible entities.
Banner	Logout	Closes the current page and goes back to the authentication page of *Talend MDM Web User Interface*.

Tab	Item	Description
	English	Lists the languages in which you can display *Talend MDM Web User Interface*.
Actions	Data Container	Lists the data containers which the user has the appropriate authorization to access. For further information, see Section 3.1, "Accessing data containers and data models".
	Data Model	Lists the data models which the user has the appropriate authorization to access. For more information, see Section 3.1, "Accessing data containers and data models".
	and	Shows or hides the **Actions** and **Menu** panels.
	Save	Saves the selected data container and data model.

2.2.2. The Menu panel

The **Menu** panel on the left hand side of the web page allows you to execute various tasks on master data pertaining to the selected data container.

The figure below illustrates an example of the **Menu** panel of the *Talend MDM Web User Interface*.



You can click any of the tabs in the **Menu** panel to display the list of options grouped under the tab.

You can show or hide the **Menu** panel by clicking the and buttons located in the upper right corner of the panel. For detailed information on the management options listed in the **Menu** panel, see Chapter 3, *Authoring and collaboration*, Chapter 4, *Other management procedures*.

2.2.3. The Web User Interface and the Studio

Talend MDM Web User Interface provides the processing layer to search, display or edit master data. However, all tasks that a business user or a data steward can do through the Web User Interface are defined within *Talend Open Studio for MDM*.

Users of *Talend Open Studio for MDM* can set the governance rules that will dictate who can read, create, update, and delete data; which validity models are required for data; and which recovery provisions are required, to name a few. For further information about available administration tasks, see the *Talend Open Studio for MDM* Administrator Guide.

Users of the *Talend MDM Web User Interface* can carry out any manual intervention necessary to make sure that the master data is clean, consistent, and accurate. For more information on the tasks a business user can do from the Web User Interface, see Chapter 3, *Authoring and collaboration*, Chapter 4, *Other management procedures*.

Chapter 3. Authoring and collaboration

While *Talend Open Studio for MDM* is the tool which centrally defines models for the master data, *Talend MDM Web User Interface* is the tool which validates actual data against these models. It is the responsibility of the data steward or business user to make sure that the master data follows the governance rules defined in the Studio.

This chapter provides the information a data steward or a business user needs to manage master data assets in order to improve their reusability, accessibility, and quality.

3.1. Accessing data containers and data models

Before you can query, extract and edit master data, you must specify:

- the data container that holds the master data you want to manage,
- the data model against which the master data will be validated.

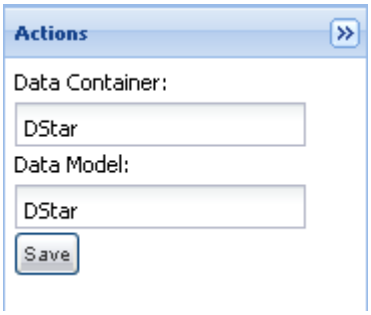
For further information on data containers and data models, see the *Talend Open Studio for MDM* Administrator Guide.

A collapsible **Actions** panel on the right hand side of the Web User Interface allows you to select a data container and a data model. Once the data container and the data model are selected in the Web User Interface, any creation or modification of master data will update the selected container.

Prerequisite(s): The MDM server is already launched. You have your authentication information to log in to *Talend MDM Web User Interface*.

To select a data container and a data model to access, complete the following:

1. Log in to the Web User Interface.
2. In the upper right corner of the web page, click on the « button to show the **Actions** panel.



3. From the **Data Container** list, select the required data container.
4. From the **Data Model** list, select the required data model.
5. Click on the **Save** button to save your selection.

You can now access the information pertaining to the selected data container using the **Menu** panel on the left hand side of the page. Any modification of master data will be validated against the selected data model; For further information on the menu options, see the following sections.

3.2. Browsing a single entity in a data container

In *Talend MDM Web User Interface*, the **Data Browser** menu allows you to search data records pertaining to a specific entity in the data container selected. You can also save and reuse your search criteria.

3.2.1. How to search entities in the selected data container

Prerequisite(s):

-The MDM server is already launched.

-At least one view has been created in *Talend Open Studio for MDM*. For further information, see the *Talend Open Studio for MDM* Administrator Guide.

Make sure that you have selected:

-the data container that holds the master data you want to manage,

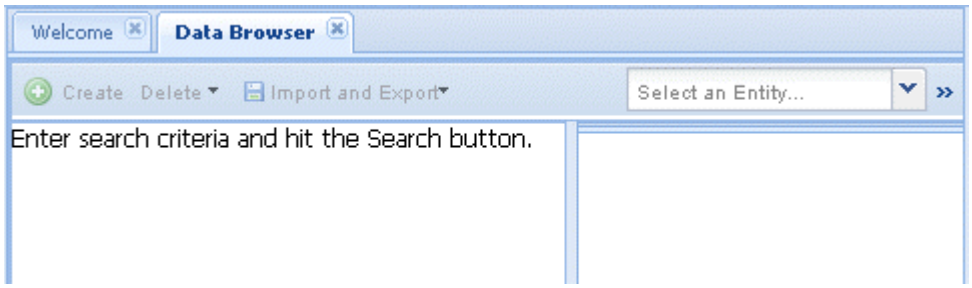
-the data model against which the master data will be validated.

For further information, see Section 3.1, “Accessing data containers and data models”.

To search for data records in a specific entity, complete the following:

1. From the **Welcome** page, click **Data Browser** , or
2. From the **Menu** pane, click **Browse** and then select **Data Browser**.

   A page opens, in which you can select the entity of interest.



3. In the entity field, click the arrow, and then select from the list the entity of interest.

   The first page of records is returned as soon as you select the entity.
4. If required, limit the results by using the search criteria options, and then clicking **Search**.

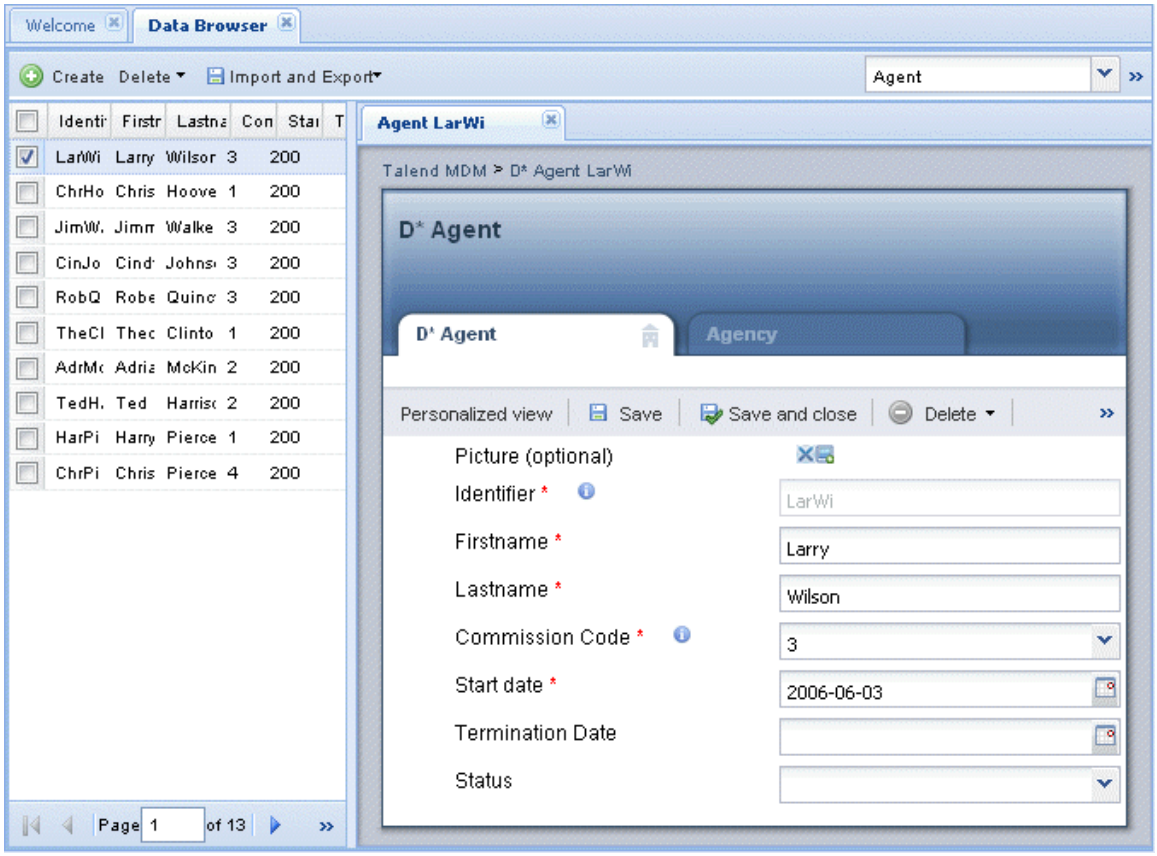
   The available search criteria depend on the parameters set in *Talend Open Studio for MDM* when creating a view for the entity. For more information, see the *Talend Open Studio for MDM* Administrator Guide.
5. If you have already bookmarked your search criteria, select from the list to the right, select a search bookmark and then click **Search**. For further information, see Section 3.2.4, “How to save and reuse the search criteria”.
6. Consider, for example, searching the *Agent* entity for all data records in which the commission code is equal to “3”:

   After setting the entity name in the first field, click the arrow in the second field and select *Commission Code*.

   In the drop-down list immediately to the right, click the arrow and select a search option, **is equal to** in this example.

   In the next field, select *3*.

Click on **Search** to display all agent whose commission code is equal to “3”.



The first record is automatically selected in the list and its detail are listed in the panel to the right.

If one or more foreign keys have been defined to link the selected entity to other entities in the data model, tabs representing these foreign keys will display in the detail view to show the entities linked together.

7. Click on any of the listed records to open its detail in the right panel, or right click the record and then select **Open Item In New Tab** to open the record in its own top-level tab.

8. If required, set in the **Lines/page** box at the bottom of the page a number for the data records you want to display.

   This number will be retained every time you try to browse data records in the XML repository (MDM hub).

If a smart view has already been created for the business entity in *Talend Open Studio for MDM*, the **Data Browser** page will open on this customized view and not on the usual generated view. For further information on how to open a smart view, see Section 3.3.2, “How to open a smart view of a data record in an entity”. For further information on smart views, see the *Talend Open Studio for MDM* Administrator Guide.

3.2.2. How to export/import the search results

After setting your search criteria and launching your search for data records pertaining to a specific entity, you can export your search results in an xls or csv file. This could be very interesting if you have some kind of mass update on a group of records. You search for the records, export the search results, do your updates in the file and finally import the records into MDM again.

3.2.2.1. How to export data records

You can copy data records that are the results of specific search criteria from the MDM server to your computer. This enables you to work with a local copy of the data records, do any modifications and then import the records again onto the MDM server for example.

Prerequisite(s):

-The MDM server is already launched.

-At least one view has been created in *Talend Open Studio for MDM*. For further information, see the *Talend Open Studio for MDM* Administrator Guide.

Make sure that you have selected:

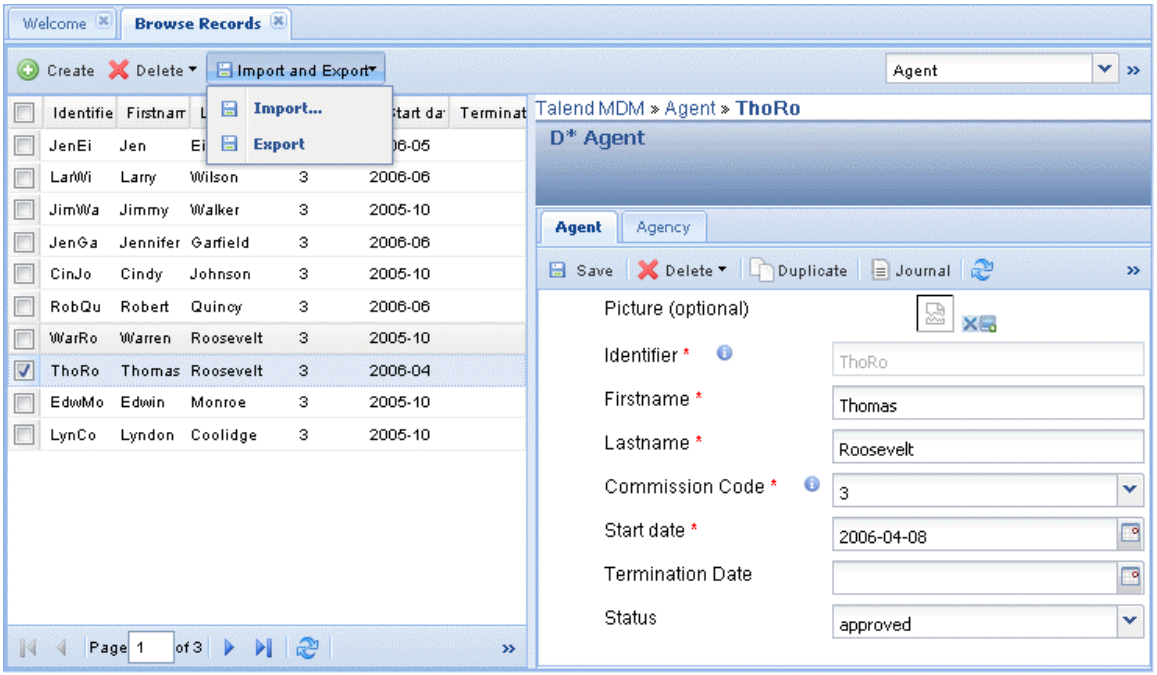
-the data container that holds the master data you want to manage,

-the data model against which the master data will be validated.

For further information, see Section 3.1, “Accessing data containers and data models”.

To export all the records result of your search criteria, complete the following:

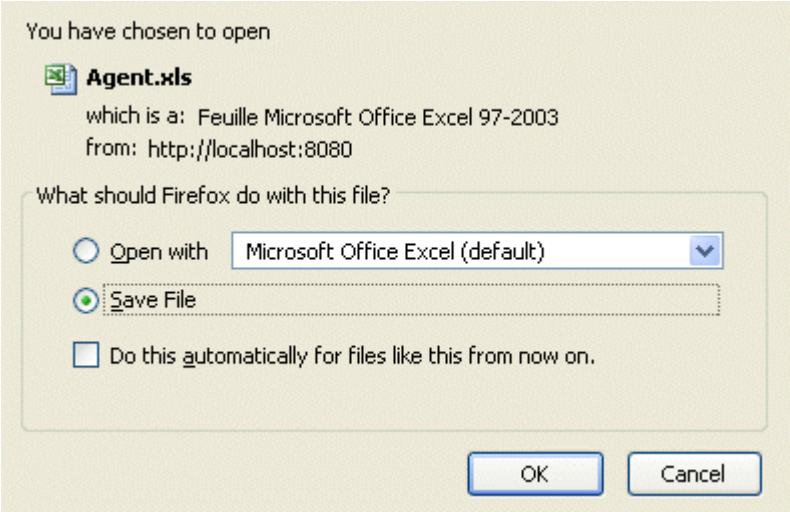
1. Follow the steps outlined in Section 3.2.1, “How to search entities in the selected data container” or Section 3.2.3, “How to use the advanced search capabilities” to list the data records according to a specific search criteria.



2. Click **Import and Export** on the menu bar to open a list.

3. Select **Export** to open a dialog box.

The steps to follow are different according to your operating system. Follow the instructions in the dialog box that opens in order to complete the export operation.



4. Select the **Save File** option and then click **OK** to close the dialog box. The listed records are all copied from the MDM server to your computer in an xls file.

   you can now do necessary modifications on the records and then import them on the MDM server as outlined in Section 3.2.2.2, “How to import data records” .

3.2.2.2. How to import data records

You can import data records from a local xls or csv file on the MDM server. Usually, these records are those that are exported from the MDM server to a local copy to do some mass modifications as outlined in Section 3.2.2.1, “How to export data records” .

Prerequisite(s):

-The MDM server is already launched.

-The data records have been already copied from the server to a local copy on your computer. For further information, see Section 3.2.2.1, “How to export data records”.

Make sure that you have selected:

-the data container that holds the master data you want to manage,

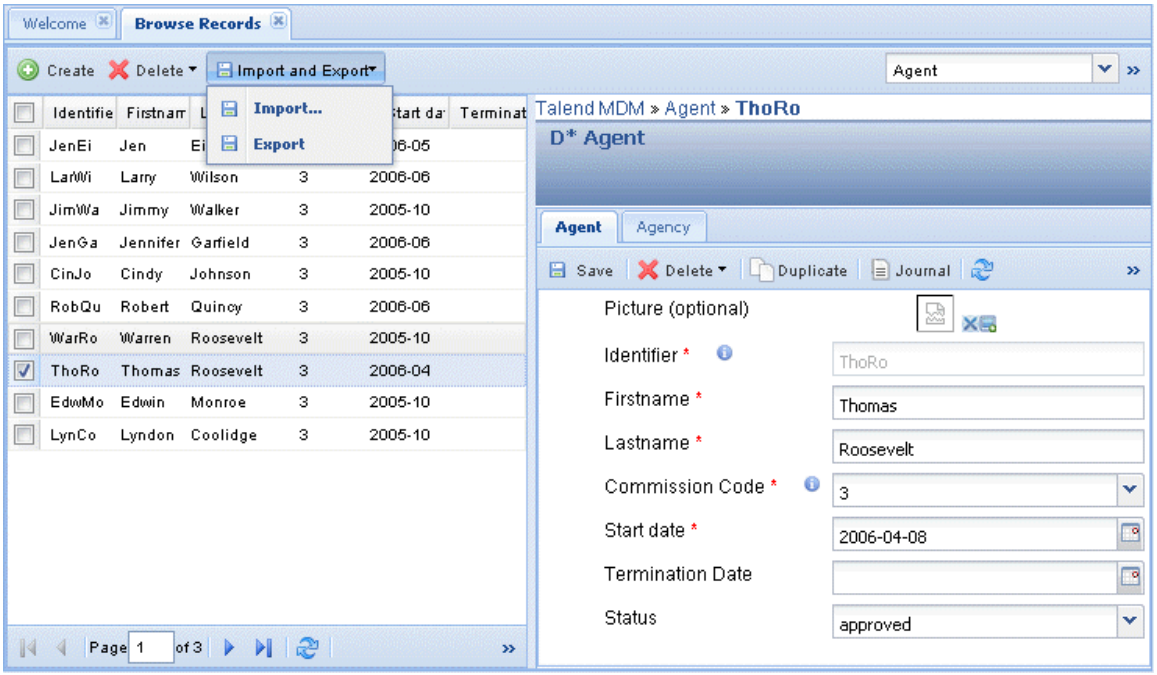
-the data model against which the master data will be validated.

For further information, see Section 3.1, “Accessing data containers and data models”.

To import data records from a local file onto the MDM server, complete the following:

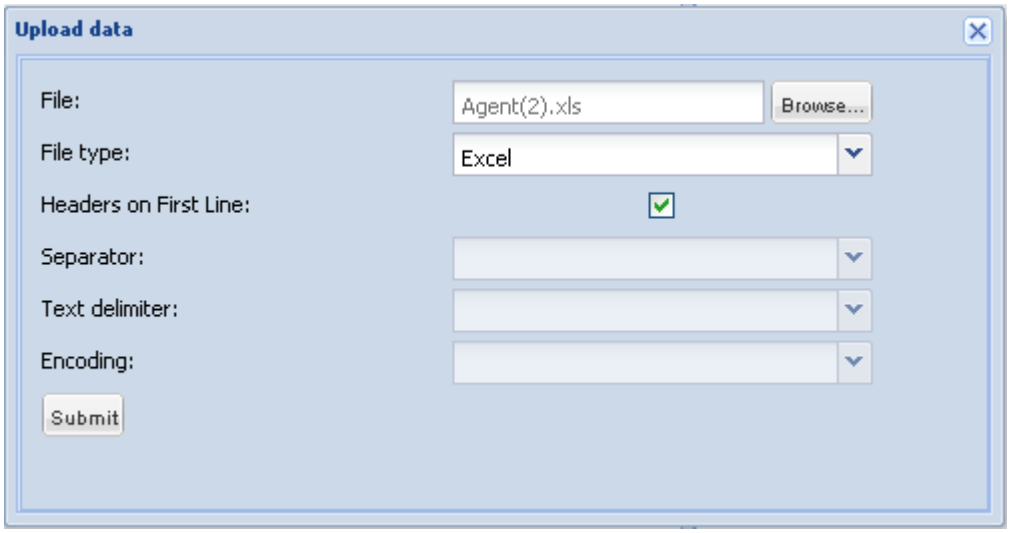
1. Open the **[Data Browser]** page in *Talend MDM Web User Interface*.

2. Select the entity in which you want to import the data records, and then click the **Search** button to list all the records in the selected entity.



3. Click **Import and Export** on the menu bar to open a list.

4. Select **Import...** to open a dialog box.



5. Click the **Browse...** button and follow the instruction in the open dialog box to upload the file that holds the data records.

6. From the **File type** list, select the type of the file you want to import, **Excel** or **CSV**.

7. Click **Submit**. A progress information bar displays followed by a confirmation message.

The import operation may take some time depending on how many records you have in the local file.

8. Click **OK** to close the confirmation message. All data records in the local file are imported on the MDM server.

3.2.3. How to use the advanced search capabilities

Talend MDM Web User Interface provides you with advanced search capabilities. You can construct search expression by chaining complex statements graphically. Additionally, these advanced searches can be saved or "bookmarked".

Prerequisite(s):

-The MDM server is already launched.

-At least one view has been created in *Talend Open Studio for MDM*. For further information, see the *Talend Open Studio for MDM* Administrator Guide.

Make sure that you have selected:

-the data container that holds the master data you want to manage,

-the data model against which the master data will be validated.

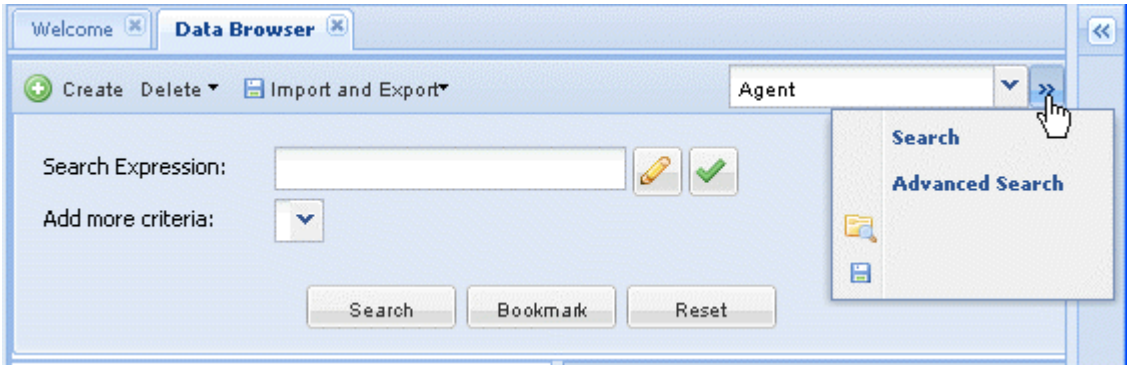
For further information, see Section 3.1, "Accessing data containers and data models".

To search for data records using expressions, complete the following:

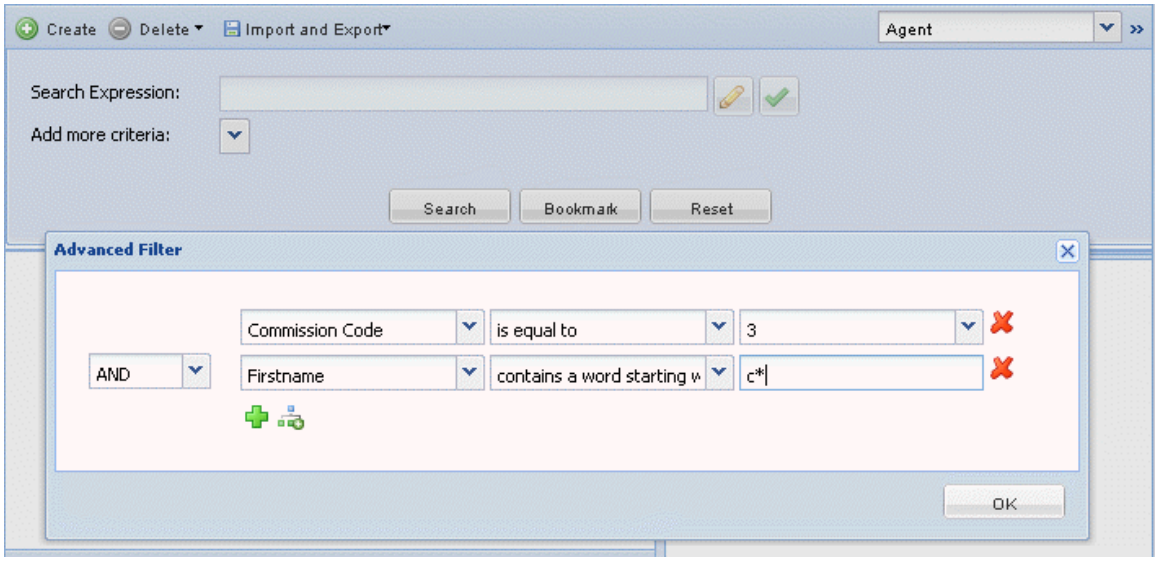
1. Click on **Data Browser** in the **Menu** panel to open the page in which you can select the entity of interest..

   In the entity field, click the arrow, and then select from the list the entity you want to search for data records.

   In the upper right corner of the page, select **Advanced Search** to show the advanced search view.



2. Click the icon to open the **[Advanced Filter]** dialog box.



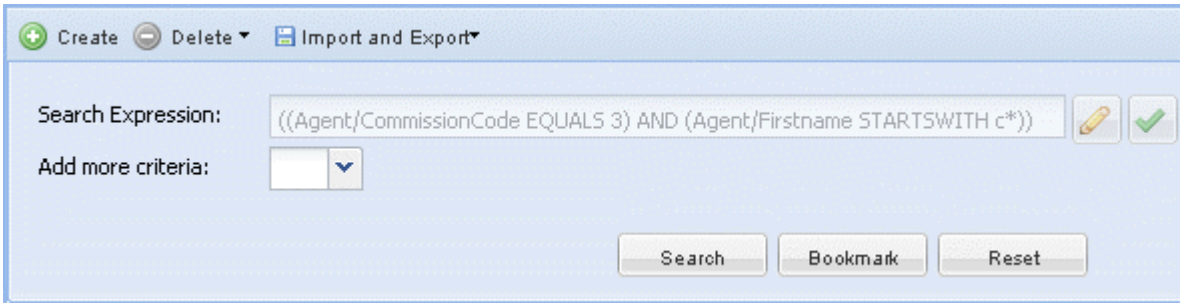
3. Construct the search expression using the drop-down lists.

4. Use the plus button to add as many statements to the expression selecting as well a logical operator from the list.

5. If required, click Add more criteria to filter your search using the date.

6. Click **Ok** to close the **[Advanced Filter]** dialog box.

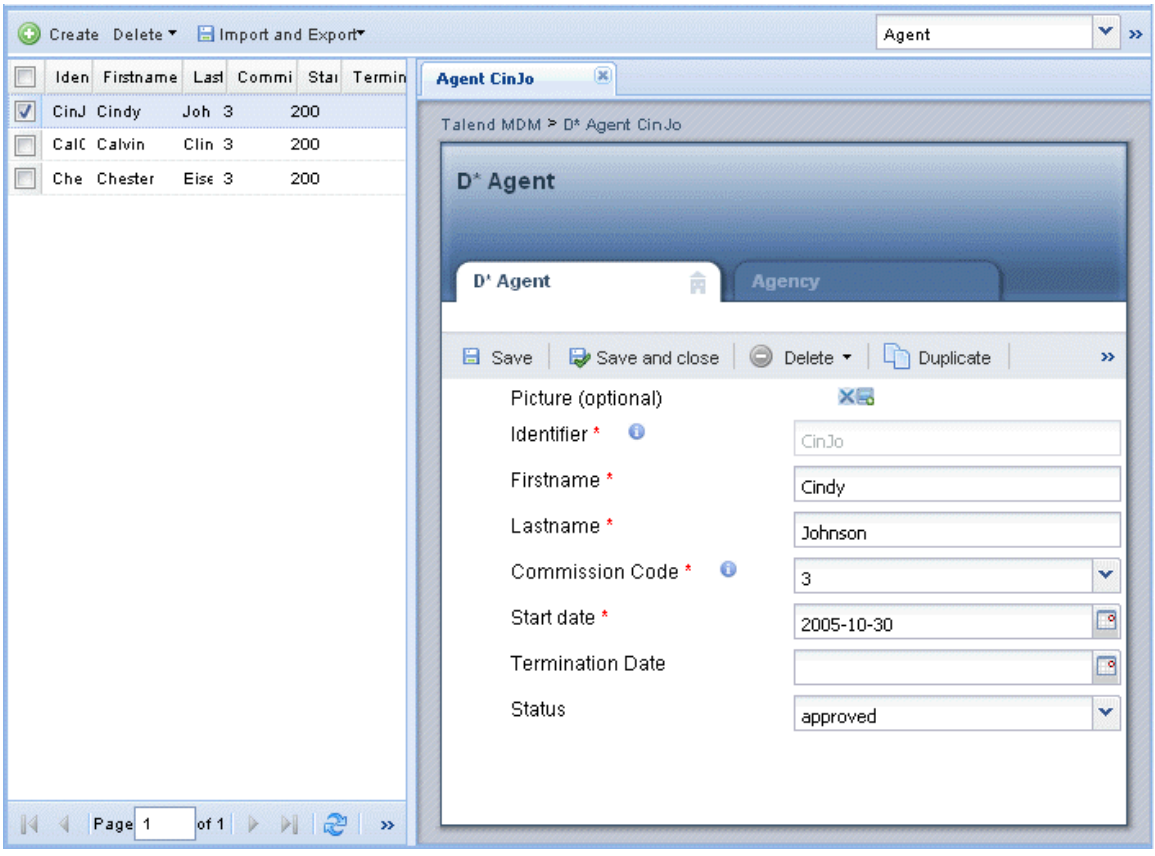
   The expression you built graphically is displayed in the **Search Expression** field.



7. If required, click the icon to check if your expression is valid.

8. Click on **Bookmark** if you want to save your search criteria for later use. For further information, see Section 3.2.4, “How to save and reuse the search criteria”.

9. Click on **Search** to display all agent whose commission code is equal to “3” and whose first name starts with “c”.



   The first record is automatically selected in the list and its detail are listed in the panel to the right.

10. Click on any of the listed records to open its detail.

The number of the records displayed in the page depends on what you have already defined in the **Lines/page** box in a previous search. Change the number in the box according to your needs and then restart your advanced search to display the desired number of records in the page. This number will be retained every time you try to browse data records in the XML repository (MDM hub).

3.2.4. How to save and reuse the search criteria

In order not to set your search criteria over and over again when you are browsing data records in a specific entity, *Talend MDM Web User Interface* enables you to save your search criteria for later use.

Prerequisite(s):

-The MDM server is already launched.

-At least one view has been created in *Talend Open Studio for MDM*. For further information, see the *Talend Open Studio for MDM* Administrator Guide.

Make sure that you have selected:

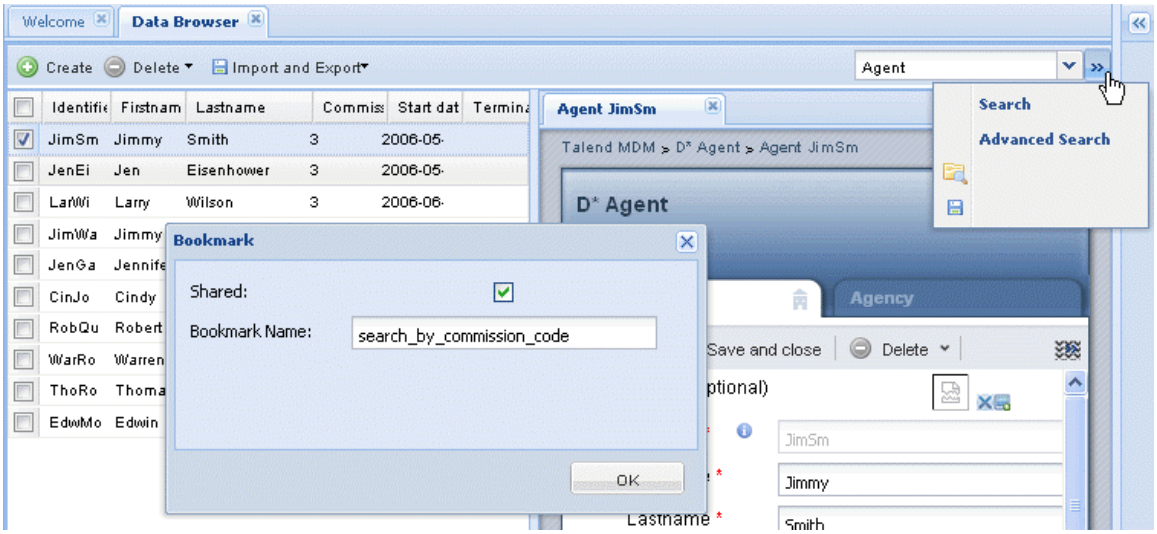
-the data container that holds the master data you want to manage,

-the data model against which the master data will be validated.

For further information, see Section 3.1, “Accessing data containers and data models”.

To save your search criteria, complete the following:

1. Follow the steps outlined in Section 3.2.1, “How to search entities in the selected data container” or Section 3.2.3, “How to use the advanced search capabilities” to list the data records according to a specific search criteria.



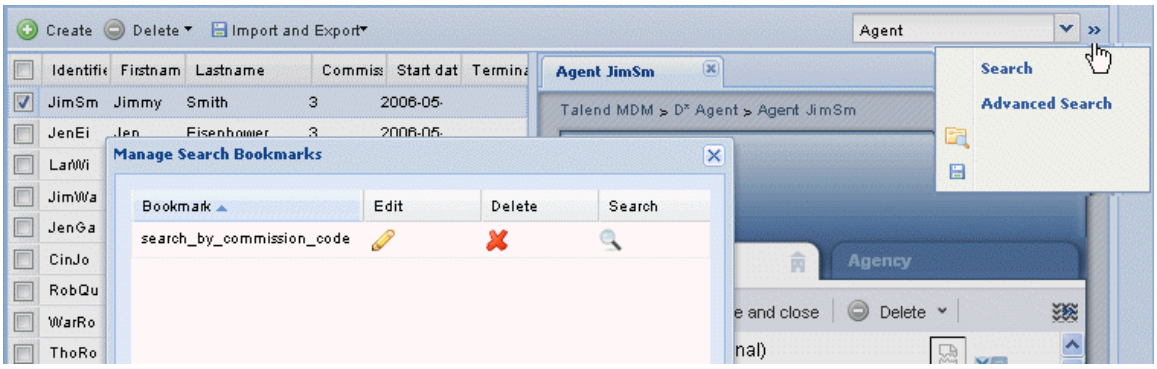
2. Click on the icon in the upper right corner of the page to open a dialog box.
3. Select the **Shared** check box if you want to share this bookmark with other business users.
4. In the **Bookmark Name** field, enter a name for your search criteria and then click **Ok** to close the dialog box.

   A confirmation message displays.
5. Click **OK** to close the message.

   The current search criteria name is listed in a search bookmark list.

To reuse a search criteria you already defined, complete the following:

1. Click on the icon in the upper right corner of the page to open the search bookmark list.



This list includes all search bookmarks created by different business users.

2. Select from the list the search bookmark according to which you want to display data records and then click .

   The number of the records displayed in the page depends on what you have already defined in the **Lines/page** box in a previous search. Change the number in the box according to your needs and then reselect your search criteria to display the desired numbers of records. This number will be retained every time you try to browse data records in the XML repository (MDM hub).

In the search bookmark list:

Click	To...
	open a dialog box where you can edit the search bookmark
	delete the search bookmark
	search the data records according to the search criteria set in the selected bookmark

3.3. Managing records in an entity

In *Talend MDM Web User Interface*, the **Data Browser** menu allows you to author/manage data records pertaining to a specific entity in the selected data container.

3.3.1. How to open a data record in an entity

From *Talend MDM Web User Interface*, you can search and open a generated view of data records pertaining to a specific entity in a specific data container.

Prerequisite(s):

-The MDM server is already launched.

-At least one view has been created in *Talend Open Studio for MDM*. For further information, see the *Talend Open Studio for MDM* Administrator Guide.

Make sure that you have selected:

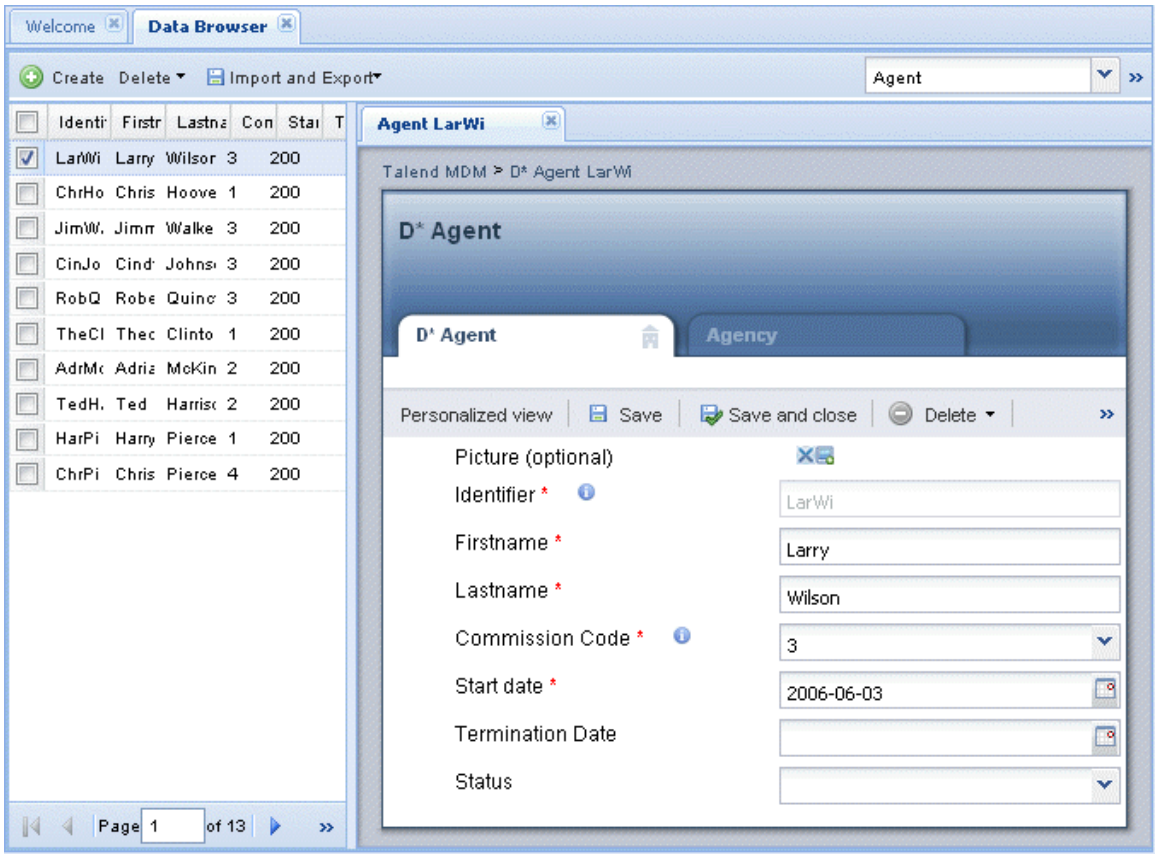
-the data container that holds the master data you want to manage,

-the data model against which the master data will be validated.

For further information, see Section 3.1, “Accessing data containers and data models”.

To open a generated view of a data record pertaining to a specific entity, complete the following:

1. Follow the steps outlined in Section 3.2.1, “How to search entities in the selected data container” to list the records of interest in the **Data Browser** page.

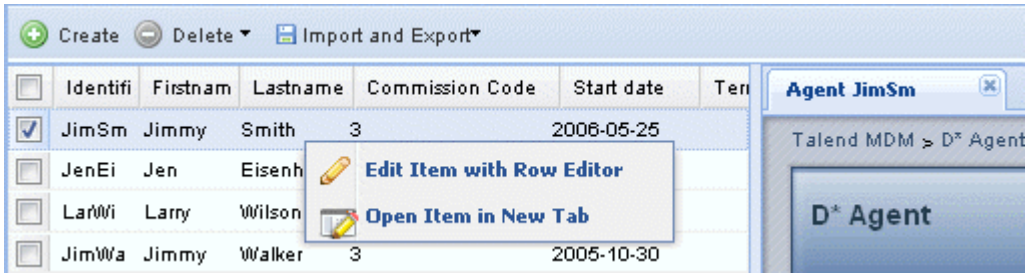


This page always opens on the data record list pertaining to a specific entity. The first record in the list is selected by default and its details show in the panel to the right.

The number of the records displayed in the page depends on what you have already defined in the **Lines/page** box in a previous search. Change the number in the box according to your needs and then restart your advanced search to display the desired number of records in the page. This number will be retained every time you try to browse data records in the XML repository (MDM hub).

2. Either, click on a specific data record in the record list to open its detail in the pane to the right,

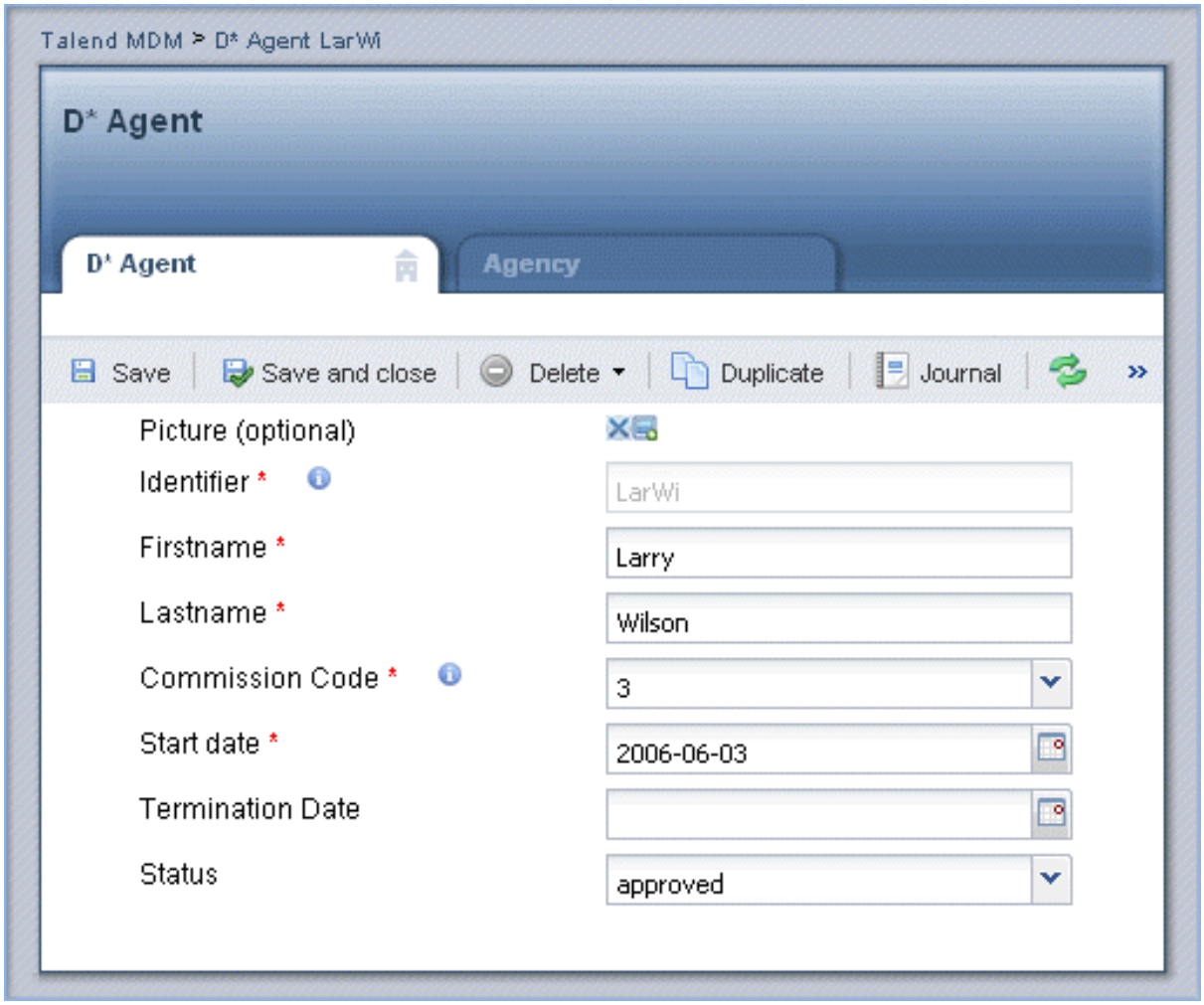
3. Or, right-click the record in the record list to display a contextual menu.



4. From the contextual menu, select:

Option	To...
Edit item with row editor	update the record through a row editor. For further information on editing data records, see Section 3.3.3, "How to update a data record in an entity".
Open item in new tab	open the record details in a new view.

All viewable attributes pertaining to the data record appear in the panel to the right.



If a foreign key has been defined to link the selected entity to another entity in the data model, two tabs will display in the detail view to represent the two entities linked together.

If a smart view has already been created in *Talend Open Studio for MDM* for the business entity that holds the record, the **Data Browser** page will open on this customized view and not on the usual generated view. For further information on how to open a smart view, see Section 3.3.2, "How to open a smart view of a data record in an entity". For further information on smart views, see the *Talend Open Studio for MDM* Administrator Guide.

These attributes differ according to what has been defined in the Studio when defining the data model. For further information, see the *Talend Open Studio for MDM* Administrator Guide.

Read-only attributes are displayed in grey color, while writable attributes are displayed in white color. Many management operations are accessible through the different tabs in this generated form of the data record. The table below explains these operations.

Icon/Character	Function
	Uploads a picture for the data record.
	Removes the picture from the data record.
	Displays an information tooltip for the related attribute.
*	Indicates a mandatory attribute.
	Manages relationships (foreign key) between entities: displays a list of available foreign keys for the relationship.
	Manages relationships (foreign key) between entities: creates a new record for the relationship.
	Manages relationships (foreign key) between entities: removes the foreign key from the field.
	Manages relationships (foreign key) between entities: opens the related record in a new page.

The following options are available on the view toolbar:

Click	To...
Save	save any modifications you may do on the record detail.
Save and close	save any modifications you may do on the record detail and close the record.
Delete	delete the record permanently or only erase it from the data record list. For further information, see Section 3.3.5, “How to delete a data record from an entity”.
Duplicate	open an exact copy of the record in a new page. Then you can use this copy as a base to create a new record in order not to create one from scratch, for example. For further information on adding new data records, see Section 3.3.4, “How to add a new data record to an entity”.
Journal	open a page that lists all logs on the selected data record. For further information, see Section 4.1, “Viewing log files for all data records”.
	refresh the page display.
The drop-down arrow	display a list of all the runnable processes created in the MDM Studio on the selected entity. From this list, you can run any of the listed processes to carry out a specific task on master data. For further information, see Section 3.5, “Running a Runnable Process designed in the Studio”.

3.3.2. How to open a smart view of a data record in an entity

A smart view is an alternative to the “conventional” generated view used to display the detail of a data record in *Talend MDM Web User Interface*. It is a customized, business-oriented view that renders an HTML presentation of the details of a data record held in a specific entity. Smart views are created in the MDM Studio; for further information, see the *Talend Open Studio for MDM* Administrator Guide.

Whenever you try to browse a data record in a specific entity, Talend MDM checks for a smart view for such entity. If it finds the smart view, it uses this view to render the HTML presentation of the record detail instead of displaying the “conventional” generated form. You can then switch back and forth between the smart view and the generated form.

Prerequisite(s):

-The MDM server is already launched.

-At least one smart view has been created in *Talend Open Studio for MDM*. For further information, see the *Talend Open Studio for MDM* Administrator Guide.

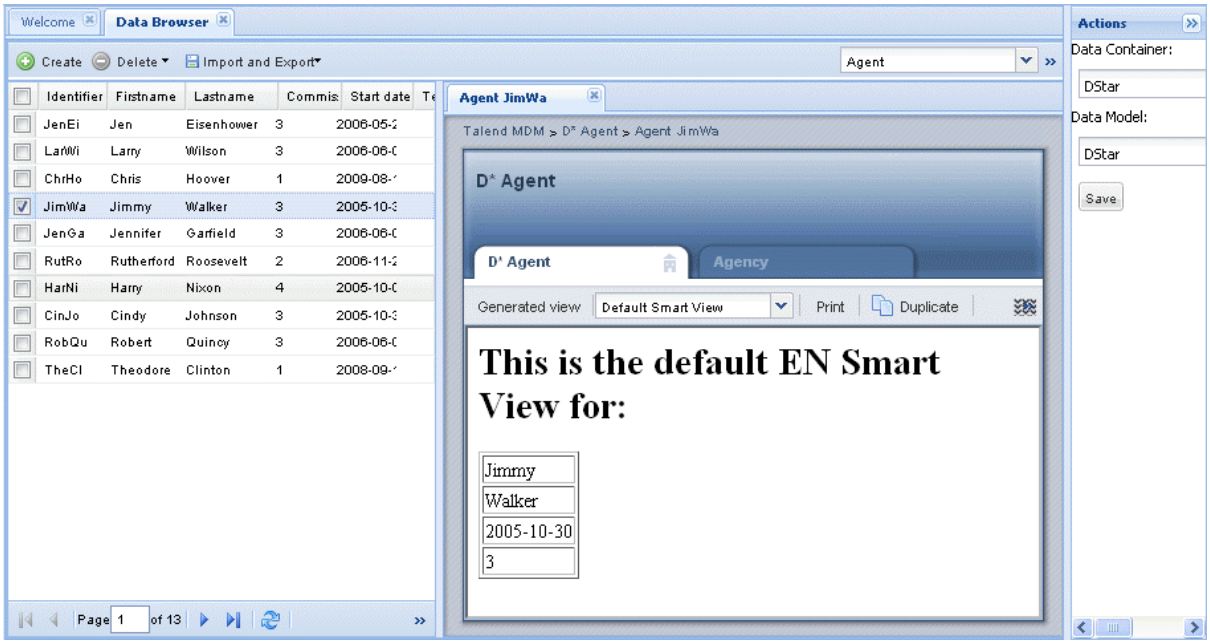
Make sure that you have selected:

-the data container that holds the master data you want to manage,

-the data model against which the master data will be validated.

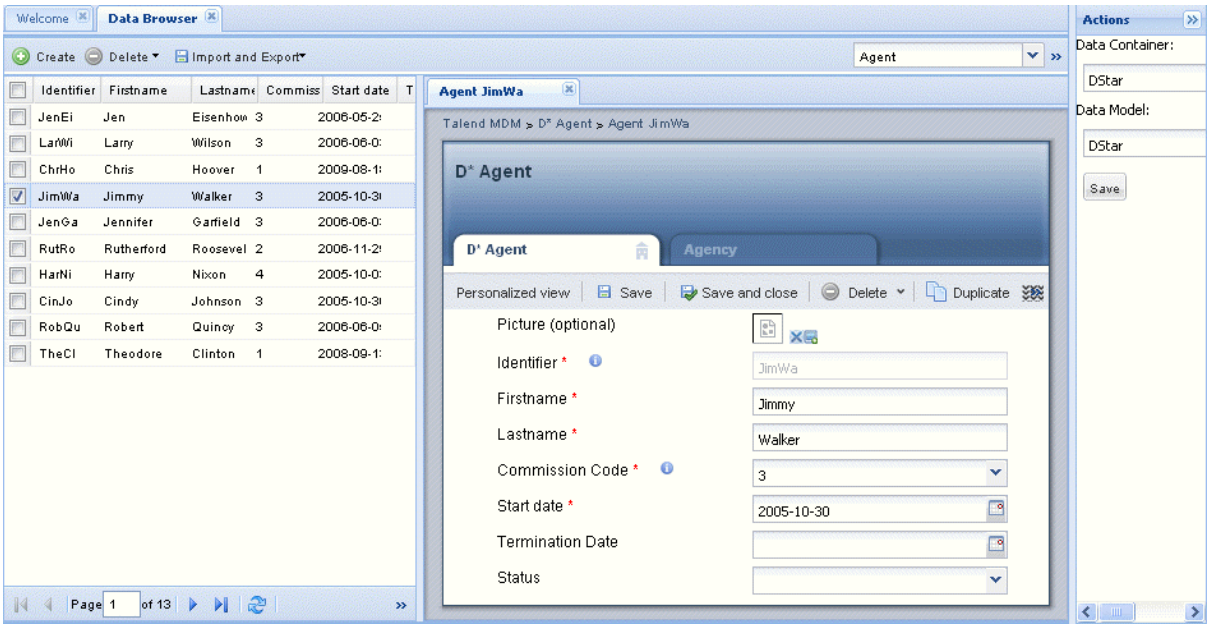
For further information, see Section 3.1, “Accessing data containers and data models”.

Follow the steps outlined in Section 3.2.1, “How to search entities in the selected data container” to open a smart view.



The **[Data Browser]** page opens to list the data records pertaining to the selected entity in the selected data container. The record details open in a smart view (HTML representation) in the panel to the right.

You can switch to the “conventional” generated form by clicking the **Generated view** tab:



The following options are available on the toolbar:

Click	To...
Generated view	switch back to the generated view of the record detail. You can switch back and forth between the generated view and the smart view using the **Generated view** and **Personalized view** bars respectively.
Drop-down arrow	display a list of all the smart views created in the MDM Studio on the selected entity. From this list, you can select the smart view you want to open in the **[Data Browser]** page. For further information on smart views, see the *Talend Open Studio for MDM* Administrator Guide.
Print	print the record detail to a file.
Duplicate	open an exact copy of the record in a new page. Then you can use this copy as a base to create a new record in order not to create one from scratch, for example. For further information on adding new data records, see Section 3.3.4, “How to add a new data record to an entity”.
Journal	open a page that lists all logs on the selected data record. For further information, see Section 4.1, “Viewing log files for all data records”.
	refresh the page display.
Drop-down arrow	display a list of all the runnable processes created in the MDM Studio on the selected entity. From this list, you can run any of the listed processes to carry out a specific task on master data. For further information, see Section 3.5, “Running a Runnable Process designed in the Studio”.

3.3.3. How to update a data record in an entity

Prerequisite(s):

-The MDM server is already launched.

-At least one view has been created in *Talend Open Studio for MDM*. For further information, see the *Talend Open Studio for MDM* Administrator Guide.

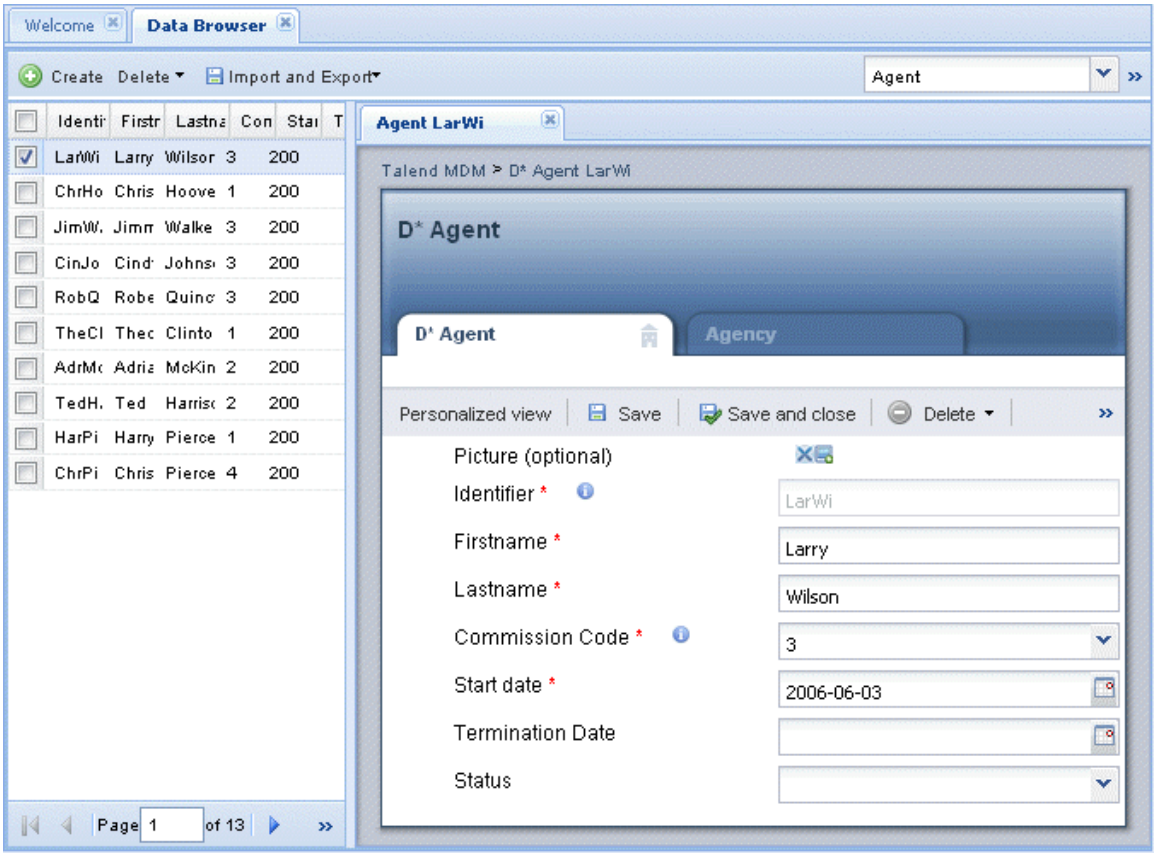
Make sure that you have selected:

-the data container that holds the master data you want to manage,

-the data model against which the master data will be validated.

For further information, see Section 3.1, “Accessing data containers and data models”.

1. Follow the steps outlined in Section 3.2.1, “How to search entities in the selected data container” to list the records of interest in the **[Data Browser]** page.

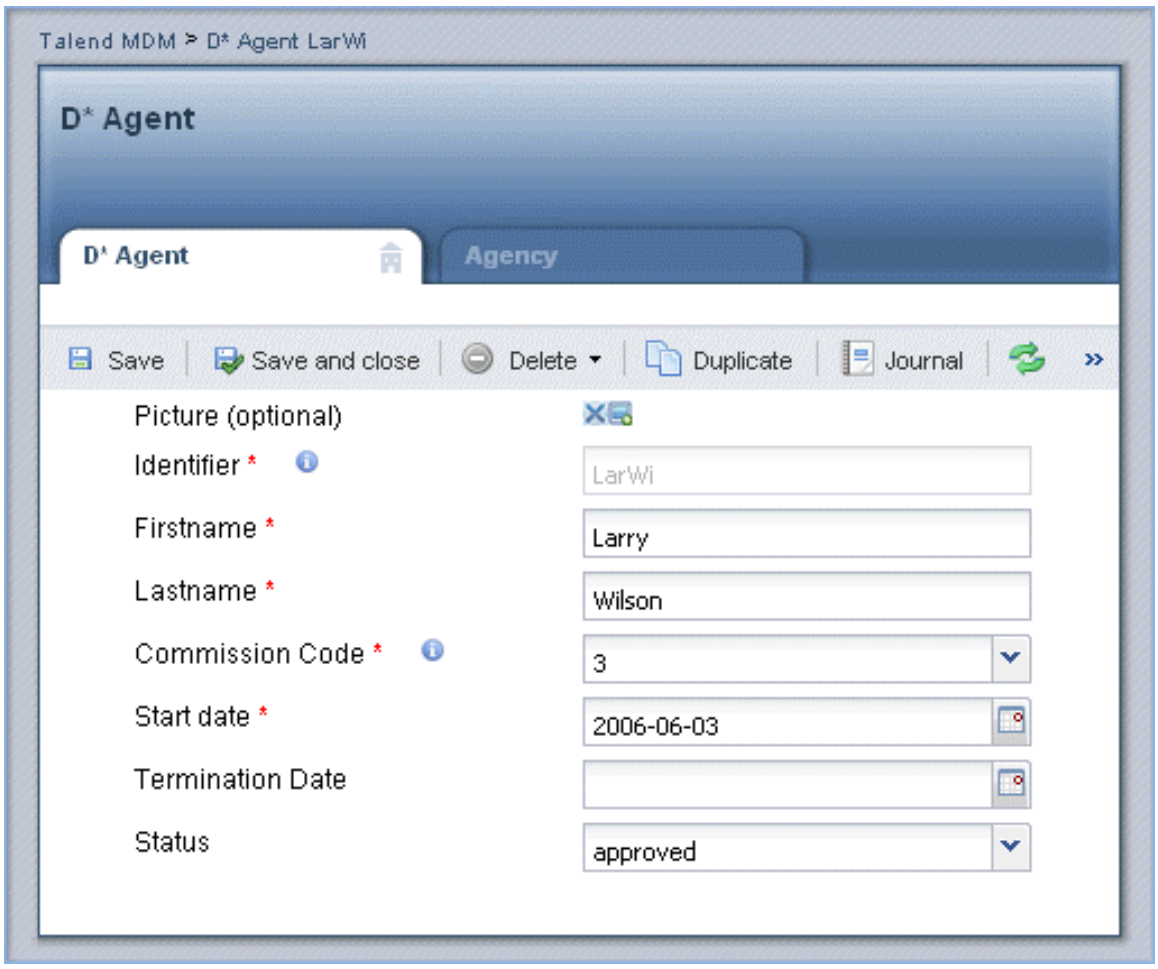


The page always opens on the entity list where the first record in the list is selected by default and its details show in the panel to the right.

The number of the records displayed in the page depends on what you have already defined in the **Lines/page** box in a previous search. Change the number in the box according to your needs and then restart your advanced search to display the desired number of records in the page. This number will be retained every time you try to browse data records in the XML repository (MDM hub).

2. In the record list, click on the data record you want to update.

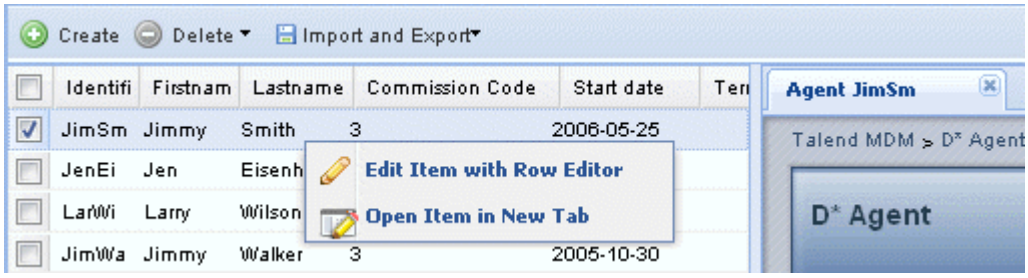
   All the viewable attributes pertaining to the data record appear in the panel to the right:



If a smart view Process has been created for the business entity holding the record, the record detail will open in an HTML representation. For further information, see Section 3.3.1, "How to open a data record in an entity".

3. Edit any of the modifiable attributes according to your needs .

   You can also update a record through a row editor if you right-click it in the record list and select **Edit Item with Row Editor**.

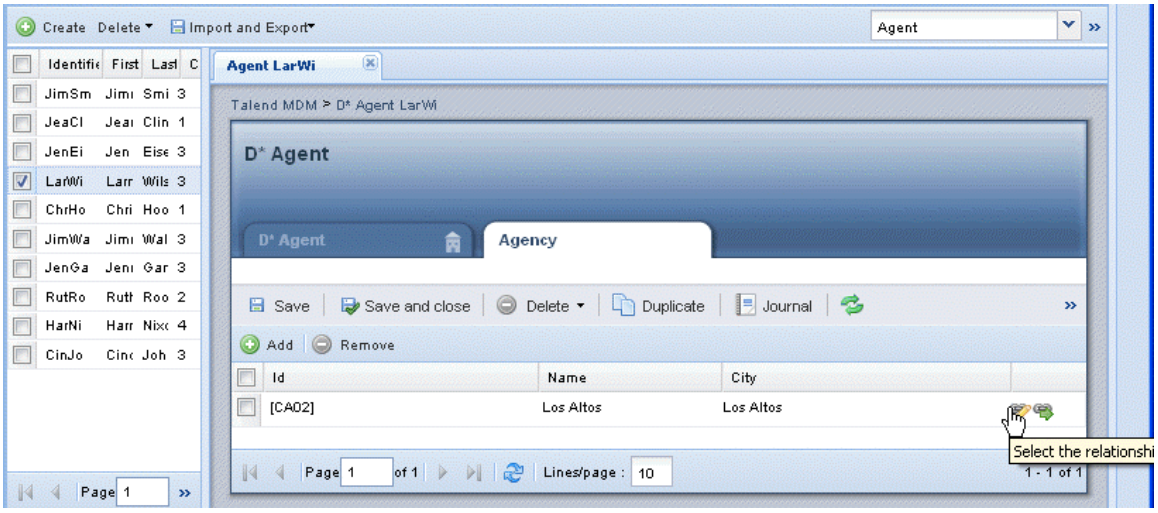


If you try to update a data record that has been modified by somebody else after you have retrieved it from the database, a warning message displays to warn you that saving your modifications will overwrite the other user's changes.

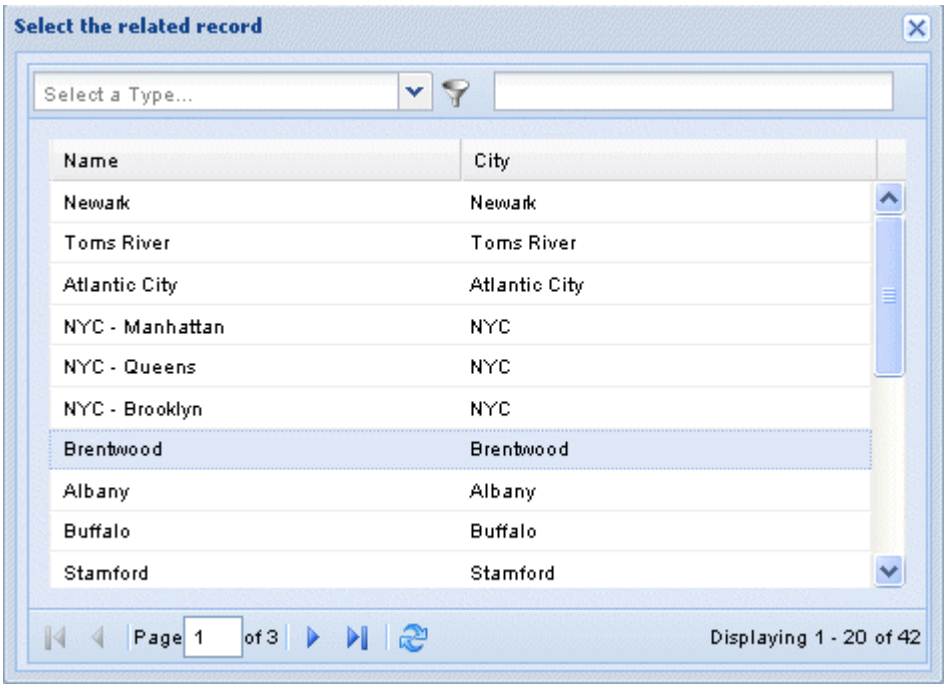
4. If required, click any of the tabs that represent foreign key relationships to open the corresponding view and modify the relationship directly from there.

   Consider, for example, that you want to update the agency to which the agent is attached through a foreign key. In this example, a foreign key has been defined in *Talend Open Studio for MDM* to link the **Agent** and **Agency** entities together. In such a case, two tabs display in the detail panel to the right.

5. In the **Data Browser** page, click the **Agency** tab in the view to the right.



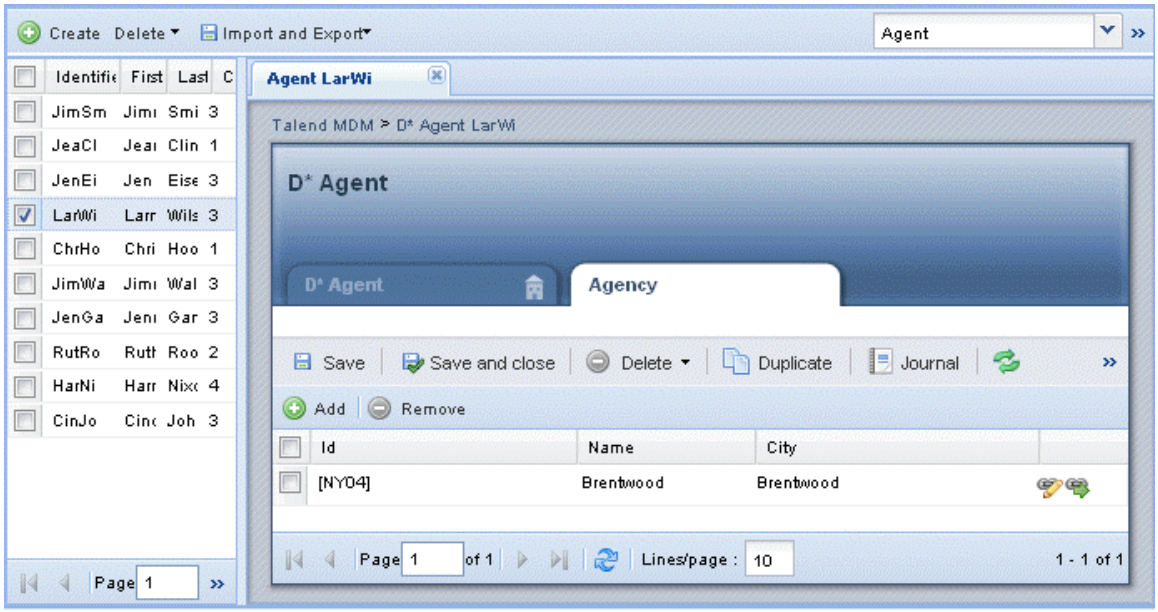
6. In this view, click on , and then double-click the agency/city combination in the open dialog box.



If the **Set the Foreign Key Info** annotation is added to the specified attribute in *Talend Open Studio for MDM* when defining the data model, items will be ordered alphabetically in the open foreign key list. If not, items will be ordered by creation date. For further information, see the *Talend Open Studio for MDM* Administrator Guide.

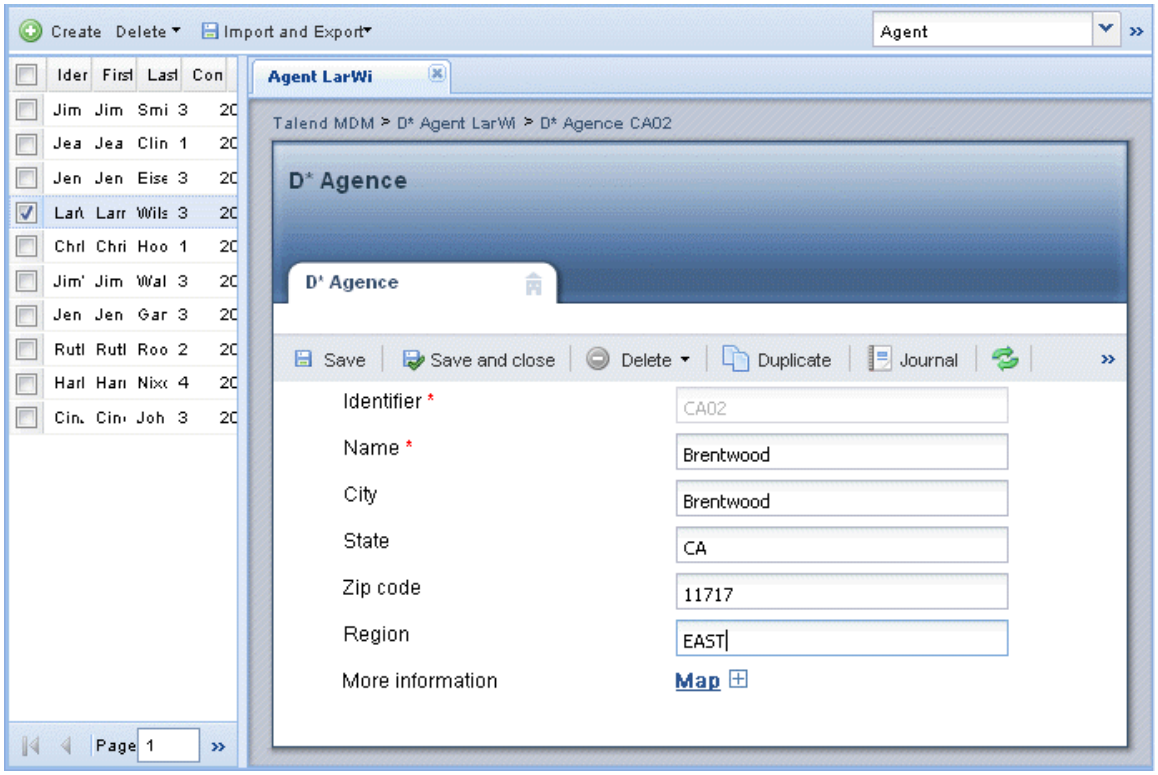
If the **Set the foreign key filter** annotation is added to the specified attribute in *Talend Open Studio for MDM* when defining the corresponding data model, you can filter the foreign key values displayed in the list. For further information, see the *Talend Open Studio for MDM* Administrator Guide.

The dialog box closes and the **Agency** field is updated with the selected foreign key.



The related agency (foreign key) information in the selected data record has been modified accordingly.

7. In the **Agency** view, click on the icon to open the detail of the related agency.



8. If required, edit any of the modifiable attributes from this view.

9. Click **Save** or **Save and close**.

10. Click any of the breadcrumbs that appear horizontally across the top of the view to open the record details or any of the foreign key details.

If you click **Duplicate** on the toolbar, a new data record is created which is identical to the open one except for the ID value. You can make modifications to the listed attributes and save these modifications

to create a new data record. For further information on how to create a new data record, see Section 3.3.4, “How to add a new data record to an entity”.

3.3.4. How to add a new data record to an entity

In the **[Data Browser]** page, you can add new data records to the selected entity. The data records you add are validated against the data model you select before browsing the entity. For more information, see Section 3.1, “Accessing data containers and data models”.

Prerequisite(s):

-The MDM server is already launched.

-At least one view has been created in *Talend Open Studio for MDM*. For further information, see the *Talend Open Studio for MDM* Administrator Guide.

Make sure that you have selected:

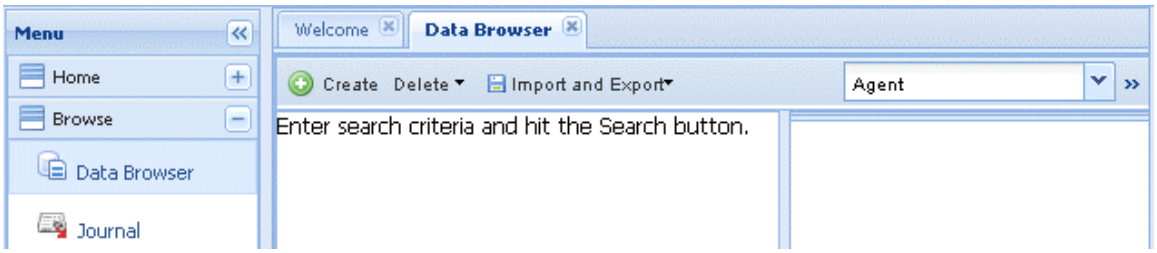
-the data container that holds the master data you want to manage,

-the data model against which the master data will be validated.

For further information, see Section 3.1, “Accessing data containers and data models”.

To add a data record in an entity, complete the following:

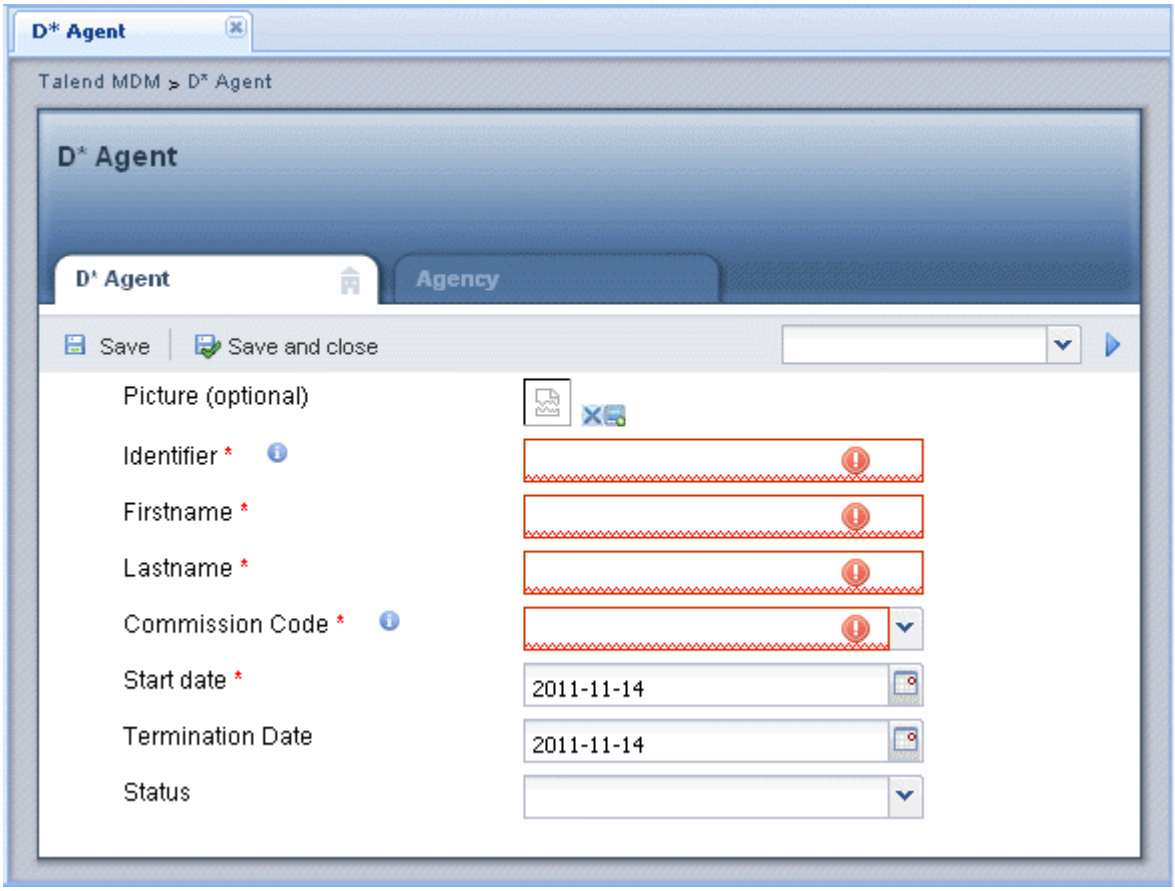
1. In the **Menu** panel, click on **Data Browser** to open the **[Data Browser]** page.



2. In the entity field, click the arrow and then select from the list the entity to which you want to add a data record.

   Click on the

tab in the upper left corner to open a new page.



Now you can add a new data record to the *Agent* list, *Janet Richardson* for example.

When you start filling in the fields in the page, obligatory fields display in red. You will not be able to save the new record before you fill in all these fields.

3. If required, use the icon and browse on your workstation to upload a picture for the new agent.

4. Type *JanRi* in the **Identifier** field.

   Put your pointer on to see the description of the identifier.

   In the **Firstname** field, enter the agent first name, *Janet* in this example.

   In the **Lastname** field, enter the agent last name, *Richardson* in this example.

   From the **Commission Code** list, select the commission code for this agent.

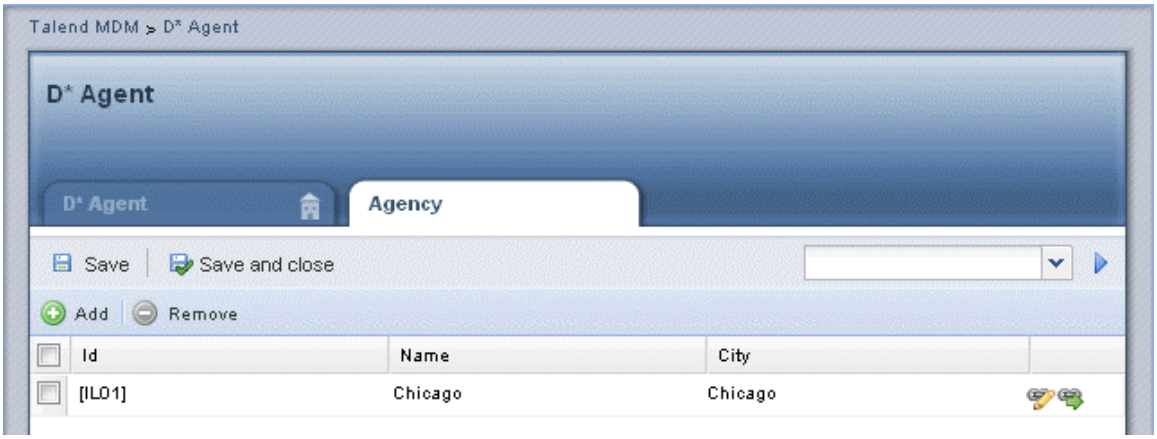
   Put your pointer on to see a description of the commission code that may help you to decide what commission code to give to the agent. This is a kind of a business rule against which you validate the agent commission code. For further information, see the *Talend Open Studio for MDM* Administrator Guide.

   Click the calender next to the **Start Date** field and select a start date for the agent.

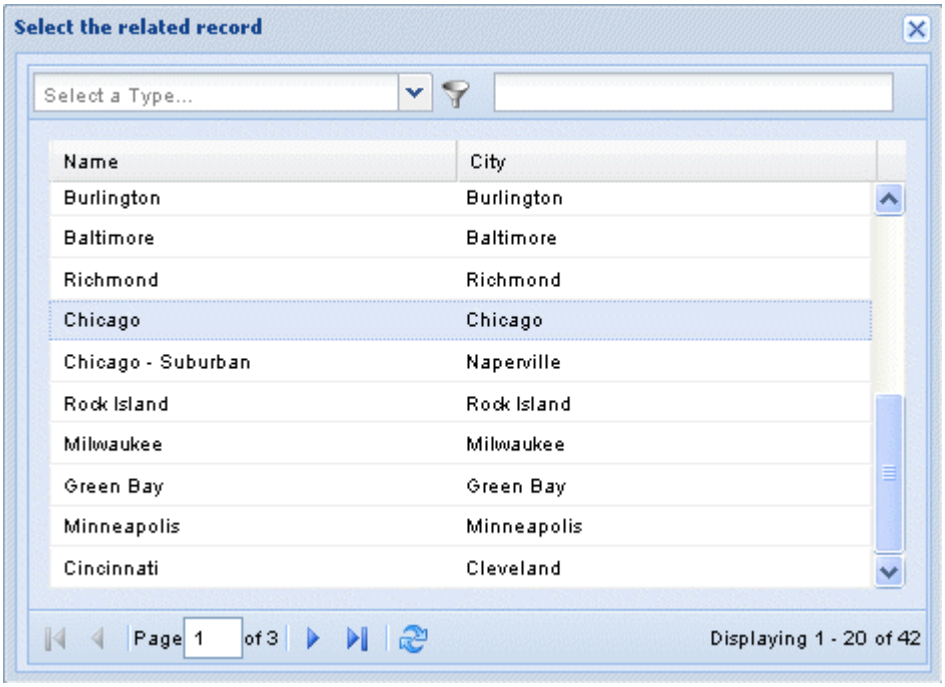
   If required, click the calender next to the **Termination date** field and select an end date for the agent.

   From the **Status** list, select a status for the agent from the enumeration list.

5. Click the **Agency** tab to open the corresponding view where you can set the foreign key information and link the record to a specific agency.



6. Click to display a list of foreign keys that link the *Agent* entity with the *Agency* entity.

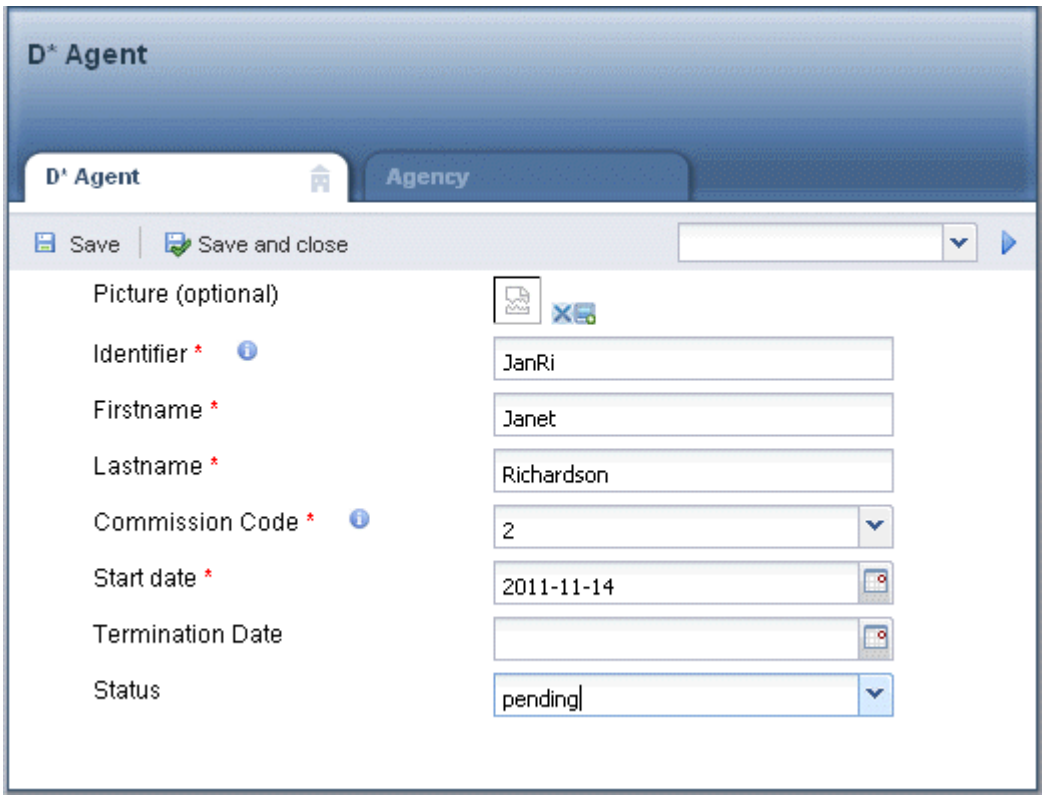


Such a list displays if foreign keys and foreign keys information have been defined in the *Agent* entity through *Talend Open Studio for MDM*. For further information, see the *Talend Open Studio for MDM* Administrator Guide.

If the **Set the foreign key filter** annotation is added to the specified attribute in *Talend Open Studio for MDM* when defining the corresponding data model, you can filter the foreign key values displayed in the list. For further information, see the *Talend Open Studio for MDM* Administrator Guide.

7. Double-click the agency to which you want to attach this agent.

The dialog box closes and the information of the selected agency displays in the **Agency** panel.



8. Click on **Save** or **Save and Close.** The data record list now includes *Janet Richardson*.

If you get an error message upon saving the record, this could mean that the validation process of the data record fails. This validation process is carried out by a **Before-Saving** process created in the Studio. For further information on the **Before-Saving** processes, check the *Talend Open Studio for MDM* Administrator Guide.

3.3.5. How to delete a data record from an entity

You can either permanently delete data records from the selected entity or erase them from the data record list, which allows you to recover them at a later date.

Prerequisite(s):

-The MDM server is already launched.

-At least one view has been created in *Talend Open Studio for MDM*. For further information, see the *Talend Open Studio for MDM* Administrator Guide.

Make sure that you have selected:

-the data container that holds the master data you want to manage,

-the data model against which the master data will be validated.

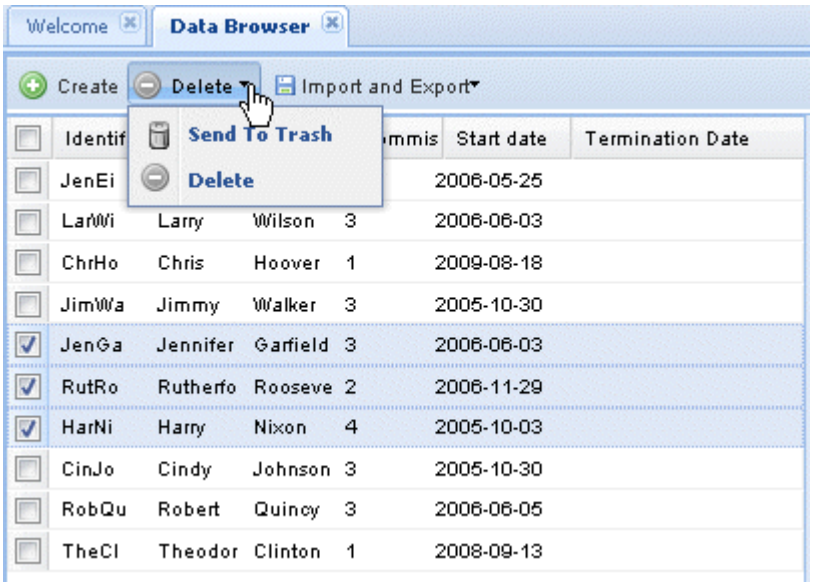
For further information, see Section 3.1, “Accessing data containers and data models”.

To delete a data record permanently, complete the following:

1. In the **[Data Browser]** page, search for the data records pertaining to the entity of interest.

All searched data records are listed in this page. For more information, see Section 3.2.1, “How to search entities in the selected data container”.

2. Select the check box(es) next to the data record(s) you want to delete.



3. Click the

tab and then select **Delete** to permanently delete the data record(s).

   A confirmation message displays.

   *The **Delete** button removes data permanently. In case of doubt, use the **Send to Trash** option.*

4. Click on **Yes** to confirm the deletion and close the message.

   The selected data record(s) is/are deleted from the list and from the XML repository.

To erase a data record from the record list, complete the following:

1. In the **[Data Browser]** page, search for the data records pertaining to the entity of interest.

   All searched data records are listed in this page. For more information, see Section 3.2.1, “How to search entities in the selected data container”.

2. Select the check box(es) next to the data record(s) you want to remove from the list.

3. Click the

tab and select **Send to Trash** to remove the data record(s) from the list.

   A dialog box displays asking for the path to delete data records.

4. Click on **OK** to close the dialog box.

   The selected data records are erased from the data record list. Recovery copies are stored in the **Recycle Bin**. For more information on recovering deleted data records, see Section 3.3.6, “How to recover a deleted data record”.

3.3.6. How to recover a deleted data record

In the recycle bin you can view data records which have been deleted using the **Send to Trash** option. For further information on the delete operation, see Section 3.3.5, “How to delete a data record from an entity”.

From the recycle bin, you can permanently delete data records or restore them to the entity they were deleted from.

Prerequisite(s):

-The MDM server is already launched.

-At least one view has been created in *Talend Open Studio for MDM*. For further information, see the *Talend Open Studio for MDM* Administrator Guide.

Make sure that you have selected:

-the data container that holds the master data you want to manage,

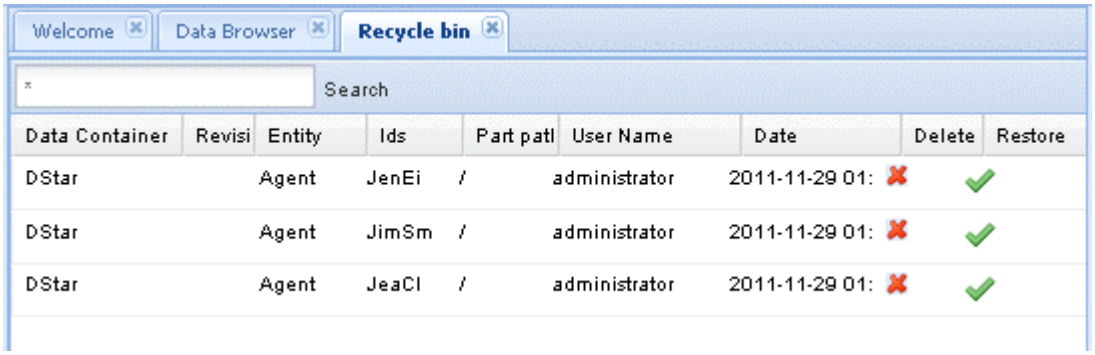
-the data model against which the master data will be validated.

For further information, see Section 3.1, “Accessing data containers and data models”.

To recover deleted data records, complete the following:

1. In the **Menu** panel, click on **Browse** - **Recycle Bin**

   The following page displays.



2. Click on the tick sign next to the data record you wish to restore.

   A message displays prompting you to confirm the restore operation.

3. Click on **Yes**.

   The data record is restored from the recycle bin. You can now see the data record in the data record list.

To delete data records permanently:

1. On the **[Recycle bin]** page, click on next to the data record you want to delete.

   A dialog box displays to confirm the deletion operation.

2. Click on **Yes**.

   The data record is deleted permanently from the MDM server.

3.3.7. How to view the log file for a data record

The log file for an open data record lists descriptions of events associated with this specific data record.

You can access a log file that lists information on all data records through the **Journal** menu option. For more information, see Section 4.1, “Viewing log files for all data records”.

Prerequisite(s):

-The MDM server is already launched.

-At least one view has been created in *Talend Open Studio for MDM*. For further information, see the *Talend Open Studio for MDM* Administrator Guide.

Make sure that you have selected:

-the data container that holds the master data you want to manage,

-the data model against which the master data will be validated.

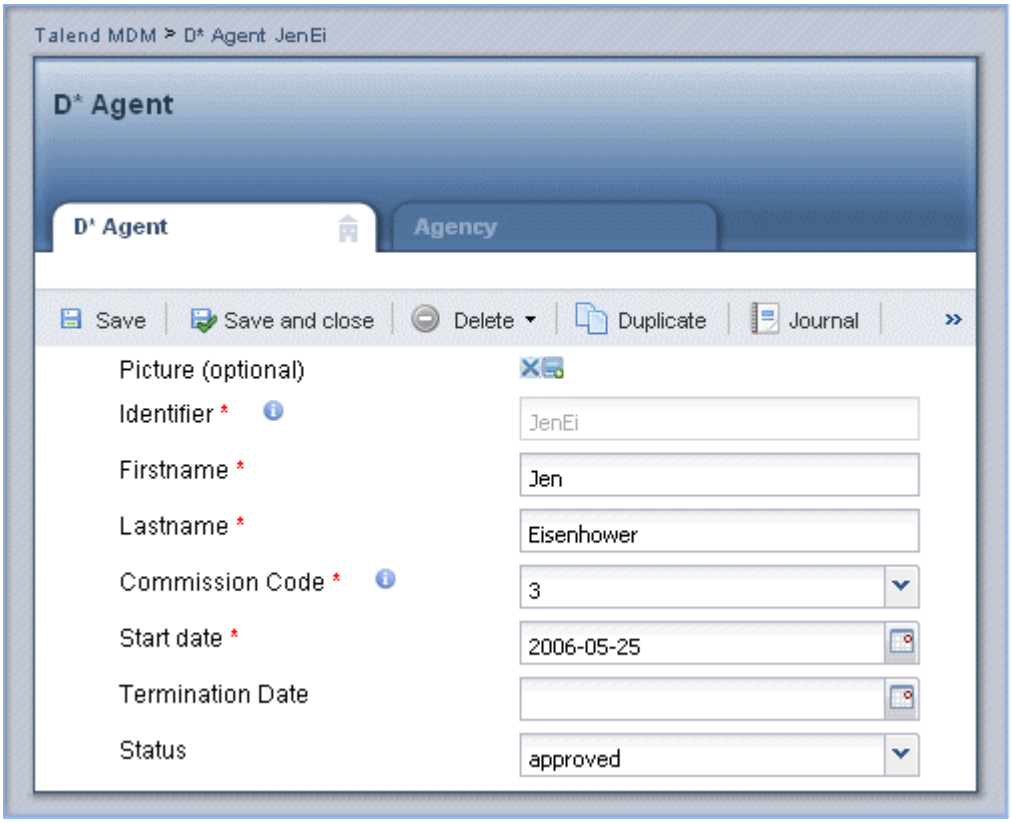
For further information, see Section 3.1, “Accessing data containers and data models”.

To view the log file for a specific data record, complete the following:

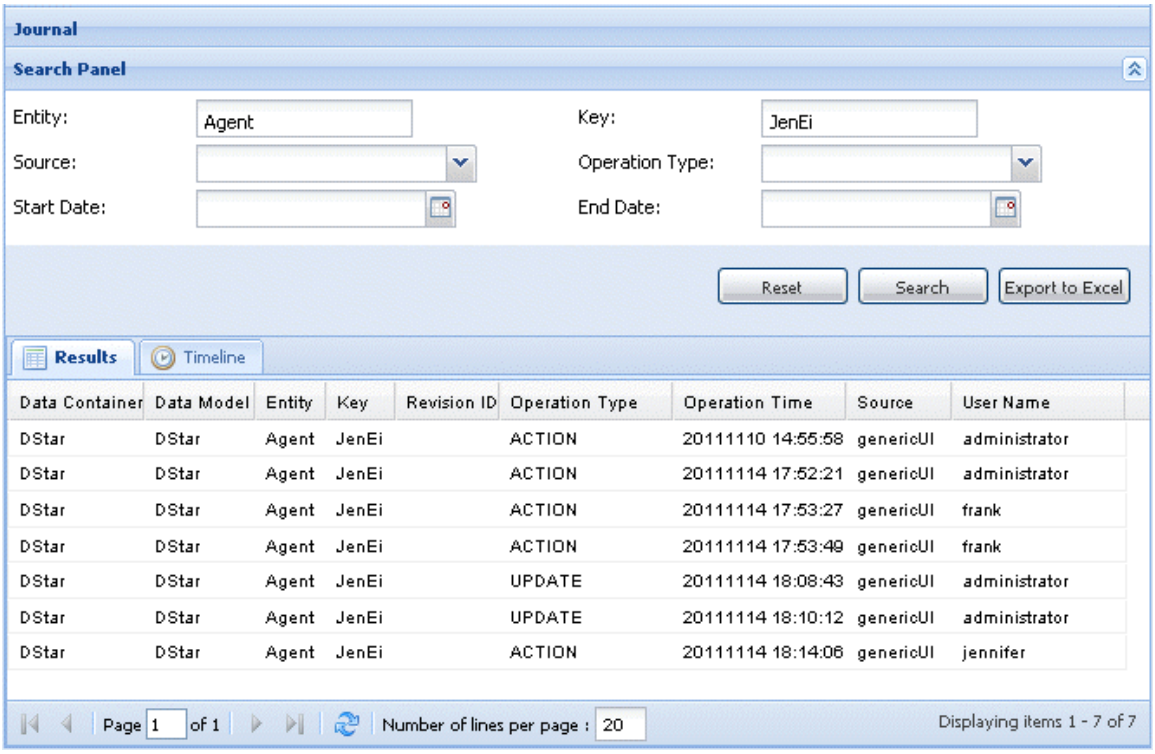
1. In the **[Data Browser]** page, search for the data records pertaining to the entity of interest.

   All searched data records are listed in the page. The first record is selected by default and its details are displayed in the panel to the right. For more information, see Section 3.2.1, “How to search entities in the selected data container”.

2. Click on any of the listed data records to open the record detail.



3. Click on **Journal** to open the log file of the record.

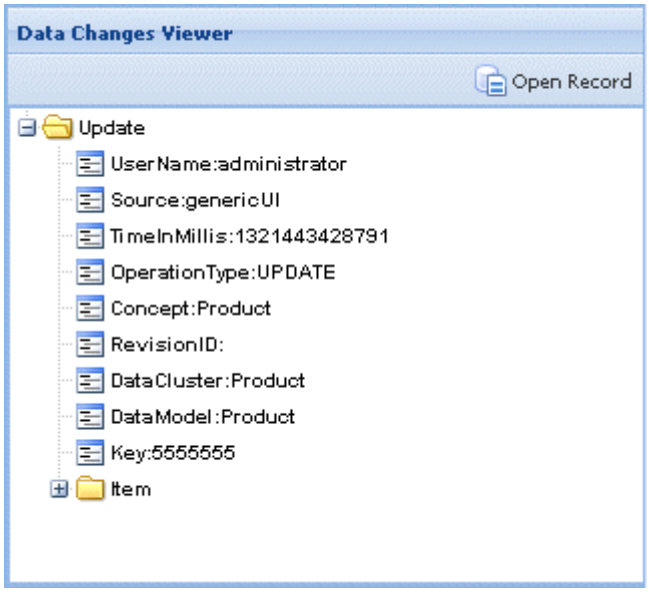


Here you can view information on all the events associated with the selected data record.

To view a detailed description of one of the listed events, complete the following:

1. On the **[Journal]** page, double-click on a row.

   A page called [**[Data Changes Viewer]** opens.



   Here you can view several pieces of information about the modified data record, including the source, type of change, the impacted data record and the relevant entity.

2. Expand the **Item** folder(s) to view the values which have been changed.

   The **Update** folder contains the same information as the record row you clicked on to open the **[Data Changes Viewer]** page. Each **Item** folder represents a value which was changed at the moment the specific record update took place. Therefore, if two item folders are displayed, then this means that two values were changed.

The **Item** folders always contains the same information:

- path:/Entity/attribute,
- oldValue: old attribute value,
- newValue: new attribute value.

You can see the item information which has been updated. For example, an item name or description, as well as the old and new values linked to the item. In this case, you can see that the agent first name changed from *Jen* to *Jenni*.

3. If required, click **Open Record** in the upper right corner of the page to open the record detail.

   A **Before** and **After** panels in the lower part of the page show the complete details of the source record and modified record respectively.

   If you log in to *Talend MDM Web User Interface* as an administrator, a **Restore** button will display in the **Before** and **After** panels. This button enables the administrator to restore the old version of the record.

   .

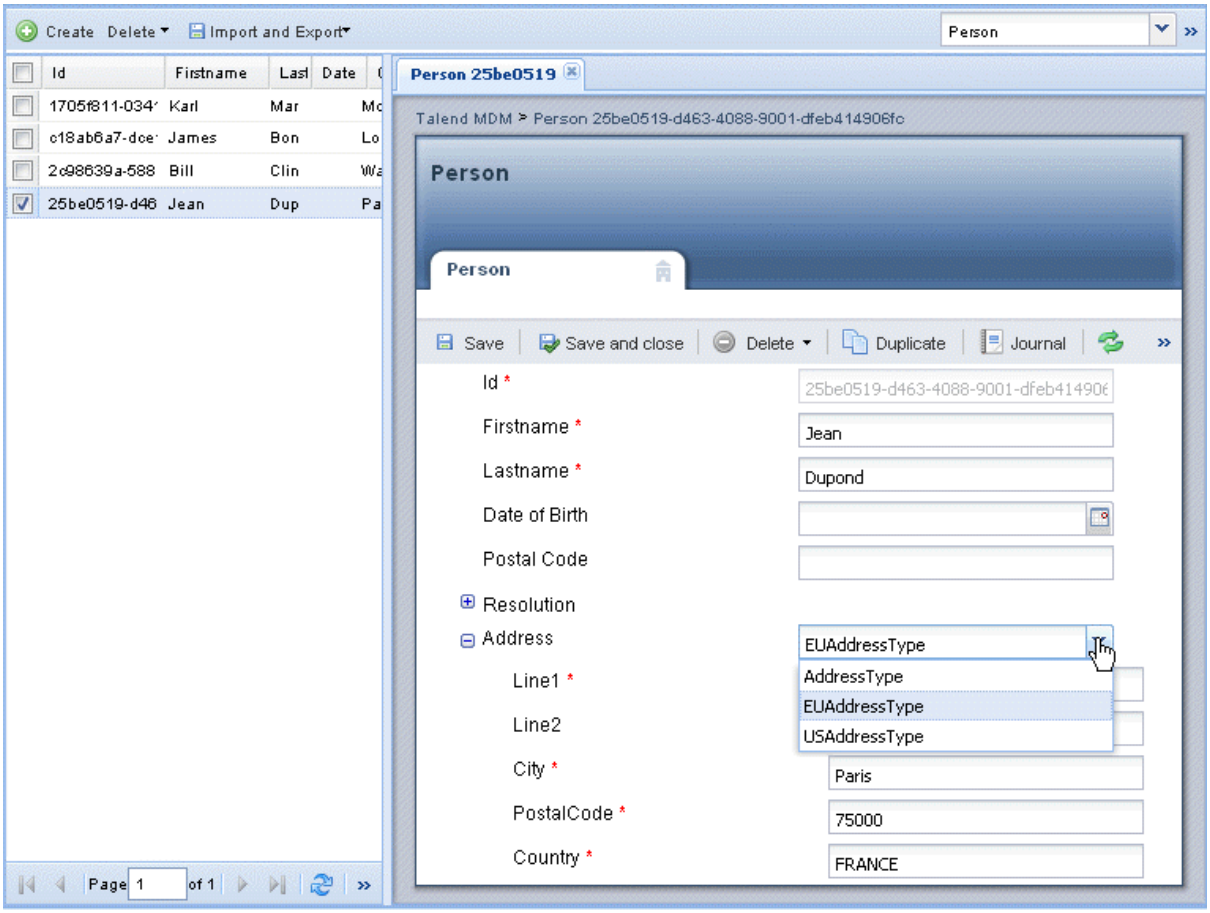
You can also view item events using the **Journal** option on the **Menu** panel. This is useful if you want to search for changes based on the source of change, operation type or date, rather than by specific item, for example. For further information, see Section 4.1, “Viewing log files for all data records”.

3.4. Using inheritance and polymorphism

Talend MDM introduces a true object oriented data model that allows to use inheritance and polymorphic characteristics when defining data models in *Talend Open Studio for MDM*. For further information, see the *Talend Open Studio for MDM* Administrator Guide.

If inheritance and polymorphic characteristics are used when defining data models in the Studio, you can have access at runtime to elements extended from other attributes or entities in the data model where you can decide which to choose.

For instance, you can have an address established as a main generic address and at run time defines it as a US or European address.



3.5. Running a Runnable Process designed in the Studio

If a Runnable Process is created on a specific business entity from *Talend Open Studio for MDM*, it is automatically listed in the **[Data Browser]** page in *Talend MDM Web User Interface*. Such a process can be designed to do different tasks, for example sending an entity by email.

Prerequisite(s):

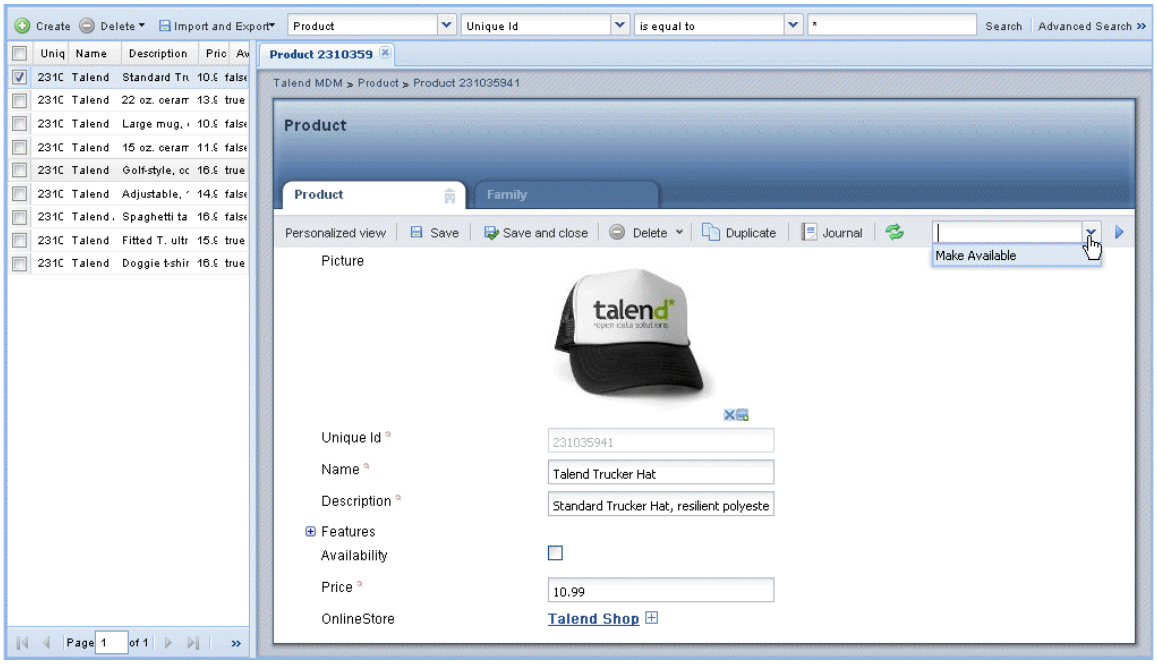
-The MDM server is already launched.

-At least one Runnable Process has been created in *Talend Open Studio for MDM*.

To execute a Runnable Process from the web interface, complete the following:

1. On the **Menu** panel, click on **Browse** and then select **Data Browser**.

2. From the entity list, select the entity on which the Runnable process has been created. All data records pertaining to the selected entity are displayed in the page, the first record in the list is selected by default and its detail display in the panel to the right.



3. Click the record on which you want to run the Runnable process in order to open its detail in the panel to the right

4. In the upper right corner of the detail view, click the arrow to display a list of all the Runnable Processes designed in the Studio on the selected entity.

5. Select the process you want to execute on the open data record and then click the button to the right of the list.

   This will execute the selected process carrying out on the open record the tasks defined in the process.

3.6. Running a Standalone Process designed in the Studio

If a Standalone Process is created in *Talend Open Studio for MDM*, it is automatically listed in the **[Welcome]** page in *Talend MDM Web User Interface*.

Such a process is not linked to a specific entity and can be designed to do different tasks on master data, for example adding a new record/entity in the XML repository, launching a job to do some check or transformation on master data, or launch a job to return a specific result in a new tab in the web interface.

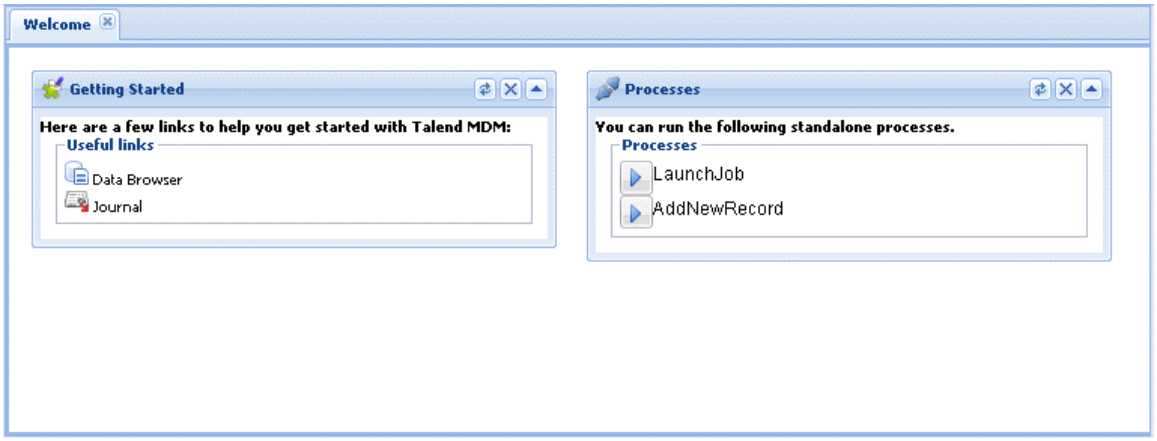
Prerequisite(s):

-The MDM server is already launched.

-At least one Standalone Process has been created in *Talend Open Studio for MDM*. For further information, see the *Talend Open Studio for MDM* Administrator Guide.

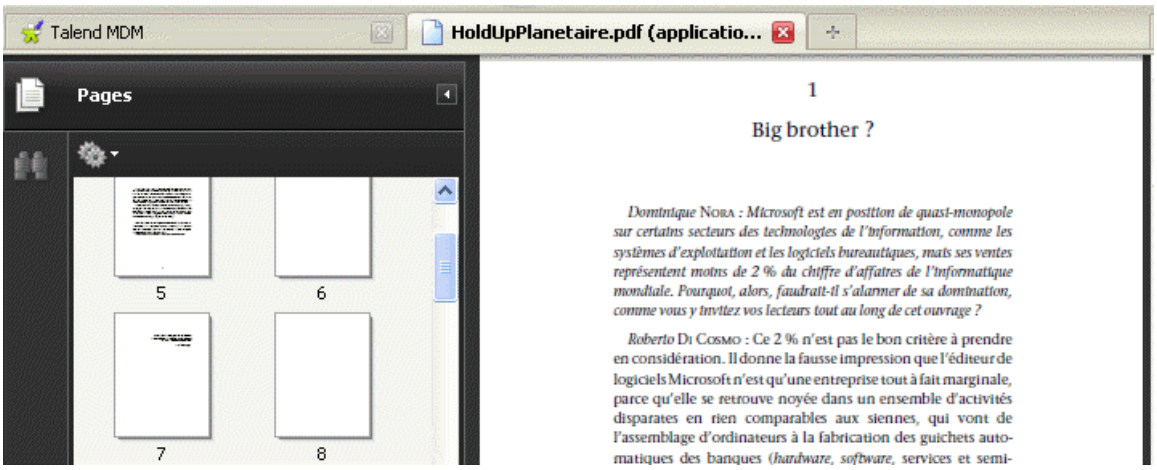
To execute a Standalone Process from the web interface, complete the following:

1. Log in to *Talend MDM Web User Interface* to display the **[Welcome]** page. For further information, see Section 2.1, “Logging into the Web User Interface”.



2. In the **Processes** panel, click the button that corresponds to the Standalone Process you want to execute. *LaunchJob* in this example.

   This *LaunchJob* Standalone Process calls a Job which passes to the Process output variable the URL of a PDF you want to display in a new tab in the Web User Interface. You can then save or print the returned result.



For further information on how to define such a Standalone Processes, see the *Talend Open Studio for MDM* Administrator Guide

To be able to run a Standalone Process that returns a result without problems as in the example above, make sure that the configuration of your web browser is set correctly: not to block pop-up windows and to open new windows in new tabs.

Chapter 4. Other management procedures

This chapter provides the information you need to carry out some advanced MDM procedures including synchronizing master data on multiple MDM servers or Versions, using cross-referencing tables for content adaptation and generating master data reports.

4.1. Viewing log files for all data records

The log file lists descriptions of every event associated with each data record in the MDM hub. This page is useful if you want to search for changes based on the source, operation type or date, rather than by a specific data record, for example.

Prerequisite(s): The MDM server is already launched and you have logged in to *Talend MDM Web User Interface*.

Make sure that you have selected:

-the data container that holds the master data you want to manage,

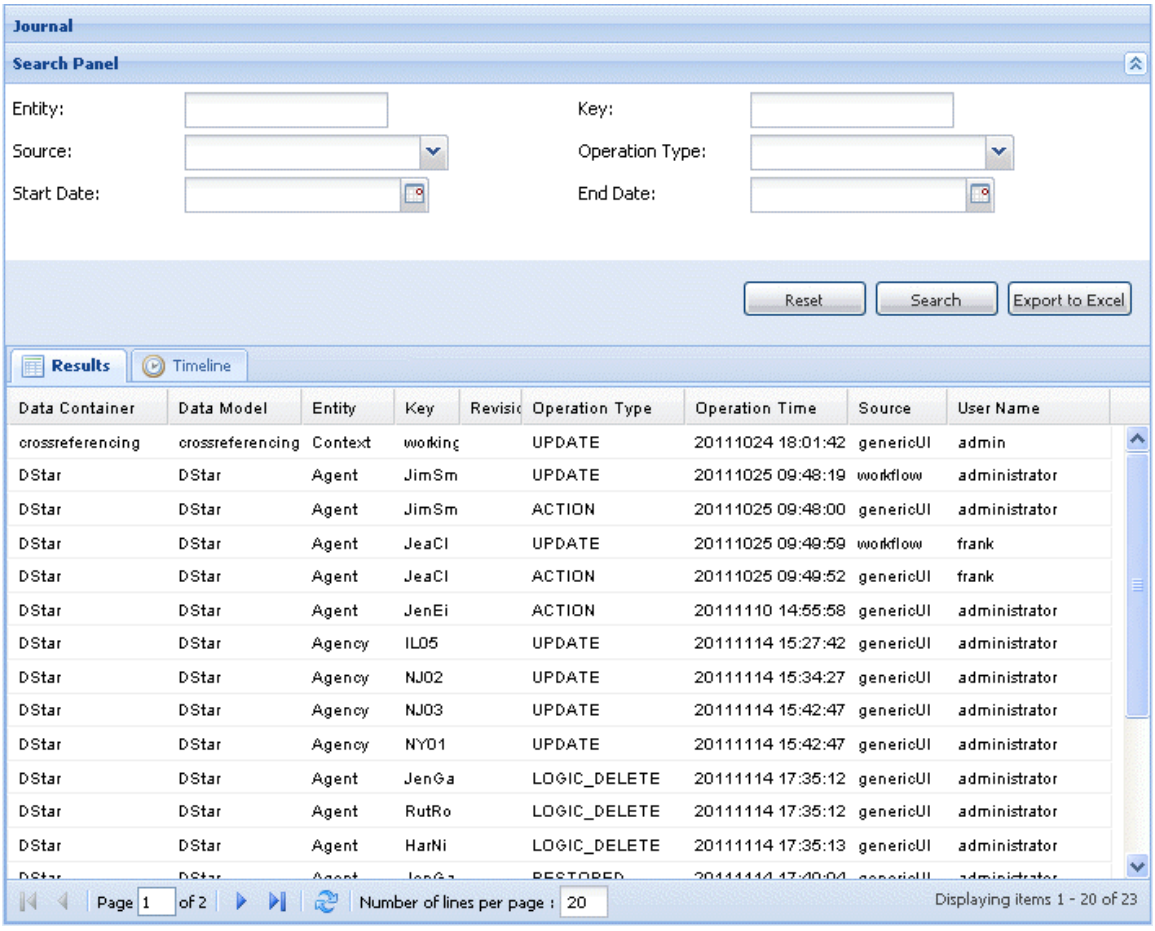
-the data model against which the master data will be validated.

For further information, see Section 3.1, “Accessing data containers and data models”.

To create this view, complete either of the following:

1. From the **[Welcome]** page, click **Journal**.
2. Or, on the **Menu** panel, click on **Browse** and then select **Journal**.

   A table of data records appears in the new page, along with various search options.



You can limit the results by using the options in the **Search Panel** at the top of the page. For further information, see Section 4.1.1, “How to search for specific logs”.

You can switch between the log table and a time line view - a design showing a calendar labeled with dates and events labeled on points where they have happened - using the **Results** and **TimeLine** tabs.

In the log table you can see a list of all the events concerning the data records in the MDM hub. The default column headings show you the following information concerning each data record:

Column name	Description
Data Container	Name of the data container that pertains the data record.
Data Model	Name of the data model against which the data record is validated.
Entity	Name of the business entity that pertains the data record.
Key	The primary key of the data record.
Revision ID	The identifier of the master data Version that pertains the data record.
Operation Type	Type of operation carried out on the data record: either **UPDATE**, **DELETE**, **CREATE** or **ACTION**.
Operation time	Date and time of the operation.
Source	Name of the source through which the data record modification took place, i.e. a **Talend** job, the Web User Interface (manually by a data steward), etc.
User name	Login name of the user who made the modification.

4.1.1. How to search for specific logs

The **Search Panel** at the top of the **[Journal]** page allows you to set various search criteria to narrow the results yielded.

1. In the **Entity** field, type in the name of the entity you want to limit the search to.
2. From the **Source** list, select the source of the modifications:

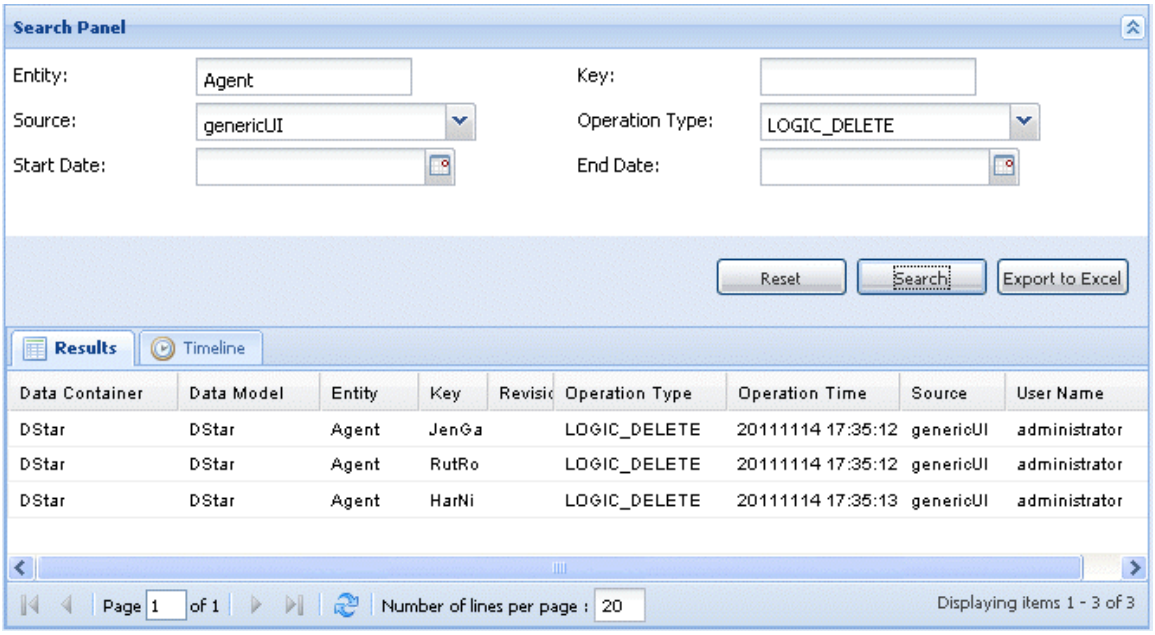
   -**genericUI**: if data is modified through *Talend MDM Web User Interface*,

   -**adminWorkbench**: if data is modified through *Talend Open Studio for MDM*,
3. If you know the key which corresponds to a specific data record of interest, type it in the **key** field.
4. From the **Operation Type** list, choose the type of event among the listed ones.
5. Click on next to the **Start Date** field.

   A calendar appears.
6. Select the relevant **Start Date** from the calendar.
7. Click on next to the **End Date** field.

   A calendar appears.
8. Select the relevant **End Date** from the calendar.
9. Click on the **Search** button on the bottom right corner of the search panel.

   The page displays the records which meet the specified search criteria.



From this log table, you can:

- click the **Export to Excel** tab to export the log list in an .xls file,
- click the **Reset** tab in order to clear the search fields and set new search criteria before clicking the **Search** tab,
- double click any of the log items to view the details of the changes which occurred. For further information, see Section 4.1.2, “How to view the log details”.

4.1.2. How to view the log details

To view the details of any of the listed logs, complete the procedure outlined in Section 3.3.7, “ How to view the log file for a data record” .

4.1.3. How to manage the log list display

On the **[Journal]** page, you can choose to order the events by numerical or alphabetical order, for any of the columns. You can also show/hide one or more columns in the list.

To order the events list according to specific criteria, complete the following:

1. Move the pointer over a column name and click on the arrow which appears.

   A drop-down list appears.

2. In the drop-down list, select:

Item	To...
Sort Ascending	arrange the list in an ascending order
Sort Descending	arrange the list in an descending order
Columns	display a drop-down list where you can select/clear the check box next to the column(s) you want to show/hide

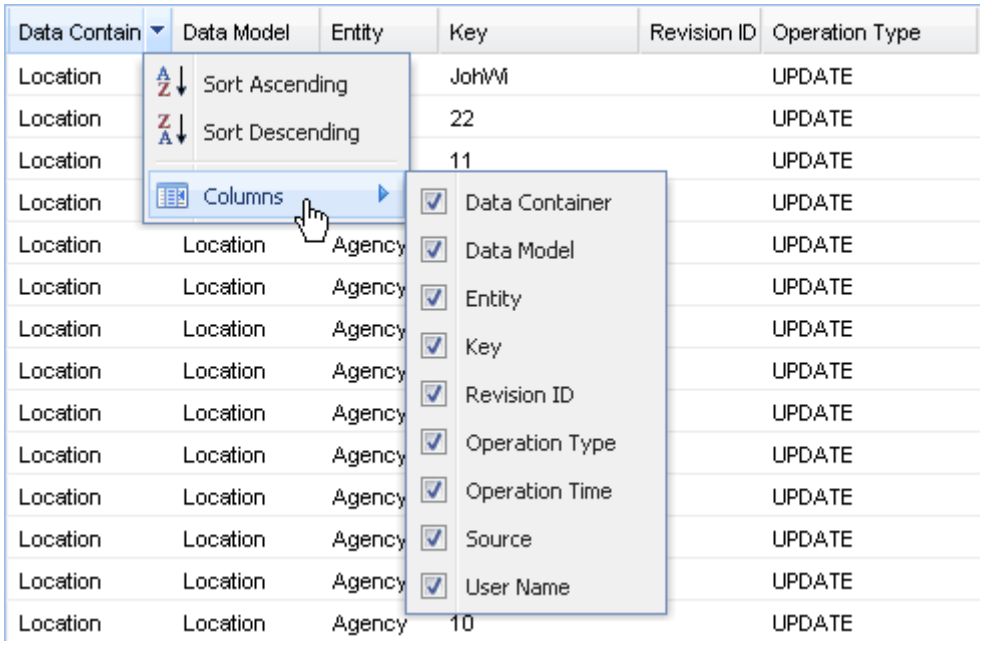
To show or hide any of the columns:

1. Move the pointer over any of the column headings and click on the arrow.

   A drop down menu appears.

2. Place the pointer on **Columns**.

   A list of all the column names appears.



All of the visible columns have their corresponding check boxes selected in the list. Select or clear the check boxes next to the name of the column, according to the view you want to create.

Appendix A. Deprecated features

This appendix describes the features of *Talend MDM Web User Interface* that are deprecated but still available for use.

More efficient methods of performing are available in the current Talend MDM. But if you want to continue using the legacy methods governing master data through Talend MDM Web User Interface, you can have access to all deprecated features through the following link: http://localhost:8080/talendmdm/secure/?target=original.

A.1. Browsing multiple entities (composite view) in a data container

In *Talend MDM Web User Interface*, the **Browse Views** menu allows you to search data records in composite views, i.e. data records pertaining to multiple entities in the selected data container. A composite view can provide greater insight on master data.

Prerequisite(s):

-The MDM server is already launched.

-At least one composite view has been created in *Talend Open Studio for MDM*. For further information, see the *Talend Open Studio for MDM* Administrator Guide.

Make sure that you have selected:

-the data container that holds the master data you want to manage,

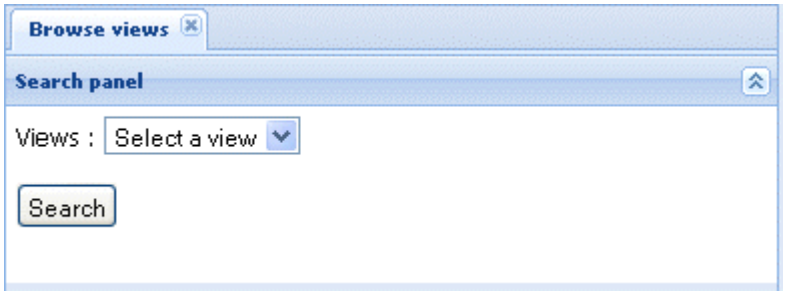
-the data model against which the master data will be validated.

For further information, see Section 3.1, “Accessing data containers and data models”.

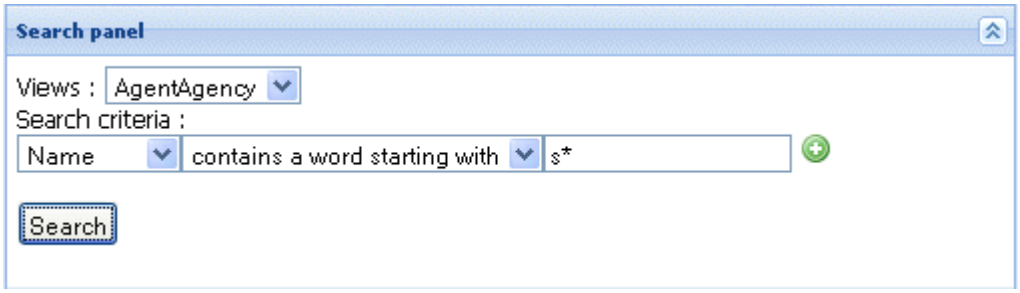
To search for data records pertaining to multiple entities, complete the following:

1. Click on **Browse views** in the **Menu** panel.

   A page opens, in which you can select the view of interest.



2. From the **Views** list, select the composite view through which you want to search records.



   You can now search for data records pertaining to the selected composite view. In this example, these data records belong to two different entities, *Agent* and *Agency*, which are joined by common fields. Agents are joined on agencies foreign keys in order to link every agent with all the agencies he/she is part of. For further information, see the *Talend Open Studio for MDM* Administrator Guide.

   You can also limit the results by using the **Search criteria** options.

   The available search criteria depend on the parameters set in *Talend Open Studio for MDM* when creating the composite view. For more information, see the *Talend Open Studio for MDM* Administrator Guide.

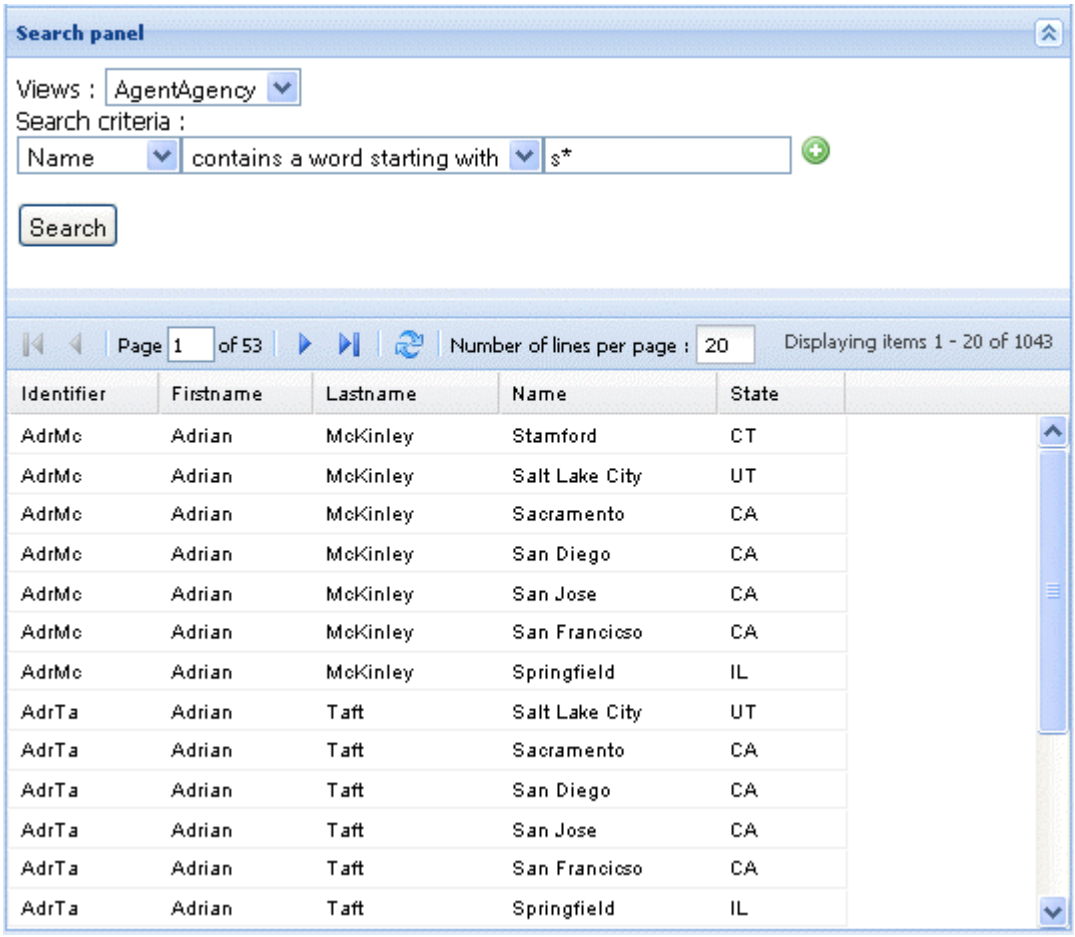
3. Consider, for example, searching the *AgentAgency* composite view for agents linked with agencies which names start with the letter “s”.

   From the drop-down list under **Search criteria**, select **Name**.

4. In the drop-down list immediately to the right, click the arrow and select a search option, **contains a word starting with**, for example.

5. In the next field, type *s**.

6. Click on **Search** to display all agents joined with the agencies which names start with the letter “s”.



If you double-click any of the listed records, you have access to a tree view of the selected record and to its XML source code.

A.2. Using grouping hierarchy

The **Grouping Hierarchy** menu in *Talend MDM Web User Interface* allows you to:

- visualize data records in a schematic form, according to the criteria you set.

  For further information on how to create a hierarchical view of data records, see Section A.2.1, “How to create a grouping hierarchy”.

- update these data records.

  For further information on how to update data records via the hierarchical view, see Section A.2.2, “How to update data records using the grouping hierarchy page”

A.2.1. How to create a grouping hierarchy

From the **[Grouping Hierarchy]** page, you can organize the data records pertaining to the entity you select in a schematic form according to the criteria you set in the **Pivot** and **Display Field** fields.

This hierarchical view is useful if you want to update specific information for multiple data records. For further information, see Section A.2.2, “How to update data records using the grouping hierarchy page”.

Prerequisite(s): The MDM server is already launched.

Make sure that you have selected:

-the data container that holds the master data you want to manage,

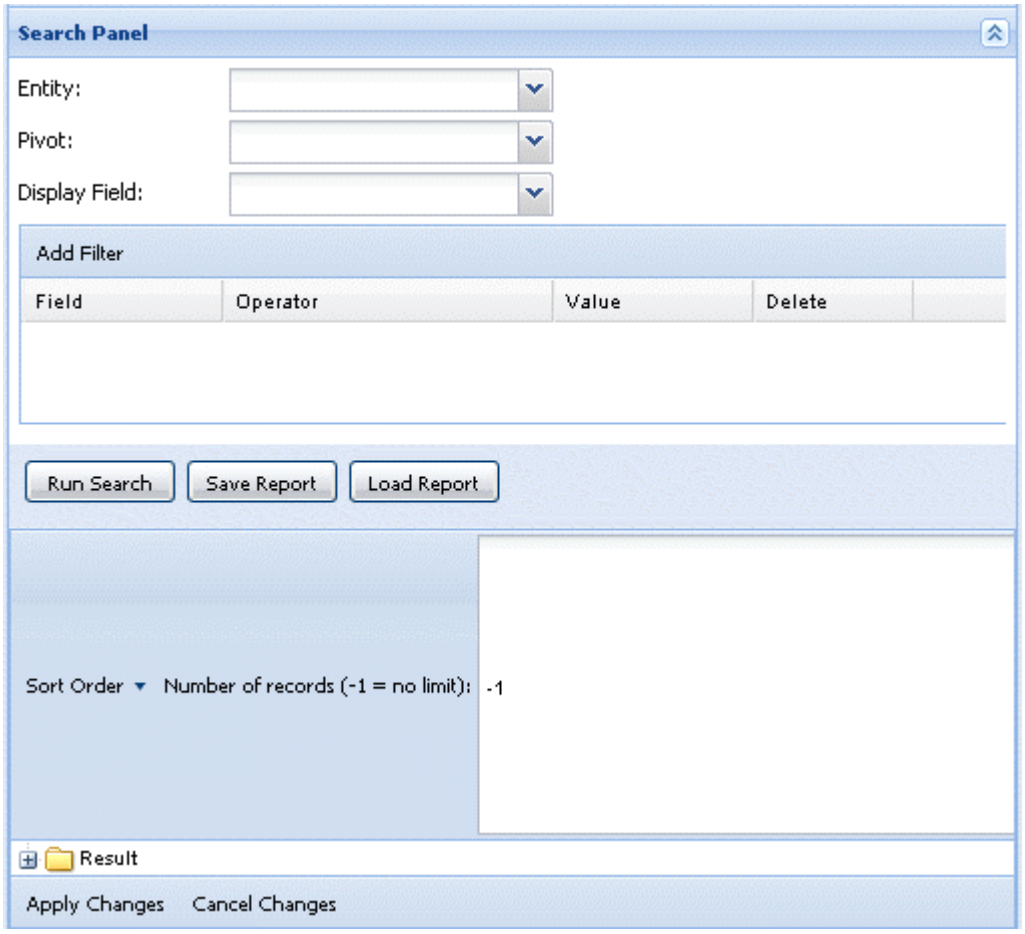
-the data model against which the master data will be validated.

For further information, see Section 3.1, “Accessing data containers and data models”.

To create a hierarchical view for an entity, complete the following:

1. On the **Menu** panel, click on **Grouping Hierarchy**.

   A new page opens.



2. From the **Entity** list, select the entity for which you want to create a hierarchical view.

   From the **Pivot** list, select the entity attribute by which you want to group the attributes.

   From the **Display Field** list, select the attribute you want to display.

   In this example, we want to classify agencies by their states.

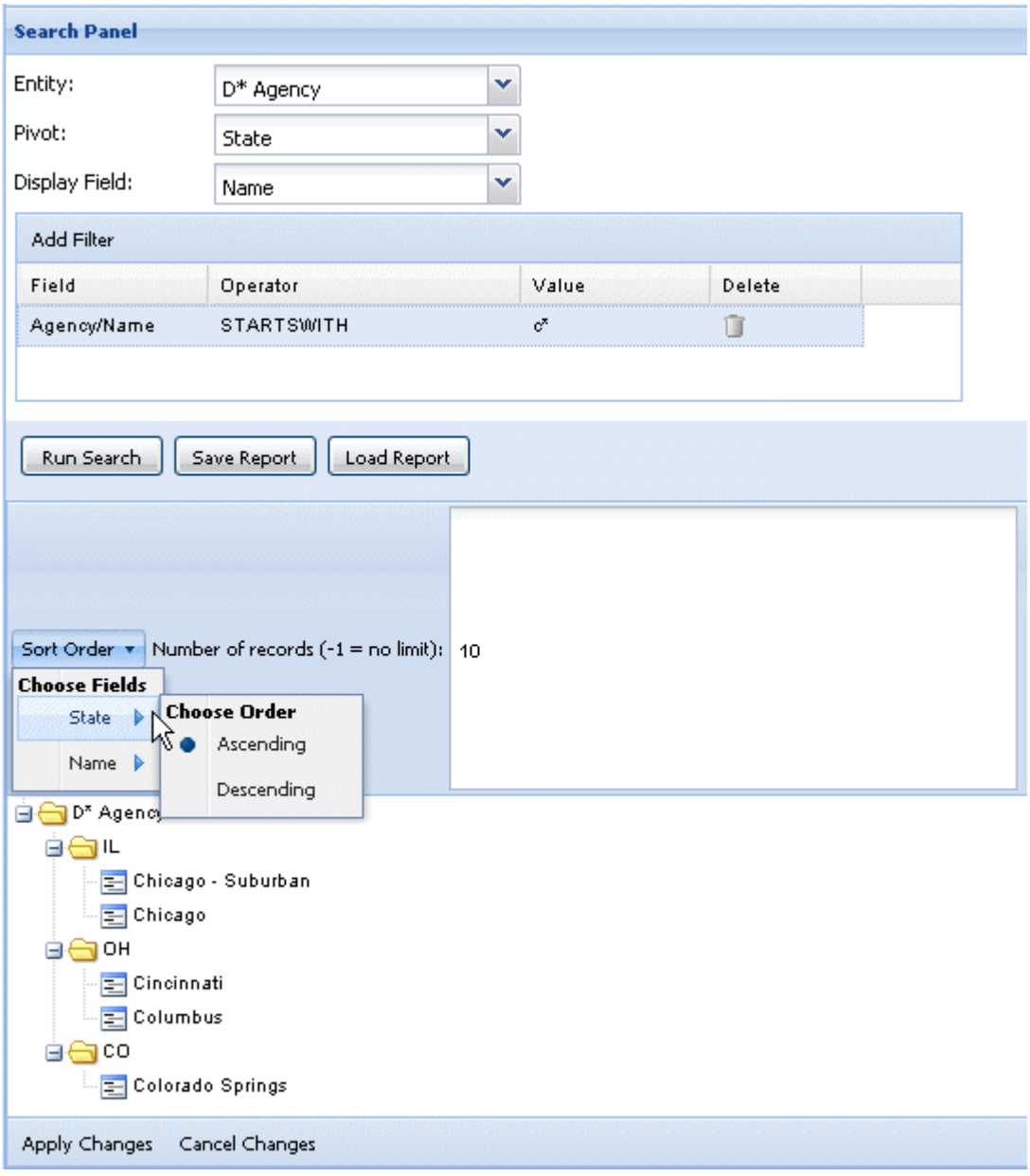
3. Click on **Add Filter** if you want to limit the results presented in the schematic view according to the criteria you set in the **Filters** table.

   For example, here we will search only for agencies which names start with the letter “c”.

4. In the **Number of records** field, enter the number of the records you want to displayed in the list, if required. If you keep *-1*, all entity records present on the MDM server will be displayed in the list.

5. Click on **Run Search**.

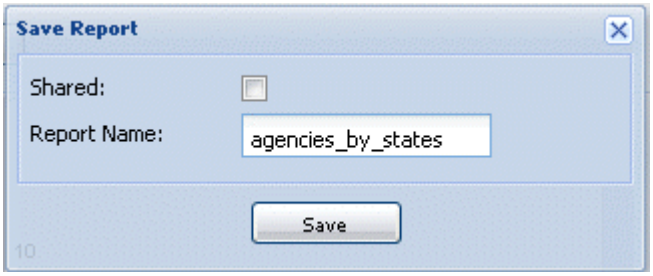
   A schematic view appears to classify filtered agencies by their countries.



6. If required, click the **Sort Order** arrow and select the field/order according to which you want to order the records in the list.

7. Click on **Save Report** if you want to save the settings of the current hierarchical view.

   A dialog box opens.



8. Enter a name for the hierarchical view in the **Report Name** field and then click on **Save** to complete the operation.

   A confirmation message displays.

9. Click on **OK** to close the message.

   The hierarchical view is saved and will be available to load when needed. For further information, see Section A.2.3, “How to load a specific grouping hierarchy”

A.2.2. How to update data records using the grouping hierarchy page

Once a grouping hierarchy is created, you can modify the classification of any of the data records represented in the schematic view or the information pertaining to one specific data record.

Prerequisite(s): The MDM server is already launched.

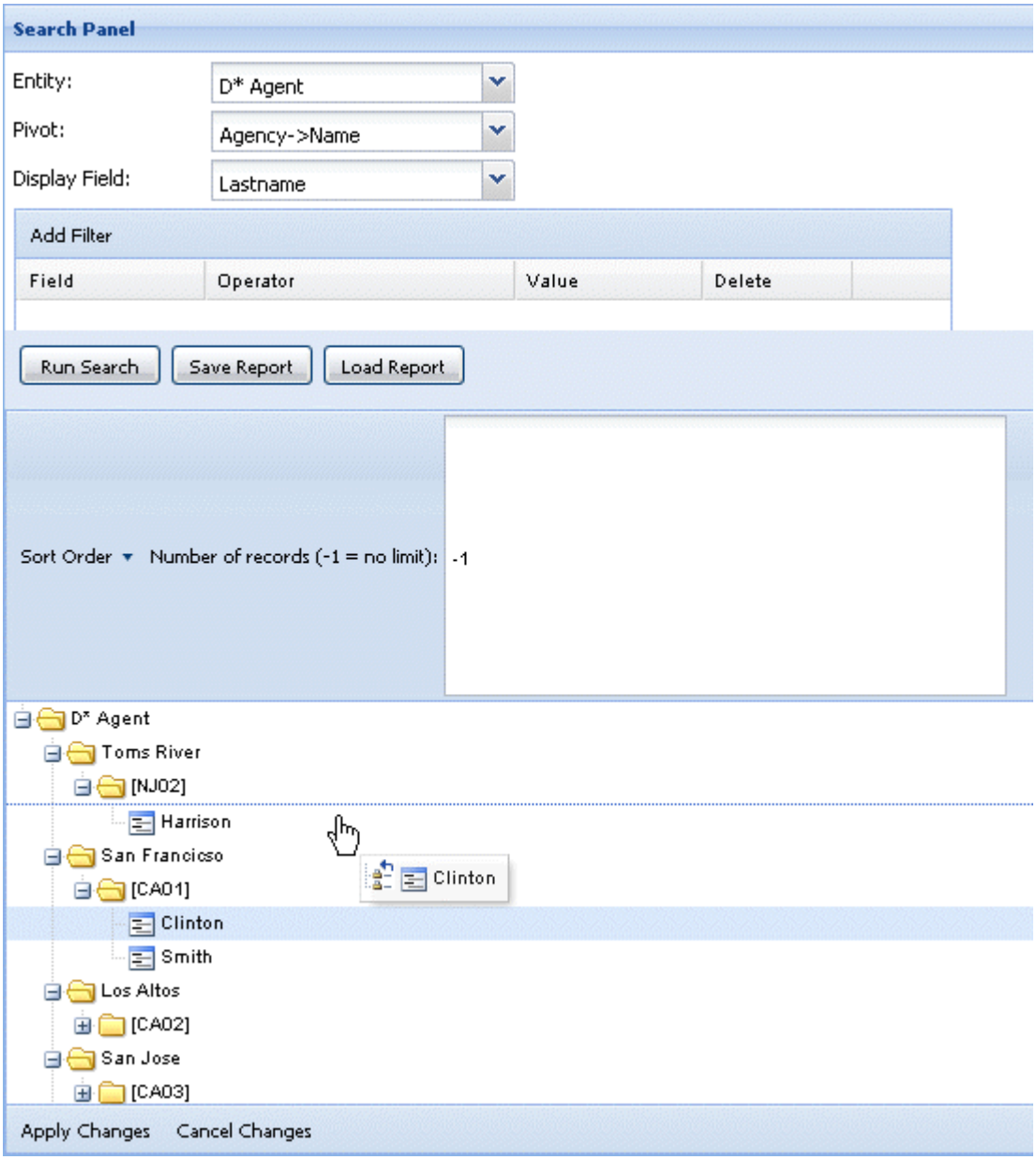
Make sure that you have selected:

-the data container that holds the master data you want to manage,

-the data model against which the master data will be validated.

For further information, see Section 3.1, “Accessing data containers and data models”.

1. Follow the steps outlined in Section A.2.1, “How to create a grouping hierarchy” to create a schematic view.



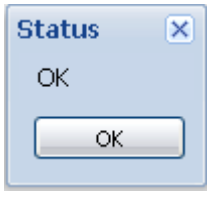
Consider a scenario where an agent called *Clinton* leaves an agency named *San Francisco* for an agency named *Tomes River*. You must create a hierarchical view representing the agent names classified by agencies.

2. To update this change using this hierarchical view:

   Drag *Clinton* from the *San Francisco* folder to the *Toms River* folder.

3. Click on **Apply Changes**.

   A progress bar indicates that the change is being saved. A pop-up confirms that the change has been saved successfully.



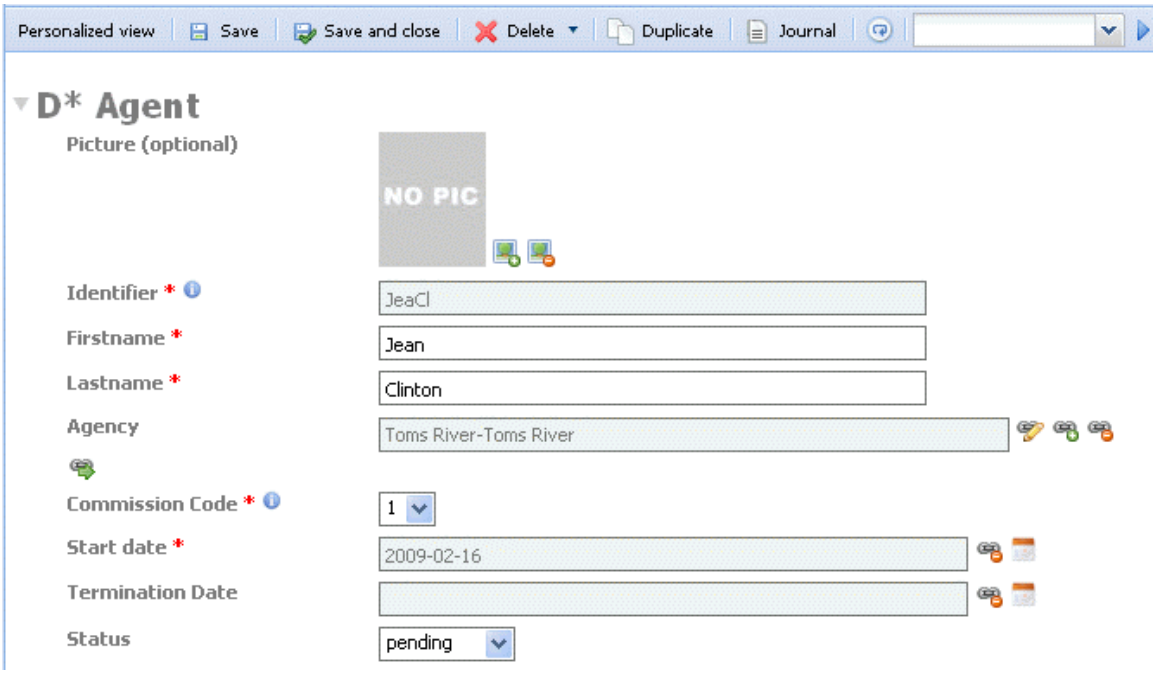
4. Click **OK** on the pop-up.

The update of the data record has been saved.

5. You may now decide that you want to update information which is not viewable in the schema you have defined:

   Double-click on the *Clinton* agent.

   All of the information concerning this agent appears in the page.



You can now update any of the information displayed. For further information on how to do this, see Section 3.3.3, “How to update a data record in an entity”.

A.2.3. How to load a specific grouping hierarchy

From the [**Grouping Hierarchy]** page, you can load any of the stored views to check data or to carry out modifications.

Prerequisite(s): The MDM server is already launched.

Make sure that you have selected:

-the data container that holds the master data you want to manage,

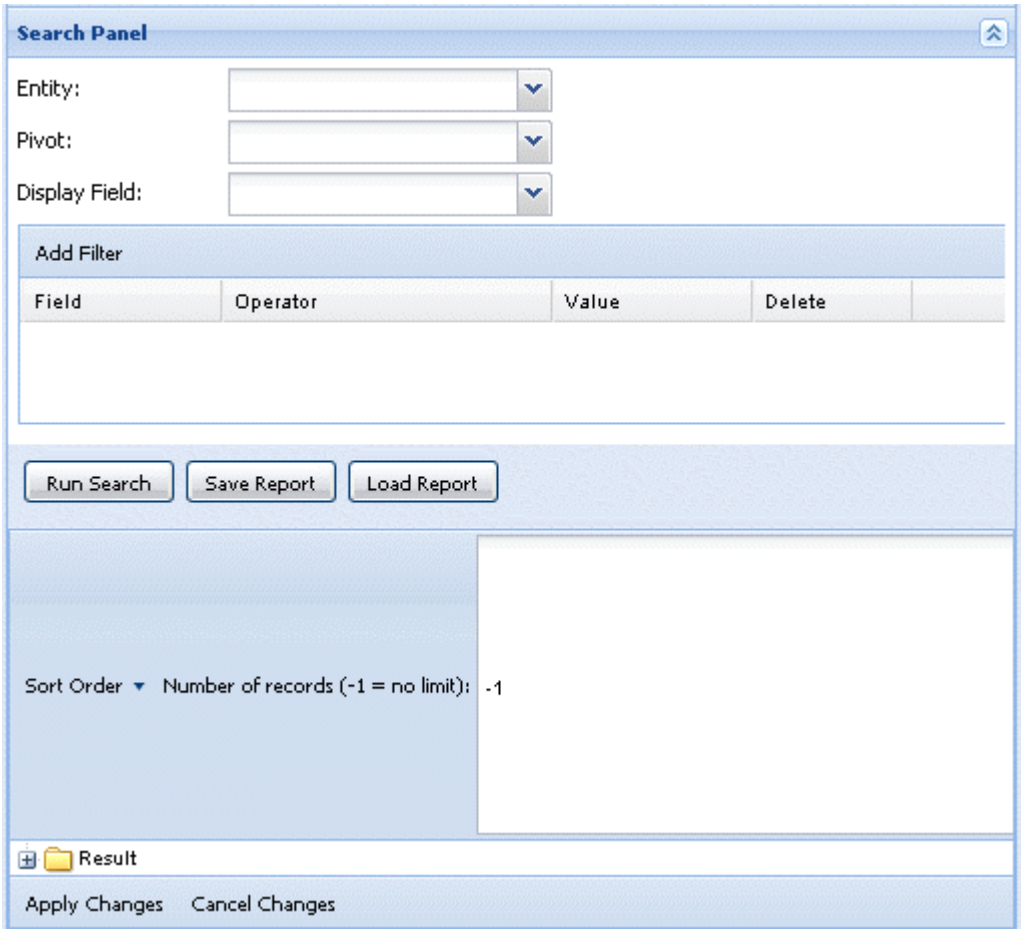
-the data model against which the master data will be validated.

For further information, see Section 3.1, “Accessing data containers and data models”.

To load a specific hierarchical view, complete the following:

1. On the **Menu** panel, click on **Grouping Hierarchy**.

   A new page opens.



2. Click on **Load Report**.

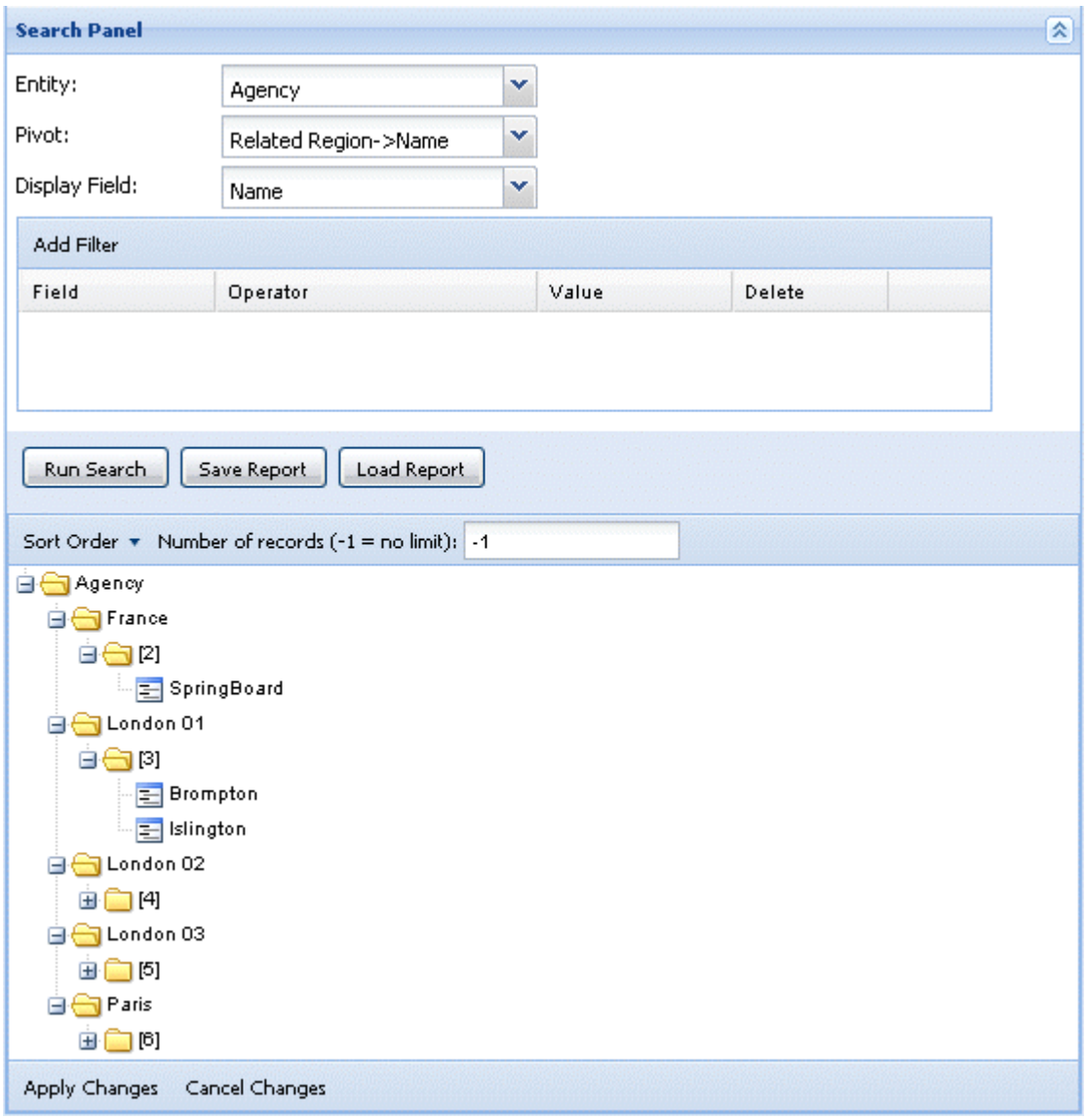
   A dialog box opens.

3. From the **Reports** list, select the name of the hierarchical view you want to open and then click on **Load**.

   The dialog box closes and the settings for the selected hierarchical view display in the **Search Panel** fields.

4. On the **[Hierarchical View Display]** page, click on **Run Search**.

   The selected hierarchical view opens.



From this view, you can modify the classification of any of the data records represented in the schematic view or the information pertaining to one specific data record. For further information, see Section A.2.2, “How to update data records using the grouping hierarchy page”.

A.3. Using data reports

From the **[Reports]** page in *Talend MDM Web User Interface*, authorized users can:

- create simple reports on master data showing information according to defined criteria.
- create multiple reports that pivot on a specified element for each data record.
- create reports containing data resulting from XQuery instructions (stored procedures) listed in the Studio.

  For more information on stored procedures, see the *Talend Open Studio for MDM* Administrator Guide.
- generate .xls files from these reports and export them locally to be viewed offline at a later date or to be shared with other business users.

Authorized users can export, edit, and delete data reports.

The following sections detail the procedural steps to carry out each of the above management options.

A.3.1. How to create a simple report on master data

From *Talend MDM Web User Interface*, you can create a data report on a specific business entity in the selected data container.

Prerequisite(s): The MDM server is already launched and you have logged in to *Talend MDM Web User Interface*.

Make sure that you have selected:

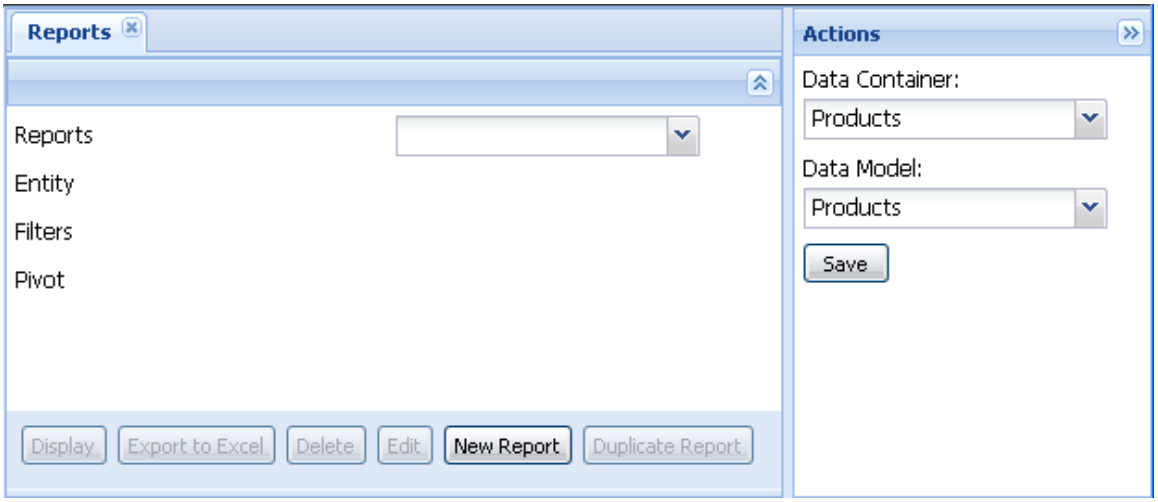
-the data container that holds the master data on which you want to create a report,

-the data model against which the master data will be validated.

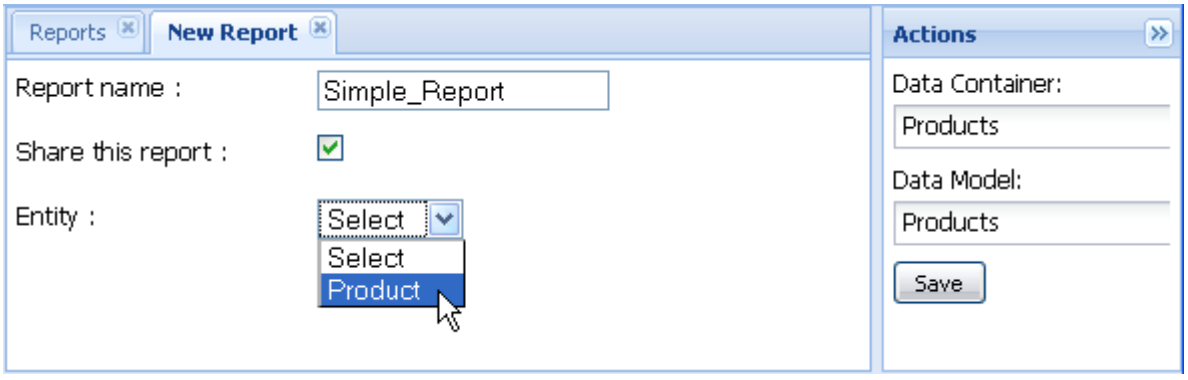
For further information, see Section 3.1, “Accessing data containers and data models”.

To create a simple report on master data, complete the following:

1. Click on **Reports** in the **Menu** panel to open a new page.

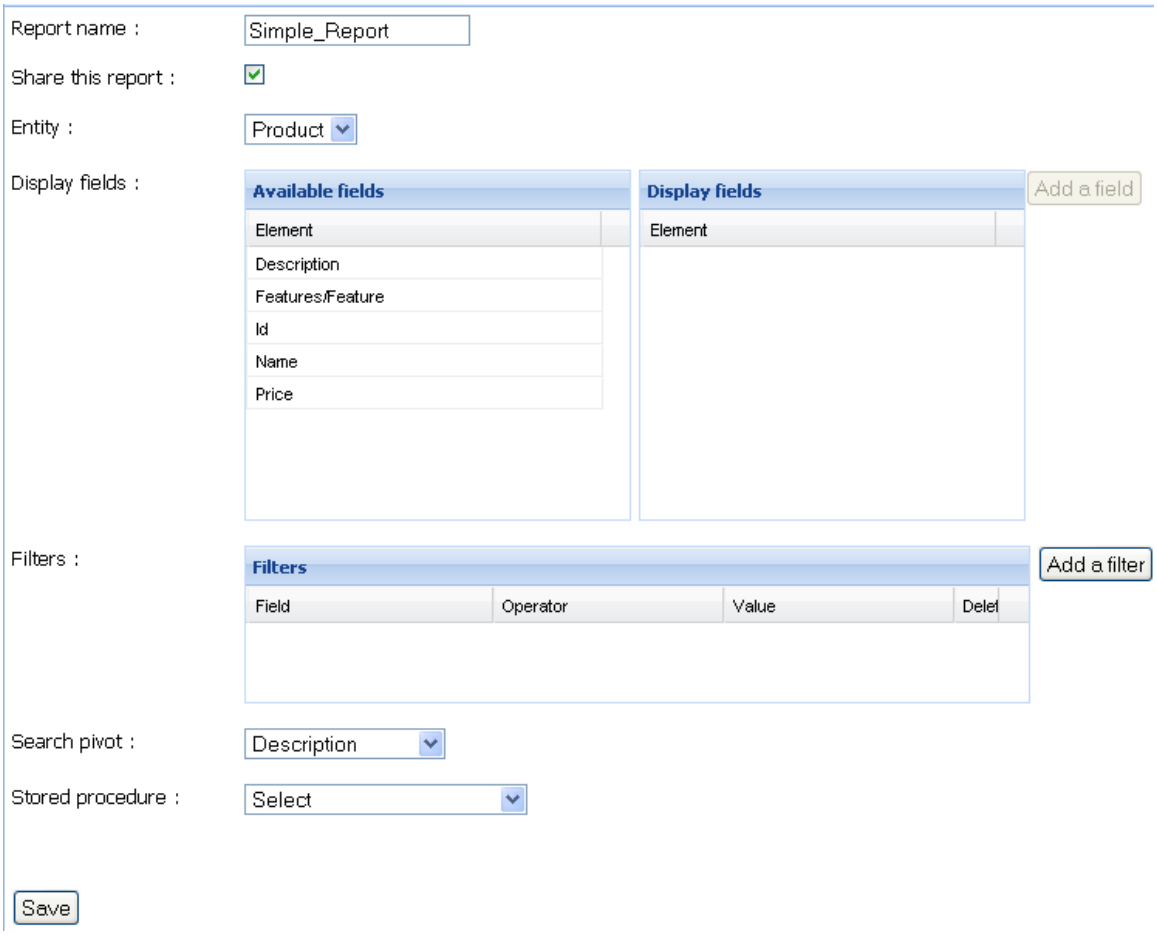


2. Click on **New Report** to proceed to the next step.



3. In the **Report name** field, enter a name for the report you want to create.
4. Select the **Share this report** check box if you want other business users to have access to your report.
5. From the **Entity** list, select the business entity you want to create a report on.

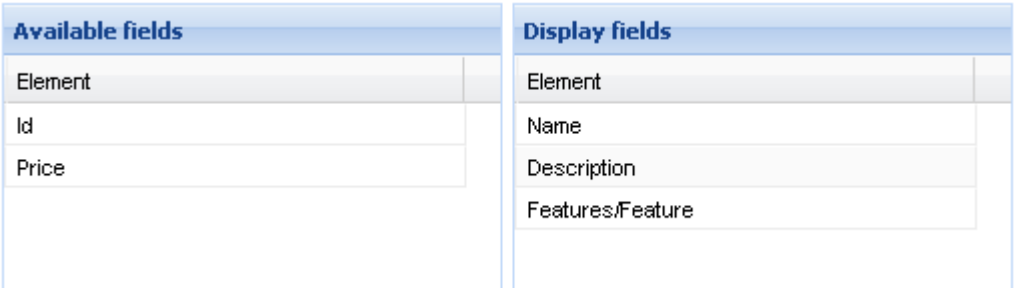
All the attributes pertaining to the selected entity display in the **Available fields** list.



6. From this page you can define the information to be displayed in the report by dragging and dropping the attributes.

   Drag all the attributes you want to show in the report from the **Available fields** list to the **Display fields** list.

   In this example, we want to show only the *Name*, *Description* and *Features* of the data records in the selected entity.

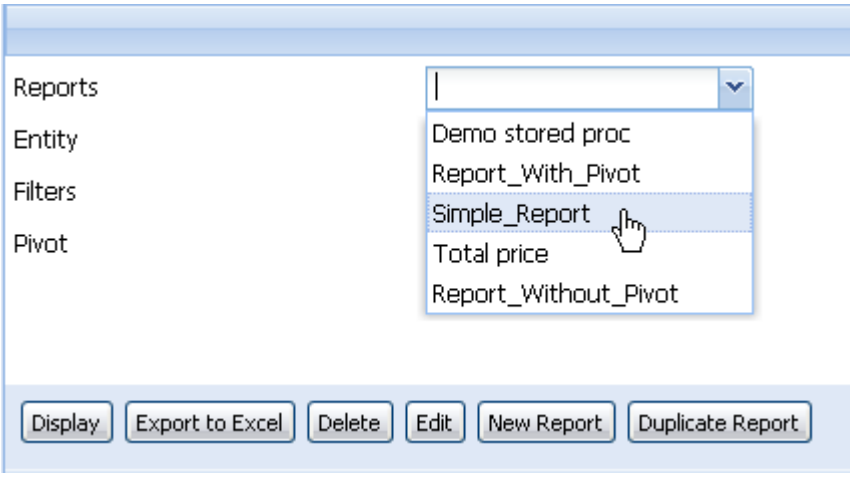


7. In the **Filters** area, click on **Add a filter** to add a line to the **Filters** table. Then click in this line to apply the filter conditions to the data you want to display in the report.

   You can create reports that use pivot or XQuery instructions on master data. For further information, see Section A.3.2, “How to create a report with pivot” and Section A.3.3, “How to create a report with a stored procedure”.

8. Click on **Save**.

   This page closes and the created report is listed in the **Reports** list.



To display the content of this report or any other report in the **Reports** list, refer to Section A.3.4, "How to view the content of a report".

To generate an .xls file of this report, refer to Section A.3.5, "How to generate an .xls file of a report".

A.3.2. How to create a report with pivot

You can create a report on master data using a pivot. This function enables you to produce a report with multiple occurrences for the same data record, repeating the same criteria for varying elements of a specific attribute.

A report with a pivot can provide greater insight on master data than a simple report.

Consider, as an example, a data record called *Cup*. This cup has the following features: *Color red*, *Size Maxi* and *Disney Picture*. With a simple report, you will get one record: *Cup*, *Color Red*.

With a report using pivot, you can iterate through the features by specifying *Features/Feature* as the pivot. Talend MDM will now repeat the record for each feature and you will get three records for *Cup*:

Cup, *Color Red Cup*, *Size Maxi Cup*, *Disney Picture* So this record is repeated three times, each representing one of its features.

Prerequisite(s): The MDM server is already launched and you have logged in to *Talend MDM Web User Interface*.

Make sure that you have selected:

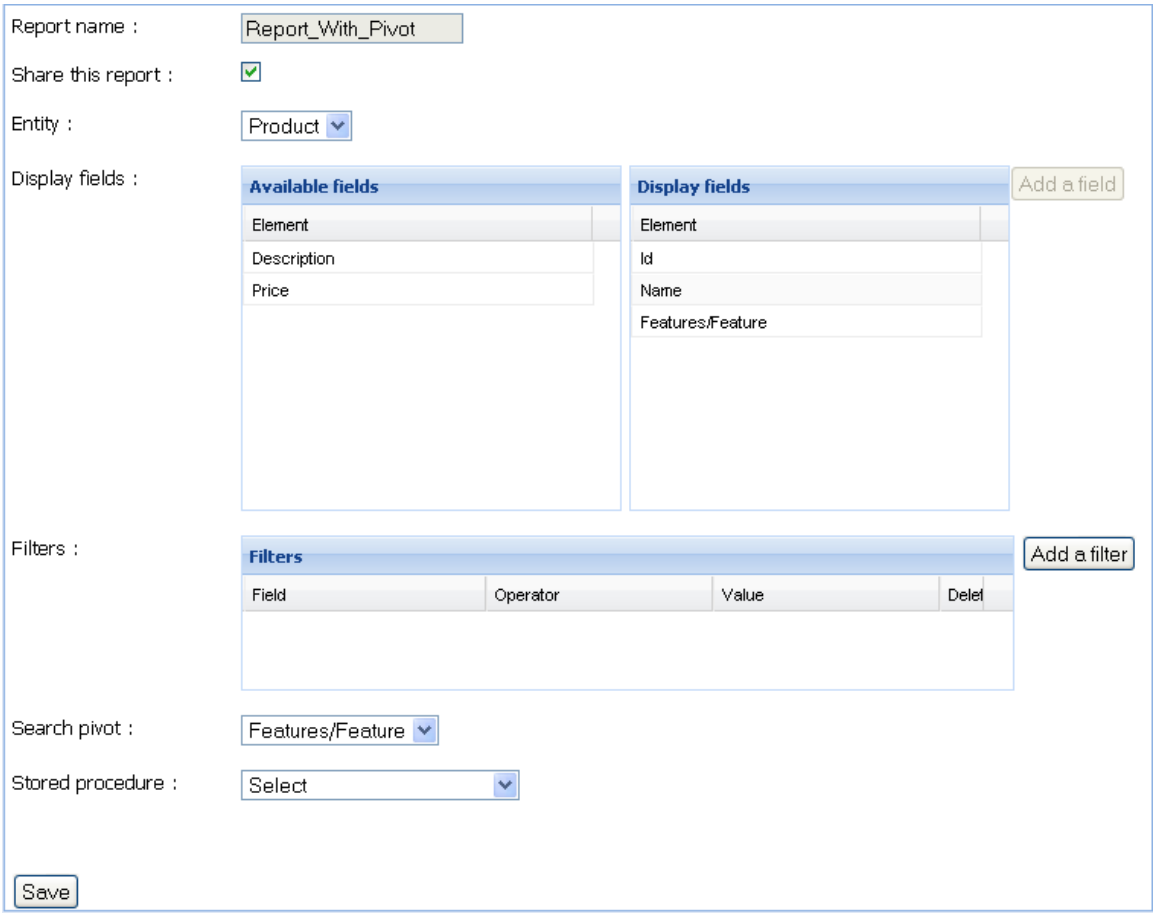
-the data container that holds the master data on which you want to create a report,

-the data model against which the master data will be validated.

For further information, see Section 3.1, "Accessing data containers and data models".

To create a report with a pivot, complete the following:

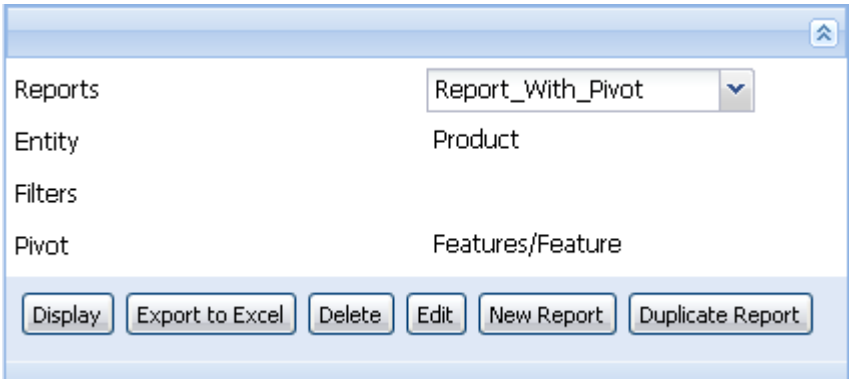
1. Follow the steps outlined in Section A.3.1, "How to create a simple report on master data" to create a simple report.



In this example, we want to create a report on an entity called *Product*. we want to show in this report the *id*, *name* and each of the *Features* for all data records in *Products*.

2. From the **Search pivot** list, select the attribute by which you want to group data, in this case we have selected *Features*.

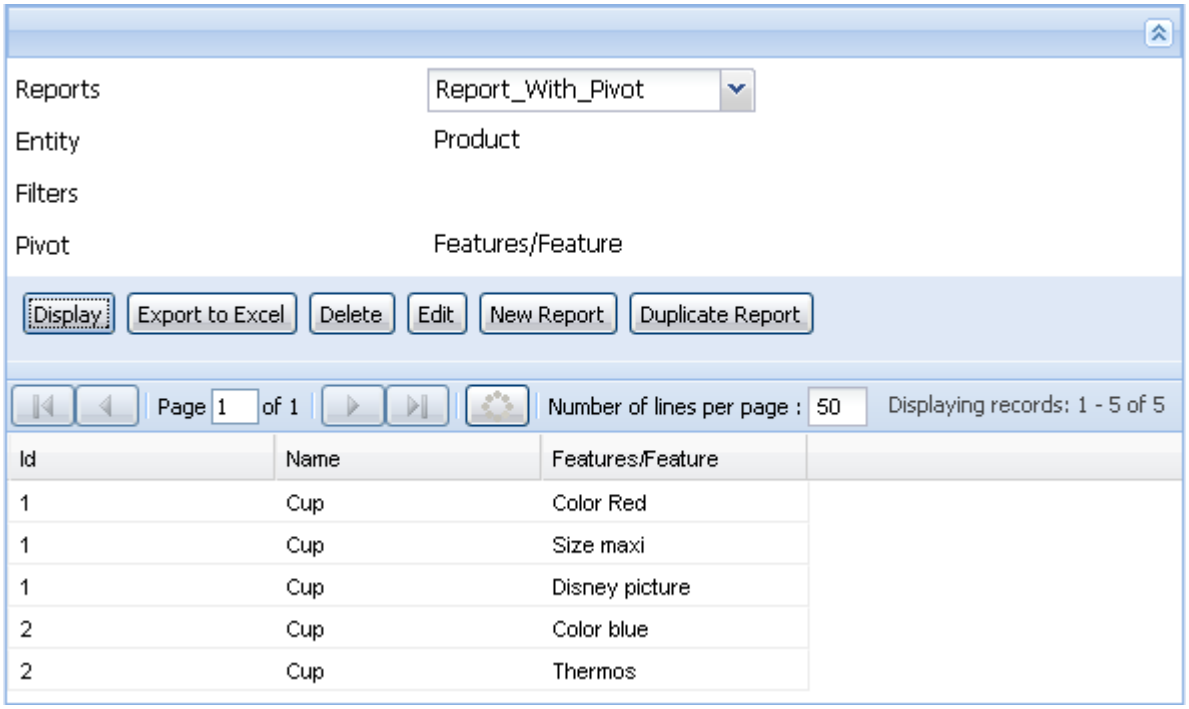
3. Click on **Save** to proceed to the next step.



4. From the **Reports** list, select the new report you have created.

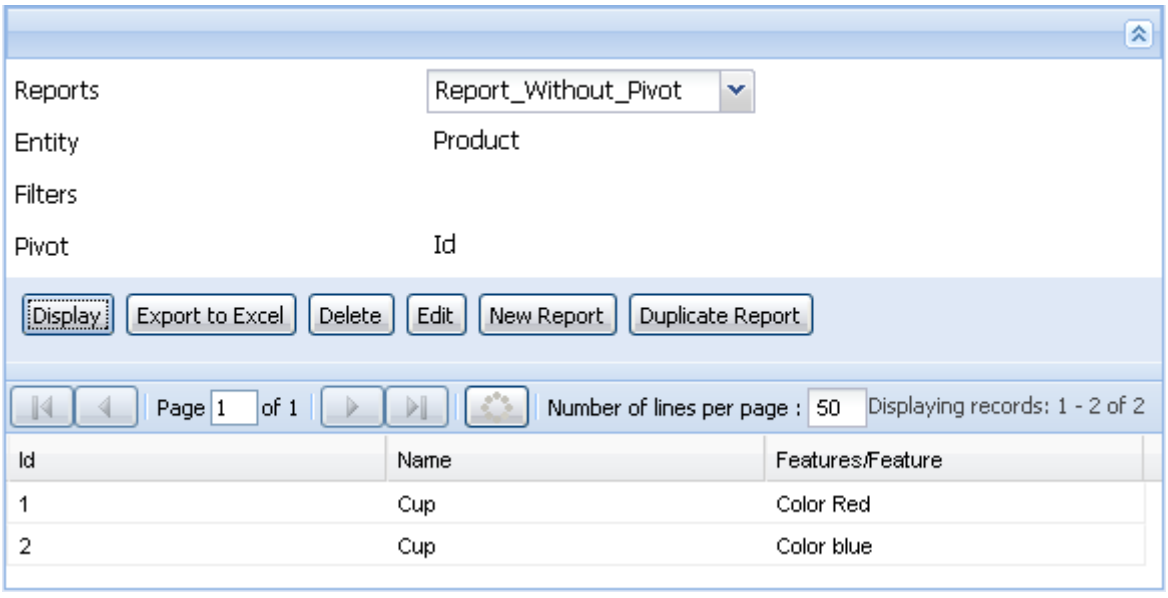
   The report parameters display below the field showing the element used to group data records by.

5. Click on **Display.** In the displayed list, information for each data record is repeated for each of the elements according to the selected attribute.



In this example, the first data record (cup) is *red* in color, *maxi* in size and has a *Disney picture*. So this record is repeated three times, each representing one of its features. While the second data record is a *Thermos* cup that is *blue* in color and thus is listed twice in the report.

A report with the same parameters on the same master data will show the following information if a pivot is not used in it:



To generate an .xls file of this report, refer to Section A.3.5, “How to generate an .xls file of a report”.

A.3.3. How to create a report with a stored procedure

Talend MDM Web User Interface allows you to create data reports that call specific XQuery instructions (stored procedures) listed in *Talend Open Studio for MDM* to query specific master data and to then return the results in the report.

These XQuery instructions support input parameters and are used to query master data grouped in the central XML repository. The input parameters of the XQuery instructions are defined as a % sign followed by a number. For example: %0, %1, %2,%n.

The syntax of these XQuery instructions must follow a particular XML schema if they are to be called in a report. Their result line must have the following syntax: <result><Field1>val1</Field1>...<Fieldn>valn</Fieldn></result>. The "Field#" are the fields defined in the report page.

For example, the syntax of the stored procedure created in the Studio and used with this report should be as follows:

```
for $d in distinct-values(//Product/Name)
let $product := //Product[Name= $d and Price >= %0 and Price <=
%1]
order by $d
return <result><Name>{$d}</Name><Sum>{sum($product/Price)}</Sum></result>
```

For further information on stored procedures, see the *Talend Open Studio for MDM* Administrator Guide.

Prerequisite(s): The MDM server is already launched and you have logged in to *Talend MDM Web User Interface*.

Make sure that you have selected:

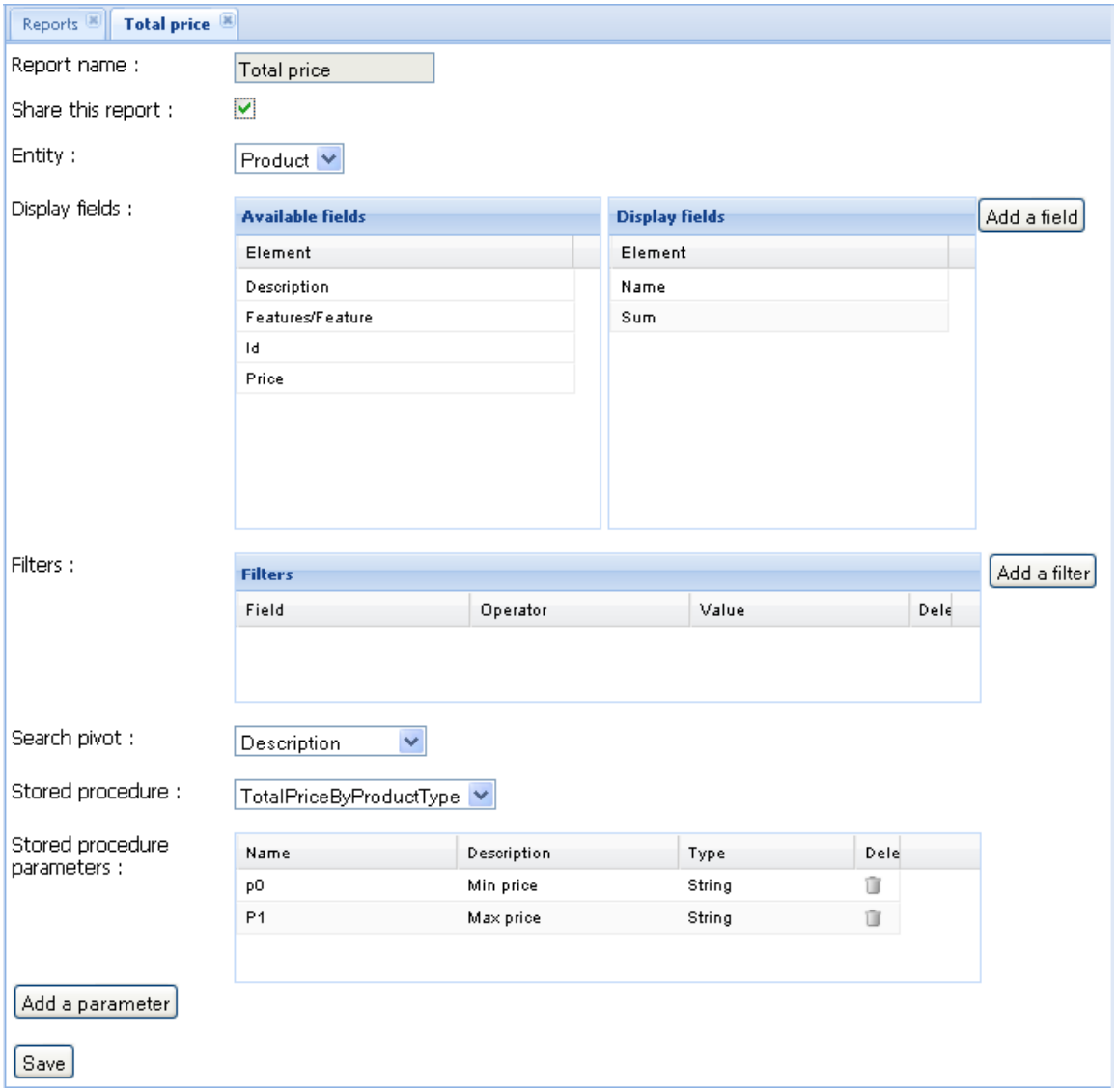
-the data container that holds the master data on which you want to create a report,

-the data model against which the master data will be validated.

For further information, see Section 3.1, "Accessing data containers and data models".

To create a report with a stored procedure, complete the following:

1. Follow the steps outlined in Section A.3.1, "How to create a simple report on master data" to create a simple report.



You can build the report by using simple drag and drop operations on existing fields from the selected entity, or add any other fields with the **Add a field** button.

In this example, the report will display the name(s) of the data records and the sum of their prices calculated by the stored procedure.

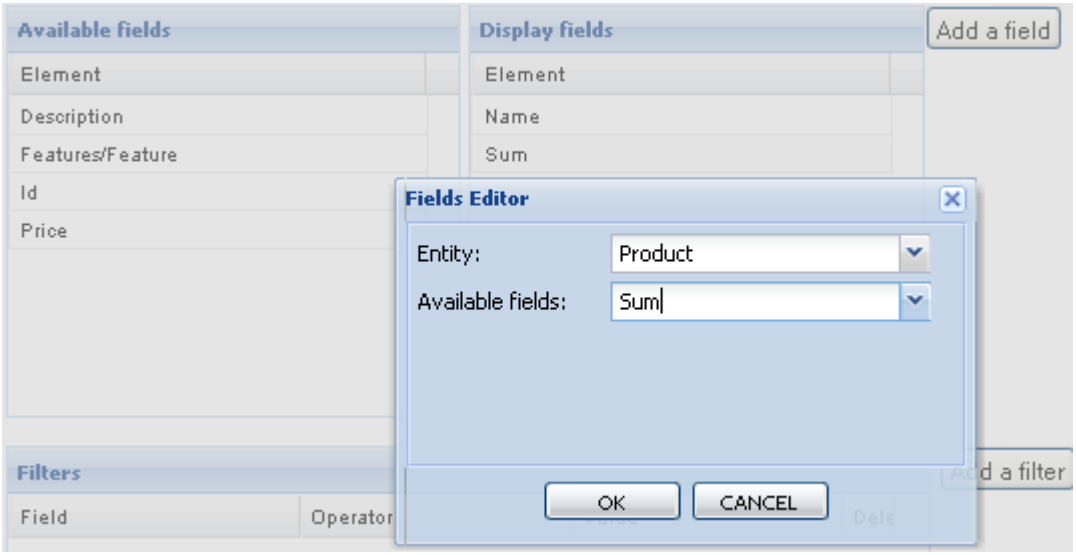
*Make sure to map in the **Display fields** list the exact fields defined in the stored procedure result. In this instance, Name and Sum.*

2. Drop *Name* from the **Available fields** list into the **Display field** list.

3. From the **Stored procedure** list, select the stored procedure you want to use to calculate the sum of the prices.

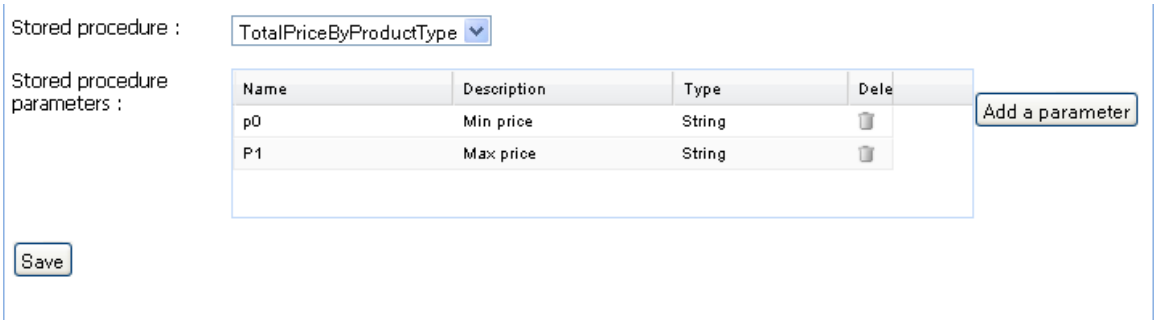
   A **Stored procedure parameters** table displays.

4. In the **Display fields** area, click on **Add a field** to open the **[Fields Editor]**. Here you can add the field that will hold the result returned by the stored procedure.



5. From the entity list, select the entity on which you want to execute the stored procedure.
6. In **Available fields**, enter the name of the new field that will show the returned result after executing the stored procedure, in this case, the sum of the prices.
7. Click on **OK** to close the editor and proceed to the next step.

   The new field shows in the **Display field** list.
8. In the **Stored procedure parameters** table, enter a name, a description and a type for each of the input parameters of the stored procedure in the corresponding fields.



You must define a parameter for each input parameter, %X (X = 0 to N), used in the XQuery instructions defined in *Talend Open Studio for MDM*.

9. If required, click on **Add a parameter** to add a line to the table and fill it with the new parameter information.
10. Click on **Save** at the bottom of the page to proceed to the next step.

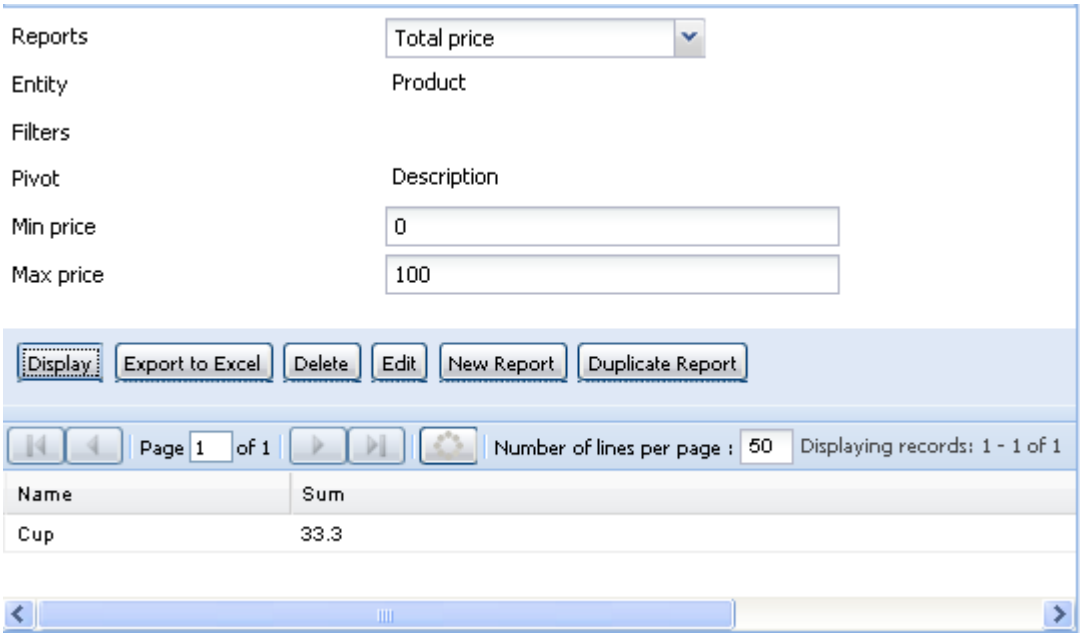
    The new report page closes.

To open the report created with the stored procedure, complete the following:

1. From the **Reports** list, select the report that uses the stored procedure.

   New parameter fields display labeled with the description you entered in the **Description** field in the **Stored procedure parameters** table.
2. Enter the corresponding input parameters and then click on **Display**.

   A list displays showing the name of the data record (cup) and the sum of the cup prices (10.2 + 23.10).



A.3.4. How to view the content of a report

Prerequisite(s): The MDM server is already launched and you have logged in to *Talend MDM Web User Interface*.

Make sure that you have selected:

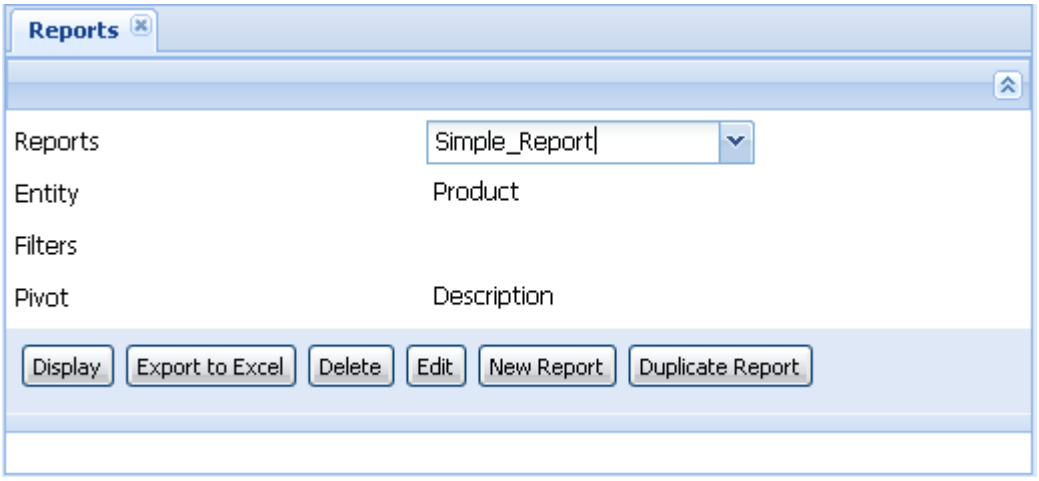
-the data container that holds the master data for which you want to manage reports,

-the data model against which the master data will be validated.

For further information, see Section 3.1, “Accessing data containers and data models”.

To display an existing report, complete the following:

1. Click on **Reports** in the **Menu** panel to open a new page.

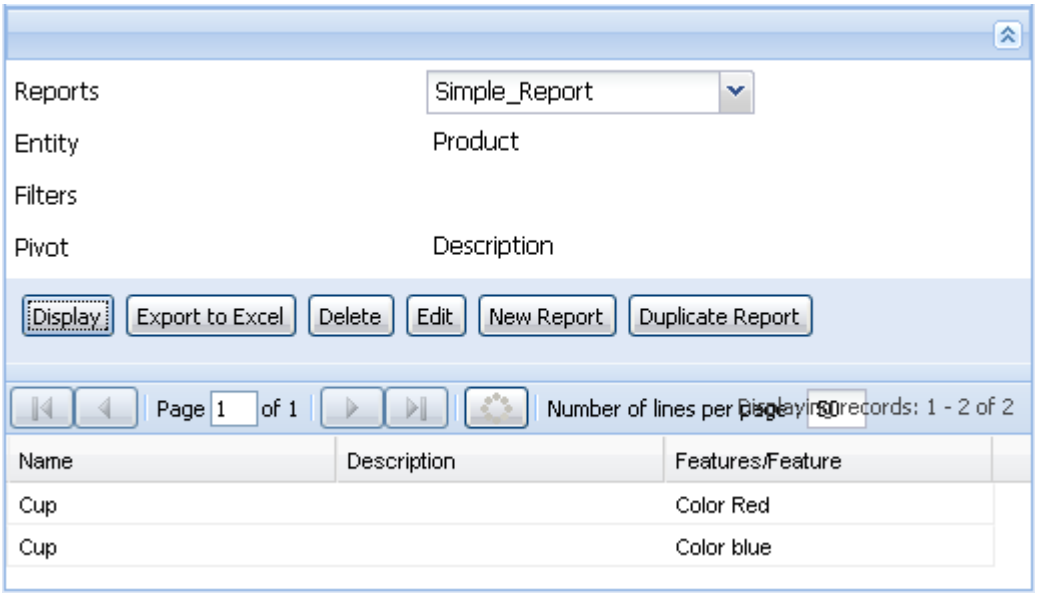


2. From the **Reports** list, select the report you want to view.

   The parameters for the selected report display.

3. Click on **Display**.

All attributes matching the conditions set display in the lower half of the page. In this report, only the *Name*, *Description* and *Features* are to be displayed. For more information, refer to Section A.3.1, "How to create a simple report on master data".



A.3.5. How to generate an .xls file of a report

Once a report is created on master data, you can generate/export an .xls file and save it locally in order to share it offline with other business users.

Prerequisite(s): The MDM server is already launched and you have logged in to *Talend MDM Web User Interface*.

Make sure that you have selected:

-the data container that holds the master data for which you want to manage reports,

-the data model against which the master data will be validated.

For further information, see Section 3.1, "Accessing data containers and data models".

To generate an .xls file of a report, complete the following:

1. Follow the steps outlined in Section A.3.4, "How to view the content of a report" and open the report for which you want to generate an .xls file.
2. On the **[Reports]** page, click on **Export to Excel**.

   A browser dialog box opens prompting you to open or save the file.
3. Select the **Save File** option and then click on **OK**.

   The selected report is exported as an .xls file to your desktop.

A.3.6. How to edit a report

Prerequisite(s): The MDM server is already launched and you have logged in to *Talend MDM Web User Interface*.

Make sure that you have selected:

-the data container that holds the master data for which you want to manage reports,

-the data model against which the master data will be validated.

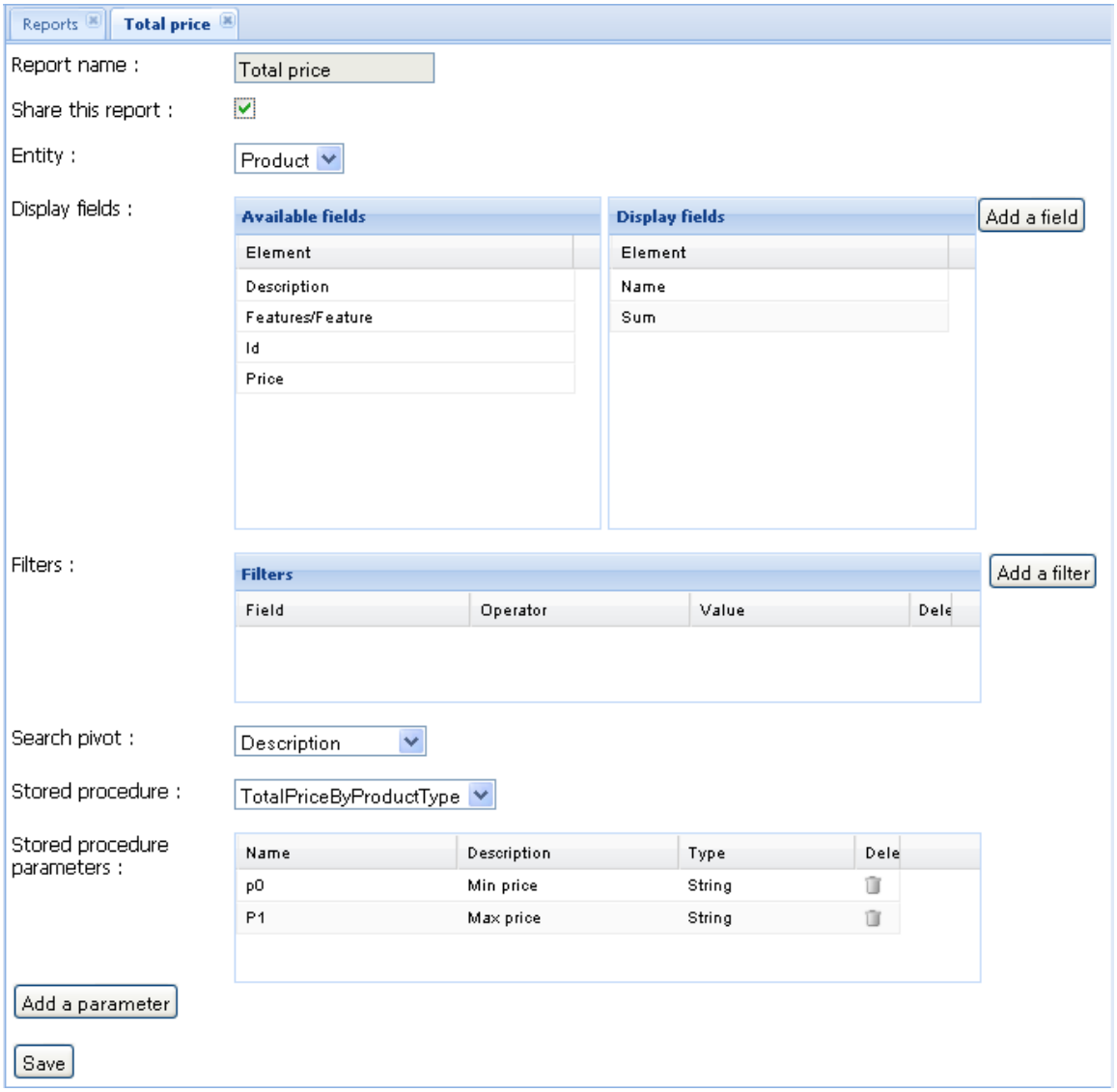
For further information, see Section 3.1, “Accessing data containers and data models”.

To edit an existing report, complete the following:

1. Follow the steps outlined in Section A.3.4, “How to view the content of a report” to open the report you want to edit.

2. On the **[Reports]** page, click **Edit** to proceed to the next step.

   A page with the current report name opens showing all the report parameters.



3. Modify the report parameters as required and then click on **Save** to save your modifications and close the page.

A.3.7. How to duplicate a report

To avoid creating one or multiple reports from scratch, you can copy an existing one and modify its parameters to have a new report.

Prerequisite(s): The MDM server is already launched and you have logged in to *Talend MDM Web User Interface*.

Make sure that you have selected:

-the data container that holds the master data for which you want to manage reports,

-the data model against which the master data will be validated.

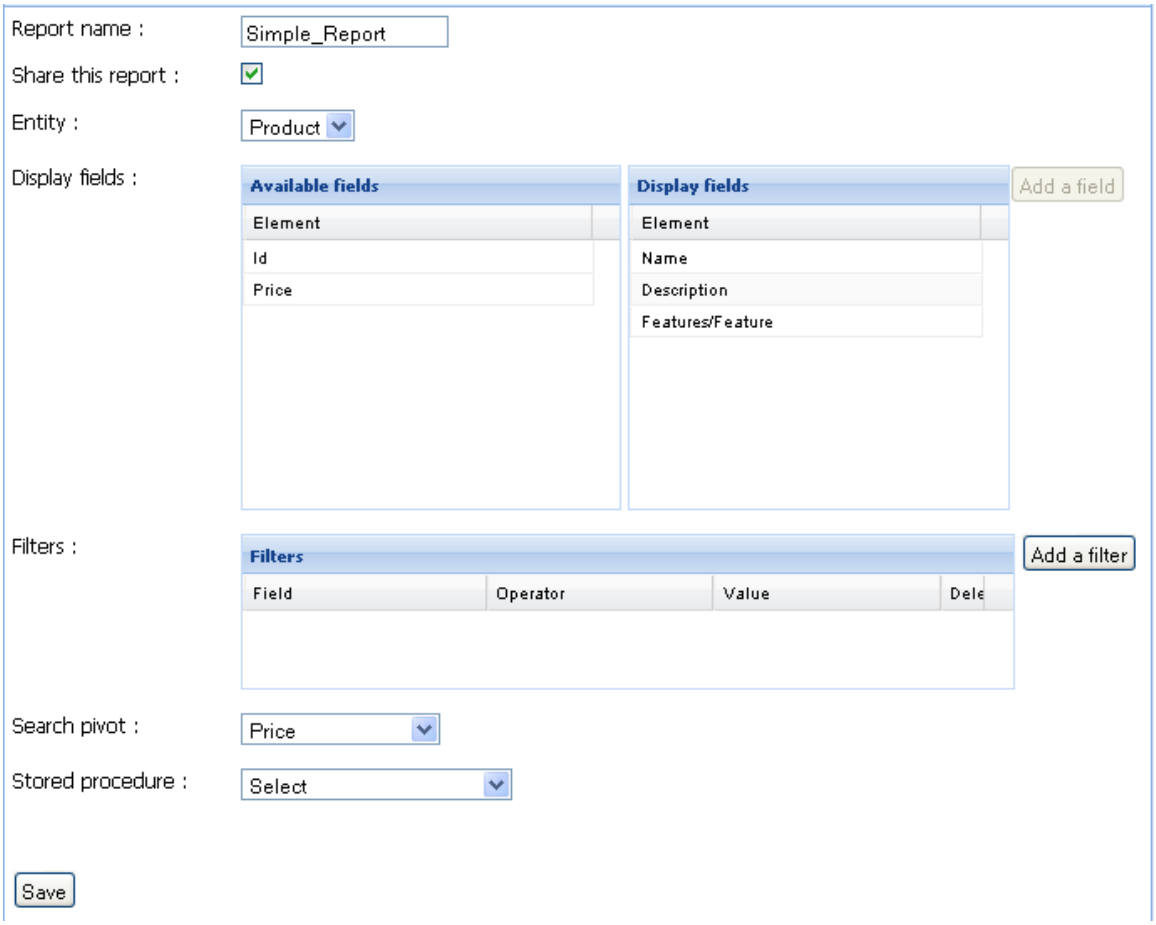
For further information, see Section 3.1, “Accessing data containers and data models”.

To duplicate an existing report, complete the following:

1. Follow the steps outlined in Section A.3.4, “How to view the content of a report” to open the report you want to duplicate.

2. On the [**Reports]** page, click **Duplicate Report** to proceed to the next step.

   A page with the current report name opens showing all the report parameters.



3. In the **Report name** field, enter a new name for the report.

4. Modify the report parameters as required and then click on **Save** to save your modifications and close the page.

   A record holding the new name and parameters is created and added to the **Reports** list.

A.3.8. How to delete a report

Prerequisite(s): The MDM server is already launched and you have already logged in to *Talend MDM Web User Interface*.

Make sure that you have selected:

-the data container that holds the master data for which you want to manage reports,

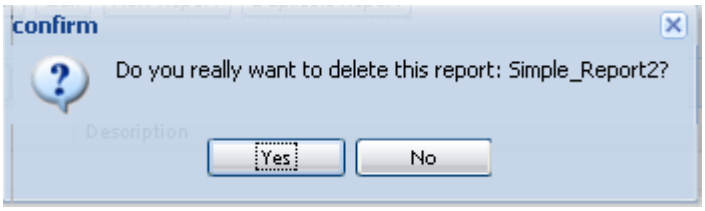
-the data model against which the master data will be validated.

For further information, see Section 3.1, “Accessing data containers and data models”.

To delete a report, complete the following:

1. Follow the steps outlined in Section A.3.4, “How to view the content of a report” and open the report you want to delete.
2. On the [**Reports]** page, click on **Delete**.

   A confirmation dialog box opens.



3. Click on **Yes**.

   The selected report is deleted from the **Reports** list.