

# MDM Client Application Design

## Lab Guide

Version: MDM10.4-CAD-202010



**Informatica™**  
University

## MDM Client Application Design

Version: MDM10.4-CAD-202010

October 2020

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This guide uses the following formatting conventions:

If you see...	It means...	Example
>	Indicates a sub menu to navigate to.	Click Repository > Connect. In this example, you should click the Repository menu or button and choose Connect.
<b>boldfaced text</b>	Indicates text you need to type or enter.	Click the Rename button and name the new source definition <b>S_EMPLOYEE</b> .
UPPERCASE	Database tables and column names are shown in all UPPERCASE.	T_ITEM_SUMMARY
<i>italicized text</i>	Indicates a variable you must replace with specific information.	Connect to the Repository using the assigned <i>login_id</i> .
<b>Note:</b>	The following paragraph provides additional facts.	<b>Note:</b> You can select multiple objects to import by using the Ctrl key.
<b>Tip:</b>	The following paragraph provides suggested uses or a Velocity best practice.	<b>Tip:</b> The m_ prefix for a mapping name is...

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# Module 0: Getting Started

## Lab 0: Starting the Services

### Overview:

The MDM Application Design environment has 1 Virtual Machine (VM).

For the MDM environment to work, we need to have all the MDM services up and running. In this lab, you will start the VM and deploy all the MDM services.

### Objectives:

- Start the VM in the lab environment – Start Applications
- Start JBoss and monitor deployments

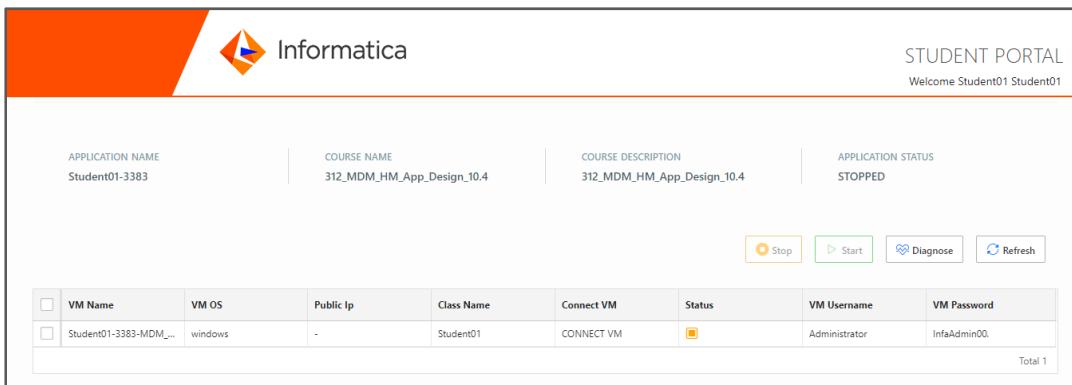
### Duration:

10 minutes

---

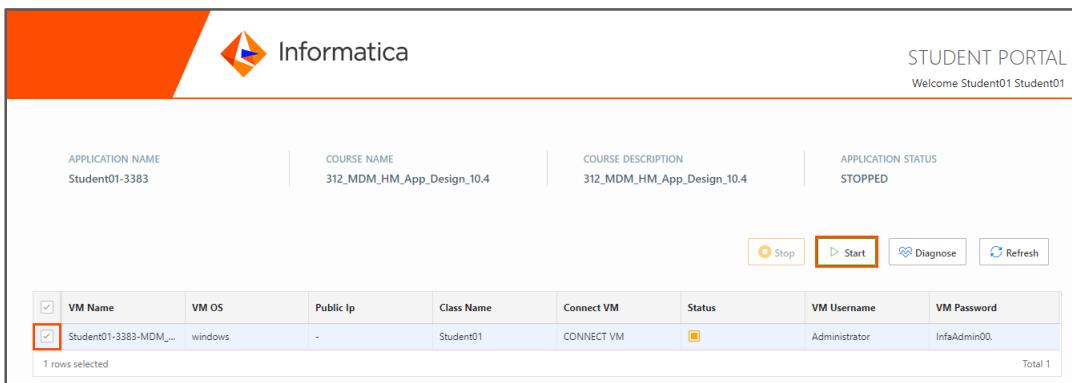
### Tasks

- Open the lab environment link.



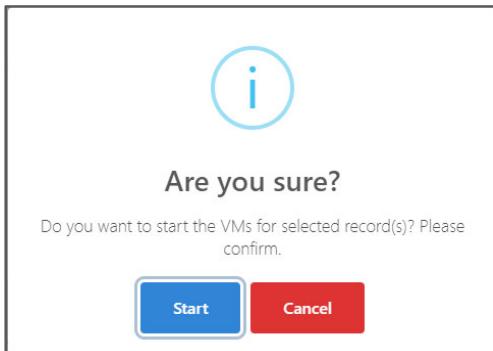
VM Name	VM OS	Public Ip	Class Name	Connect VM	Status	VM Username	VM Password
Student01-3383-MDM...	windows	-	Student01	CONNECT VM	<input checked="" type="button"/>	Administrator	InfaAdmin00.

- Select the VM and click **Start**.



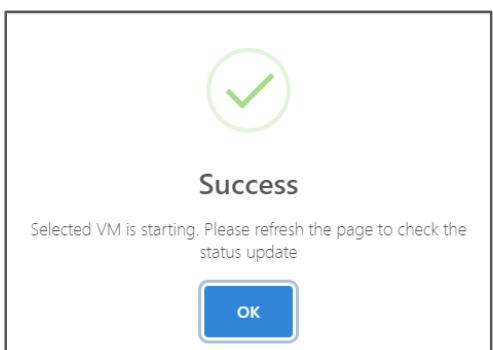
VM Name	VM OS	Public Ip	Class Name	Connect VM	Status	VM Username	VM Password
Student01-3383-MDM...	windows	-	Student01	CONNECT VM	<input type="button" value="Running"/>	Administrator	InfaAdmin00.

3. A confirmation window appears. Click **Start**.



**Note:** It will take a few minutes for the VM to start.

4. Click **OK**.



APPLICATION NAME	COURSE NAME	COURSE DESCRIPTION	APPLICATION STATUS
Student01-3383	312_MDM_HM_App_Design_10.4	312_MDM_HM_App_Design_10.4	STARTED
<input type="button" value="Stop"/> <input type="button" value="Start"/> <input type="button" value="Diagnose"/> <input type="button" value="Refresh"/>			
VM Name	VM OS	Public Ip	Class Name
<input type="checkbox"/> Student01-3383-MDM_...	windows	-	Student01
		CONNECT VM	<input checked="" type="button" value=""/>
		VM Username	Administrator
		VM Password	InfaAdmin00.
Total 1			

You can see that the VM is started.

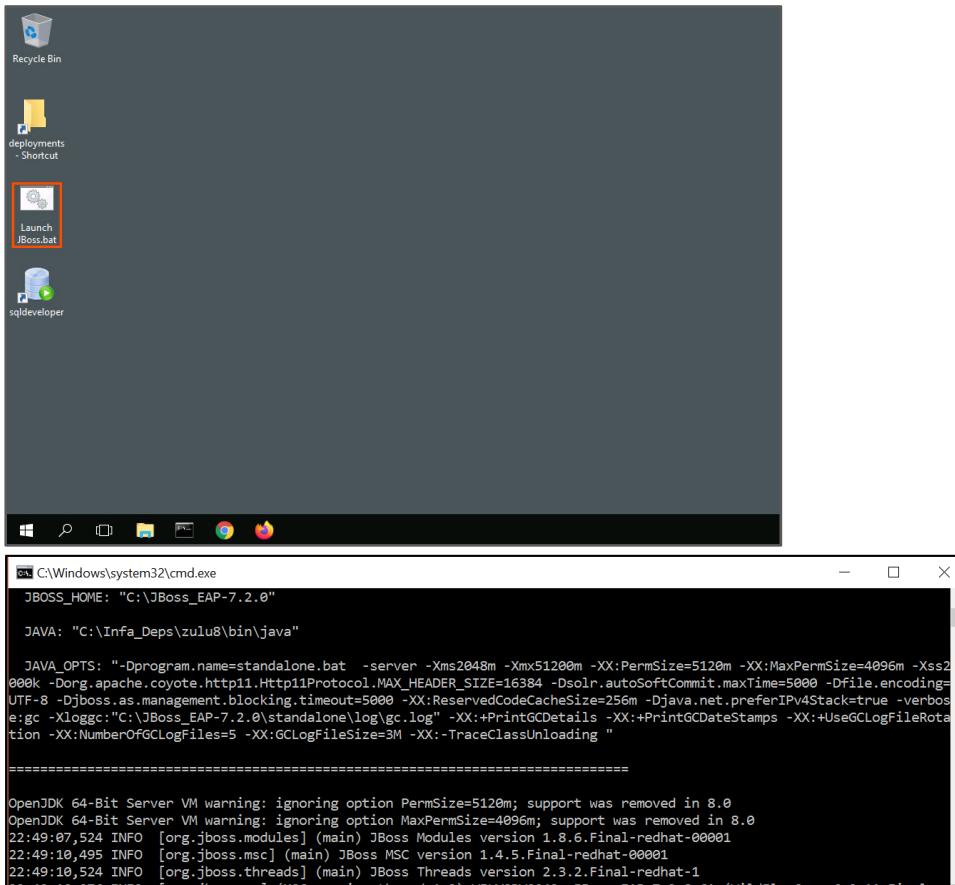
5. Click the **CONNECT VM** link of the **MDM App Design** VM.

<input type="checkbox"/>	VM Name	VM OS	Public Ip	Class Name	Connect VM	Status
<input type="checkbox"/>	Student01-3383-MDM_...	windows	-	Student01	<input type="button" value="CONNECT VM"/>	<input checked="" type="button" value=""/>

6. Click **Connect**.

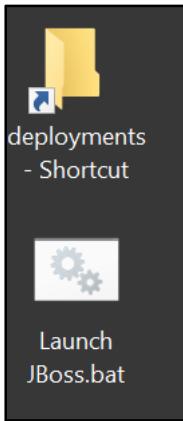


7. Double-click the **Launch JBoss** script on the desktop.

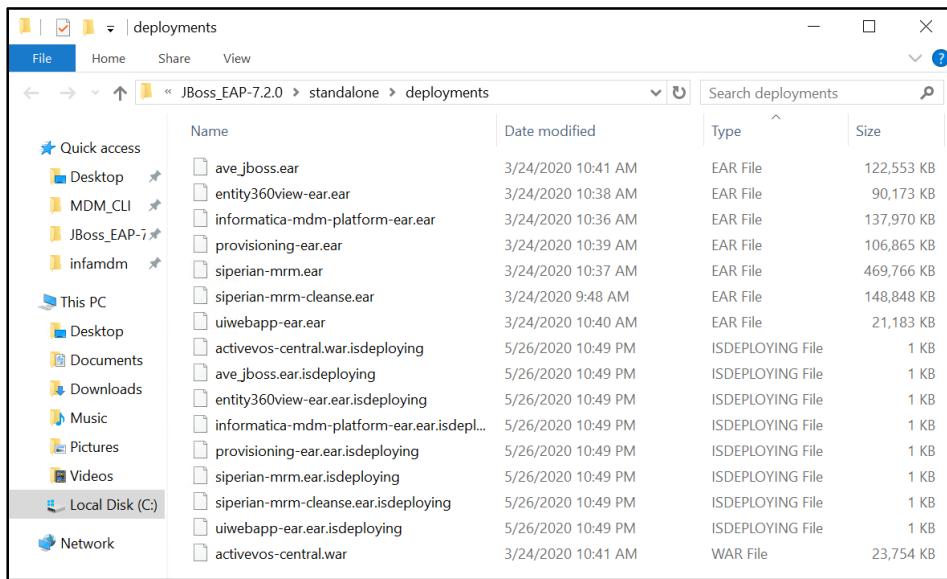


**Note:** JBoss starts as a command prompt. Minimize the window. Ensure that you have only one launch script running.

8. Double-click the Deployments folder (**deployments-Shortcut**) on the desktop.



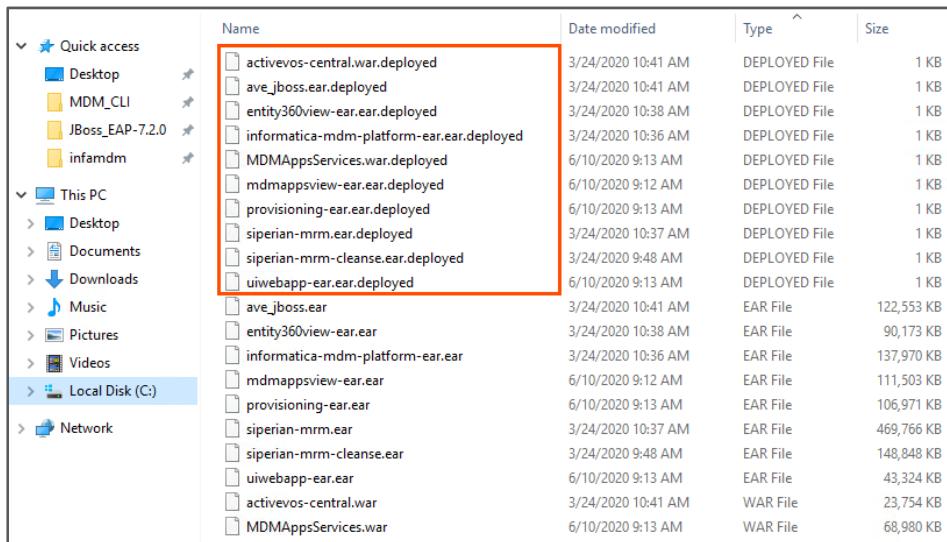
9. You can see files with “**isdeploying**” file extension.



Name	Date modified	Type	Size
ave_jboss.ear	3/24/2020 10:41 AM	EAR File	122,553 KB
entity360view-ear.ear	3/24/2020 10:38 AM	EAR File	90,173 KB
informatica-mdm-platform-ear.ear	3/24/2020 10:36 AM	EAR File	137,970 KB
provisioning-ear.ear	3/24/2020 10:39 AM	EAR File	106,865 KB
siperian-mrm.ear	3/24/2020 10:37 AM	EAR File	469,766 KB
siperian-mrm-cleanse.ear	3/24/2020 9:48 AM	EAR File	148,848 KB
uiwebapp-ear.ear	3/24/2020 10:40 AM	EAR File	21,183 KB
activevos-central.war.isdeploying	5/26/2020 10:49 PM	ISDEPLOYING File	1 KB
ave_jboss.ear.isdeploying	5/26/2020 10:49 PM	ISDEPLOYING File	1 KB
entity360view-ear.ear.isdeploying	5/26/2020 10:49 PM	ISDEPLOYING File	1 KB
informatica-mdm-platform-ear.ear.isdeploying	5/26/2020 10:49 PM	ISDEPLOYING File	1 KB
provisioning-ear.ear.isdeploying	5/26/2020 10:49 PM	ISDEPLOYING File	1 KB
siperian-mrm.ear.isdeploying	5/26/2020 10:49 PM	ISDEPLOYING File	1 KB
siperian-mrm-cleanse.ear.isdeploying	5/26/2020 10:49 PM	ISDEPLOYING File	1 KB
uiwebapp-ear.ear.isdeploying	5/26/2020 10:49 PM	ISDEPLOYING File	1 KB
activevos-central.war	3/24/2020 10:41 AM	WAR File	23,754 KB

**Note:** These are the MDM deployments and it will take about 5-8 minutes to deploy.

10. After the deployment, the **isdeploying** file extensions will change to “**.deployed**” files.



Name	Date modified	Type	Size
activevos-central.war.deployed	3/24/2020 10:41 AM	DEPLOYED File	1 KB
ave_jboss.ear.deployed	3/24/2020 10:41 AM	DEPLOYED File	1 KB
entity360view-ear.ear.deployed	3/24/2020 10:38 AM	DEPLOYED File	1 KB
informatica-mdm-platform-ear.ear.deployed	3/24/2020 10:36 AM	DEPLOYED File	1 KB
MDMAAppsServices.war.deployed	6/10/2020 9:13 AM	DEPLOYED File	1 KB
mdmapsview-ear.ear.deployed	6/10/2020 9:12 AM	DEPLOYED File	1 KB
provisioning-ear.ear.deployed	6/10/2020 9:13 AM	DEPLOYED File	1 KB
siperian-mrm.ear.deployed	3/24/2020 10:37 AM	DEPLOYED File	1 KB
siperian-mrm-cleanse.ear.deployed	3/24/2020 9:48 AM	DEPLOYED File	1 KB
uiwebapp-ear.ear.deployed	6/10/2020 9:13 AM	DEPLOYED File	1 KB
ave_jboss.ear	3/24/2020 10:41 AM	EAR File	122,553 KB
entity360view-ear.ear	3/24/2020 10:38 AM	EAR File	90,173 KB
informatica-mdm-platform-ear.ear	3/24/2020 10:36 AM	EAR File	137,970 KB
mdmapsview-ear.ear	6/10/2020 9:12 AM	EAR File	111,503 KB
provisioning-ear.ear	6/10/2020 9:13 AM	EAR File	106,971 KB
siperian-mrm.ear	3/24/2020 10:37 AM	EAR File	469,766 KB
siperian-mrm-cleanse.ear	3/24/2020 9:48 AM	EAR File	148,848 KB
uiwebapp-ear.ear	6/10/2020 9:13 AM	EAR File	43,324 KB
activevos-central.war	3/24/2020 10:41 AM	WAR File	23,754 KB
MDMAAppsServices.war	6/10/2020 9:13 AM	WAR File	68,980 KB

**Note:** This indicates that MDM is up and running. Do not delete any of these files.

*This concludes the lab.*

# Module 1: Introduction to MDM Data Director Application

## Lab 1-1: Add Records through a Multi-Level Approval Workflow

### Overview:

In this lab, you will navigate a pre-configured application. You will log in as different users – a business user, data steward, manager, and a senior manager. Each of these user roles are configured with a different layout while creating, editing, and viewing data.

You will add a person business entity through the application and follow it up through a workflow.

### Objectives:

- Access the ActiveVOS Admin Console
- Access the MDM Hub Console
- Log into the MDM Data Director application and navigate with different user roles
- Add a record through a workflow

### Duration:

45 minutes

---

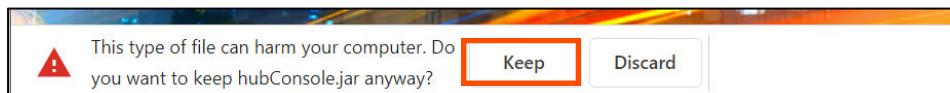
### Tasks

1. Open the Chrome browser from the taskbar.
2. From the Bookmarks, click **Informatica > MDM Hub Console** to launch the MDM Hub Console.
3. The **MDM Hub Console** window appears. Enter the username and password as **admin/admin** and click **Download**.

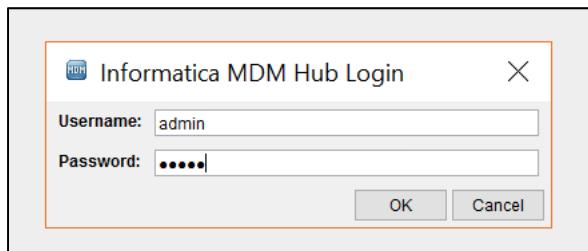


The screenshot shows the 'Informatica MDM Hub Console' login interface. At the top, there's a header bar with the Informatica logo and the text 'Informatica MDM Hub Console'. Below the header, a message reads: 'To launch the Hub Console, enter the user credentials, and click Download. Run the .jar file that downloads.' There are two input fields: 'Username:' with a value of 'admin' and 'Password:' with a value of '\*\*\*\*\*'. A blue 'Download' button is located below the password field. At the bottom of the page, a copyright notice states: '© Copyright 1998-2020 Informatica LLC. All Rights Reserved.'

4. You will be prompted to download the **hubconsole.jar** file (just above the taskbar). Click **Keep** to download the file and open it.

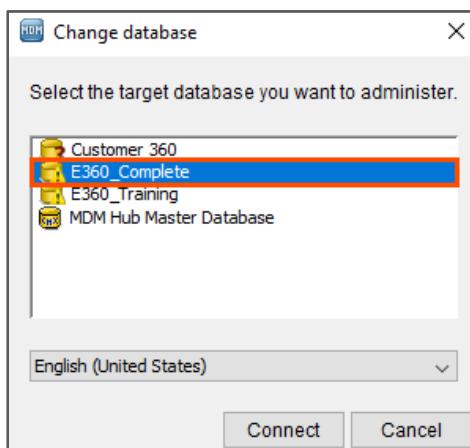


5. Log in to the hub with the username and password as **admin/admin**.



The default username and password for the MDM Administrator is set as **admin**.

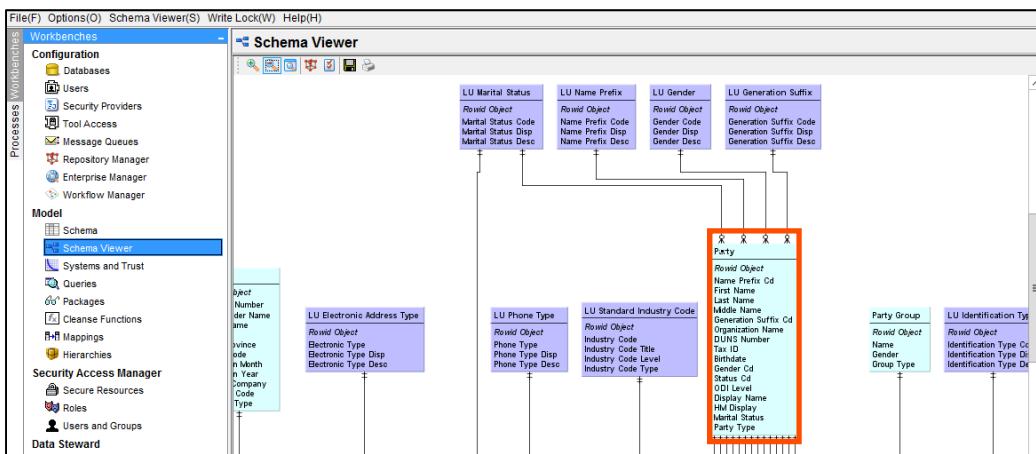
6. From the list of databases, select **E360\_Complete** and click **Connect**.



The **E360\_Complete Operational Record Store** (ORS) has a pre-configured application that you will use in this module. You will use **E360\_Training** ORS in the subsequent modules to build an application.

7. In the **Model** workbench, click **Schema Viewer**.

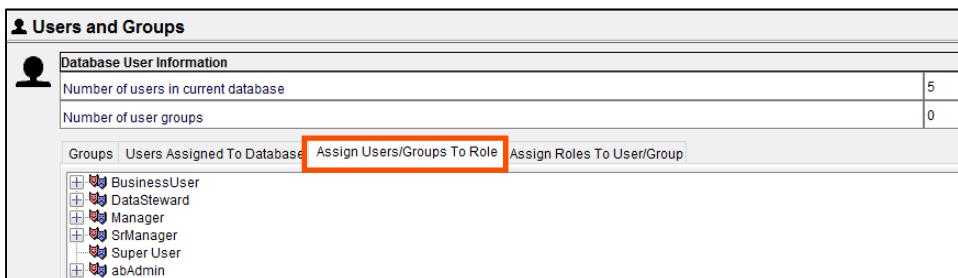
8. Explore the data model and observe the **Party** base object. Click the magnifier icon to enlarge the view. This base object contains two business entities, a person and an organization. The **Party Type** column is the differentiator.



9. Under the **Security Access Manager** workbench, click **Users and Groups**.



10. Click the **Assign Users/Groups to Role** tab to see a list of roles and users that are specific to the E360\_Complete ORS.

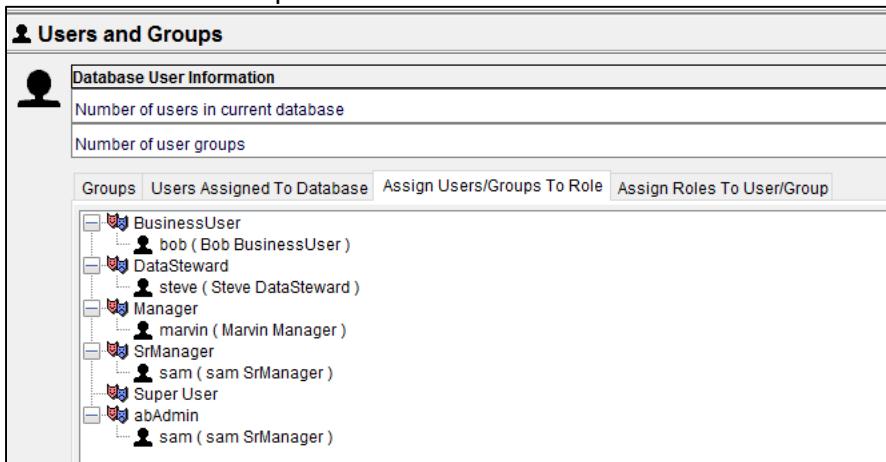


Database User Information	
Number of users in current database	5
Number of user groups	0

Groups: [Users Assigned To Database](#) [Assign Users/Groups To Role](#) [Assign Roles To User/Group](#)

- [BusinessUser](#)
- [DataSteward](#)
- [Manager](#)
- [SrManager](#)
- [Super User](#)
- [abAdmin](#)

11. Click the + icon to expand each role and notice the role names.



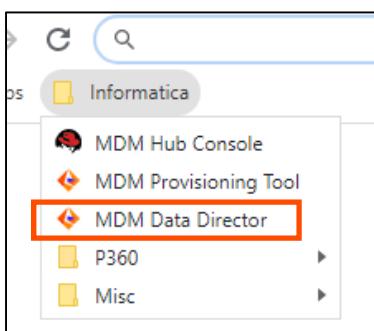
Database User Information	
Number of users in current database	
Number of user groups	

Groups    Users Assigned To Database    Assign Users/Groups To Role    Assign Roles To User/Group

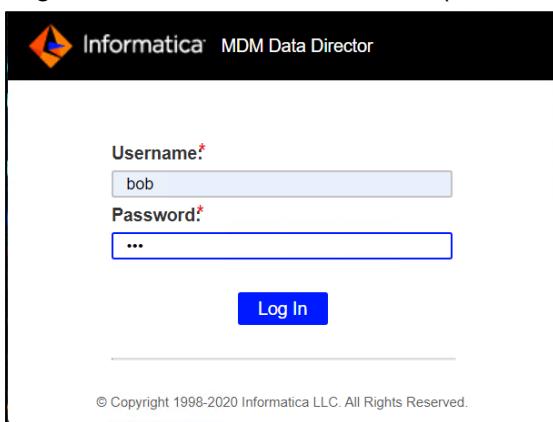
- BusinessUser
  - bob ( Bob BusinessUser )
- DataSteward
  - steve ( Steve DataSteward )
- Manager
  - marvin ( Marvin Manager )
- SrManager
  - sam ( sam SrManager )
- Super User
- abAdmin
  - sam ( sam SrManager )

In the lab environment, **bob** is set as the Business User, **steve** as the Data Steward, **marvin** as the Manager, and **sam** as the Senior Manager. You will log in to the web application as each of these users need to manage the master data.

12. In the Chrome browser, open a new tab, from the bookmarks, click **Informatica > MDM Data Director**.



13. Log in with the username as **bob** (the Business User) and the password as **mdm**.



Informatica® MDM Data Director

Username\*: bob

Password\*: ...

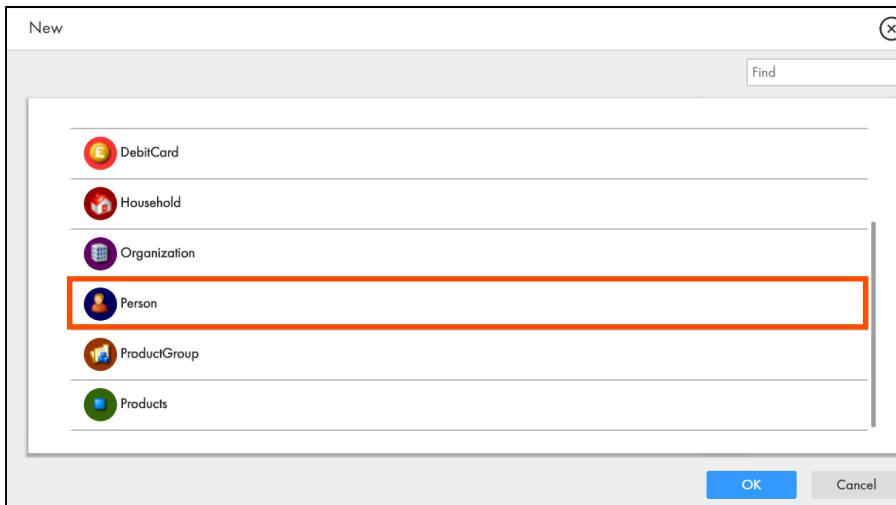
Log In

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## Adding a New Record

You will now add a record through the application.

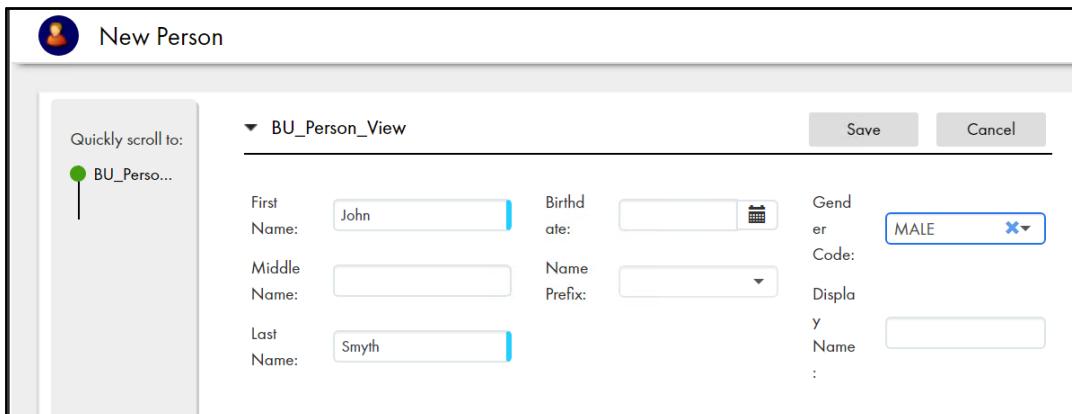
14. Click **New** and observe the list of business entities.
15. Select **Person** and click **OK**.



**Note:** These entities are created in the provisioning tool. You will define these entities in the subsequent modules.

This opens the view to enter the person details. This view can be customized specific to the user role through the provisioning tool. Although both organization and person business entities are in the same base object, the columns that are available for each are unique and customizable.

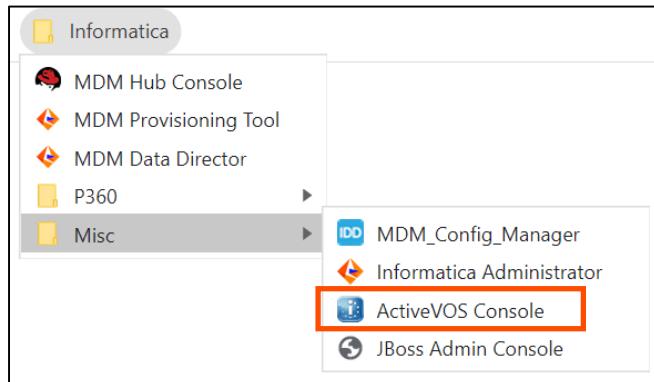
16. Enter the First Name as **John**, the last name as **Smyth**, and the Gender Cd as **MALE**.



BU_Person_View		Save	Cancel
First Name:	John	Birthdate:	
Middle Name:		Name Prefix:	
Last Name:	Smyth	Gender Code:	MALE
		Display Name:	

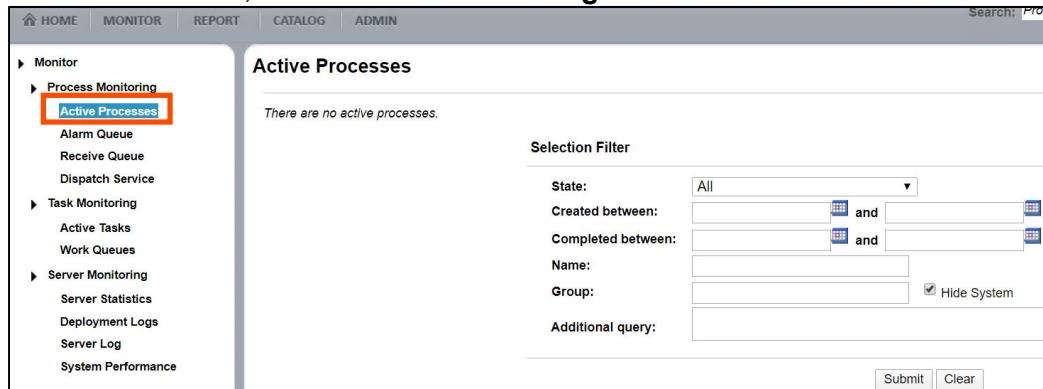
**Note:** Do not save the record yet. When saved, this will trigger a workflow in the ActiveVOS. This workflow goes through four levels before the record is active in the MDM system.

17. Open a new tab in the browser, from the bookmarks, click **Informatica > Misc > ActiveVOS Console**.



18. Log in with the username as **avosadmin** and password as **Informatica@123**.

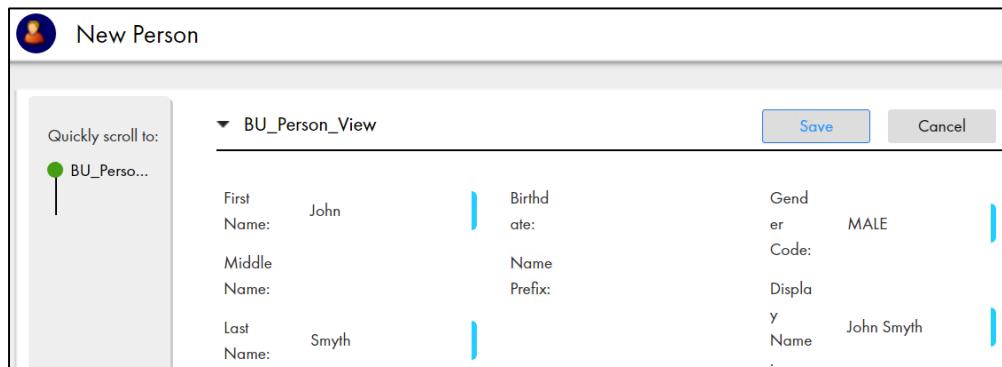
19. In the **Monitor** tab, click **Process Monitoring > Active Processes**.



The screenshot shows the 'Active Processes' page under 'Process Monitoring'. The left sidebar has options like Monitor, Process Monitoring (with Active Processes selected), Task Monitoring, Server Monitoring, etc. The main area says 'There are no active processes.' A 'Selection Filter' section includes fields for State (All), Created between, Completed between, Name, Group, and Additional query, with a 'Submit' and 'Clear' button at the bottom.

**Note:** You will not see a row for your workflow yet.

20. Switch back to the **MDM Data Director** and click **Save**.



The screenshot shows the 'New Person' form in the MDM Data Director. The title bar says 'New Person'. The form has a 'BU\_Person\_View' section with fields for First Name (John), Middle Name (Smyth), Last Name (Smyth), Birthdate, Gender (MALE), and other details. There are 'Save' and 'Cancel' buttons at the top right. A sidebar on the left says 'Quickly scroll to:' with a dropdown menu showing 'BU\_Person...'.

**Note:** A workflow is configured to start when the business user adds a person business entity. This record goes through an approval process before it becomes active. You can attach a PDF or an image to the workflow for other users to refer.

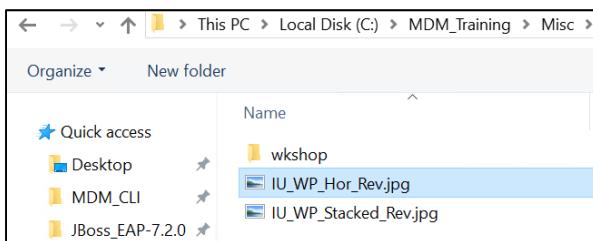
**21. Click **Browse**.**

Task Comment and Attachments

Title:	Review changes in Person						
Priority:	Due Date:						
NORMAL	02-44-2020						
Task Type:	Business Entity:						
	Person						
File Attachments:							
<table border="1"> <thead> <tr> <th>File Name</th> <th>Creator</th> <th>Date Uploaded</th> </tr> </thead> <tbody> <tr> <td colspan="3"><i>(Empty table)</i></td> </tr> </tbody> </table>		File Name	Creator	Date Uploaded	<i>(Empty table)</i>		
File Name	Creator	Date Uploaded					
<i>(Empty table)</i>							
<input type="button" value="Browse"/>							
Add Comment:							
<input type="text" value="Type your comment here..."/>							

**22. Navigate to the C:\MDM\_Training\Misc folder.**

**23. Select the image file IU\_WP\_Hor\_Rev.jpg and click **Open**.**



**24. Click **Save**.**

File Attachments:

File Name	Creator	Date Uploaded
IU_WP_Hor_Rev.jpg	bob	12:04:24
<input type="button" value="Delete"/>		
<input type="button" value="Save"/> <input type="button" value="Cancel"/>		

Add Comment:

Type your comment here...

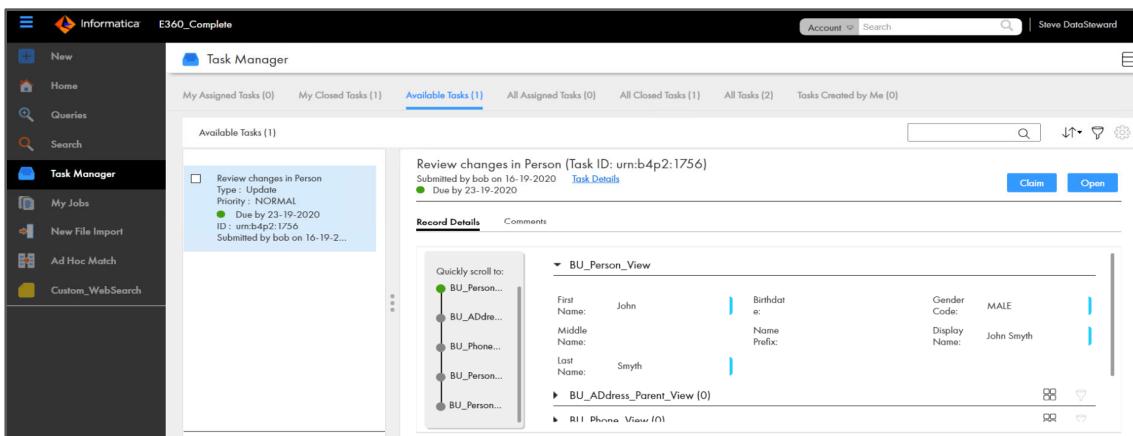
**Note:** The Task Comment and Attachments page should disappear.

**25. Switch back to the ActiveVOS page and click **Active Processes**.**

Active Processes		Ver.	Start Date	End Date	State	Group
<input type="checkbox"/>	ID 1602 BeUpdateWithApprovalWorkflow	1.0	2020-06-15 00:18		Running	
<input type="checkbox"/> Select All / None <input type="button" value="20"/> records per page. Action: <input type="button" value="Terminate"/> <input type="button" value="Execute..."/>						
Results 1 - 1 of 1						

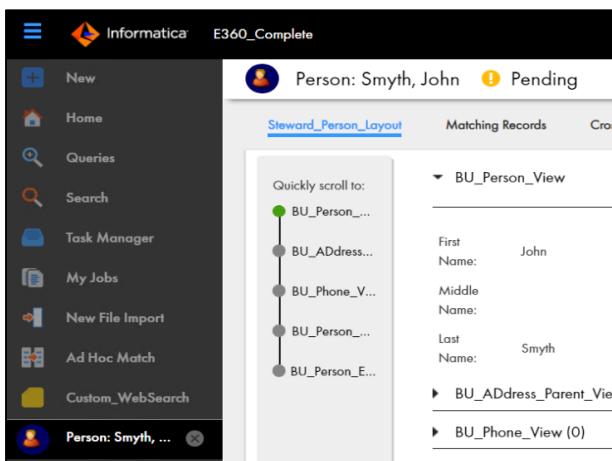
**Note:** The page refreshes and you will now see a workflow with the status “Running”.

26. Log out as bob and log in with the username as **steve**, the data steward, with password as **mdm**.
27. Click **Task Manager** and from the Available Tasks.
28. Click **Claim**.

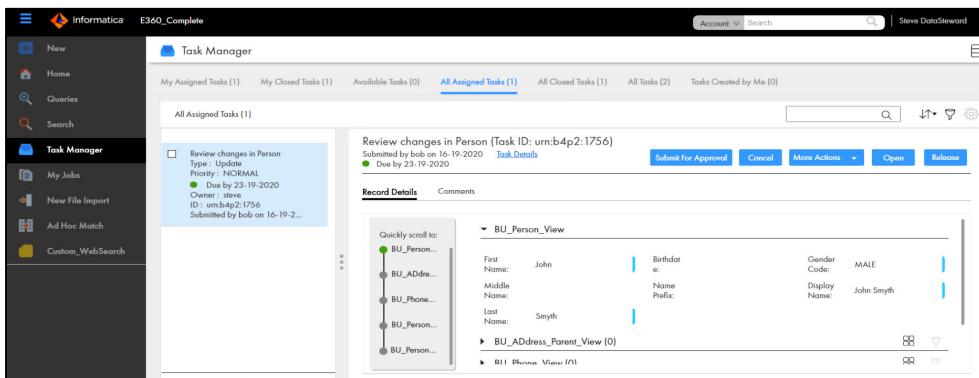


**Note:** After you claim it, the task will disappear from the available tasks and appear under the **Assigned Tasks**. As a task owner, you can disclaim the task or submit it for approval.

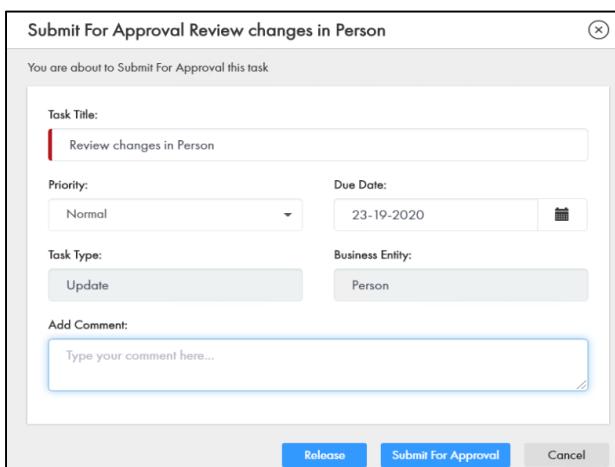
29. Click **Open** and the record opens as a new page.
30. Observe that the task is in **Pending** state and will be active after the final approval.
31. Close this and click **Task Manager**.



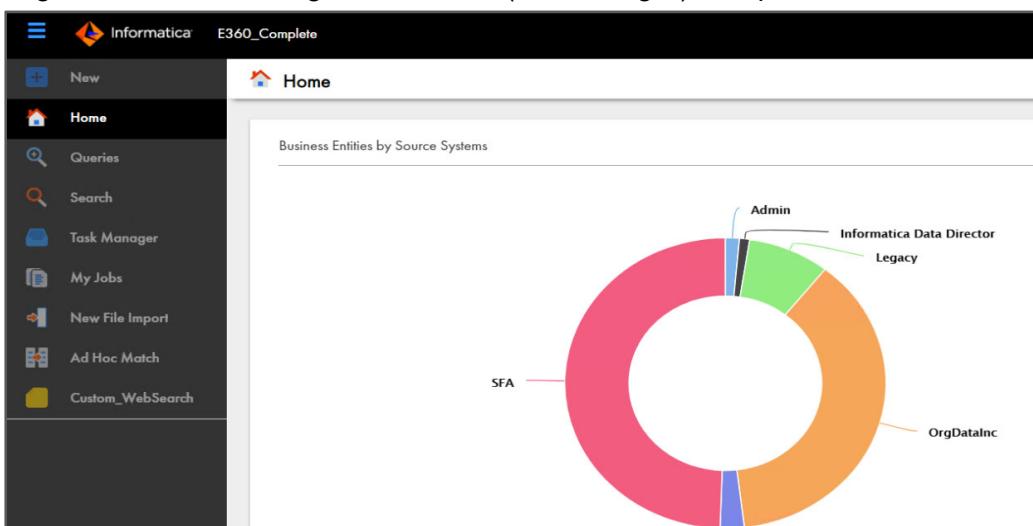
32. Select the task and click **Submit for Approval**.



33. Enter a comment and click **Submit for Approval**.



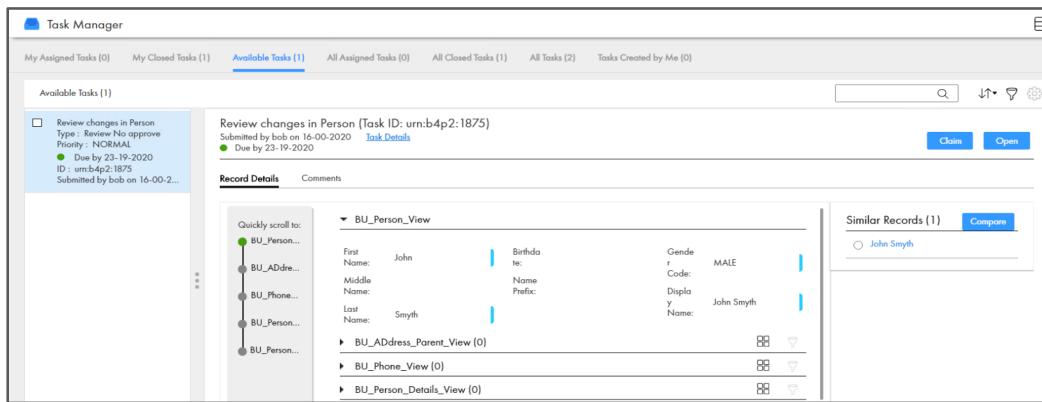
34. Log out as steve and log in as marvin (the Manager) with password as **mdm**.



**Note:** Marvin, the manager has a custom home page with a few graphs.

35. Click **Task Manager**.

36. Click Available Tasks and claim the John Smyth's task.



The screenshot shows the Task Manager interface with the 'Available Tasks' tab selected. A single task is listed:

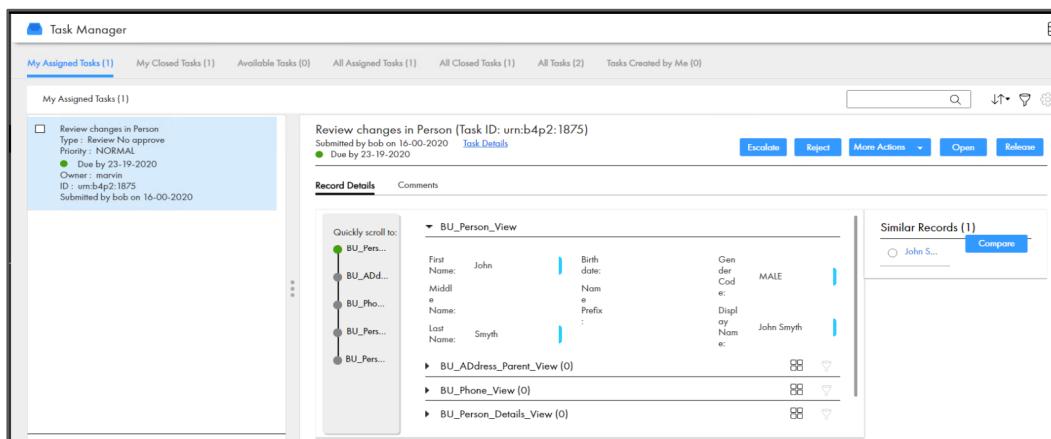
- Type : Review No approve
- Priority : NORMAL
- Due by 23-19-2020
- ID : urn:b4p2:1875
- Submitted by bob on 16-00-2...

The task details show a record for 'BU\_Person\_View' with the following fields:

First Name:	John	Birth date:	
Middle Name:		Gender Code:	MALE
Last Name:	Smyth	Display Name:	John Smyth

Buttons at the top right include 'Claim' (highlighted in blue) and 'Open'.

37. After you claim it, Escalate the task.

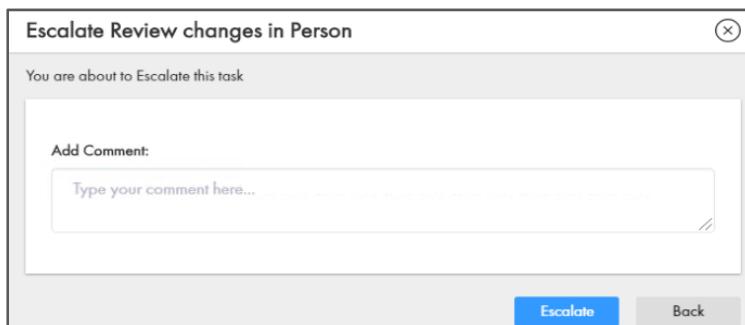


The screenshot shows the Task Manager interface with the 'My Assigned Tasks' tab selected. The same task is listed:

- Type : Review No approve
- Priority : NORMAL
- Due by 23-19-2020
- Owner : marvin
- ID : urn:b4p2:1875
- Submitted by bob on 16-00-2020

The task details show the same record for 'BU\_Person\_View' with the same fields. Buttons at the top right include 'Escalate' (highlighted in blue), 'Reject', 'More Actions', 'Open', and 'Release'.

38. Enter a comment and click Escalate.



The screenshot shows the 'Escalate Review changes in Person' dialog box. It contains a message: 'You are about to Escalate this task'. Below is a text area labeled 'Add Comment:' with the placeholder 'Type your comment here...'. At the bottom are two buttons: 'Escalate' (highlighted in blue) and 'Back'.

39. You will see a notification that “Escalate is successful” and that the task is closed.

40. Log out as marvin and log in as **sam** with password as **mdm**.

**Note:** Sam is the SrManager for this ORS and responsible for all the final approvals.

41. Click the All Tasks tab.

42. Open the unclaimed task and **claim** it.



Review changes in Person  
Type : Final Review  
Priority : NORMAL  
● Due by 03-36-2020  
ID : urn:b4p2:855  
Submitted by bob on 27-17-2020

Review changes in Person  
Type : Review No appro  
Priority : NORMAL  
● Task Closed  
Owner : marvin  
ID : urn:b4p2:803  
Submitted by bob on 27-17-2020

Review changes in Person (Task ID: urn:b4p2:855)  
Submitted by bob on 27-17-2020 [Task Details](#)  
● Due by 03-36-2020

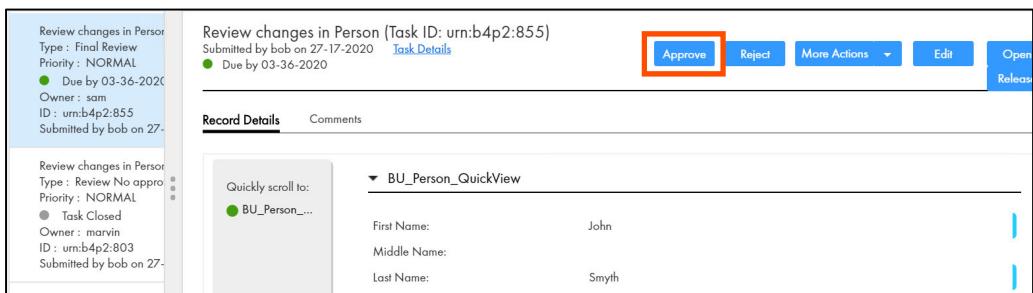
**Record Details** Comments

Quickly scroll to: BU\_Person\_QuickView

First Name: John  
Middle Name:  
Last Name: Smyth  
Birthdate:

**Claim** **Open**

43. Observe that the options are different from previous users. Click **Approve**.



Review changes in Person  
Type : Final Review  
Priority : NORMAL  
● Due by 03-36-2020  
Owner : sam  
ID : urn:b4p2:855  
Submitted by bob on 27-17-2020

Review changes in Person  
Type : Review No appro  
Priority : NORMAL  
● Task Closed  
Owner : marvin  
ID : urn:b4p2:803  
Submitted by bob on 27-17-2020

Review changes in Person (Task ID: urn:b4p2:855)  
Submitted by bob on 27-17-2020 [Task Details](#)  
● Due by 03-36-2020

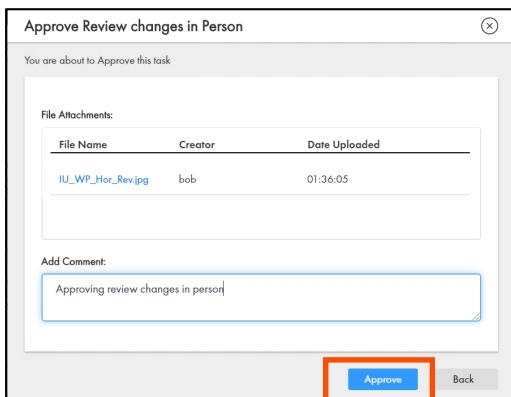
**Record Details** Comments

Quickly scroll to: BU\_Person\_QuickView

First Name: John  
Middle Name:  
Last Name: Smyth

**Approve** **Reject** **More Actions** **Edit** **Open**  
**Release**

44. Enter a comment and click **Approve**.



Approve Review changes in Person

You are about to Approve this task

File Attachments:

File Name	Creator	Date Uploaded
IU_WP_Hor_Rev.jpg	bob	01:36:05

Add Comment:

Approving review changes in person

**Approve** **Back**

45. You will see a notification that the approval was successful.

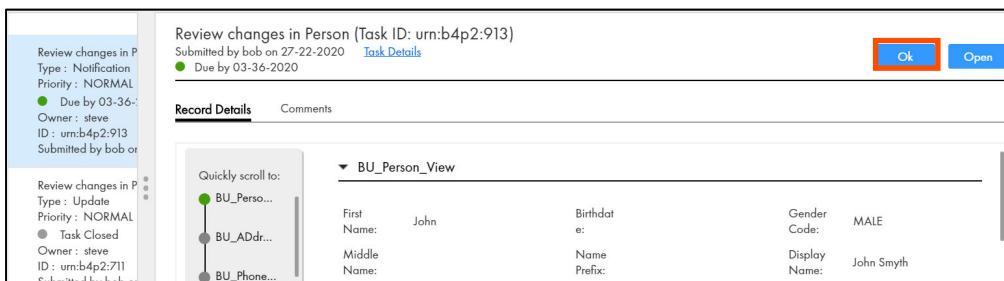
46. Log out as sam and log in as **steve/mdi**, the Data Steward.

47. Click the **All Tasks** tab.

**Note:** You will notice an unclaimed notification task.

48. **Claim** the task.

49. Review the changes, enter a comment, and click **OK**.



Review changes in P  
Type : Notification  
Priority : NORMAL  
● Due by 03-36-2020  
Owner : steve  
ID : urn:b4p2:913  
Submitted by bob on 27-22-2020

Review changes in P  
Type : Update  
Priority : NORMAL  
● Task Closed  
Owner : steve  
ID : urn:b4p2:711  
Submitted by bob on 27-22-2020

Review changes in Person (Task ID: urn:b4p2:913)  
Submitted by bob on 27-22-2020 [Task Details](#)  
● Due by 03-36-2020

**Record Details** Comments

Quickly scroll to: BU\_Person\_View

First Name: John  
Middle Name:  
Last Name:  
Birthdate:  
Gender Code: MALE  
Display Name: John Smyth

**Ok** **Open**

OK Review changes in Person

You are about to OK this task

File Attachments:

File Name	Creator	Date Uploaded
IU_WP_Hor_Rev.jpg	bob	01:36:05

Add Comment:

Ok

**OK** Back

50. You will see a notification “**OK is successful**”.
51. In the ActiveVOS page, click **Active Processes**.
52. The page refreshes, and the workflow status now shows as “**Completed**”.



The screenshot shows the ActiveVOS interface with the "Active Processes" tab selected. A single process entry is listed:

ID	Title	Ver.	Start Date	End Date	State	Group
708	BeUpdateWithApprovalWorkflow	1.0	2020-05-27 01:36	2020-05-27 02:25	Completed	

*This concludes the lab.*

# Module 1: Introduction to MDM Data Director Application

## Lab 1-2: Two-Step Workflow

### Overview:

Like the multi-level approval, you can also configure a smaller two-step approval using the same workflow engine. In this exercise, you will merge two records as a steward and approve the merge as the manager.

As part of this exercise, you will also define a search query.

### Objectives:

- Define a search query
- Perform a two-step merge

### Duration:

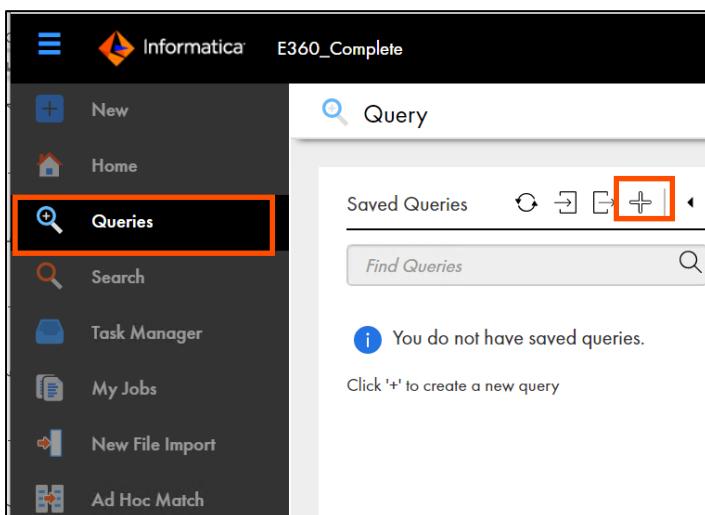
10 minutes

---

### Tasks:

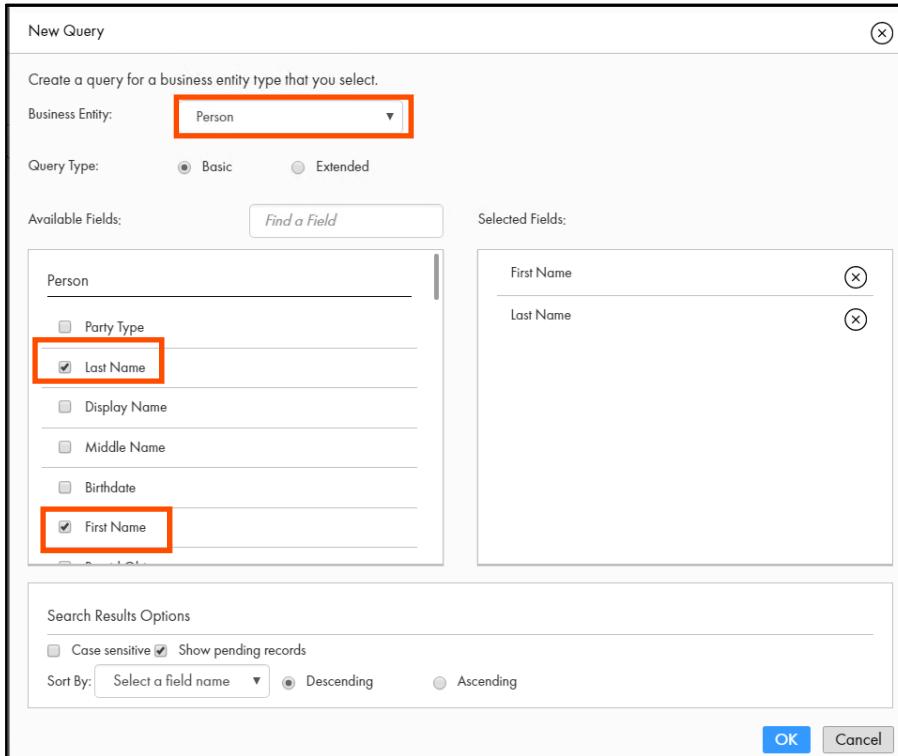
You will create a basic query based on the first and last names.

1. Log into the **MDM Data Director** as **steve/mdm**.
2. Select **Queries** from the menu, click the **+** icon.



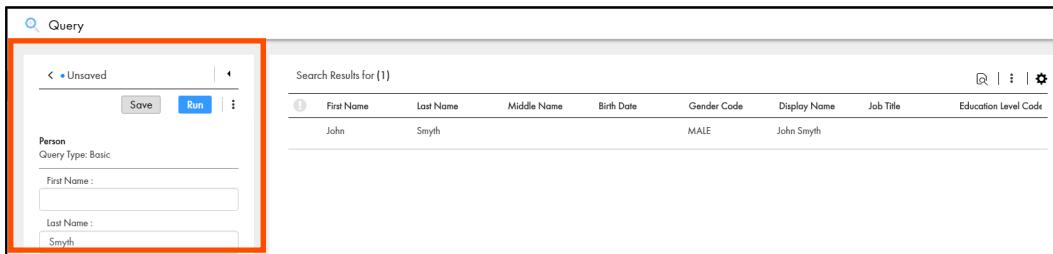
3. In the **New Query** page, select **Person** from the Business Entity drop-down.

4. From the list of **Available Fields**, select **First Name** and **Last Name** columns, and click **OK**.



The screenshot shows the 'New Query' dialog box. In the 'Business Entity' dropdown, 'Person' is selected. Under 'Query Type', 'Basic' is chosen. The 'Available Fields' section contains several checkboxes: 'Party Type' (unchecked), 'Last Name' (checked and highlighted with a red box), 'Display Name' (unchecked), 'Middle Name' (unchecked), 'Birthdate' (unchecked), and 'First Name' (checked and highlighted with a red box). The 'Selected Fields' section contains 'First Name' and 'Last Name'. At the bottom, there are 'Search Results Options' for 'Case sensitive' and 'Show pending records', and a 'Sort By' dropdown set to 'Select a field name' with 'Descending' selected. The 'OK' button is highlighted.

5. Enter the Last Name as **Smyth** and click **Run**.



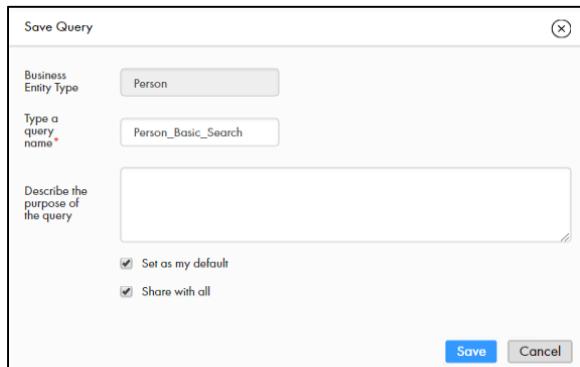
The screenshot shows the 'Query' interface. On the left, a form has 'Person' selected as the business entity and 'Query Type: Basic'. The 'Last Name' field is populated with 'Smyth'. On the right, the results table shows one record: John Smyth with a gender code of MALE and display name of John Smyth.

First Name	Last Name	Middle Name	Birth Date	Gender Code	Display Name	Job Title	Education Level Code
John	Smyth			MALE	John Smyth		

**Note:** You should see the record you added in the previous exercise.

6. Now that the query fetches the results, click **Save**.  
 7. Enter the name of the query as **Person\_Basic\_Search**.  
 8. Select the **Set as my default** and **Share with all** checkboxes.

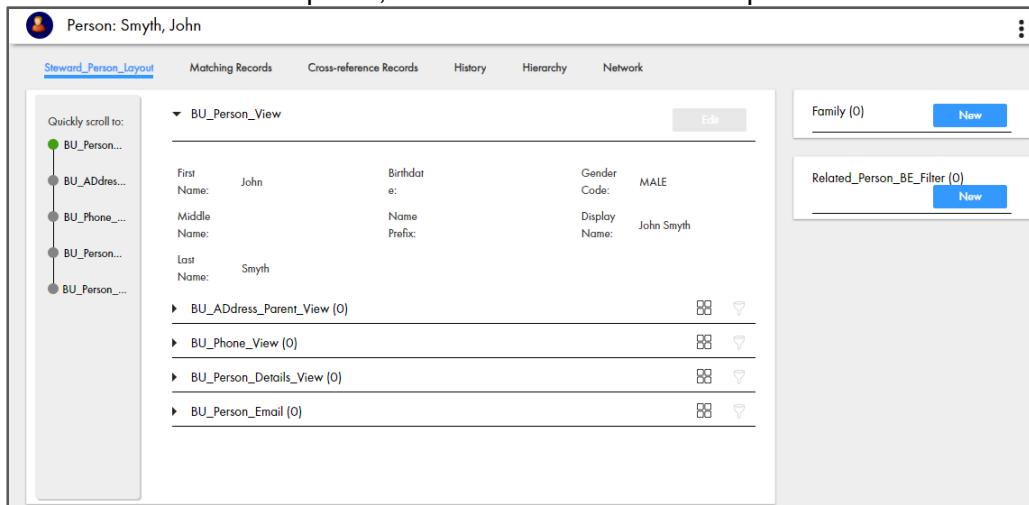
9. Click **Save**.



The dialog box is titled "Save Query". It contains fields for "Business Entity Type" (Person), "Type a query name\*" (Person\_Basic\_Search), and a "Describe the purpose of the query" text area. At the bottom, there are two checkboxes: "Set as my default" and "Share with all". The "Save" button is highlighted.

**Note:** This query will be available for all users who have access to this E360\_Complete application.

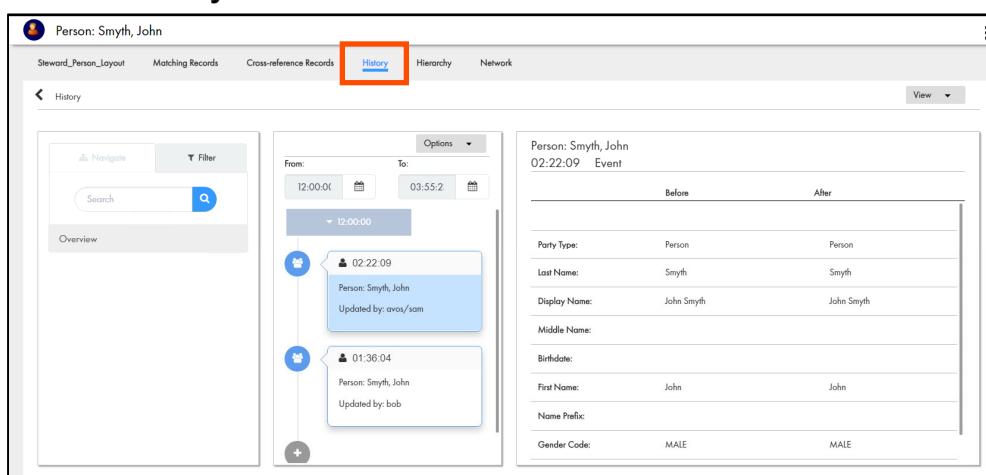
10. In the **Search Results** panel, double-click the record to open it.



The search results panel shows a record for "Person: Smyth, John". The left sidebar lists related entities: BU\_Person..., BU\_Address..., BU\_Phone..., and BU\_Person... (with a plus sign). The main content area displays the person's details: First Name: John, Middle Name: , Last Name: Smyth, Birthdate: , Gender Code: MALE, Display Name: John Smyth. Below the details are four expandable sections: BU\_ADDRESS\_Parent\_View (0), BU\_Phone\_View (0), BU\_Person\_Details\_View (0), and BU\_Person\_Email (0). To the right, there are buttons for "Family (0)" and "Related\_Person\_BE\_Filter (0)".

**Note:** This is the same record that was added in the previous exercise.

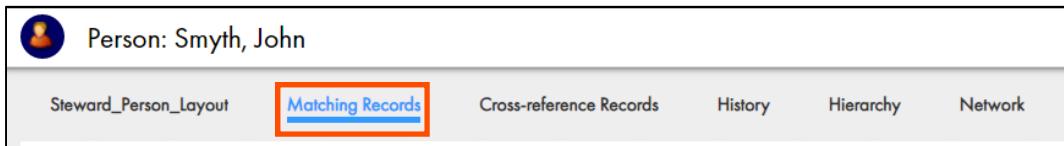
11. Click the **History** tab.



The history tab shows a timeline of events for the person. The first event is "02.22.09 Person: Smyth, John Updated by: avos/sam". The second event is "01.36.04 Person: Smyth, John Updated by: bob". The right panel displays the person's details before and after the update: Party Type: Person, Last Name: Smyth, Display Name: John Smyth, Middle Name: , Birthdate: , First Name: John, Name Prefix: , Gender Code: MALE.

**Note:** The layouts are configurable for each entity based on the purpose and user access. We will configure them in the later modules. Observe the sequence of events and the workflow. For task related details, you can check the ActiveVOS console.

12. Click the **Matching Records** tab.

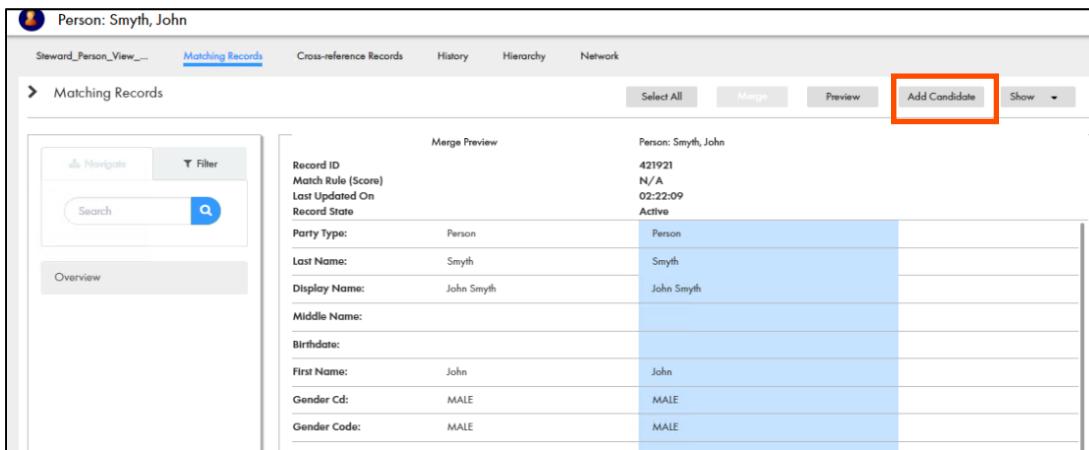


Person: Smyth, John

Seward\_Person\_Layout    **Matching Records**    Cross-reference Records    History    Hierarchy    Network

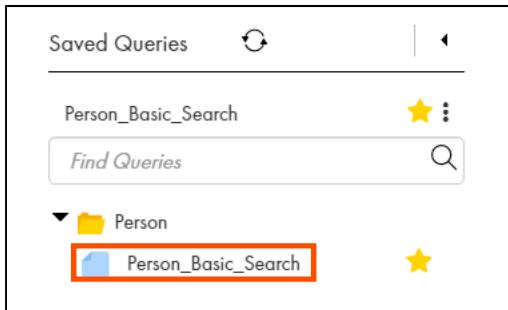
You will now perform a merge as a steward.

13. Click **Add Candidate**.



Merge Preview		Person: Smyth, John
Record ID	421921	
Match Rule (Score)	N/A	
Last Updated On	02:22:09	
Record State	Active	
Party Type:	Person	Person
Last Name:	Smyth	Smyth
Display Name:	John Smyth	John Smyth
Middle Name:		
Birthdate:		
First Name:	John	John
Gender Cd:	MALE	MALE
Gender Code:	MALE	MALE

14. Select the **Person\_Basic\_Search** as the search query.



Saved Queries

Person\_Basic\_Search

Find Queries

Person

Person\_Basic\_Search

**Note:** If you do not find the query loaded, click the **Reload** button next to the **Saved Queries**.

15. Enter the last name as **Smith** and click **Run**.



Person - Public

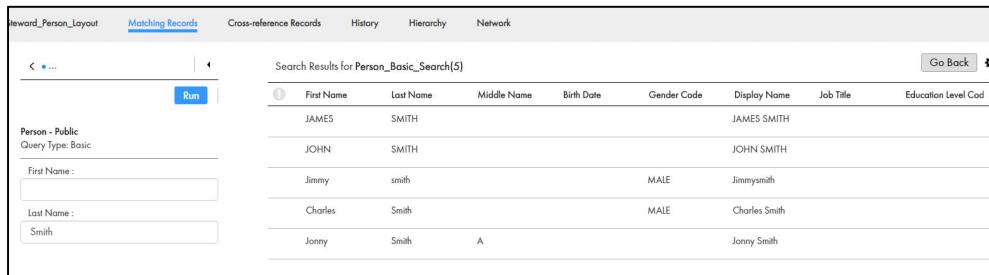
Query Type: Basic

First Name :

Last Name :

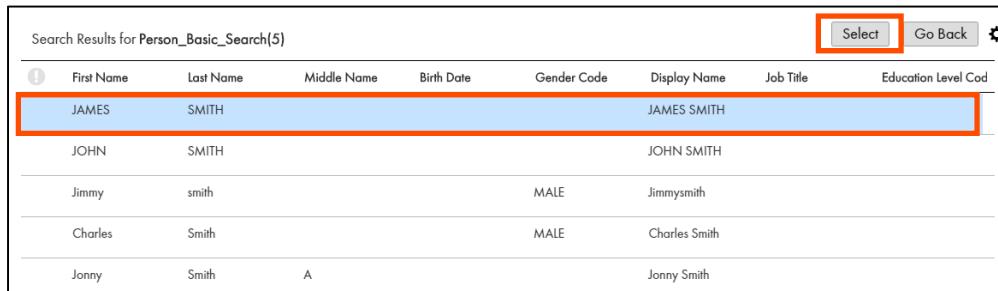
Smith

16. Records with **Smith** as last name appear in the Search Results panel.



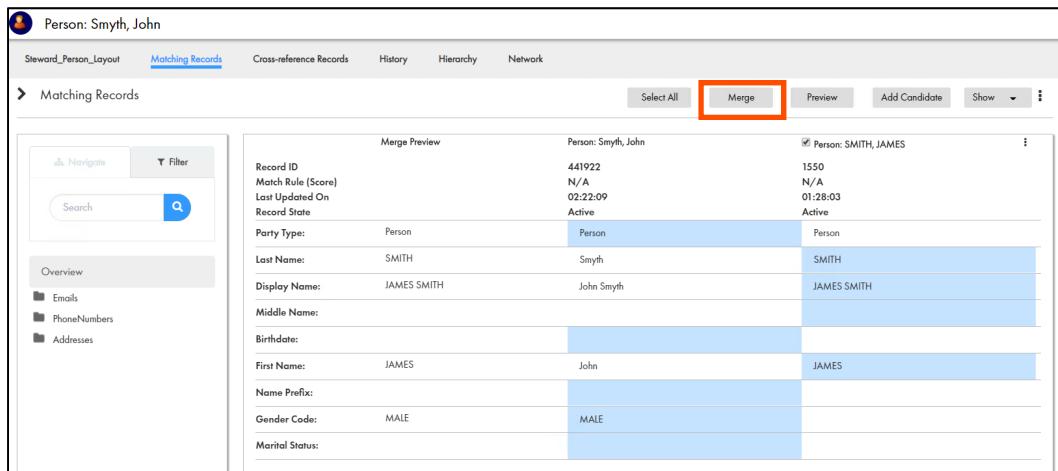
First Name	Last Name	Middle Name	Birth Date	Gender Code	Display Name	Job Title	Education Level Cod
JAMES	SMITH				JAMES SMITH		
JOHN	SMITH				JOHN SMITH		
Jimmy	smith			MALE	Jimmysmith		
Charles	Smith			MALE	Charles Smith		
Jonny	Smith	A			Jonny Smith		

17. Click the row item with **JAMES SMITH** and then click **Select**.



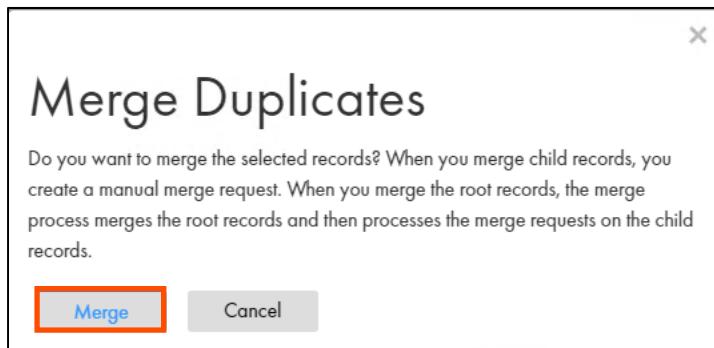
First Name	Last Name	Middle Name	Birth Date	Gender Code	Display Name	Job Title	Education Level Cod
JAMES	SMITH				JAMES SMITH		
JOHN	SMITH				JOHN SMITH		
Jimmy	smith			MALE	Jimmysmith		
Charles	Smith			MALE	Charles Smith		
Jonny	Smith	A			Jonny Smith		

18. Select the checkbox next to James Smith and click **Merge**.



Record ID	Person: SMITH, JAMES
441922	1550
N/A	N/A
02:22:09	01:28:03
Active	Active
Party Type:	Person
Last Name:	SMITH
Display Name:	JAMES SMITH
Middle Name:	John Smyth
Birthdate:	
First Name:	JAMES
Name Prefix:	John
Gender Code:	MALE
Marital Status:	

19. In the **Merge Duplicates** window, click **Merge**.

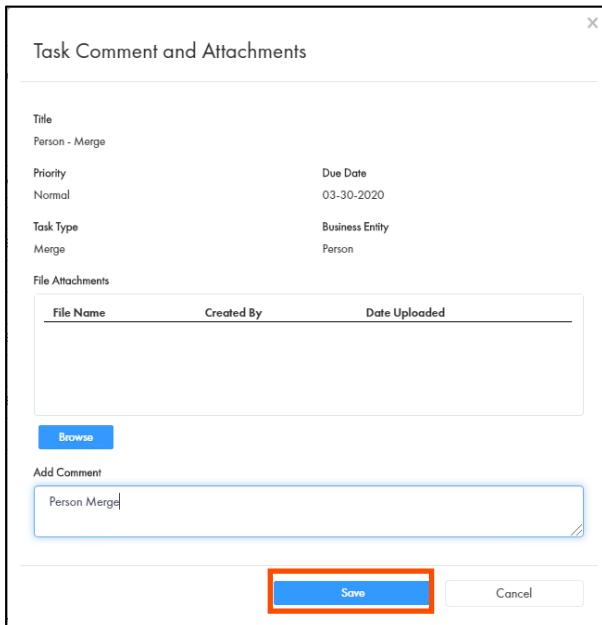


Merge Duplicates

Do you want to merge the selected records? When you merge child records, you create a manual merge request. When you merge the root records, the merge process merges the root records and then processes the merge requests on the child records.

**Merge**      **Cancel**

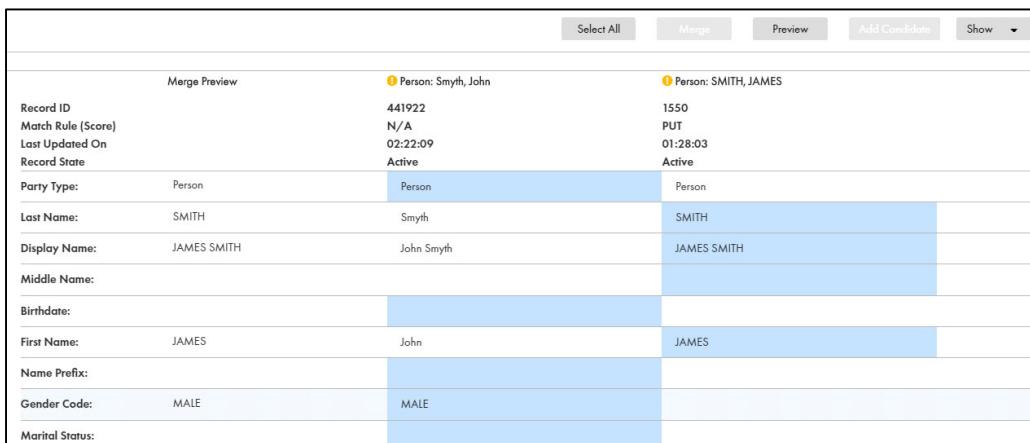
20. In the **Task Comment and Attachments** window, enter an optional comment and click **Save**.



The screenshot shows the 'Task Comment and Attachments' dialog box. At the top, it displays task details: Title 'Person - Merge', Priority 'Normal', Due Date '03-30-2020', Task Type 'Merge', Business Entity 'Person'. Below this is a section for 'File Attachments' which is currently empty. Underneath is an 'Add Comment' text area containing the text 'Person Merge'. At the bottom right are two buttons: 'Save' (which is highlighted with a red box) and 'Cancel'.

**Note:** This will trigger an ActiveVOS workflow. Managers can claim this task and approve the merge.

21. Observe that, after the data steward performs a merge, the records enter a pending state as indicated by the **yellow** exclamation mark.



The screenshot shows the 'Merge Preview' screen. It displays two records side-by-side. The left record is for 'Person: Smyth, John' (Record ID 441922) and the right record is for 'Person: SMITH, JAMES' (Record ID 1550). The preview table includes fields for Record ID, Match Rule (Score), Last Updated On, Record State, Party Type, Last Name, Display Name, Middle Name, Birthdate, First Name, Name Prefix, Gender Code, and Marital Status. The 'Record State' column for both records shows 'Active'. The 'Last Name' and 'Display Name' columns show 'SMITH' and 'JAMES SMITH' respectively. The 'First Name' column shows 'JAMES' and 'John'. The 'Gender Code' column shows 'MALE' and 'MALE'. The 'Marital Status' column is empty. The 'Record ID' column shows '441922' and '1550'. The 'Match Rule (Score)' column shows 'N/A' and 'PUT'. The 'Last Updated On' column shows '02:22:09' and '01:28:03'. The 'Record State' column shows 'Active' for both rows. The 'Party Type' column shows 'Person' for both rows. The 'Last Name' column shows 'SMITH' and 'Smyth'. The 'Display Name' column shows 'JAMES SMITH' and 'John Smyth'. The 'Middle Name' column is empty. The 'Birthdate' column is empty. The 'First Name' column shows 'JAMES' and 'John'. The 'Name Prefix' column is empty. The 'Gender Code' column shows 'MALE' and 'MALE'. The 'Marital Status' column is empty.

22. Toggle to ActiveVOS console, and check for a new two-step approval workflow. (Log in as **avosadmin/Informatica@123**, if the session has expired.)

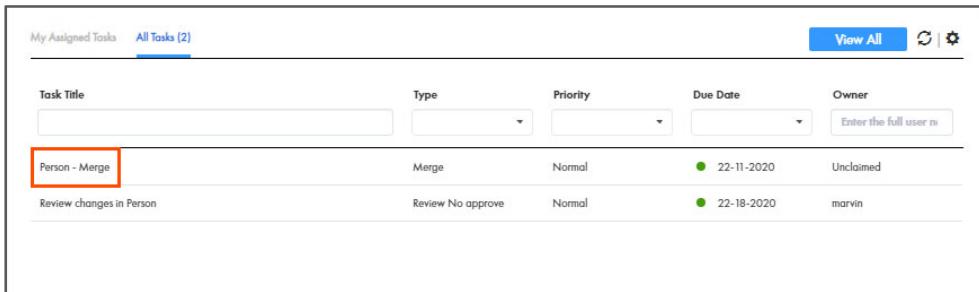


The screenshot shows the INFORMATICA ActiveVOS console. The 'Active Processes' tab is selected. A process titled 'BeMergeWorkflow' (ID 985) is listed and highlighted with a red box. Other processes listed are 'BeUpdateWithApprovalWorkflow' (ID 708). The table columns are ID, Title, Ver., Start Date, End Date, and State. The 'BeMergeWorkflow' row has the following values: ID 985, Title 'BeMergeWorkflow', Ver. 1.0, Start Date 2020-05-27 04:31, End Date 2020-05-27 02:25, and State 'Running'. The 'BeUpdateWithApprovalWorkflow' row has the following values: ID 708, Title 'BeUpdateWithApprovalWorkflow', Ver. 1.0, Start Date 2020-05-27 01:36, End Date 2020-05-27 02:25, and State 'Completed'.

23. In the MDM Data Director, log out as steve (data steward), and log in as **marvin** (manager).

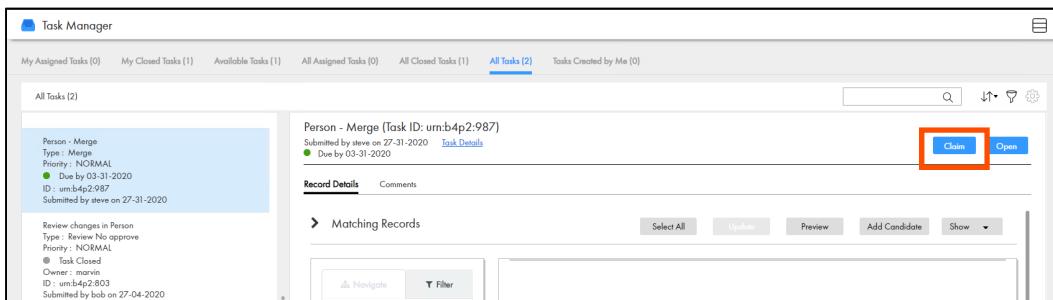
24. Scroll down and click the **All Tasks** tab and observe the record details.

25. Click **Person-Merge** link to open the task.



Task Title	Type	Priority	Due Date	Owner
Person - Merge	Merge	Normal	● 22-11-2020	Unclaimed
Review changes in Person	Review No approve	Normal	● 22-18-2020	marvin

26. Click **Claim**.



Person - Merge (Task ID: urn:b4p2:987)  
 Submitted by steve on 27-31-2020 [Task Details](#)  
 ● Due by 03-31-2020  
 Type : Merge  
 Priority : NORMAL  
 Due by: 03-31-2020  
 ID : urn:b4p2:987  
 Submitted by steve on 27-31-2020

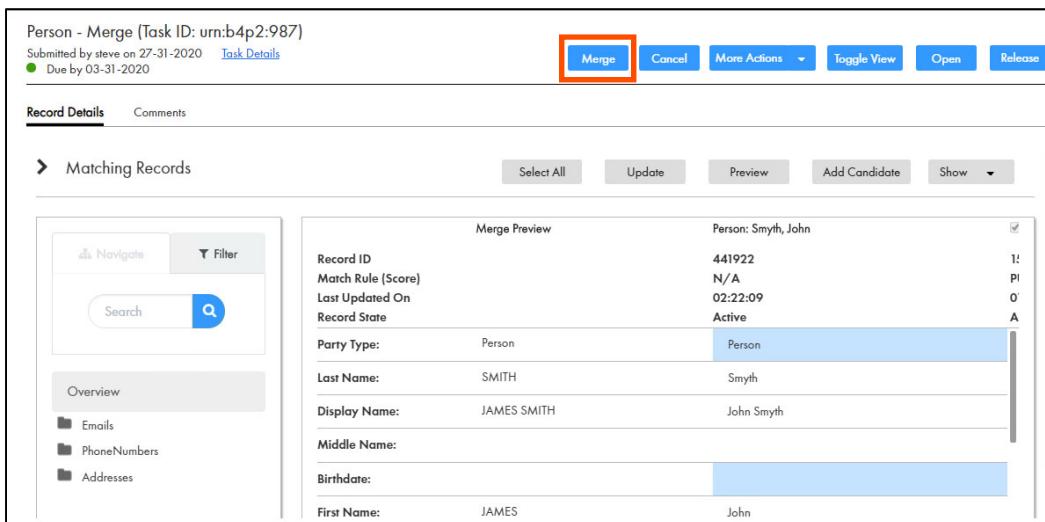
Review changes in Person  
 Type : Review No approve  
 Priority : NORMAL  
 ● Task Closed  
 Owner : marvin  
 ID : urn:b4p2:803  
 Submitted by bob on 27-04-2020

**Record Details**    **Comments**

**Merge Preview**

Record ID	441922
Match Rule (Score)	N/A
Last Updated On	02:22:09
Record State	Active
Party Type:	Person
Last Name:	SMITH
Display Name:	JAMES SMITH
Middle Name:	John Smyth
Birthdate:	
First Name:	JAMES

27. Click **Merge**.



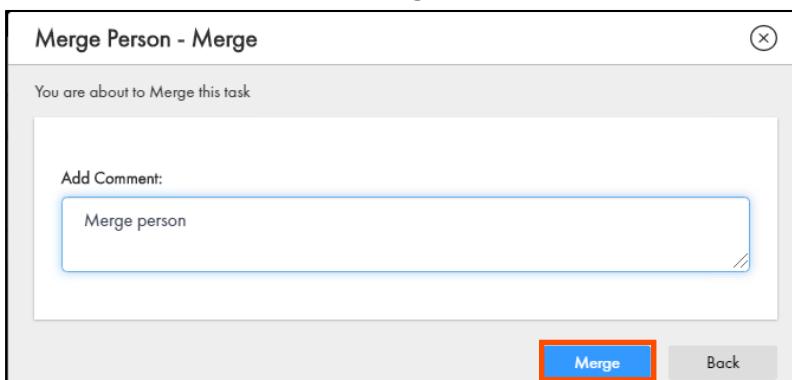
Person - Merge (Task ID: urn:b4p2:987)  
 Submitted by steve on 27-31-2020 [Task Details](#)  
 ● Due by 03-31-2020

**Record Details**    **Comments**

**Merge Preview**

Record ID	441922
Match Rule (Score)	N/A
Last Updated On	02:22:09
Record State	Active
Party Type:	Person
Last Name:	SMITH
Display Name:	JAMES SMITH
Middle Name:	John Smyth
Birthdate:	
First Name:	JAMES

28. Enter a comment and click **Merge**.



Merge Person - Merge

You are about to Merge this task

Add Comment:  
 Merge person

**Merge**    **Back**

**Note:** A notification appears indicating the merge is successful.

29. In the ActiveVOS console, you can see that the status of the merge workflow is “Completed”.



ID	Title	Ver.	Start Date	End Date	State	Group
985	BeMergeWorkflow	1.0	2020-05-27 04:31	2020-05-27 04:42	Completed	Completed
708	BeUpdateWithApprovalWorkflow	1.0	2020-05-27 01:36	2020-05-27 02:25	Completed	Completed

---

*This concludes the lab.*

# Module 1: Introduction to MDM Data Director Application

## Lab 1-3: Basic and Extended Queries

### Overview:

In this lab, you will define and backup search queries, build related records, and manage hierarchies and networks.

### Objectives:

- Define Standard and extended queries
- Backup queries
- Add related people to organization business entity
- Add related organization to organization business entity
- Navigate hierarchies and networks

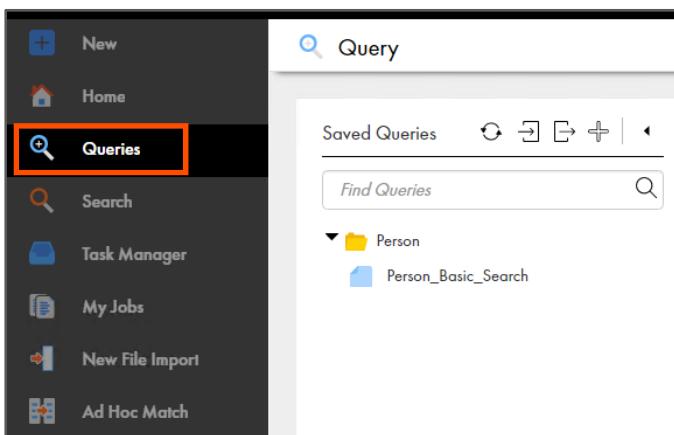
### Duration:

30 minutes

---

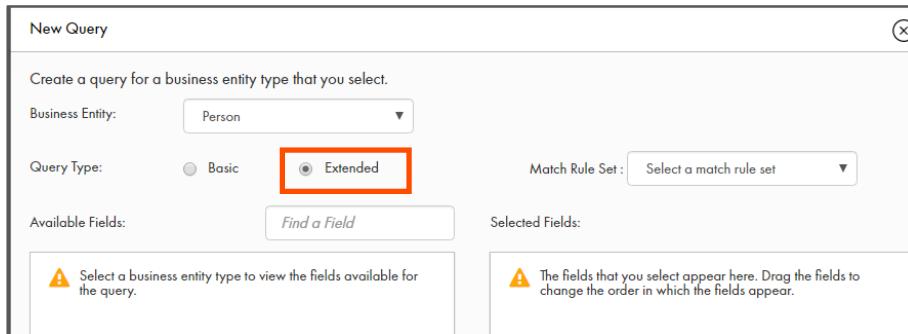
### Tasks

1. Log into the Entity 360 application as **sam** with password as **mdm**.  
Sam is the Senior Manager with most of the privileges and does not require further approvals for adding records.
2. Click **Queries**.



3. Click the + icon to add a new query.
4. In the **New Query** window, select the Business Entity as **Person**.

5. Select the Query Type as **Extended**.



New Query

Create a query for a business entity type that you select.

Business Entity: Person

Query Type:  Basic  Extended  Match Rule Set: Select a match rule set

Available Fields: Find a Field

Select a business entity type to view the fields available for the query.

Selected Fields:

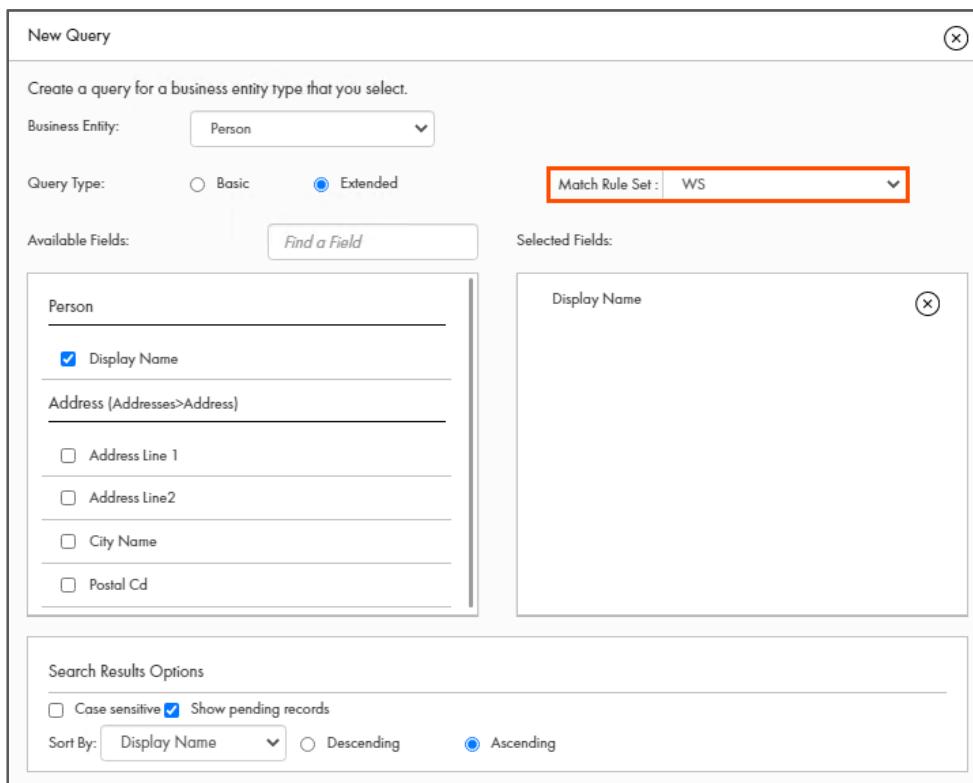
The fields that you select appear here. Drag the fields to change the order in which the fields appear.

6. For the Match Rule Set, from the drop-down, select **WS**.

**Note:** WS is a match ruleset configured in the MDM hub.

7. From the Available Fields, select **Display Name**.

8. Sort the search results in **Ascending** order of the Display Name field and click **OK**.



New Query

Create a query for a business entity type that you select.

Business Entity: Person

Query Type:  Basic  Extended  Match Rule Set: WS

Available Fields: Find a Field

Person  
 Display Name  
Address (Addresses>Address)  
 Address Line 1  
 Address Line2  
 City Name  
 Postal Cd

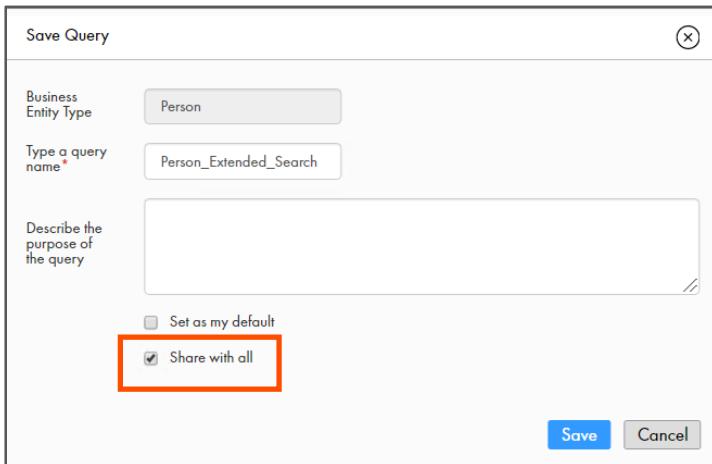
Selected Fields:

Display Name

Search Results Options  
 Case sensitive  Show pending records  
Sort By: Display Name  Descending  Ascending

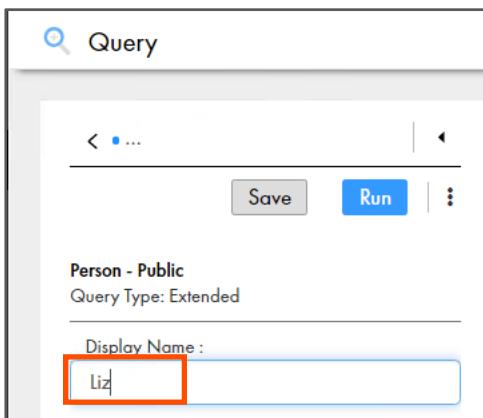
**Note:** The query can even show records awaiting approval when the pending records option is enabled.

9. Click **Save**.
10. Enter the Query Name as **Person\_Extended\_Search**.
11. Select the **Share with all** checkbox and click **Save**.



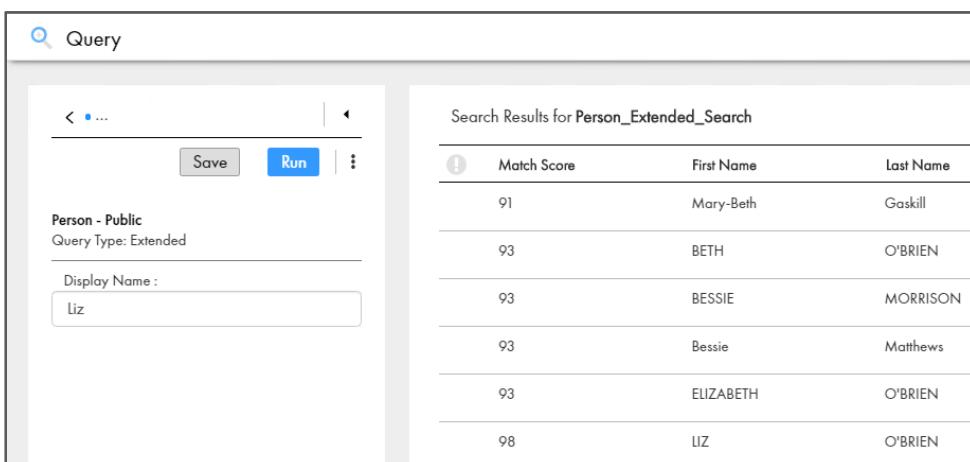
The screenshot shows the 'Save Query' dialog box. It has fields for 'Business Entity Type' (Person) and 'Type a query name' (Person\_Extended\_Search). There is a large text area for 'Describe the purpose of the query'. At the bottom, there are two checkboxes: 'Set as my default' (unchecked) and 'Share with all' (checked, highlighted with a red box). Below the checkboxes are 'Save' and 'Cancel' buttons.

12. Enter **Liz** in the Display Name field and click **Run**.



The screenshot shows the 'Query' dialog box. It displays 'Person - Public' and 'Query Type: Extended'. The 'Display Name' field contains 'Liz' (highlighted with a red box). Below the field are 'Save' and 'Run' buttons, with 'Run' being blue and highlighted.

13. The search results include variations of the name Liz.

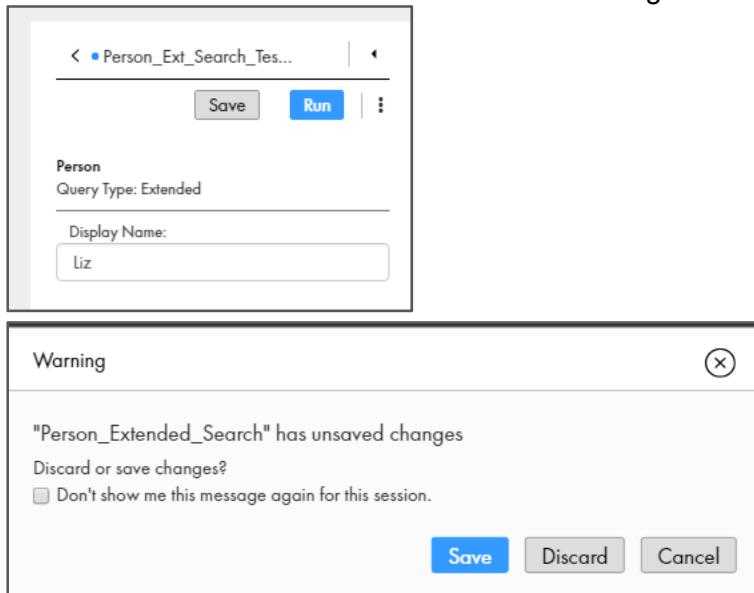


The screenshot shows the 'Query' dialog box again, this time with the 'Run' button highlighted. To the right is the 'Search Results for Person\_Extended\_Search' table. The table has columns: Match Score, First Name, and Last Name. The results are:

Match Score	First Name	Last Name
91	Mary-Beth	Gaskill
93	BETH	O'BRIEN
93	BESSIE	MORRISON
93	Bessie	Matthews
93	ELIZABETH	O'BRIEN
98	LIZ	O'BRIEN

**Note:** Since the match job is already executed, you see the results for the extended search.

14. Click the back arrow and choose to **discard** changes to the query.

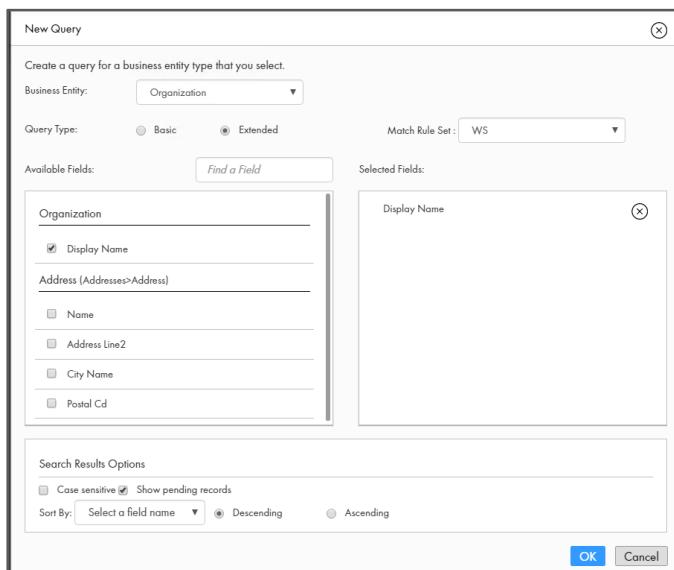


The screenshot shows two windows. The top window is a query editor titled "Person\_Ext\_Search\_Tes...". It has a "Save" button, a "Run" button, and a "..." button. Below these are sections for "Person" and "Query Type: Extended". Under "Display Name:", there is a text input field containing "Liz". The bottom window is a "Warning" dialog box. It says "'Person\_Extended\_Search' has unsaved changes" and asks "Discard or save changes?". There is a checkbox "Don't show me this message again for this session." and three buttons at the bottom: "Save", "Discard", and "Cancel".

15. Click the **Extended** query type to create a new extended query.

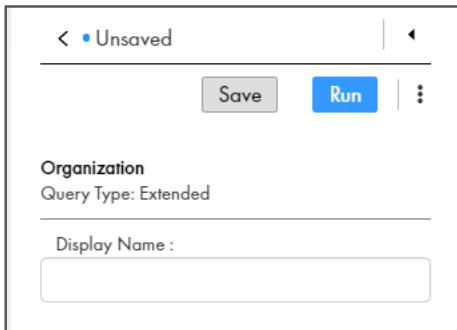
16. Select the following:

- Business entity – **Organization**
- Match Rule Set – **WS**
- Field – **Display Name**



The screenshot shows the "New Query" dialog box. At the top, it says "Create a query for a business entity type that you select." A dropdown "Business Entity" is set to "Organization". Below it, "Query Type:" has a radio button for "Extended" selected. "Match Rule Set:" is set to "WS". The "Available Fields:" section lists fields like "Organization", "Address", "Name", "Address Line2", "City Name", and "Postal Cd". "Display Name" is checked. The "Selected Fields:" section contains "Display Name". At the bottom, "Search Results Options" include "Case sensitive" (unchecked), "Show pending records" (checked), and "Sort By: Select a field name" with "Descending" selected. There are "OK" and "Cancel" buttons at the bottom right.

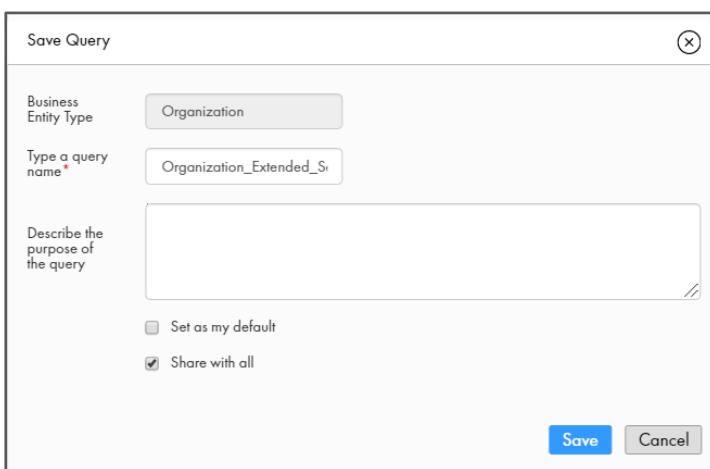
17. Click **OK** and **Save** the query.



The screenshot shows a query editor interface. At the top, it says 'Unsaved' with a back arrow. Below that are two buttons: 'Save' (gray) and 'Run' (blue). To the right of the Run button is a vertical ellipsis. The main area is titled 'Organization' and specifies 'Query Type: Extended'. There is a field labeled 'Display Name:' with an empty input box below it.

18. Enter the query name as **Organization\_Extended\_Search**.

19. Select the **Share with all** checkbox, and click **Save**.



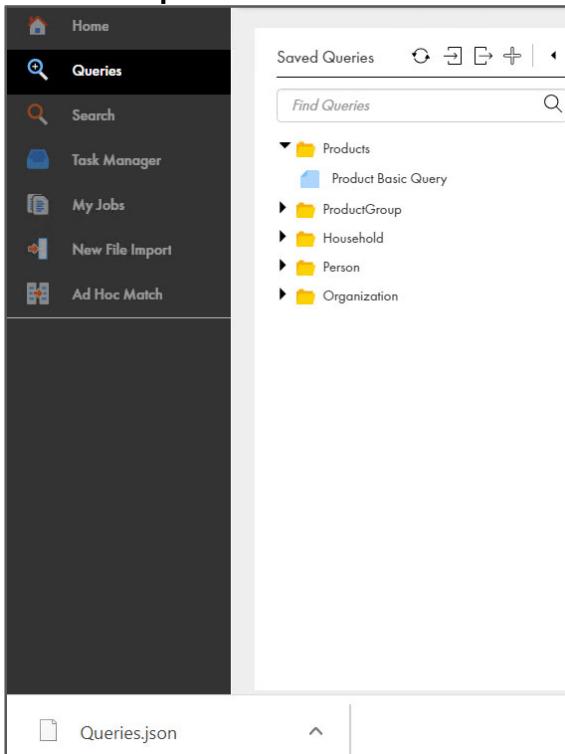
The screenshot shows a 'Save Query' dialog box. It has fields for 'Business Entity Type' (set to 'Organization') and 'Type a query name' (containing 'Organization\_Extended\_Sear'). There is a large text area for 'Describe the purpose of the query' which is empty. At the bottom, there are two checkboxes: 'Set as my default' (unchecked) and 'Share with all' (checked). At the very bottom are 'Save' and 'Cancel' buttons.

20. Follow the previous steps and create the following public queries:

Query Name	Entity	Type	Fields
Product Basic Query	Products	Basic	Number Name Product Type
Product Group	ProductGroup	Basic	Name Number
Household_Basic	Household	Basic	Name
Person	Person	Basic	First name Middle name Last name Display Name Birthdate Emails: isValidInd TelephoneNumber: Do Not Call PersonDetails: Is VIP Ind
Organization	Organization	Basic	DUNS number Display Name

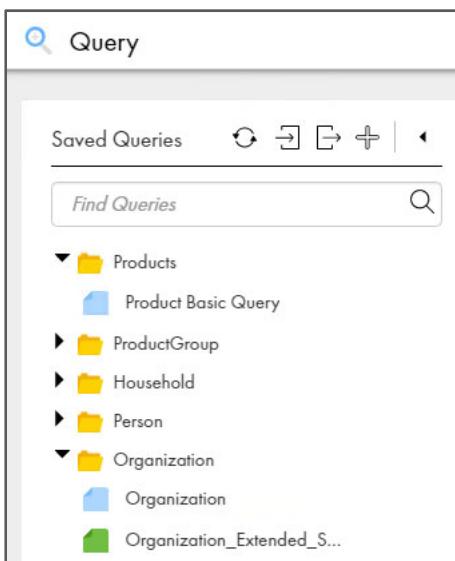
**Note:** Test each of the query and export it as a json file to your desktop. You will need these queries in the later labs.

21. Click the **Export** icon next to the Saved Queries.

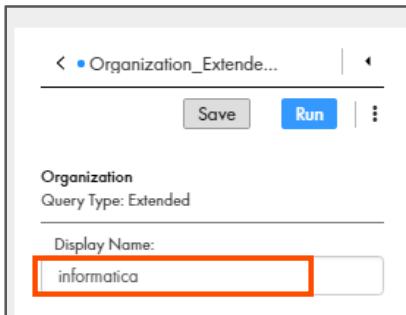


**Note:** This will export the queries in the JSON format. You will import these queries in the application you will design in the later modules.

22. From the list of queries, double-click **Organization > Organization\_Extended\_Search**.

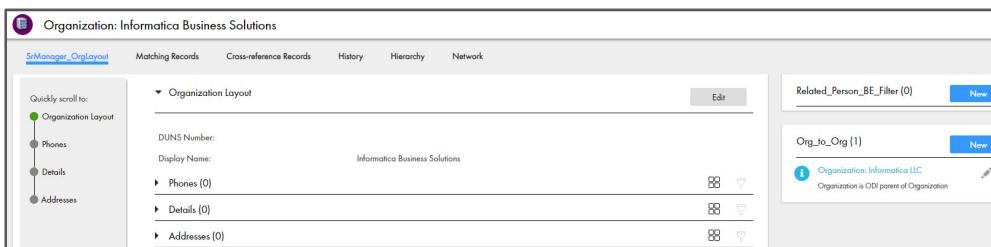


23. Search for the organization “**Informatica**” and click **Run**.



The screenshot shows a search interface for 'Organization\_Extended'. At the top, there are 'Save' and 'Run' buttons. Below them, it says 'Organization' and 'Query Type: Extended'. A 'Display Name:' field contains the value 'informatica', which is highlighted with a red box.

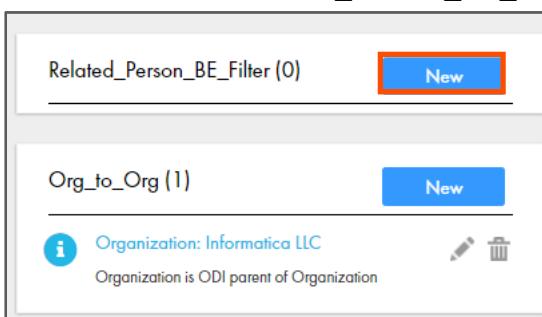
24. From the **Search Results** window on the right, double-click the **Informatica Business Solutions** record to open it.



The screenshot shows the 'Organization: Informatica Business Solutions' search results. It includes tabs for 'Matching Records', 'Cross-reference Records', 'History', 'Hierarchy', and 'Network'. On the left, there's a tree view under 'Organization Layout' with nodes for 'Phones', 'Details', and 'Addresses'. The main pane shows a record for 'Informatica Business Solutions' with fields for 'DUNS Number' and 'Display Name'. Below this are sections for 'Phones (0)', 'Details (0)', and 'Addresses (0)'. To the right, there's a 'Related Records' section with two items: 'Related\_Person\_BE\_Filter (0)' and 'Org\_to\_Org (1)'. The 'Org\_to\_Org' item is expanded, showing a single record for 'Organization: Informatica LLC' with the note 'Organization is ODI parent of Organization'.

You will now add related records. Observe the **Related Records** section is now empty.

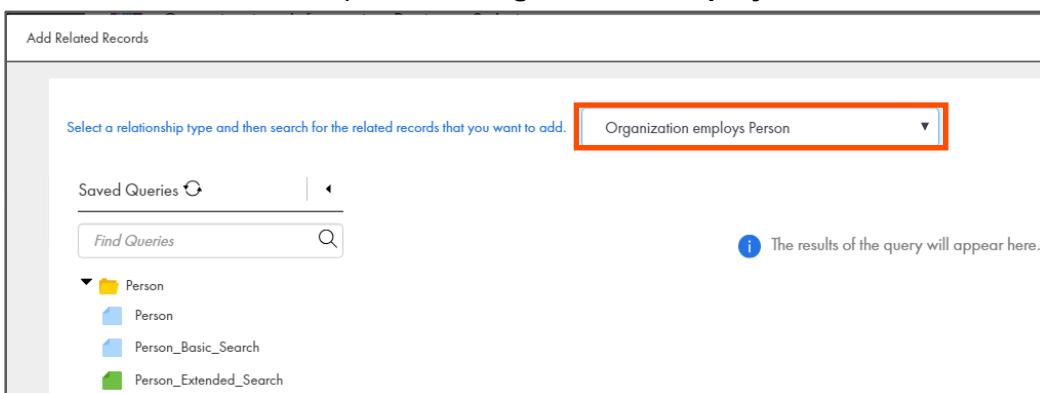
25. Click **New** for the Related\_Person\_BE\_Filter.



The screenshot shows the 'Add Related Records' window. It has a section for 'Related\_Person\_BE\_Filter (0)' with a 'New' button highlighted with a red box. Below it is another section for 'Org\_to\_Org (1)' with a 'New' button. The 'Org\_to\_Org' section contains a record for 'Organization: Informatica LLC' with the note 'Organization is ODI parent of Organization'.

26. In the **Add Related Records** window, click **Person\_Basic\_Search**.

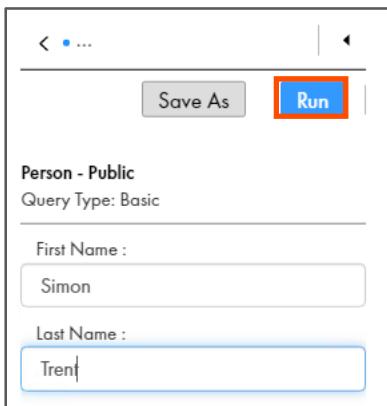
27. Ensure that the relationship is set to **Organization employs Person**.



The screenshot shows the 'Add Related Records' window again. In the 'Relationship type' dropdown, the option 'Organization employs Person' is selected and highlighted with a red box. Below this, there's a 'Saved Queries' section with a 'Find Queries' input field and a list of saved queries: 'Person', 'Person\_Basic\_Search', and 'Person\_Extended\_Search'. A note on the right says 'The results of the query will appear here.'

28. Enter **Simon** in the first name and for the last name enter **Trent**.

29. Click **Run**.

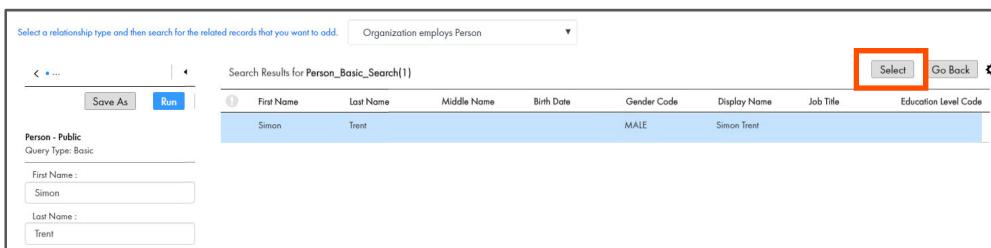


Person - Public  
Query Type: Basic

First Name : Simon

Last Name : Trent

30. Select the search result and click the **Select** button.



Select a relationship type and then search for the related records that you want to add. Organization employs Person

First Name	Last Name	Middle Name	Birth Date	Gender Code	Display Name	Job Title	Education level Code
Simon	Trent			MALE	Simon Trent		

Person - Public  
Query type: Basic

First Name : Simon

Last Name : Trent

31. Click **Save**.



Define the attributes of the relationships that you want to add.

Selected Record: Person: Trent, Simon  
Selected Relationship Type: Organization employs Person

Relationship Attributes

Rel Desc:

Rel Name:

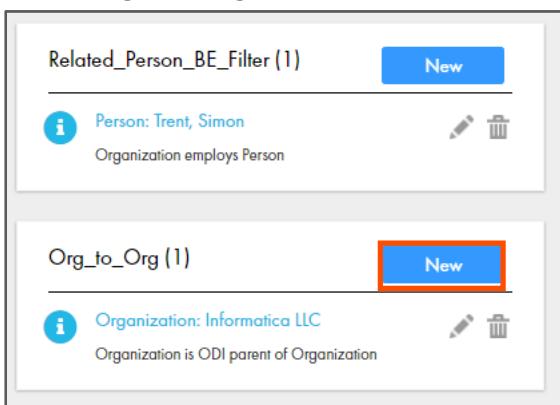
Rowid Rel Type: employs

Rowid Hierarchy: Customer

Back **Save**

**Note:** The page should disappear.

32. In the Org\_to\_Org relationship, click **New**.



Related\_Person\_BE\_Filter (1) **New**

Person: Trent, Simon  
Organization employs Person

Org\_to\_Org (1) **New**

Organization: Informatica LLC  
Organization is ODI parent of Organization

33. Select **Organization** public query.

34. In the **Display Name**, enter the search as **Informatica\***, and click **Run**.

Select a relationship type and then search for the related records that you want to add. Organization is ODI parent of Organization

Display Name	DUNS Number
Informatica Business Solutions	
Informatica LLC	
Informatica Business Solutions pvt LTD	
Informatica Inc.	
Informatica LLC	
Informatica	
Informatica Corp	
Informatica Business solutions pvt ltd	

Organization - Public  
Query Type: Basic  
DUNS Number:  
Display Name: Informatica \*

Run | Go Back | 

35. From the results, select **Informatica Business Solutions pvt LTD** and click **Select**.

Search Results for Organization(8)

Display Name	DUNS Number
Informatica Business Solutions	
Informatica LLC	
Informatica Business Solutions pvt LTD	
Informatica Inc.	
Informatica LLC	
Informatica	
Informatica Corp	
Informatica Business solutions pvt ltd	

Go Back | 

36. Your record should now have a related person and a related organization. Click **Save**.

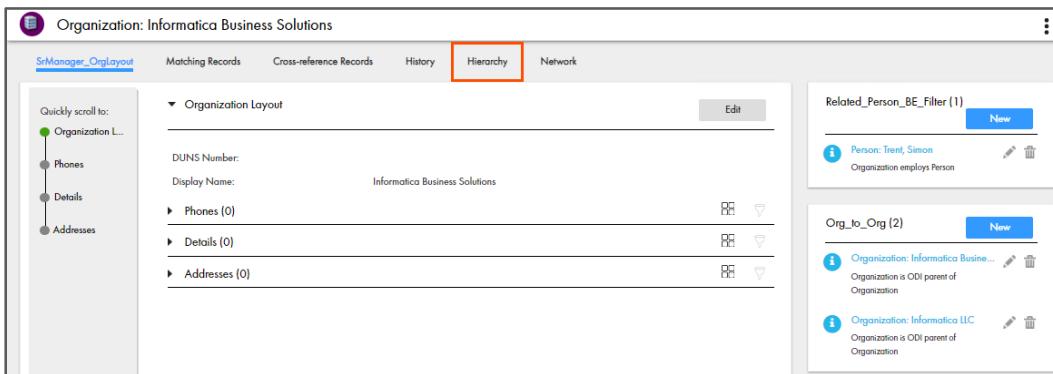
Define the attributes of the relationships that you want to add.

Selected Record:	Organization: Informatica Business Solutions pvt Ltd
Selected Relationship Type:	Organization is ODI parent of Organization
Relationship Attributes	
Rel Desc:	
Rowid Rel Type:	is ODI parent of
Rowid Hierarchy:	ODI
Rel Name:	

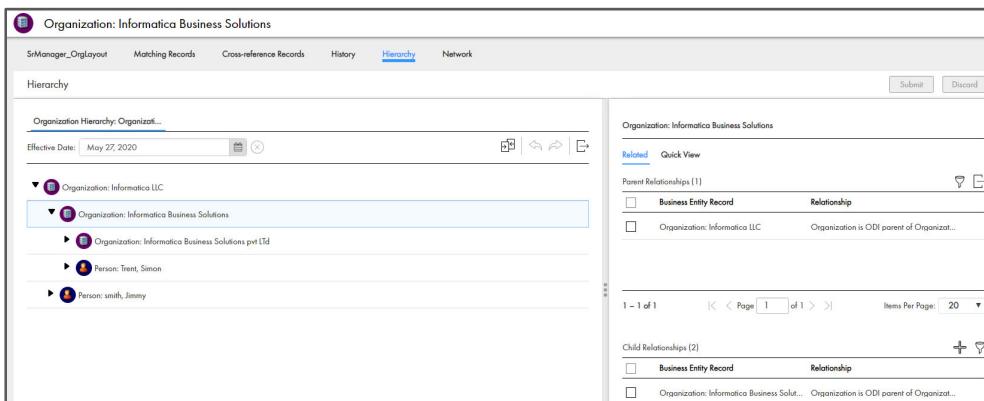
Back | **Save** | 

Next, we will navigate the hierarchies and networks.

37. Click the **Hierarchy** tab.



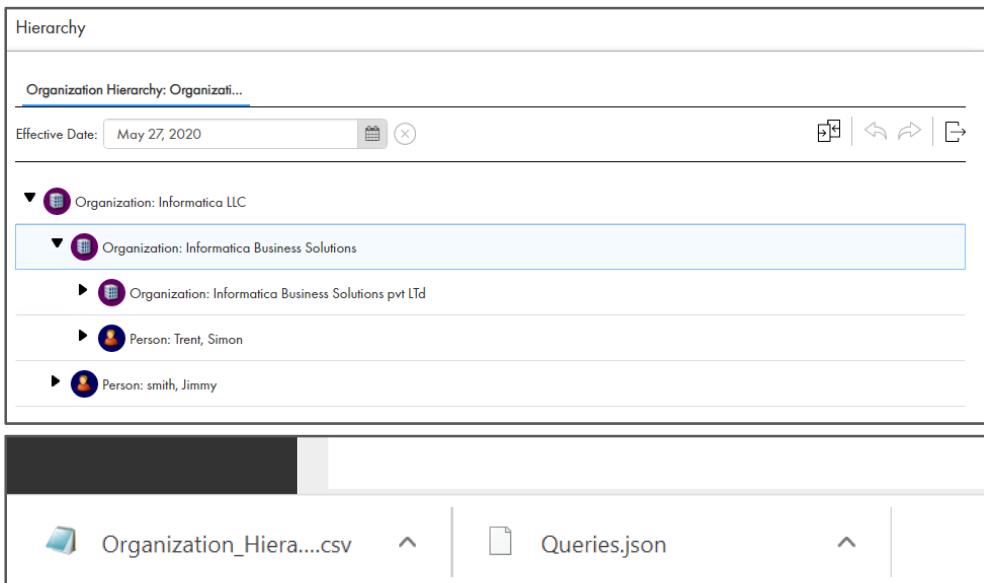
38. You should now see a hierarchical representation of the relationships as shown.



**Note:** Navigate your way to each of the entity and observe the relationship on the right-hand side.

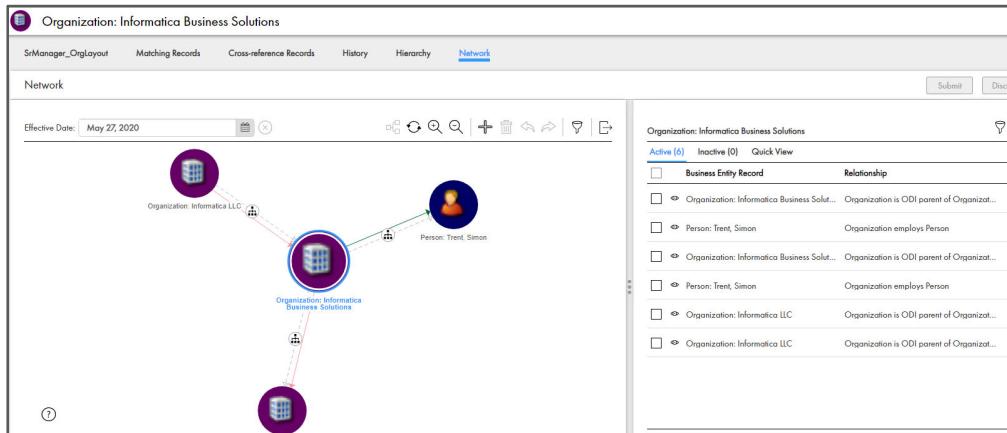
39. Click the **Export** icon to download the entities and their relationships.

40. Save **Organization\_Hierarchy.csv** on the desktop.

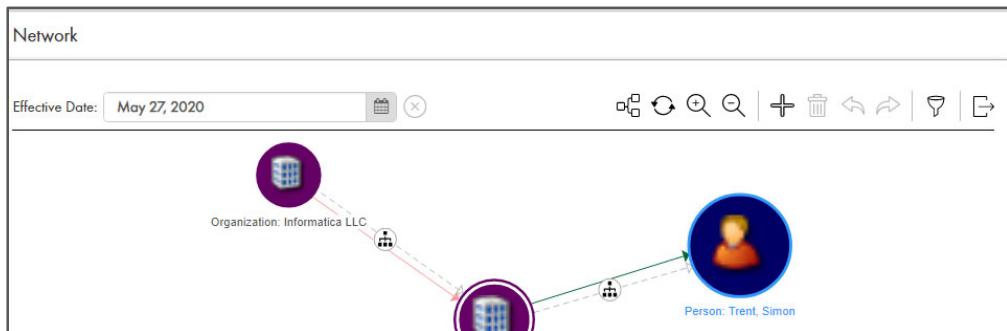


You could also add a related record from the hierarchy tab.

41. To see a network, click the **Network** tab. This will show the sphere of influence for the current record.



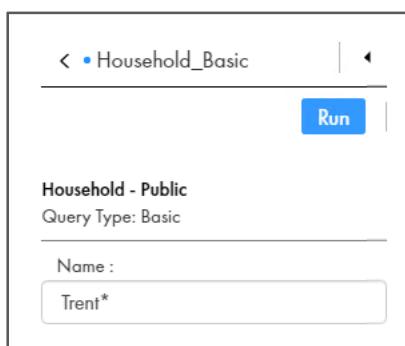
42. Select **Simon's** record and click the **add** button next to Simon (not from the toolbar).



43. In the Add related records window, select the relationship as **Household contains member person**.

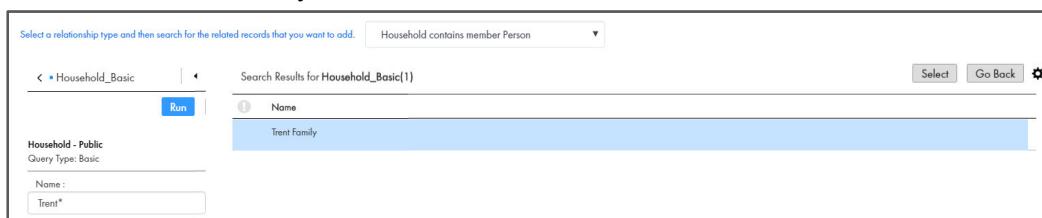
44. Select the **Household** query.

45. Enter the Name as **Trent\*** to search for the **Trent Family**.



This screenshot shows the 'Household\_Basic' query search interface. It includes a navigation bar with a back arrow, a 'Run' button, and a dropdown menu set to 'Household contains member Person'. Below this, there is a section for 'Household - Public' with 'Query Type: Basic'. A search field labeled 'Name:' contains the value 'Trent\*'. The interface is clean and modern, typical of a web-based application.

46. Select the **Trent Family** result and click **Select**.



This screenshot shows the search results for the 'Household\_Basic' query. The top bar says 'Select a relationship type and then search for the related records that you want to add.' and has a dropdown set to 'Household contains member Person'. The search results are displayed in a table with columns for 'Name' and other details. The row for 'Trent Family' is highlighted with a blue background. At the bottom of the search results table, there are buttons for 'Select', 'Go Back', and a gear icon.

47. In the next page, click **Save**.



Define the attributes of the relationships that you want to add.

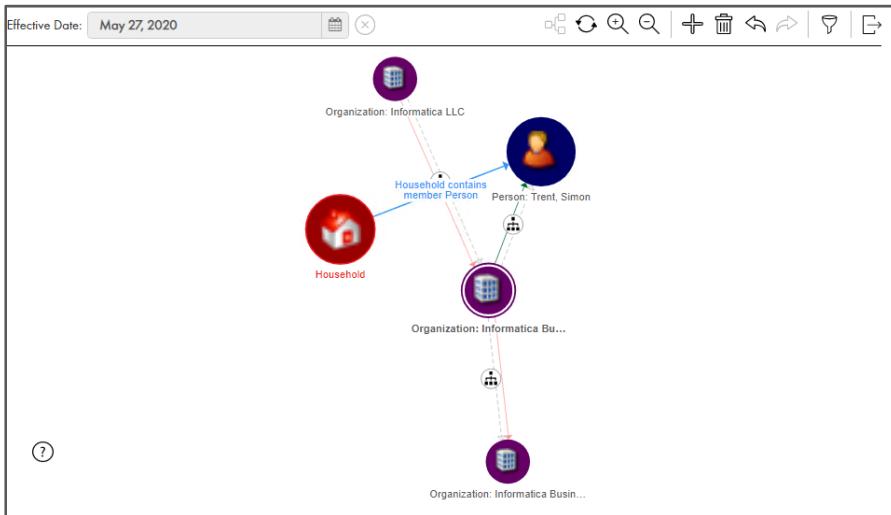
Selected Record: Household  
Selected Relationship Type: Household contains member Person

Relationship Attributes

Rowid RelType:	contains member	X
Rowid Hierarchy:	Customer	X

Back **Save**

48. You will be returned to the **network**.



**Note:** Now, you will see the **household** as well.

*This concludes the lab.*



# Module 1: Introduction to MDM Data Director Application

## Lab 1-4: Import Business Entities and Relationships

### Overview:

The data director allows you to import a flat file via a mapping created within the application. You can reuse this mapping for future imports. The file import option allows you to import entities, relationships, and even hierarchies.

### Objectives:

- Import business entities and relationships

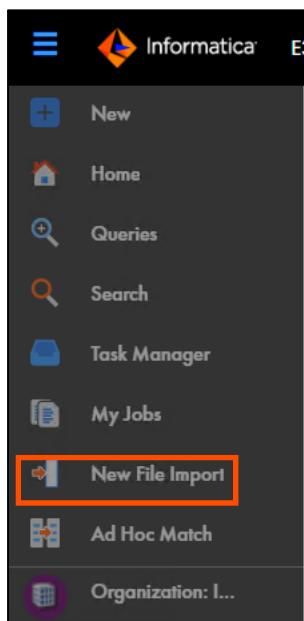
### Duration:

30 minutes

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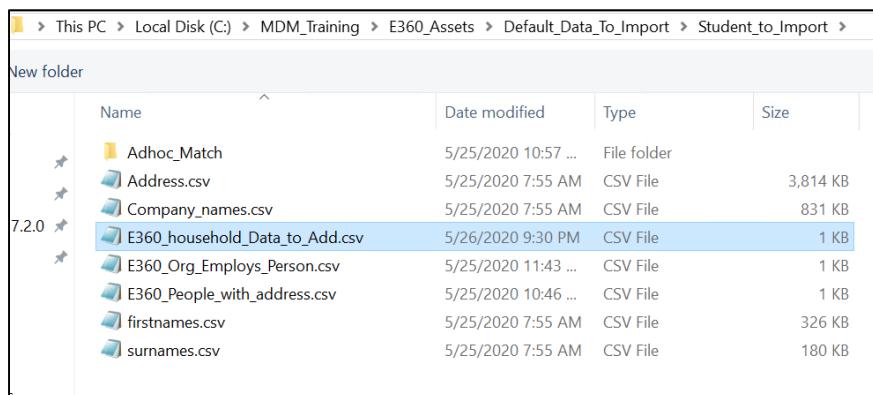
### Tasks

- In the MDM Data Director, click the **New File Import** option from the left-hand menu.

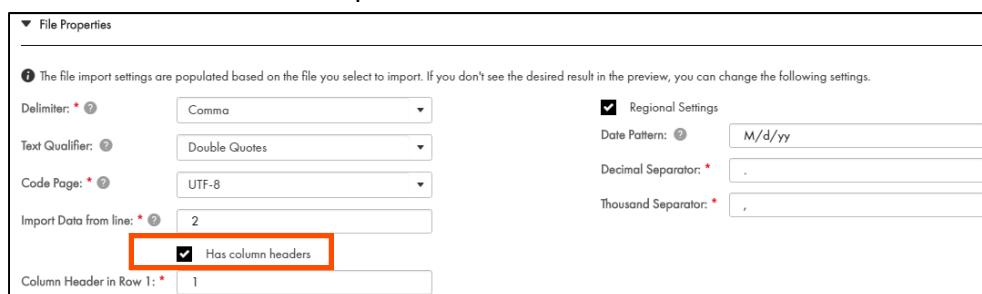


2. Click **Browse** and select the file

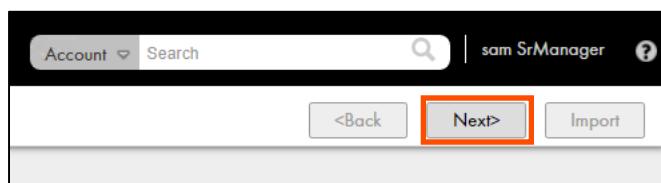
C:\MDM\_Training\E360\_Assets\Default\_Data\_To\_Import\Student\_to\_Import\E360\_household\_Data\_to\_Add.csv.



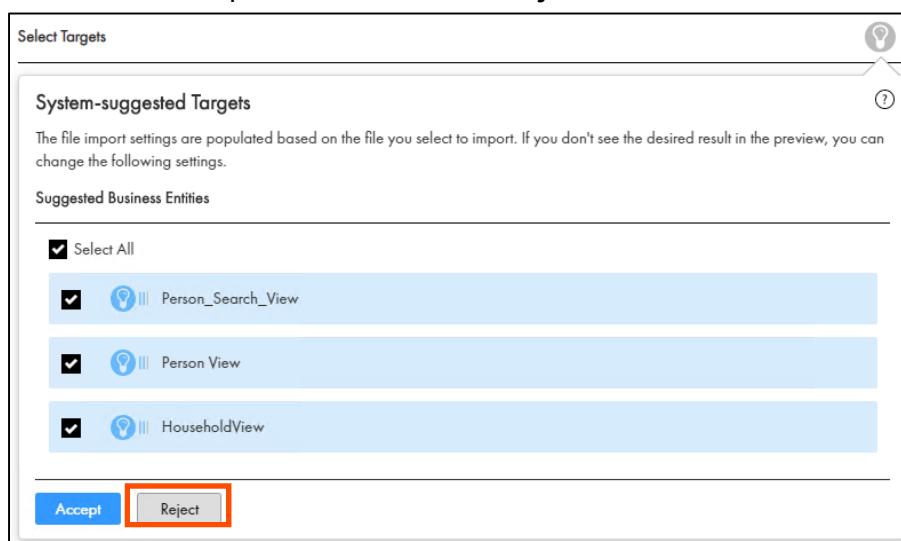
3. Scroll down, in the File Properties section, enable the **Has column headers** checkbox.



4. Click **Next**.



5. In the second step of the wizard, click **Reject**.



6. Click the + icon for the Business Entities.



Select Targets

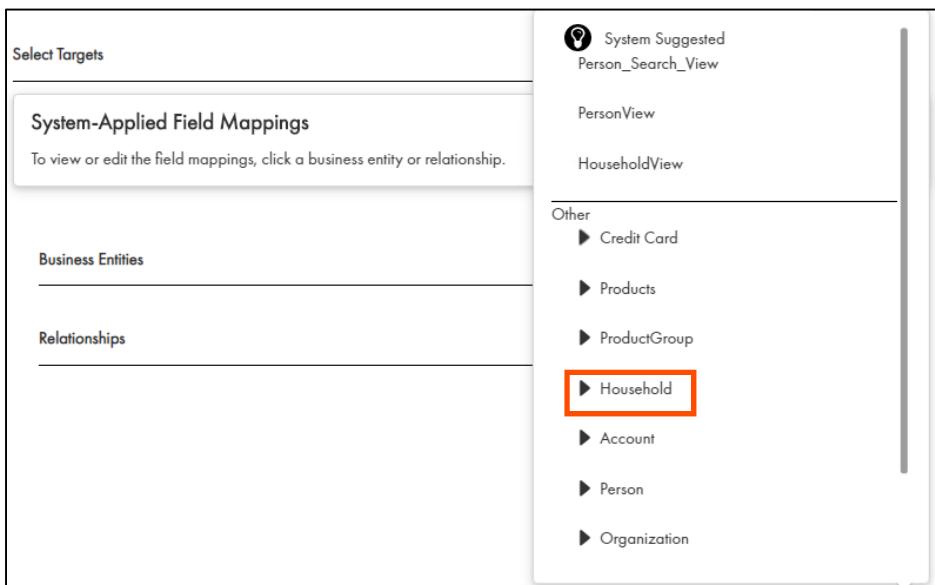
System-Applied Field Mappings

To view or edit the field mappings, click a business entity or relationship.

Business Entities

Relationships

7. Select the **Household** business entity.



Select Targets

System-Applied Field Mappings

To view or edit the field mappings, click a business entity or relationship.

Business Entities

Relationships

System Suggested Person\_Search\_View

PersonView

HouseholdView

Other

- ▶ Credit Card
- ▶ Products
- ▶ ProductGroup
- ▶ Household **(highlighted)**
- ▶ Account
- ▶ Person
- ▶ Organization

8. In the Household business entity, drag and drop the **default family name** on the **Name**.

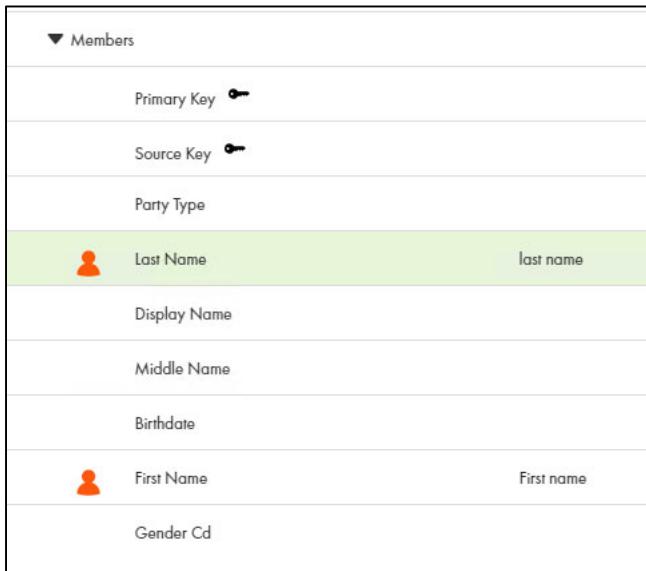


Target Field	Source Column Header
▼ Household	
Primary Key	key
Source Key	key
Group Type	
<span style="color: orange;">👤</span> Name	default Family name
▼ Members	

9. Similarly, expand **Members**:

- Drag the **First name** source column from the left hand side and drop it on the **First Name** under the Household entity.

- Drag the **Last name** source column from the left hand side and drop it on the **Last Name** under the Household entity.



The screenshot shows the 'Field Mapping Options' dialog for the 'Household' entity. The 'Members' section is expanded. Under 'Source Type', the 'Last Name' column is selected and mapped to the 'last name' target field. Other columns like 'Display Name', 'Middle Name', 'Birthdate', 'First Name', and 'Gender Cd' are also listed but not mapped.

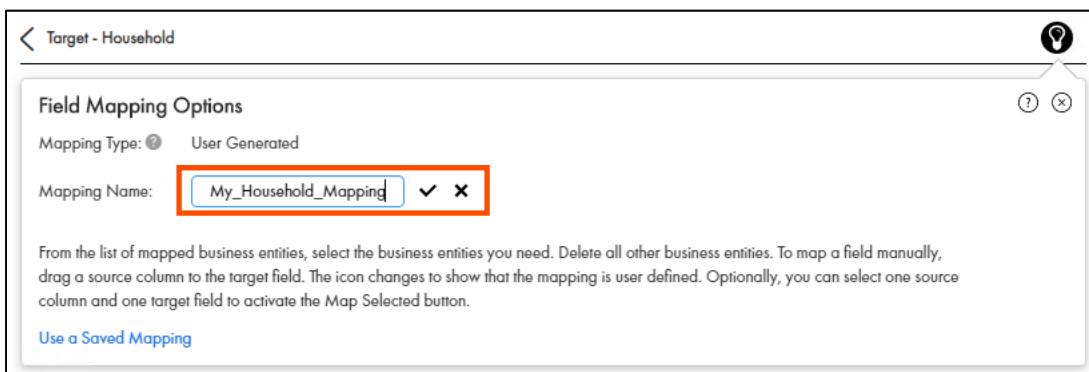
10. Click on the **Cog** icon.



The screenshot shows the 'User Mapping' dialog. At the top right, there is a cog icon (Edit) which is highlighted with a red box. Below it, there is a question mark icon and a close button.

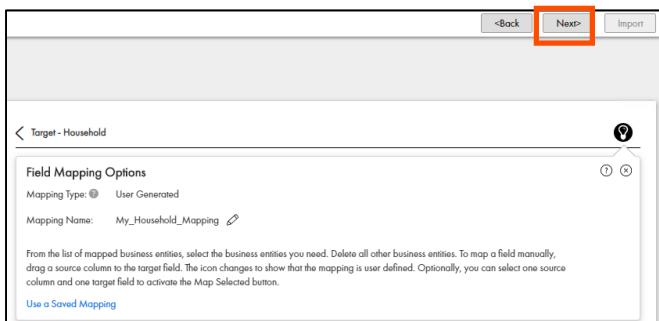
11. Click the **Edit** icon and name the mapping as **My\_Household\_Mapping**.

12. Click the **tick** icon to save the name.



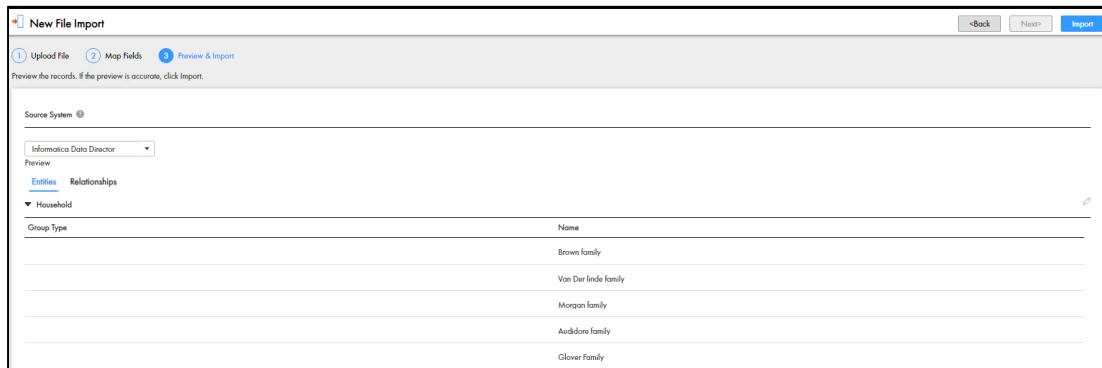
The screenshot shows the 'Field Mapping Options' dialog again. The 'Mapping Name' field contains 'My\_Household\_Mapping' and the edit icon next to it is highlighted with a red box. The 'User Generated' mapping type is selected. A descriptive text at the bottom explains how to map fields manually by dragging them between source and target fields.

13. Click **Next**.



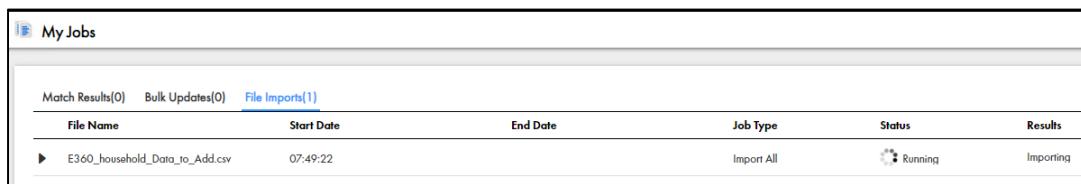
The screenshot shows the 'Field Mapping Options' dialog on the next step. The 'Next>' button at the top right is highlighted with a red box. The dialog content is identical to the previous screenshot, showing the mapping name and instructions.

14. In the **Preview & Import** page, review the data before you import it.



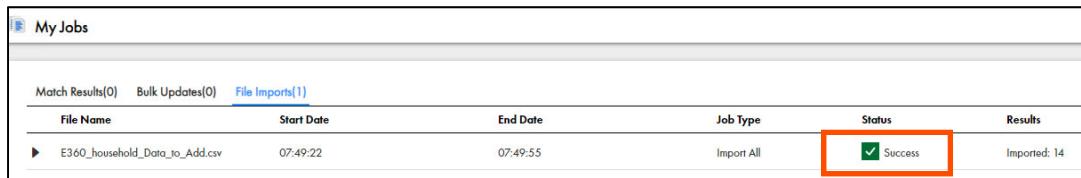
The screenshot shows the 'New File Import' interface. Under 'Source System', 'Informatica Data Director' is selected. In the 'Entities' tab, 'Household' is chosen. The preview table lists five households: Brown family, Van Der Linde family, Morgan family, Audrone family, and Glover family.

15. Click **Import** and the **My Jobs** page appears showing the progress of the file import.



The 'My Jobs' page displays a single file import job. The job details are: File Name: E360\_household\_Data\_to\_Add.csv, Start Date: 07:49:22, End Date: (not shown), Job Type: Import All, Status: Running, and Results: Importing.

**Note:** Monitor the Status field. It changes from Pending to Running, and Success.



The 'My Jobs' page shows the same import job now completed. The status has changed to 'Success'. The results show 14 imported records.

### Additional Exercise (Optional):

Import the **E360\_People\_with\_address.csv** file into the person business entity.

*This concludes the lab.*



# Module 1: Introduction to MDM Data Director Application

## Lab 1-5: Import and Export Data

### Overview:

In this lab, you will export data out of the Data Director application via the search results. This also lets you perform a search and replace.

### Objectives:

- Export query results
- Perform a search and replace

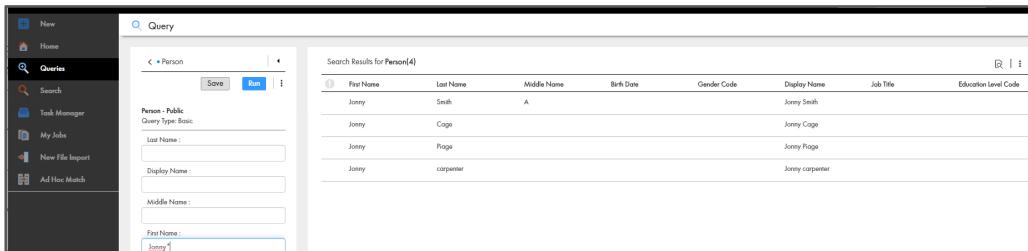
### Duration:

20 minutes

---

### Tasks:

1. While logged in as **sam**, click **Queries** from the left-hand menu.
2. Open the **Person** basic query.
3. In the First name field, enter the search as **Jonny\*** and click **Run**.



First Name	Last Name	Middle Name	Birth Date	Gender Code	Display Name	Job Title	Education Level Code
Jonny	Smith	A			Jonny Smith		
Jonny	Cage				Jonny Cage		
Jonny	Piage				Jonny Piage		
Jonny	carpenter				Jonny carpenter		

4. From the top right-hand side, click more (the 3 vertical dots) and click **Export Current Fields**.



This will download a file with the fields visible in the search results.

5. **Save** the file on the desktop.

6. Once the csv file is downloaded and saved, click the **Find and Replace** icon towards the right-hand side.



This will allow for a search and replace.

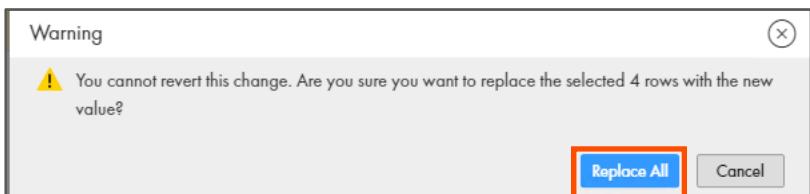
7. In the **Find in** field, select the column as **First Name**, and enter the value as **Jonny** and click **Find**.

Find and Replace Records for Person View					
Find in:	First Name	Jonny	Find	Replace with:	Replace All
4 Matching Rows Found <input type="checkbox"/> Show Matching Rows Only					
① First Name	Last Name	Middle Name	Birth Date	Gender Code	Display Name
Jonny	Smith	A			Jonny Smith
Jonny	Cage				Jonny Cage
Jonny	Piage				Jonny Piage
Jonny	carpenter				Jonny carpenter

8. Enter **Jonathan** in the **Replace with** field, and click **Replace All**.

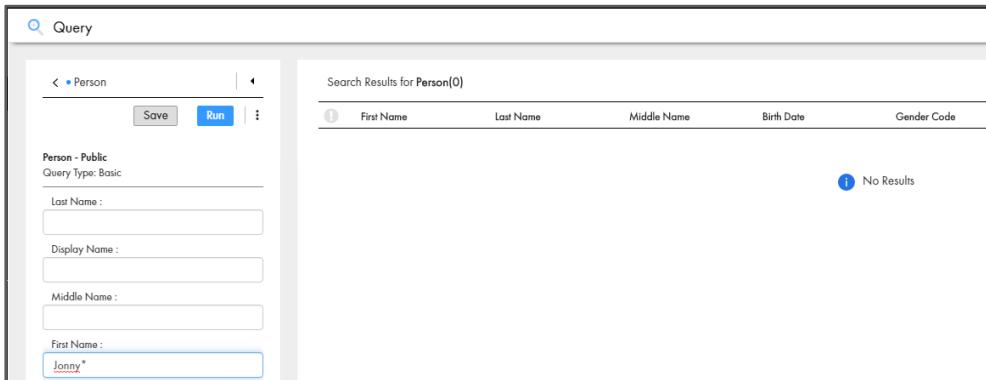
Find and Replace Records for Person View					
Find in:	First Name	Jonny	Find	Replace with:	Jonathan
4 Matching Rows Found <input type="checkbox"/> Show Matching Rows Only					
① First Name	Last Name	Middle Name	Birth Date	Gender Code	Display Name
Jonny	Piage				Jonny Piage
Jonny	Cage				Jonny Cage
Jonny	Smith	A			Jonny Smith
Jonny	carpenter				Jonny carpenter

9. You will get a warning message box mentioning that you cannot revert back. Click **Replace All**.



**Note:** Observe that all the selected records are updated.

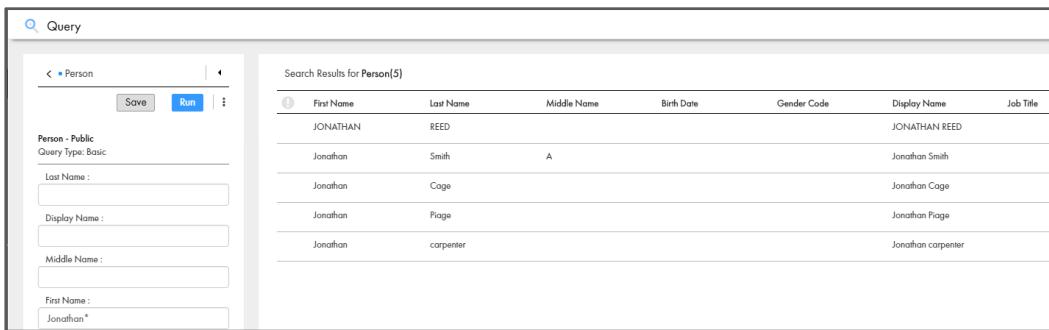
10. Return to the person query and search for the first name **Jonny** to confirm the data change.



The screenshot shows the Informatica Query interface. On the left, there's a form with fields for Last Name, Display Name, Middle Name, and First Name. The First Name field contains "Jonny\*". On the right, a table titled "Search Results for Person(0)" is displayed, showing columns for First Name, Last Name, Middle Name, Birth Date, and Gender Code. A message "No Results" is shown at the bottom of the results table.

**Note:** You will not see any results.

11. Enter the search string as **Jonathan\*** in the First Name field, and view the results.



The screenshot shows the Informatica Query interface. On the left, there's a form with fields for Last Name, Display Name, Middle Name, and First Name. The First Name field contains "Jonathan\*". On the right, a table titled "Search Results for Person(5)" is displayed, showing columns for First Name, Last Name, Middle Name, Birth Date, Gender Code, Display Name, and Job Title. The results are as follows:

First Name	Last Name	Middle Name	Birth Date	Gender Code	Display Name	Job Title
JONATHAN	REED				JONATHAN REED	
Jonathan	Smith	A			Jonathan Smith	
Jonathan	Cage				Jonathan Cage	
Jonathan	Page				Jonathan Page	
Jonathan	carpenter				Jonathan carpenter	

---

*This concludes the lab.*



# Module 1: Introduction to MDM Data Director Application

## Lab 1-6: Perform an Adhoc Match

### Overview:

The data director allows you to perform an ad hoc match by comparing data from the flat file with the data in the MDM system. For a flat file import and the ad hoc match, the required privileges are already assigned for this repository.

### Objectives:

- Import flat file data into the data director application
- Perform an adhoc match

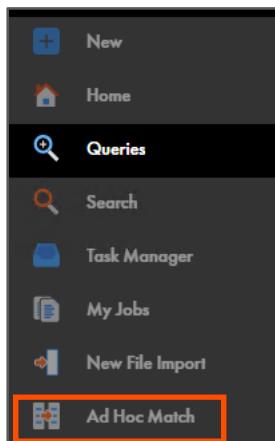
### Duration:

30 minutes

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### Tasks

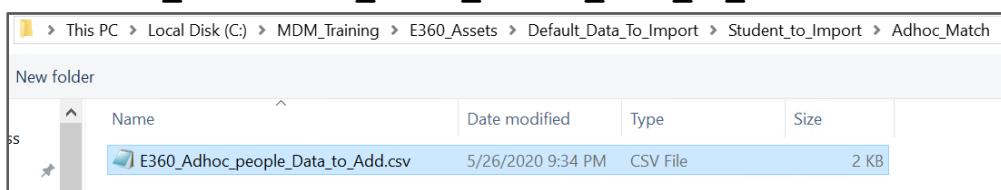
1. In the MDM Data Director application, click the **Ad Hoc Match** option from the left-hand side main menu.



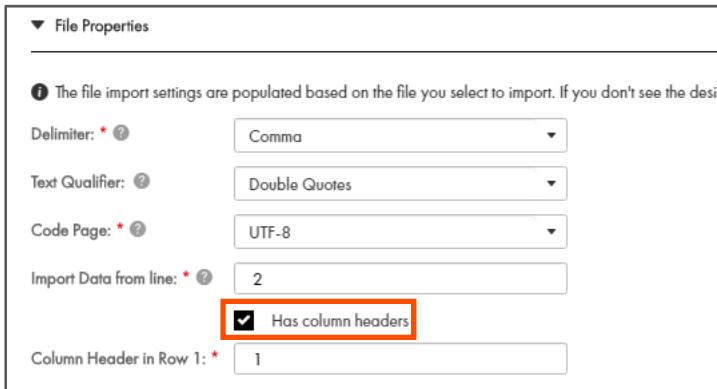
This will open a wizard.

2. Click **Browse** to select the file

C:\MDM\_Training\E360\_Assets\Default\_Data\_To\_Import\Student\_to\_Import\Adhoc\_Match\E360\_Adhoc\_people\_Data\_to\_Add.csv.

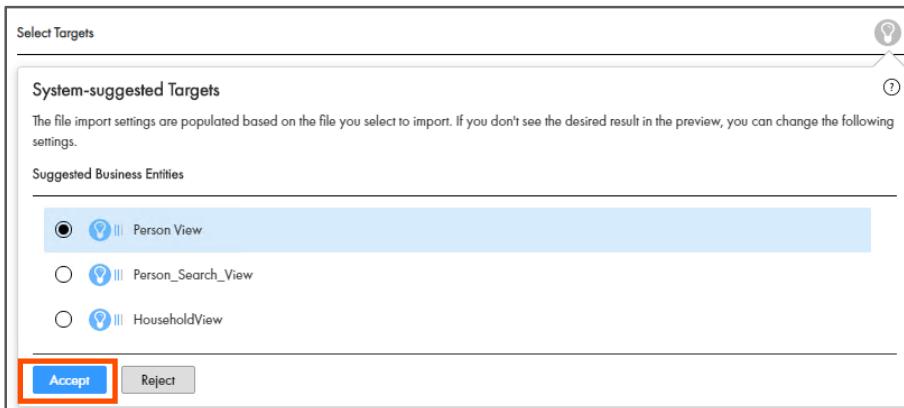


3. Scroll down and in the **File Properties** section, enable the **Has column headers** checkbox.



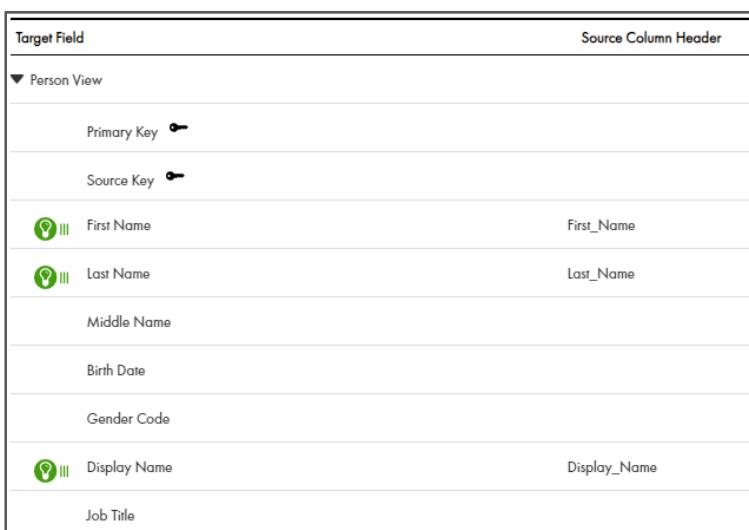
The screenshot shows the 'File Properties' configuration window. It includes fields for Delimiter (Comma), Text Qualifier (Double Quotes), Code Page (UTF-8), Import Data from line (2), and Column Header in Row 1 (1). The 'Has column headers' checkbox is checked and highlighted with a red box.

4. Click **Next**.  
 5. In the second step of the wizard, by default you can see that the **Person View** is selected.  
 6. Click **Accept**.



The screenshot shows the 'Select Targets' dialog. Under 'Suggested Business Entities', the 'Person View' radio button is selected and highlighted with a red box. At the bottom, the 'Accept' button is also highlighted with a red box.

7. Expand the **Person View**.  
 8. Map the **First\_Name**, **Last\_Name**, and **Display\_Name** from the flat file to the Person View.

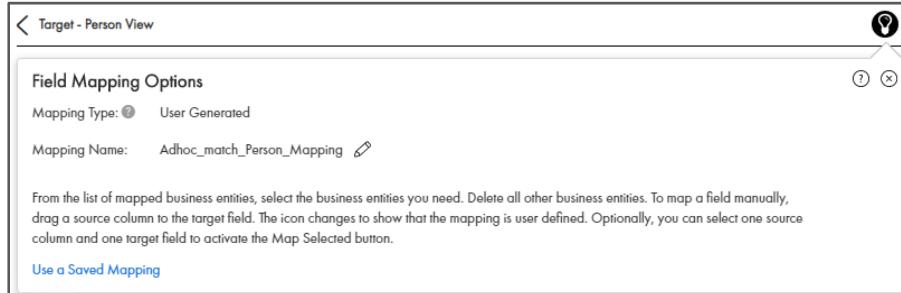


The screenshot shows the mapping interface for the 'Person View'. It lists target fields and their corresponding source column headers:

Target Field	Source Column Header
Primary Key	
Source Key	
First Name	First_Name
Last Name	Last_Name
Middle Name	
Birth Date	
Gender Code	
Display Name	Display_Name
Job Title	

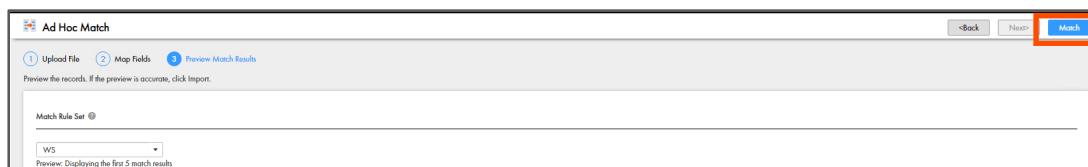
**Note:** Ignore if fields are already mapped.

- Click the Cog icon and save the mapping as **Adhoc\_match\_Person\_Mapping**.



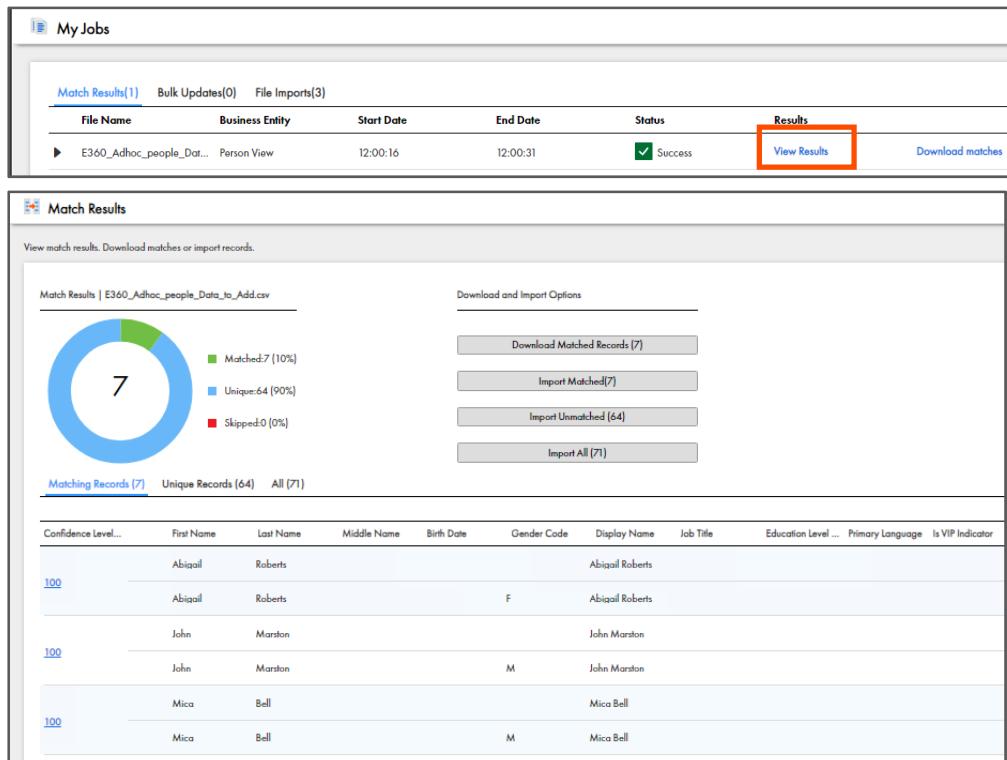
- Click **Next**.

- Select the **Match Rule Set** as **WS** and click **Match**.



**Note:** The My Jobs page appears where you can monitor the status of the ad-hoc match.

- Click the **View Results** link.



File Name	Business Entity	Start Date	End Date	Status	Results
E360_Adhoc_people_Data_to_Add.csv	Person View	12:00:16	12:00:31	Success	<a href="#">View Results</a>

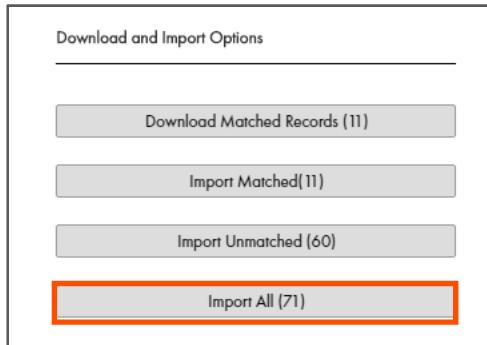
  

Confidence Level...	First Name	Last Name	Middle Name	Birth Date	Gender Code	Display Name	Job Title	Education Level ...	Primary Language	Is VIP Indicator
100	Abigail	Roberts				Abigail Roberts				
100	Abigail	Roberts			F	Abigail Roberts				
100	John	Marston				John Marston				
100	John	Marston			M	John Marston				
100	Mica	Bell				Mica Bell				
100	Mica	Bell			M	Mica Bell				

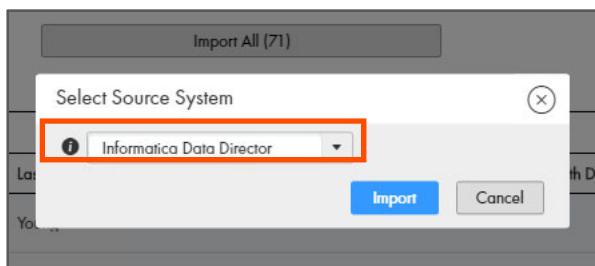
**Note:** You can view the Match results and records in this page.

You will now have an option to import the matched, unmatched records, or all the records into the system.

13. From the **Download and Import Options** section, click **Import all**.



14. From the **Select Source System** drop down, select **Informatica Data Director**.



15. Click **Import**.

16. My Jobs page opens, and you can view that the Import is successful.

My Jobs								
Match Results(1)	Bulk Updates(0)	File Imports(4)	File Name	Start Date	End Date	Job Type	Status	Results
			▶ E360_Adhoc_people_Data_to_Add.csv	12:06:17	12:06:34	Import All		Imported: 71
			▶ E360_People_with_address.csv	10:52:59	10:53:05	Import All		Imported: 5
			▶ E360_Org_Employs_Person.csv	09:30:43	09:30:59	Import All		Imported: 18
			▶ E360_household_Data_to_Add.csv	07:49:22	07:49:55	Import All		Imported: 14

*This concludes the lab.*

## Module 2: Configuring MDM Data Director Application

### Lab 2-1: Create an MDM Data Director Application

#### Overview:

Each Operational Reference Store (ORS) can have at least one MDM Data Director application. In this lab, you will create one in the Informatica MDM Provisioning Tool.

#### Objectives:

- Create an MDM Data Director application using the Provisioning tool

#### Duration:

5 minutes

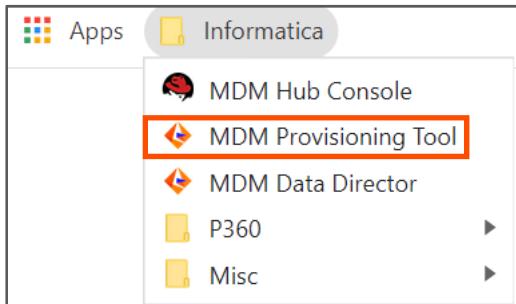
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#### Tasks

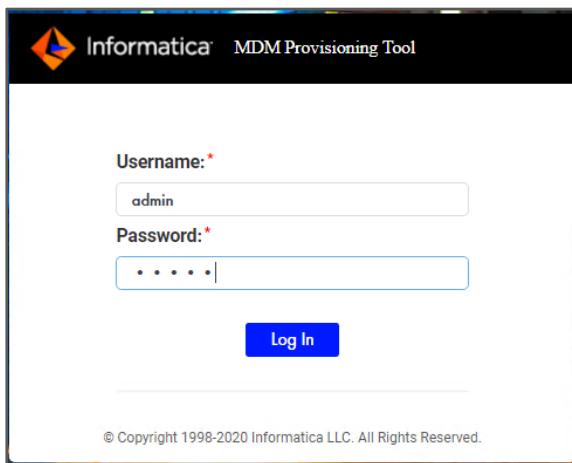
1. Ensure the **Jboss** server is up and running.

**Note:** If not, start the **JBoss** script from the desktop. This will take about ten minutes to start.

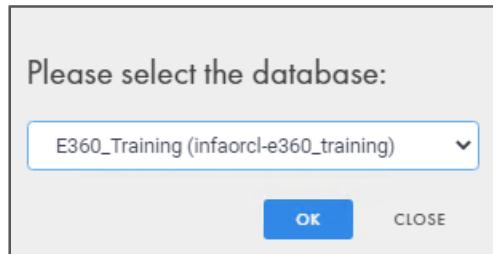
2. Open the Chrome browser and from the **Informatica** bookmarks, navigate to the **MDM Provisioning Tool**.



3. Log in to the **Provisioning Tool** as **admin/admin**.

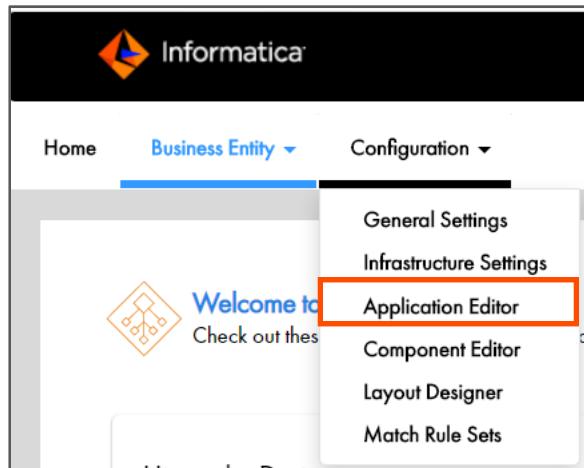


4. Select the database as **E360\_Training (infaorcl-e360\_training)** and click **OK**.

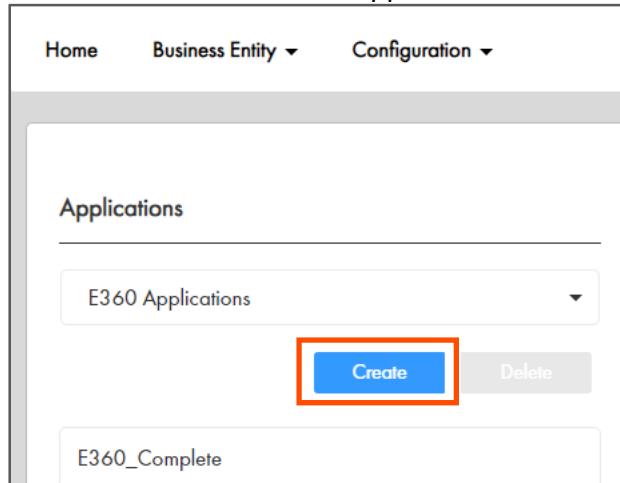


**Note:** This is the ORS that will be associated with the MDM Data Director application that you will create.

5. Click the **Configuration** menu and select the **Application Editor** option.



6. In the **Application Editor** page, the **E360 Applications** appears by default.
7. Click **Create** to add a new application.



8. In the **Properties** panel, specify the application properties as shown:

Properties	Value
Name	E360_Training
Display	E360_Training
Source System	Informatica Data Director
Session Timeout	1000

[New E360 Application]

Name:	<input type="text" value="E360_Training"/>	<input type="button" value="Apply"/>	<input type="button" value="Discard"/>
Display Name:	<input type="text" value="E360_Training"/>		
Source System:	<input type="text" value="Informatica Data Director"/>	<input type="button" value="▼"/>	
Session Timeout (minutes):	<input type="text" value="1000"/>		
Display Default Record Views:	<input type="checkbox"/>		
Search Options:	<input type="checkbox"/> Smart search <input type="checkbox"/> Queries		

6. Select the **Display Default Record Views** and **Smart Search** checkboxes.  
 7. Select the **Queries** checkbox, and the **Queries Dialog in Application** option appears.  
 8. Select the query options and click **Apply**.

<p>Applications</p> <p>E360 Applications</p> <p><input type="button" value="Create"/></p> <p><input type="button" value="Delete"/></p> <p>[New E360 Application]</p>	<p>Tree View</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> E360 Applications</li> <li><input type="checkbox"/> Business Entities</li> <li><input type="checkbox"/> Search Configuration</li> <li><input type="checkbox"/> Default Display Formats</li> </ul>	<p>[New E360 Application]</p> <table border="1"> <tr> <td style="text-align: right; padding-right: 10px;">Name:</td> <td><input type="text" value="E360_Training"/></td> <td style="width: 60px; text-align: right; padding-right: 10px;"><input type="button" value="Apply"/></td> <td style="width: 60px; text-align: right; padding-right: 10px;"><input type="button" value="Discard"/></td> </tr> <tr> <td style="text-align: right; padding-right: 10px;">Display Name:</td> <td><input type="text" value="E360_Training"/></td> <td colspan="2"></td> </tr> <tr> <td style="text-align: right; padding-right: 10px;">Source System:</td> <td><input type="text" value="Informatica Data Director"/></td> <td colspan="2" style="text-align: right; padding-right: 10px;"><input type="button" value="▼"/></td> </tr> <tr> <td style="text-align: right; padding-right: 10px;">Session Timeout (minutes):</td> <td><input type="text" value="1000"/></td> <td colspan="2"></td> </tr> <tr> <td style="text-align: right; padding-right: 10px;">Display Default Record Views:</td> <td><input checked="" type="checkbox"/></td> <td colspan="2"></td> </tr> <tr> <td style="text-align: right; padding-right: 10px;">Search Options:</td> <td colspan="3"> <input checked="" type="checkbox"/> Smart search  <input checked="" type="checkbox"/> Queries  <input checked="" type="checkbox"/> Queries dialog in application         </td> </tr> </table>	Name:	<input type="text" value="E360_Training"/>	<input type="button" value="Apply"/>	<input type="button" value="Discard"/>	Display Name:	<input type="text" value="E360_Training"/>			Source System:	<input type="text" value="Informatica Data Director"/>	<input type="button" value="▼"/>		Session Timeout (minutes):	<input type="text" value="1000"/>			Display Default Record Views:	<input checked="" type="checkbox"/>			Search Options:	<input checked="" type="checkbox"/> Smart search <input checked="" type="checkbox"/> Queries <input checked="" type="checkbox"/> Queries dialog in application		
Name:	<input type="text" value="E360_Training"/>	<input type="button" value="Apply"/>	<input type="button" value="Discard"/>																							
Display Name:	<input type="text" value="E360_Training"/>																									
Source System:	<input type="text" value="Informatica Data Director"/>	<input type="button" value="▼"/>																								
Session Timeout (minutes):	<input type="text" value="1000"/>																									
Display Default Record Views:	<input checked="" type="checkbox"/>																									
Search Options:	<input checked="" type="checkbox"/> Smart search <input checked="" type="checkbox"/> Queries <input checked="" type="checkbox"/> Queries dialog in application																									

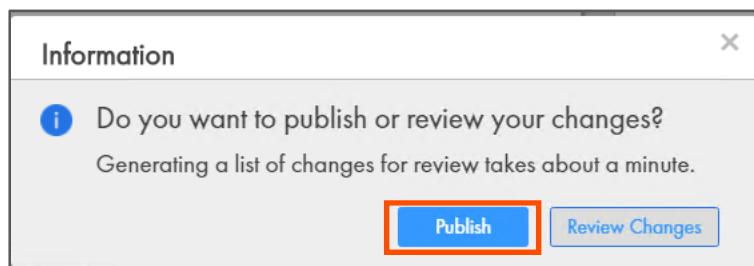
9. Observe that the Application is displayed on the page.

<p>Applications</p> <p>E360 Applications</p> <p><input type="button" value="Create"/></p> <p><input type="button" value="Delete"/></p> <p><input type="button" value="E360_Training"/></p>	<p>E360_Training</p> <p><input type="button" value="Create"/></p> <p><input type="button" value="Delete"/></p> <p><input type="checkbox"/> E360_Training</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Business Entities</li> <li><input type="checkbox"/> Search Configuration</li> <li><input type="checkbox"/> Default Display Formats</li> </ul>
--	--

10. Click **Publish**. This will publish the changes to the MDM Hub.



11. A change confirmation dialog box prompts you to confirm the changes. Click **Publish**.



12. A validation process runs on the application and you get a **The changes were published successfully** message.

---

*This concludes the lab.*

## Module 2: Configuring MDM Data Director Application

### Lab 2-2: Configure Reference Entities

#### Overview:

A reference entity is a lookup base object. A lookup consists of a predefined list of values that is available for selection in the data director application.

In this lab, you will define the reference entity in the Provisioning Tool and a relationship in the MDM hub, between the reference base object and the base object that contains the business entity.

#### Objectives:

- Create a reference entity through the Provisioning tool

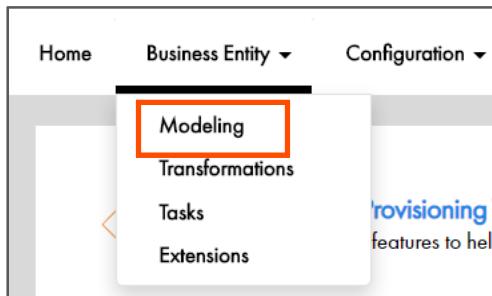
#### Duration:

15 minutes

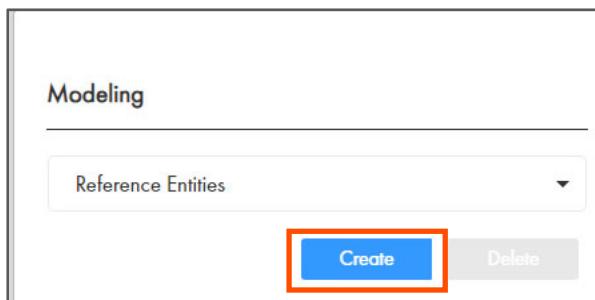
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#### Tasks

1. Return to the Provisioning Tool as **admin/admin**, if you have logged out or if your session has expired.
2. Select the Database as **E360\_Training**.
3. In the Provisioning Tool, click **Business Entity > Modeling**.



4. In the **Modeling** page, **Reference Entities** option is selected by default.
5. Click **Create** to add a new **Reference Entity**.

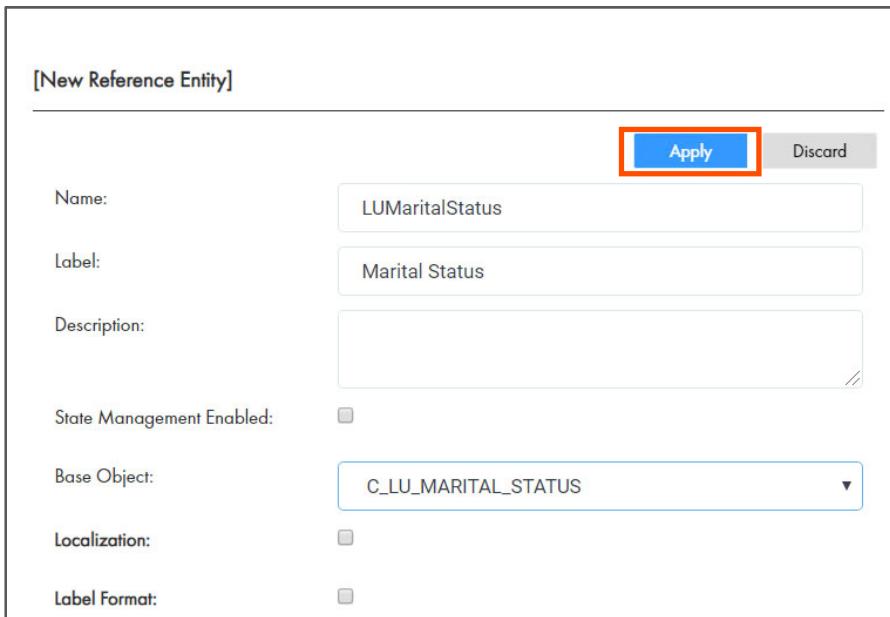


The screenshot shows the 'Modeling' page with the 'Reference Entities' option selected in the dropdown menu. At the bottom of the page, there is a 'Create' button, which is highlighted with a red box. There is also a 'Delete' button next to it.

6. On the right-hand side, in the **New Reference Entity** section, enter the following values:

Property	Value
Name	LUMaritalStatus
Label	Marital Status
Base Object	C_LU_MARITAL_STATUS

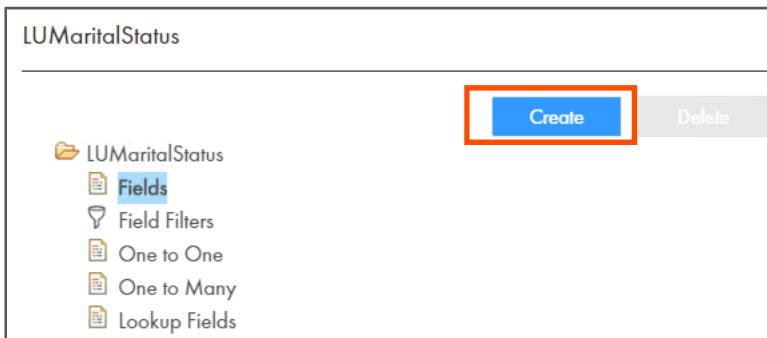
7. Click **Apply** to save the changes.



[New Reference Entity]

<b>Name:</b>	LUMaritalStatus	<b>Apply</b>	<b>Discard</b>
<b>Label:</b>	Marital Status		
<b>Description:</b>			
<b>State Management Enabled:</b>	<input type="checkbox"/>		
<b>Base Object:</b>	C_LU_MARITAL_STATUS		
<b>Localization:</b>	<input type="checkbox"/>		
<b>Label Format:</b>	<input type="checkbox"/>		

8. In the **LUMaritalStatus** reference entity, select **Fields** and click **Create**.



LUMaritalStatus

<b>Fields</b>	<b>Create</b>	<b>Delete</b>
<ul style="list-style-type: none"> <li><input type="checkbox"/> LUMaritalStatus</li> <li><input checked="" type="checkbox"/> <b>Fields</b></li> <li><input type="checkbox"/> Field Filters</li> <li><input type="checkbox"/> One to One</li> <li><input type="checkbox"/> One to Many</li> <li><input type="checkbox"/> Lookup Fields</li> </ul>		

9. Add the following properties for the new field:

Property	Value
Name	MaritalStatusDisplay
Label	Marital Status Display
Column	MARITAL_STATUS_DISP

10. Click **Apply** to save the changes.

[New Field]

		<b>Apply</b>	Discard
Name:	MaritalStatusDisplay		
Label:	Marital Status Display		
Read Only:	<input type="checkbox"/>		
Required:	<input type="checkbox"/>		
URI:	<input type="text"/>		
Type:	<input type="text"/>		
Display Format:	<input type="text"/>		
Filter:	<input type="checkbox"/>		
Searchable:	<input type="checkbox"/>		
Column:	MARITAL_STATUS_DISP		

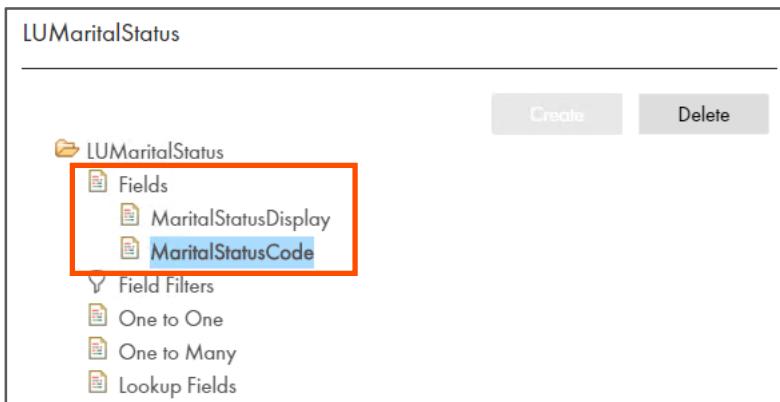
11. Similarly, create another field with the following properties and click **Apply**.

Property	Value
Name	MaritalStatusCode
Label	Marital Status Code
Column	MARITAL_STATUS_CODE

[New Field]

		<b>Apply</b>	Discard
Name:	MaritalStatusCode		
Label:	Marital Status Code		
Read Only:	<input type="checkbox"/>		
Required:	<input type="checkbox"/>		
URI:	<input type="text"/>		
Type:	<input type="text"/>		
Display Format:	<input type="text"/>		
Filter:	<input type="checkbox"/>		
Searchable:	<input type="checkbox"/>		
Column:	MARITAL_STATUS_CODE		

12. Observe the new fields added under **LUMaritalStatus > Fields**.

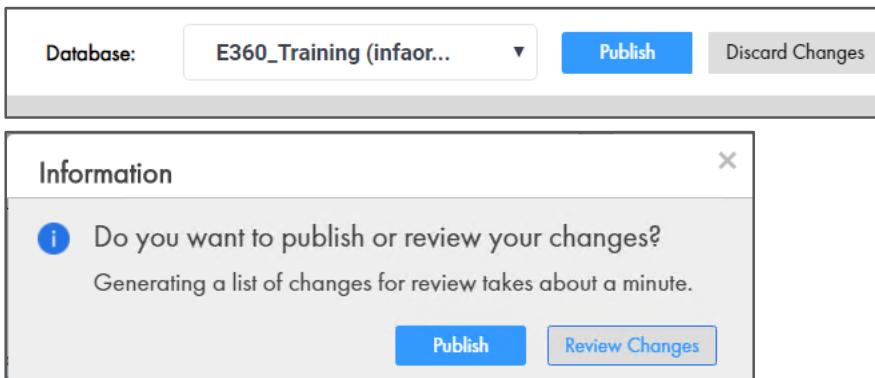


LUMaritalStatus

Create Delete

- LUMaritalStatus
  - Fields
    - MaritalStatusDisplay
    - MaritalStatusCode
  - Field Filters
  - One to One
  - One to Many
  - Lookup Fields

13. Click **Publish**.



Database: E360\_Training (infaor... ▾ Publish Discard Changes

Information

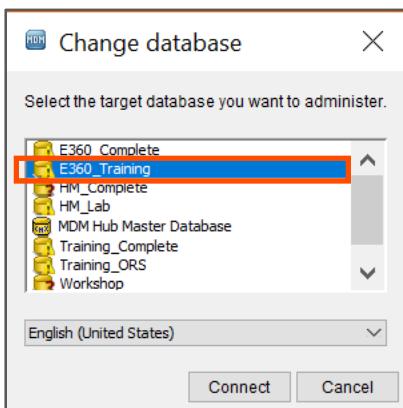
Do you want to publish or review your changes?  
Generating a list of changes for review takes about a minute.

Publish Review Changes

**Note:** To associate the reference entity to the Person business entity, first you need to establish a relationship between the Party and LU Marital Status base objects in the MDM Hub.

14. Click **Informatica MDM Hub Console** tab in the browser.

15. Select **E360\_Training** as the database and click **Connect**.



Change database

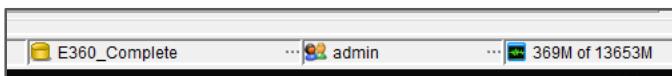
Select the target database you want to administer.

- E360 Complete
- E360\_Training**
- HM\_Complete
- HM\_Lab
- MDM Hub Master Database
- Training\_Complete
- Training\_ORS
- Workshop

English (United States)

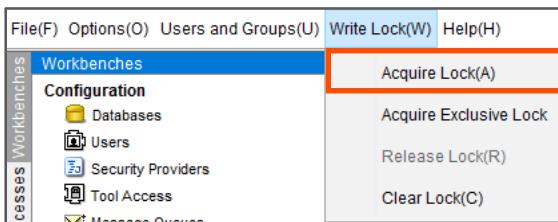
Connect Cancel

**Note:** If the Hub Console window is already opened for E360\_Complete database, then click E360\_Complete from the bottom of the screen and change to **E360\_Training**.

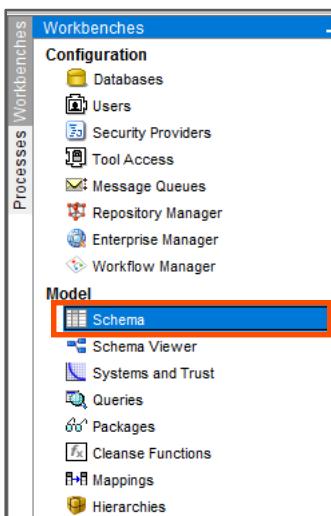


E360\_Training admin 369M of 13653M

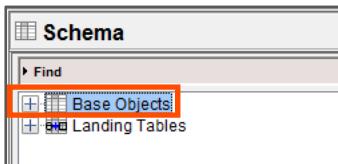
16. Click **Write Lock (W)** and select **Acquire Lock (A)**.



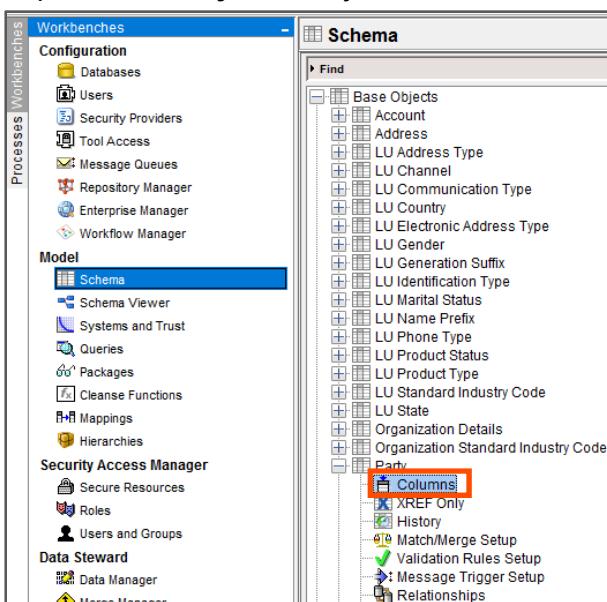
17. From the **Model** workbench, select **Schema**.



18. Expand **Base Objects**.



19. Expand the **Party** base object and click **Columns**.



20. In the Party Columns page, click the ‘+’ sign to add a new column to the **Party** base object.

Party Columns														
Column Counts														
1 Primary Key, 13 System, 15 Regular=29 Total														
<input type="checkbox"/> Show system columns														
Display Name	Physical Name	Nullable	Data Type	Length	Precision	Scale	Has Def...	Default	Trust	Unique	Validate	Apply Null Values	GBID	Putable
Rowid Object	ROWID_OBJECT	<input checked="" type="checkbox"/>	CHAR	14										
Name Prefix Cd	NAME_PREFIX_CD	<input checked="" type="checkbox"/>	VARCHAR	10					<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>		
First Name	FIRST_NAME	<input checked="" type="checkbox"/>	VARCHAR	50					<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>		
Last Name	LAST_NAME	<input checked="" type="checkbox"/>	VARCHAR	50					<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>		
Middle Name	MIDDLE_NAME	<input checked="" type="checkbox"/>	VARCHAR	50				<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>		
Generation Suffix Cd	GENERATION_SUFFIX_CD	<input checked="" type="checkbox"/>	VARCHAR	10				<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>		
Organization Name	ORGANIZATION_NAME	<input checked="" type="checkbox"/>	VARCHAR	200					<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>		
DUNS Number	DUNS_NUMBER	<input checked="" type="checkbox"/>	VARCHAR	9					<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>		
Tax ID	TAX_ID	<input checked="" type="checkbox"/>	CHAR	9										
Birthdate	BIRTHDATE	<input checked="" type="checkbox"/>	DATE							<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	
Gender Cd	GENDER_CD	<input checked="" type="checkbox"/>	VARCHAR	10					<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>		
Status Cd	STATUS_CD	<input checked="" type="checkbox"/>	CHAR	2					<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>		
ODI Level	ODI_LEVEL	<input checked="" type="checkbox"/>	VARCHAR	20					<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>		
Display Name	DISPLAY_NAME	<input checked="" type="checkbox"/>	VARCHAR	200				<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>			
HM Display	HM_DISPLAY	<input checked="" type="checkbox"/>	VARCHAR	200					<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>		
Party Type	PARTY_TYPE	<input checked="" type="checkbox"/>	VARCHAR	255			<input checked="" type="checkbox"/>							
<input checked="" type="checkbox"/> Marital Status														
<input checked="" type="checkbox"/> MARITAL_STATUS(automatically takes)														
<input checked="" type="checkbox"/> Checked														
<input checked="" type="checkbox"/> VARCHAR														
<input checked="" type="checkbox"/> 20														

21. Enter the following values to the new column.

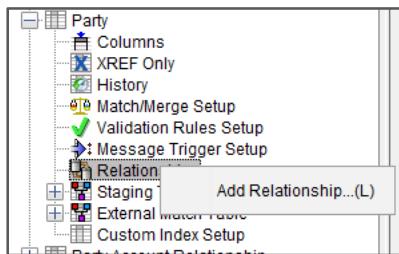
Property	Value
Display Name	Marital Status
Physical Name	MARITAL_STATUS(automatically takes)
Nullable	Checked
Datatype	VARCHAR
Length	20

Party Columns														
Column Counts														
1 Primary Key, 13 System, 15 Regular=29 Total														
<input type="checkbox"/> Show system columns														
Display Name	Physical Name	Nullable	Data Type	Length	Precision	Scale	Has Def...	Default	Trust	Unique	Validate	Apply Null Values	GBID	Putable
Rowid Object	ROWID_OBJECT	<input checked="" type="checkbox"/>	CHAR	14										
Name Prefix Cd	NAME_PREFIX_CD	<input checked="" type="checkbox"/>	VARCHAR	10					<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>		
First Name	FIRST_NAME	<input checked="" type="checkbox"/>	VARCHAR	50					<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>		
Last Name	LAST_NAME	<input checked="" type="checkbox"/>	VARCHAR	50					<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>		
Middle Name	MIDDLE_NAME	<input checked="" type="checkbox"/>	VARCHAR	50				<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>		
Generation Suffix Cd	GENERATION_SUFFIX_CD	<input checked="" type="checkbox"/>	VARCHAR	10				<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>		
Organization Name	ORGANIZATION_NAME	<input checked="" type="checkbox"/>	VARCHAR	200					<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>		
DUNS Number	DUNS_NUMBER	<input checked="" type="checkbox"/>	VARCHAR	9					<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>		
Tax ID	TAX_ID	<input checked="" type="checkbox"/>	CHAR	9										
Birthdate	BIRTHDATE	<input checked="" type="checkbox"/>	DATE						<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>		
Gender Cd	GENDER_CD	<input checked="" type="checkbox"/>	VARCHAR	10					<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>		
Status Cd	STATUS_CD	<input checked="" type="checkbox"/>	CHAR	2					<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>		
ODI Level	ODI_LEVEL	<input checked="" type="checkbox"/>	VARCHAR	20					<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>		
Display Name	DISPLAY_NAME	<input checked="" type="checkbox"/>	VARCHAR	200				<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>			
HM Display	HM_DISPLAY	<input checked="" type="checkbox"/>	VARCHAR	200					<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>		
Party Type	PARTY_TYPE	<input checked="" type="checkbox"/>	VARCHAR	255			<input checked="" type="checkbox"/>							
<input checked="" type="checkbox"/> Marital Status														
<input checked="" type="checkbox"/> MARITAL_STATUS(automatically takes)														
<input checked="" type="checkbox"/> Checked														
<input checked="" type="checkbox"/> VARCHAR														
<input checked="" type="checkbox"/> 20														

22. Click **Save**.

**Note:** A **Save Table** appears. Do not enter or click anything. It will disappear by itself.

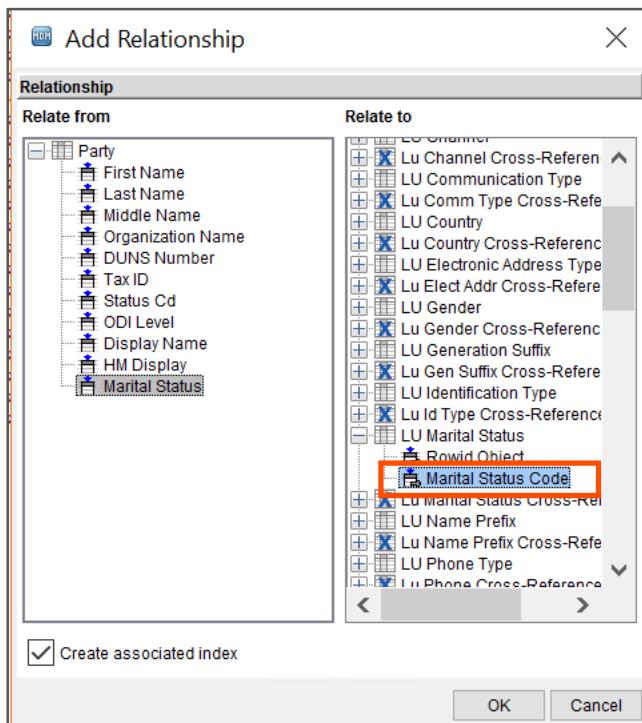
23. Right-click **Relationships** in the Party base object and then click **Add Relationship**.



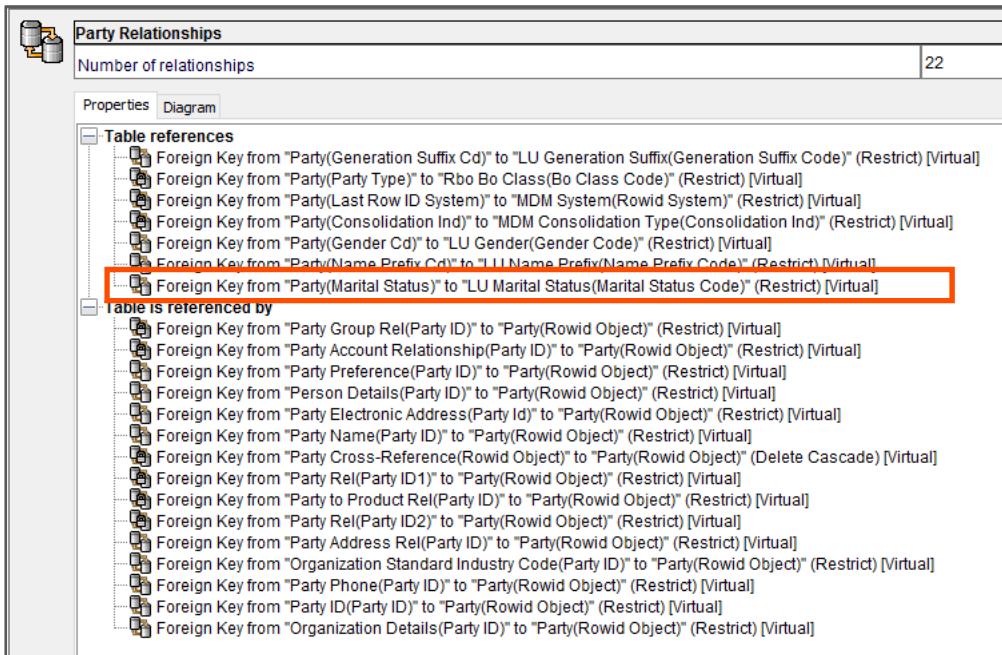
35. In the Add Relationship page, from the **Relate From** section, expand **Party** and select **Marital Status**.

36. From the **Related To** section, expand **LU Marital Status** and select **Marital Status Code**.

37. Click **OK** to add the changes.



**Note:** You will notice that a new relationship is added to the Party Base Object.



Party Relationships	
Number of relationships	22
<input type="radio"/> Properties <input type="radio"/> Diagram	
<b>Table references</b> <ul style="list-style-type: none"> <li>- Foreign Key from "Party(Generation Suffix Cd)" to "LU Generation Suffix(Generation Suffix Code)" (Restrict) [Virtual]</li> <li>- Foreign Key from "Party(Party Type)" to "Rbo Bo Class(Bo Class Code)" (Restrict) [Virtual]</li> <li>- Foreign Key from "Party(Last Row ID System)" to "MDM System(Rowid System)" (Restrict) [Virtual]</li> <li>- Foreign Key from "Party(Consolidation Ind)" to "MDM Consolidation Type(Consolidation Ind)" (Restrict) [Virtual]</li> <li>- Foreign Key from "Party(Gender Cd)" to "LU Gender(Gender Code)" (Restrict) [Virtual]</li> <li>- Foreign Key from "Party(Name Prefix Cd)" to "LU Name Prefix(Name Prefix Code)" (Restrict) [Virtual]</li> <li><b>Foreign Key from "Party(Marital Status)" to "LU Marital Status(Marital Status Code)" (Restrict) [Virtual]</b></li> </ul>	
<b>Table is referenced by</b> <ul style="list-style-type: none"> <li>- Foreign Key from "Party Group Rel(Party ID)" to "Party(Rowid Object)" (Restrict) [Virtual]</li> <li>- Foreign Key from "Party Account Relationship(Party ID)" to "Party(Rowid Object)" (Restrict) [Virtual]</li> <li>- Foreign Key from "Party Preference(Party ID)" to "Party(Rowid Object)" (Restrict) [Virtual]</li> <li>- Foreign Key from "Person Details(Party ID)" to "Party(Rowid Object)" (Restrict) [Virtual]</li> <li>- Foreign Key from "Party Electronic Address(Party Id)" to "Party(Rowid Object)" (Restrict) [Virtual]</li> <li>- Foreign Key from "Party Name(Party ID)" to "Party(Rowid Object)" (Restrict) [Virtual]</li> <li>- Foreign Key from "Party Cross-Reference(Rowid Object)" to "Party(Rowid Object)" (Delete Cascade) [Virtual]</li> <li>- Foreign Key from "Party Rel(Party ID1)" to "Party(Rowid Object)" (Restrict) [Virtual]</li> <li>- Foreign Key from "Party to Product Rel(Party ID)" to "Party(Rowid Object)" (Restrict) [Virtual]</li> <li>- Foreign Key from "Party Rel(Party ID2)" to "Party(Rowid Object)" (Restrict) [Virtual]</li> <li>- Foreign Key from "Party Address Rel(Party ID)" to "Party(Rowid Object)" (Restrict) [Virtual]</li> <li>- Foreign Key from "Organization Standard Industry Code(Party ID)" to "Party(Rowid Object)" (Restrict) [Virtual]</li> <li>- Foreign Key from "Party Phone(Party ID)" to "Party(Rowid Object)" (Restrict) [Virtual]</li> <li>- Foreign Key from "Party ID(Party ID)" to "Party(Rowid Object)" (Restrict) [Virtual]</li> <li>- Foreign Key from "Organization Details(Party ID)" to "Party(Rowid Object)" (Restrict) [Virtual]</li> </ul>	

### Skill Application:

38. In the **Provisioning** tool, create another reference entity with:

Property	Value
Name	LUNamePrefix
Label	Name Prefix
Base object	C_LU_NAME_PREFIX

39. Use the following table and add **Fields** to the LUNamePrefix lookup:

Field	Property	Value
prfxDesc	Name	prfxDesc
	Label	Prefix Description
	Column	NAME_PREFIX_DESC
prfxName	Name	prfxName
	Label	Prefix Name
	Column	NAME_PREFIX_CODE

40. The two fields should appear under **Fields** as shown.



The screenshot shows the configuration interface for the 'LUNNamePrefix' entity. At the top, there are 'Create' and 'Delete' buttons. Below them, a sidebar lists various entity types: 'LUNNamePrefix' (selected), 'Fields' (highlighted with a red box), 'Field Filters', 'One to One', 'One to Many', and 'Lookup Fields'. Under 'Fields', two items are listed: 'prfxDesc' and 'prfxName', both highlighted with blue boxes.

41. Publish the reference entity.

---

*This concludes the lab.*



## Module 2: Configure MDM Data Director Application

### Lab 2-3: Configure Business Entities and Relationships

#### Overview:

In the previous lab, you have created a reference entity. In this lab, you will define a business entity using MDM Data Director application.

Recall the first lab where you added a person. Now, define this business entity from the provisioning tool. Although centered around the C\_PARTY base object, this business entity spans over several related base objects such as the reference entity previously created and the C\_ADDRESS which contains the person's address.

#### Objectives:

- Configure Business Entities
- Configure Similar Records component
- Define Relationships
- Define Default values

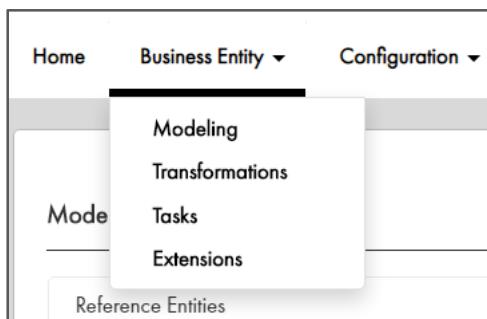
#### Duration:

2 hours

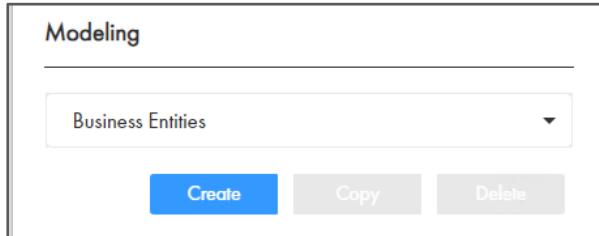
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#### Tasks:

1. In the Provisioning Tool, click **Business Entity > Modeling**.

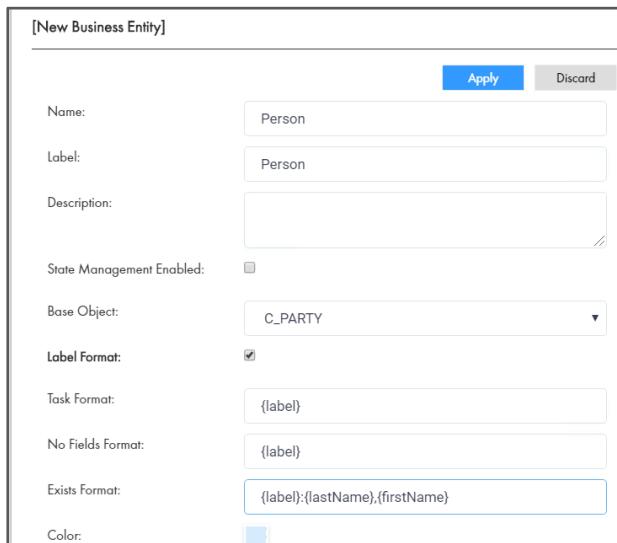


2. Select **Business Entities** from the drop-down list and click **Create**.



3. Use the following values from the table below to create a **Person** business entity:

Property	Value
Name	Person
Label	Person
State Management Enabled	Uncheck
Base Object	C_PARTY
Label Format	Check
Task format	{label}
No fields format	{label}
Exists format	{label}:{lastName},{firstName}

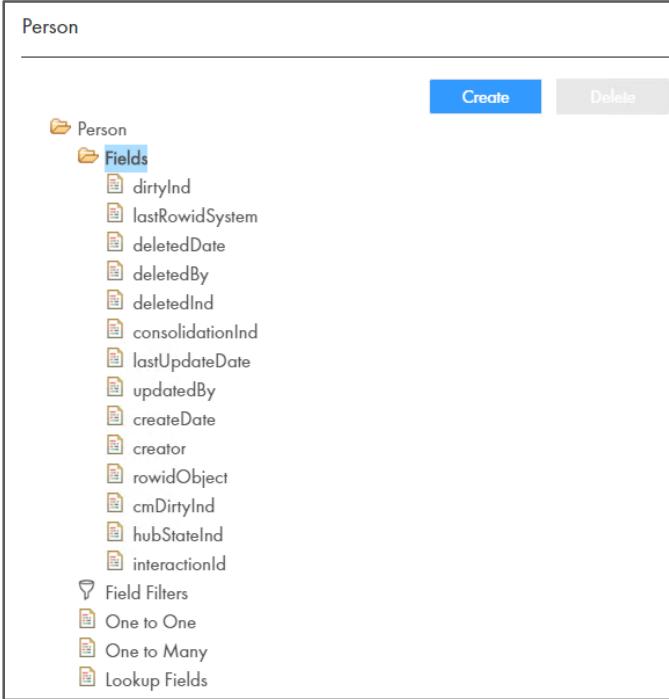


4. **Apply** the changes and then publish.

**Note:** The changes will be made to the MDM Application configuration.

5. Navigate to **Business Entity > Modeling**.  
6. From the **Business Entities**, select **Person**.

7. Expand the **Fields** folder to see the default fields.



The screenshot shows the 'Person' entity in the Informatica MDM Data Director. The 'Fields' folder is expanded, listing system columns such as dirtyInd, lastRowidSystem, deletedDate, deletedBy, deletedInd, consolidationInd, lastUpdateDate, updatedBy, createDate, creator, rowidObject, cmDirtyInd, hubStateInd, and interactionId. Other options like Field Filters, One to One, One to Many, and Lookup Fields are also visible.

**Note:** These read-only fields correspond to the system columns from the corresponding base object and appear after publishing the changes. You will now add additional fields to this entity.

8. Select **Fields** and click **Create**.  
 9. In the **New Field** section, enter the values as shown in the table below:

Field	Property	Value
PartyType	Name	partyType
	Label	Party Type
	Column	PARTY_TYPE
	Filter	Checked
	Operator	In
	Value	Person
lastName	Name	lastName
	Label	Last Name
	Column	LAST_NAME
displayName	Name	displayName
	Label	Display Name
	Column	DISPLAY_NAME
	Searchable	Checked
	Search Analyzer	text_fuzzy

	Filterable	Checked
	Facet	Checked
	Displayable	Checked
middleName	Name	middleName
	Label	Middle Name
	Column	MIDDLE_NAME
birthdate	Name	birthdate
	Label	Birthdate
	Column	BIRTHDATE
	Searchable	Checked
	Search Analyzer	text_fuzzy
	Filterable	Checked
	Displayable	Checked
firstName	Name	firstName
	Label	First Name
	Column	FIRST_NAME

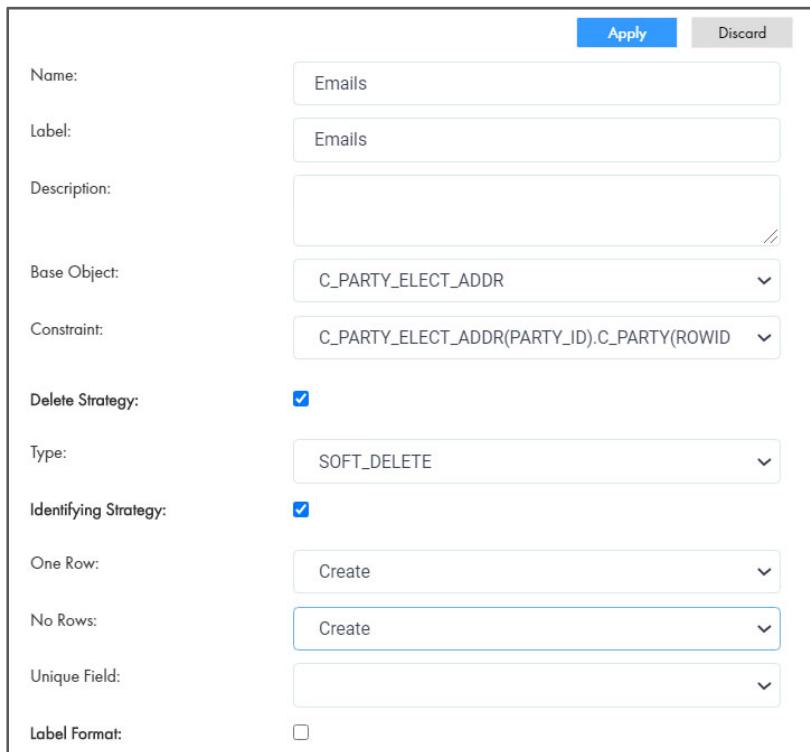
A person entity has email addresses and they are maintained in a related base object.

10. To define Email addresses, select the **One to Many** leaf and click **Create**.



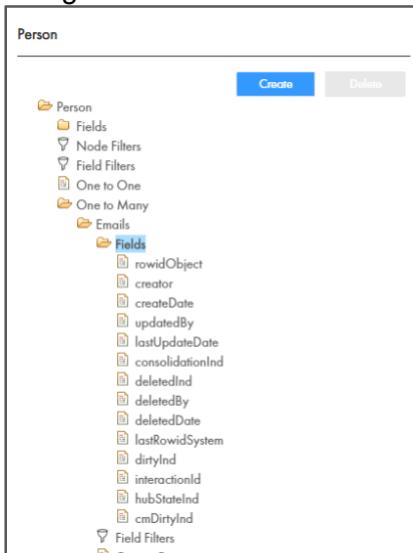
11. In the new **One to Many** panel, enter the following values:

Property	Value
Name	Emails
Label	Emails
Base Object	C_PARTY_ELECT_ADDR
Constraint	This gets auto-populated
Delete Strategy	Enable
Type	SOFT_DELETE
Identifying Strategy	Enable
One Row	Create
No Rows	Create



12. Click **Apply** and **Publish** the changes to MDM Hub

13. Navigate to the **Person** Business Entity.



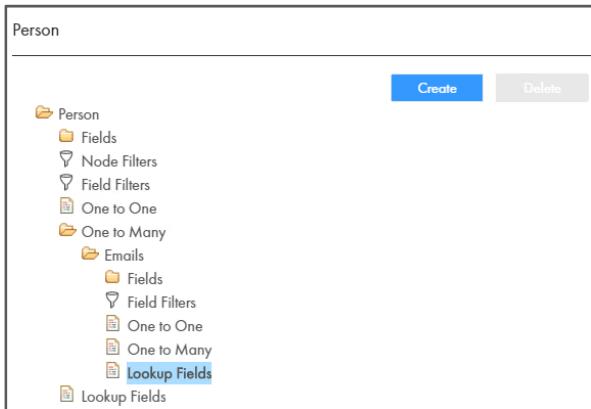
The read-only fields corresponding to the system columns will now appear under the **One to Many > Emails > Fields**.

The Emails relationship is defined and now requires the fields that are part of the person entity.

14. Add the following fields under **Person > One to Many > Emails > Fields**.

Field	Property	Value
isValidInd	Name	isValidInd
	Label	Is Valid Ind
	Column	IS_VALID_IND
optInInd	Name	optInInd
	Label	Opt In Ind
	Column	OPT_IN_IND
electronicAddress	Name	electronicAddress
	Label	Electronic Address
	Column	ELECTRONIC_ADDRESS
	Searchable	Checked
	Search Analyzer	text_fuzzy
	Filterable	Checked
	Displayable	Checked

15. The emails have a lookup field. Under **Emails**, select the **Lookup Fields**, and click **Create**.



16. Enter the following values and click **Apply**:

Property	Value
Name	elecAddrTypeCd
Label	Electronic Address Type
Object	LUElectronicAddressType
Constraint	This gets auto-populated.
Lookup Display Field	electronicType

[New Lookup Field]

	Apply	Discard
Name:	elecAddrTypeCd	
Label:	Electronic Address Type	
Depends On:	<input type="button" value="▼"/>	
Object:	LUElectronicAddressType	
Constraint:	C_PARTY_ELECT_ADDR(ELECT_ADDR_TYPE_CD).C_LU.	
Lookup Display Field:	electronicType	
Required:	<input type="checkbox"/>	
Default Value	<input type="button" value="+"/>	

17. Create **TelephoneNumber**s under the **Person > One to Many** with the following values:

Property	Value
Name	TelephoneNumber
Label	Phone Numbers
Base Object	C_PARTY_PHONE
Constraint	This gets auto-populated
Delete Strategy	Checked
Type	SOFT_DELETE
Identifying Strategy	Checked
One Row	Create
No Rows	Create

[New One to Many]

<input type="button" value="Apply"/>	<input type="button" value="Discard"/>
Name: <input type="text" value="TelephoneNumber"/>	
Label: <input type="text" value="Phone Numbers"/>	
Description: <input type="text"/>	
Base Object: <input type="text" value="C_PARTY_PHONE"/> <input type="button" value="▼"/>	
Constraint: <input type="text" value="C_PARTY_PHONE(PARTY_ID).C_PARTY(ROWID_OBJ)"/> <input type="button" value="▼"/>	
Delete Strategy: <input checked="" type="checkbox"/>	
Type: <input type="text" value="SOFT_DELETE"/> <input type="button" value="▼"/>	
Identifying Strategy: <input checked="" type="checkbox"/>	
One Row: <input type="text" value="Create"/> <input type="button" value="▼"/>	
No Rows: <input type="text" value="Create"/> <input type="button" value="▼"/>	

18. **Publish** the changes.

19. Create the following fields for **TelephoneNumber**:

Field	Property	Value
doNotCallInd	Name	doNotCallInd
	Label	Do Not Call
	Column	DO_NOT_CALL_IND
phoneExtNum	Name	phoneExtNum
	Label	Phone Extn
	Column	PHONE_EXT_NUM
phoneNum	Name	phoneNum
	Label	Phone Number
	Column	PHONE_NUM
phoneCountryCd	Searchable	Checked
	Search Analyzer	text_fuzzy
	Sortable	Checked
phoneCountryCd	Displayable	Checked
	Name	phoneCountryCd
	Label	Country Code
phoneCountryCd	Column	PHONE_COUNTRY_CD

20. Create a lookup field with the following values:

Property	Value
Name	phoneTypeCd
Label	Phone Type
Object	LUPhoneType
Constraint	This gets auto-populated
Lookup Display Field	phoneType

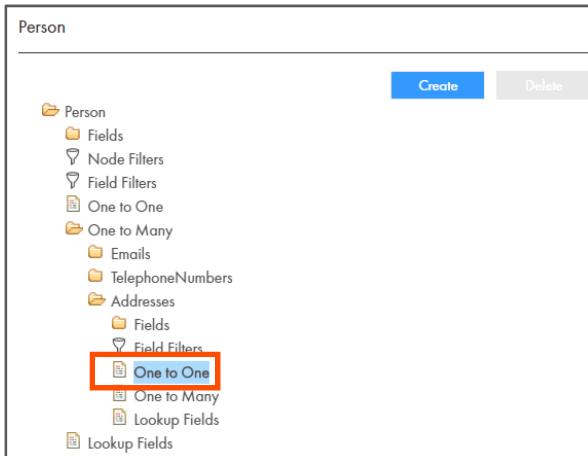
21.

22. Similarly, create another folder under **One to many** and name it as **Addresses**.

Property	Value
Name	Addresses
Label	Addresses
Base Object	C_RL_PARTY_ADDRESS
Constraint	This gets auto-populated
Delete Strategy	Checked
Type	SOFT_DELETE
Identifying Strategy	Checked
One Row	Create
No Rows	Create

23. **Publish** the changes.

24. Create a **One to One** node under the Addresses.



Property	Value
Name	Address
Label	Address
Base Object	C_ADDRESS
Constraint	This gets auto-populated
Delete Strategy	Enable
Type	SOFT_DELETE
Identifying Strategy	Enable
One Row	Create
No Rows	Create

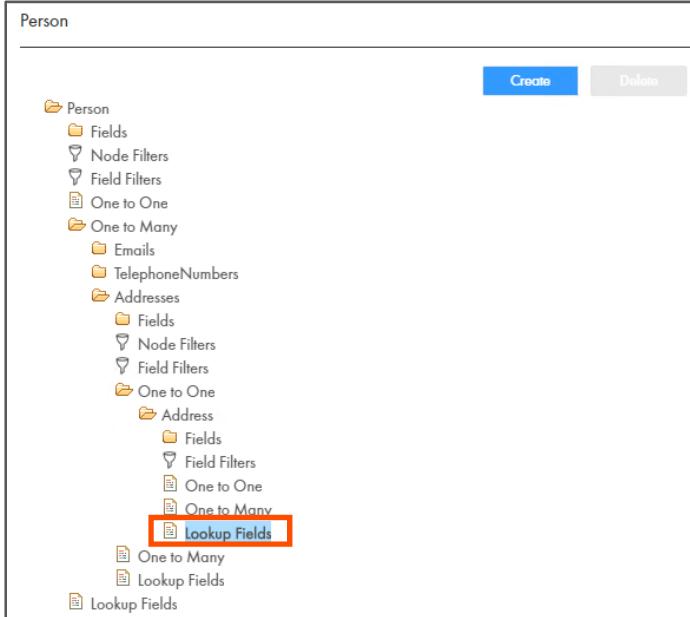
25. **Publish** the changes.

26. Add the following fields to the Address:

Field	Property	Value
addressLine1	Name	addressLine1
	Label	Address Line 1
	Column	ADDRESS_LINE_1
	Searchable	Enable
	Search Analyzer	text_fuzzy
	Sortable	Enable
	Filterable	Enable
	Displayable	Enable
addressLine2	Name	addressLine2
	Label	Address Line 2
	Column	ADDRESS_LINE_2
	Searchable	Enable
	Search Analyzer	text_fuzzy
	Sortable	Enable
	Filterable	Enable
	Displayable	Enable
cityName	Name	cityName
	Label	City Name
	Column	CITY_NAME
	Searchable	Enable
	Search Analyzer	text_fuzzy
	Sortable	Enable
	Filterable	Enable
	Displayable	Enable
postalCd	Name	postalCd
	Label	Postal Cd
	Column	POSTAL_CD
	Searchable	Enable
	Search Analyzer	text_fuzzy
	Sortable	Enable
	Filterable	Enable

	Displayable	Enable
--	-------------	--------

27. Define the following **Lookup Fields** for Address:



The screenshot shows the Informatica MDM Data Director application interface. The left sidebar displays a navigation tree under the 'Person' node. The 'Addresses' node is expanded, and the 'Address' node is further expanded. The 'Lookup Fields' node under 'Address' is highlighted with a red box.

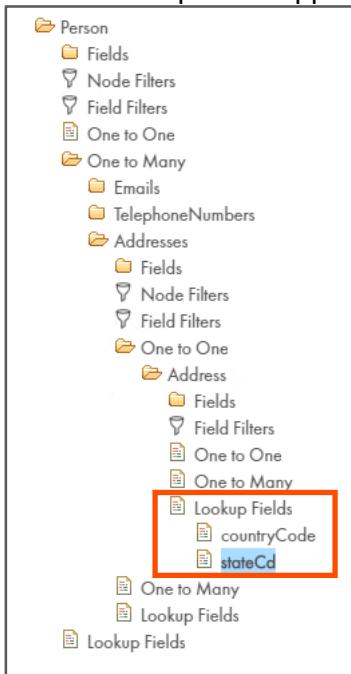
Lookup Field	Property	Value
countryCode	Name	countryCode
	Label	Country Code
	Object	LUCountry
	Constraint	This gets auto-populated
	Lookup Display Field	countryCode
stateCd	Name	stateCd
	Label	State Cd
	Object	LUState
	Constraint	This gets auto-populated
	Lookup Display Field	stateNameDisp

Name:	countryCode
Label:	County Code
Depends On:	<input type="button" value="▼"/>
Object:	LUCountry <input type="button" value="▼"/>
Constraint:	C_ADDRESS(COUNTRY_CODE).C_LU_COUNTRY(COUNTRY_CO <input type="button" value="▼"/>
Lookup Display Field:	countryCode <input type="button" value="▼"/>
Required:	<input type="checkbox"/>
Default Value <input style="float: right;" type="button" value="+"/>	
Lookup Filter <input style="float: right;" type="button" value="+"/>	

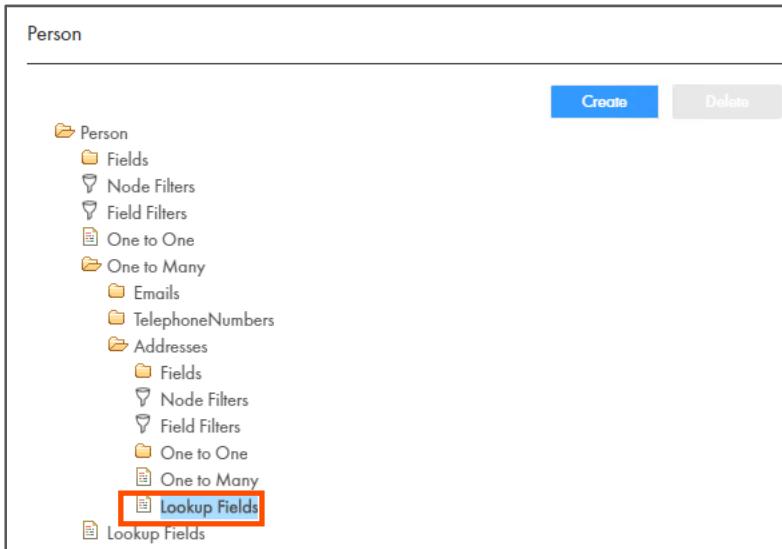
[New Lookup Field]

<input style="background-color: #0070C0; color: white; padding: 2px 10px; margin-right: 10px;" type="button" value="Apply"/> <input style="padding: 2px 10px;" type="button" value="Discard"/>	
Name:	stateCd
Label:	State Cd
Depends On:	<input type="button" value="▼"/>
Object:	LUState <input type="button" value="▼"/>
Constraint:	C_ADDRESS(STATE_CD).C_LU_STATE(STATE_ABBREVIATION) <input type="button" value="▼"/>
Lookup Display Field:	stateNameDisp <input type="button" value="▼"/>
Required:	<input type="checkbox"/>
Default Value <input style="float: right;" type="button" value="+"/>	
Lookup Filter <input style="float: right;" type="button" value="+"/>	

28. The two lookup fields appear as shown in the screenshot.



29. Switch back to **Addresses** (the parent of the Address) to create a lookup field with the values listed in the table below:



The screenshot shows the navigation tree for the 'Person' entity. Under 'One to Many', there is a folder named 'Addresses'. Inside 'Addresses', there is a folder named 'Lookup Fields'. Both 'countryCode' and 'stateCd' are highlighted with a red box.

Property	Value
Name	addressType
Label	Address Type
Object	LUAddressType
Constraint	This gets auto-populated
Lookup Display Field	addressTypeDisp

[New Lookup Field]

		<b>Apply</b>	<b>Discard</b>
Name:	addressType		
Label:	Address Type		
Depends On:	<input type="text"/>		
Object:	LUAddressType		
Constraint:	C_RL_PARTY_ADDRESS(ADDRESS_TYPE).C_LU_ADDRESS(ADD		
Lookup Display Field:	addressTypeDisp		
Required:	<input type="checkbox"/>		
Default Value	<input type="text"/> +		
Lookup Filter	<input type="text"/> +		

30. Create a **One to Many** leaf under Person.

31. Name it as **PersonDetails**.

Property	Value
Name	PersonDetails
Label	Person Details
Base Object	C_PERSON_DETAILS
Constraint	This gets auto-populated
Delete Strategy	Enable
Type	SOFT_DELETE
Identifying Strategy	Enable
One Row	Create
No Rows	Create

[New One to Many]

		Apply	Discard
Name:	PersonDetails		
Label:	Person Details		
Description:	<input type="text"/>		
Base Object:	C_PERSON_DETAILS		
Constraint:	C_PERSON_DETAILS(PARTY_ID).C_PARTY(ROWID_OBJECT)		
Delete Strategy:	<input checked="" type="checkbox"/>		
Type:	SOFT_DELETE		
Identifying Strategy:	<input checked="" type="checkbox"/>		
One Row:	Create		
No Rows:	Create		
Unique Field:	<input type="text"/>		
Label Format:	<input type="checkbox"/>		

32. Publish the changes.

33. The default fields appear under **PersonDetails > Fields**.

Person

		Create	Delete
<ul style="list-style-type: none"> <li>📁 Person</li> <li>    📁 Fields</li> <li>    ⌚ Node Filters</li> <li>    ⌚ Field Filters</li> <li>    📋 One to One</li> <li>    📁 One to Many                     <ul style="list-style-type: none"> <li>        📁 Emails</li> <li>        📁 TelephoneNumbers</li> <li>        📁 Addresses</li> <li>        📁 PersonDetails                             <ul style="list-style-type: none"> <li>            📁 Fields <span style="border: 2px solid red; padding: 2px;">Fields</span></li> <li>            📅 deletedDate</li> <li>            📅 deletedBy</li> <li>            📅 deletedInd</li> <li>            📅 consolidationInd</li> <li>            📅 lastUpdateDate</li> <li>            📅 updatedBy</li> <li>            📅 createDate</li> <li>            📅 creator</li> <li>            📅 rowidObject</li> <li>            📅 cmDirtyInd</li> <li>            📅 hubStatelnd</li> <li>            📅 interactionInd</li> <li>            📅 dirtyInd</li> <li>            📅 lastRowidSystem</li> </ul> </li> <li>        ⌚ Field Filters</li> <li>        📋 One to One</li> <li>        📋 One to Many</li> </ul> </li> </ul>			

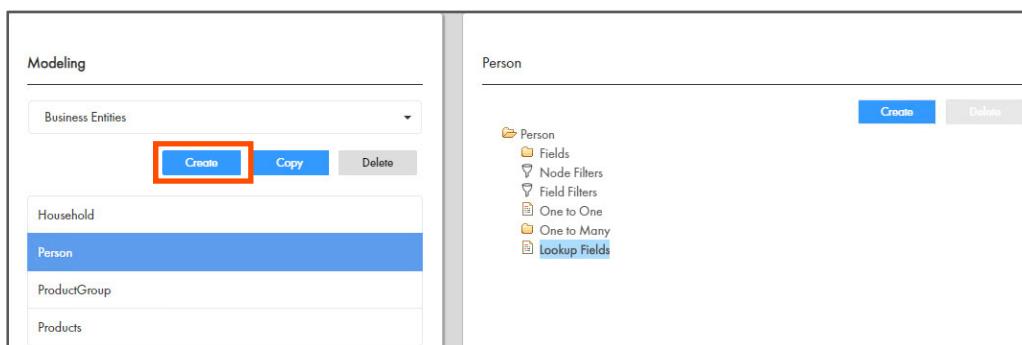
34. Add the following fields to the **PersonDetails > Fields** (Navigate to Person > One to Many > PersonDetails > Fields):

Field	Property	Value
marketingSegment	Name	marketingSegment
	Label	Marketing Segment
	Column	MARKETING_SEGMENT
isVipInd	Name	isVipInd
	Label	Is VIP Ind
	Column	IS_VIP_IND
educationLevelCd	Name	educationLevelCd
	Label	Education Level Cd
	Column	EDUCATION_LEVEL_CD
primaryLanguage	Name	primaryLanguage
	Label	Primary Language
	Column	PRIMARY_LANGUAGE
numberOfChildren	Name	numberOfChildren
	Label	Number of Children
	Column	NUMBER_OF_CHILDREN
homeOwnership	Name	homeOwnership
	Label	Home Ownership
	Column	HOME_OWNERSHIP
jobTitle	Name	jobTitle
	Label	Job Title
	Column	JOB_TITLE

You will now create the marital status lookup node. This reference entity was defined in one of the previous exercises.

35. Collapse all the nodes and select **Person > Lookup Fields**.

36. Click **Create**.



The screenshot shows the Informatica MDM Data Director application interface. On the left, the 'Modeling' pane displays a list of business entities: Household, Person (which is selected and highlighted in blue), ProductGroup, and Products. Below this list are 'Create', 'Copy', and 'Delete' buttons. The 'Create' button is highlighted with a red box. On the right, the 'Person' pane shows a sidebar with options: Person, Fields, Node Filters, Field Filters, One to One, One to Many, and Lookup Fields. The 'Lookup Fields' option is also highlighted with a red box.

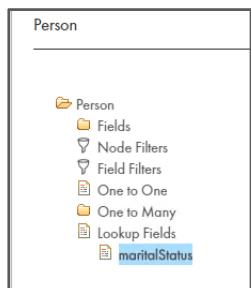
37. In the New Lookup Field page, enter the following information:

Property	Value
Name	maritalStatus
Label	Marital Status
Object	LUMaritalStatus
Constraint	This value gets auto-populated
Lookup Display Field	MaritalStatusCode

[New Lookup Field]

		<b>Apply</b>	<b>Discard</b>
Name:	maritalStatus		
Label:	Marital Status		
Depends On:		▼	
Object:	LUMaritalStatus	▼	
Constraint:	C_PARTY(MARITAL_STATUS).C_LU_MARITAL_STATUS(MARITA	▼	
Lookup Display Field:	MaritalStatusCode	▼	
Required:	<input type="checkbox"/>		
Default Value		+	
Lookup Filter		+	

38. Click **Apply** to save the changes.



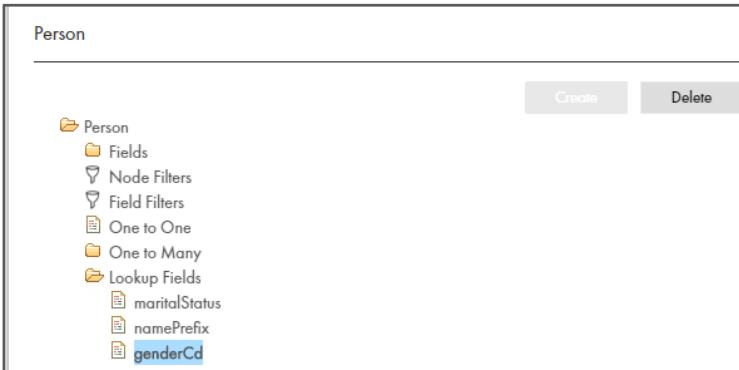
The new field now appears under **Lookup Fields**.

39. Create two more lookup fields under Person.

Lookup Field Name	Field Name	Value
namePrefix	Name	namePrefix
	Label	Name Prefix
	Object	LUNamePrefix
	Constraint	Gets auto-populated

	Lookup Display field	prfxName
genderCd	Name	genderCd
	Label	Gender Code
	Object	LUGender
	Constraint	Gets auto-populated
	Lookup Display field	genderCode

**40. Publish the changes.**



The person business entity is now created.

*This concludes the lab.*



## Module 2: Configure MDM Data Director Application

### Lab 2-4: Configure Business Entity Views

#### Overview:

Now that you have created a person business entity, you will now define an Organization business entity based on the same C\_PARTY base object. The PARTY\_TYPE column will determine if the stored entity is a person or an Organization.

#### Objectives:

- Configure Business Entities
- Configure Business Entity Views
- Configure Similar Records component
- Define Relationships
- Define Default Values

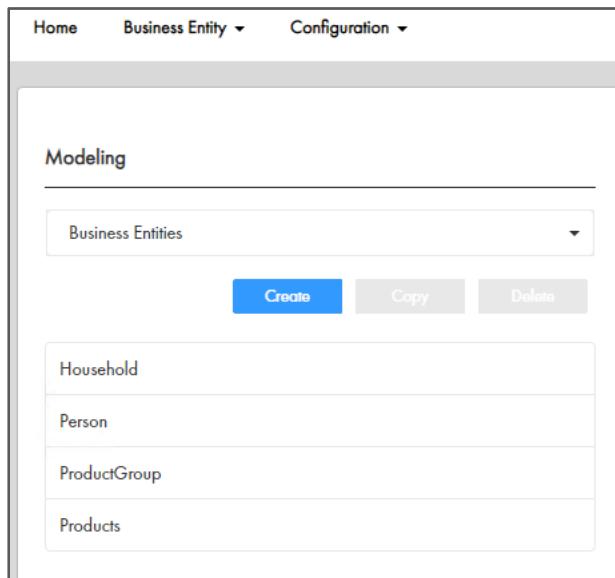
#### Duration:

2 hours

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#### Tasks

1. From the Modeling panel, select **Business Entities**.
2. Click **Create**.



3. Enter the values listed in the table below:

Field Name	Value
Name	Organization
Label	Organization
Base Object	C_PARTY
Label Format	Enable
Task format	{label}
Exists format	{label}

[New Business Entity]

		<b>Apply</b>	<b>Discard</b>
Name:	Organization		
Label:	Organization		
Description:			
State Management Enabled:	<input type="checkbox"/>		
Base Object:	C_PARTY		
Label Format:	<input checked="" type="checkbox"/>		
Task Format:	{label}		
No Fields Format:			
Exists Format:	{label}		
Color:			
Business Entity Icon:	Default		

4. Click **Apply** and **Publish**.

5. Select the **Organization** business entity to add the following fields:

Field	Property	Value
PartyType	Name	partyType
	Label	Party Type
	Column	PARTY_TYPE
	Filter	Enable
	Operator	In
	Value	Organization
	Searchable	Enable
	Search Analyzer	text_fuzzy
	Sortable	Enable
	Filterable	Enable

	Facet	Enable
	Displayable	Enable
displayName	Name	displayName
	Label	Display Name
	Column	DISPLAY_NAME
	Searchable	Enable
	Search Analyzer	text_fuzzy
	Sortable	Enable
	Filterable	Enable
	Facet	Enable
	Displayable	Enable
dunsNumber	Name	dunsNumber
	Label	Duns Number
	Column	DUNS_NUMBER

Organization

Create
Delete

- ↳ Organization
- ↳ Fields
  - dirtyInd
  - lastRowidSystem
  - deletedDate
  - deletedBy
  - deletedInd
  - consolidationInd
  - lastUpdateDate
  - updatedBy
  - createDate
  - creator
  - rowidObject
  - cmDirtyInd
  - hubStateInd
  - interactionId
  - partyType
  - displayName
  - dunsNumber**
- ↳ Field Filters
  - One to One
  - One to Many
  - Lookup Fields

6. Create a **One to Many** leaf under Organization and enter the following values:

Organization

Create      Delete

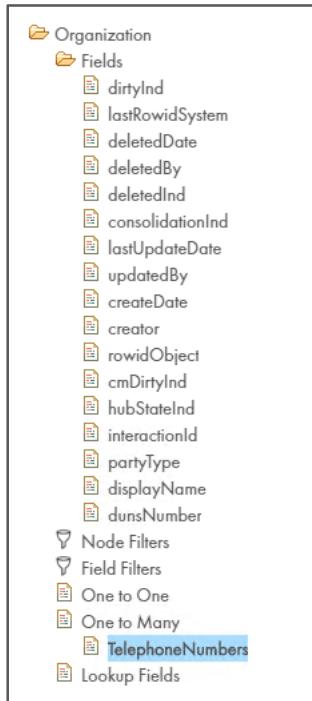
- Organization
- Fields
  - dirtyInd
  - lastRowidSystem
  - deletedDate
  - deletedBy
  - deletedInd
  - consolidationInd
  - lastUpdateDate
  - updatedBy
  - createDate
  - creator
  - rowidObject
  - cmDirtyInd
  - hubStatInd
  - interactionId
  - partyType
  - displayName
  - dunsNumber
- Field Filters
- One to One
- One to Many**
- Lookup Fields

Field	Property	Value
TelephoneNumberNumbers	Name	TelephoneNumberNumbers
	Label	Telephone Numbers
	BaseObject	C_PARTY_PHONE
	Constraint	This gets auto-populated
	Delete Strategy	Enable
	Type	Soft Delete
	Identifying Strategy	Enable
	One Row	Create
	No Rows	Create

[New One to Many]

		<b>Apply</b>	Discard
Name:	TelephoneNumber		
Label:	Telephone Numbers		
Description:	   		
Base Object:	C_PARTY_PHONE		
Constraint:	C_PARTY_PHONE(PARTY_ID).C_PARTY(ROWID_OBJECT)		
Delete Strategy:	<input checked="" type="checkbox"/>		
Type:	SOFT_DELETE		
Identifying Strategy:	<input checked="" type="checkbox"/>		
One Row:	Create		
No Rows:	Create		
Unique Field:			
Label Format:	<input type="checkbox"/>		

**7. Click Apply.**



TelephoneNumber appear in the **One to Many** list.

**8. Publish the changes.**

9. Add the following fields under **Organization > One to Many > TelephoneNumbers > Fields**.

Field	Property	Value
doNotCallInd	Name	doNotCallInd
	Label	Do Not Call Ind
	Column	DO_NOT_CALL_IND
phoneExtNum	Name	phoneExtNum
	Label	Phone Ext Number
	Column	PHONE_EXT_NUM
phoneNum	Name	phoneNum
	Label	Phone Number
	Column	PHONE_NUM
	Searchable	Enable
	Search Analyzer	text_fuzzy
	Sortable	Enable
	Filterable	Enable
	Facet	Enable
	Displayable	Enable
phoneCountryCd	Name	phoneCountryCd
	Label	Phone Country Cd
	Column	PHONE_COUNTRY_CD

## 10. Create Lookup fields under **TelephoneNumbers**.

Organization

Create      Delete

- Organization
  - Fields
  - Node Filters
  - Field Filters
  - One to One
  - One to Many
  - TelephoneNumbers
    - Fields
      - lastRowidSystem
      - deletedDate
      - deletedBy
      - deletedInd
      - consolidationInd
      - lastUpdateDate
      - updatedBy
      - createDate
      - creator
      - cmDirtyInd
      - hubStateInd
      - interactionId
      - rowidObject
      - dirtyInd
      - doNotCallInd
      - phoneExtNum
      - phoneNum
      - phoneCountryCd
    - Field Filters
    - One to One
    - One to Many
    - Lookup Fields**

Field	Property	Value
phoneTypeCd	Name	phoneTypeCd
	Label	Phone Type
	Object	LUPhoneType
	Constraint	This gets auto-populated
	Lookup Display Field	phoneType

11. Add another **One to Many** node to Organization named **Addresses** with the following values:

Organization

[Create](#) [Delete](#)

- Organization
  - Fields
  - Node Filters
  - Field Filters
  - One to One
  - One to Many**
    - TelephoneNumbers
      - Fields
        - lastRowidSystem
        - deletedDate
        - deletedBy
        - deletedInd
        - consolidationInd
        - lastUpdateDate
        - updatedBy
        - createDate
        - creator
        - cmDirtyInd
        - hubStateInd
        - interactionId
        - rowwidObject
        - dirtyInd
        - doNotCallInd
        - phoneExtNum
        - phoneNum
        - phoneCountryCd

Field	Property	Value
Addresses	Name	Addresses
	Label	Addresses
	Base Object	C_RL_PARTY_ADDRESS
	Constraint	This gets auto-populated
	Delete Strategy	Enable
	Type	SOFT DELETE
	Identifying Strategy	Enable
	One Row	Create
	No Rows	Create

**12. Click Apply.**

[New One to Many]

		Apply	Discard
Name:	Addresses		
Label:	Addresses		
Description:	<input type="text"/>		
Base Object:	C_RL_PARTY_ADDRESS	▼	
Constraint:	C_RL_PARTY_ADDRESS(PARTY_ID) C_PARTY(ROWID_OBJECT)		
Delete Strategy:	<input checked="" type="checkbox"/>		
Type:	SOFT_DELETE	▼	
Identifying Strategy:	<input checked="" type="checkbox"/>		
One Row:	Create	▼	
No Rows:	Create	▼	
Unique Field:	<input type="text"/>		
Label Format:	<input type="checkbox"/>		

**13. Expand One to Many to view the Addresses folder created.**

Organization

		Create	Delete
Organization	Fields		
Fields	Node Filters		
Node Filters	Field Filters		
Field Filters	One to One		
One to One	One to Many	▼	
One to Many	TelephoneNumber		
TelephoneNumber	Addresses		
Addresses	Lookup Fields		

**14. Click Publish.**

**15. Once published, select Organization > One to Many > Addresses > One to One and click Create.**

Organization

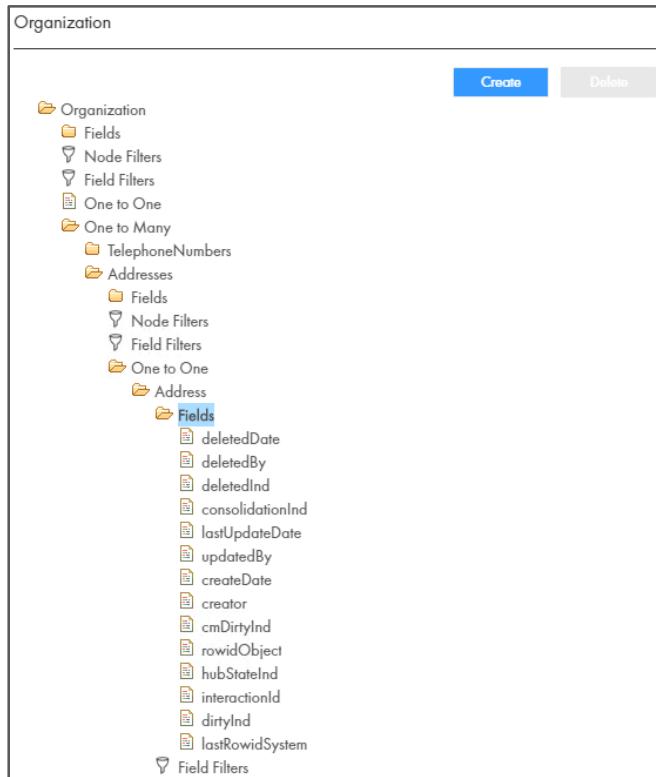
		Create	Delete
Organization	Fields		
Fields	Node Filters		
Node Filters	Field Filters		
Field Filters	One to One	▼	
One to One	One to Many	▼	
One to Many	TelephoneNumber		
TelephoneNumber	Addresses	▼	
Addresses	Fields		
Fields	Field Filters		
Field Filters	One to One	▼	
One to One	One to Many		
One to Many	Lookup Fields		
Lookup Fields	Lookup Fields		

16. Enter the following values:

Field	Property	Value
Address	Name	Address
	Label	Address
	Base Object	C_ADDRESS
	Constraint	This gets auto-populated
	Delete Strategy	Enable
	Type	SOFT DELETE
	Identifying Strategy	Enable
	One Row	Create
	No Rows	Create

17. **Publish** the changes.

18. Add the following fields to the **Organization > One to Many > Addresses > One to One > Address > Fields**:

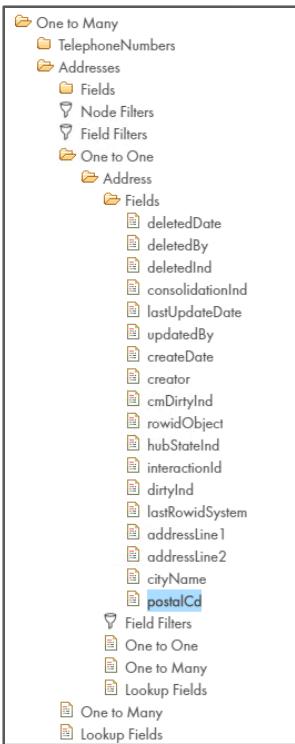


The screenshot shows the navigation structure of the Informatica MDM Data Director application. The path is: Organization > One to Many > Addresses > One to One > Address > Fields. The 'Fields' folder under 'Address' is highlighted with a blue selection bar.

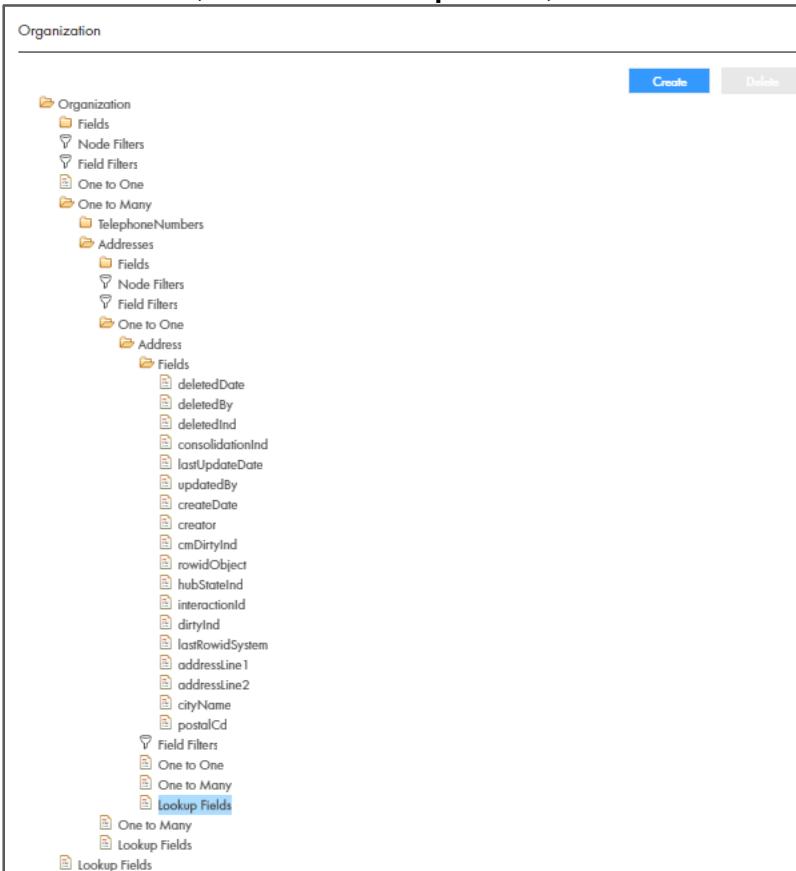
Field	Property	Value
addressLine1	Name	addressLine1
	Label	Address Line 1
	Column	ADDRESS_LINE_1

	Searchable	Enable
	Search Analyzer	text_fuzzy
	Sortable	Enable
	Filterable	Enable
	Displayable	Enable
addressLine2	Name	addressLine2
	Label	Address Line 2
	Column	ADDRESS_LINE_2
	Searchable	Enable
	Search Analyzer	text_fuzzy
	Sortable	Enable
	Filterable	Enable
	Displayable	Enable
CityName	Name	cityName
	Label	City Name
	Column	CITY_NAME
	Searchable	Enable
	Search Analyzer	text_fuzzy
	Sortable	Enable
	Filterable	Enable
	Displayable	Enable
postalCd	Name	postalCd
	Label	Postal Cd
	Column	POSTAL_CD
	Searchable	Enable
	Search Analyzer	text_fuzzy
	Sortable	Enable
	Filterable	Enable
	Displayable	Enable

Ensure that the new fields are added successfully.



19. Under Address, select the **Lookup Fields**, and click **Create**.



20. Enter the following values:

Field	Property	Value
stateCd	Name	stateCd
	Label	State Cd
	Object	LUState
	Constraint	This field is auto-populated
	Lookup Display Field	stateNameDisp

[New Lookup Field]

		Apply	Discard
Name:	stateCd		
Label:	State Cd		
Depends On:			
Object:	LUState		
Constraint:	C_ADDRESS(STATE_CD).C_LU_STATE(STATE_ABBREVIATION)		
Lookup Display Field:	stateNameDisp		
Required:	<input type="checkbox"/>		
Default Value	<input type="button" value="+"/>		
Lookup Filter	<input type="button" value="+"/>		

21. Collapse all the folders.

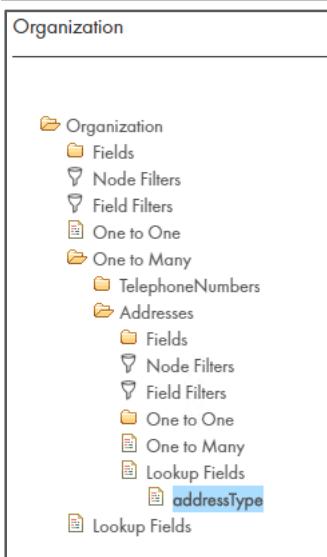
22. Click **Organization > One to Many > Addresses > Lookup Fields** and click **Create**.

Organization

		Create	Delete
↳ Organization	↳ Fields		
↳ Fields	↳ Node Filters		
↳ Node Filters	↳ Field Filters		
↳ Field Filters	↳ One to One		
↳ One to One	↳ One to Many		
↳ One to Many	↳ TelephoneNumbers		
↳ TelephoneNumbers	↳ Addresses		
↳ Addresses	↳ Fields		
↳ Fields	↳ Node Filters		
↳ Node Filters	↳ Field Filters		
↳ Field Filters	↳ One to One		
↳ One to One	↳ One to Many		
↳ One to Many	↳ Lookup Fields		
↳ Lookup Fields			

23. Enter the following values to create a lookup:

Name	Property	Value
addressType	Name	addressType
	Label	Address Type
	Object	LUAddressType
	Constraint	This field is auto-populated
	Lookup Display Field	addressTypeDisp



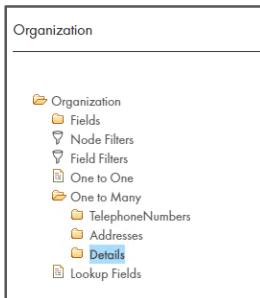
24. Add another node under **Organization > One to Many** with the following values:

Name	Property	Value
Details	Name	Details
	Label	Details
	Base Object	C_ORGANIZATION_DETAILS
	Constraint	This field gets auto-populated
	Delete Strategy	Enable
	Type	SOFT DELETE
	Identifying Strategy	Enable
	One Row	Create
	No Rows	Create

[New One to Many]

		Apply	Discard
Name:	Details		
Label:	Details		
Description:	<input type="text"/>		
Base Object:	C_ORGANIZATION_DETAILS	▼	
Constraint:	C_ORGANIZATION_DETAILS(PARTY_ID).C_PARTY(ROWID_OBJE)		
Delete Strategy:	<input checked="" type="checkbox"/>		
Type:	SOFT_DELETE	▼	
Identifying Strategy:	<input checked="" type="checkbox"/>		
One Row:	Create	▼	
No Rows:	Create	▼	
Unique Field:	<input type="text"/>		
Label Format:	<input type="checkbox"/>		

Notice that the new node is added.



**25. Publish the changes.**

**26. Add the following fields under Organization > One to Many > Details > Fields.**

Name	Property	Value
closeDate	Name	closeDate
	Label	Close Date
	Column	CLOSE_DATE
establishDate	Name	establishDate
	Label	Establish Date
	Column	ESTABLISH_DATE
employeeCount	Name	employeeCount
	Label	Employee Count
	Column	EMPLOYEE_COUNT

**27. Publish the changes.**

*This concludes the lab.*



## Module 2: Configure MDM Data Director Application

### Lab 2-5: Configure Networks

#### Overview:

Now that the entities are in place, we will define networks that determine the sphere of influence among the entities. The networks use the hierarchy configuration and it is pre-configured in the MDM hub console.

After creating the business entities, you will now define relationships.

#### Objectives:

- Configure networks

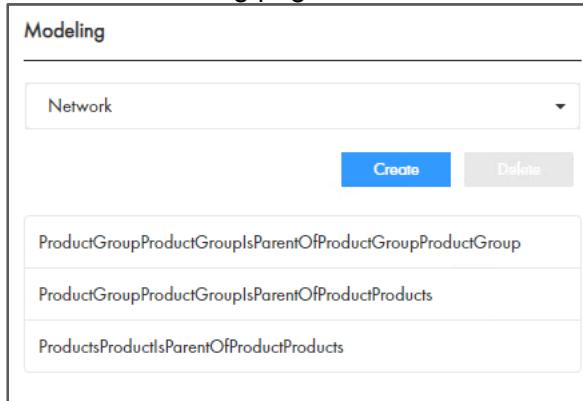
#### Duration:

2 hours

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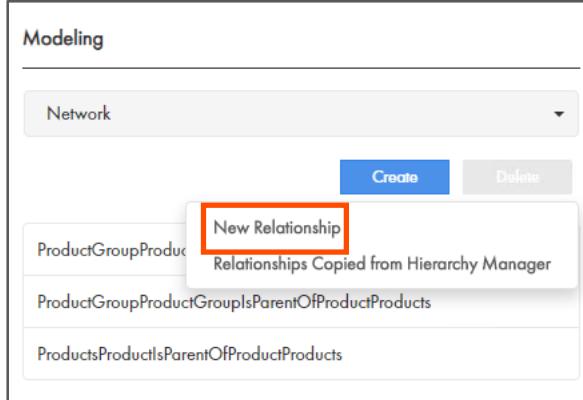
#### Tasks:

- From the Modeling page, select **Network** and click **Create**.



The screenshot shows the 'Modeling' interface. A dropdown menu is open, showing the option 'Network'. Below the dropdown are three items: 'ProductGroupProductGroupsParentOfProductGroupProductGroup', 'ProductGroupProductGroupsParentOfProductProducts', and 'ProductsProductIsParentOfProductProducts'. At the bottom right of the interface are two buttons: 'Create' (highlighted in blue) and 'Delete'.

- Click **Create > New Relationship**.



The screenshot shows the same 'Modeling' interface as above. The 'Create' button has been clicked, and a new menu item 'New Relationship' has appeared. This item is highlighted with a red box. The other options in the dropdown are 'Relationships Copied from Hierarchy Manager', 'ProductGroupProductGroupsParentOfProductProducts', and 'ProductsProductIsParentOfProductProducts'. The 'Create' and 'Delete' buttons are also visible at the bottom right.

Property	Value
Name	HouseholdContainsMemberPerson
Label	Household contains member Person
Base Object	C_RL_PARTY_GROUP
Entity 1	Household
Entity 1 Constraint	This gets auto-populated
Entity 2	Person
Entity 2 Constraint	This gets auto-populated

[New Relationship]

Name:	<input type="text" value="HouseholdContainsMemberPerson"/>
Label:	<input type="text" value="Household contains member Person"/>
Description:	<input type="text"/>
Direction:	<input type="text" value="Entity 1 to Entity 2"/>
State Management Enabled:	<input type="checkbox"/>
Line Color:	<input type="color" value="#0000FF"/>
Data-driven Relationship Based on:	<input type="text" value="None"/>
Base Object:	<input type="text" value="C_RL_PARTY_GROUP"/>
Entity 1:	<input type="text" value="Household"/>
Entity 1 Constraint:	<input type="text" value="C_RL_PARTY_GROUP(PRTY_GRP_ID),C_PARTY_GROUP(ROWI)"/>
Entity 2:	<input type="text" value="Person"/>
Entity 2 Constraint:	<input type="text" value="C_RL_PARTY_GROUP(PARTY_ID),C_PARTY(ROWID_OBJECT)"/>
Label Format:	<input type="checkbox"/>

3. Click **Apply**.
4. Publish the changes.
5. Select **Fields** and click **Create**.

HouseholdContainsMemberPerson

HouseholdContainsMemberPerson

Fields

Field Filters

Lookup Fields

6. Enter values as listed in the table below:

Field Name	Property	Value
rowidRelType	Name	rowidRelType
	Label	Rowid Rel Type
	Column	ROWID_REL_TYPE
	Filter	Enable
	Operator	In
	Value	10
rowidHierarchy	Name	rowidHierarchy
	Label	Rowid Hierarchy
	Column	ROWID_HIERARCHY
	Filter	Enable
	Operator	In
	Value	2

7. To define another Relationship, select **Network**.  
 8. Click **Create > New Relationship**.  
 9. Enter the following values in the **New Relationship** window:

Property	Value
Name	OrganizationEmploysPerson
Label	Organization Employs Person
State Management	Enable
Base Object	C_RL_PARTY
Entity 1	Organization
Entity 1 Constraint	This gets auto-populated
Entity 2	Person
Entity 2 Constraint	This gets auto-populated

[New Relationship]

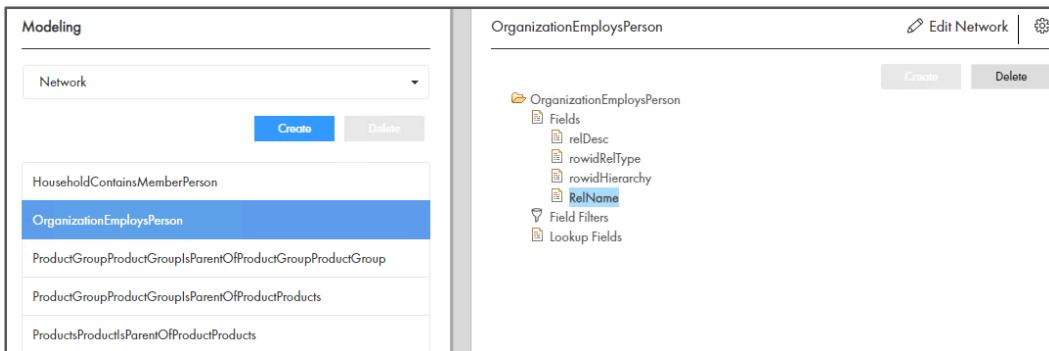
		<b>Apply</b>	Discard
Name:	OrganizationEmploysPerson		
Label:	Organization Employs Person		
Description:	  		
Direction:	Entity 1 to Entity 2		
State Management Enabled:	<input checked="" type="checkbox"/>		
Line Color:	<span style="background-color: blue; width: 10px; height: 10px; display: inline-block;"></span>		
Data-driven Relationship Based on:	None		
Base Object:	C_RL_PARTY		
Entity 1:	Organization		
Entity 1 Constraint:	C_RL_PARTY(PARTY_ID2).C_PARTY(ROWID_OBJECT)		
Entity 2:	Person		
Entity 2 Constraint:	C_RL_PARTY(PARTY_ID1).C_PARTY(ROWID_OBJECT)		
Label Format:	<input type="checkbox"/>		

**10. Click **Apply**.**

**11. Publish the changes.**

12. Under **OrganizationEmploysPerson > Fields**, add the following fields:

Field Name	Property	Value
relDesc	Name	relDesc
	Label	Rel Desc
	Column	REL_DESC
rowidRelType	Name	rowidRelType
	Label	Rowid Rel Type
	Column	ROWID_REL_TYPE
	Filter	Enable
	Operator	In
	Value	3
rowidHierarchy	Name	rowidHierarchy
	Label	Rowid Hierarchy
	Column	ROWID_HIERARCHY
	Filter	Enable
	Operator	In
	Value	2
RelName	Name	RelName
	Label	Rel Name
	Column	REL_NAME



The screenshot shows the 'Modeling' interface on the left and the 'OrganizationEmploysPerson' network details on the right.

**Modeling:** Shows a list of networks: Network, HouseholdContainsMemberPerson, OrganizationEmploysPerson (selected), ProductGroupProductGroupIsParentOfProductGroupProductGroup, ProductGroupProductGroupIsParentOfProductProducts, and ProductsProductIsParentOfProductProducts.

**OrganizationEmploysPerson:** Details for the selected network.

- Fields:** A list of fields added to the network:
  - relDesc
  - rowidRelType
  - rowidHierarchy
  - RelName (selected)
- Field Filters**
- Lookup Fields**

13. **Publish** the changes.

14. Create another relationship with the name **PersonOwnsProduct**.

Property	Value
Name	PersonOwnsProduct
Label	Person Owns Product
State Management	Enable
Base Object	C_RL_PARTY_PRODUCT
Entity 1	Person
Entity 1 Constraint	This gets auto-populated
Entity 2	Products
Entity 2 Constraint	This gets auto-populated

PersonOwnsProduct

		Apply	Discard
Name:	PersonOwnsProduct		
Label:	Person Owns Product		
Description:			
Direction:	Entity 1 to Entity 2		
State Management Enabled:	<input checked="" type="checkbox"/>		
Line Color:	<span style="color: blue;">█</span>		
Data-driven Relationship Based on:	None		
Base Object:	C_RL_PARTY_PRODUCT		
Entity 1:	Person		
Entity 1 Constraint:	C_RL_PARTY_PRODUCT(PARTY_ID).C_PARTY(ROWID_OBJECT)		
Entity 2:	Products		
Entity 2 Constraint:	C_RL_PARTY_PRODUCT(PRODUCT_ID).C_PRODUCT(ROWID_OBJECT)		
Label Format:	<input type="checkbox"/>		

15. **Publish** the changes.

16. Add 3 fields with the following values:

Field Name	Property	Value
rowidRelType	Name	rowidRelType
	Label	Rowid Rel Type
	Column	ROWID_REL_TYPE
	Filter	Enable
	Operator	In
	Value	5
rowidHierarchy	Name	rowidHierarchy
	Label	Rowid Hierarchy
	Column	ROWID_HIERARCHY
	Filter	Enable
	Operator	In
	Value	2
serialNumber	Name	serialNumber
	Label	Serial Number
	Column	SERIAL_NUMBER



The screenshot shows the 'PersonOwnsProduct' relationship configuration screen. At the top, there are buttons for 'Edit Network' and a gear icon. Below that, there are 'Create' and 'Delete' buttons. The main area displays the relationship structure with nodes for 'PersonOwnsProduct', 'Fields' (containing 'rowidRelType', 'rowidHierarchy', and 'serialNumber'), 'Field Filters', and 'Lookup Fields'. The 'serialNumber' field is highlighted with a blue selection bar.

17. **Publish** the changes.

18. Add another relationship named **PersonPrefersProductGroup**.

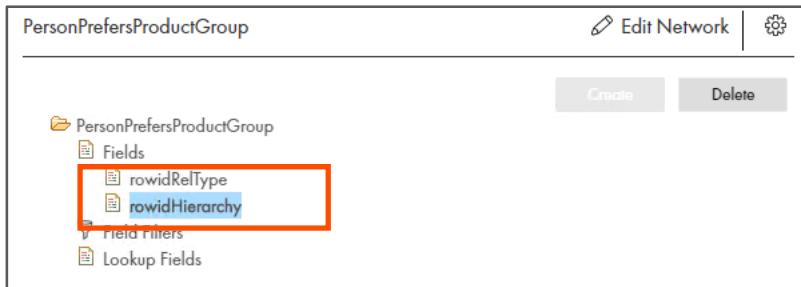
Property	Value
Name	PersonPrefersProductGroup
Label	Person Prefers Product Group
State Management	Enable
Base Object	C_RL_PARTY_PRODUCT
Entity 1	Person
Entity 1 Constraint	This gets auto-populated
Entity 2	Products
Entity 2 Constraint	This gets auto-populated

[New Relationship]

		<b>Apply</b>	Discard
Name:	PersonPrefersProductGroup		
Label:	Person Prefers product group		
Description:	   		
Direction:	Entity 1 to Entity 2		
State Management Enabled:	<input checked="" type="checkbox"/>		
Line Color:	<span style="background-color: blue; display: inline-block; width: 10px; height: 10px;"></span>		
Data-driven Relationship Based on:	None		
Base Object:	C_RL_PARTY_PRODUCT		
Entity 1:	Person		
Entity 1 Constraint:	C_RL_PARTY_PRODUCT(PARTY_ID).C_PARTY(ROWID_OBJECT)		
Entity 2:	Products		
Entity 2 Constraint:	C_RL_PARTY_PRODUCT(PRODUCT_ID).C_PRODUCT(ROWID_OBJECT)		
Label Format:	<input type="checkbox"/>		

19. Add the following fields:

Field Name	Property	Value
rowidRelType	Name	rowidRelType
	Label	Rowid Rel Type
	Column	ROWID_REL_TYPE
	Filter	Enable
	Operator	In
	Value	1
rowidHierarchy	Name	rowidHierarchy
	Label	Rowid Hierarchy
	Column	ROWID_HIERARCHY
	Filter	Enable
	Operator	In
	Value	2

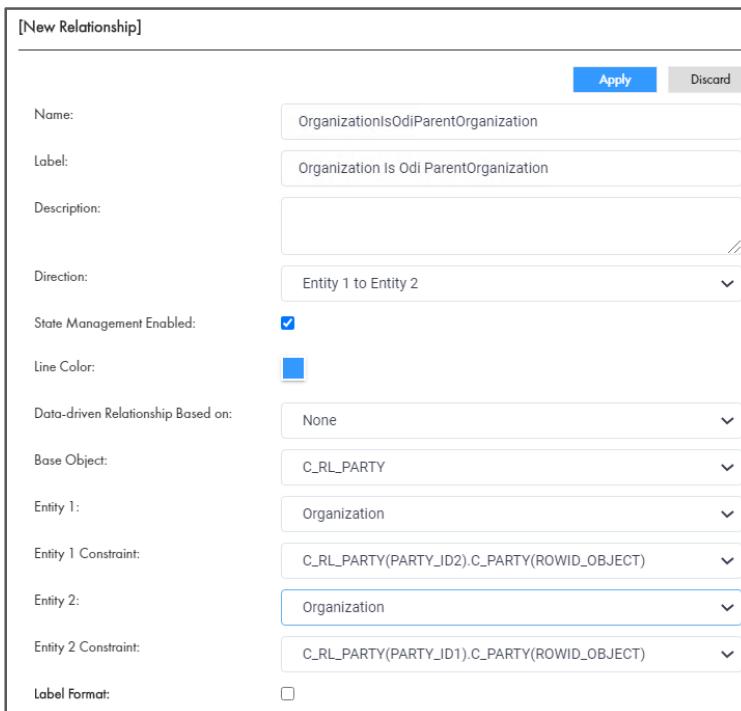


The screenshot shows the 'Edit Network' interface for a relationship named 'PersonPrefersProductGroup'. In the 'Fields' section, two fields are highlighted with a red box: 'rowidRelType' and 'rowidHierarchy'.

20. **Publish** the changes.

21. Add a relationship named **OrganizationIsOdiParentOrganization** with the following values:

Property	Value
Name	OrganizationIsOdiParentOrganization
Label	Organization Is Odi Parent Organization
State Management Enabled	Check
Base Object	C_RL_PARTY
Entity 1	Organization
Entity 1 Constraint	This gets auto-populated
Entity 2	Organization
Entity 2 Constraint	This gets auto-populated



The screenshot shows the 'New Relationship' dialog with the following settings:

- Name: OrganizationIsOdiParentOrganization
- Label: Organization Is Odi Parent Organization
- Description: (empty)
- Direction: Entity 1 to Entity 2
- State Management Enabled: checked
- Line Color: blue
- Data-driven Relationship Based on: None
- Base Object: C\_RL\_PARTY
- Entity 1: Organization
- Entity 1 Constraint: C\_RL\_PARTY(PARTY\_ID2).C\_PARTY(ROWID\_OBJECT)
- Entity 2: Organization
- Entity 2 Constraint: C\_RL\_PARTY(PARTY\_ID1).C\_PARTY(ROWID\_OBJECT)
- Label Format: (checkbox)

22. Add the following fields:

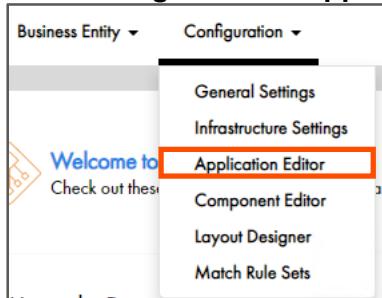
Field Name	Property	Value
relDesc	Name	relDesc
	Label	Rel Desc
	Column	REL_DESC
rowidRelType	Name	rowidRelType
	Label	Rowid Rel Type
	Column	ROWID_REL_TYPE
	Filter	Enable
	Operator	In
	Value	2
rowidHierarchy	Name	rowidHierarchy
	Label	Rowid Hierarchy
	Column	ROWID_HIERARCHY
	Filter	Enable
	Operator	In
	Value	1
relName	Name	relName
	Label	Rel Name
	Column	REL_NAME



The screenshot shows the Informatica ODI interface with the object name "OrganizationsOdiParentOrganization". At the top, there are buttons for "Edit Network" and a gear icon. Below the object name, there are "Create" and "Delete" buttons. The "Fields" section is expanded, showing four fields: relDesc, rowidRelType, rowidHierarchy, and relName. The "relName" field is currently selected, indicated by a blue selection bar around its row.

23. Publish the changes.

24. Click Configuration > Application Editor.



25. Select **E360\_Training** as the database (on the top right -hand side of the page).

26. Select **E360\_Training** > **Business Entities** and click **Create**.

27. Select **Person** from the drop-down list.

28. Select the **Visible** checkbox.

29. Repeat the same for the following entities:

Entities
Organization
CreditCard
Products
ProductGroup
Household
Account
Address
DebitCard

30. **Publish** the changes.

*This concludes the lab.*



## Module 2: Configure MDM Data Director Application

### Lab 2-6: Create Business Entity Views

#### Overview:

A business entity view is a collection of all columns across all base objects about an entity. You can use the views to design a search result format, layouts, and cleansing. You may define more than one view for an entity.

You will define business entity views for the person and Organization business entities.

#### Objectives:

- Create a business entity view for Person
- Create a business entity view for Organization

#### Duration:

30 minutes

---

#### Tasks

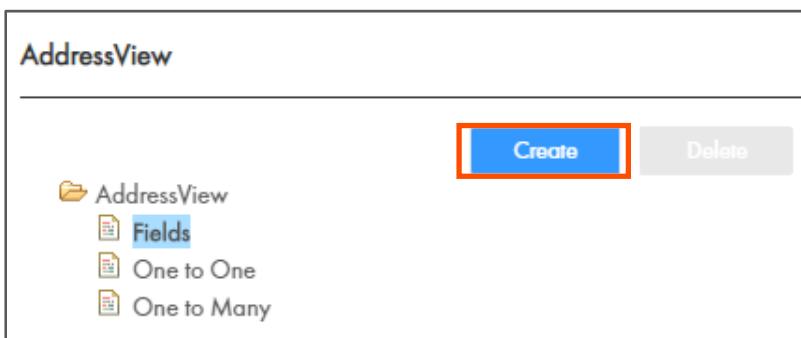
You will configure the business entity views. Business Entity Views are the condensed version of Business Entities.

1. Click **Business Entities > Modelling > Business Entity Views**.



**Note:** You will see a list of existing business entity views.

2. In the tree view of **AddressView**, click **Fields**.
3. Click **Create** to add new fields.



4. Enter the following values in the New field panel:

Property	Value
Name	addrLn1
Label	Address Line 1
Required	Checked

5. Click **Apply** to save the changes.

[New Field]

		<b>Apply</b>	Discard
Name:	addrLn1		
Label:	Address Line1		
Depends On:	<input type="text"/>		
URI:	<input type="text"/>		
Type:	<input type="text"/>		
Display Format:	<input type="text"/>		
Length:	<input type="text"/>		
Total Digits:	<input type="text"/>		
Fraction Digits:	<input type="text"/>		
Read Only:	<input type="checkbox"/>		
Required:	<input checked="" type="checkbox"/>		
Default Value	<input type="button" value="+"/>		

**Note:** Ignore if fields are already added.

6. Add another Business Entity View named **PersonView**.

[New ViewRoot]

		<b>Apply</b>	Discard
Name:	PersonView		
Label:	Person View		
Business Entity:	<input type="text" value="Person"/>		

7. Add the following fields to PersonView:

Name	Label
firstName	First Name
lastName	Last Name
middleName	Middle Name
birthdate	Birthdate
genderCd	Gender Code

displayName	Display Name
jobTitle	Job Title
educationLevelCd	Education Level Code
primaryLanguage	Primary Language
isVipInd	Is Vip Ind
marketingSegment	Marketing Segment
homeownership	Home Ownership
numberOfChildren	Number of Children

PersonView

Create      Delete

- PersonView
  - Fields
    - firstName
    - lastName
    - middleName
    - birthdate
    - genderCd
    - displayName
    - jobTitle
    - educationLevelCd
    - primaryLanguage
    - isVipInd
    - marketingSegment
    - homeownership
    - numberOfChildren
  - One to One
  - One to Many

8. **Publish** the changes.
9. Select the **One to Many** leaf and create **TelephoneNumber**s.

PersonView

Create      Delete

- PersonView
  - Fields
  - One to One
  - One to Many**

10. Click **Fields** under **TelephoneNumber**s to create the following fields.

PersonView

Create      Delete

- PersonView
  - Fields
  - One to One
  - One to Many
    - TelephoneNumber
      - Fields
        - One to One
        - One to Many

Name	Label
phoneTypeCd	Phone Type
doNotCallInd	Do Not Call Ind
phoneCountryCd	Phone Country Code
phoneNum	Phone Number
phoneExtNum	Phone Extn Num

11. Create another **One to Many** leaf as **Emails**.

PersonView

- ↳ PersonView
- ↳ Fields
- ↳ One to One
- ↳ **One to Many**
- ↳ TelephoneNumbers
- ↳ Fields
  - ↳ phoneTypeCd
  - ↳ doNotCallInd
  - ↳ phoneCountryCd
  - ↳ phoneNum
  - ↳ phoneExtNum
- ↳ One to One
- ↳ One to Many

Create Delete

NEW\_viewMany

- Name:
- Label:

Apply Discard

12. Create the following fields under **Emails**.

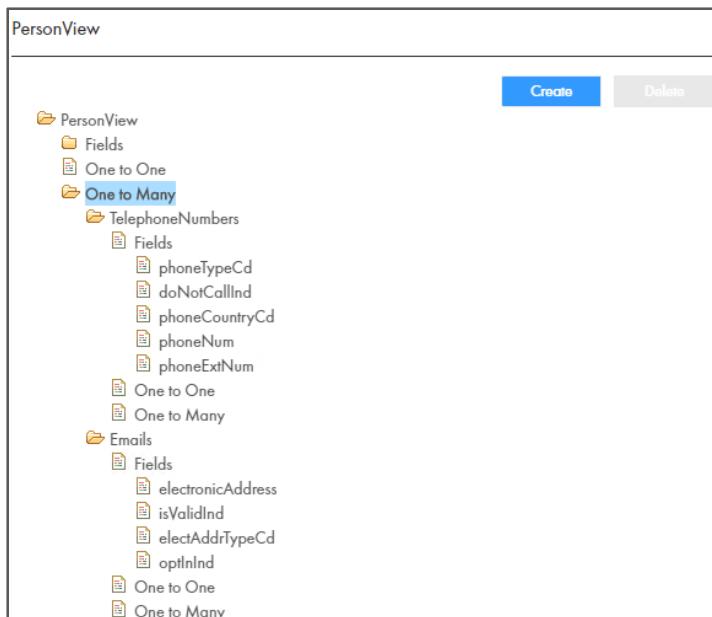
PersonView

- ↳ PersonView
- ↳ Fields
- ↳ One to One
- ↳ One to Many
- ↳ TelephoneNumbers
- ↳ Fields
  - ↳ phoneTypeCd
  - ↳ doNotCallInd
  - ↳ phoneCountryCd
  - ↳ phoneNum
  - ↳ phoneExtNum
- ↳ One to One
- ↳ One to Many
- ↳ **Emails**
- ↳ Fields
- ↳ One to One
- ↳ One to Many

Create Delete

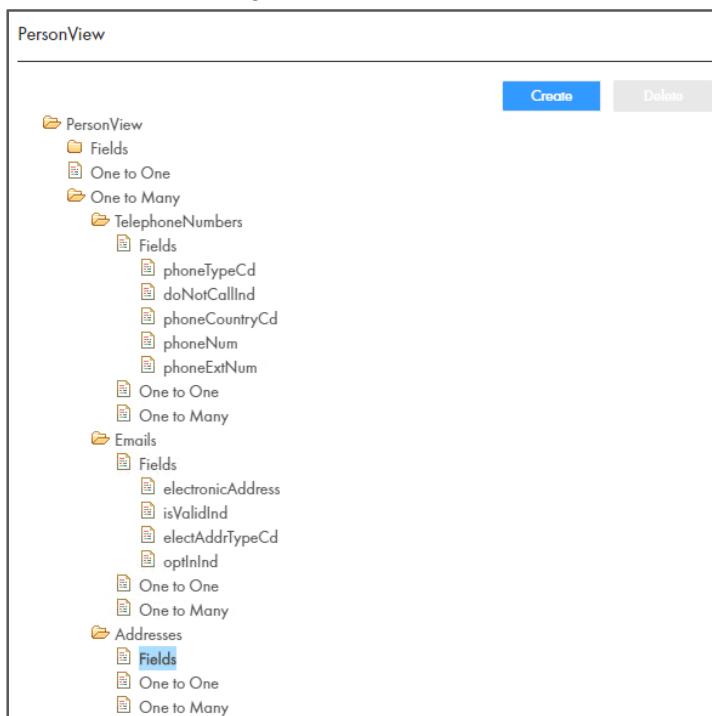
Name	Label
electronicAddress	Electronic Address
isValidInd	Is Valid Ind
electAddrTypeCd	Electronic Address Type Code
optInInd	Opt In Ind

13. Create another **One to Many** leaf and name it as **Addresses**.



The screenshot shows the 'PersonView' interface with a tree view of relationships. A new 'One to Many' relationship has been created and is currently selected. The 'Fields' node under this relationship contains four fields: electronicAddress, isValidInd, electAddrTypeCd, and optInInd.

14. Create the following fields under it:



The screenshot shows the 'PersonView' interface with the 'Addresses' relationship now containing its own 'Fields' node. This node contains two fields: electronicAddress and isValidInd.

Name	Label
addressType	Address Type
addressLine1	Address Line 1
addressLine2	Address Line 2
cityName	City Name
stateCd	State Code
postalCd	Postal Code
countryCd	Country Code

PersonView

[Create](#) [Delete](#)

- ↳ PersonView
  - ↳ Fields
  - ↳ One to One
  - ↳ One to Many
    - ↳ TelephoneNumbers
      - ↳ Fields
      - ↳ phoneTypeCd
      - ↳ doNotCallInd
      - ↳ phoneCountryCd
      - ↳ phoneNum
      - ↳ phoneExtNum
      - ↳ One to One
      - ↳ One to Many
    - ↳ Emails
      - ↳ Fields
      - ↳ electronicAddress
      - ↳ isValidInd
      - ↳ electAddrTypeCd
      - ↳ optInInd
      - ↳ One to One
      - ↳ One to Many
    - ↳ Addresses
      - ↳ Fields
      - ↳ addressType
      - ↳ addressLine1
      - ↳ addressLine2
      - ↳ cityName
      - ↳ stateCd
      - ↳ postalCd
      - ↳ countryCd
      - ↳ One to One
      - ↳ One to Many

**15. Publish the changes.**

### Skill Application:

Create a Business Entity View

In this section of the lab, use what you have learned in the preceding walkthroughs to complete the Skill Application exercise.

You will create the Business Entity View for **Organization** business entity.

1. In the Provisioning tool, navigate to click **Business Entity > Modeling**.
2. From the drop-down, select **Business Entity Views** and click **Create**.
3. Enter the name as and the label as **Organization View**.
4. Set the **Business Entity** as **Organization**.
5. Click **Apply**.
6. **Publish** the changes.
7. Under **OrganizationView**, click **Fields** and add the following fields:

Field	Label
displayName	Display Name
dunsNumber	Duns Number

8. Click the **One to Many** leaf and click **Create**.
9. Enter the **Name** as **TelephoneNumbers**.
10. Add the following fields under **TelephoneNumbers**:

Name	Label
phoneCountryCd	Phone Country Code
phoneNum	Phone Number
phoneExtNum	Phone Ext Number
doNotCallInd	Do Not Call Ind
phoneTypeCd	Phone Type Code

11. Create another **One to Many** leaf named as **Details**.
12. Under **Details**, add the following fields:

Name	Label
establishDate	Establish Date
closeDate	Close Date
phoneExtNum	Phone Ext Number
employeeCount	Employee Count

13. Create another **One to Many** leaf named as **Addresses**.
14. Under the Addresses, add the following fields:

Name	Label
addressLine1	Address Line 1
addressLine2	Address Line 2

addressType	Address Type
cityName	City Name
postalCd	Post Code
stateCd	State Code

OrganizationView

Create
Delete

- OrganizationView
  - Fields
    - displayName
    - dunsNumber
    - One to One
    - One to Many
    - TelephoneNumbers
      - Fields
        - phoneCountryCd
        - phoneNum
        - phoneExtNum
        - doNotCallInd
        - phoneTypeCd
      - One to One
      - One to Many
    - Details
      - Fields
        - establishDate
        - closeDate
        - phoneExtNum
        - employeeCount
      - One to One
      - One to Many
    - Addresses
      - Fields
        - addressLine1
        - addressLine2
        - addressType
        - cityName
        - postalCd
        - stateCd
      - One to One

## 15. Publish the changes.

---

*This concludes the lab.*

## Module 2: Configure MDM Data Director Application

### Lab 2-7: Configure a Family Hierarchy

#### Overview

In the previous labs, we have defined networks. We will now leverage the networks and build hierarchies. Once defined, the data director application, presents a graphical view to view and manage entities within hierarchies and across networks.

#### Objectives:

- Define a Family hierarchy

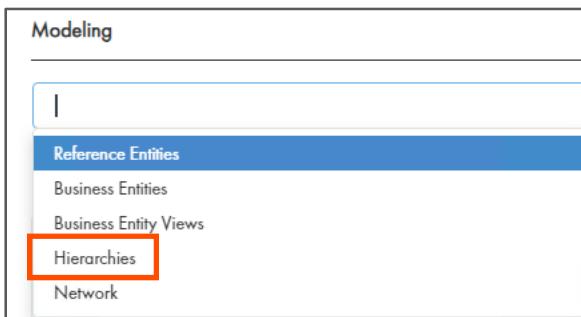
#### Duration:

30 minutes

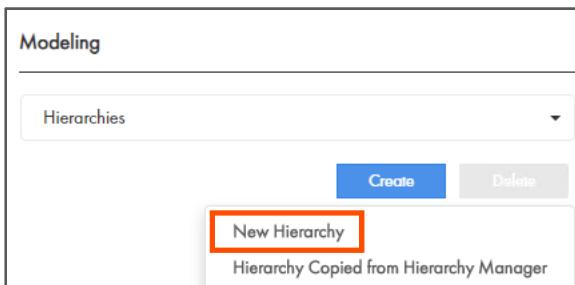
---

#### Tasks

1. Click **Business Entities > Modelling > Hierarchies**.



2. Click **Create > New hierarchy**.



3. Enter the following values:

Name – **Family**

Label – **Family**

Description – **Household to Person**.

4. Click **Apply**.

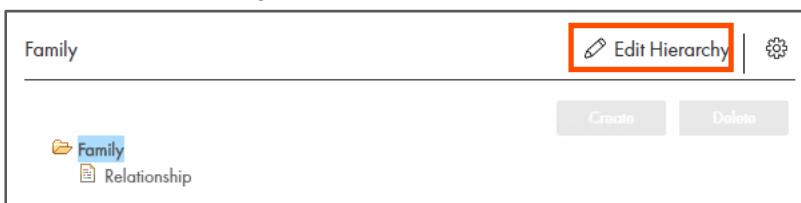


[New Hierarchy]

Name:	Family
Label:	Family
Description:	Household to Person

**Apply**      Discard

5. Click **Edit Hierarchy** icon.



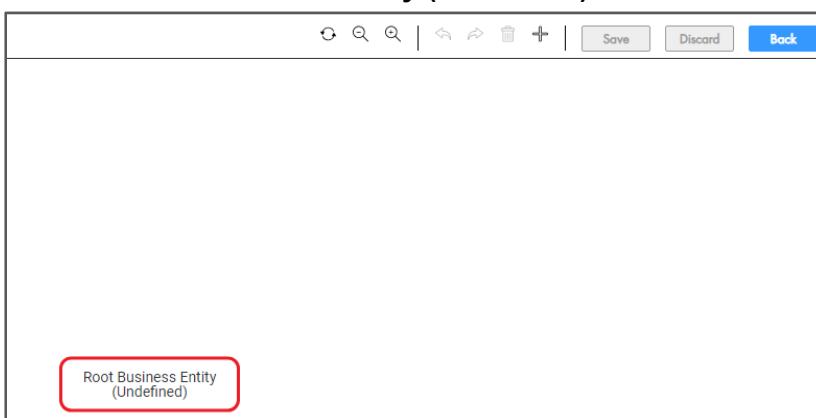
Family

Edit Hierarchy | ⚙

Create      Delete

- Family
  - Relationship

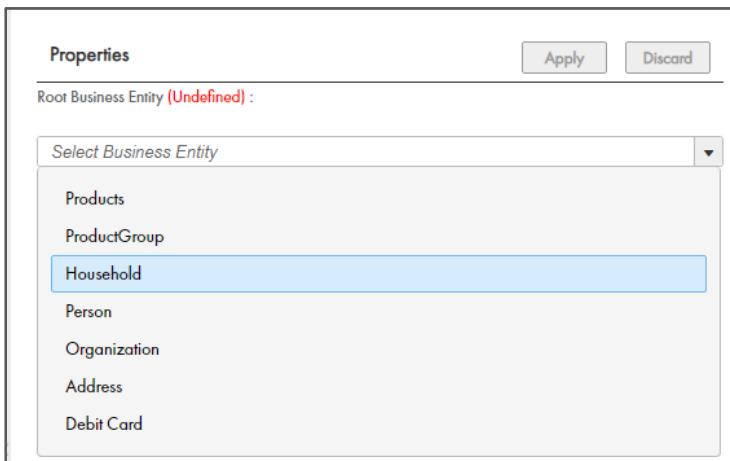
6. Click the **Root Business Entity (Undefined)** box.



Save      Discard      Back

Root Business Entity (Undefined)

7. Select the Business Entity as **Household** from the drop down on the right-hand side of the page, and click **Apply**.



Properties

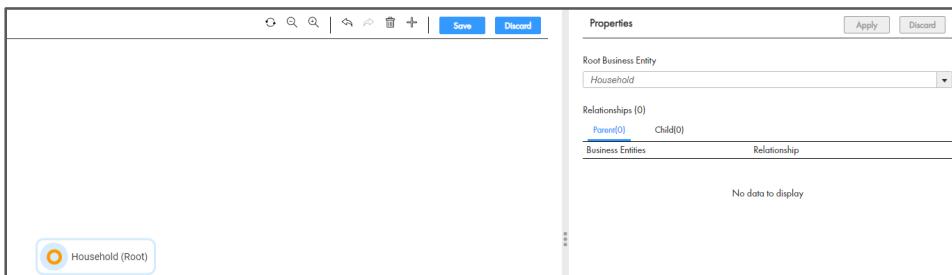
Root Business Entity (Undefined) :

Select Business Entity

- Products
- ProductGroup
- Household**
- Person
- Organization
- Address
- Debit Card

Apply      Discard

8. Notice the Hierarchy Designer workspace with Household.

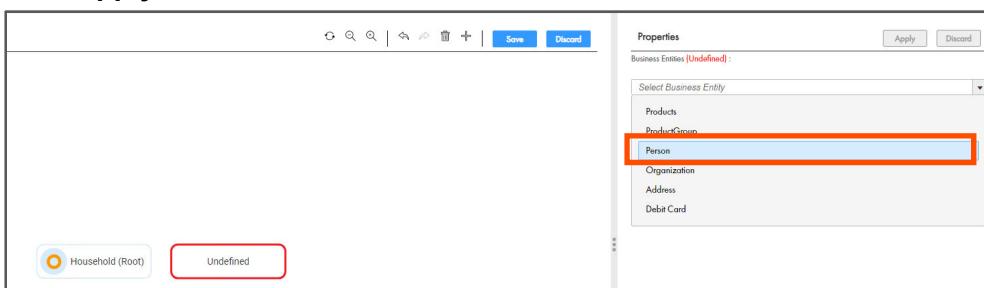


9. Click the + icon on the top to include another Business Entity.

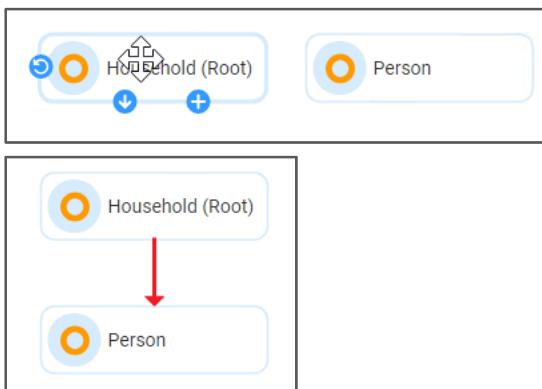


10. Select the business entity as **Person**.

11. Click **Apply**.

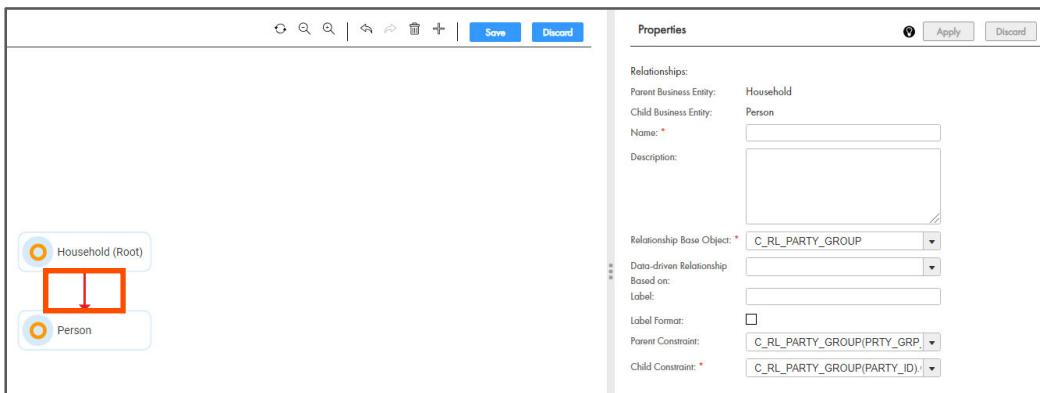


12. Click the **Household (Root)** entity. You can view the relationship icon (down arrow). Click that arrow and link it with the **Person** entity.

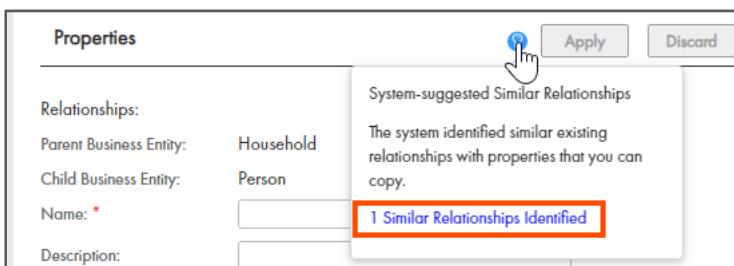


13. Click the Relationship arrow (Red arrow).

14. You can view the Properties on the right-hand side of the window.

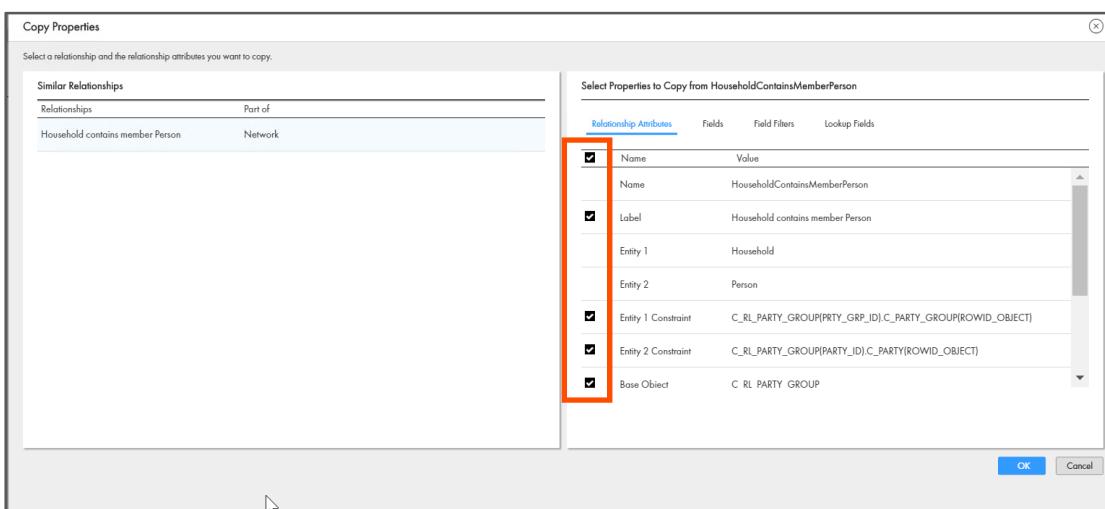


15. Click the bulb-like icon next to the Apply button, and click **Similar Relationships Identified**.



16. View the **Copy Properties** window with options on the right-hand side to select properties to copy from HouseHoldContainsMemberPerson relationship.

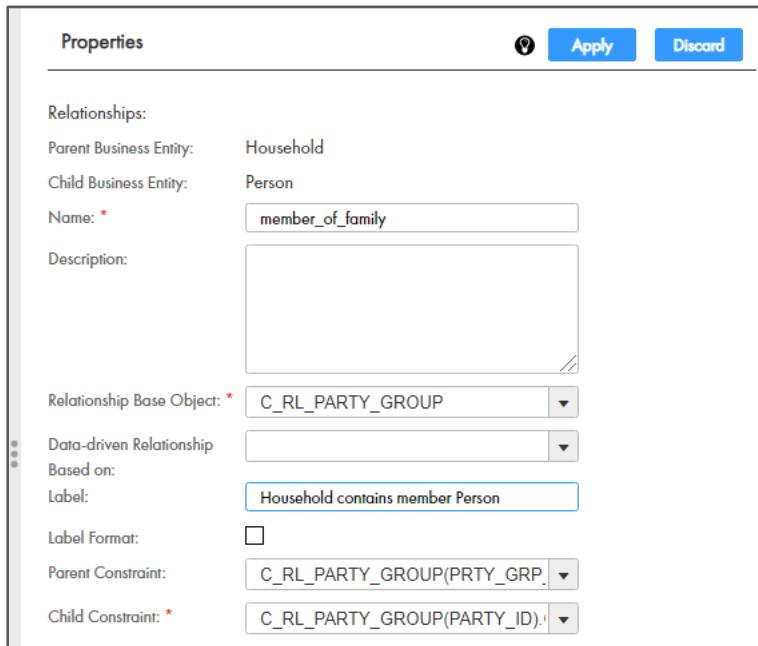
17. Select **All** the attributes from the list and click **OK**.



18. In the Properties section, enter the following values:

Name - **member\_of\_family**

Label field gets populated with **Household contains member Person**.



Properties

Relationships:

Parent Business Entity: Household

Child Business Entity: Person

Name: \* member\_of\_family

Description:

Relationship Base Object: \* C\_RL\_PARTY\_GROUP

Data-driven Relationship

Based on: Household contains member Person

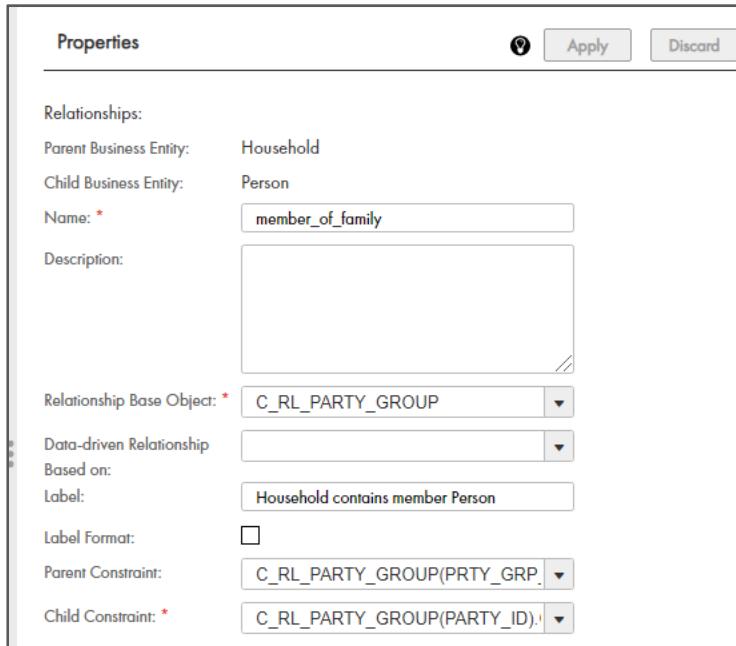
Label:

Label Format:

Parent Constraint: C\_RL\_PARTY\_GROUP(PRTY\_GRP)

Child Constraint: \* C\_RL\_PARTY\_GROUP(PARTY\_ID)

19. Click **Apply**.



Properties

Relationships:

Parent Business Entity: Household

Child Business Entity: Person

Name: \* member\_of\_family

Description:

Relationship Base Object: \* C\_RL\_PARTY\_GROUP

Data-driven Relationship

Based on: Household contains member Person

Label:

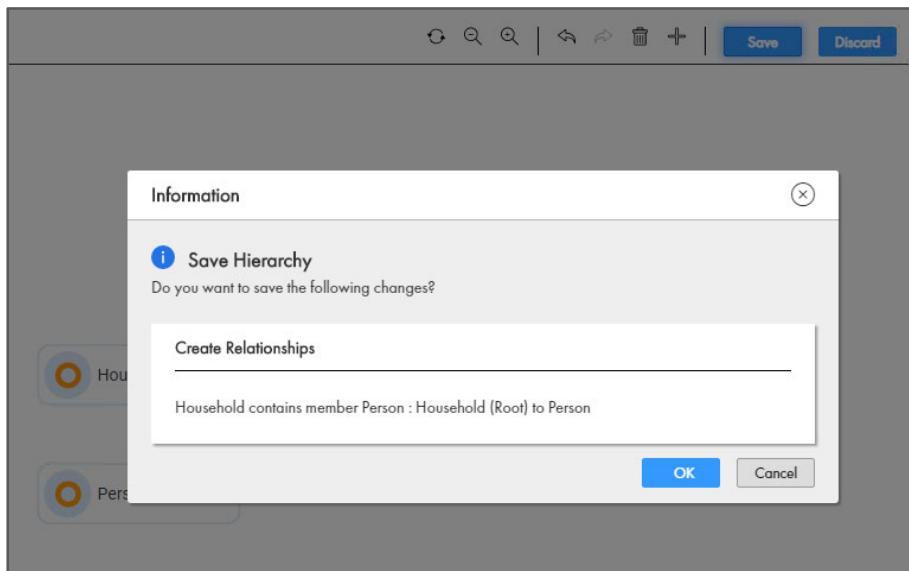
Label Format:

Parent Constraint: C\_RL\_PARTY\_GROUP(PRTY\_GRP)

Child Constraint: \* C\_RL\_PARTY\_GROUP(PARTY\_ID)

20. Click the **Save** button in the Hierarchy Designer workspace.

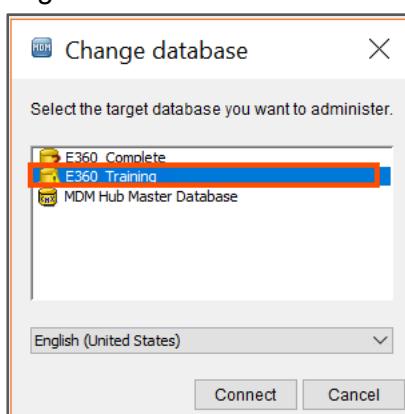
21. **Save Hierarchy** confirmation message window appears. Click **OK**.



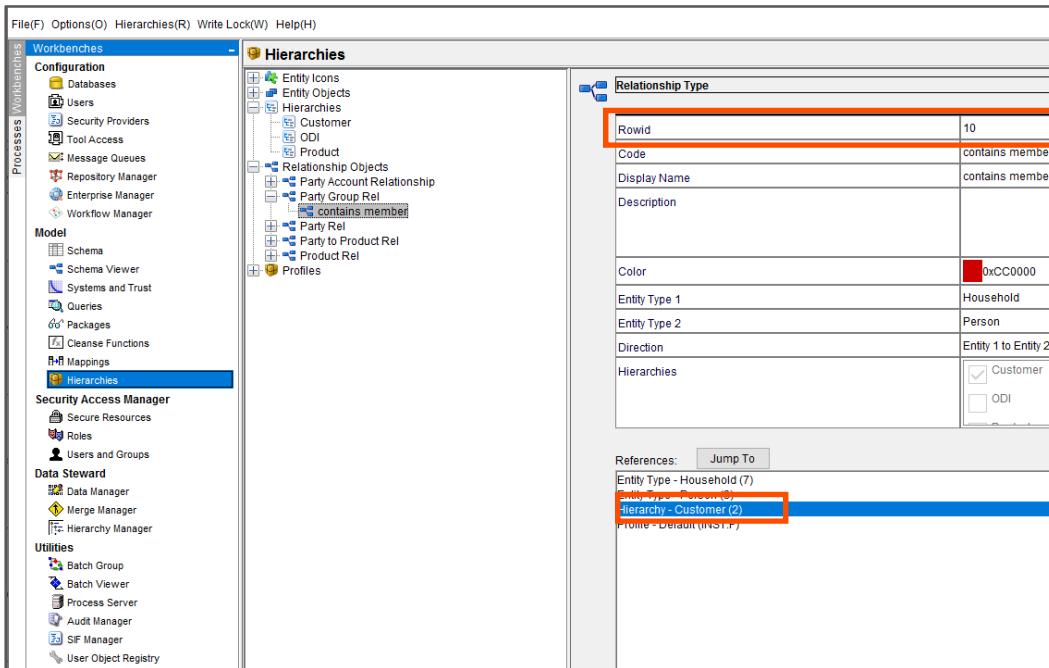
22. **Publish** the changes.

23. Open the **MDM hub console** that is minimized.

24. Login as **admin/admin** and connect to the **E360\_training** ORS.



25. Click **Hierarchies** workbench to identify the rowid and Hierarchy values.



**Note:** Observe that the value of **Hierarchy** is 2 and **Rowid** is 10.

26. Add fields to the relationship as shown in the table:



Name	Value	Column	Filter
rowidHierarchy	Rowid Hierarchy	ROWID_HIERARCHY	Enable Operator = In Value = 2
rowidRelType	Rowid Rel Type	ROWID_REL_TYPE	Enable Operator = In Value = 10

[New Field]

		Apply	Discard
Name:	rowidHierarchy		
Label:	Rowid Hierarchy		
Read Only:	<input type="checkbox"/>		
Required:	<input type="checkbox"/>		
URI:	<input type="button" value="▼"/>		
Type:	<input type="button" value="▼"/>		
Display Format:	<input type="button" value="▼"/>		
Filter:	<input checked="" type="checkbox"/>		
Operator:	<input type="button" value="In"/>		
Value:	<input type="text" value="2"/> <span style="border: 2px solid red; padding: 2px;">2</span>		
Column:	ROWID_HIERARCHY		

[New Field]

		Apply	Discard
Name:	rowidRelType		
Label:	Rowid Rel Type		
Read Only:	<input type="checkbox"/>		
Required:	<input type="checkbox"/>		
URI:	<input type="button" value="▼"/>		
Type:	<input type="button" value="▼"/>		
Display Format:	<input type="button" value="▼"/>		
Filter:	<input checked="" type="checkbox"/>		
Operator:	<input type="button" value="In"/>		
Value:	<input type="text" value="10"/> <span style="border: 2px solid red; padding: 2px;">10</span>		
Column:	ROWID_REL_TYPE		

27. Click **Publish**. This will publish the Family hierarchy to the MDM hub.  
 This concludes creating the family hierarchy.

*This concludes the lab.*

## Module 2: Configure MDM Data Director Application

### Lab 2-8: Configure Organization Hierarchy

#### Overview:

We will now define an organization hierarchy. This will tie the Organization and Person wherever there is a person who is related to the organization. The network then allows us to navigate across these hierarchies and into the related business entities.

#### Objectives:

- Define an Organization hierarchy
- Set the required privileges in the MDM hub
- Set the privilege to import flat files
- Register a process server

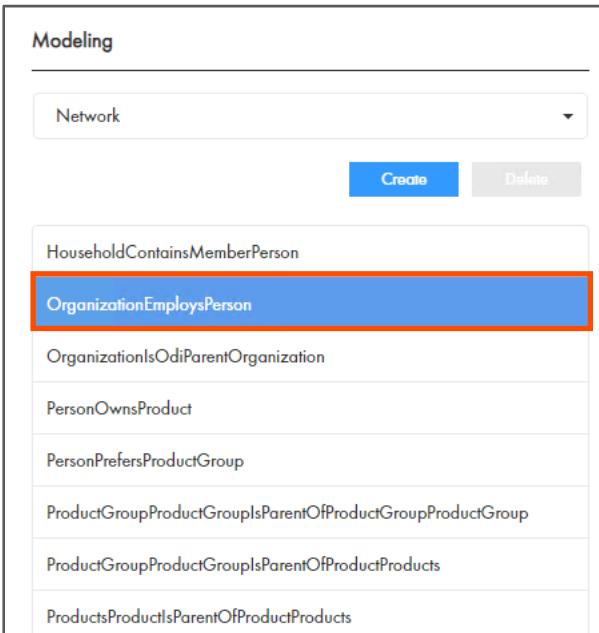
#### Duration:

30 minutes

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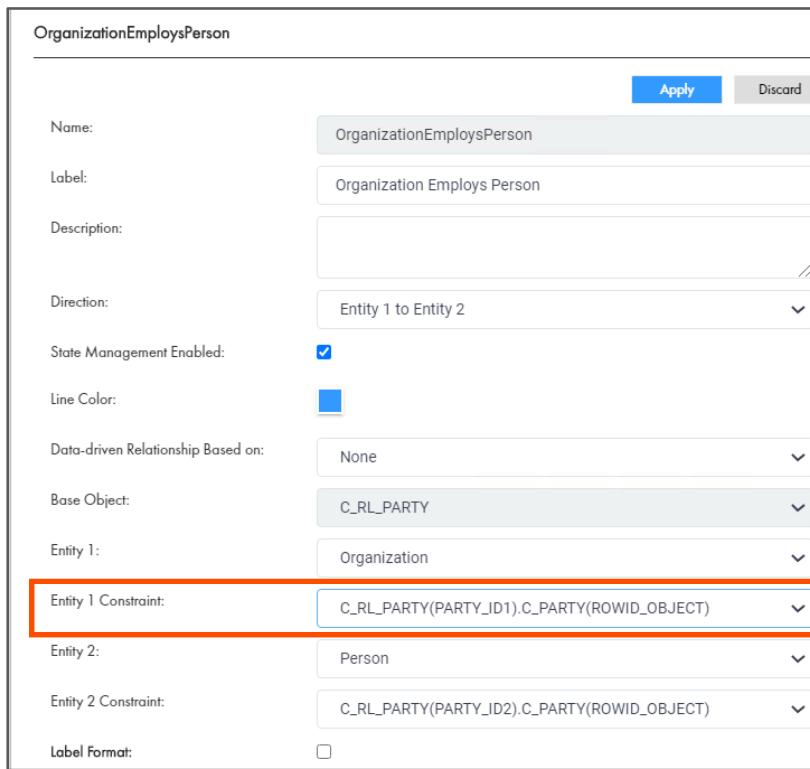
#### Tasks

1. In the Modeling page, select **Network** and click **OrganizationEmploysPerson** Network.



The screenshot shows the 'Modeling' interface. At the top, there is a dropdown menu set to 'Network'. Below it are two buttons: 'Create' (blue) and 'Delete' (grey). A list of network names is displayed in a scrollable area, with 'OrganizationEmploysPerson' highlighted by a red rectangular box. Other networks listed include HouseholdContainsMemberPerson, OrganizationIsOdiParentOrganization, PersonOwnsProduct, PersonPrefersProductGroup, ProductGroupProductGroupIsParentOfProductGroupProductGroup, ProductGroupProductGroupIsParentOfProductProducts, and ProductsProductIsParentOfProductProducts.

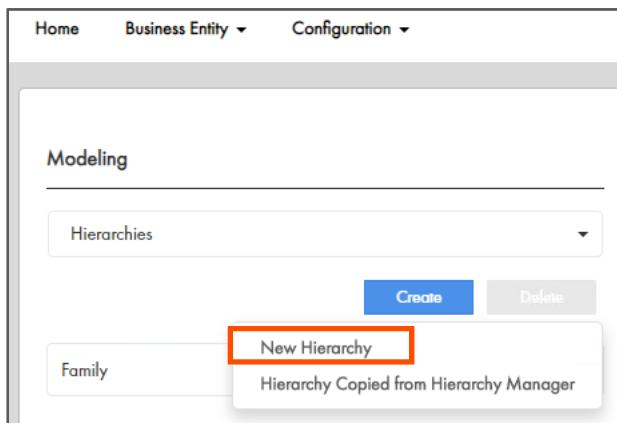
2. Click the **Entity 1 constraint** drop-down and change it to **PARTY\_ID1**.



The screenshot shows the configuration for the relationship 'OrganizationEmploysPerson'. The 'Entity 1 Constraint' dropdown is set to 'C\_RL\_PARTY(PARTY\_ID1).C\_PARTY(ROWID\_OBJECT)' and is highlighted with a red box.

OrganizationEmploysPerson	
Name:	OrganizationEmploysPerson
Label:	Organization Employs Person
Description:	
Direction:	Entity 1 to Entity 2
State Management Enabled:	<input checked="" type="checkbox"/>
Line Color:	<span style="background-color: blue; display: inline-block; width: 10px; height: 10px;"></span>
Data-driven Relationship Based on:	None
Base Object:	C_RL_PARTY
Entity 1:	Organization
Entity 1 Constraint:	C_RL_PARTY(PARTY_ID1).C_PARTY(ROWID_OBJECT)
Entity 2:	Person
Entity 2 Constraint:	C_RL_PARTY(PARTY_ID2).C_PARTY(ROWID_OBJECT)
Label Format:	<input type="checkbox"/>

3. Click **Apply**.  
 4. **Publish** the changes.  
 5. From the Modeling drop-down, select **Hierarchies**.  
 6. Click **Create > New Hierarchy**.



The screenshot shows the 'Modeling' screen with the 'Hierarchies' option selected in the dropdown. The 'Create' button is highlighted with a red box, and a tooltip 'Hierarchy Copied from Hierarchy Manager' is visible near the 'New Hierarchy' button.

7. Enter the following details:

Name - **Organization\_Chart**

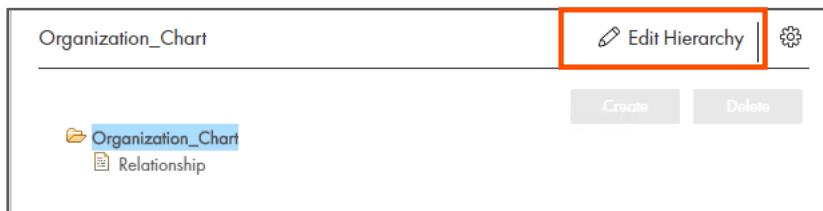
Label - **Organization\_Chart**

Description - org to org and org to person



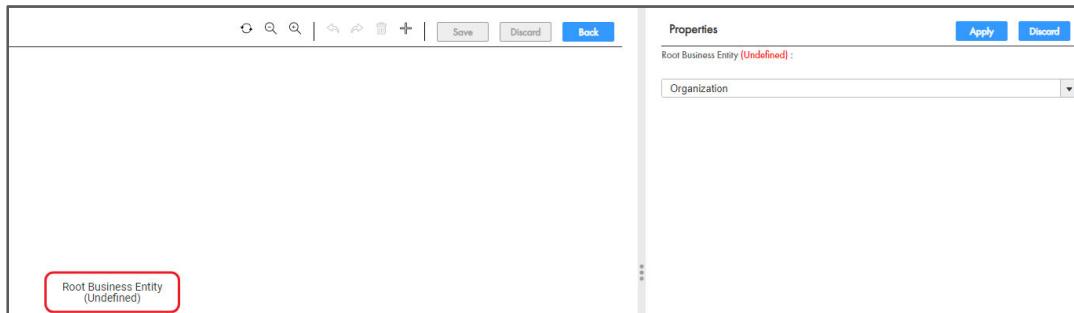
8. Click **Apply**.

9. Click **Edit Hierarchy**.

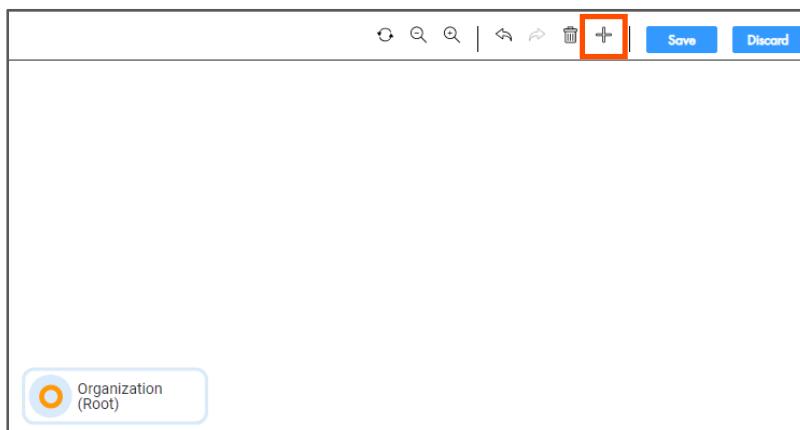


10. Click the Undefined entity box.

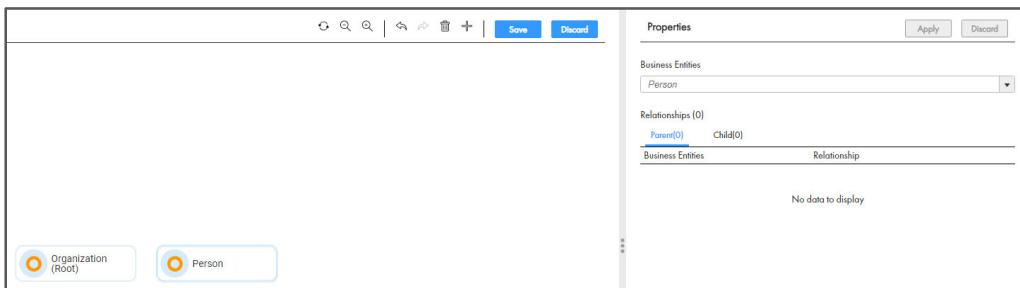
11. From the Properties window, select the Business Entity as **Organization**.



12. Click **Apply** and then click the + icon to add another Business entity.



13. From the Properties window, select the Business entity as **Person** and click **Apply**.

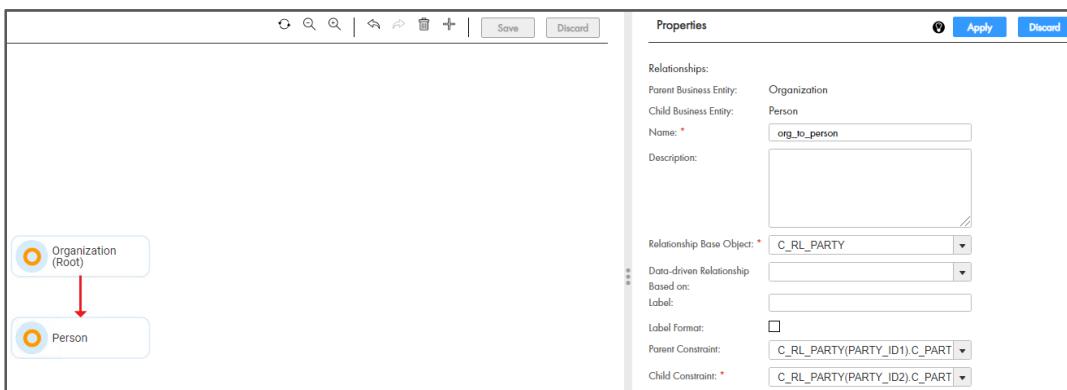


14. Click the **Organization** entity.

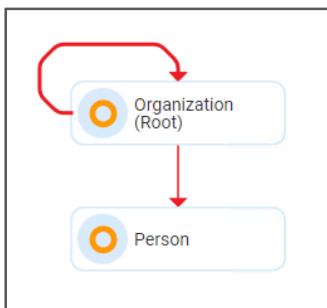
15. Click the arrow and connect it to the **Person** entity to establish a relationship.

16. Enter a **Name** to the relationship as **org\_to\_person**.

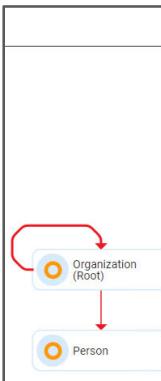
17. Ensure that the Parent constraint is **PARTY\_ID1** and the Child constraint is **PARTY\_ID2**.



18. Double-click the **self-arrow** in the Organization entity to include an Organization to Organization relationship.



19. In the **Properties** window, enter the name as **Is\_parent\_of**.



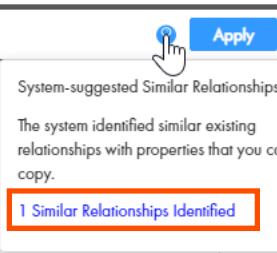
The diagram shows a relationship between two entities: "Organization (Root)" and "Person". An arrow points from "Organization (Root)" to "Person".

Properties	
Relationships:	
Parent Business Entity:	Organization
Child Business Entity:	Organization
Name: *	<b>Is_parent_of</b>
Description:	
Relationship Base Object: *	C_RL_PARTY
Data-driven Relationship	None
Based on:	
Label:	
Label Format:	<input type="checkbox"/>
Parent Constraint:	C_RL_PARTY(PARTY_ID1).C_PART
Child Constraint: *	C_RL_PARTY(PARTY_ID2).C_PART

20. Ensure that the Parent constraint is **PARTY\_ID2** and the Child constraint is **PARTY\_ID1**.

Relationship Base Object: *	C_RL_PARTY
Data-driven Relationship	None
Based on:	
Label:	Organization is ODI parent of Organization
Label Format:	<input type="checkbox"/>
Parent Constraint:	C_RL_PARTY(PARTY_ID2).C_PART
Child Constraint: *	C_RL_PARTY(PARTY_ID1).C_PART

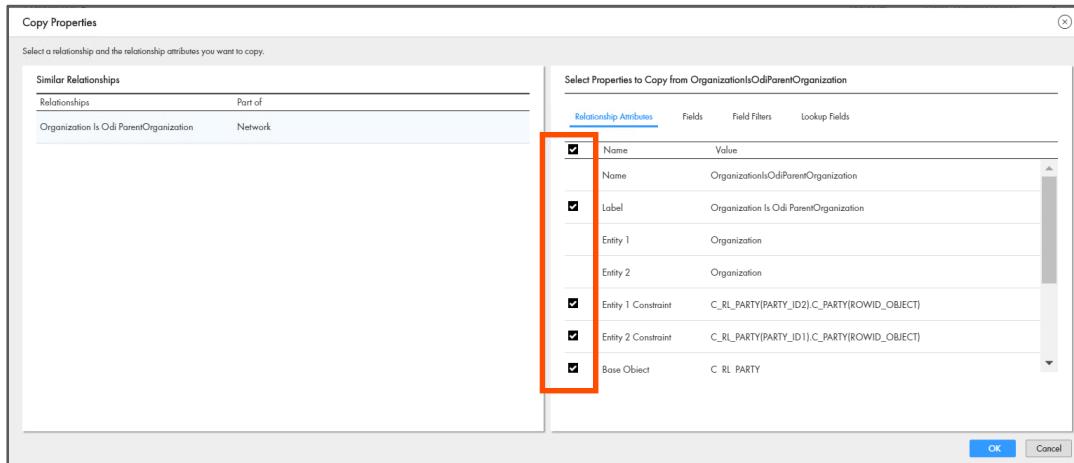
21. In the Properties window, click the bulb-like icon and click the **Similar Relationships Identified** link.



The Properties window displays the configuration for the relationship "Is\_parent\_of". A tooltip is shown over the "Similar Relationships Identified" link, which contains the text: "The system identified similar existing relationships with properties that you can copy." The link itself is highlighted with a red box.

Properties	
Relationships:	
Parent Business Entity:	Organization
Child Business Entity:	Organization
Name: *	<b>Is_parent_of</b>
Description:	
Relationship Base Object: *	C_RL_PARTY
Data-driven Relationship	
Based on:	
Label:	

22. In the **Copy Properties** window that appears, select all the properties to copy from **OrganizationIsOdiParentOrganization**.

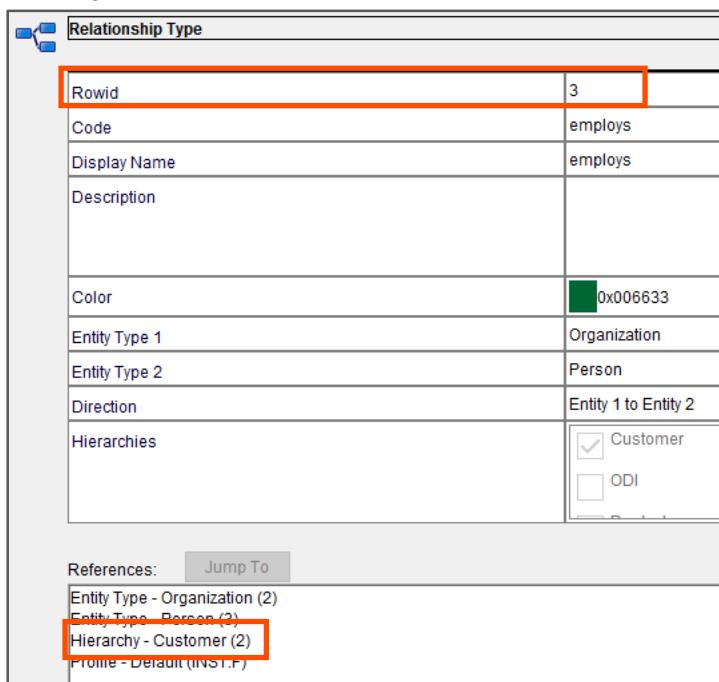


23. Click **OK**.

24. Click **Apply** and **Publish** the changes to the MDM hub.

25. Open the **MDM Hub Console** and click **Hierarchies** workbench.

26. In the Hierarchies panel, click **Hierarchies > Relationship Objects > Party Rel > employs**.



Rowid	3
Code	employs
Display Name	employs
Description	
Color	0x006633
Entity Type 1	Organization
Entity Type 2	Person
Direction	Entity 1 to Entity 2
Hierarchies	<input checked="" type="checkbox"/> Customer <input type="checkbox"/> ODI

References: [Jump To](#)

- [Entity Type - Organization \(2\)](#)
- [Entity Type - Person \(2\)](#)
- [Hierarchy - Customer \(2\)](#)
- [Profile - Default \(INST.F\)](#)

**Note:** Observe that the value of Hierarchy is **2** and Rowid is **3**.

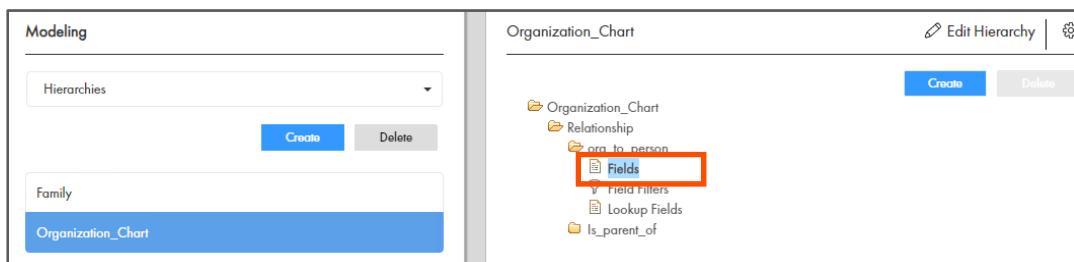
27. Again, right below the employs relationship, click **is ODI parent of (Hierarchies > Relationship Objects > Party Rel > is ODI parent of)**.

Relationship Type	
Rowid	2
Code	is ODI parent of
Display Name	is ODI parent of
Description	
Color	0x990066
Entity Type 1	Organization
Entity Type 2	Organization
Direction	Entity 1 to Entity 2
Hierarchies	<input type="checkbox"/> Customer <input checked="" type="checkbox"/> ODI <input type="checkbox"/> Other
References:	
<a href="#">Jump To</a>	
<a href="#">Entity Type - Organization (2)</a> <a href="#">Hierarchy - ODI (1)</a> <a href="#">Profile - Default (INST.F)</a>	

**Note:** Notice that the Hierarchy is **1** and Rowid is **2**.

You will need these values to create fields for the relationships in the Provisioning tool.

28. Navigate back to the Provisioning tool and click **Hierarchies > Organization\_Chart** hierarchy.  
 29. Expand **Relationship > org\_to\_person**.  
 30. Click **Fields** and then **Create** to add fields to this relationship.



The screenshot shows two panels of the Provisioning tool interface. The left panel, titled 'Modeling', has a 'Hierarchies' section with a dropdown menu and 'Create' and 'Delete' buttons. Below it is a 'Family' section with 'Organization\_Chart' selected. The right panel, titled 'Organization\_Chart', shows a tree structure under 'Relationship'. The 'org\_to\_person' node has a 'Fields' node highlighted with a red box. A 'Create' button is visible at the top right of the right panel.

31. Enter the following Values to the fields and click **Apply**:

Field	Value
Name	rowidHierarchy
Label	Rowid Hierarchy
Column	ROWID_HIERARCHY
Filter	Enable
Operator	In
Value	2

[New Field]

	<input type="button" value="Apply"/>	<input type="button" value="Discard"/>
Name:	rowidHierarchy	
Label:	Rowid Hierarchy	
Read Only:	<input type="checkbox"/>	
Required:	<input type="checkbox"/>	
URI:	<input style="width: 150px;" type="text"/> <input style="width: 20px;" type="button" value="…"/>	
Type:	<input style="width: 150px;" type="text"/> <input style="width: 20px;" type="button" value="…"/>	
Display Format:	<input style="width: 150px;" type="text"/> <input style="width: 20px;" type="button" value="…"/>	
Filter:	<input checked="" type="checkbox"/> <input type="checkbox"/>	
Operator:	<input style="width: 150px;" type="text"/> <input style="width: 20px;" type="button" value="…"/>	
Value:		<input type="button" value="…"/>
Column:	<input style="width: 150px;" type="text"/> <input style="width: 20px;" type="button" value="…"/>	

32. Add another field **rowid\_rel\_type**, enter the following values and click **Apply**:

Field	Value
Name	rowidRelType
Label	Rowid Rel Type
Column	ROWID_REL_TYPE
Filter	Enable
Operator	In
Value	3

[New Field]

		<b>Apply</b>	Discard
Name:	rowidRelType		
Label:	Rowid Rel Type		
Read Only:	<input type="checkbox"/>		
Required:	<input type="checkbox"/>		
URI:	<input type="text"/>		
Type:	<input type="text"/>		
Display Format:	<input type="text"/>		
Filter:	<input checked="" type="checkbox"/>		
Operator:	<input type="text"/> In		
Value:	<input type="text"/> 3		
Column:	<input type="text"/> ROWID_REL_TYPE		

33. Similarly, click **Relationship > Is\_parent\_of > Fields** and add two fields to the **Is\_parent\_of** relationship.

**Modeling**

- Hierarchies
- Organization\_Chart**

**Organization\_Chart**

**Organization\_Chart**

Edit Hierarchy | 

**Create** **Delete**

- Organization\_Chart
- Relationship
- org\_to\_person
- Fields
- rowidHierarchy
- rowidRelType
- Field Filters
- Lookup Fields
- Is\_parent\_of
- Fields
- Field Filters
- Lookup Fields

34. Enter the values given in the tables below.

**Note:** Scroll up to refer the values of Hierarchy and relationship type that were noted in the MDM hub console.

Field	Value
Name	rowidHierarchy
Label	Rowid Hierarchy
Column	ROWID_HIERARCHY
Filter	Enable
Operator	In
Value	1

[New Field]

	<input type="button" value="Apply"/>	<input type="button" value="Discard"/>
Name:	rowidHierarchy	
Label:	Rowid Hierarchy	
Read Only:	<input type="checkbox"/>	
Required:	<input type="checkbox"/>	
URI:	<input style="width: 150px;" type="text"/> <input style="width: 20px;" type="button" value="▼"/>	
Type:	<input style="width: 150px;" type="text"/> <input style="width: 20px;" type="button" value="▼"/>	
Display Format:	<input style="width: 150px;" type="text"/> <input style="width: 20px;" type="button" value="▼"/>	
Filter:	<input checked="" type="checkbox"/> <input style="width: 150px;" type="text"/>	
Operator:	<input style="width: 150px;" type="text"/> <input style="width: 20px;" type="button" value="▼"/>	
Value:	<input style="width: 150px; border: 1px solid red; height: 20px; vertical-align: middle;" type="text"/> <input style="width: 20px;" type="button" value="▼"/>	
Column:	<input style="width: 150px;" type="text"/> <input style="width: 20px;" type="button" value="▼"/>	

Field	Value
Name	rowidRelType
Label	Rowid Rel Type
Column	ROWID_REL_TYPE
Filter	Enable
Operator	In
Value	2

[New Field]

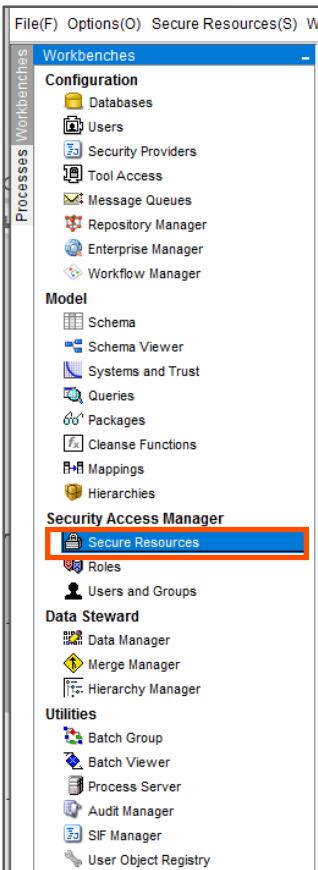
		Apply	Discard
Name:	rowidRelType		
Label:	Rowid Rel Type		
Read Only:	<input type="checkbox"/>		
Required:	<input type="checkbox"/>		
URI:	<input type="text"/> <span style="font-size: small;">v</span>		
Type:	<input type="text"/> <span style="font-size: small;">v</span>		
Display Format:	<input type="text"/> <span style="font-size: small;">v</span>		
Filter:	<input checked="" type="checkbox"/>		
Operator:	<input type="text"/> In <span style="font-size: small;">v</span>		
Value:	<input type="text"/> 2		
Column:	<input type="text"/> ROWID_REL_TYPE <span style="font-size: small;">v</span>		

**35. Publish** the changes to the MDM hub.

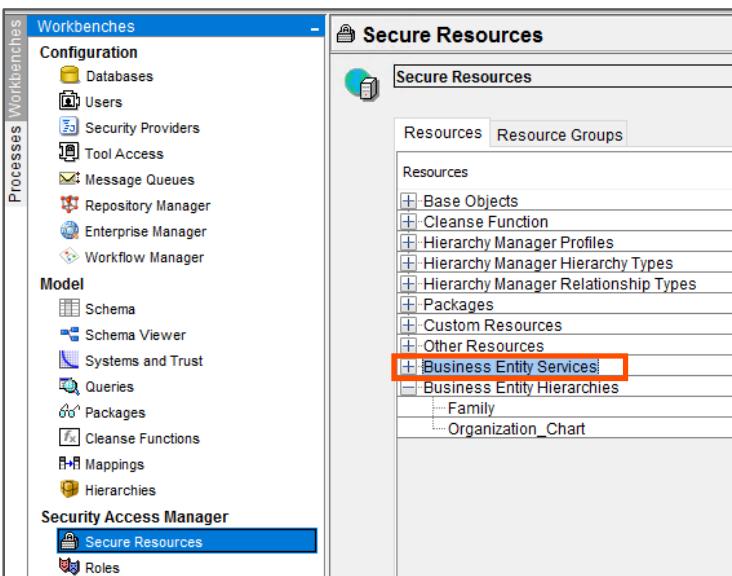
After you define the hierarchies, you will need to grant access to the users for those hierarchies.

**36. Switch to the MDM Hub Console.**

**37. Under the Secure Access Manager workbench, click Secure Resources.**



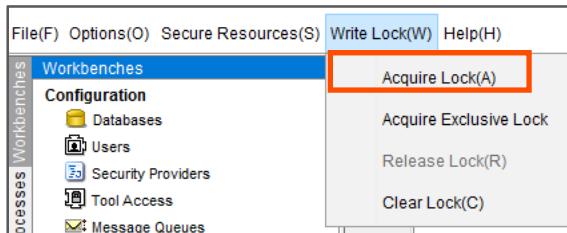
### 38. Expand Business Entity Hierarchies.



The screenshot shows the right-hand content area of the Informatica Provisioning tool. It displays the 'Secure Resources' page. The 'Resources' tab is selected. Under the 'Resources' category, several nodes are listed: Base Objects, Cleanse Function, Hierarchy Manager Profiles, Hierarchy Manager Hierarchy Types, Hierarchy Manager Relationship Types, Packages, Custom Resources, Other Resources, and Business Entity Services. The 'Business Entity Services' node is highlighted with a red box. Expanding this node reveals two sub-nodes: Business Entity Hierarchies, which further expands into Family and Organization\_Chart.

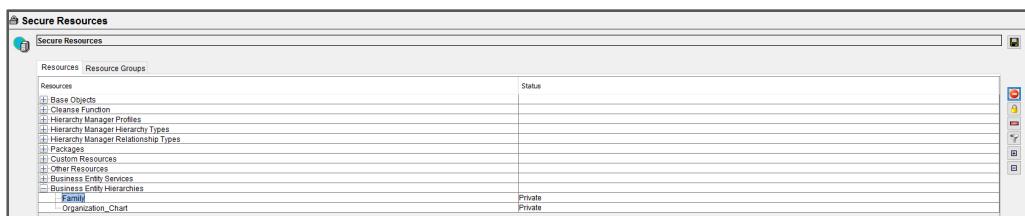
**Note:** You can notice that the Hierarchies created in the Provisioning tool appear here as **Private** resources.

39. In the main menu, click **Write Lock(W)** > **Acquire Lock(A)**.



40. Select the **Family** business entity hierarchy.

41. On the right-hand side, click the second lock-like icon to change the status from **Private** to **Secure**.



Notice that the status changed from **Private** to **Secure**.

Business Entity Hierarchies	
Family	Secure
Organization_Chart	Private

42. Repeat the same for the **Organization\_Chart** entity hierarchy.

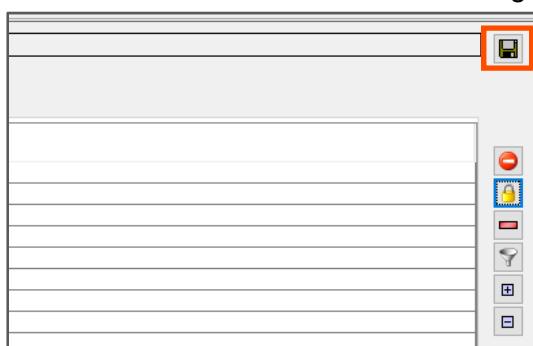
Business Entity Hierarchies	
Family	Secure
Organization_Chart	Secure

43. Expand the **Business Entity Services** resource.

44. Change the status of **Find-Replace**, **File Import**, and **Adhoc Match** from **Private** to **Secure**.

Business Entity Services	
Find-Replace	Secure
File Import	Secure
Adhoc Match	Secure
Business Entity Hierarchies	
Family	Secure
Organization_Chart	Secure

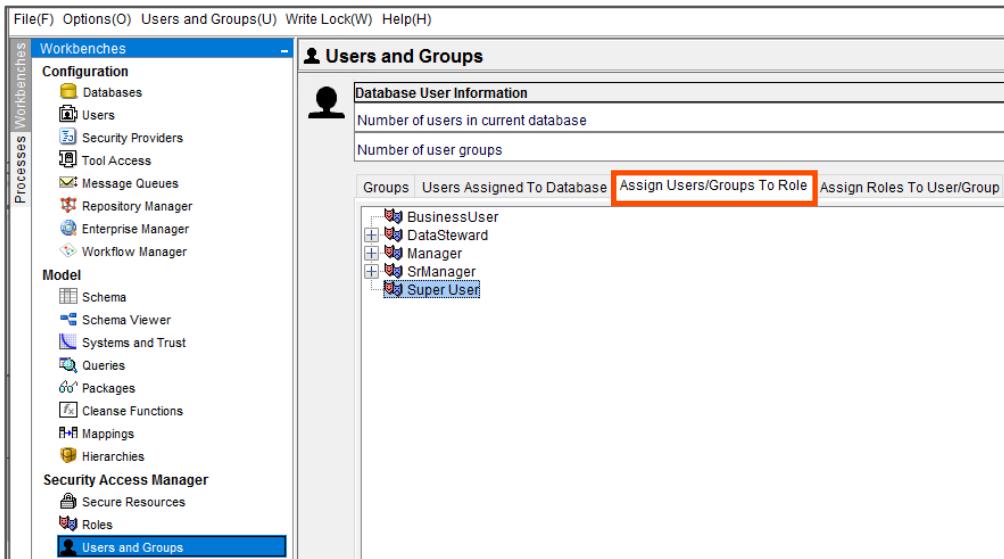
45. Click the **Save** icon to save these changes.



46. From the Security Access Manager workbench, click **Users and Groups**.

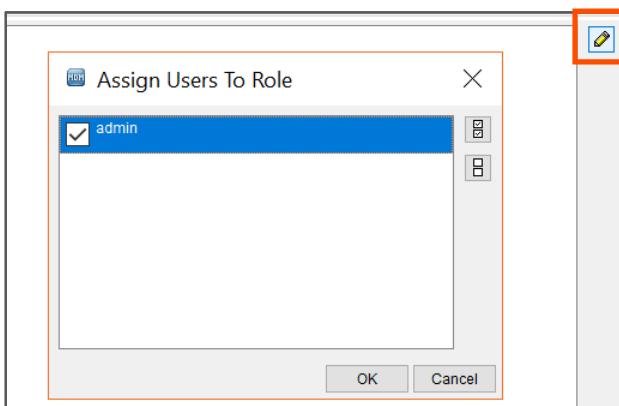
47. Click **Assign Users/Groups To Role** tab.

48. Select **Super User**.

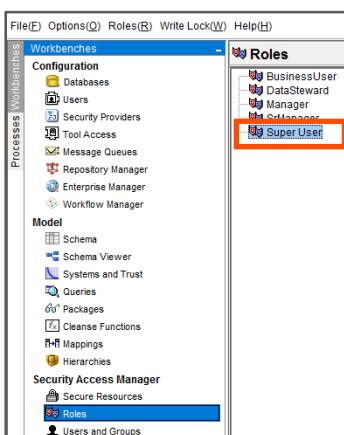


49. Click the **Edit** icon on the right-hand side.

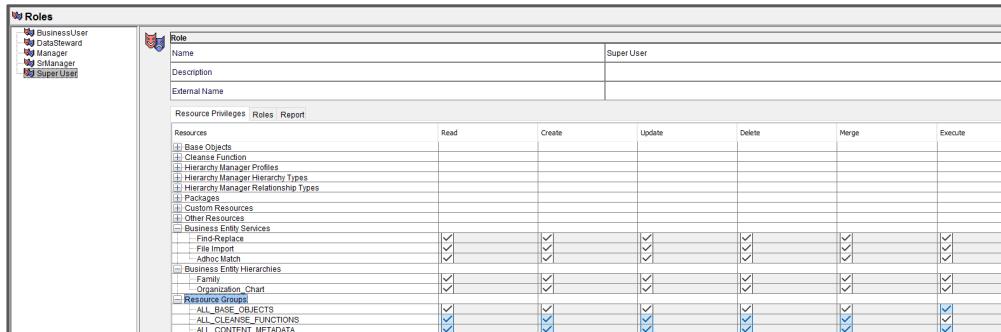
50. Select **admin** and click **OK**.



51. In the Secure Access Manager workbench, select **Roles** and click **Super User**.

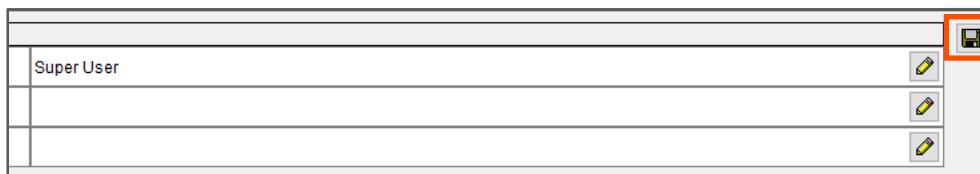


52. Grant the **Business Entity Services** – File-Replace, File-Import, and Adhoc Match privileges to the super user role.
53. Similarly, grant super role the Business Entity Hierarchies – Family and Organization\_Chart.

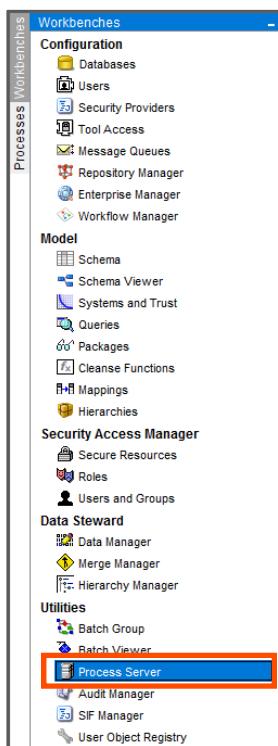


Role	
Name	Description
Super User	
<b>Resource Privilege Roles Report</b>	
Resources	Read Create Update Delete Merge Execute
Base Objects	
Business Function	
Hierarchy Manager Profiles	
Hierarchy Manager Hierarchy Types	
Hierarchy Manager Relationship Types	
Custom Resources	
Other Resources	
Business Entity Services	
File Replace	✓ ✓ ✓ ✓ ✓ ✓ ✓
File Import	✓ ✓ ✓ ✓ ✓ ✓ ✓
Adhoc Match	
Business Entity Hierarchies	
Family	✓ ✓ ✓ ✓ ✓ ✓ ✓
Organization_Chart	
Resources Groups	
ALL_CLEANSE_OBJECTS	✓ ✓ ✓ ✓ ✓ ✓ ✓
ALL_CONTENT_FUNCTIONS	✓ ✓ ✓ ✓ ✓ ✓ ✓

54. Save the changes.



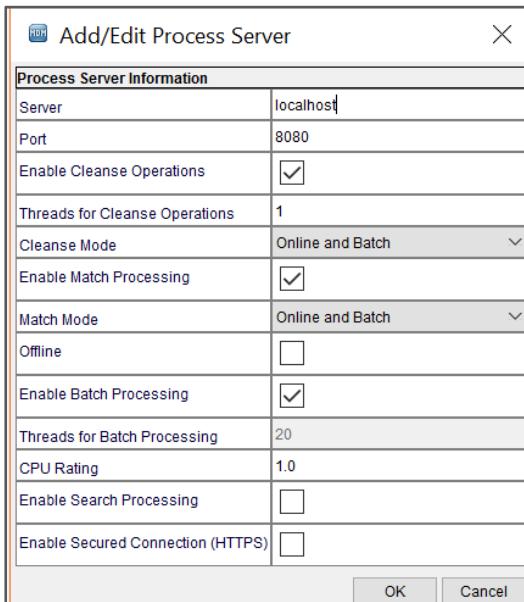
55. Click **Process Server** in the Utilities section of the Workbench.



56. Click the + icon to register a process server.

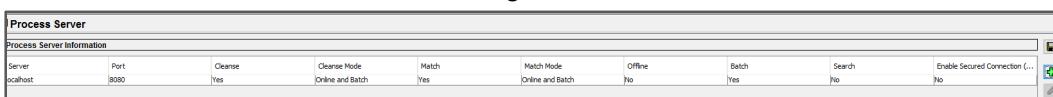


57. Enter the Server as **localhost** and click **OK**.



Process Server Information	
Server	localhost
Port	8080
Enable Cleanse Operations	<input checked="" type="checkbox"/>
Threads for Cleanse Operations	1
Cleanse Mode	Online and Batch
Enable Match Processing	<input checked="" type="checkbox"/>
Match Mode	Online and Batch
Offline	<input type="checkbox"/>
Enable Batch Processing	<input checked="" type="checkbox"/>
Threads for Batch Processing	20
CPU Rating	1.0
Enable Search Processing	<input type="checkbox"/>
Enable Secured Connection (HTTPS)	<input type="checkbox"/>

58. Click the **Save** button to save the changes.



Process Server									
Process Server Information									
Server	Port	Cleanse	Cleanse Mode	Match	Match Mode	Offline	Batch	Search	Enable Secured Connection (HTTPS)
localhost	8080	Yes	Online and Batch	Yes	Online and Batch	No	Yes	No	No

In the next lab, you will define the layouts to see the hierarchies and networks.

*This concludes the lab.*

## Module 3: Customize MDM Data Director Application User Interface

### Lab 3-1: Customize MDM Data Director Application External Components

#### Overview:

You will create components such as external links for social media feeds or web search. You will also define related records, similar records, and customize the task manager layouts. You can add the components to the home pages or the entity layouts in the later labs.

#### Objectives:

- Define hard-coded and context-driven external components
- Define the Get Related component to relate two records
- Define Similar Records components to show suggestions in an entity layout
- Customize the task manager layout

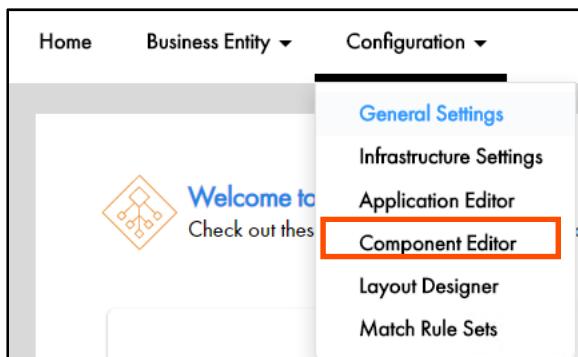
#### Duration:

40 minutes

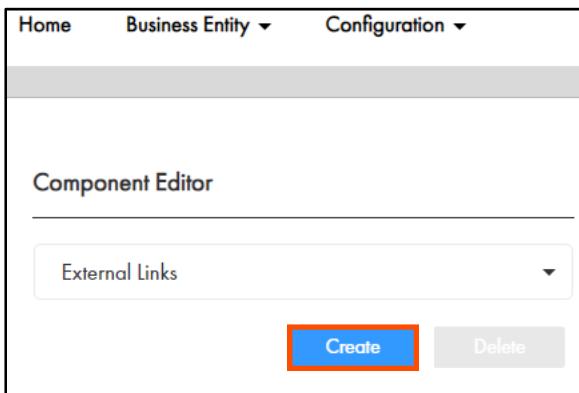
---

#### Tasks

1. Log in to the **Provisioning Tool** application as **admin/admin**.
2. Select **E360\_Training** as your database and click **Connect**.
3. Click the **Configuration** menu and select **Component Editor**.



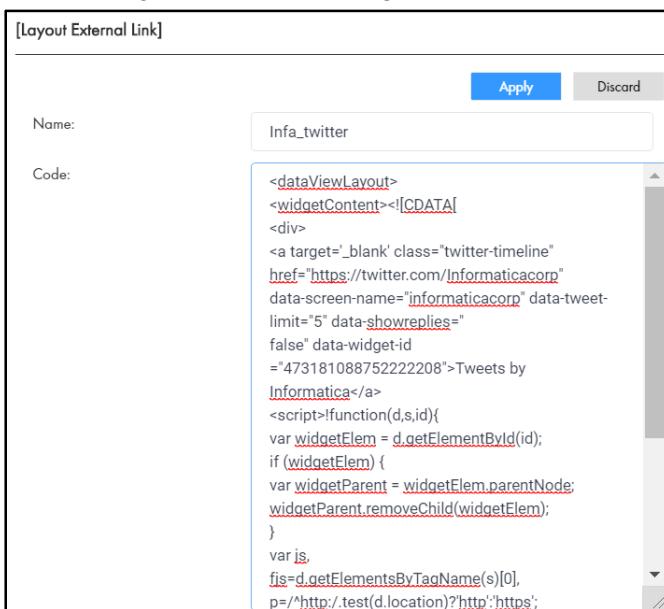
4. In the Components page, **External Links** option appears by default. Click **Create** to configure a new External Link.



5. In the **Layout External Link** properties panel, add the property values as shown below.

Property	Value
Name	Infa_twitter
Code	Copy the XML code from C:\MDM_Training\E360_Assets\TXT\Infa_Twitter.txt file

6. Click **Apply** to save the changes.



[Layout External Link]

Apply	Discard
Name:	Infa_twitter
Code:	<pre>&lt;dataViewLayout&gt; &lt;widgetContent&gt;&lt;![CDATA[ &lt;div&gt; &lt;a target='_blank' class="twitter-timeline"  href="https://twitter.com/Informaticacorp"  data-screen-name="informaticacorp" data-tweet-limit="5" data-showreplies="false"  data-widget-id="47318108875222208"&gt;Tweets by Informatica&lt;/a&gt; &lt;script&gt;function(d,s,id){ var widgetElem = d.getElementById(id); if (widgetElem) { var widgetParent = widgetElem.parentNode; widgetParent.removeChild(widgetElem); } var js, fis=d.getElementsByTagName(s)[0], p='^http://.test(d.location)?http://https'; js.innerHTML=p; d.replaceChild(js,widgetElem); } }&lt;/script&gt;</pre>

**Note:** This component contains the code to display the hard-coded twitter feed.

7. Similarly, create another external link **Ent\_Twitter** using the following details.

Property	Value
Name	<b>Ent_Twitter</b>
Code	Copy the XML code from <b>C:\MDM_Training\E360_Assets\TXT\Ent_twitter.txt</b> file

[Layout External Link]

Name:

**Apply**
**Discard**

---

Code:

```
<div>
<a target="_blank" class="twitter-timeline"
 href="https://twitter.com/{{displayName}}"
 data-screen-name="{{taxID}}" data-tweet-limit="5" data-
show-replies="false" data-widget-
id="47318108752222208">Tweets by
{{displayName}} </a>

<script>function(d,s,id){ var widgetElem =
d.getElementById(id); if (widgetElem) { var
widgetParent = widgetElem.parentNode;
widgetParent.removeChild(widgetElem); } var js,
fis=d.getElementsByTagName(s)[0],
p=/^http/.test(d.location)?'http':'https';
js=d.createElement(s); js.id=id;
js.src=p+"://platform.twitter.com/widgets.js";
fis.parentNode.insertBefore(js,fis); }
(document['script'"twitter-wjs"]);
```

**Note:** This component has the XML code to set the “displayName” column from the business entity.

Next, you will create two components for web search. One with hard-coded value “Informatica,” and the other set to the value of the displayName column.

8. In the External Links page, click **Create**.  
 9. Use the following details to create the first component.

Property	Value
Name	<b>Infa_Bing</b>
Code	Copy the XML code from <b>C:\MDM_Training\E360_Assets\TXT\infa_Bing.txt</b>

[Layout External Link]

	<input style="background-color: #0072BC; color: white; border: 1px solid #0072BC; padding: 2px 10px; border-radius: 3px; font-weight: bold; font-size: 10pt; margin-right: 5px;" type="button" value="Apply"/> <input style="border: 1px solid #ccc; padding: 2px 10px; border-radius: 3px; font-size: 10pt;" type="button" value="Discard"/>
Name:	Infa_Bing
Code:	<pre>&lt;style&gt; #box { height: 500px; overflow: auto; }  &lt;div id="box"&gt;     &lt;iframe src="http://www.bing.com/search?q={{displayName}}" allowtransparency="true" frameborder="0" scrolling="no" style="border:none;overflow:auto;height:100%;width:100%"&gt;         &lt;/iframe&gt; &lt;/div&gt;</pre>

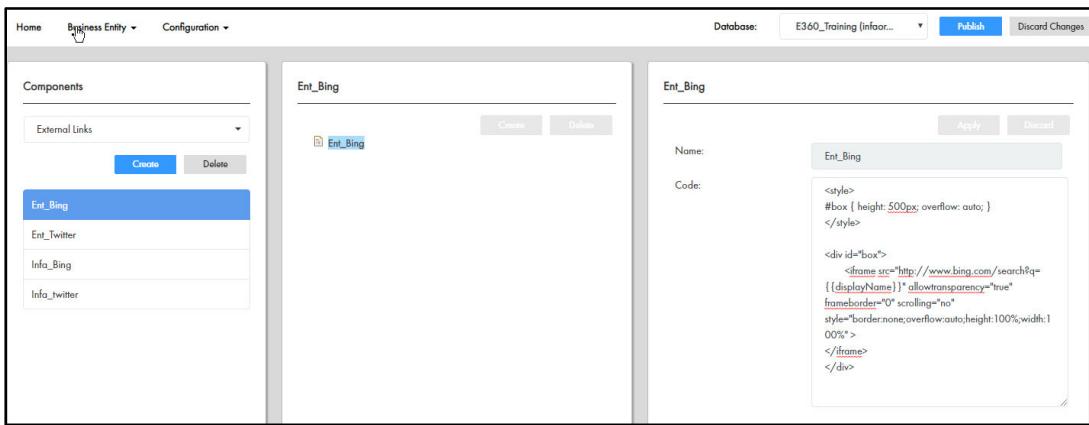
10. Create the next component using the following details:

Property	Value
Name	<b>Ent_Bing</b>
Code	Copy the XML code from <b>C:\MDM_Training\E360_Assets\TXT\Ent_Bing.txt</b>

[Layout External Link]

	<input style="background-color: #0072BC; color: white; border: 1px solid #0072BC; padding: 2px 10px; border-radius: 3px; font-weight: bold; font-size: 10pt; margin-right: 5px;" type="button" value="Apply"/> <input style="border: 1px solid #ccc; padding: 2px 10px; border-radius: 3px; font-size: 10pt;" type="button" value="Discard"/>
Name:	Ent_Bing
Code:	<pre>&lt;style&gt; #box { height: 500px; overflow: auto; }  &lt;div id="box"&gt;     &lt;iframe src="http://www.bing.com/search?q={{displayName}}" allowtransparency="true" frameborder="0" scrolling="no" style="border:none;overflow:auto;height:100%;width:100%"&gt;         &lt;/iframe&gt; &lt;/div&gt;</pre>

**11. Publish the changes to MDM Hub.**



The screenshot shows the 'Components' section of the MDM Hub. On the left, a list of components includes 'Ent\_Bing' (selected), 'Ent\_Twitter', 'Info\_Bing', and 'Info\_twitter'. In the center, the 'Ent\_Bing' component details are displayed. The 'Name' field is set to 'Ent\_Bing'. The 'Code' field contains the following HTML code:

```

<style>
#box { height: 500px; overflow: auto; }
</style>

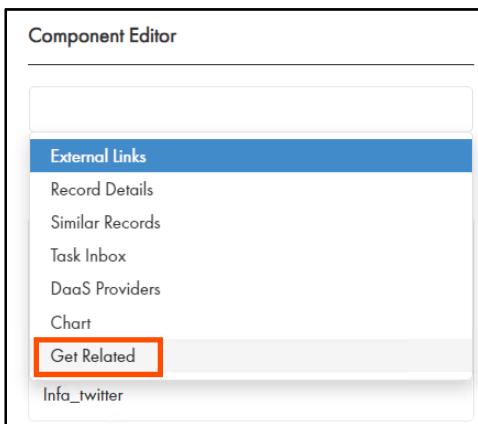
<div id="box">
<frame src="http://www.bing.com/search?q=[{displayName}]" allowtransparency="true"
frameborder="0" scrolling="no"
style="border:none;overflow:auto;height:100%;width:100%">
</frame>
</div>

```

Now that the external links are created, define the **Get Related** component.

**12. Select Component Editor from the Configuration menu.**

**13. From Components, select Get Related component and click Create.**



The screenshot shows the 'Component Editor' interface. The 'External Links' category is selected. Within it, the 'Get Related' option is highlighted with a red box.

**14. Enter Name and Label as Family.**

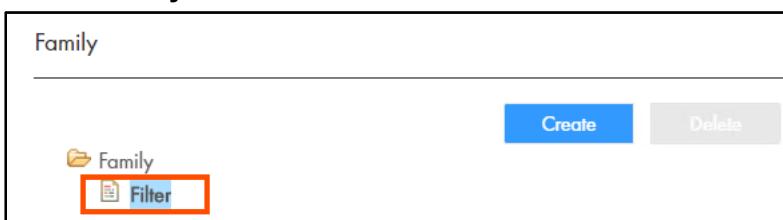
**15. Click Apply.**



The screenshot shows the 'Component Editor' interface with 'Get Related' selected. In the center, a 'Tree View' pane shows a single node labeled 'Family'. On the right, the 'New Layout Related Records' dialog is open, showing the following fields:

- Name: Family
- Label: Family
- Honor Direction:
- Read Only:

**16. Select Family > Filter and click Create.**



The screenshot shows the 'Family' component details. The 'Create' and 'Delete' buttons are visible at the bottom. A 'Filter' button, which is highlighted with a red box, is located below the 'Create' button.

17. Enter the following values to create a filter:

Field	Value
Name	HouseHold_from_HM
Object Type	Relationship
Object	HouseholdContainsMemberPerson

[New Filter]

Name:	<input type="text" value="HouseHold_from_HM"/>	Apply	Discard
Object Type:	<input type="text" value="Relationship"/>	<span style="border: 1px solid #ccc; padding: 2px 5px;">▼</span>	
Object:	<input type="text" value="HouseholdContainsMemberPerson"/>	<span style="border: 1px solid #ccc; padding: 2px 5px;">▼</span>	

18. Click **Apply**.

19. In the Components page, select **Get Related** and click **Create**.

20. Enter Name and Label as **Org\_to\_Org**.

21. Enter the following values to create a filter:

Field	Value
Name	Org_to_Org
Object Type	Relationship
Object	OrganizationIsOdiParentOfOrganization

Component Editor

<p>Get Related</p> <p>Family</p> <p>Org_to_Org</p>	<p>Org_to_Org</p> <p>Org_to_Org</p> <p>Filter</p> <p>[New Filter]</p>	<p>[New Filter]</p> <p>Name: Org_to_Org</p> <p>Object Type: Relationship</p> <p>Object: OrganizationIsOdiParentOfOrganization</p>
--	---	---

22. Click **Apply**.

23. Create another Get Related component named **Related\_Person\_BE\_Filter**.

24. Create a field with the following values:

Field	Value
Name	RelatedPersonBEFilter
Object Type	Business Entity
Object	Person

<b>Components</b>	<b>Related_Person_BE_Filter</b>	<b>Related_Person_BE_Filter</b>
<p>Get Related</p> <p><a href="#">Create</a> <a href="#">Delete</a></p> <p>Family</p> <p>Org_To_Product</p> <p><a href="#">Related_Person_BE_Filter</a></p>	<p><a href="#">Create</a> <a href="#">Delete</a></p> <p>↳ Related_Person_BE_Filter</p> <p>↳ Filter</p> <p>↳ Related_Person_BE_Filter</p>	<p>Name: <input type="text" value="Related_Person_BE_Filter"/></p> <p>Label: <input type="text" value="Related_Person_BE_Filter"/></p> <p>Honor Direction: <input type="checkbox"/></p>

Now, add **Similar Records** component. You will add this to the layout in the later lab exercise.

25. From the **Components** section, select **Similar Records** and click **Create**.

## Component Editor

---

Similar Records

CreateDelete

26. Enter the Name as **SimilarPeople** and copy the contents of the xml from **C:\MDM\_Training\E360\_Assets\TXT\Similar\_People.txt**.

[New Layout Similar Records]

**Apply** **Discard**

Name:	SimilarPeople
XML:	<pre>1  &lt;?xml version="1.0" encoding="UTF-8"?&gt;&lt;config 2      xmlns="http://www.informatica.com/mdm 3          /&gt; 4      &lt;searchableFields&gt; 5          &lt;field name="firstName"/&gt; 6          &lt;field name="lastName"/&gt; 7      &lt;/searchableFields&gt; 8      &lt;searchType&gt; 9          &lt;smartSearch&gt; 10         &lt;/smartSearch&gt; 11     &lt;/searchType&gt; 12     &lt;label existsFormat="{1} {2} {3}"&gt; 13         &lt;column columnUid="firstName"/&gt; 14         &lt;column columnUid="middleName"/&gt; 15         &lt;column columnUid="lastName"/&gt; 16     &lt;/label&gt; 17 &lt;/config&gt;</pre>

**Note:** This will not work immediately as you have not configured the ElasticSearch yet. To use the match rule set here, you can refer to the Similar\_People\_Fuzzy.txt.

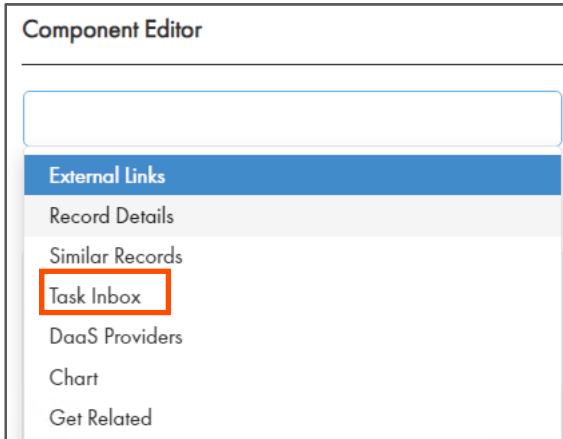
- ## **27. Publish the changes to MDM Hub.**

Next, you will customize the task inbox.

28. In the Provisioning Tool, click the **Configuration** menu and select **Component Editor**.

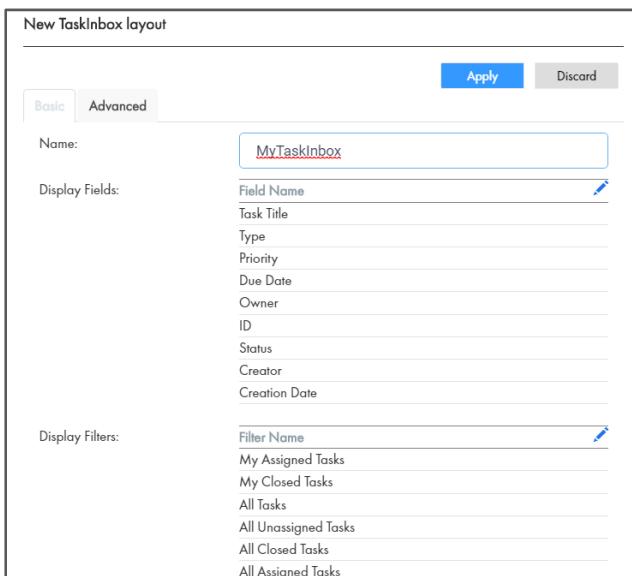
A screenshot of the Microsoft Business Central ribbon interface. The ribbon has three main tabs: Home, Business Entity, and Configuration. The Configuration tab is currently selected, indicated by a dark grey background and a downward arrow icon. A secondary menu is open under the Configuration tab, listing several options: General Settings, Infrastructure Settings, Application Editor, Component Editor (which is highlighted with a red border), Layout Designer, and Match Rule Sets.

29. Select **Task Inbox** from the drop-down list and click **Create**.



30. Enter the name as **MyTaskInbox**.

31. Click **Apply** and then **Publish** the changes.



New TaskInbox layout

Basic Advanced

Name:

Display Fields:

- Field Name
- Task Title
- Type
- Priority
- Due Date
- Owner
- ID
- Status
- Creator
- Creation Date

Display Filters:

- Filter Name
- My Assigned Tasks
- My Closed Tasks
- All Tasks
- All Unassigned Tasks
- All Closed Tasks
- All Assigned Tasks

Apply Discard

---

*This concludes the lab.*

# Module 3: Customize MDM Data Director Application User Interface

## Lab 3-2: Customize MDM Data Director Entity Layouts

### Overview:

Through the Provisioning Tool, you can define different entity layouts for different users, based on their roles. This means that you get to select specific columns for each role.

The Data Stewards, Managers, and Senior Managers prefer different layouts while working with business entities. Data Stewards prefer a web search and a Twitter feed for the Person. Managers prefer the Twitter feed and do not want to create entities. Senior Managers prefer the Twitter feed of the entity along with Informatica's official Twitter feed with the business entity columns.

In this lab, you will define role-based Entity Layouts in the Provisioning Tool and test the layout in the MDM Data Director UI.

### Objectives:

- Define role-based entity layouts using the Provisioning Tool
- Test the layout in MDM Data Director UI

### Duration:

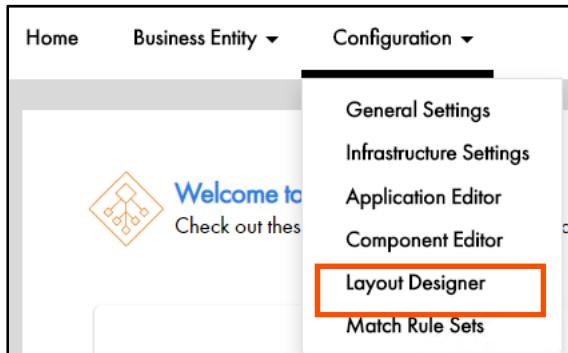
60 minutes

---

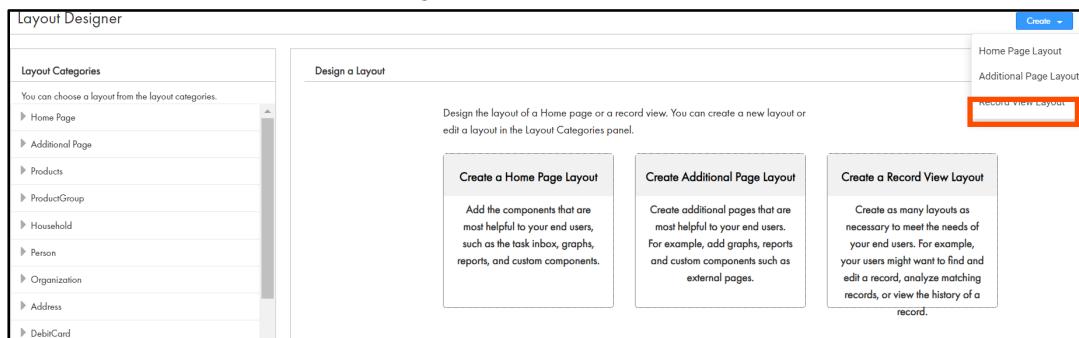
### Tasks

In the previous lab, you added the external components. You will now create layouts for the Person business entity.

1. In the **Provisioning Tool**, click **Configuration > Layout Designer**.



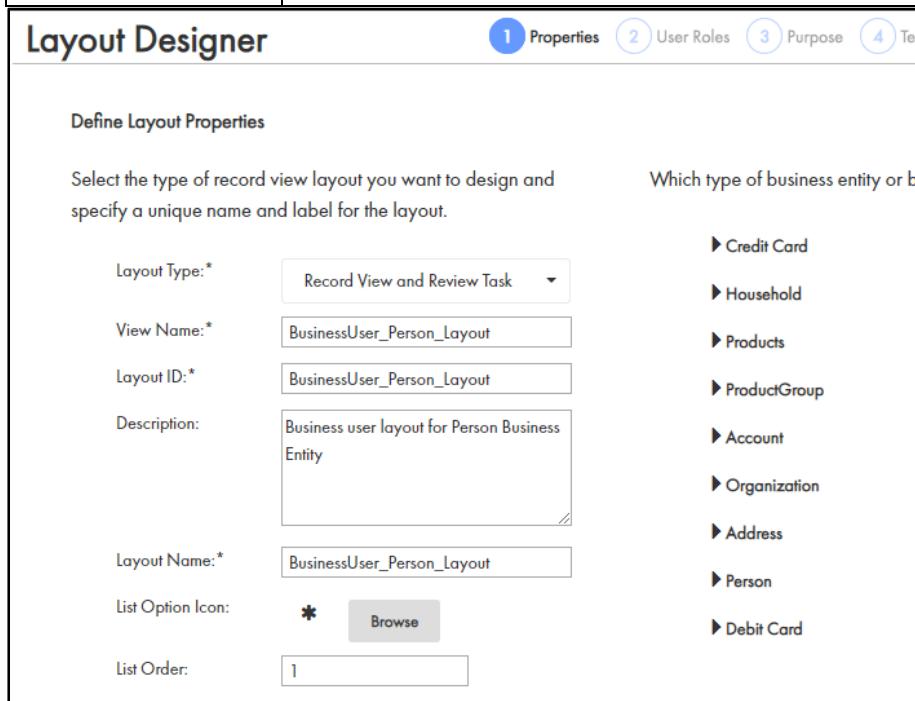
2. Click Create > Record View Layout.



The screenshot shows the Informatica Layout Designer interface. In the top right corner, there is a 'Create' button with a dropdown arrow. Below it, three options are listed: 'Home Page Layout', 'Additional Page Layout', and 'Record View Layout'. The 'Record View Layout' option is highlighted with a red box.

3. Enter the following values:

Property	Value
Layout Type	Record View and Review Task
View Name	BusinessUser_Person_Layout
Layout ID	This field is auto-populated
Description	Business users Layout for Person Business entity.
Layout Name	BusinessUser_Person_Layout (auto-populated)
List option icon	* (Browse)
List order	1



The screenshot shows the 'Layout Designer' page with the 'Properties' tab selected. At the top, there are four tabs: 1 Properties (selected), 2 User Roles, 3 Purpose, and 4 Terms.

**Define Layout Properties**

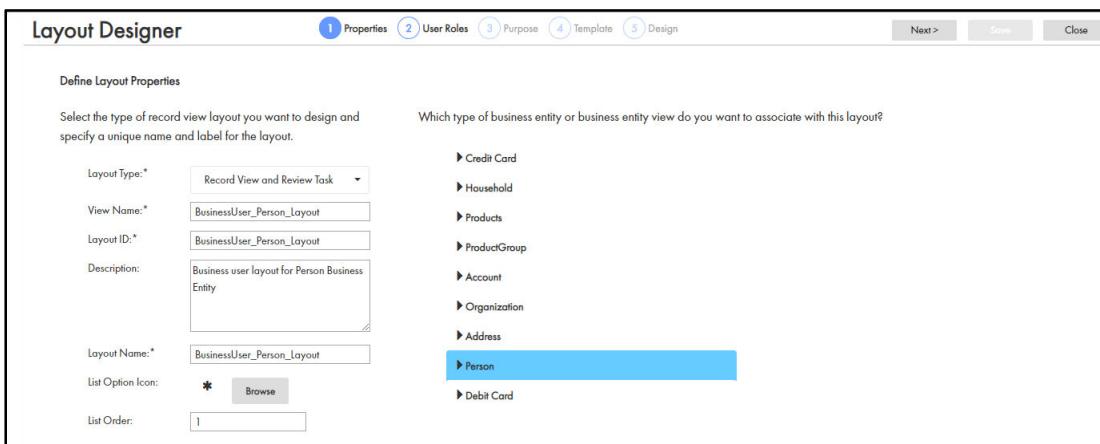
Select the type of record view layout you want to design and specify a unique name and label for the layout.

Layout Type: <sup>*</sup>	Record View and Review Task
View Name: <sup>*</sup>	BusinessUser_Person_Layout
Layout ID: <sup>*</sup>	BusinessUser_Person_Layout
Description:	Business user layout for Person Business Entity
Layout Name: <sup>*</sup>	BusinessUser_Person_Layout
List Option Icon:	* <input type="button" value="Browse"/>
List Order:	1

Which type of business entity or business object?

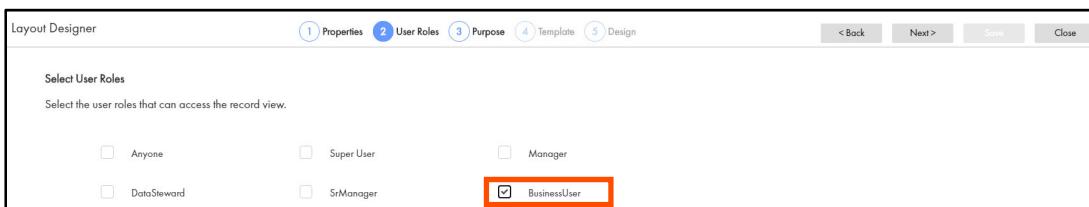
- ▶ Credit Card
- ▶ Household
- ▶ Products
- ▶ ProductGroup
- ▶ Account
- ▶ Organization
- ▶ Address
- ▶ Person
- ▶ Debit Card

4. Select **Person** and click **Next**.



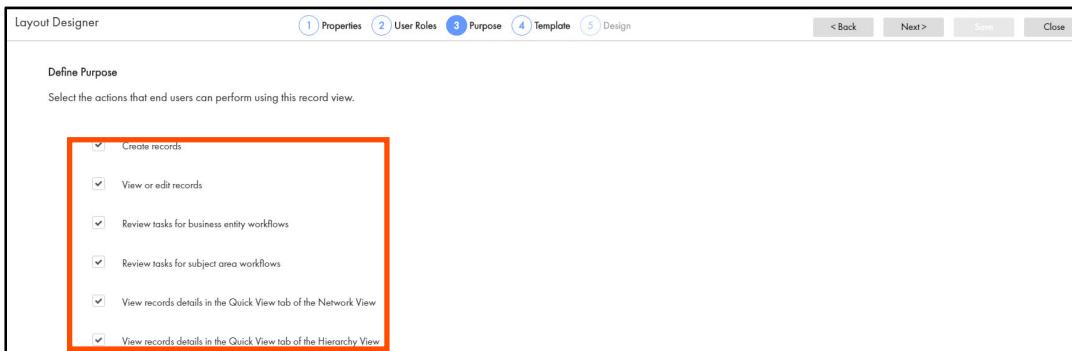
The screenshot shows the 'Layout Designer' interface on the 'Properties' tab. On the left, there's a form with fields: 'Layout Type:' (Record View and Review Task), 'View Name:' (BusinessUser\_Person\_Layout), 'Layout ID:' (BusinessUser\_Person\_Layout), 'Description:' (Business user layout for Person Business Entity), 'Layout Name:' (BusinessUser\_Person\_Layout), 'List Option Icon:' (\*), and 'List Order:' (1). On the right, a list of business entities is shown with 'Person' highlighted in blue.

5. In the **User Roles** page, select the **Business User** and click **Next**.



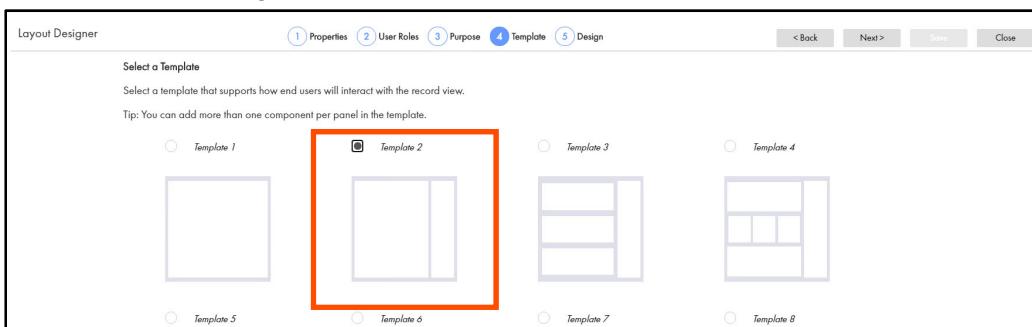
The screenshot shows the 'Layout Designer' interface on the 'User Roles' tab. It has a section titled 'Select User Roles' with checkboxes for 'Anyone', 'Super User', 'Manager', 'DataSteward', 'SrManager', and 'BusinessUser'. The 'BusinessUser' checkbox is checked and highlighted with a red box.

6. In the **Purpose** page, select all the options and click **Next**.



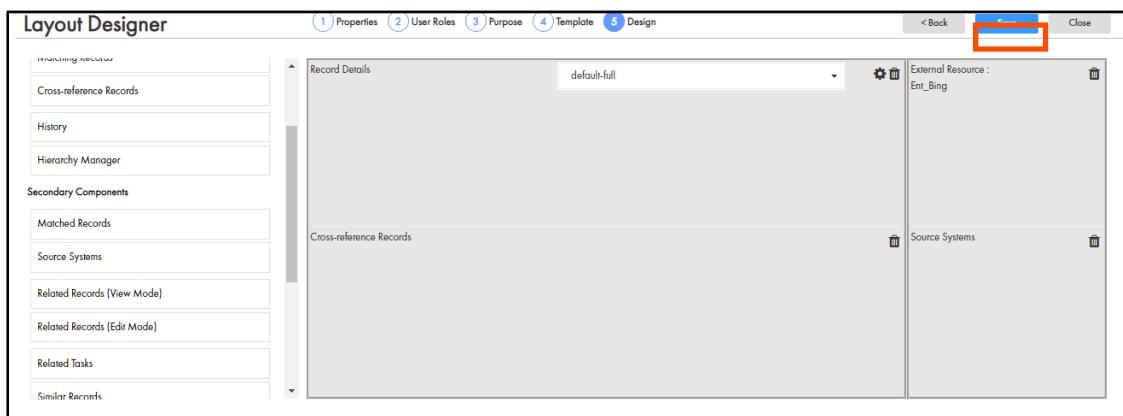
The screenshot shows the 'Layout Designer' interface on the 'Purpose' tab. It has a section titled 'Define Purpose' with a list of actions: 'Create records', 'View or edit records', 'Review tasks for business entity workflows', 'Review tasks for subject area workflows', 'View records details in the Quick View tab of the Network View', and 'View records details in the Quick View tab of the Hierarchy View'. All these options are checked and highlighted with a red box.

7. In the **Template** page, select **Template 2** and click **Next**.



The screenshot shows the 'Layout Designer' interface on the 'Template' tab. It has a section titled 'Select a Template' with radio buttons for 'Template 1', 'Template 2', 'Template 3', 'Template 4', 'Template 5', 'Template 6', 'Template 7', and 'Template 8'. 'Template 2' is selected and highlighted with a red box.

8. In the **Design** page, drag and drop the components from the left-hand side. Add the **Record Details**, **Ent\_Bing**, **Source systems**, and the **Cross-reference Records** as shown in the below screenshot.



The screenshot shows the Layout Designer interface with the 'Design' tab selected. On the left, there's a sidebar with sections like 'Cross-reference Records', 'History', 'Hierarchy Manager', 'Secondary Components', and 'Related Tasks'. The main area contains four components: 'Record Details' (with a dropdown menu), 'Ent\_Bing' (with a trash bin icon), 'Source Systems' (with a trash bin icon), and 'Cross-reference Records' (with a trash bin icon). A red box highlights the 'Ent\_Bing' component.

9. Click **Save** and then **Close**.

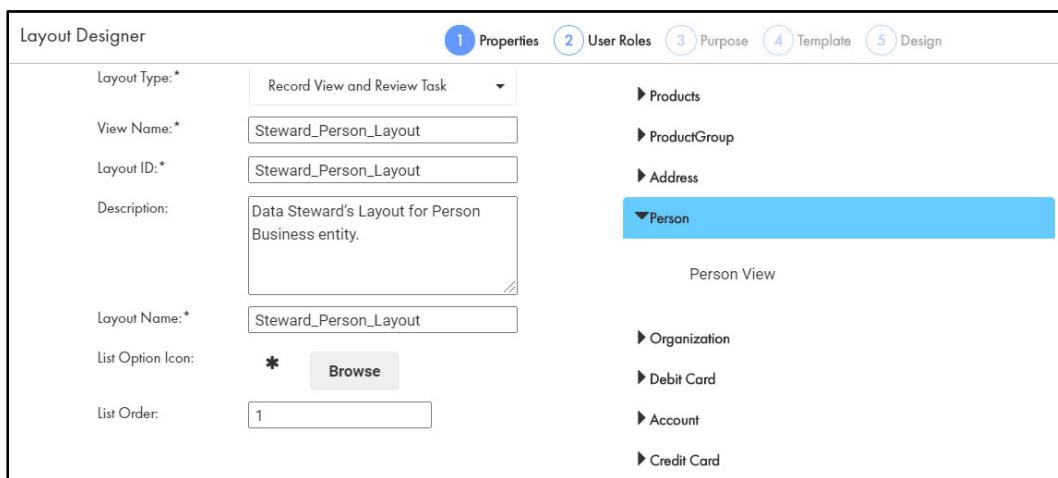
The business user now has a view for the person business entity.

You will now define another view for the Data Steward.

10. Create a **Record View Layout** with the following values:

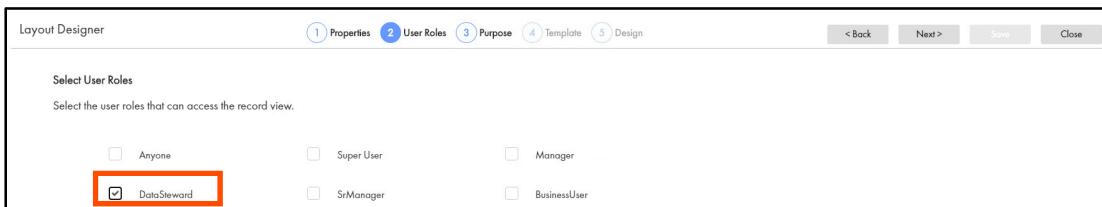
Property	Value
Layout Type	Record View and Review Task
View Name	Steward_Person_Layout
Layout ID	This field is auto-populated
Description	Data Steward's Layout for Person Business entity.
Layout Name	Steward_Person_Layout (auto-populated)
List option icon	*
List order	1

11. Select **Person** and click **Next**.



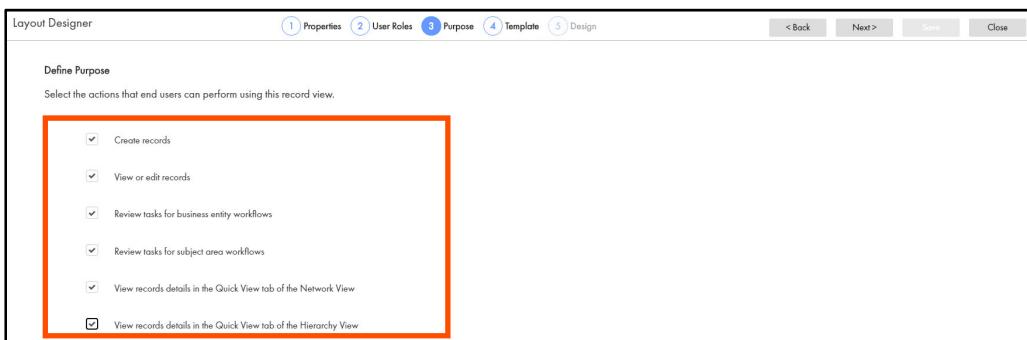
The screenshot shows the Layout Designer interface with the 'Properties' tab selected. The form fields are filled as follows: Layout Type: 'Record View and Review Task', View Name: 'Steward\_Person\_Layout', Layout ID: 'Steward\_Person\_Layout', Description: 'Data Steward's Layout for Person Business entity.', Layout Name: 'Steward\_Person\_Layout', List Option Icon: '\*', and List Order: '1'. To the right, a list of entities is shown with 'Person' highlighted in blue. Below the list, the text 'Person View' is displayed.

12. In the **User Roles**, select **DataSteward** and click **Next**.



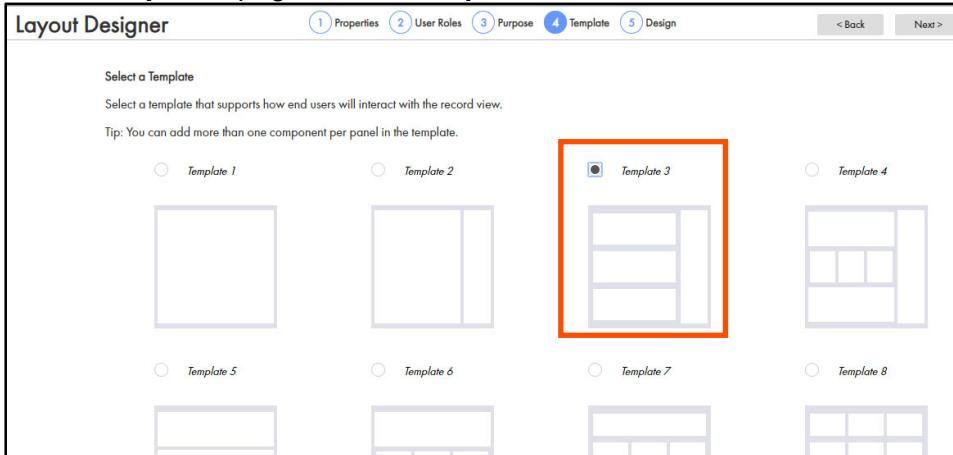
The screenshot shows the 'User Roles' step of the Layout Designer. It displays a list of user roles: Anyone, Super User, Manager, DataSteward (which is checked and highlighted with a red box), SrManager, and BusinessUser.

13. In the **Purpose** page, select all the options and click **Next**.



The screenshot shows the 'Purpose' step of the Layout Designer. It lists several actions that end users can perform: Create records, View or edit records, Review tasks for business entity workflows, Review tasks for subject area workflows, View records details in the Quick View tab of the Network View, and View records details in the Quick View tab of the Hierarchy View. All these options are checked and highlighted with a red box.

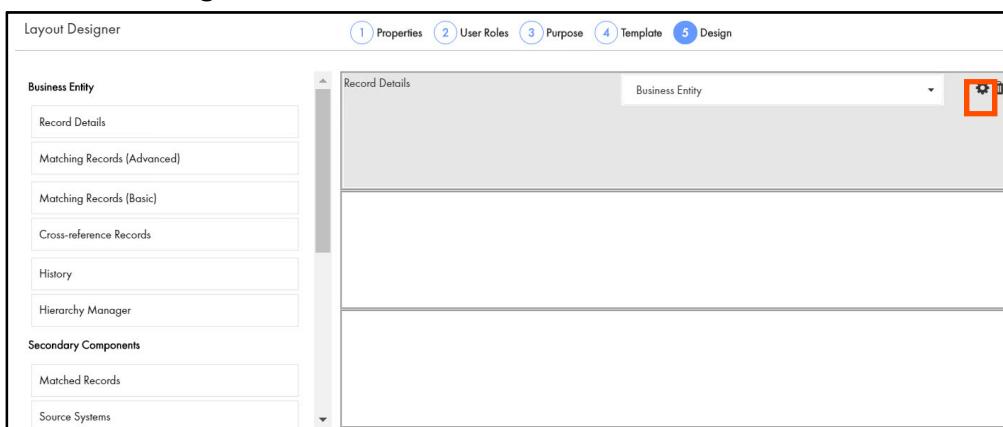
14. In the **Templates** page, select **Template 3** and click **Next**.



The screenshot shows the 'Template' step of the Layout Designer. It displays eight template options: Template 1, Template 2, Template 3 (which is selected and highlighted with a red box), Template 4, Template 5, Template 6, Template 7, and Template 8.

15. Drag the **Record Details** from the left panel to the right empty panel.

16. Click the **Settings** icon.

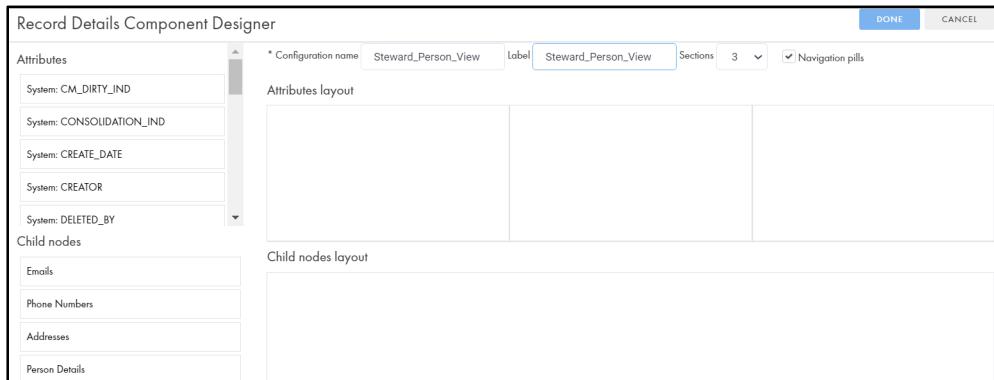


The screenshot shows the 'Design' step of the Layout Designer. On the left, there's a sidebar with sections like Business Entity, Record Details, Matching Records (Advanced), Matching Records (Basic), Cross-reference Records, History, and Hierarchy Manager. Below that is Secondary Components with Matched Records and Source Systems. On the right, there's a large empty panel. A 'Record Details' component is being moved from the sidebar to this panel, with a red box highlighting its handle.

17. In the **Record Details Components Designer** window, enter the following details:

Configuration Name: **Steward\_Person\_View**

Label: **Steward\_Person\_View**

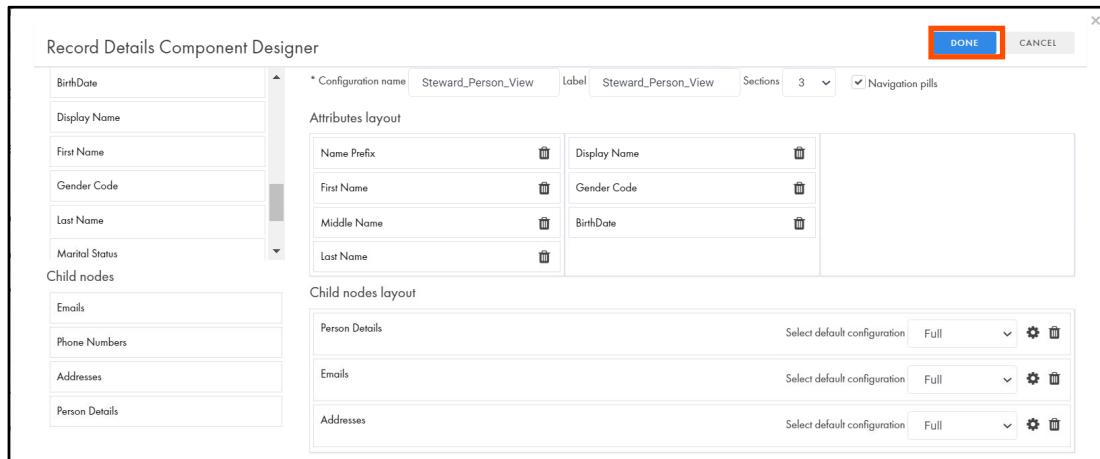


The screenshot shows the 'Record Details Component Designer' window. At the top, there are fields for 'Configuration name' (set to 'Steward\_Person\_View'), 'Label' (set to 'Steward\_Person\_View'), 'Sections' (set to 3), and a checked checkbox for 'Navigation pills'. Below these are two main sections: 'Attributes' and 'Child nodes'. The 'Attributes' section contains several system-defined attributes: 'System: CM\_DIRTY\_IND', 'System: CONSOLIDATION\_IND', 'System: CREATE\_DATE', 'System: CREATOR', and 'System: DELETED\_BY'. The 'Child nodes' section contains three child nodes: 'Emails', 'Phone Numbers', and 'Addresses'. On the right side of the window, there are two layout panels: 'Attributes layout' and 'Child nodes layout', both of which are currently empty.

18. Drag and drop the following **attributes** and **child nodes** as shown in the image below:

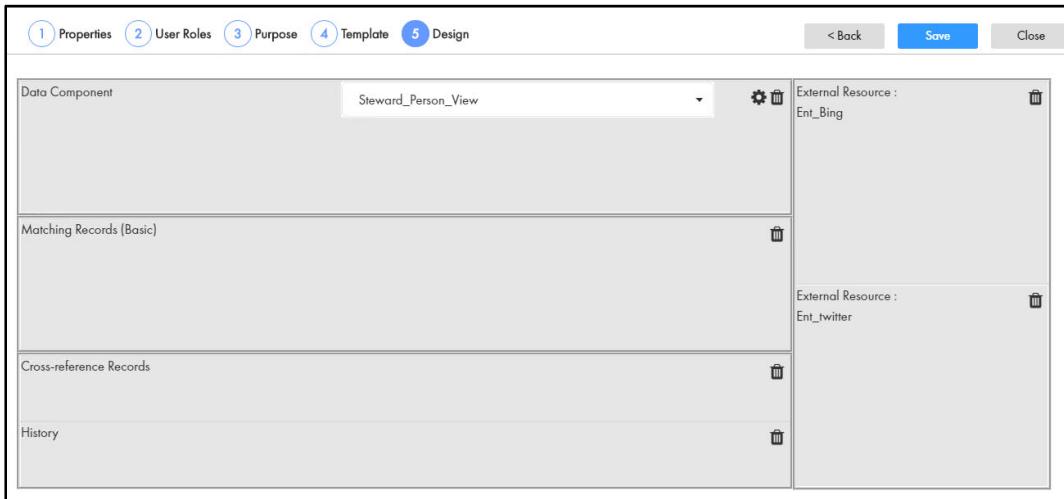
Attributes	Child Nodes
Name Prefix	PersonDetails
First Name	Emails
Display Name	Addresses
Middle Name	
Gender Code	
Last Name	
Birthdate	

19. Click **Done**.



The screenshot shows the 'Record Details Component Designer' window after the configuration has been updated. The 'Attributes' section now includes 'Name Prefix', 'First Name', 'Display Name', 'Gender Code', 'Last Name', and 'BirthDate'. The 'Child nodes' section now includes 'Emails', 'Phone Numbers', and 'Addresses'. On the right side, the 'Attributes layout' panel now contains six items corresponding to the attributes listed in the 'Attributes' section. The 'Child nodes layout' panel contains three items corresponding to the child nodes listed in the 'Child nodes' section. The 'DONE' button at the top right is highlighted with a red box.

20. Add the **Matching Records (Basic)**, **Cross-reference Records**, **History**, **Ent\_Twitter**, and **Ent\_Bing** components as shown.



The screenshot shows the 'Design' tab of the Data Component configuration interface. The main area contains four components: 'Matching Records (Basic)', 'Cross-reference Records', 'History', and 'External Resource'. The 'External Resource' section contains two entries: 'Ent\_Bing' and 'Ent\_twitter', each with a delete icon. The top navigation bar includes tabs for Properties, User Roles, Purpose, Template, and Design, along with Save and Close buttons.

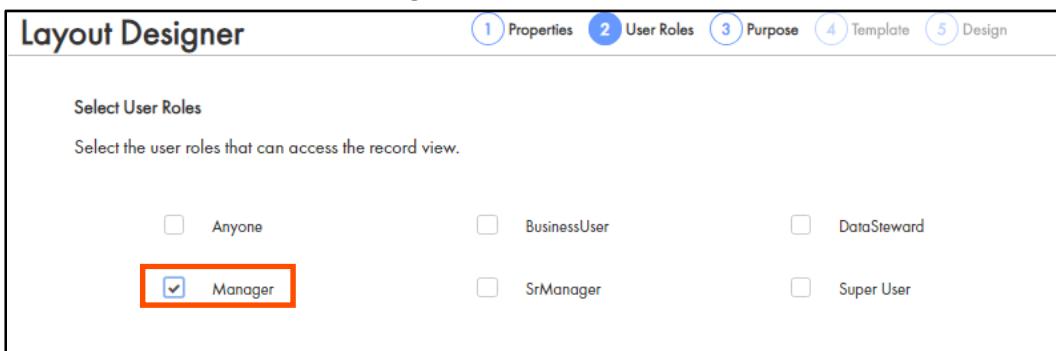
21. Click **Save** and **Close**.

22. Use the following values to create a view for the **manager**:

Property	Value
Layout Type	Record View and Review Task
View Name	Manager_Person_Layout
Layout ID	This field is auto-populated
Description	Manager's Layout for Person Business entity.
Layout Name	Manager_Person_Layout (auto-populated)
List option icon	* (browse)
List order	1

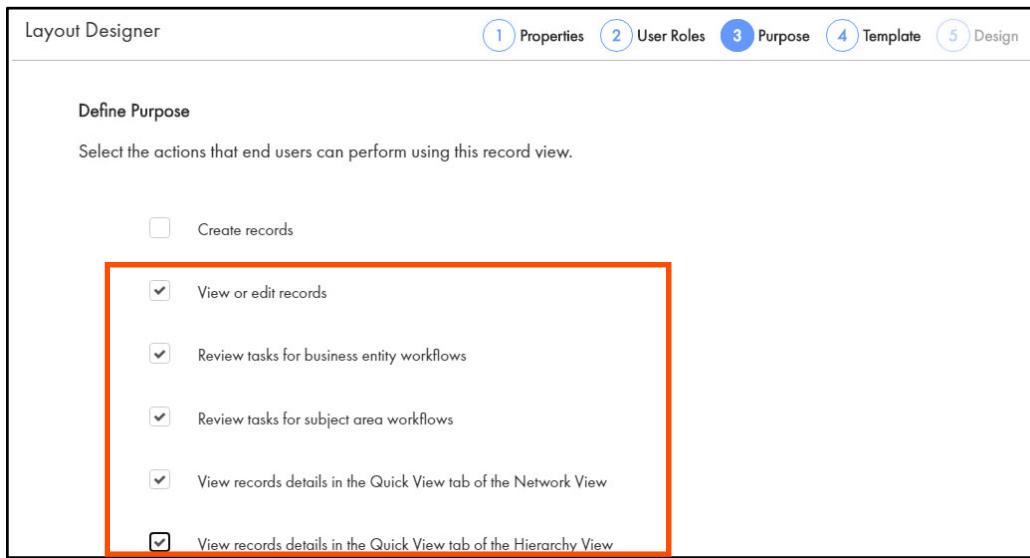
23. Select **Person** and click **Next**.

24. In the User Roles, select **Manager** and click **Next**.



The screenshot shows the 'User Roles' step of the Layout Designer. It displays a list of user roles with checkboxes. The 'Manager' checkbox is selected and highlighted with a red border, while other roles like 'Anyone', 'BusinessUser', 'DataSteward', 'SrManager', and 'Super User' are unselected.

25. In the **Purpose** page, select all the options except the Create records option, and click **Next**.

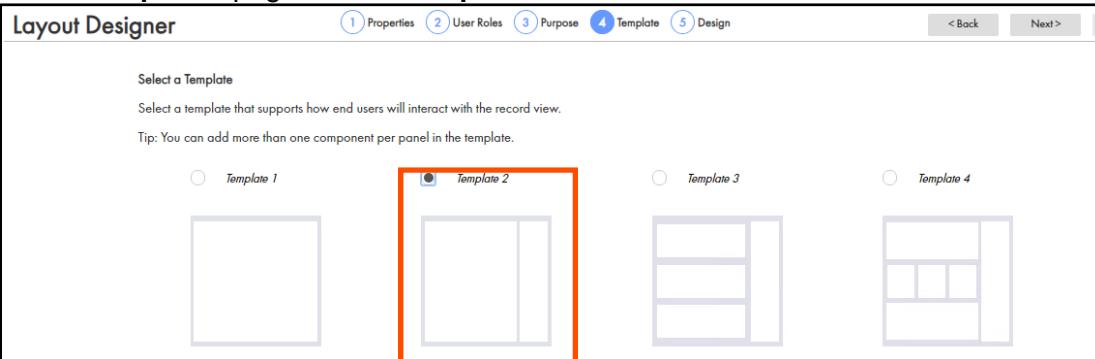


Layout Designer      ① Properties   ② User Roles   ③ Purpose   ④ Template   ⑤ Design

Define Purpose  
Select the actions that end users can perform using this record view.

- Create records
- View or edit records
- Review tasks for business entity workflows
- Review tasks for subject area workflows
- View records details in the Quick View tab of the Network View
- View records details in the Quick View tab of the Hierarchy View

26. In the **Templates** page, select **Template 2** and click **Next**.



Layout Designer      ① Properties   ② User Roles   ③ Purpose   ④ Template   ⑤ Design      < Back    Next >

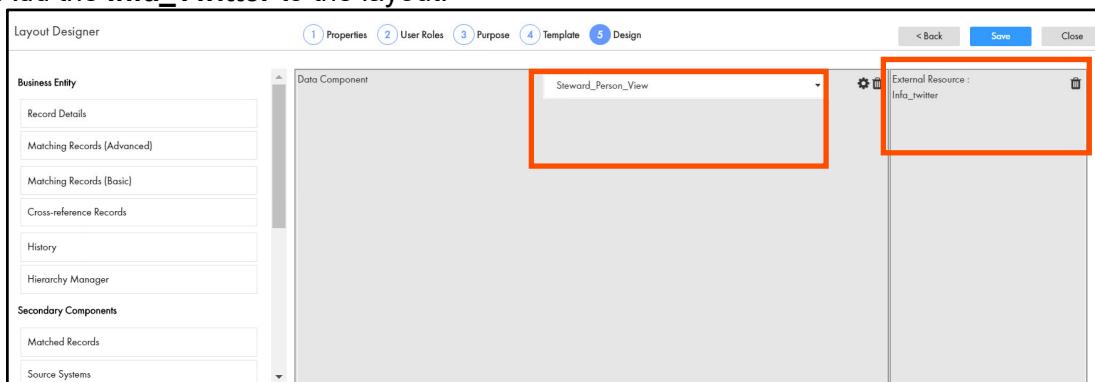
Select a Template  
Select a template that supports how end users will interact with the record view.  
Tip: You can add more than one component per panel in the template.

- Template 1
- Template 2
- Template 3
- Template 4

27. In the **Design** page, add the record details.

28. Select the **Steward\_Person\_View** from the drop-down.

29. Add the **Infa\_Twitter** to the layout.



Layout Designer      ① Properties   ② User Roles   ③ Purpose   ④ Template   ⑤ Design      < Back    Save    Close

Business Entity

- Record Details
- Matching Records [Advanced]
- Matching Records [Basic]
- Cross-reference Records
- History
- Hierarchy Manager
- Secondary Components
- Matched Records
- Source Systems

Data Component

Steward\_Person\_View

External Resource :  
Infa\_Twitter

30. Click **Save** and **Close**.

31. Use the following values to create another view for the **SrManager** role:

Property	Value
Layout Type	Record View and Review Task

View Name	SrManager_Person_Layout
Layout ID	This field is auto-populated
Description	Senior Manager's Layout for Person Business entity.
Layout Name	SrManager_Person_Layout (auto-populated)
List option icon	*
List order	1

32. Select **Person** and click **Next**.

**Layout Designer**

1 Properties    2 User Roles    3 Purpose    4 Template    5 Design

Layout Type:*	Record View and Review Task	Credit Card
View Name:*	SrManager_Person_Layout	Household
Layout ID:*	SrManager_Person_Layout	Products
Description:	Enter a description for users editing this layout.	ProductGroup
Layout Name:*	SrManager_Person_Layout	Account
List Option Icon:	<input type="radio"/> Browse	Organization
List Order:	1	DebitCard
		Address
		▶ Person

33. In the **User Roles** page, select **SrManager** and click **Next**.

**Layout Designer**

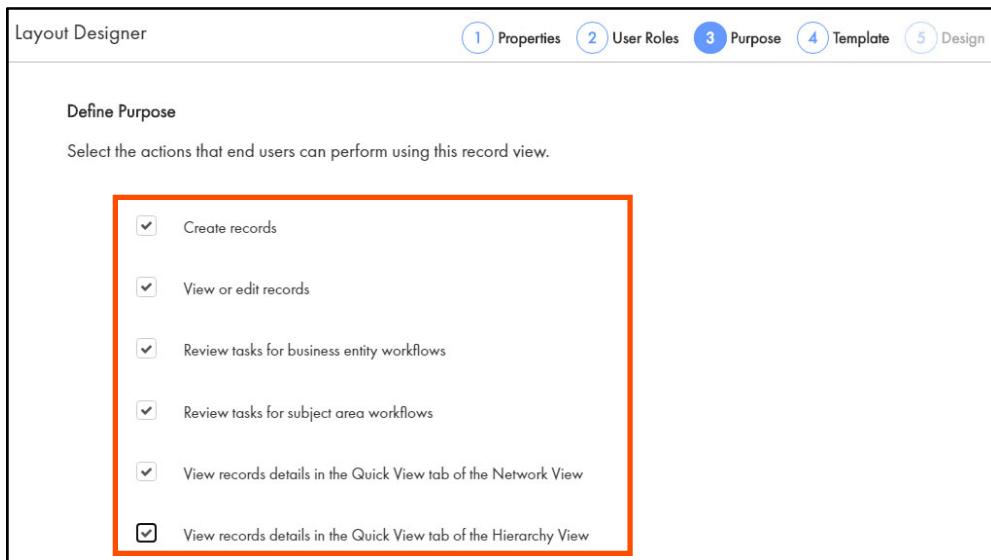
1 Properties    2 User Roles    3 Purpose    4 Template    5 Design

**Select User Roles**

Select the user roles that can access the record view.

<input type="checkbox"/> Anyone	<input type="checkbox"/> Super User	<input type="checkbox"/> Manager
<input type="checkbox"/> DataSteward	<input checked="" type="checkbox"/> SrManager	<input type="checkbox"/> BusinessUser

34. In the **Purpose** page, select all the options and click **Next**.

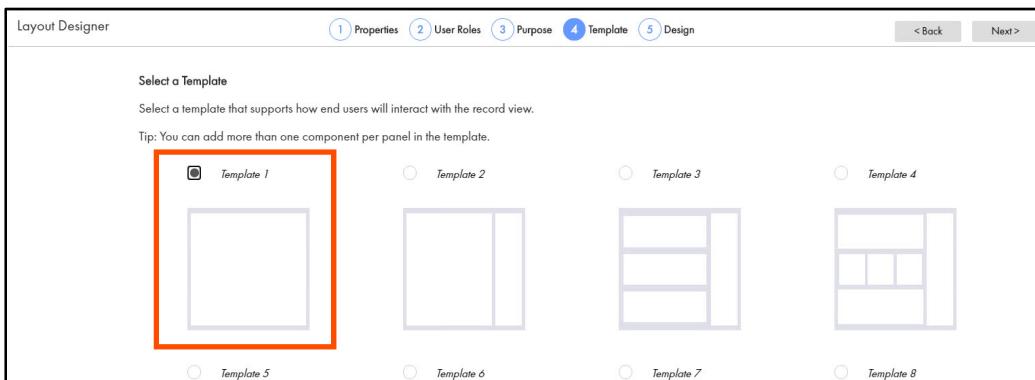


Layout Designer      ① Properties    ② User Roles    ③ Purpose    ④ Template    ⑤ Design

Define Purpose  
Select the actions that end users can perform using this record view.

- Create records
- View or edit records
- Review tasks for business entity workflows
- Review tasks for subject area workflows
- View records details in the Quick View tab of the Network View
- View records details in the Quick View tab of the Hierarchy View

35. In the **Template** page, select the **Template 1** and click **Next**.



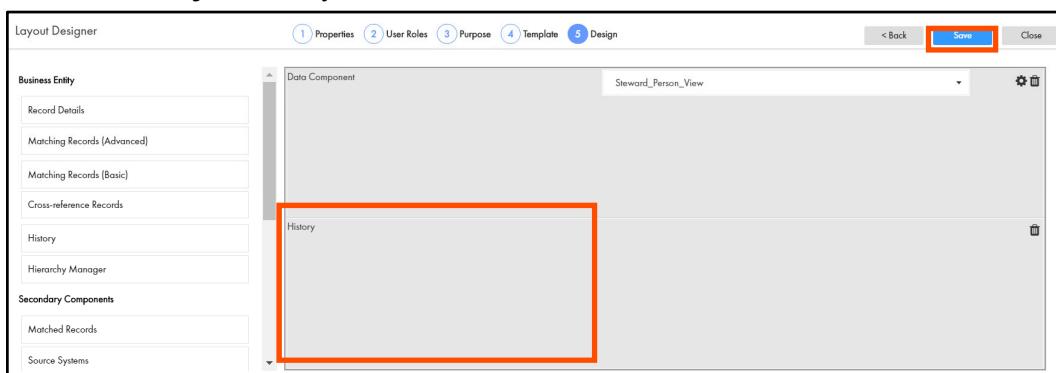
Layout Designer      ① Properties    ② User Roles    ③ Purpose    ④ Template    ⑤ Design    < Back    Next >

Select a Template  
Select a template that supports how end users will interact with the record view.  
Tip: You can add more than one component per panel in the template.

- Template 1
- Template 2
- Template 3
- Template 4
- Template 5
- Template 6
- Template 7
- Template 8

36. In the **Design** page, add the **Record Details** and select the **Steward\_Person\_View** from the drop-down.

37. Add the **History** to the layout, then **Save** and **Close** the wizard.



Layout Designer      ① Properties    ② User Roles    ③ Purpose    ④ Template    ⑤ Design    < Back    Save    Close

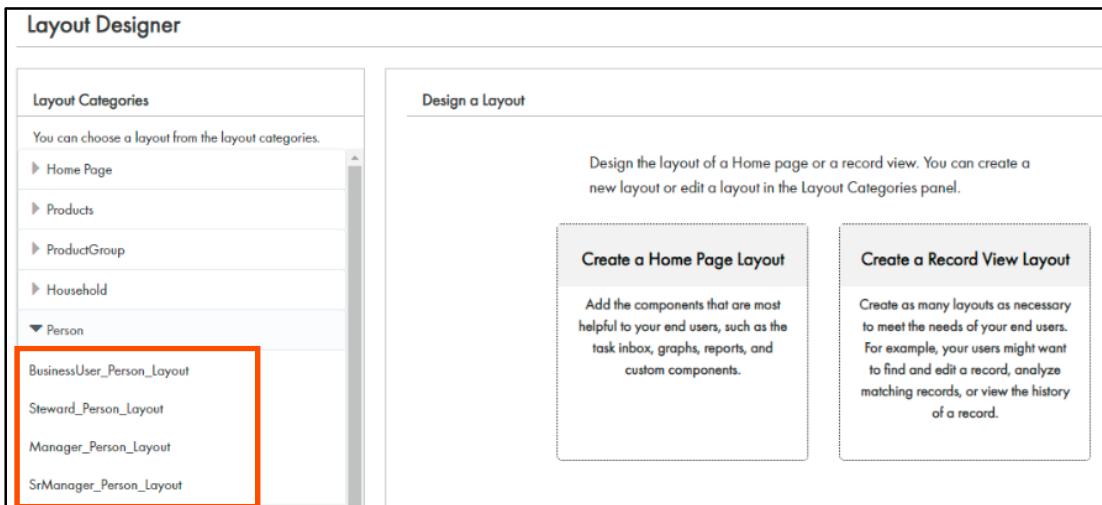
Business Entity

- Record Details
- Matching Records (Advanced)
- Matching Records (Basic)
- Cross-reference Records
- History
- Hierarchy Manager
- Secondary Components
- Matched Records
- Source Systems

Data Component      Steward\_Person\_View

- History

38. Under the **Person** Layout, you should now see a view for each role.



The screenshot shows the 'Layout Designer' interface. On the left, under 'Layout Categories', there is a list of categories: Home Page, Products, ProductGroup, Household, and Person. The 'Person' category is expanded, showing four layout options: BusinessUser\_Person\_Layout, Steward\_Person\_Layout, Manager\_Person\_Layout, and SrManager\_Person\_Layout. The 'BusinessUser\_Person\_Layout' is highlighted with a red box.

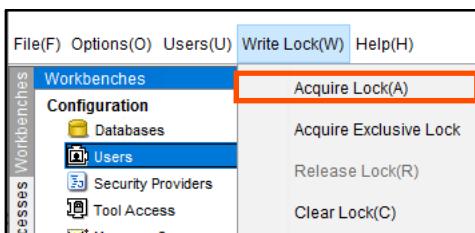
39. **Publish** the changes.

40. Switch to the **MDM Hub Console**.

41. Click the **Users** workbench.

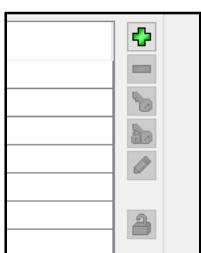
42. Click **Connect to Master Database**.

43. Click **Write Lock (W) > Acquire Lock(A)**.



The screenshot shows the MDM Hub Console menu bar with 'Write Lock(W)' selected. A dropdown menu for 'Workbenches' is open, showing several options: 'Acquire Lock(A)', 'Acquire Exclusive Lock', 'Release Lock(R)', and 'Clear Lock(C)'. The 'Acquire Lock(A)' option is highlighted with a red box.

44. Click the + icon and create the following users with the database as **E360\_Training**.



First Name	Last Name	User Name	Email	Password	Verify Password
ray	lewis	ray	<a href="mailto:ray@infa-server.com">ray@infa-server.com</a>	mdm	mdm
mark	anthony	mark	<a href="mailto:mark@infa-server.com">mark@infa-server.com</a>	mdm	mdm
joey	mathew	joey	<a href="mailto:joey@infa-server.com">joey@infa-server.com</a>	mdm	mdm
jimmy	carey	jimmy	<a href="mailto:jimmy@infa-server.com">jimmy@infa-server.com</a>	mdm	mdm

Add User

User	
First name	ray
Middle name	
Last name	lewis
User name	ray
Email	ray@infa-server.com
Default database	E360_Training
Application user	<input type="checkbox"/>

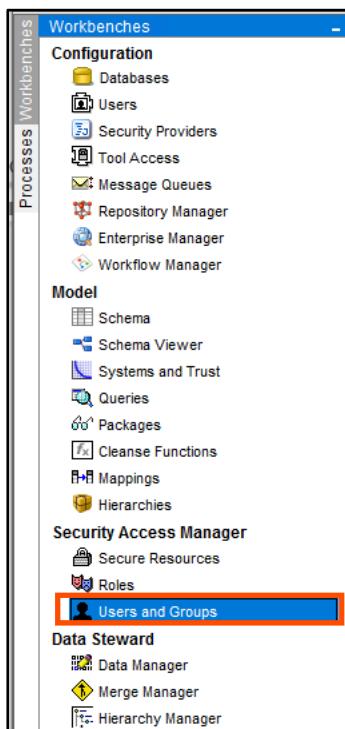
  

Password settings	
Password	***
Verify password	***
Use external authentication	<input type="checkbox"/>
Public certificate of the user	<input type="text"/> <input type="button" value="Browse"/>

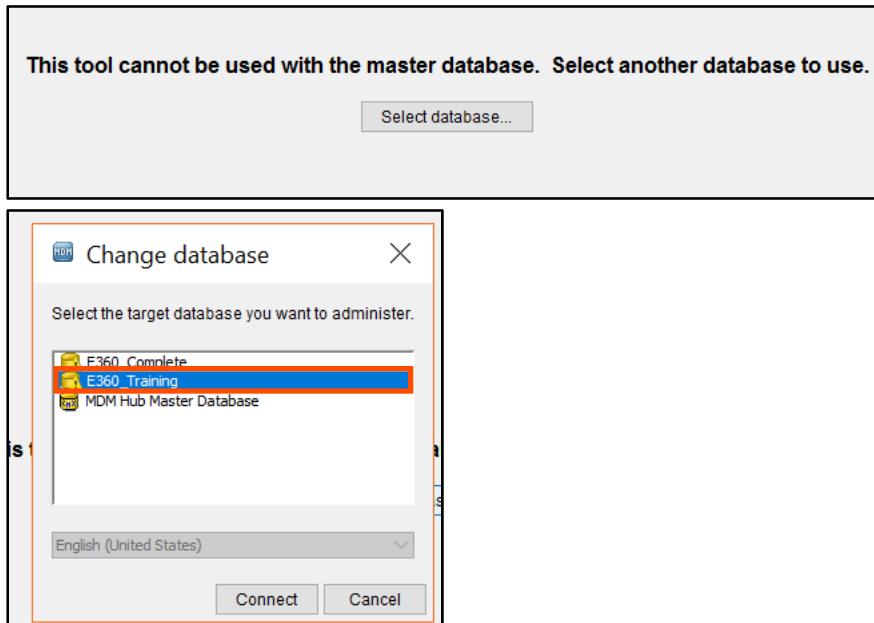
For external authentication, configure a Java Authentication and Authorization Service (JAAS) login module in the Security Providers tool.

45. Save the changes.

46. Click the **Users and Groups** workbench.

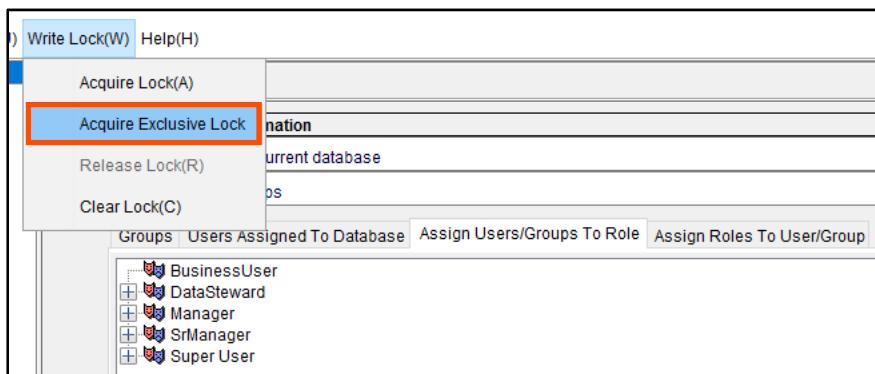


47. Click **Select Database** and select the **E360\_Training** ORS.

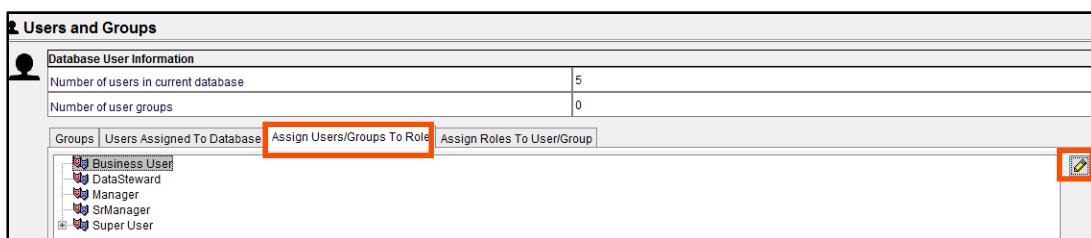


48. Click the **Assign Users/Groups to Role** tab.

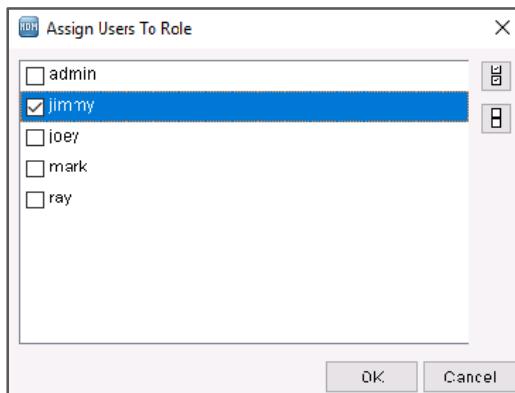
49. Click **Write Lock(W)** > **Acquire Exclusive Lock**.



50. Select **Business Users** and click the **Edit icon**.



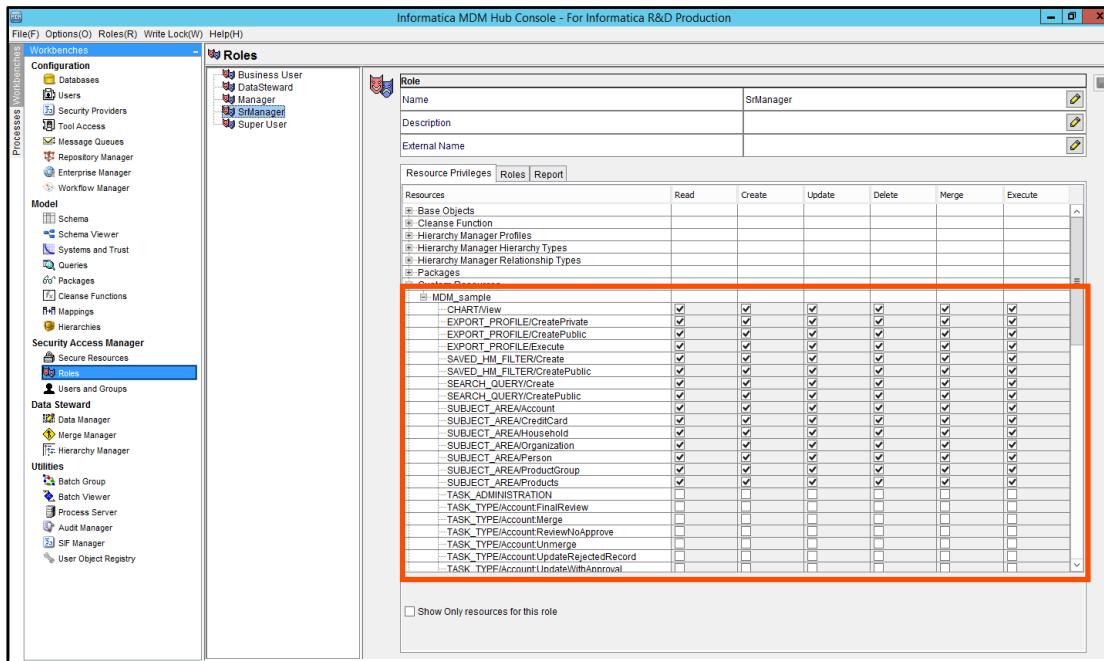
51. Select **jimmy** and click **OK**.



52. Similarly, assign roles to the other users as listed in the table below:

User Name	Role
Ray	Data Steward
Mark	Manager
joey	SrManager

53. From the workbench, select **Roles** and set the privileges for the SrManager as shown:



Follow the same steps, and set privileges for Data Steward, Manager, and Business User.

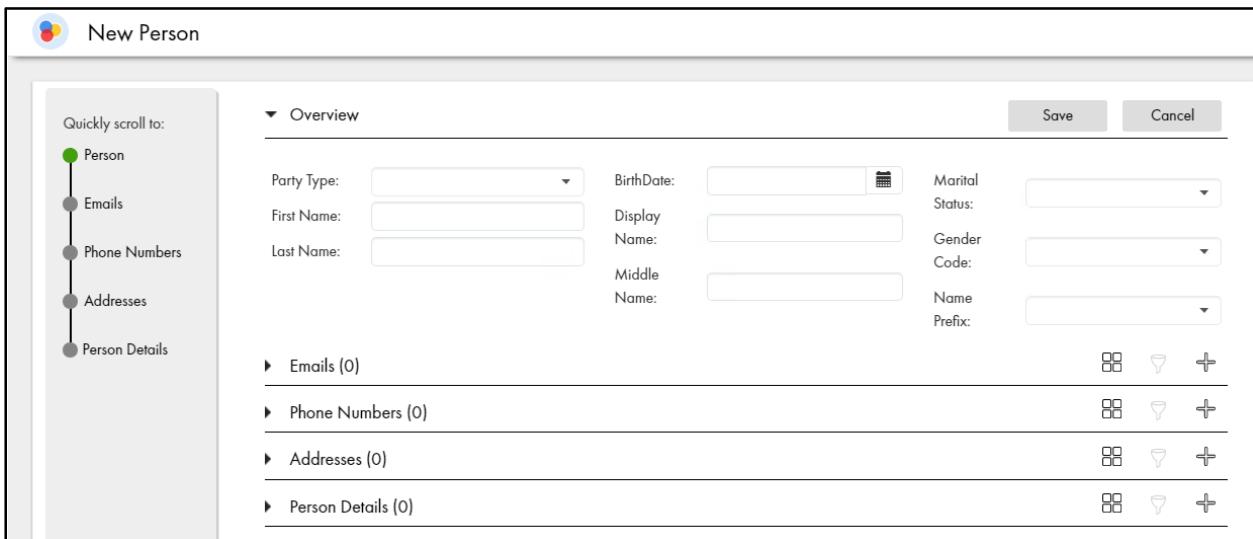
54. Log into the **MDM Data Director** application as **jimmy/mdm**, the business user.

55. If you are prompted to select the application, select **E360\_Training** application.

56. Click **New** and select **Person** to add a new Person business entity.

57. Observe that the layout matches your configuration.

58. Click **Cancel** to close.



59. Repeat the process for the other roles.

### Skill Application:

#### Views for Organization

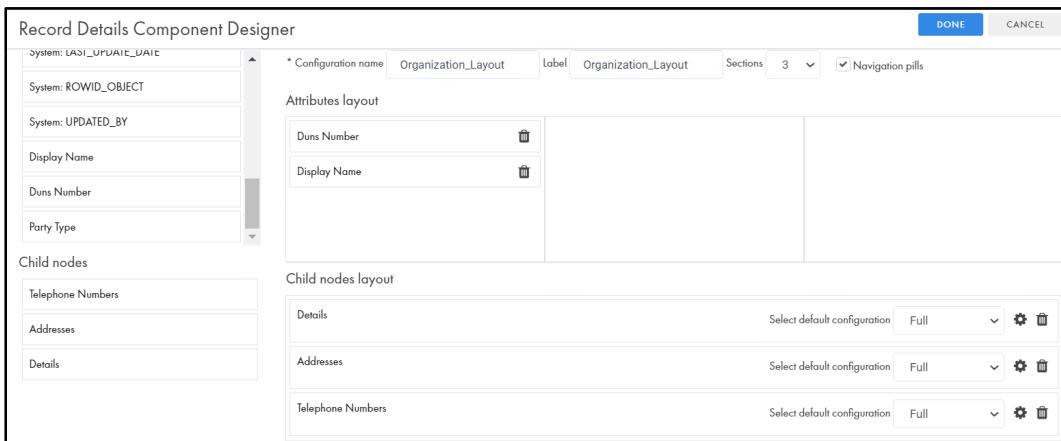
Next, you will create Entity views for DataSteward role.

1. Navigate to the Provisioning tool as **admin/admin**.
2. Select the Database as **E360\_Training**.
3. Click **Configuration > Layout Designer**.
4. In the Layout Designer, click **Create** and select **Record View Layout**.
5. Enter the properties of the layout as listed below:

Property	Value
Layout Type	Record View and Review Task
View Name	Steward_Organization_Layout
Layout ID	This field is auto-filled
Description	New Layout for data stewards while adding an Organization business entity.
Layout Name	This field is auto-filled
List option icon	*
List order	1

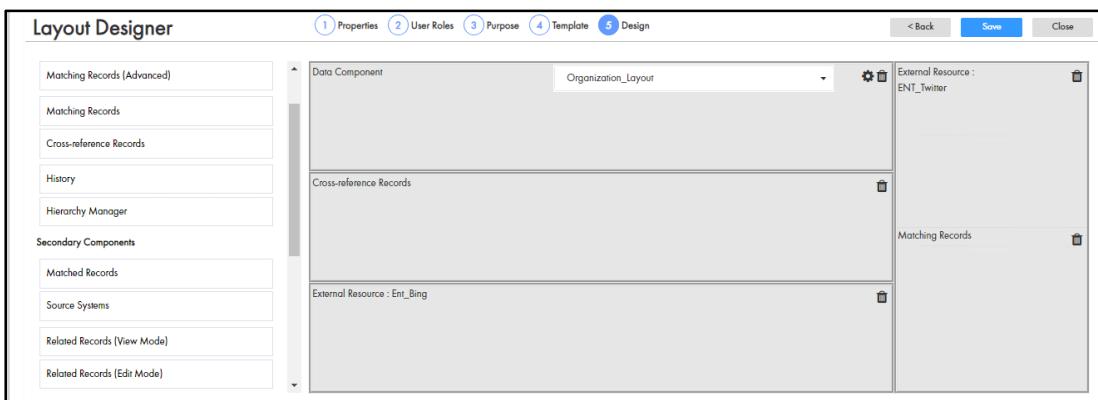
6. Select **Organization** and click **Next**.
7. In the **Select User Roles** page, select the role as **DataSteward** and click **Next**.
8. In the **Define Purpose** page, select all the checkboxes and click **Next**.
9. In the **Select a Template** page, select **Template 3** and click **Next**.
10. Drag and drop the **Record Details** component to the right empty panel.
11. Click the **settings** icon.

12. In the Record Details Component Designer window, enter the **Configuration Name** and **Label** as **Organization\_Layout**.
13. Drag the **DunsNumber** and **displayName** to the Attributes layout.
14. Drag the **Details**, **Addresses**, and **TelephoneNumbers** to Child nodes layout.
15. Click **Done**.



The screenshot shows the 'Record Details Component Designer' window. At the top, there are fields for 'Configuration name' (set to 'Organization\_Layout'), 'Label' (set to 'Organization\_Layout'), 'Sections' (set to 3), and a checked checkbox for 'Navigation pills'. Below this, the 'Attributes layout' section contains two items: 'Duns Number' and 'Display Name'. The 'Child nodes' section contains three items: 'Details', 'Addresses', and 'Telephone Numbers'. Each item in the child nodes section has a 'Select default configuration' dropdown set to 'Full'.

16. Drag and drop the **Cross-reference Records**, **Ent\_Bing**, **Ent\_Twitter**, and **Matching Records** as shown.



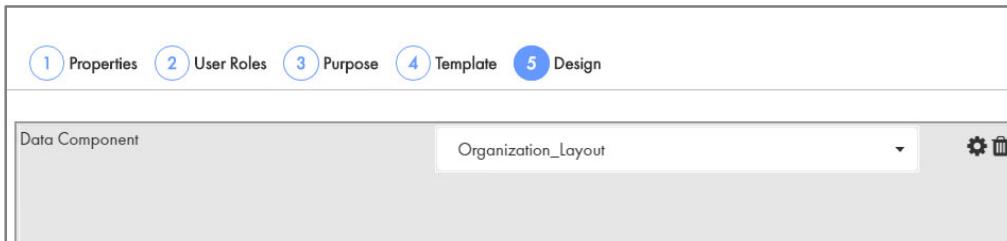
The screenshot shows the 'Layout Designer' window. On the left, there's a sidebar with various components: Matching Records (Advanced), Matching Records, Cross-reference Records, History, Hierarchy Manager, Secondary Components, Matched Records, Source Systems, Related Records (View Mode), and Related Records (Edit Mode). The main area shows a 'Data Component' named 'Organization\_Layout'. Inside this component, there are three sections: 'Cross-reference Records', 'External Resource : ENT\_Twitter', and 'External Resource : Ent\_Bing'. There are also 'Matching Records' and 'Matching Records' sections on the right side of the main area.

17. Click **Save** and then **Close**.
18. Similarly, create the layout for the Manager with the following details.

Property	Value
Layout Type	Record View and Review Task
View Name	Manager_Organization_View
Description	Organization Layout for Managers
List option name	Manager_Organization_View (auto-filled)
List option icon	*
List order	1

19. Select **Organization** and click **Next**.
20. In the **User Roles** page, select the role as **Manager**.
21. In the **Design Purpose** page, select all the options in the **Purpose** step.
22. In **Select a Template** page, select **Template 2** and click **Next**.

23. Drag and drop **Record Details**.



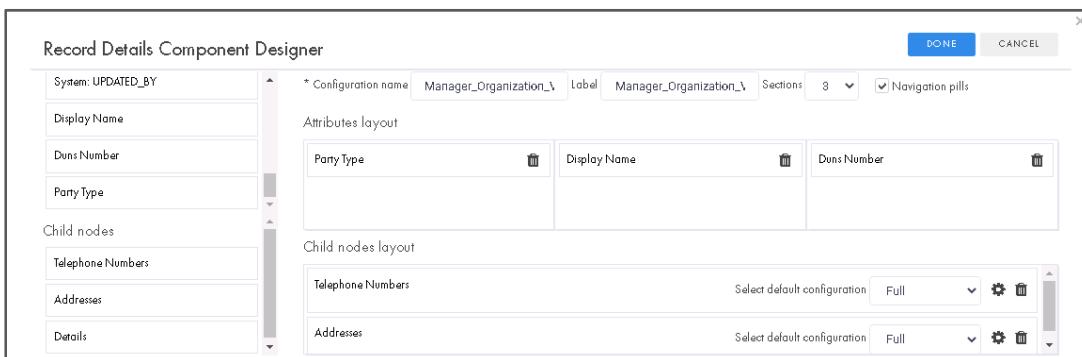
24. In the **Record Details** page, click the **settings** icon to tweak further what columns to show in the layout.

Add the following details for the data component:

25. In the Record Details Component Designer window, enter the **Configuration Name** and **Label** as **Manager\_Organization\_View**.

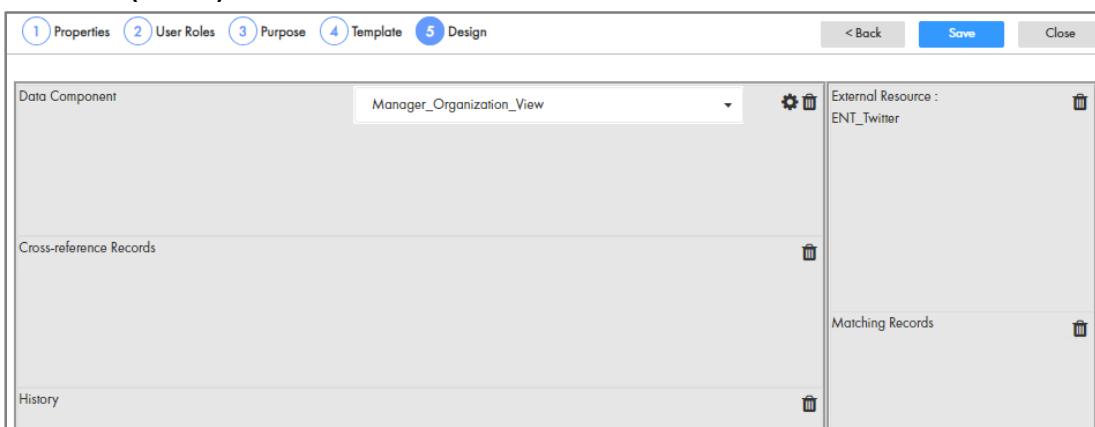
26. Drag **Party Type**, **displayName**, and **dunsNumber** from the **Attributes** in the left-hand side of the screen and add it to the **Attributes Layout**.

27. Drag and drop **TelephoneNumbers** and **Addresses** in the Child node layout.



28. Click **Done**.

29. Drag and drop **Cross-reference Records**, **History**, **Ent\_Twitter**, and **Matching Records (Basic)** as shown.

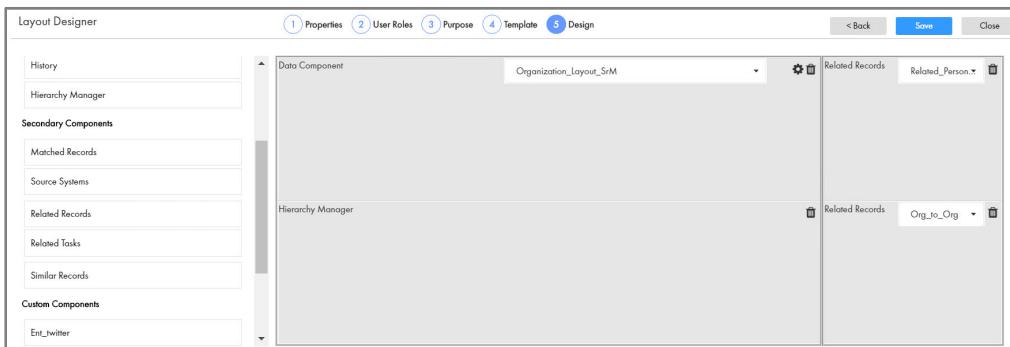


30. Click **Save** and then **Close**.

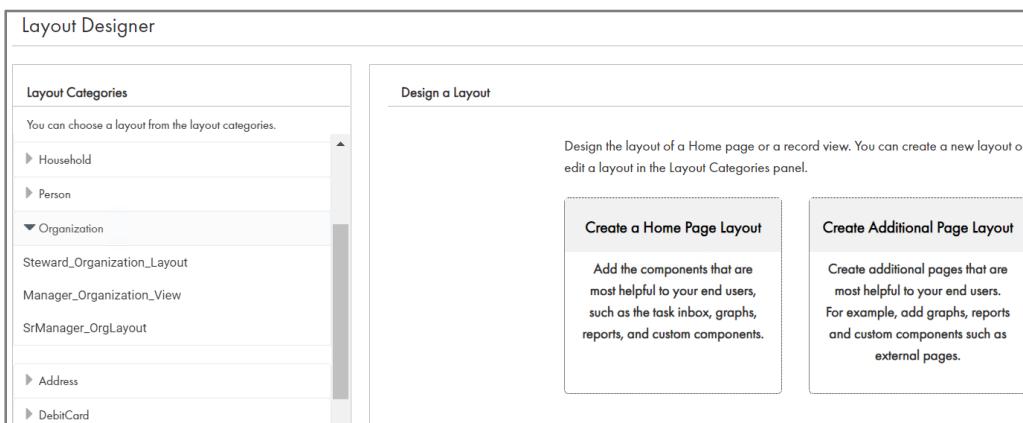
31. Now, create an Organization entity view for the **SrManager** role with the following details:

Property	Value
Layout Name	SrManager_OrgLayout
M_Org_Layout	SRM_OrgLayout
Description	New Layout for SrManagers
List option name	SRM_OrgLayout
List option icon	*
List order	1

32. Select the **Organization** business entity and click **Next**.
33. In the **User Roles** page, select the role as **SrManager** and click **Next**.
34. In the **Purpose** page, select all the options and click **Next**.
35. In **Select a Template** page, select **Template 2** and click **Next**.
36. In the Design page drag and drop **Record Details** to the right panel.
37. Click the Settings icon and enter the Configuration name and label as **Organization\_Layout\_SrM**.
38. Drag and drop **dunsNumber** and **displayName** to Attributes.
39. Drag and drop **Addresses**, **Telephone Numbers**, and **Details** to Child Nodes.
40. Click **Done**.
41. Drag and drop **Hierarchy Manager** and **Related Records** to the right panel as shown.
42. Select **Related\_Person\_BE\_Filter** and **Org\_to\_Org** for the Related Records.



43. Click **Save** and then **Close**.

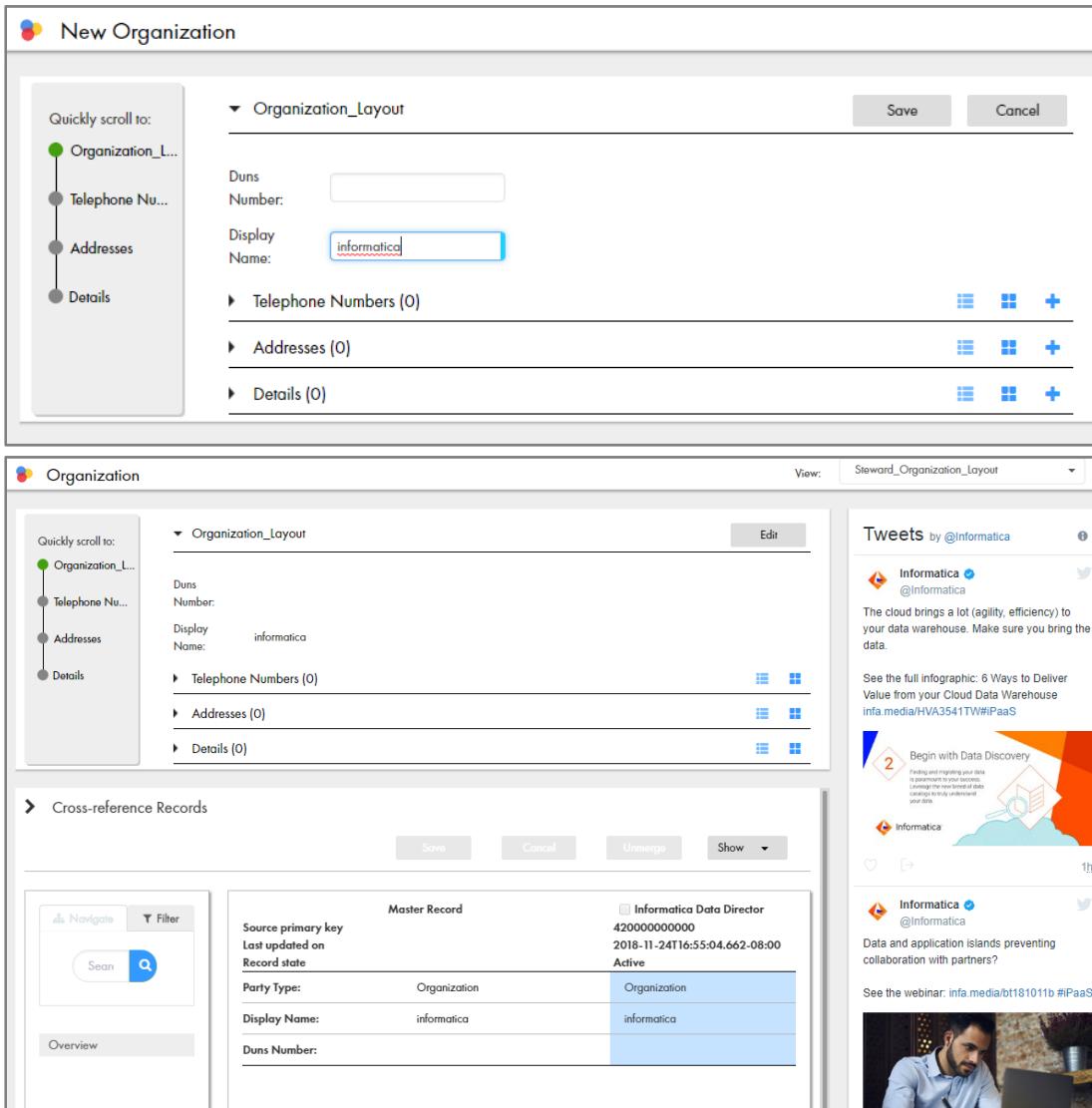


**Note:** The layouts will list under **Organization** as shown in the screenshot.

44. **Publish** your changes to the MDM Hub.

Test the layouts that you have configured so far.

45. Log in to **MDM Data Director** with **E360\_training** application as **ray/mdm**, the Data Steward.
46. From the **New** menu, click **Organization**.
47. Enter the Display Name as **Informatica** and click **Save**.



The screenshot shows two main windows from the MDM Data Director application.

**New Organization Window:**

- Title Bar:** New Organization
- Left Panel:** Quickly scroll to: Organization\_L..., Telephone Nu..., Addresses, Details.
- Form Fields:**
  - Duns Number: (empty)
  - Display Name: informatica (highlighted in blue)
  - Buttons: Save, Cancel
- Section Headers:** Telephone Numbers (0), Addresses (0), Details (0) each with a grid icon and a plus sign.

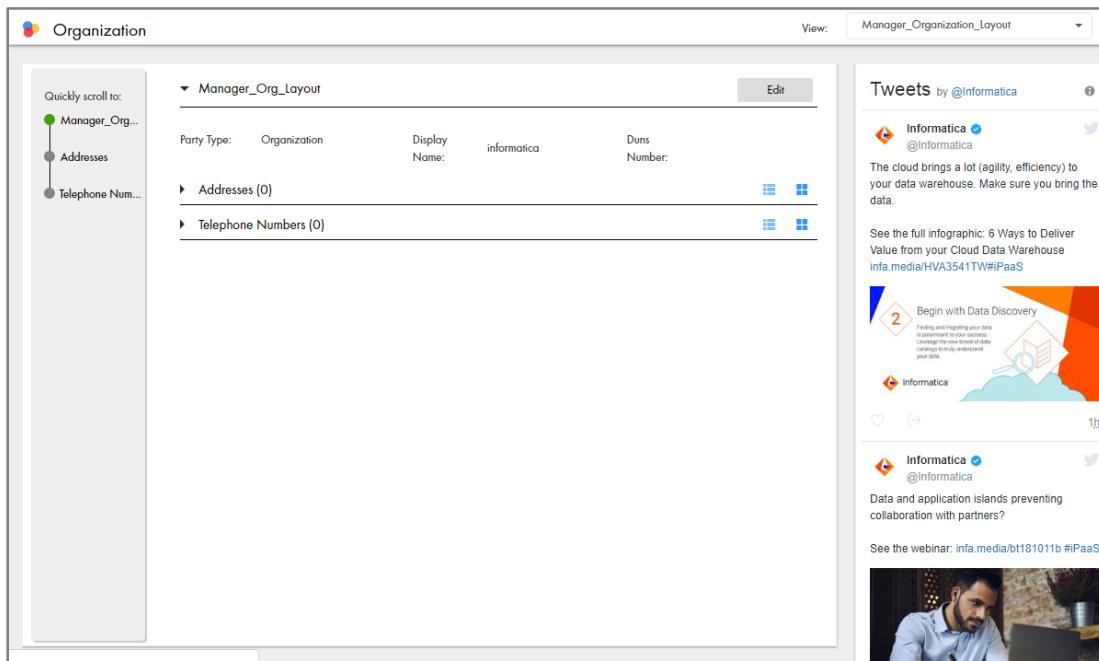
**Organization Record Window:**

- Title Bar:** Organization
- Left Panel:** Quickly scroll to: Organization\_L..., Telephone Nu..., Addresses, Details.
- Form Fields:**
  - Duns Number: (empty)
  - Display Name: informatica
  - Buttons: Edit, Save, Cancel, Unassign, Show
  - Section Headers: Telephone Numbers (0), Addresses (0), Details (0) each with a grid icon and a plus sign.
- Cross-reference Records:** A table showing a single master record with the following details:
 

Master Record		Source primary key	Informatica Data Director
Last updated on	2018-11-24T16:55:04.662-08:00	420000000000	Active
Party Type:	Organization	Organization	
Display Name:	informatica	informatica	
Duns Number:			
- Right Panel:** Tweets by @Informatica
  - Informatica (@Informatica) The cloud brings a lot (agility, efficiency) to your data warehouse. Make sure you bring the data.
  - See the full infographic: 6 Ways to Deliver Value from your Cloud Data Warehouse [infa.media/HVA3541TW#iPaaS](#)
  - Begin with Data Discovery 
- Bottom Right:** A small image of a man in a blue shirt.

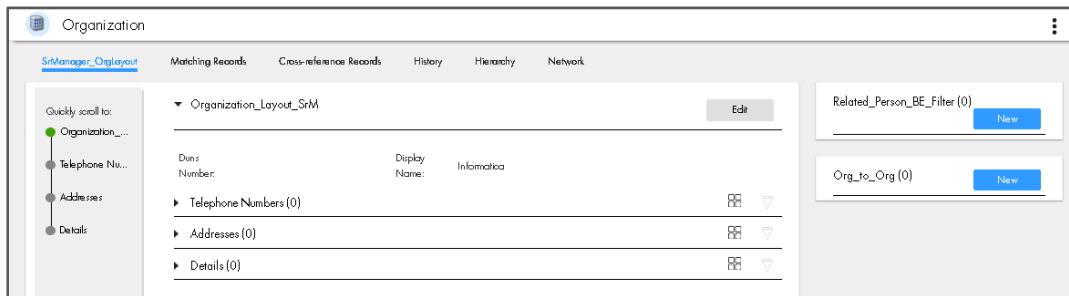
48. Log out as ray and log back in as **mark/mdm**, the manager.
49. From the **New** menu, click **Organization**.
50. In the **Display Name** field enter **Informatica** and click **Save**.

51. Observe the difference in the Entity View layout.



52. Log out as mark and log in as **joey/mdi**, the SrManager.

53. In the **Display Name** field, type **Informatica** and click **Save**.



Observe the difference in the Entity View layout.

*This concludes the lab.*

# Module 3: Customize MDM Data Director Application User Interface

## Lab 3-3: Customize MDM Data Director Application Home Pages

### Overview:

In this lab, you will define role-based home pages in the Provisioning Tool and test the home pages in the MDM Data Director UI.

You will create the home pages specific to each role.

### Objectives:

- Define role-based home pages through the Provisioning Tool

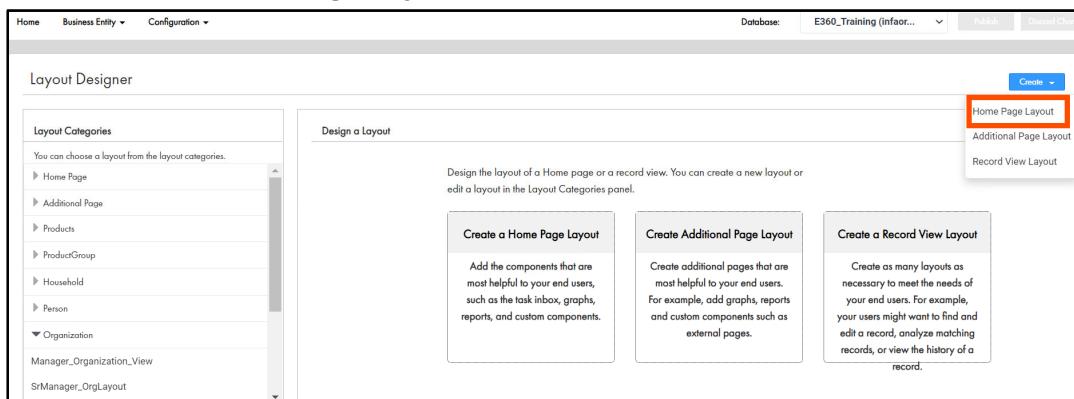
### Duration:

40 minutes

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### Tasks

1. Log into the **Provisioning Tool** and select the **E360\_Training** database.
2. Click **Configuration** menu and select **Layout Designer**.
3. Click **Create > Home Page Layout**.



4. In the **Define Layout Properties** page, specify the following layout properties of the new start page and click **Next**.

Property	Value
View Name	Steward_Home
Layout ID	This field gets auto-filled
Description	For data stewards.
Layout Name	This field gets auto-filled

### Define Layout Properties

Specify a unique name and label for the layout.

View Name:*	<input type="text" value="Steward_Home"/>
Layout ID:*	<input type="text" value="Steward_Home"/>
Description:	<input type="text" value="For data stewards."/>   
Layout Name:*	<input type="text" value="Steward_Home"/>

5. Select the user role as **DataSteward** and click **Next**.

Layout Designer

① Properties   ② User Roles   ③ Template   ④ Design

Select User Roles

Select the user roles that can access the Home page.

<input type="checkbox"/> Anyone	<input type="checkbox"/> Super User	<input type="checkbox"/> Manager
<input checked="" type="checkbox"/> DataSteward	<input type="checkbox"/> SrManager	<input type="checkbox"/> BusinessUser

6. Select **Template 2** and click **Next**.

Layout Designer

① Properties   ② User Roles   ③ Template   ④ Design

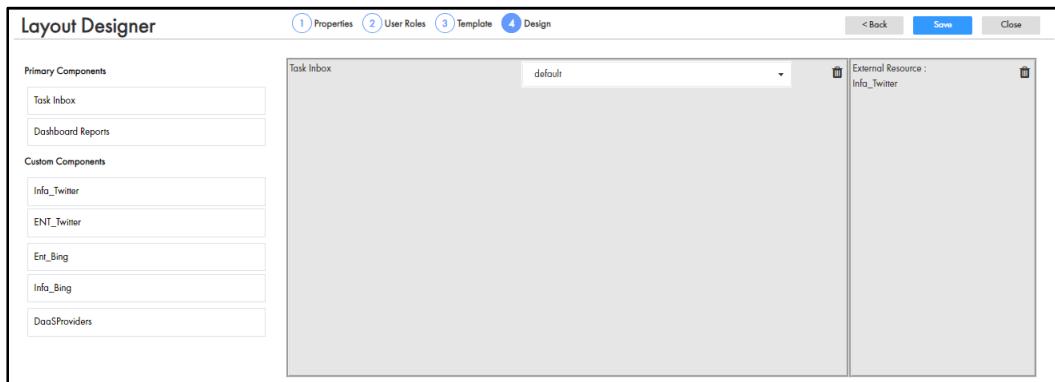
Select a Template

Select a template that supports how end users will interact with the Home page.

Tip: You can add more than one component per panel in the template.

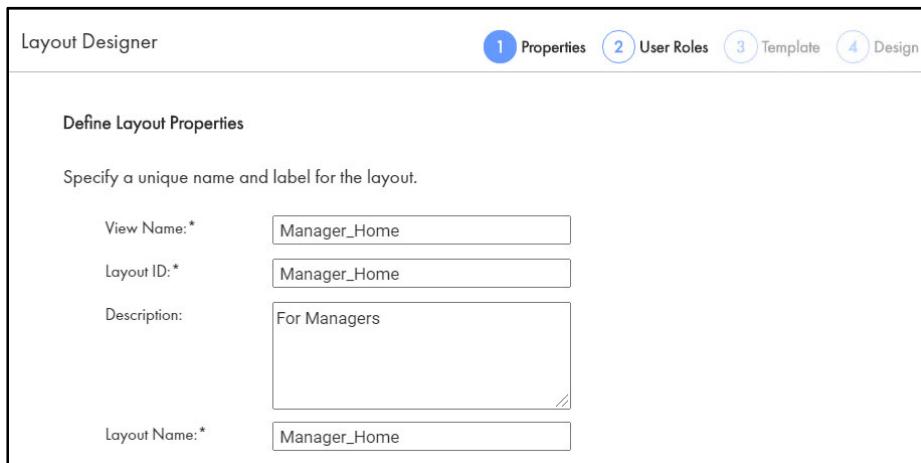
<input type="radio"/> Template 1	<input checked="" type="radio"/> Template 2	<input type="radio"/> Template 3
<input type="radio"/> Template 5	<input type="radio"/> Template 6	<input type="radio"/> Template 7

7. Drag and drop **Task Inbox** and **Info\_Twitter** components as shown below and click **Save**.



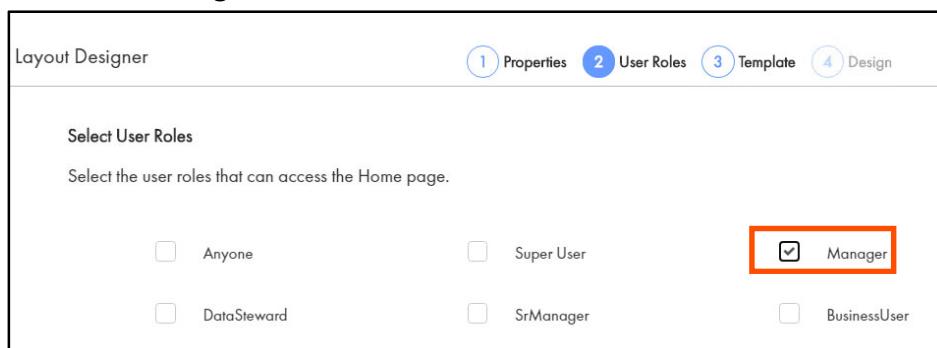
8. Similarly, create another Home Page Layout for **Managers**.

Property	Value
View Name	Manager_Home
Layout ID	This field gets auto-filled
Description	For managers
Layout Name	This field gets auto-filled

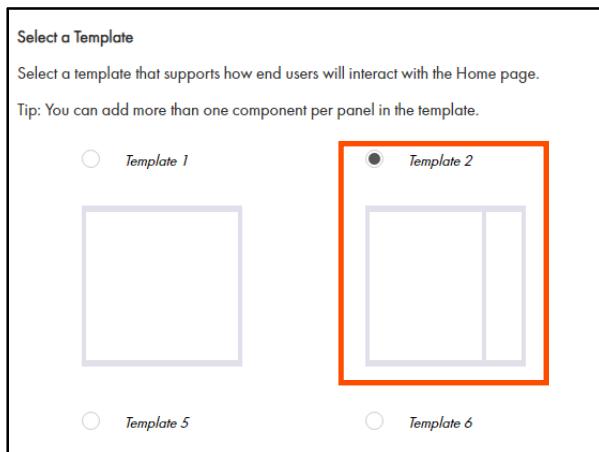


9. Click **Next**.

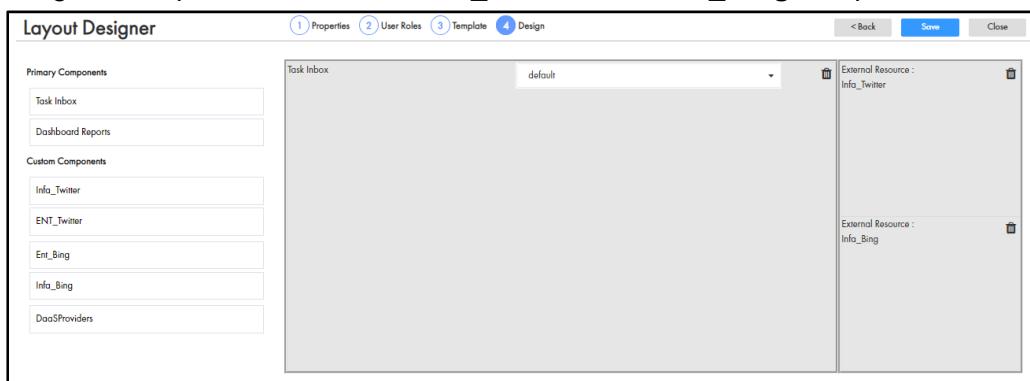
10. Select the **Manager** as a user role and click **Next**.



11. Select **Template 2** and click **Next**.



12. Drag and drop the **Task Inbox**, **Info\_Twitter**, and **Info\_Bing** components as shown.



13. Click **Save** and then **Close**.

14. Add a Home Page Layout for **SrManagers**.

Property	Value
View Name	SrManager_Home
Layout ID	This field gets auto-filled
Description	For Senior Managers
Layout Name	This field gets auto-filled

Layout Designer

1 Properties 2

### Define Layout Properties

Specify a unique name and label for the layout.

View Name:*	SrManager_Home
Layout ID:*	SrManager_Home
Description:	For Senior Managers
Layout Name:*	SrManager_Home

15. Click **Next**.

16. Select the user role as **SrManager** and click **Next**.

Layout Designer

1 Properties 2 User Roles 3 Template 4 Design

### Select User Roles

Select the user roles that can access the Home page.

<input type="checkbox"/> Anyone	<input type="checkbox"/> Super User	<input type="checkbox"/> Manager
<input type="checkbox"/> DataSteward	<input checked="" type="checkbox"/> SrManager	<input type="checkbox"/> BusinessUser

17. Select **Template 2** and click **Next**.

18. Drag and drop the **Task Inbox**, **Infa\_Bing**, and **Infa\_Twitter** components.

Layout Designer

1 Properties 2 User Roles 3 Template 4 Design

< Back Save Close

Primary Components	Task Inbox	default	External Resource : Infa_Twitter
	Dashboard Reports		
Custom Components	Infa_Twitter	External Resource : Infa_Bing	
	ENT_Twitter		
	Ent_Bing		

19. Click **Save** and then **Close**.

20. **Publish** the changes.

21. Log in to **MDM Data Director** with **E360\_training** application as the Data Steward (**ray/mdm**), to check the home page and to create a Person record.

22. Observe that the positions of the fields are as per the configuration.

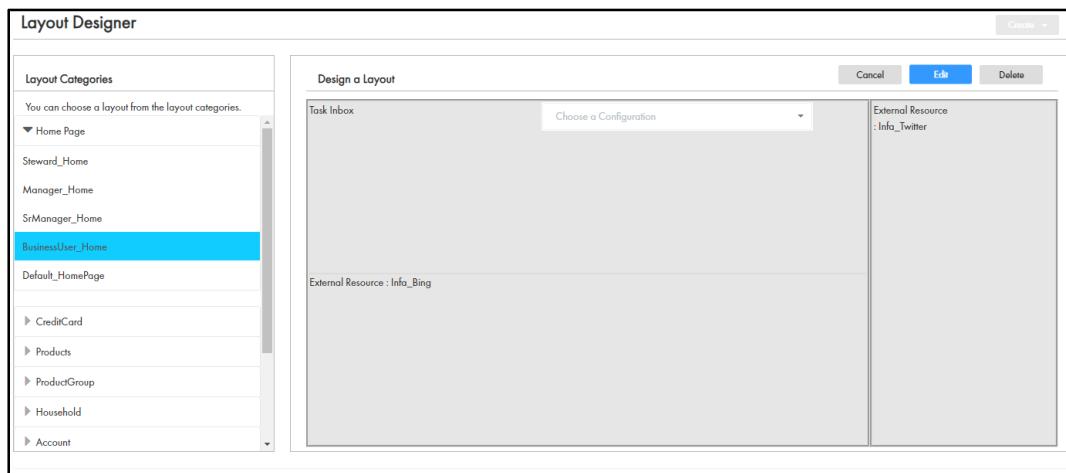
23. Repeat the same for the Manager (**mark/mdm**) and SrManager (**joey/mdm**) and observe the home page.

### Skill Application:

1. Create a home page layout for Business User with the following details:

Property	Value
View Name	BusinessUser_Home
Layout ID	This field gets auto-filled
Description	For Business Users
Layout Name	This field gets auto-filled

2. Select **Template 2**.
3. Have the **Task Inbox**, **Infa\_Bing**, and **Infa\_Twitter** in the layout as shown below.



4. **Save and Publish** the changes.
5. Log into **MDM Data Director** and check the home page.
6. Create a Person record.
7. Observe that the positions of the fields are as per the configuration.

*This concludes the lab.*

# Module 3: Customize MDM Data Director Application User Interface

## Lab 3-4: Define Related Records

### Overview

The layouts can show additional information through secondary components such as related records, similar records, charts, and so on. You will define a secondary component for the related records which contribute to the hierarchies.

### Objectives:

- Edit entity layout to include related records component
- Bind two records with a relationship

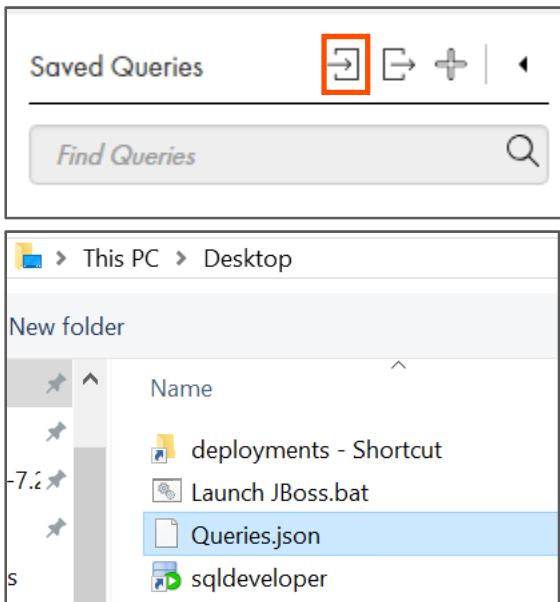
### Duration:

20 minutes

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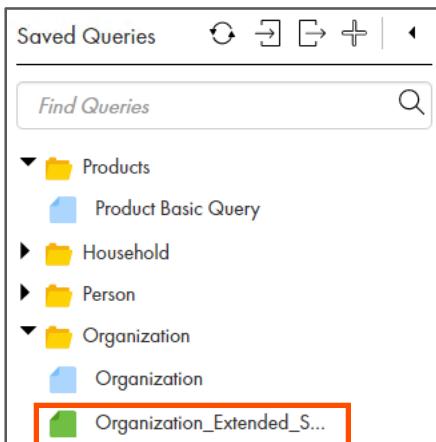
### Tasks

1. Log in to the **MDM Data Director** application as **joey/mdm**, the Senior Manager.
2. You will be prompted to select an application, select **E360\_training**.  
**Note:** If you have used this recently, it will connect you to the E360\_Training database. You can view it at the top left-hand side of the page.
3. From the **Queries** tab, click the **Import** icon and import the **Queries.json** file from the Desktop.



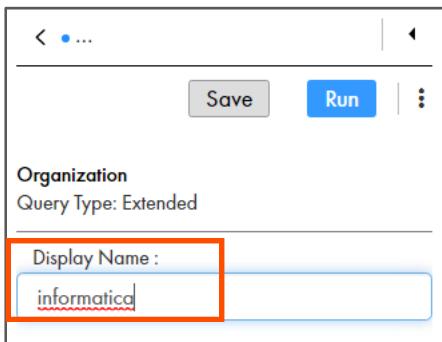
**Note:** Remember that you have exported the queries created in the E360\_Complete application.

4. Expand **Organization** and select **Organization\_Extended\_Search** query.



The screenshot shows the 'Saved Queries' interface. On the left, there's a tree view of saved queries categorized by product: Products (Product Basic Query), Household, Person, and Organization. Under Organization, there are two entries: 'Organization' and 'Organization\_Extended\_S...'. The 'Organization\_Extended\_S...' entry is highlighted with a red box.

5. Search for **informatica** by entering the search string and click **Run**.



The screenshot shows the 'Organization' query editor. It has a 'Save' button, a 'Run' button, and a 'More' button. Below these are sections for 'Organization' and 'Query Type: Extended'. A 'Display Name :' field contains the value 'informatica', which is highlighted with a red box.

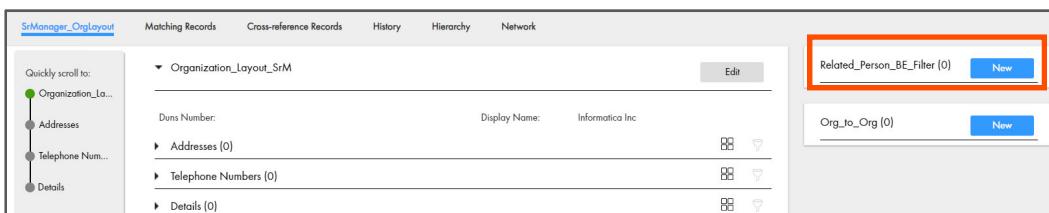
6. Double-click one of the results.



The screenshot shows the search results for 'Organization\_Extended\_Search'. The results table has columns: Match Score, Party Type, Duns Number, and Display Name. There are four rows, all of which are highlighted with a red box. The first row corresponds to the 'informatica' entry from the previous step.

Match Score	Party Type	Duns Number	Display Name
100	Organization		Informatica Inc
100	Organization		Informatica Corp
100	Organization		Informatica
100	Organization		Informatica LLC

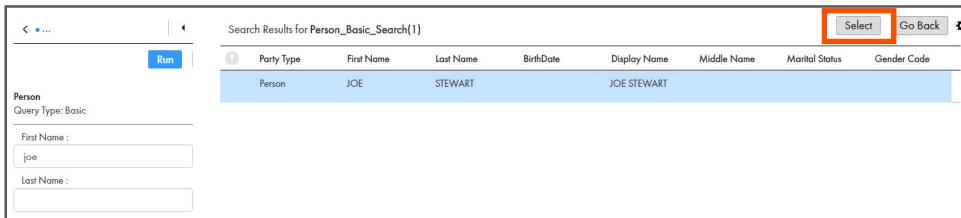
7. From **Related\_Person\_BE\_Filter**, click **New**.



The screenshot shows the 'Related\_Person\_BE\_Filter' interface. It has tabs for 'Matching Records', 'Cross-reference Records', 'History', 'Hierarchy', and 'Network'. On the left, there's a sidebar with 'Quickly scroll to:' and links for 'Organization\_Layout\_SrM', 'Addresses', 'Telephone Numbers', and 'Details'. In the main area, there's a table with columns: Duns Number, Display Name, and several edit icons. To the right, there are two buttons: 'Related\_Person\_BE\_Filter (0)' and 'New', with the 'New' button highlighted with a red box.

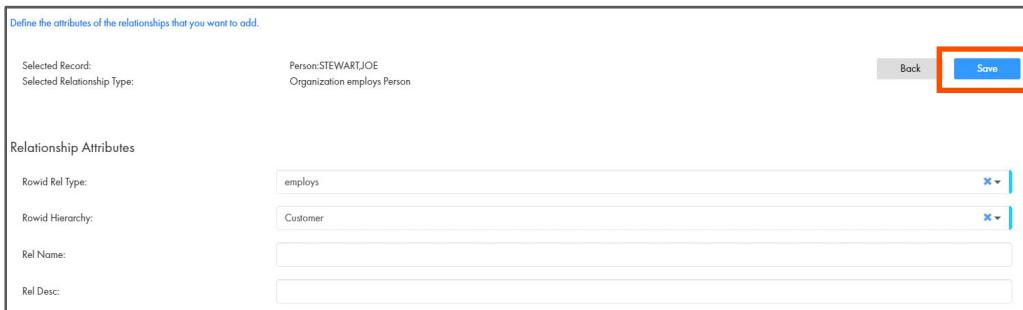
8. Select **Person\_Basic\_Search** and search for **joe**.

9. Select a record and click **Select**.



Party Type	First Name	Last Name	BirthDate	Display Name	Middle Name	Marital Status	Gender Code
Person	JOE	STEWART		JOE STEWART			

10. In the Step 2 page, click **Save**.



Define the attributes of the relationships that you want to add.

Selected Record: Person:STEWART,JOE  
Selected Relationship Type: Organization employs Person

Relationship Attributes

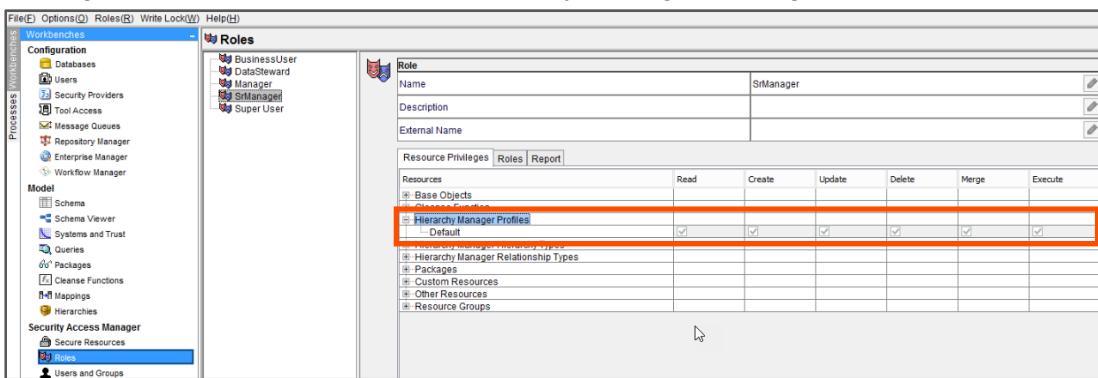
Rowid Rel Type: employs

Rowid Hierarchy: Customer

Rel Name:

Rel Desc:

**Note:** If you see an error and are not allowed to proceed to the next step due to role privileges, make sure the required Hierarchy Manager privileges are set for the role:



Workbenches - Roles

Role

Name: SrManager

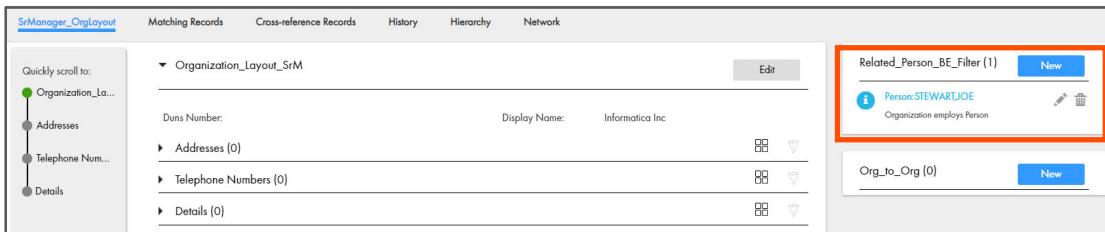
Description:

External Name:

Resource Privileges

Resources	Read	Create	Update	Delete	Merge	Execute
Hierarchy Manager Profiles	✓	✓	✓	✓	✓	✓
Default	✓	✓	✓	✓	✓	✓

11. The relationship appears under the **Related\_Person\_BE\_Filter**.



SrManager\_OrgLayout Matching Records Cross-reference Records History Hierarchy Network

Organization\_Layout\_SrM

Duns Number: Display Name: Informatica Inc

Addresses (0)

Telephone Numbers (0)

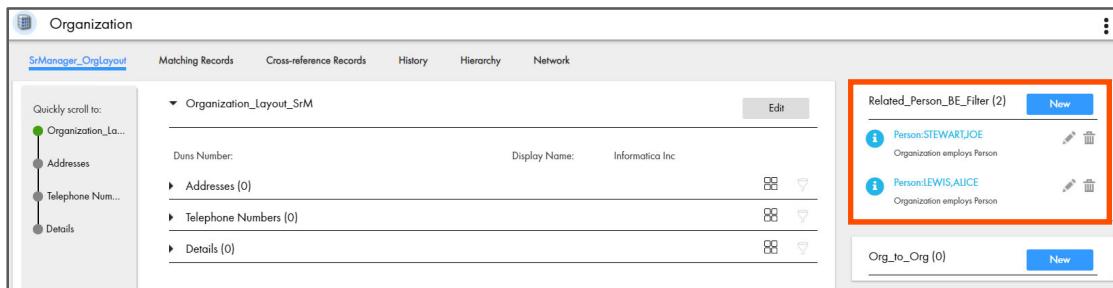
Details (0)

Related\_Person\_BE\_Filter (1)

Person:STEWART,JOE  
Organization employs Person

Org\_to\_Org (0)

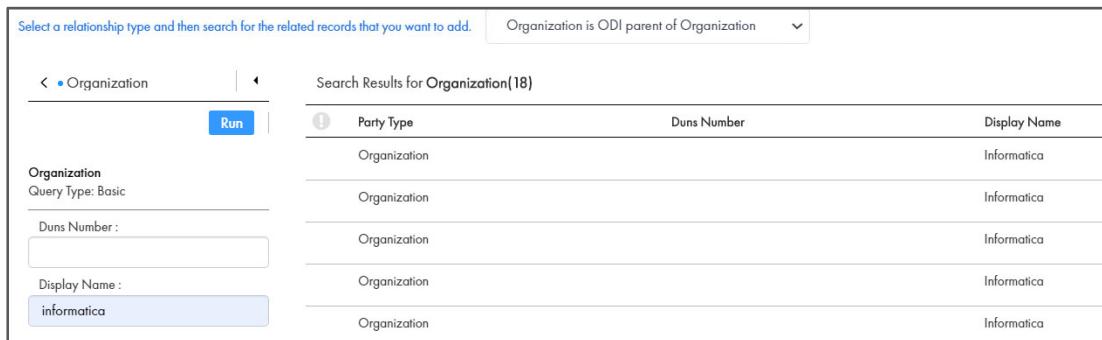
## 12. You can add additional related records.



The screenshot shows the 'Organization' record details. In the 'Related\_Person\_BE\_Filter' section, there are two entries:

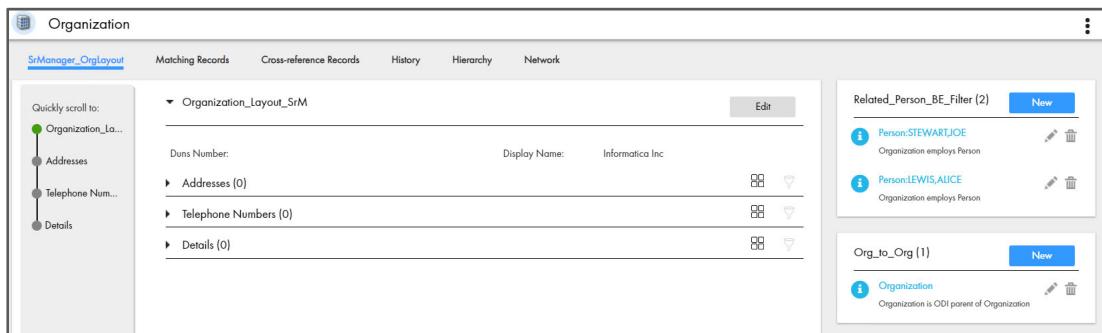
- Person:STEWART,JOE  
Organization employs Person
- Person:LEWIS,AUCE  
Organization employs Person

## 13. Follow the previous steps and add a related record for Organization.



The screenshot shows the search results for 'Organization(18)'. One organization, 'informatica', is selected.

Party Type	Duns Number	Display Name
Organization		Informatica



The screenshot shows the 'Organization' record details after adding a new related record. The 'Related\_Person\_BE\_Filter' section now shows three entries:

- Person:STEWART,JOE  
Organization employs Person
- Person:LEWIS,AUCE  
Organization employs Person
- Organization  
Organization is ODI parent of Organization

---

*This concludes the lab.*

# Module 3: Customize MDM Data Director Application User Interface

## Lab 3-5: Configure Charts

### Overview:

You will now configure charts and add them to the home pages. The home page layout allows you to add graphs specific to the user role.

### Objectives:

- Define charts and sample data
- Add charts to the home pages

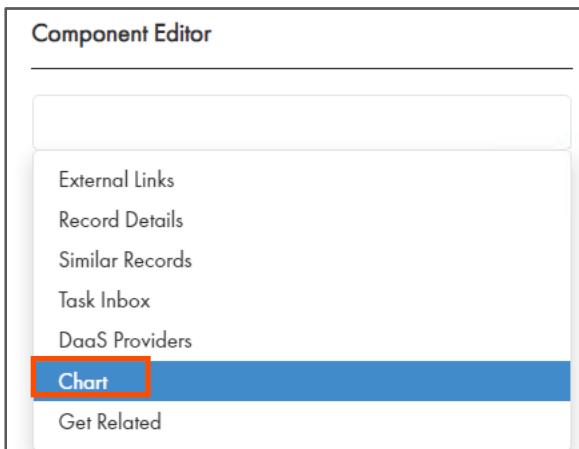
### Duration:

40 minutes

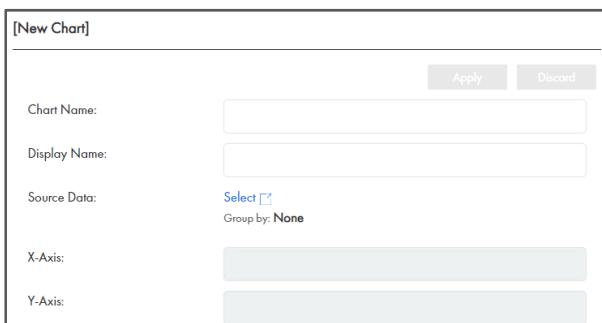
---

### Tasks

1. Log into the **Provisioning Tool** and select the **E360\_Training** database.
2. Click **Configuration > Component Editor**.
3. Select **Chart** and click **Create**.



4. In the New chart, click **Select**.



The screenshot shows the '[New Chart]' configuration dialog box. It has fields for 'Chart Name:' and 'Display Name:', both of which are empty. Under 'Source Data:', there is a 'Select' button with a dropdown arrow and the text 'Group by: None'. Below that are fields for 'X-Axis:' and 'Y-Axis:', each containing a single-line input field.

**Chart Settings**

**Source Data**      Chart Editor

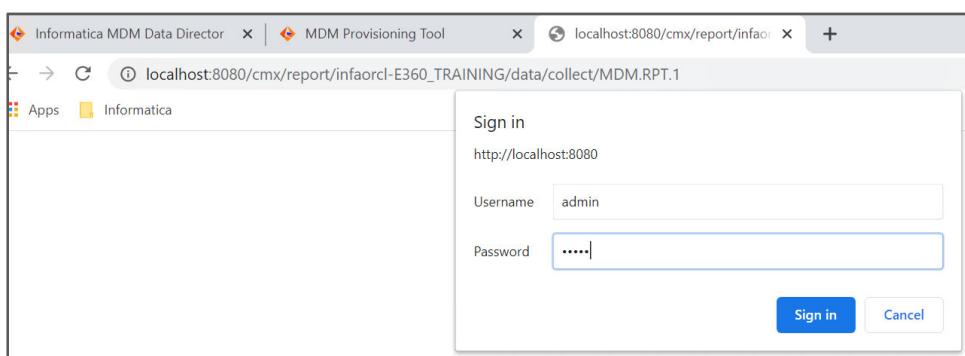
Select source data for the chart, and then filter or group the data to select the data that you want to use.

Source Data: **Select**      X-Axis: **Select**

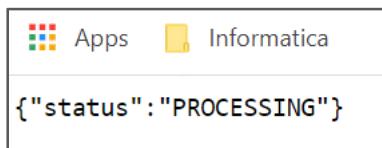
**Select**

Notice that we do not have the necessary source data to define charts.

5. Open a new tab and in the address bar, type the following:  
[http://localhost:8080/cmx/report/infaorcl-E360\\_TRAINING/data/collect/MDM.RPT.1](http://localhost:8080/cmx/report/infaorcl-E360_TRAINING/data/collect/MDM.RPT.1)
6. Sign in as **admin/admin**.



Notice that the status shows **PROCESSING**.



```
{"status": "PROCESSING"}
```

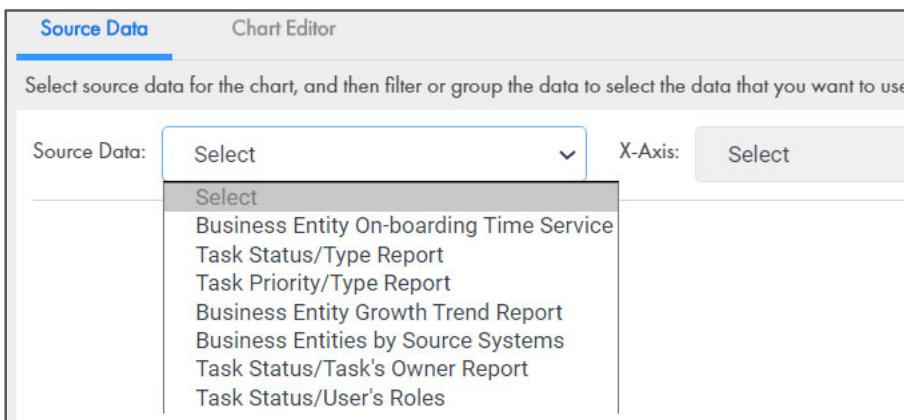
7. Towards the end of the URL, replace 1 with 2 and hit enter again.



**Note:** Repeat this for 2,4,5,6,7,8, and 10. Note that **3** and **9** do not exist currently.

8. Log out of the provisioning tool and log back in as **admin**. Connect to the **E360\_Training** application.
9. Click **Configuration > Component Editor**.
10. From the list select **Chart** and click **Create**.

11. Click the **Source Data** drop down.



The screenshot shows a dropdown menu titled "Source Data" with the option "Select" highlighted. Below it is a list of report options:

- Business Entity On-boarding Time Service
- Task Status/Type Report
- Task Priority/Type Report
- Business Entity Growth Trend Report
- Business Entities by Source Systems
- Task Status/Task's Owner Report
- Task Status/User's Roles

**Note:** Notice that now we have the source data required for the charts.

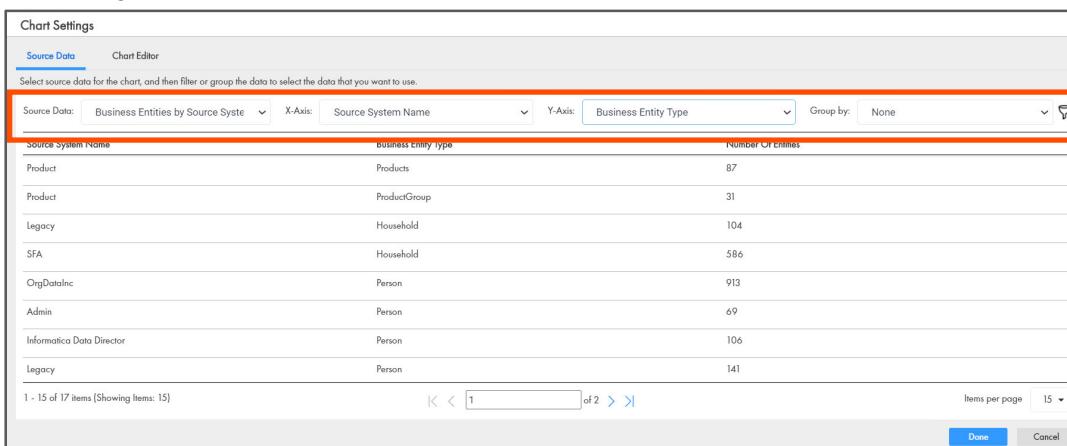
12. Select the following settings:

**Source Data:** Business Entities by Source System

**X-Axis:** Source System Name

**Y-Axis:** Business Entity Type

**Group by:** None

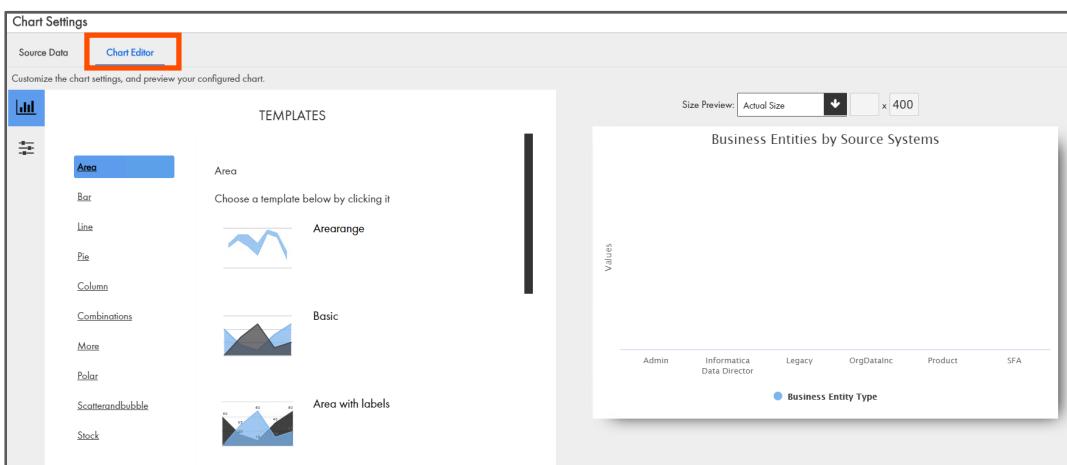


The screenshot shows the "Chart Settings" dialog with the "Source Data" tab selected. The "Source Data" dropdown is set to "Business Entities by Source System". The "X-Axis" dropdown is set to "Source System Name". The "Y-Axis" dropdown is set to "Business Entity Type". The "Group by" dropdown is set to "None". The main area displays a table of data:

Source System Name	Business Entity Type	Number Of Entities
Product	Products	87
Product	ProductGroup	31
Legacy	Household	104
SFA	Household	586
OrgDataInc	Person	913
Admin	Person	69
Informatica Data Director	Person	106
Legacy	Person	141

At the bottom, there are buttons for "Done" and "Cancel".

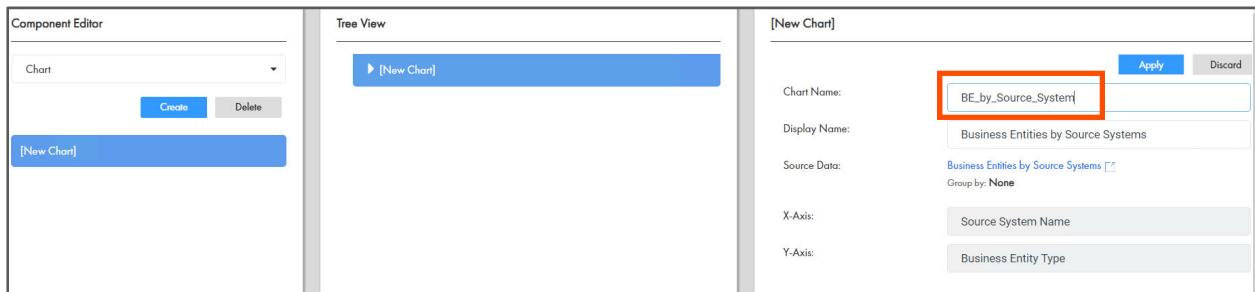
13. Click the **Chart Editor** tab.



The screenshot shows the "Chart Settings" dialog with the "Chart Editor" tab selected. The left sidebar lists chart templates: Area, Bar, Line, Pie, Column, Combinations, More, Polar, ScatterandBubble, and Stock. The "Area" template is selected and highlighted with a red box. The right side shows a preview of the chart titled "Business Entities by Source Systems" with categories Admin, Informatica Data Director, Legacy, OrgDataInc, Product, and SFA. The Y-axis is labeled "Business Entity Type".

14. Click the **Source Data** tab and click **Done**.

15. Enter the name of the chart as **BE\_by\_Source\_System** and click **Apply**.



The screenshot shows the 'Component Editor' interface. On the left, under 'Chart', there is a 'Create' button. In the center, a 'Tree View' pane shows '[New Chart]'. On the right, the '[New Chart]' configuration pane is open. It includes fields for 'Chart Name' (set to 'BE\_by\_Source\_System'), 'Display Name' (set to 'Business Entities by Source Systems'), 'Source Data' (set to 'Business Entities by Source Systems'), 'Group by' (set to 'None'), 'X-Axis' (set to 'Source System Name'), and 'Y-Axis' (set to 'Business Entity Type'). The 'Apply' and 'Discard' buttons are at the top right.

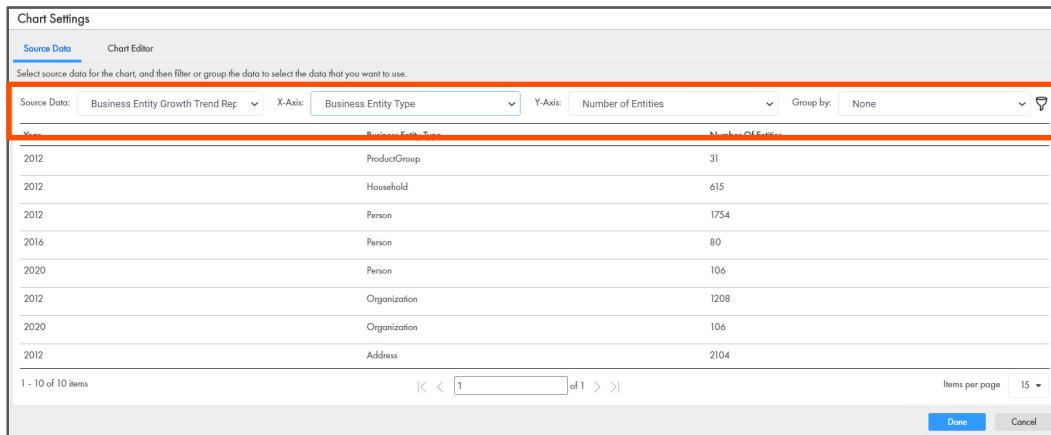
16. Create another chart and select the following values:

**Source Data:** Business Entity Growth Trend Report

**X-Axis:** Business Entity Type

**Y-Axis:** Number of Entities

**Group by:** None



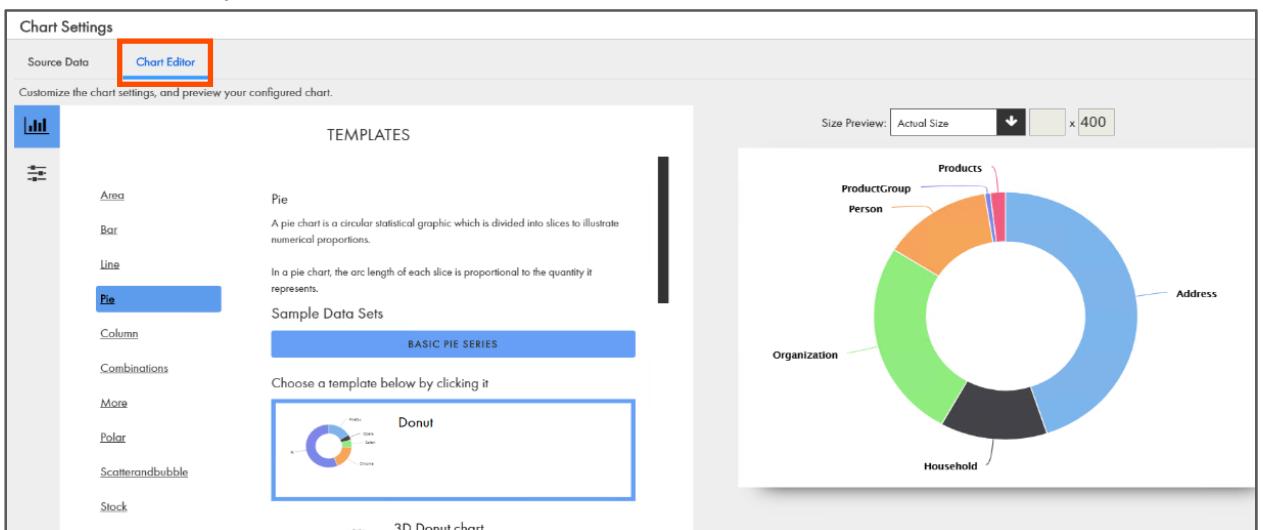
The screenshot shows the 'Chart Settings' dialog. Under the 'Source Data' tab, 'Business Entity Growth Trend Rep' is selected. The 'X-Axis' dropdown is set to 'Business Entity Type'. The main area displays a table of data with columns: Year, Business Entity Type, and Number of Entities. The table contains the following data:

Year	Business Entity Type	Number of Entities
2012	ProductGroup	31
2012	Household	615
2012	Person	1754
2016	Person	80
2020	Person	106
2012	Organization	1208
2020	Organization	106
2012	Address	2104

At the bottom, there are buttons for 'Done' and 'Cancel'.

17. Click **Chart Editor**.

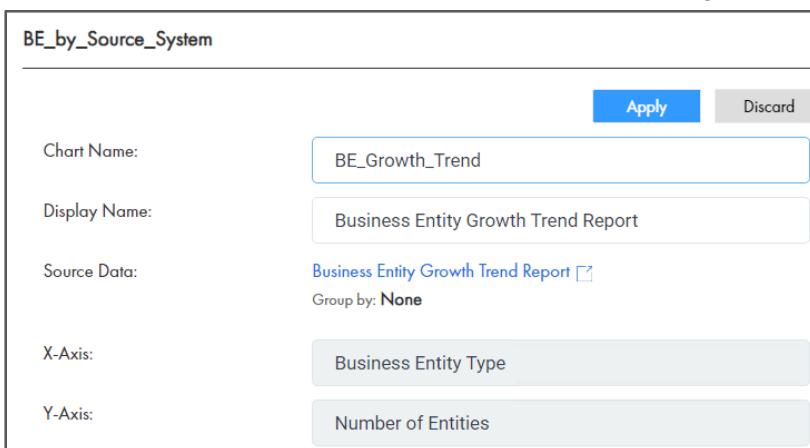
18. Select the chart type as Pie, and in the templates, select Donut.



The screenshot shows the 'Chart Settings' interface. On the left, a sidebar lists chart types: Area, Bar, Line, **Pie**, Column, Combinations, More, Polar, Scatterandbubble, and Stock. The 'Pie' option is selected. In the center, under 'TEMPLATES', the 'Donut' template is highlighted with a blue border. To the right, a preview window displays a 3D Donut chart with segments labeled 'Products', 'Person', 'Organization', 'Household', and 'Address'. A red box highlights the 'Chart Editor' tab at the top of the main panel.

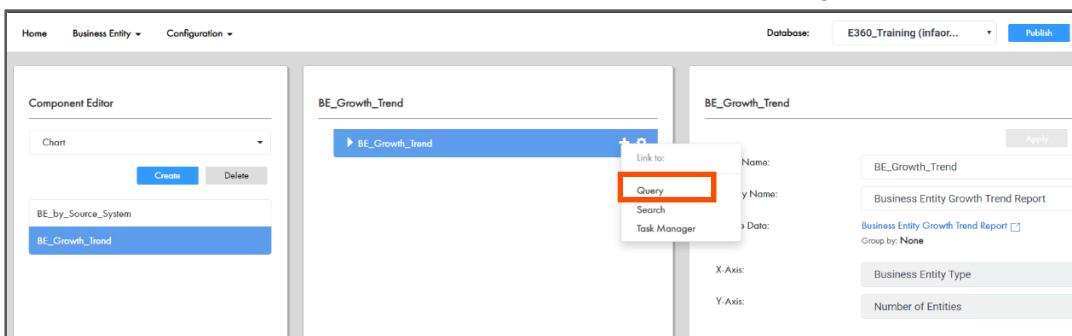
19. Click **Source Data** and click **Done**.

20. Name the chart as **BE\_Growth\_Trend** and click **Apply**.



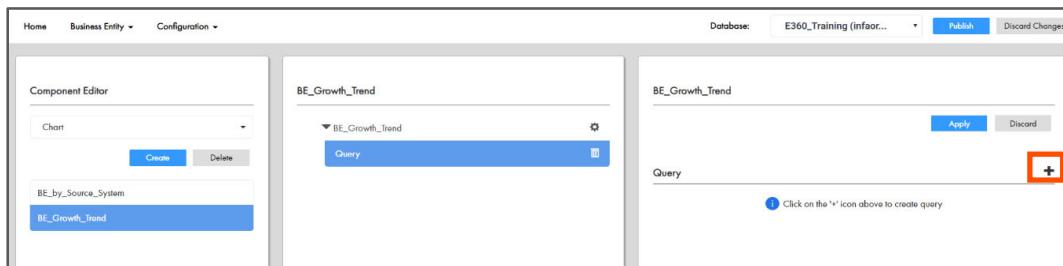
The screenshot shows the 'BE\_by\_Source\_System' configuration dialog. It includes fields for 'Chart Name' (BE\_Growth\_Trend), 'Display Name' (Business Entity Growth Trend Report), 'Source Data' (Business Entity Growth Trend Report), 'Group by' (None), 'X-Axis' (Business Entity Type), and 'Y-Axis' (Number of Entities). At the top right are 'Apply' and 'Discard' buttons.

21. Click the + icon in the **BE\_Growth\_Trend** chart and click **Query**.



The screenshot shows the 'Component Editor' interface. On the left, a list of charts includes 'BE\_by\_Source\_System' and **BE\_Growth\_Trend**. In the center, the 'BE\_Growth\_Trend' chart is selected. A context menu is open over the chart, with the 'Query' option highlighted by a red box. To the right, the chart's configuration panel shows its name as 'BE\_Growth\_Trend', display name as 'Business Entity Growth Trend Report', source data as 'Business Entity Growth Trend Report', group by 'None', X-axis as 'Business Entity Type', and Y-axis as 'Number of Entities'. The 'Database' dropdown at the top right is set to 'E360\_Training (infor...)'.

22. In the right-hand pane, click + icon to create a query.



The screenshot shows the Informatica MDM Data Director application. On the left, the 'Component Editor' pane displays a chart component with 'Create' and 'Delete' buttons. Below it are two business entity components: 'BE\_By\_Source\_System' and 'BE\_Growth\_Trend'. The 'BE\_Growth\_Trend' component is selected and expanded, showing a 'Query' tab. On the right, a 'Query' dialog box is open under the 'BE\_Growth\_Trend' heading. It contains a text input field labeled 'Query' and a red-bordered '+' button. Above the '+' button, a tooltip says 'Click on the '+' icon above to create query'. At the top of the dialog are 'Apply' and 'Discard' buttons.

23. Select the following from the **New Query** page and click **OK**.

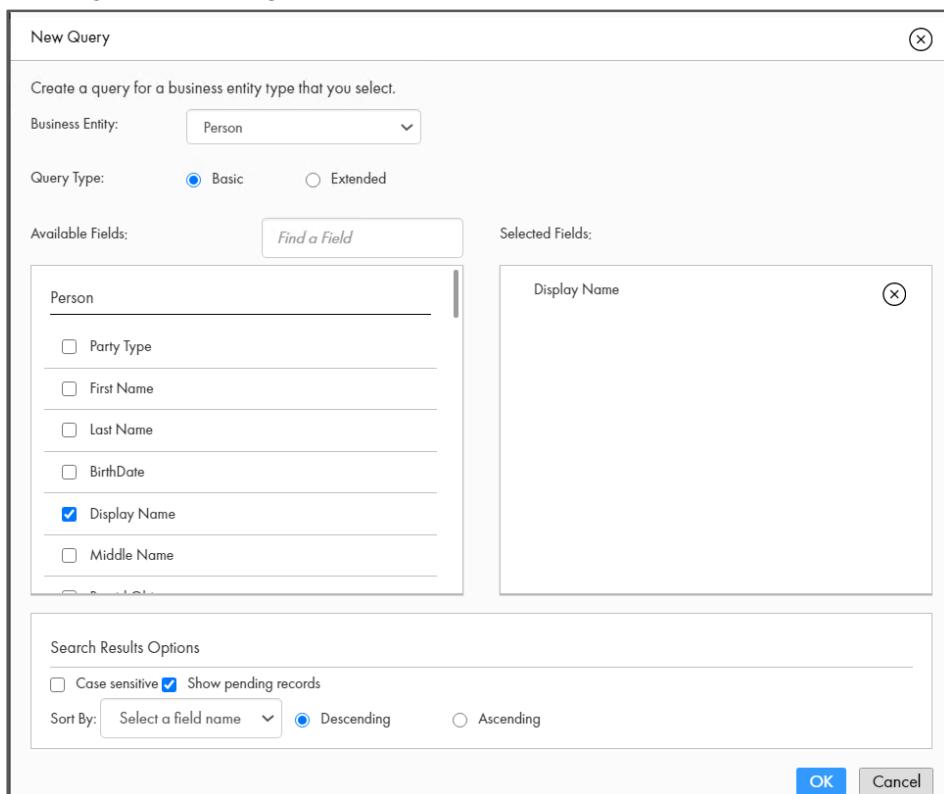
**Business Entity:** Person

**Query Type:** Basic

**Fields:** Display Name

**Search Results Option:** Show pending records (selected by default)

**Sort By:** Descending



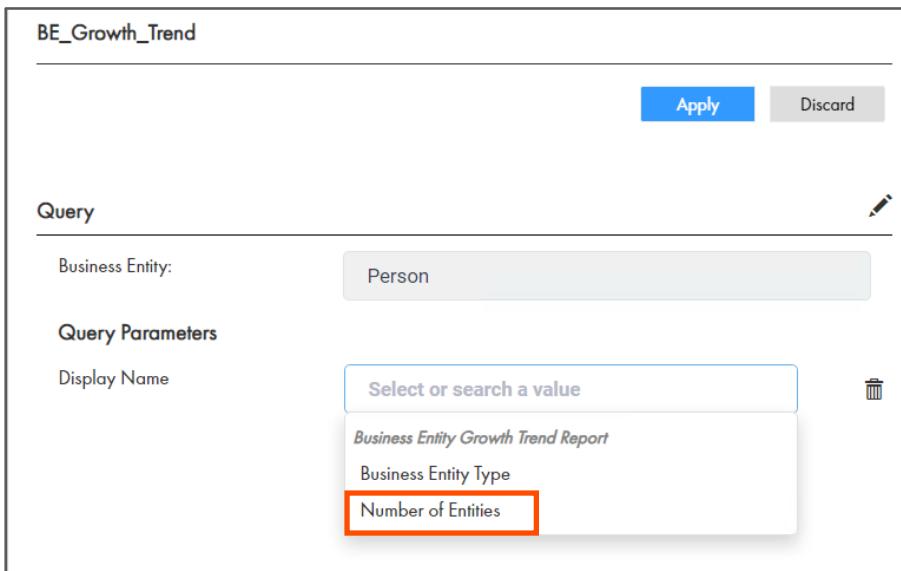
The 'New Query' dialog box has the following configuration:

- Business Entity:** Person
- Query Type:** Basic (radio button selected)
- Available Fields:** Person
  - Party Type
  - First Name
  - Last Name
  - BirthDate
  - Display Name
  - Middle Name
- Selected Fields:** Display Name
- Search Results Options:**
  - Case sensitive  Show pending records
  - Sort By: Select a field name (dropdown) set to 'Display Name'  Descending  Ascending

At the bottom are 'OK' and 'Cancel' buttons.

24. In the **Query Parameters** section, for the **Display Name**, select **Number of Entities**.

25. Click **Apply**.



BE\_Growth\_Trend

Query

Business Entity: Person

Query Parameters

Display Name: Select or search a value

- Business Entity Growth Trend Report
- Business Entity Type
- Number of Entities**

26. To create another chart, click **Chart > Create**.

27. Click **Source Data** drop down.

28. Select the **Source Data as Task Status/Task's Owner Report**.

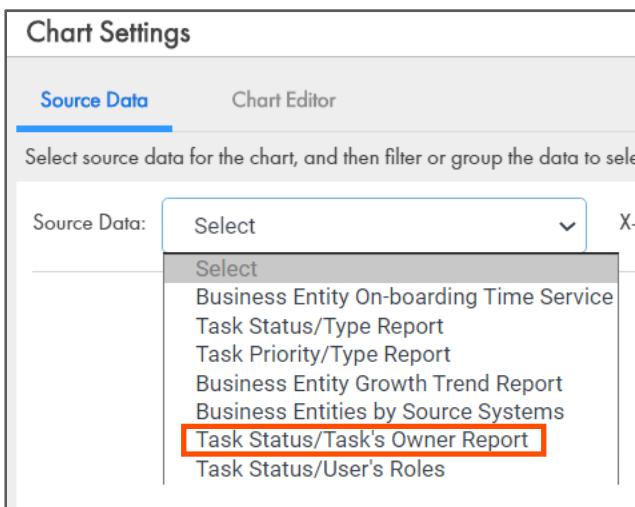


Chart Settings

Source Data Chart Editor

Select source data for the chart, and then filter or group the data to select.

Source Data: Select

- Select
- Business Entity On-boarding Time Service
- Task Status/Type Report
- Task Priority/Type Report
- Business Entity Growth Trend Report
- Business Entities by Source Systems
- Task Status/Task's Owner Report**
- Task Status/User's Roles

29. Select **X-Axis as Task's Owner**.

30. Note that we do not have the data to render the chart currently.

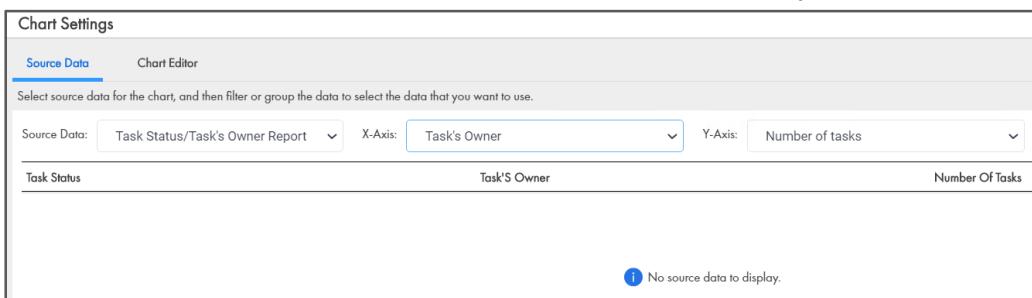


Chart Settings

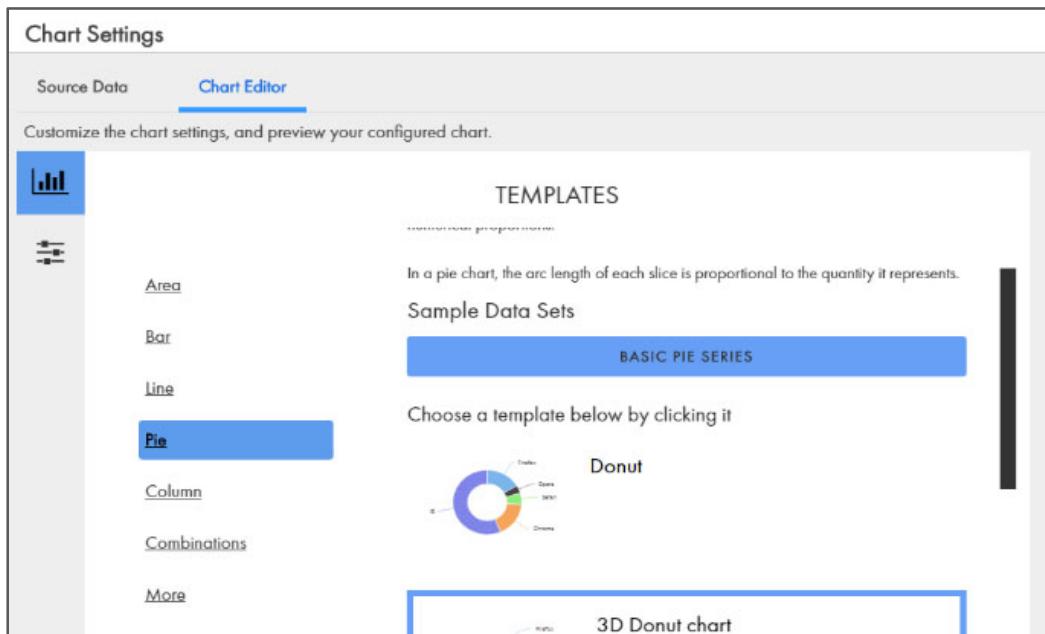
Source Data Chart Editor

Select source data for the chart, and then filter or group the data to select the data that you want to use.

Source Data: Task Status/Task's Owner Report X-Axis: Task's Owner Y-Axis: Number of tasks

Task Status	Task'S Owner	Number Of Tasks
No source data to display.		

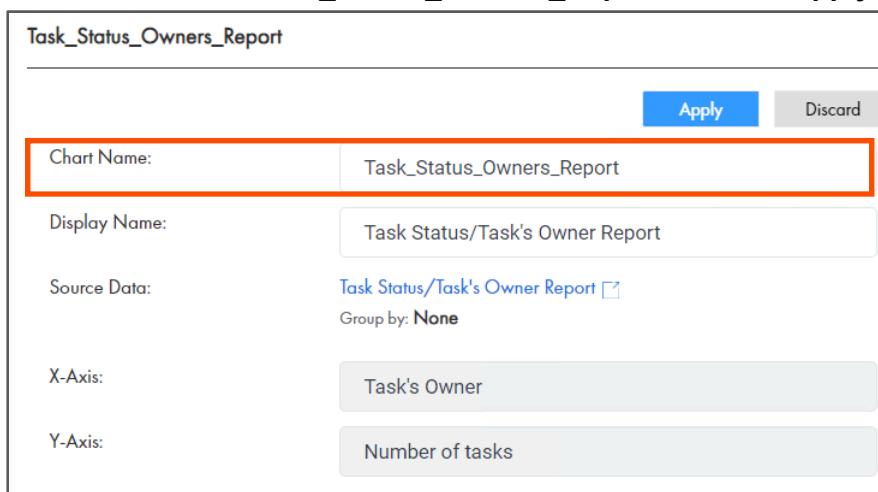
31. Click the **Chart Editor** and select **Pie** chart, and from the Templates, select **Donut**.



The screenshot shows the 'Chart Settings' interface. The 'Source Data' tab is selected. In the 'TEMPLATES' section, the 'Pie' category is highlighted. A 'Basic Pie Series' template is selected, and a preview of a donut chart is shown with four segments labeled 'Total', 'Open', 'Closed', and 'Dormant'. Below the preview, there is a link to '3D Donut chart'.

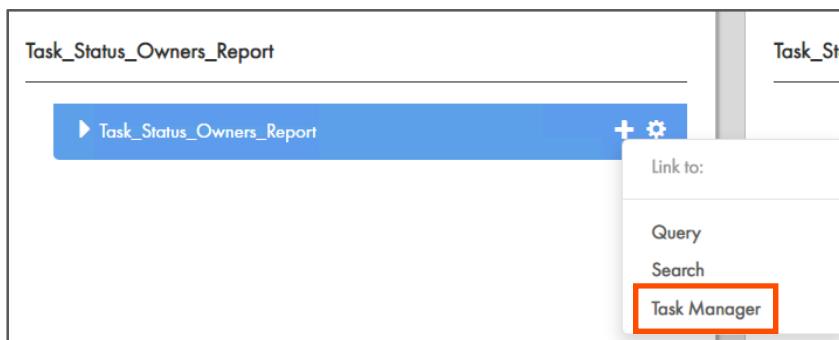
32. Click **Source Data** and click **Done**.

33. Name the chart as **Task\_Status\_Owners\_Report** and click **Apply**.



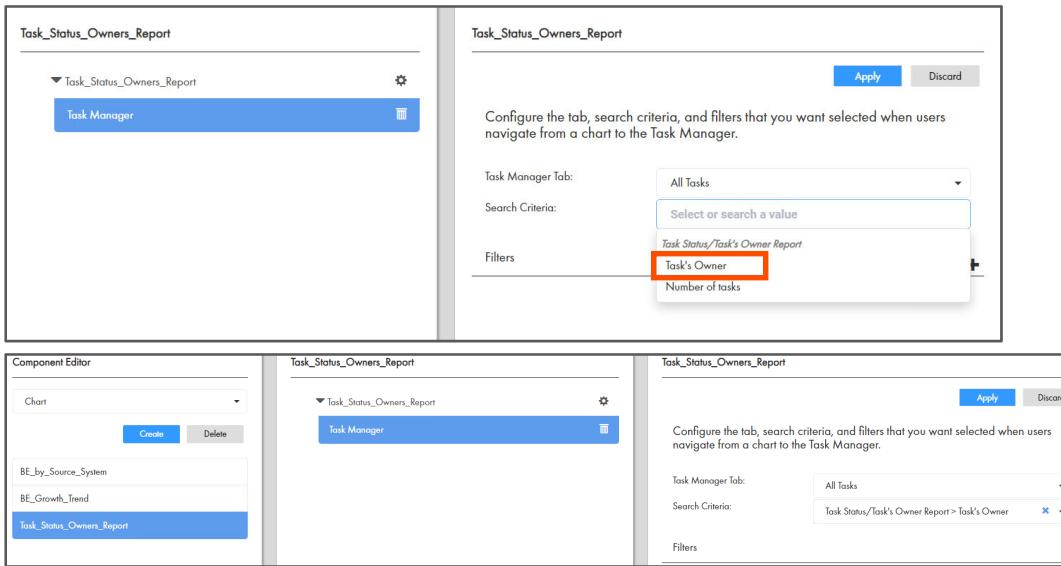
The screenshot shows the configuration dialog for the chart. The 'Chart Name:' field is set to 'Task\_Status\_Owners\_Report'. Other settings include 'Display Name:' as 'Task Status/Task's Owner Report', 'Source Data:' as 'Task Status/Task's Owner Report', 'X-Axis:' as 'Task's Owner', and 'Y-Axis:' as 'Number of tasks'. The 'Apply' button is highlighted with a red box.

34. Click the + icon for the **Task\_Status\_Owners\_Report** and select **Task Manager**.



The screenshot shows the task card for 'Task\_Status\_Owners\_Report'. A context menu is open, with the 'Task Manager' option highlighted with a red box under the 'Link to:' section.

35. Select the Search Criteria as **Task's Owner**.



The first screenshot shows the 'Task\_Status\_Owners\_Report' configuration page with the 'Task Manager' tab selected. The second screenshot shows the 'Task Manager Tab' dropdown set to 'All Tasks' and the 'Search Criteria' dropdown set to 'Select or search a value'. A red box highlights the 'Task Status/Task's Owner Report' option in the dropdown. The third screenshot shows the 'Component Editor' with 'Task\_Status\_Owners\_Report' selected, and the 'Chart' configuration page where the 'Task Manager' tab is selected and the 'Search Criteria' dropdown is set to 'Task Status/Task's Owner Report > Task's Owner'.

36. Click **Apply**.

37. To create another chart, click **Chart > Create**.

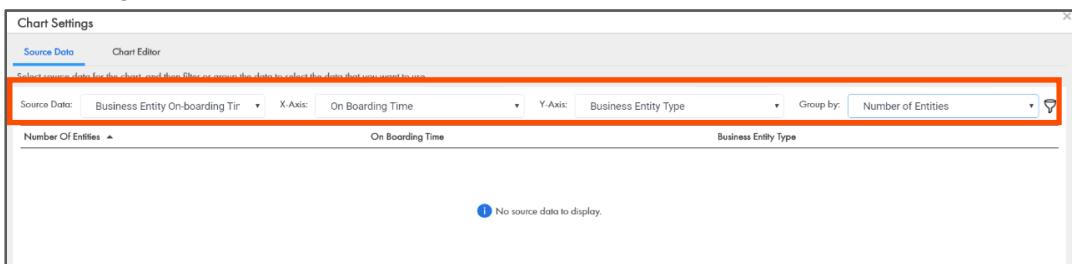
38. Select the following values:

**Source Data:** Business Entity On-boarding Time Service

**X-Axis:** On Boarding Time

**Y-Axis:** Business Entity Type

**Group By:** Number of Entities

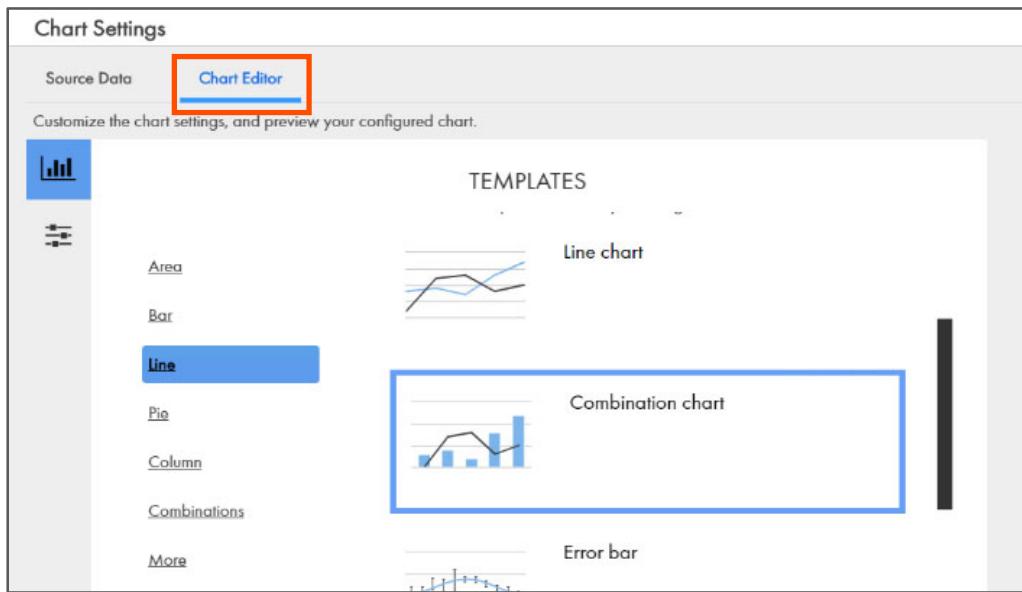


The screenshot shows the 'Chart Settings' page with the 'Source Data' tab selected. The 'Source Data' dropdown is set to 'Business Entity On-boarding Tir', the 'X-Axis' dropdown is set to 'On Boarding Time', the 'Y-Axis' dropdown is set to 'Business Entity Type', and the 'Group by' dropdown is set to 'Number of Entities'. A red box highlights the 'Group by' dropdown. Below the settings, a message states 'No source data to display'.

**Note:** There is no source data to display.

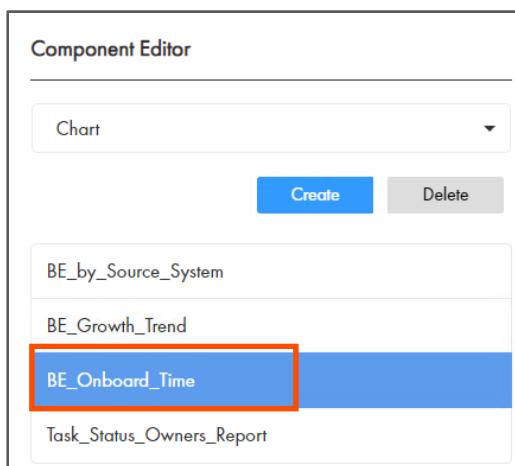
39. Click **Chart Editor**.

40. Select **Line** and from the **TEMPLATES**, select **Combination chart**.



41. Click **Source Data** and click **Done**.

42. Name the chart as **BE\_OnBoard\_Time** and click **Apply**.

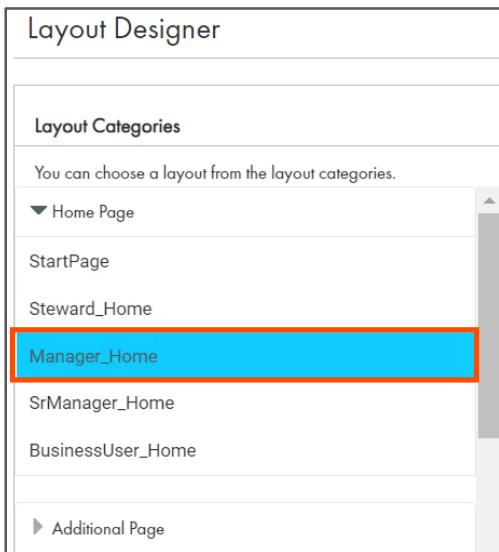


43. **Publish** the charts to the MDM hub.

**Add charts to the Manager's home page**

44. Click **Configuration > Layout Designer**.

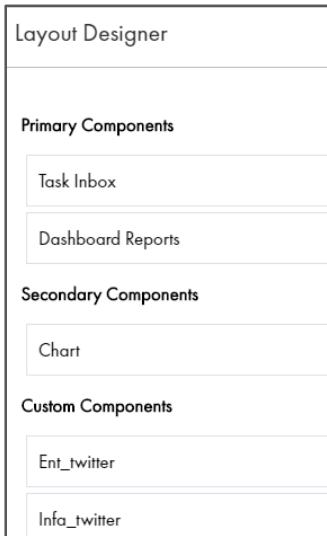
45. Click **Home Page** to expand it and select **Manager\_Home**.



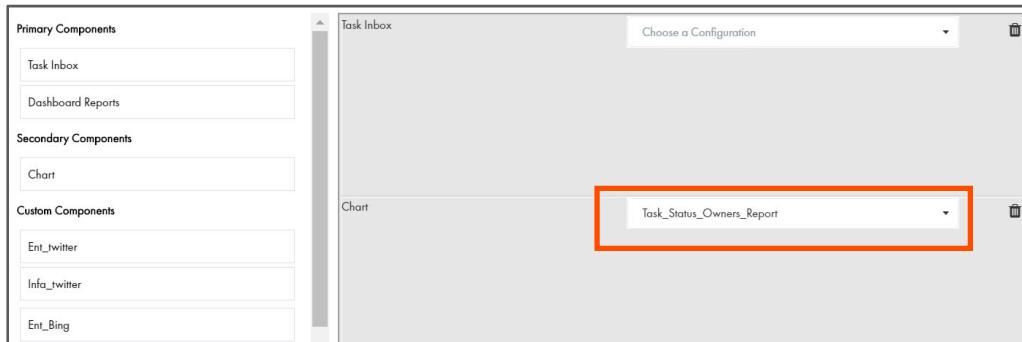
46. Click **Edit**.



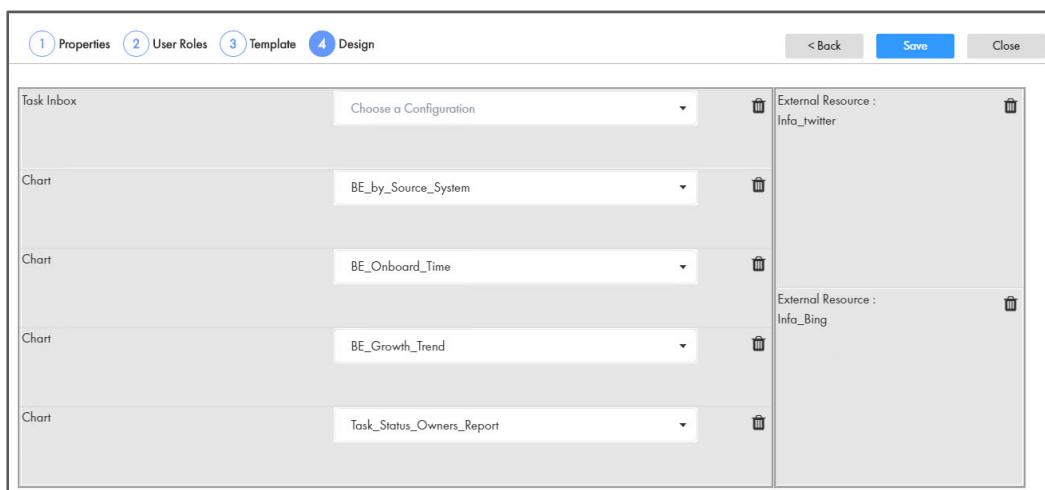
47. Drag **Chart** to the layout canvas.



48. Click the drop-down and select **Task\_Status\_Owner\_Report** configuration.



49. Repeat the above step 3 more times and add the other 3 charts to the manager's homepage.

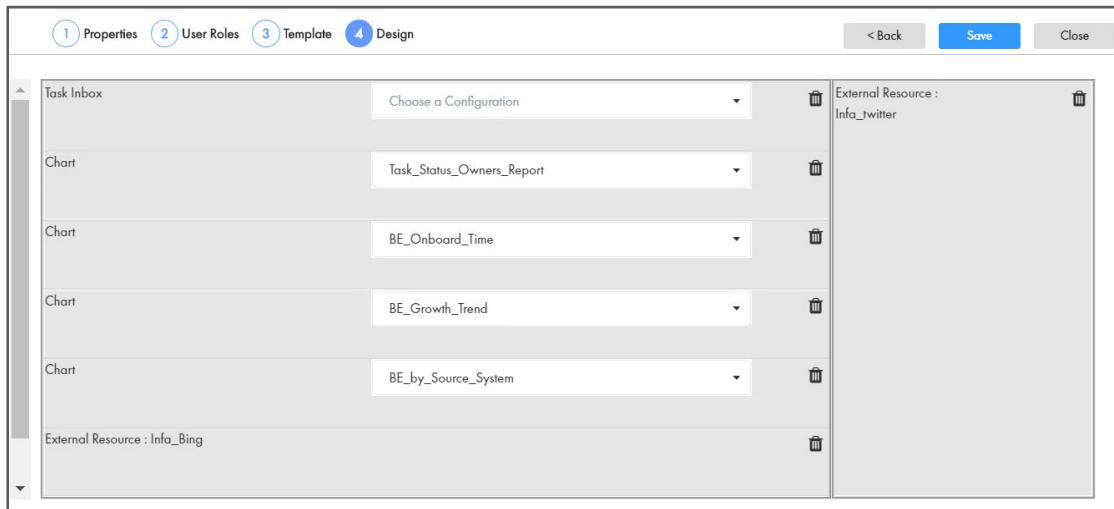


50. Click **Save**, and **Publish** the changes.

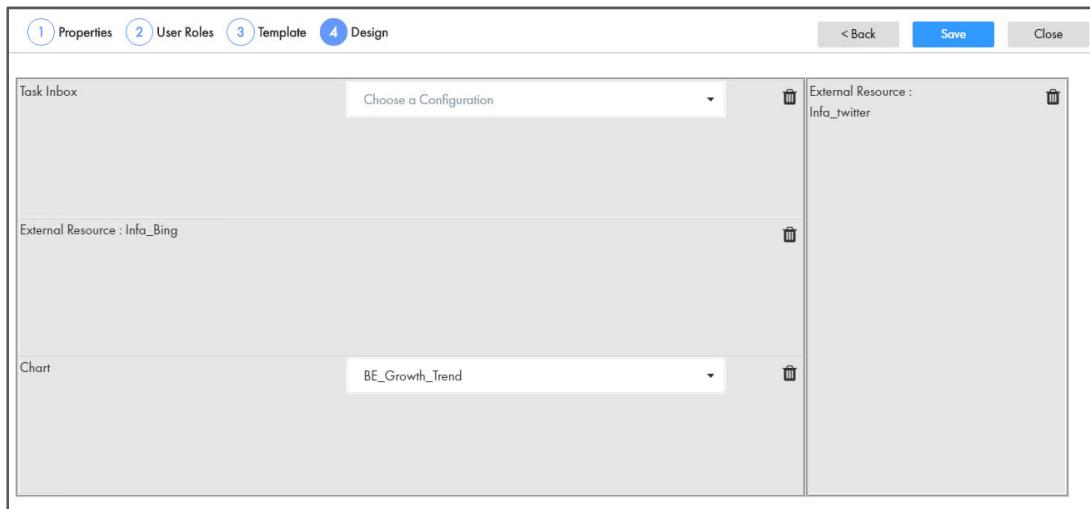
51. Login to the MDM Data Director as **mark/mdm** and check the homepage layout.

## Skill Application

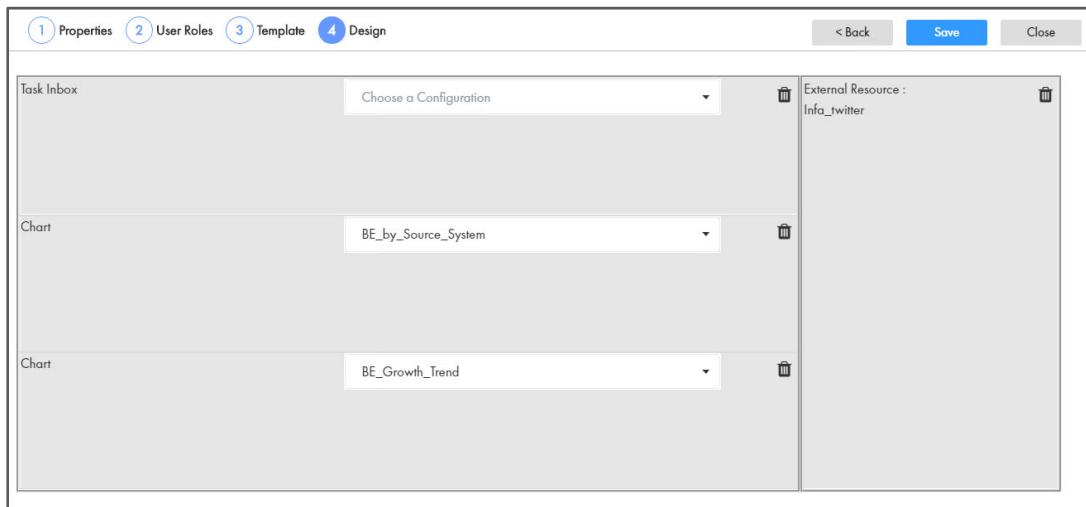
- Add all the 4 charts to the Senior Manager's homepage and publish the changes.



- Add the **BE\_Growth\_Trend** to the Business user's home page and publish the changes.



3. Add the **BE\_Growth\_Trend** and **BE\_by\_Source\_System** to the Steward's home page and publish the changes.



---

*This concludes the lab.*

# Module 4: Data Cleansing

## Lab 4-1: Enrich the Person Business Entity

### Overview:

In the previous labs, you created a Person business entity and a business entity view for the person. In this lab, you will configure components necessary for cleansing, adding data, and for customizing the search result view.

### Objectives:

- Configure “business entity to view”, “view to business entity”, and “business entity to business entity” transformations
- Perform a simple cleanse from the MDM Data Director application
- Set a custom view for query results

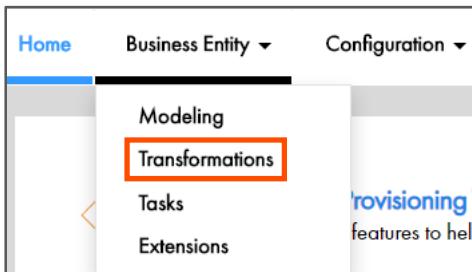
### Duration:

40 minutes

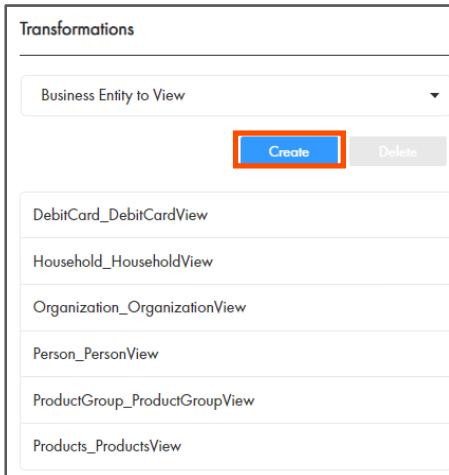
---

### Tasks

1. In the Provisioning Tool, click **Business Entity > Transformations**.



2. In the Transformations drop-down, the **Business Entity to View** option is selected by default. Click **Create**.



3. Enter the Name as **Person\_PersonView**.
4. Select **PersonView** from the View drop-down list.
5. Click **Apply**.

[New BE to View]

Name:	<input style="width: 100%; border: none;" type="text" value="Person_PersonView"/>
View:	<input style="width: 100%; border: none;" type="text" value="PersonView"/>

6. Under the **Person\_PersonView**, select **Groups**, and click **Create**.

Person\_PersonView

 Person_PersonView  Groups  Transformations	
--	--

7. Enter the name of the group as **Emails**.
8. Select the source and target as **Emails**.

Select...

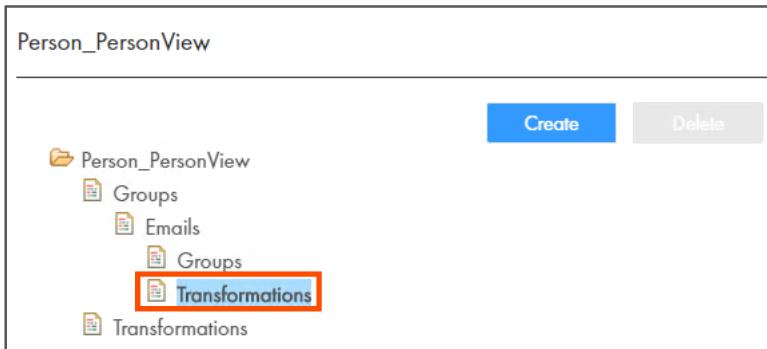
 Emails  
 TelephoneNumbers  
 Addresses  
 PersonDetails

9. Click **Apply**.

[New Group]

Name:	<input style="width: 100%; border: none;" type="text" value="Emails"/>
Source:	<input style="width: 100%; border: none;" type="text" value="Emails"/>
Target:	<input style="width: 100%; border: none;" type="text" value="Emails"/>

10. Under the **Groups > Emails** group, select **Transformations** and click **Create**.



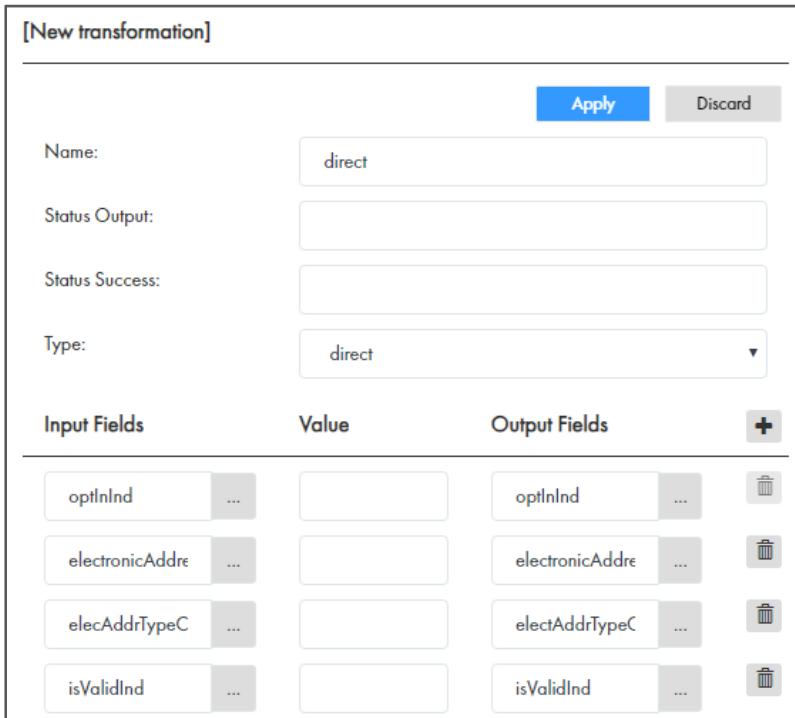
11. Enter the Name as **direct** and select the type as **direct**.

12. You will now add the following input fields and map them to the corresponding fields:

**Note:** To add additional input and output fields, click the **+** icon.

Input Fields	Output Fields
OptInInd	OptInInd
electronicAddress	electronicAddress
elecAddrTypeCd	elecAddrTypeCd
isValidInd	isValidInd

13. Click **Apply**.

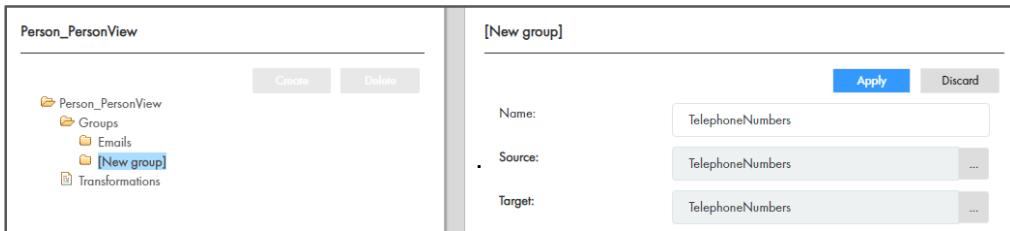


Input Fields	Value	Output Fields	+
optInInd		optInInd	
electronicAddress		electronicAddress	
elecAddrTypeC		elecAddrTypeC	
isValidInd		isValidInd	

14. Click **Publish**.

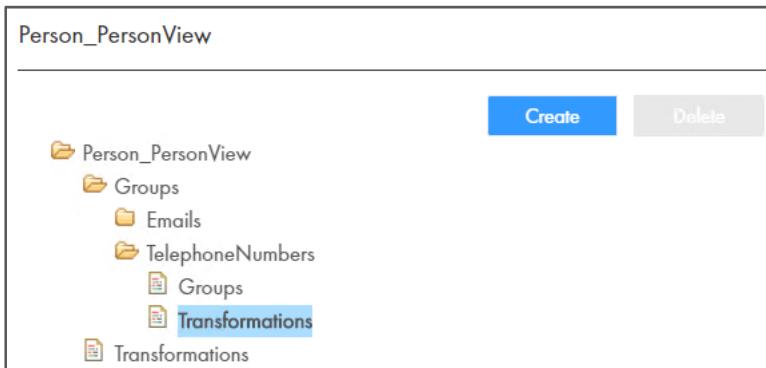
15. Add another group named **TelephoneNumber**s.

16. Add the source and target as **TelephoneNumber**s and click **Apply**.



The screenshot shows the 'Person\_PersonView' project structure. On the left, under 'Groups', there is a folder named 'New group'. On the right, a dialog box titled '[New group]' is open, showing the configuration for this group. The 'Name:' field is set to 'TelephoneNumber'. The 'Source:' and 'Target:' fields are both set to 'TelephoneNumber'. At the bottom right of the dialog are 'Apply' and 'Discard' buttons.

17. Add a **direct** transformation for TelephoneNumbers.

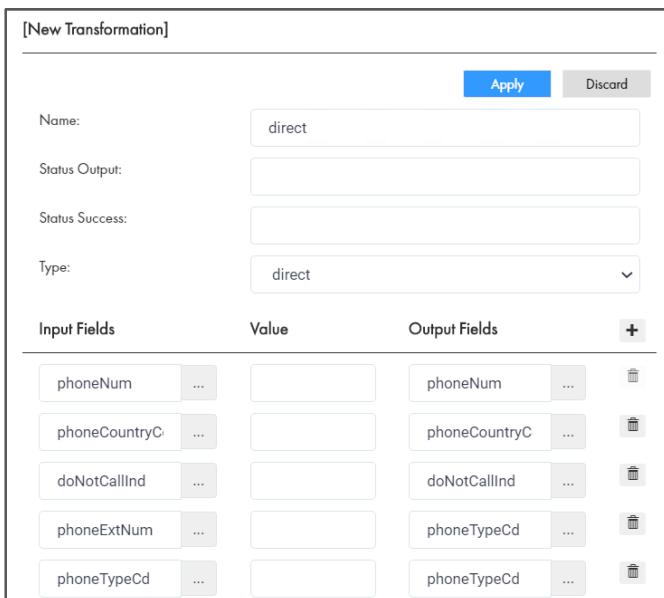


The screenshot shows the 'Person\_PersonView' project structure. Under the 'Groups' section, there is a folder named 'TelephoneNumber'. Inside 'TelephoneNumber', there is a sub-node named 'Transformations'. This node is highlighted with a blue selection bar.

18. In the **direct** transformation, perform the following mapping:

Input Fields	Output Fields
phoneNum	phoneNum
phoneCountryCd	phoneCountryCd
doNotCallInd	doNotCalling
PhoneExtNum	PhoneExtNum
phoneTypeCd	phoneTypeCd

19. Click **Apply**.



The screenshot shows the configuration of a new transformation named 'direct'. The 'Name:' field is set to 'direct'. The 'Type:' dropdown is set to 'direct'. Below this, there is a mapping table with two columns: 'Input Fields' and 'Output Fields'. The 'Input Fields' column contains 'phoneNum', 'phoneCountryCd', 'doNotCallInd', 'PhoneExtNum', and 'phoneTypeCd'. The 'Output Fields' column contains 'phoneNum', 'phoneCountryCd', 'doNotCalling', 'PhoneExtNum', and 'phoneTypeCd'. Each row has a small trash can icon at the end of the 'Output Fields' cell.

20. Follow the above steps and add the **Addresses** group.  
 21. Add a **direct** transformation with the following mappings:

Input Fields	Output Fields
Address.cityName	cityName
Address.stateCd	stateCd
Address.postalCd	postalCd
Address.addressLine1	addressLine1
Address.addressline2	addressLine2
addressType	addressType
Address.countryCode	countryCode

22. Click **Apply**.

Apply
Discard

Name:	direct																																
Status Output:																																	
Status Success:																																	
Type:	direct																																
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; padding: 5px;">Input Fields</th> <th style="text-align: center; padding: 5px;">Value</th> <th style="text-align: left; padding: 5px;">Output Fields</th> <th style="text-align: right; padding: 5px;">+</th> </tr> </thead> <tbody> <tr> <td style="padding: 5px;">Address.cityName</td> <td style="text-align: center; padding: 5px;">...</td> <td style="padding: 5px;">cityName</td> <td style="text-align: right; padding: 5px;">trash</td> </tr> <tr> <td style="padding: 5px;">Address.stateCd</td> <td style="text-align: center; padding: 5px;">...</td> <td style="padding: 5px;">stateCd</td> <td style="text-align: right; padding: 5px;">trash</td> </tr> <tr> <td style="padding: 5px;">Address.postalCd</td> <td style="text-align: center; padding: 5px;">...</td> <td style="padding: 5px;">postalCd</td> <td style="text-align: right; padding: 5px;">trash</td> </tr> <tr> <td style="padding: 5px;">Address.addressL</td> <td style="text-align: center; padding: 5px;">...</td> <td style="padding: 5px;">addressLine1</td> <td style="text-align: right; padding: 5px;">trash</td> </tr> <tr> <td style="padding: 5px;">Address.addressL</td> <td style="text-align: center; padding: 5px;">...</td> <td style="padding: 5px;">addressLine2</td> <td style="text-align: right; padding: 5px;">trash</td> </tr> <tr> <td style="padding: 5px;">addressType</td> <td style="text-align: center; padding: 5px;">...</td> <td style="padding: 5px;">addressType</td> <td style="text-align: right; padding: 5px;">trash</td> </tr> <tr> <td style="padding: 5px;">Address.countryC</td> <td style="text-align: center; padding: 5px;">...</td> <td style="padding: 5px;">countryCd</td> <td style="text-align: right; padding: 5px;">trash</td> </tr> </tbody> </table>		Input Fields	Value	Output Fields	+	Address.cityName	...	cityName	trash	Address.stateCd	...	stateCd	trash	Address.postalCd	...	postalCd	trash	Address.addressL	...	addressLine1	trash	Address.addressL	...	addressLine2	trash	addressType	...	addressType	trash	Address.countryC	...	countryCd	trash
Input Fields	Value	Output Fields	+																														
Address.cityName	...	cityName	trash																														
Address.stateCd	...	stateCd	trash																														
Address.postalCd	...	postalCd	trash																														
Address.addressL	...	addressLine1	trash																														
Address.addressL	...	addressLine2	trash																														
addressType	...	addressType	trash																														
Address.countryC	...	countryCd	trash																														

After creating the groups, define the mapping for the primary fields.

23. Under the **Person\_PersonView**, select **Transformations** and click **Create**.

Person\_PersonView

---

Create
Delete

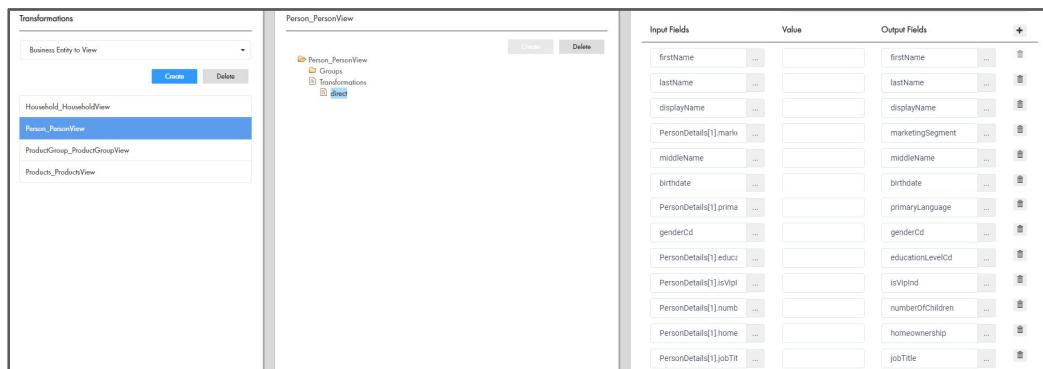
- 📁 Person\_PersonView
- 📁 Groups
- 📝 **Transformations**

24. Enter the name as **direct** and select the type as **direct**.

25. Enter the following values:

Input Fields	Output Fields
firstName	firstName
lastName	lastName
displayName	displayName
PersonDetails.marketingSegment	MarketingSegment
middleName	middleName
Birthdate	Birthdate
PersonDetails.primaryLanguage	primaryLanguage
genderCd	genderCd
PersonDetails.educationLevelCd	educationLevelCd
PersonDetails.isVipInd	isVipInd
PersonDetails.numberOfChildren	numberOfChildren
PersonDetails.homeOwnership	homeownership
PersonDetails.jobTitle	jobTitle

26. Click **Apply** to save the changes.

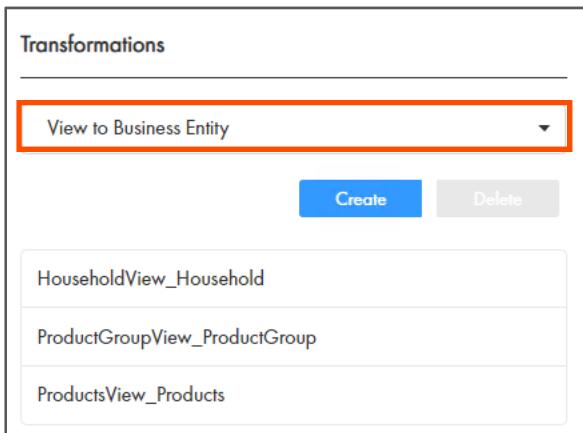


Input Fields	Value	Output Fields
firstName	...	firstName
lastName	...	lastName
displayName	...	displayName
PersonDetails[1].marketingSegment	...	MarketingSegment
middleName	...	middleName
birthdate	...	birthdate
PersonDetails[1].primaryLanguage	...	primaryLanguage
genderCd	...	genderCd
PersonDetails[1].educationLevelCd	...	educationLevelCd
PersonDetails[1].isVipInd	...	isVipInd
PersonDetails[1].numberOfChildren	...	numberOfChildren
PersonDetails[1].homeOwnership	...	homeownership
PersonDetails[1].jobTitle	...	jobTitle

**Note:** The business entity to view transformation is now ready.

You will now create a **View to Business Entity**.

27. From the **Transformations** drop-down, select **View to Business Entity** and click **Create**.



The screenshot shows a list of transformations. At the top, there is a dropdown menu labeled "Transformations" with "View to Business Entity" selected. Below the dropdown are two buttons: "Create" (blue) and "Delete" (grey). Underneath these are three transformation entries: "HouseholdView\_Household", "ProductGroupView\_ProductGroup", and "ProductsView\_Products". The "View to Business Entity" entry is highlighted with a red box.

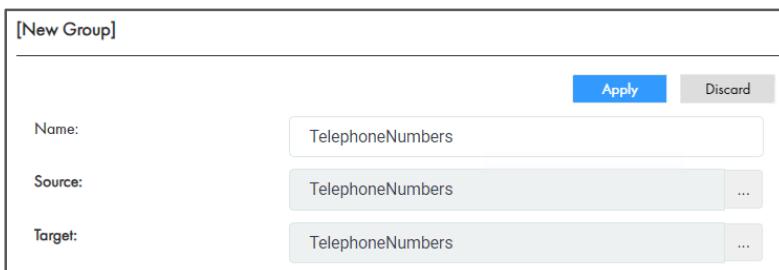
28. Enter the name as **PersonView\_Person** and select **PersonView** as the View type and click **Apply**.



The screenshot shows a configuration dialog titled "[New View to BE]". It has two main fields: "Name:" which is set to "PersonView\_Person", and "View:" which is set to "PersonView". Below these fields are two buttons: "Apply" (blue) and "Discard" (grey).

This is the component responsible to write back to the base object.

29. Under **PersonView\_Person**, create the **TelephoneNumberNumbers** group.



The screenshot shows a configuration dialog titled "[New Group]". It has three main fields: "Name:" set to "TelephoneNumberNumbers", "Source:" set to "TelephoneNumberNumbers", and "Target:" set to "TelephoneNumberNumbers". Below these fields are two buttons: "Apply" (blue) and "Discard" (grey).

30. Add a **direct** transformation.

31. Define the following mapping and click **Apply** to save the changes.

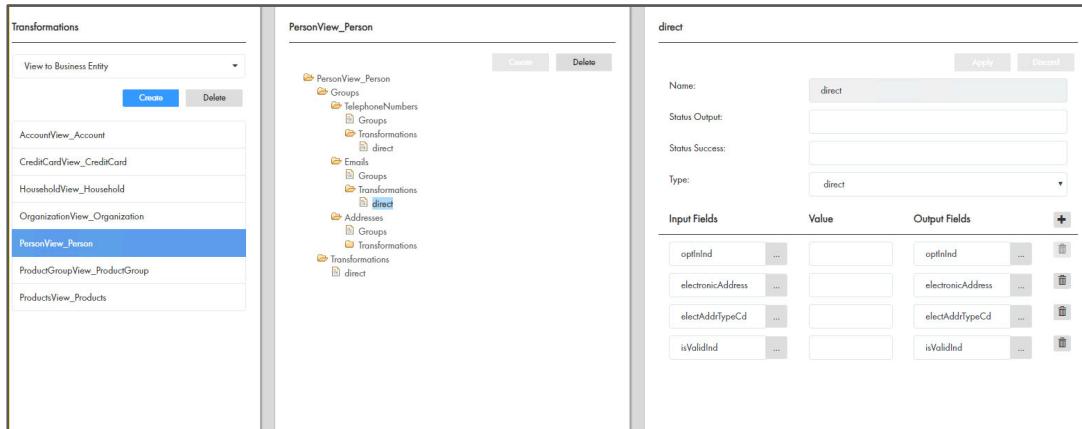
Input Fields	Output Fields
phoneCountryCd	phoneCountryCd
doNotCalling	doNotCallInd
phoneExtNum	phoneExtNum
phoneTypeCd	phoneTypeCd
phoneNum	PhoneNum

32. Add another group named **Emails**.

33. Add a **direct** transformation under it with the following mapping:

Input Fields	Output Fields
optInInd	optInInd
electronicAddress	electronicAddress
electAddrTypeCd	electAddrTypeCd
isValidInd	isValidInd

34. Click **Apply** to save the changes.



The screenshot shows the 'Transformations' interface. On the left, a tree view lists various business entities like 'AccountView\_Account', 'CreditCardView\_CreditCard', etc., with 'PersonView\_Person' selected. In the center, under 'PersonView\_Person', 'Transformations' is selected, and a new 'Create' button is visible. On the right, the 'direct' transformation is being configured. It has a 'Name' field set to 'direct'. Under 'Type', 'direct' is selected. The 'Input Fields' and 'Output Fields' mapping table contains the following entries:

Input Fields	Value	Output Fields
optInInd		optInInd
electronicAddress		electronicAddress
electAddrTypeCd		electAddrTypeCd
isValidInd		isValidInd

35. Create the **Addresses** Group with a **direct** transformation.

36. Complete the following mapping:

Input Fields	Output Fields
cityName	Address.cityName
stateCd	Address.stateCd
postalCd	Address.postalCd
addressLine2	Address.addressLine2
addressLine1	Address.addressLine1
addressType	addressType
countryCode	Address.countryCode

37. Click **Apply** to save the changes.

38. Under **PersonView\_Person**, select **Transformations** and click **Create**.

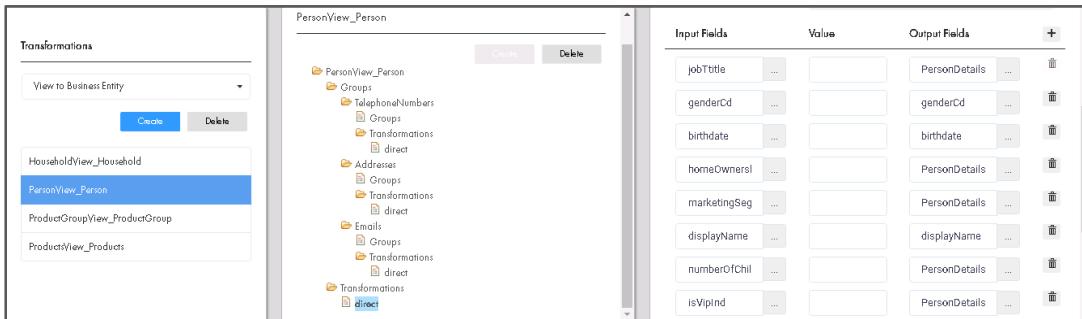
39. Enter the name as **direct** and select **direct** from the Type drop-down list.

40. Complete the following mapping:

Input Fields	Output Fields
primaryLanguage	PersonDetails.primaryLanguage
firstName	firstName
educationLevelCd	PersonDetails.educationLevelCd

lastName	lastName
isVipInd	PersonDetails.isVipInd
numberOfChildren	PersonDetails.numberOfChildren
displayName	displayName
marketingSegment	PersonDetails.marketingSegment
middleName	middleName
birthdate	birthdate
homeownership	PersonDetails.homeOwnership
jobTitle	PersonDetails.jobTitle
genderCd	genderCd

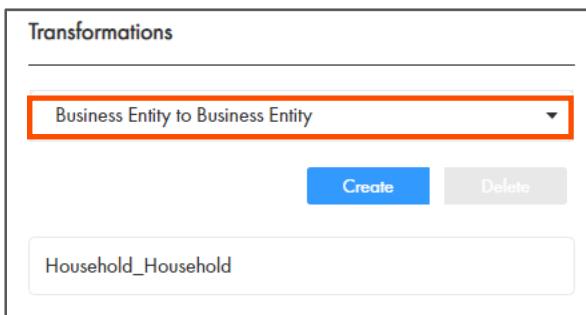
41. Click **Apply** to save the View to Business Entity configuration.



42. **Publish** the changes.

At this point, you have the Business Entity to View component to read data, and Business Entity to View to write data. You will now configure a Business Entity to Business Entity, to link them both.

43. From the **Transformations** drop-down, select **Business Entity to Business Entity** and click **Create**.



44. Enter the Name as **Person\_Person** and select **Person** from the Business Entity drop-down list.



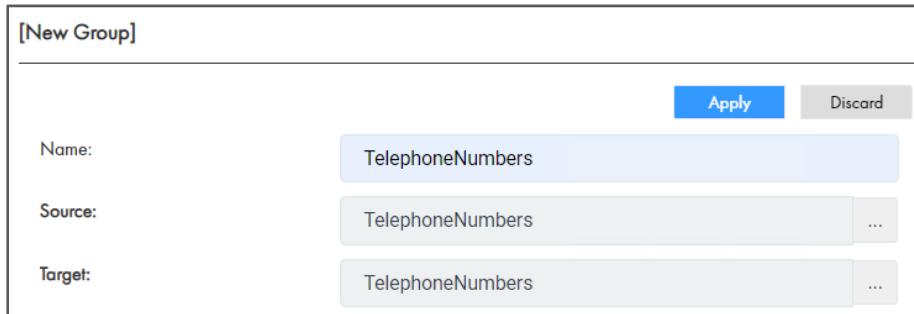
NEW\_CO2CO

Name: Person\_Person

Business Entity: Person

Apply Discard

45. Create a group named **TelephoneNumberNumbers**.



[New Group]

Name: TelephoneNumbers

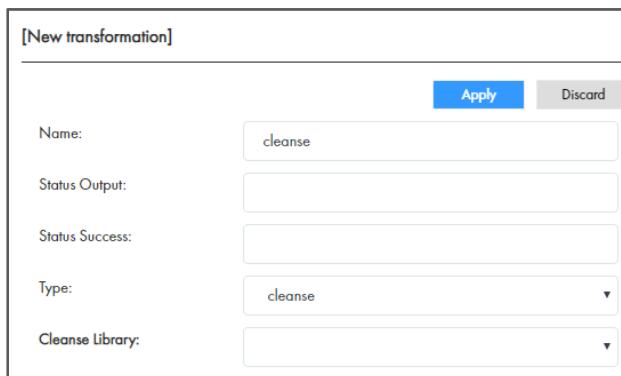
Source: TelephoneNumbers

Target: TelephoneNumbers

Apply Discard

46. Select **TelephoneNumberNumbers > Transformations** and click **Create**.

47. Enter the name as **cleanse** and for the Type, select **cleanse**.



[New transformation]

Name: cleanse

Status Output:

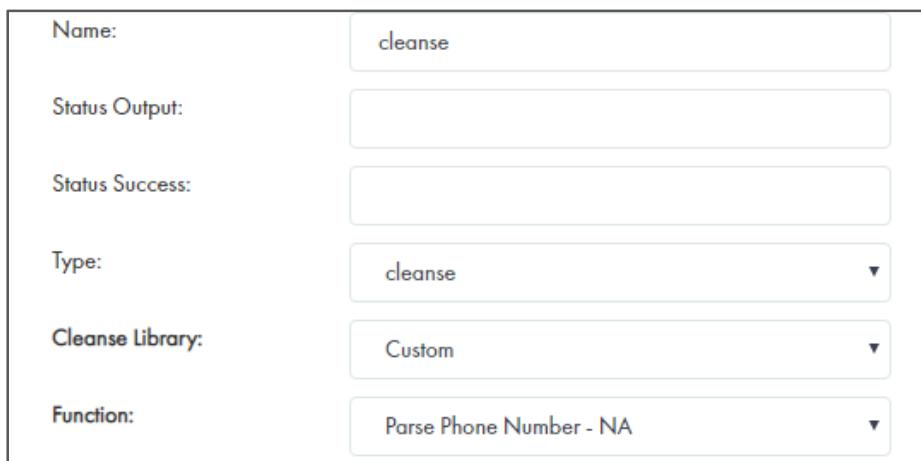
Status Success:

Type: cleanse

Cleanse Library:

Apply Discard

48. The **Cleanse Library** appears. From the drop-down, select **Custom** and set the function to **Parse Phone Number – NA**.



Name: cleanse

Status Output:

Status Success:

Type: cleanse

Cleanse Library: Custom

Function: Parse Phone Number - NA

49. In the **Input Parameters** section, select the Field Name as **phoneNum**.
50. For the output fields, set the Country Code to **phoneCountryCd** and Display column as **phoneNum**.

Function Parameter Name	Field Name	Value
Phone Number:	phoneNum	<input type="button" value="..."/>

Output Parameters

Function Parameter Name	Field Name	Value
Country Code:	phoneCountryCd	<input type="button" value="..."/> <input type="checkbox"/>
Area Code:		<input type="button" value="..."/> <input type="checkbox"/>
Prefix:		<input type="button" value="..."/> <input type="checkbox"/>
Line Code:		<input type="button" value="..."/> <input type="checkbox"/>
Display Column:	phoneNum	<input type="button" value="..."/> <input type="checkbox"/>
Unprocessed:		<input type="button" value="..."/> <input type="checkbox"/>
Is Valid Telephone:		<input type="button" value="..."/> <input type="checkbox"/>

51. Click **Apply** to save changes.
52. Create another group and name it as **Addresses**.

[New Group]	
<input type="button" value="Apply"/> <input type="button" value="Discard"/>	
Name:	Addresses
Source:	Addresses
Target:	Addresses

53. Create a **cleanse** transformation.

54. Select the Cleanse Library as **Custom** and the function as **Cleanse Address - NA**.

[New transformation]

Name:	cleanse
Status Output:	
Status Success:	
Type:	cleanse
Cleanse Library:	Custom
Function:	Cleanse Address - NA

55. Configure the following input parameters.

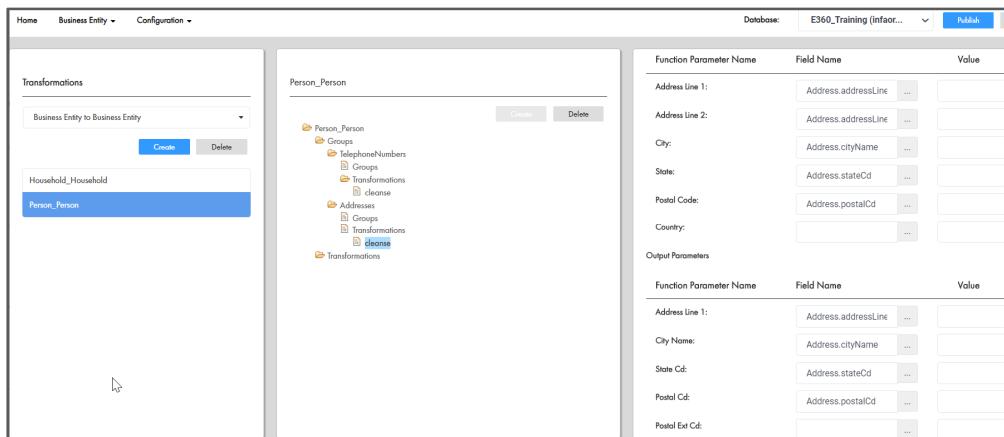
Function Parameter Name	Field Name
Address Line1	Address.addressLine1
Address Line 2	Address.addressLine2
City	Address.cityName
State	Address.stateCd
Postal Code	Address.postalCd

Function Parameter ...	Field Name	Value
Address Line 1:	Address.addressLine1	...
Address Line 2:	Address.addressLine2	...
City:	Address.cityName	...
State:	Address.stateCd	...
Postal Code:	Address.postalCd	...
Country:		...

56. Configure the following output parameters:

Function Parameter Name	Field Name
Address Line1	Address.addressLine1
City Name	Address.cityName
State Cd	Address.stateCd
Postal Cd	Address.postalCd
Country Code	Address.countryCode

57. Click **Apply** to save the changes.



Function Parameter Name	Field Name	Value
Address Line1:	Address.addressLine1	[...]
Address Line2:	Address.addressLine1	[...]
City:	Address.cityName	[...]
State:	Address.stateCd	[...]
Postal Code:	Address.postalCd	[...]
Country:		[...]

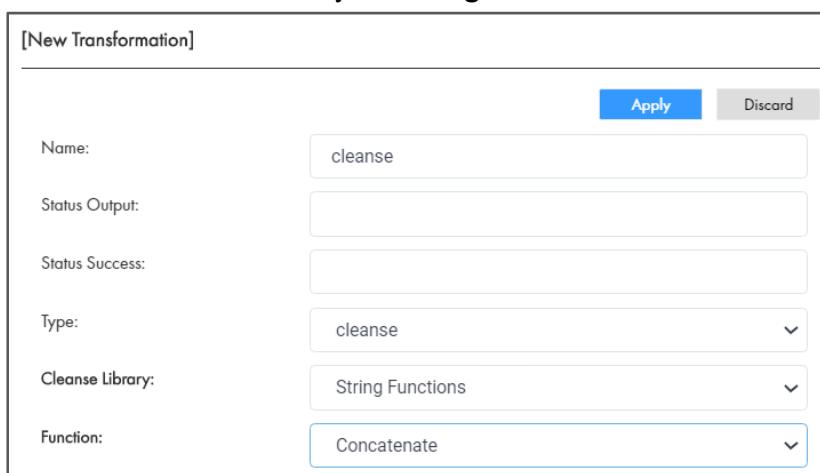
Function Parameter Name	Field Name	Value
Address Line1:	Address.addressLine1	[...]
City Name:	Address.cityName	[...]
State Cd:	Address.stateCd	[...]
Postal Cd:	Address.postalCd	[...]
Postal Ext Cd:		[...]

58. Select **Person\_Person > Transformations** and click **Create**.



59. Enter the name as **cleanse** and select the Type as **cleanse**.

60. Select the Cleanse Library as **String Functions** and set the Function to **Concatenate**.



[New Transformation]

Name: cleanse

Status Output:

Status Success:

Type: cleanse

Cleanse Library: String Functions

Function: Concatenate

**Apply**   **Discard**

61. Set the following input parameters:

- string 1 - **firstName**
- leave string 2 blank
- string 3 -**lastName**

62. Set the output name as **displayName**.

Function Parameter ...	Field Name	Value
string1:	firstName	...
string2:		...
string3:	lastName	...
string4:		...
string5:		...
string6:		...
<b>Output Parameters</b>		
Function Parameter ...	Field Name	Value
string:	displayName	...

63. Click **Apply** to save the changes.

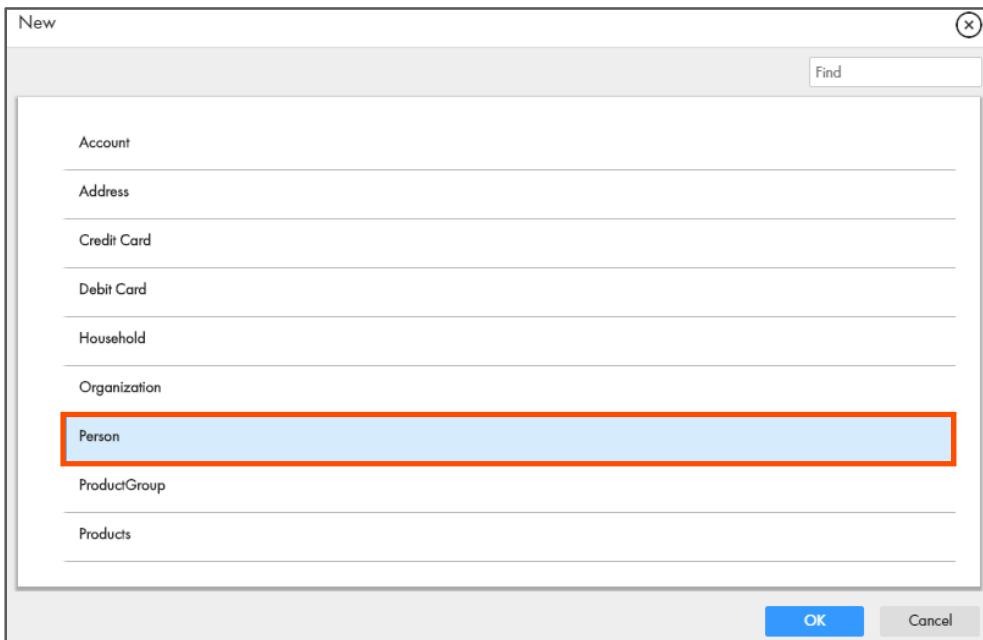
64. **Publish** the changes.

Now that you have all three components ready, add a person's record in the **MDM Data Director** application to observe that data is being cleansed.

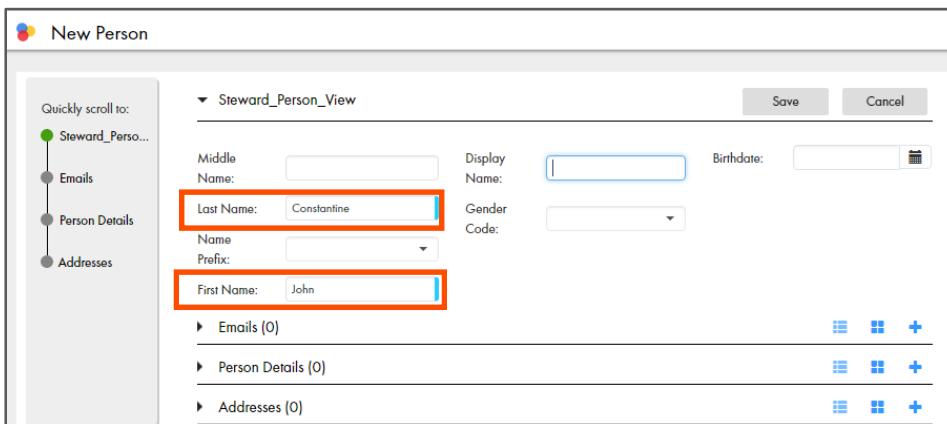
65. Log in as **ray/mdm**, the **Data Steward**.

66. Click **New**.

67. Select **Person** and click **OK**.

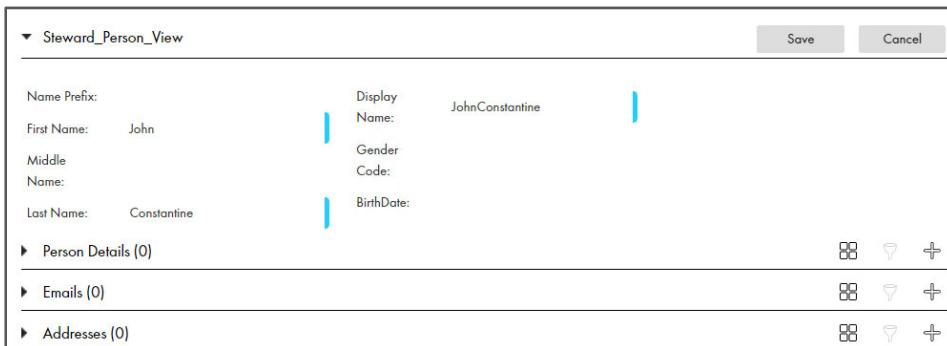


68. Enter the first name as **John**, last name as **Constantine**, and click **Save**.



Steward_Person_View		Save	Cancel
Middle Name:		Display Name:	
Last Name:	Constantine	Birthdate:	
Name Prefix:		Gender Code:	
First Name:	John		
<a href="#">Emails (0)</a> <a href="#">+</a> <a href="#">Person Details (0)</a> <a href="#">+</a> <a href="#">Addresses (0)</a> <a href="#">+</a>			

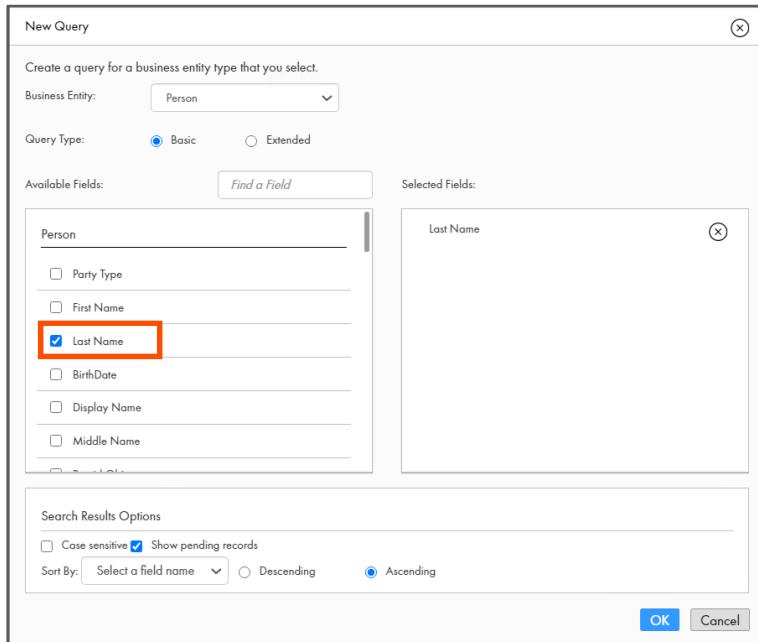
The Display name field now displays a name.



Steward_Person_View		Save	Cancel
Name Prefix:		Display Name:	JohnConstantine
First Name:	John	Gender Code:	
Middle Name:		BirthDate:	
Last Name:	Constantine		
<a href="#">Person Details (0)</a> <a href="#">+</a> <a href="#">Emails (0)</a> <a href="#">+</a> <a href="#">Addresses (0)</a> <a href="#">+</a>			

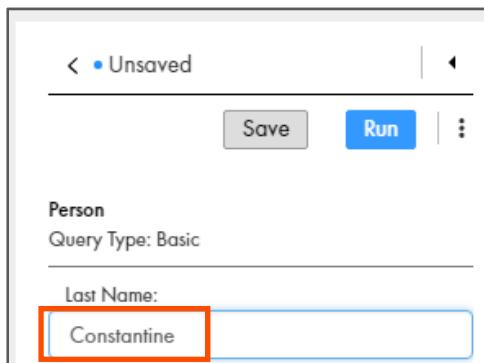
69. Click the **Queries** tab and click the **+** icon.

70. Add a **Person\_Basic** query to search for the **Last Name** as shown in the following image.



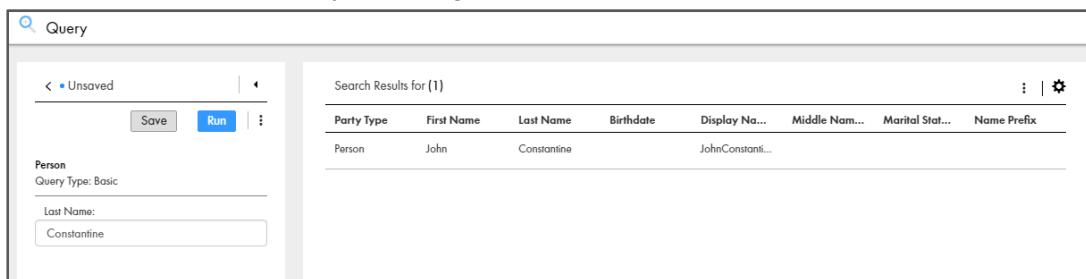
The screenshot shows the 'New Query' dialog box. Under 'Business Entity', 'Person' is selected. Under 'Query Type', 'Basic' is selected. In the 'Available Fields' list, 'Last Name' is checked and highlighted with a red box. In the 'Selected Fields' list, 'Last Name' is listed. At the bottom, 'Search Results Options' include 'Case sensitive' (unchecked), 'Show pending records' (checked), and 'Sort By: Select a field name' (set to 'Last Name', 'Ascending'). Buttons at the bottom right are 'OK' and 'Cancel'.

71. Enter **Constantine** in the Last Name textbox and click **Run** to start the search.



The screenshot shows the query editor interface. It displays a query for 'Person' with 'Query Type: Basic'. The 'Last Name:' field contains 'Constantine', which is highlighted with a red box. Below the field are 'Save' and 'Run' buttons. The status bar indicates the query is 'Unsaved'.

72. The search results display in the right panel.



The screenshot shows the search results panel titled 'Search Results for [1]'. It lists one record: Person, First Name: John, Last Name: Constantine, Birthdate: (empty), Display Name: JohnConstanti..., Middle Name: (empty), Marital Status: (empty), and Name Prefix: (empty). The left panel shows the same query configuration as the previous screenshot.

Observe the string concatenation performed between the first name and last name.

*This concludes the lab.*

## Module 4: Data Cleansing

### Lab 4-2: Configure and Use Transformations

#### Overview

In the earlier lab exercise, you created a business entity called **DebitCard** and a business entity view called **DebitCardView**. However, when you try to create a new record of type Debit Card, you will end up with an error. This is because, you have no transformations configured, which will transform business entity to view, and view to business entity.

In this lab, you will configure the transformation through the Provisioning Tool.

#### Objectives:

- Configure business entity to:
  - view transformation
  - view to business entity, and
  - view business entity to business entity transformations
- Cleanse data from the MDM Data Director application

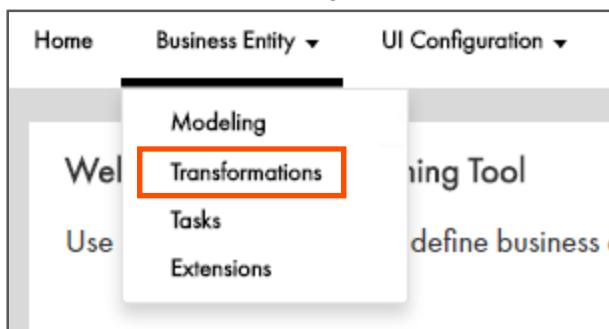
#### Duration:

30 minutes

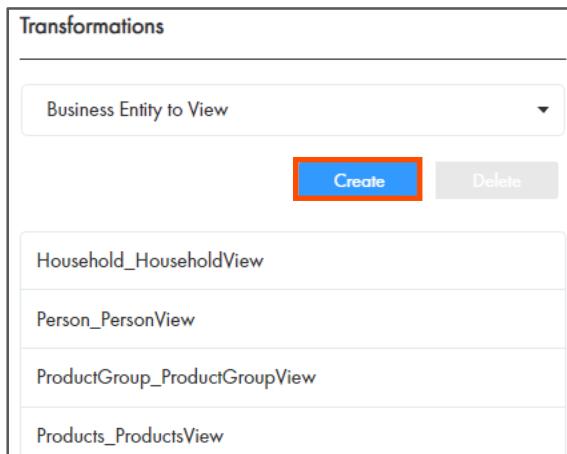
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#### Tasks

1. Log in to the Provisioning Tool and select the **E360\_Training** as the database.
2. Click the **Business Entity** menu and select **Transformations**.

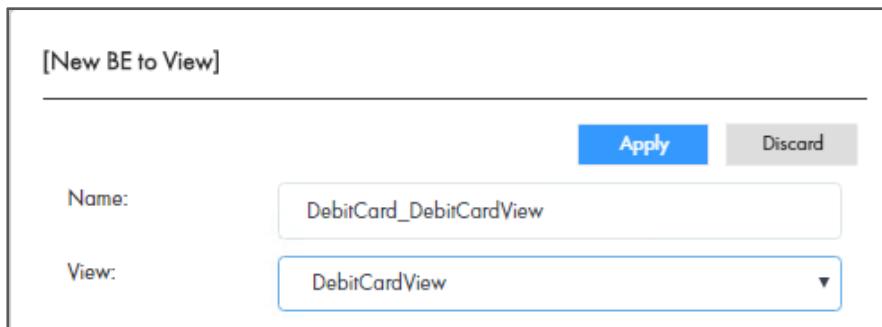


3. The **Business Entity to View** transformation will be selected by default. Click **Create**.



The screenshot shows a list of transformations. At the top, there is a dropdown menu set to "Business Entity to View". Below it, there are two buttons: "Create" (highlighted with a red border) and "Delete". The list contains four items: "Household\_HouseholdView", "Person\_PersonView", "ProductGroup\_ProductGroupView", and "Products\_ProductsView".

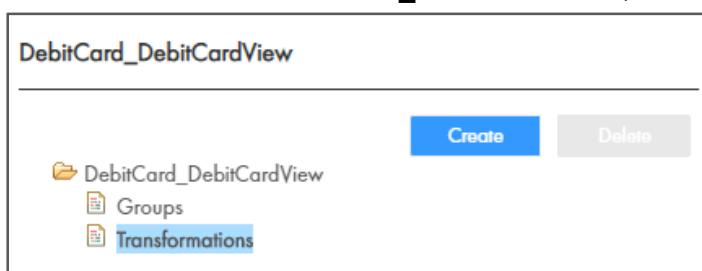
4. In the **[New BE to View]** properties panel, enter **DebitCard\_DebitCardView** in the Name field, and select **DebitCardView** from the View drop-down.  
 5. Click **Apply**.



The screenshot shows the "[New BE to View]" properties panel. It has two fields: "Name:" with the value "DebitCard\_DebitCardView" and "View:" with a dropdown menu showing "DebitCardView". At the bottom are "Apply" and "Discard" buttons.

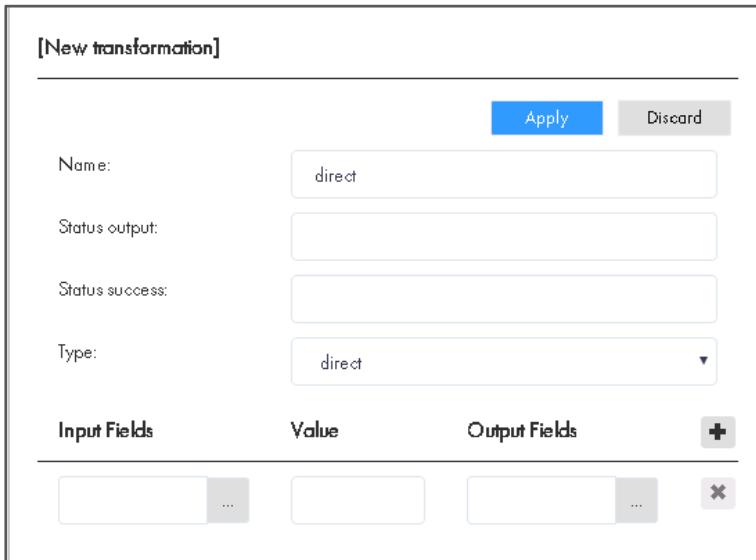
You will now add a direct transformation to DebitCard\_DebitCardView.

6. In the Tree View of **DebitCard\_DebitCardView**, click **Transformation** and click **Create**.



The screenshot shows the "DebitCard\_DebitCardView" tree view. It has three main nodes: "DebitCard\_DebitCardView" (selected), "Groups", and "Transformations". Under "DebitCard\_DebitCardView", there is a sub-node "DebitCard\_DebitCardView". At the bottom are "Create" and "Delete" buttons.

7. In the [New transformation] properties panel, enter **direct** for Name and select **direct** from the Type drop-down list.



Input Fields	Value	Output Fields	+	-
			...	x

You will now map the input fields from the business entity to the output fields of business entity view.

8. Select **accountNumber** for Input Fields and click **Select**.

9. Select **accountNumber** for Output Fields.

**Note:** Here you are mapping accountNumber field from the business entity to the same field in the view.

10. Click the '+' to add more rows.

11. Map the following input columns with the corresponding output columns:

Input Fields	Output fields
cardHolderName	cardHolderName
expirationMonth	expirationMonth
expirationYear	expirationYear
securitycode	securitycode
issuingCompany	issuingCompany

12. Click **Apply** to save the changes.

[New Transformation]

		Apply	Discard
Name:	direct		
Status Output:			
Status Success:			
Type:	direct		
Input Fields		Value	Output Fields
<input type="text" value="accountNumber"/> ...		<input type="text"/>	<input type="text" value="accountNumber"/> ...
<input type="text" value="cardHolderName"/> ...		<input type="text"/>	<input type="text" value="cardHolderName"/> ...
<input type="text" value="expirationMonth"/> ...		<input type="text"/>	<input type="text" value="expirationMonth"/> ...
<input type="text" value="expirationYear"/> ...		<input type="text"/>	<input type="text" value="expirationYear"/> ...
<input type="text" value="securityCode"/> ...		<input type="text"/>	<input type="text" value="securityCode"/> ...
<input type="text" value="issuingCompany"/> ...		<input type="text"/>	<input type="text" value="issuingCompany"/> ...

13. Publish the changes.

Next, you will configure a **View to Business Entity** transformation for the business entity Debit Card.

14. Click the **Business Entity** menu and select **Transformations**.

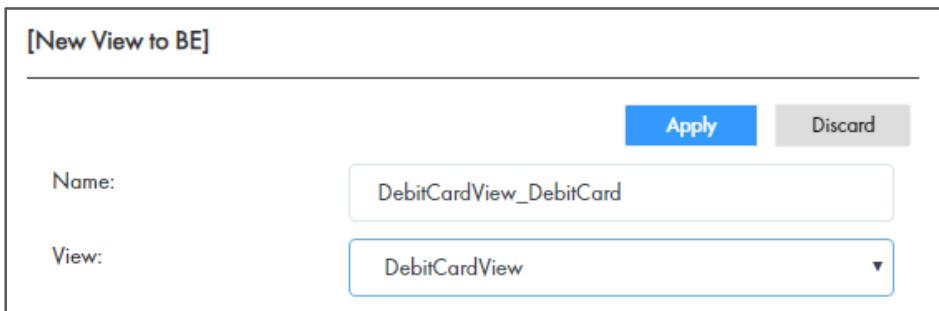
15. Under Transformations, select **View to Business Entity** from the drop-down and click **Create**.

Transformations

<input type="button" value="View to Business Entity"/>
<input type="button" value="Create"/> <span style="margin-left: 20px;"><input type="button" value="Delete"/></span>
HouseholdView_Household
PersonView_Person
ProductGroupView_ProductGroup
ProductsView_Products

16. In the **[New BE to View]** properties pane, add the **DebitCardView\_DebitCard** in the Name field.

17. Select **DebitCardView** from the View drop-down list.



[New View to BE]

Name: DebitCardView\_DebitCard

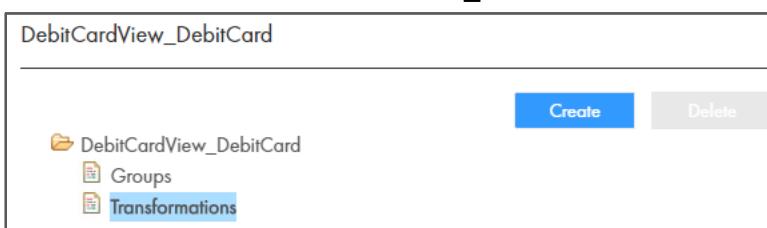
View: DebitCardView

Apply Discard

18. Click **Apply** to save the changes.

Next, you will add a direct transformation to **DebitCardView\_DebitCard**.

19. In the Tree View of **DebitCardView\_DebitCard** click **transformation** and click **Create**.



DebitCardView\_DebitCard

Create Delete

DebitCardView\_DebitCard

Groups Transformations

20. In the **[New transformation]** properties pane, add the name of the transformation as **direct**, and select **direct** from the Type drop-down list.

21. Select **accountNumber** for the input and output field.

**Note:** Here, you are mapping accountNumber field from the business entity to the same field in the view.

22. Click the '+' icon.

23. Map the following input columns with the corresponding output columns:

Input Fields	Output fields
cardHolderName	cardHolderName
expirationMonth	expirationMonth
expirationYear	expirationYear
securitycode	securitycode
issuingCompany	issuingCompany

24. The final transformation along with the mappings should look like this.

[New Transformation]

		Apply	Discard
Name:	direct		
Status Output:			
Status Success:			
Type:	direct		
<b>Input Fields</b>	<b>Value</b>	<b>Output Fields</b>	<b>+</b>
accountNumber	...	accountNumber	...
cardHolderName	...	cardHolderName	...
expirationMonth	...	expirationMonth	...
expirationYear	...	expirationYear	...
securityCode	...	securityCode	...
issuingCompany	...	issuingCompany	...

25. Click **Apply** to save the changes.

26. Click **Publish** to add the transformation to the Hub.

Finally, you will configure a **Business Entity to Business Entity** transformation.

27. Navigate to **Business Entity > Transformations**.

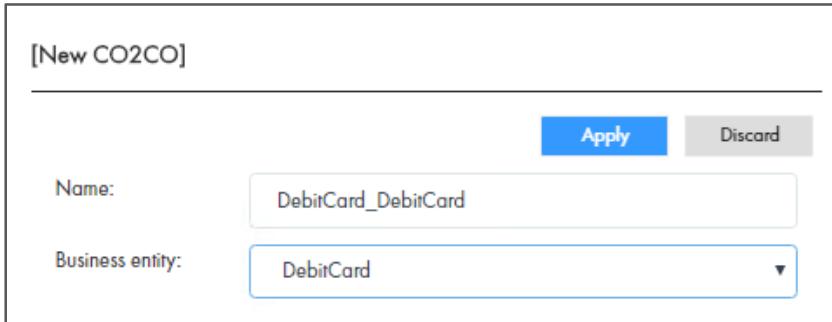
28. In the Transformations page, select **Business Entity to Business Entity** and click **Create**.

Transformations

Business Entity to Business Entity	Create	Delete
Household_Household		
Person_Person		

29. In the **[New CO2CO]** properties pane, add the **DebitCard\_DebitCard** in the Name field.

30. From the **Business Entity** drop-down select **DebitCard**.



[New CO2CO]

Name: DebitCard\_DebitCard

Business entity: DebitCard

Apply      Discard

31. Click **Apply** to save the changes.

Next, you will add a cleanse transformation to DebitCard\_DebitCard.

32. In the Tree View of **DebitCard\_DebitCard**, click **transformation** and click **Create**.



DebitCard\_DebitCard

Create      Delete

- DebitCard\_DebitCard
- Groups
- Transformations

33. In the **[New transformation]** properties pane, add the following information:

Field	Value
Name	cleanse
Type	cleanse
Cleanse Library	String Functions
Function	Uppercase

**Note:** This transformation will ensure that when you enter the card holder name value while creating a business entity of type debit card, the value will be stored in uppercase.

34. Select **CardHolderName** under Input and Output Parameters.



**Input Parameters**

Function Parameter N...	Field Name	Value
String:	CardHolderName	...

**Output Parameters**

Function Parameter N...	Field Name	Value
String:	CardHolderName	...

35. Click **Apply** to save the changes.
36. Click **Publish** to add the transformation to MDM Hub.

Now you will test the configuration related to Debit Card entity type in the MDM Data Director UI.

37. Log in to Entity 360\_Training application in the MDM Data Director as **joey/mdm**, the Senior Manager.  
**Note:** If prompted, select **E360\_Training** as the database.
38. Click **New** and select **Debit Card**.
39. Enter the following values to the fields and click **Save** to save the business entity to the database.

Field	Value
Account Number	12345
Expiration Month	09
Expiration Year	2020
Issuing Company	InfoBank
Card Holder Name	Jack Johnson
Security Code	131



40. The Debit card details appear as shown below.



**Note:** Observe that the Card Holder Name field value has been converted to Upper case after the Business to Business Entity cleanse transformation is applied to the record.

*This concludes the lab*

# Module 4: Data Cleansing

## Lab 4-3: Skill Application

### Overview:

Address Doctor is an address validation solution that parses, cleanses, and standardizes global address data across the globe.

In this exercise, you will apply the skills you learned in this module to define a Business Entity to View, View to Business Entity, and Business Entity to Business Entity transformations for the Organization Business Entity.

### Objectives:

- Define Business Entity to View transformation
- Define View to Business Entity transformation
- Define Business Entity to Business Entity transformation

### Duration:

30 minutes

---

### Tasks

1. Create a **Business Entity to View** transformation named **Organization\_OrganizationView** based on the **OrganizationView**.
2. Add the following three groups:
  - a. Addresses
  - b. TelephoneNumbers
  - c. Details
3. Under the **Addresses** group, define a **direct** transformation with the following input and output fields, and click **Apply**.

Input Fields	Output Fields
address.addressLine1	addressLine1
address.addressLine2	addressLine2
addressType	addressType
address.cityName	cityName
address.stateCd	stateCd
address.postalCd	postalCd

Input Fields	Value	Output Fields
Address.addressL1r		addressLine2
Address.addressL1r		addressLine1
addressType		addressType
Address.cityName		cityName
Address.stateCd		stateCd
Address.postalCd		postalCd

4. Under the **TelephoneNumber**s group, define a **direct** transformation with the following input and output fields.

Input Fields	Output Fields
phoneNum	phoneNum
phoneCountryCd	phoneCountryCd
doNotCallInd	doNotCallInd
phoneExtNum	phoneExtNum
phoneTypeCd	PhoneTypeCd

Input Fields	Value	Output Fields
phoneNum		phoneNum
phoneCountryCd		phoneCountryCd
doNotCallInd		doNotCallInd
phoneExtNum		phoneExtNum
phoneTypeCd		phoneTypeCd

5. Under the **Details** group, define a **direct** transformation with the following input and output fields.

Input Fields	Output Fields
closeDate	closeDate
establishDate	establishDate
employeeCount	employeeCount

The screenshot shows the Transformation Designer interface. On the left, the navigation tree displays the 'Organization\_OrganizationView' group, which contains 'Groups', 'Addresses', 'TelephoneNumberNumbers', 'Details', and 'Transformations'. Under 'Transformations', there is a 'direct' transformation. The main panel shows the configuration for this 'direct' transformation. It has fields for 'Name' (set to 'direct'), 'Status Output', 'Status Success', and 'Type' (set to 'direct'). Below these are sections for 'Input Fields' and 'Output Fields', where each input field is mapped directly to its corresponding output field.

Input Fields	Value	Output Fields
closeDate		closeDate
establishDate		establishDate
employeeCount		employeeCount

6. Under the **Organization\_OrganizationView** group, define a **direct** transformation with the following input and output fields:

Input Fields	Output Fields
displayName	displayName
dunsNumber	dunsNumber

The screenshot shows the Transformation Designer interface. On the left, the navigation tree displays the 'Organization\_OrganizationView' group, which contains 'Groups', 'Addresses', 'TelephoneNumberNumbers', 'Details', and 'Transformations'. Under 'Transformations', there is a 'direct' transformation. The main panel shows the configuration for this 'direct' transformation. It has fields for 'Name' (set to 'direct'), 'Status Output', 'Status Success', and 'Type' (set to 'direct'). Below these are sections for 'Input Fields' and 'Output Fields', where each input field is mapped directly to its corresponding output field.

Input Fields	Value	Output Fields
displayName		displayName
dunsNumber		dunsNumber

7. **Publish** the changes.  
 8. Create a **View to Business Entity** transformation named **OrganizationView\_Organization** based on the **OrganizationView**.  
 9. Under the **OrganizationView\_Organization**, create the following groups:  
   a. **TelephoneNumberNumbers**  
   b. **Addresses**  
   c. **Details**

10. Under the **TelephoneNumber**s, define a **direct** transformation with the following input and output fields.

Input Fields	Output Fields
phoneNum	phoneNum
phoneCountryCd	phoneCountryCd
doNotCallInd	doNotCallInd
phoneExtNum	phoneExtNum
phoneTypeCd	PhoneTypeCd

The screenshot shows a software interface for managing data transformations. On the left, there's a tree view of 'OrganizationView\_Organization' with nodes for 'Groups', 'Transformations', and a selected 'direct' transformation. On the right, a detailed view of the 'direct' transformation is shown. It has fields for 'Name' (set to 'direct'), 'Status Output' (empty), 'Status Success' (empty), and 'Type' (set to 'direct'). Below this is a table mapping 'Input Fields' to 'Output Fields':

Input Fields	Value	Output Fields
phoneNum	[...]	phoneNum
phoneCountryCd	[...]	phoneCountryCd
doNotCallInd	[...]	doNotCallInd
phoneExtNum	[...]	phoneExtNum
phoneTypeCd	[...]	phoneTypeCd

11. Under the **Addresses** transformation, define the **direct** transformation with the following input and output fields.

Input Fields	Output Fields
cityName	Address.cityName
stateCd	Address.stateCd
postalCd	Address.postalCd
addressLn1	Address.addressLn1
addressLn2	Address.addressLn2
addressType	addressType

The screenshot shows the Transformation Editor interface. On the left, the navigation tree for 'OrganizationView\_Organization' is visible, with 'Groups', 'Transformations', and 'Details' expanded. Under 'Transformations', a 'direct' transformation is selected. On the right, the 'direct' transformation configuration screen is shown. It includes fields for 'Name' (set to 'direct'), 'Status Output', 'Status Success', and 'Type' (set to 'direct'). Below these are sections for 'Input Fields' and 'Output Fields', where each input field is mapped to its corresponding output field.

12. Under the **Details** transformation, define the **direct** transformation with the following input and output fields:

Input Fields	Output Fields
closeDate	closeDate
establishDate	establishDate
employeeCount	employeeCount

This screenshot shows the 'OrganizationView\_Organization' transformation configuration. The 'Details' transformation is selected. A 'direct' transformation is defined with three input fields: 'closeDate', 'establishDate', and 'employeeCount'. These fields are mapped directly to their respective output fields: 'closeDate', 'establishDate', and 'employeeCount'. The entire mapping section is highlighted with a red box.

13. Under the **OrganizationView\_Organization**, create a **direct** transformation with the following input and output fields:

Input Fields	Output Fields
displayName	displayName
dunsNumber	dunsNumber

The screenshot shows the Transformation Designer interface. On the left, there's a tree view of transformations under 'OrganizationView\_Organization'. A transformation named 'direct' is selected. On the right, the details for this transformation are shown. The 'Name' field is set to 'direct'. The 'Type' dropdown is also set to 'direct'. Below this, there are sections for 'Input Fields' and 'Output Fields'. Each section contains two fields: 'displayName' and 'dunsNumber'. The entire 'Input Fields' and 'Output Fields' section is highlighted with a red border.

#### 14. Publish the changes

With the Business Entity to View and View to Business Entity transformations created, you will now create a Business Entity to Business Entity and use the address medic to cleanse the address.

15. Create a **Business Entity to Business Entity** transformation named **Organization\_Organization** based on the business entity **Organization**.
16. Create a group named **Addresses**.
17. Under **Addresses**, create a **cleanse** transformation.

The screenshot shows the Transformation Designer interface. On the left, there's a tree view of transformations under 'Organization\_Organization'. A transformation named 'Organization\_Organization' is selected. On the right, the details for this transformation are shown. The 'Name' field is set to 'Organization\_Organization'. The 'Business Entity' dropdown is set to 'Organization'. The 'Input Fields' and 'Output Fields' section is highlighted with a red border.

#### 18. Select the Cleanse Library as AddressDoctor and Function as AddressMedic.

The screenshot shows the Transformation Designer interface. On the left, there's a tree view of transformations under 'Organization\_Organization'. A transformation named 'cleanse' is selected. On the right, the details for this transformation are shown. The 'Name' field is set to 'cleanse'. The 'Cleanse Library' dropdown is set to 'AddressDoctor' and the 'Function' dropdown is set to 'AddressMedic'. The 'Input Parameters' section is highlighted with a red border.

#### 19. Scroll down to set the Input Parameters.

Function Parameter Name	Field Name	Value
Country	--	US
DeliveryAddressLines_LINE_1	Address.addressLine1	NA
DeliveryAddressLines_LINE_2	Address.addressLine2	NA
PostalCode_UNFORMATTED	Adress.postalCd	NA

Input Parameters		
Function Parameter Name	Field Name	Value
CorrectionType:		...
Country:		...
CountrySpecificLocalityLine:		...
DeliveryAddressLinesPiped:		...
DeliveryAddressLines_LINE_1:	Address.addressLine	...
DeliveryAddressLines_LINE_2:	Address.addressLine	...
Locality_ALL:		...
Locality_DEPENDENT:		...
PostalCode_UNFORMATTED:	Address.postalCd	...
Province:		...

20. Scroll down to the Output Parameters section, and link the corrected values from the addressmedic to the business entity:

Function Parameter Name	Field Name
DeliveryAddressLines_LINE_1	Address.addressLine1
DeliveryAddressLines_LINE_2	Address.addressLine2
Locality_ALL	Address.cityName
PostalCode_FORMATTED	Address.postalCd

21. Click **Apply** and **Publish** the changes.

Province:		...	
Output Parameters			
Function Parameter ...	Field Name	Value	
Building_SUBBUILDING...		...	
CorrectionStatus:		...	
CountryCode_ISO_3:		...	
DeliveryAddressLines_U...	Address.addressLine1	...	
DeliveryAddressLines_U...	Address.addressLine2	...	
Locality_ALL:	Address.cityName	...	
Locality_DEPENDENT:		...	
PostalCode_FORMATTE...	Address.postalCd	...	
Province_COUNTRY_ST...		...	

22. Log in to the **MDM Data Director** application as a Senior Manager (**joey/mdm**) and create a new **Organization** with the following values:

- a. Display Name: **Informatica LLC**
- b. Expand **Address** and select **BUSINESS** from the drop-down list
- c. Add a business address with the following details:

City Name: **Redwood City**  
Address Line1: **2100 Seaport**  
Address Line2: **redwood**  
State Code: **California**  
Postal Code: **94063**

- d. **Save** the record.

23. The address should be corrected by the addressmedic. To confirm the address correction, open the record again and navigate to the Address.

The screenshot shows the 'Organization\_Layout\_SrM' form. On the left is a sidebar with links: 'Organization\_Layout...', 'Telephone Numbers', 'Addresses', and 'Details'. The main area has tabs for 'Organization' (selected), 'Telephone Numbers (0)', and 'Addresses (1)'. Under 'Addresses (1)', the 'Address Type' is set to 'BUSINESS'. The address details are as follows:

Postal Cd:	94063-5596	Address Line 1:	2100 SEAPORT BLVD	State Cd:	CALIFORNIA
City Name:	REDWOOD CITY	Address Line 2:			

**Note:** Click the Form view button to view it in the above format.

---

*This concludes the lab.*

# Module 4: Data Cleansing

## Lab 4-4: Import Files

### Overview

You will now import a file after cleansing.

### Objectives:

- Import a new file

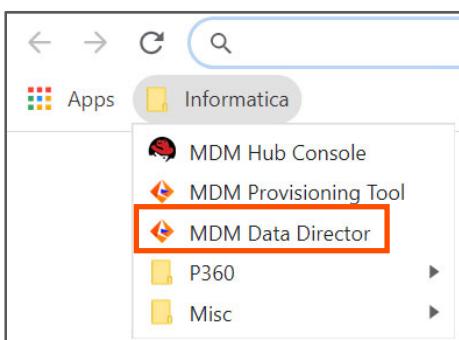
### Duration:

30 minutes

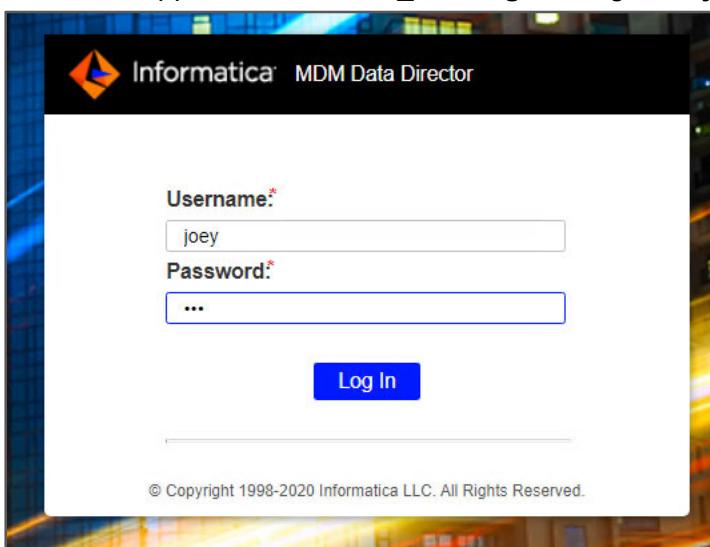
---

### Tasks

- Open a new tab in the browser, and from the bookmarks click **Informatica > MDM Data Director**.

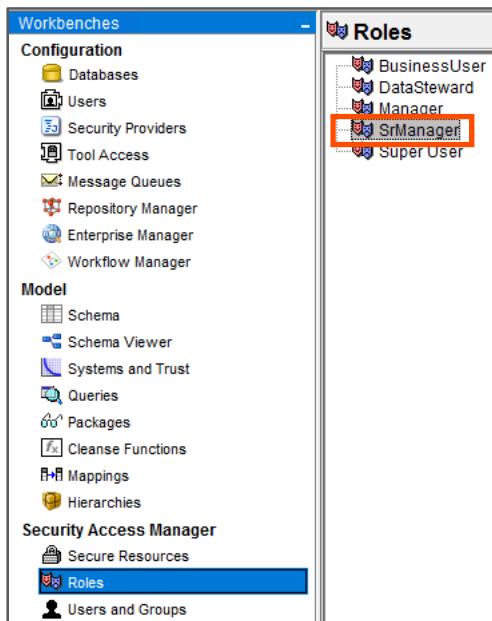


- Select the application as **E360\_training** and log in as **joey/admin**.



- Before importing a flat file, navigate to the **MDM Hub Console** to provide joey (SrManager) with all the required resource privileges.

4. Click **Roles** under Security Access Manager section, and select **SrManager**.



5. Click **Business Entity Services** and select all the privileges for **Find-Replace**, **File-Import**, and **Adhoc Match**.

Business Entity Services							
Find-Replace	✓	✓	✓	✓	✓	✓	✓
File Import	✓	✓	✓	✓	✓	✓	✓
Adhoc Match	✓	✓	✓	✓	✓	✓	✓

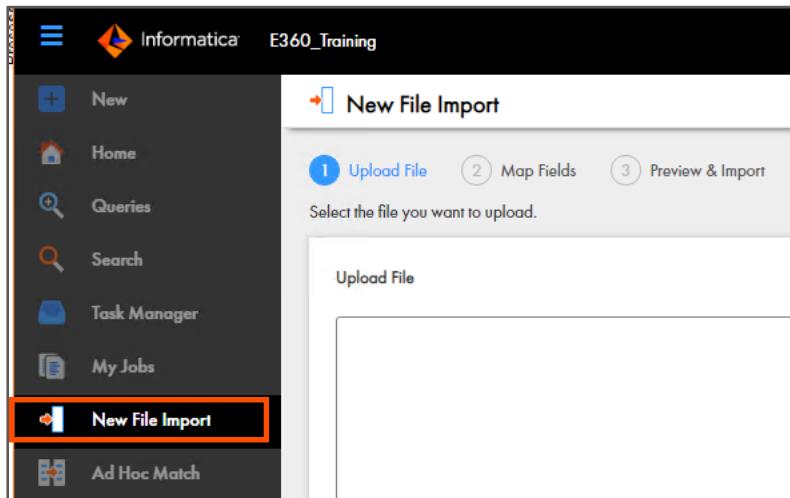
**Note:** Scroll up and provide **Task Administration** privilege and ensure that the user has privileges under Hierarchy Manager Profiles, Hierarchy manager Hierarchy Types, Hierarchy Manager Relationship Types, and Packages.

Custom Resources								
MDM_sample								
CHARTView	✓	✓	✓	✓	✓	✓	✓	✓
EXPORT_PROFILE/CreatePrivate	✓	✓	✓	✓	✓	✓	✓	✓
EXPORT_PROFILE/CreatePublic	✓	✓	✓	✓	✓	✓	✓	✓
EXPORT_PROFILE/Execute	✓	✓	✓	✓	✓	✓	✓	✓
SAVED_HM_FILTER/Create	✓	✓	✓	✓	✓	✓	✓	✓
SAVED_HM_FILTER/CreatePublic	✓	✓	✓	✓	✓	✓	✓	✓
SEARCH_QUERY/Create	✓	✓	✓	✓	✓	✓	✓	✓
SEARCH_QUERY/CreatePublic	✓	✓	✓	✓	✓	✓	✓	✓
SUBJECT_AREA/Account	✓	✓	✓	✓	✓	✓	✓	✓
SUBJECT_AREA/CreditCard	✓	✓	✓	✓	✓	✓	✓	✓
SUBJECT_AREA/Household	✓	✓	✓	✓	✓	✓	✓	✓
SUBJECT_AREA/Organization	✓	✓	✓	✓	✓	✓	✓	✓
SUBJECT_AREA/Person	✓	✓	✓	✓	✓	✓	✓	✓
SUBJECT_AREA/ProductGroup	✓	✓	✓	✓	✓	✓	✓	✓
SUBJECT_AREA/Products		✓	✓	✓	✓	✓	✓	✓
TASK_ADMINISTRATION	✓	✓	✓	✓	✓	✓	✓	✓
TASK_TYPE/AccountFinalReview		✓	✓	✓	✓	✓	✓	✓
TASK_TYPE/AccountMerge								

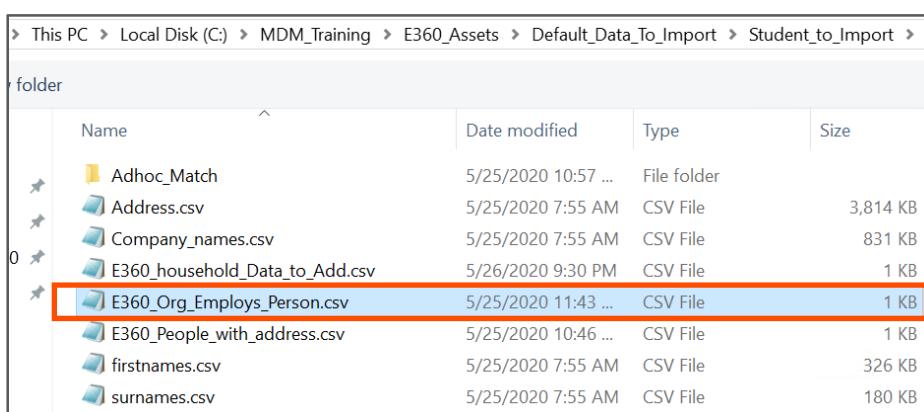
6. Click **Save**.

You will test your configuration by importing a flat file.

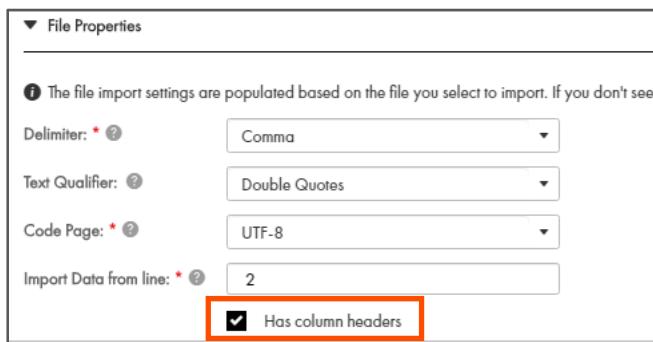
7. Toggle back to **MDM Data Director** and click **New File Import** from the menu.



8. Click the **Browse** link and select **E360\_Org\_Employs\_Person.csv** from the location:  
**C:\MDM\_Training\E360\_Assets\Default\_Data\_To\_Import\Student\_to\_Import**



9. Scroll down and ensure that the **Has column headers** checkbox is enabled.

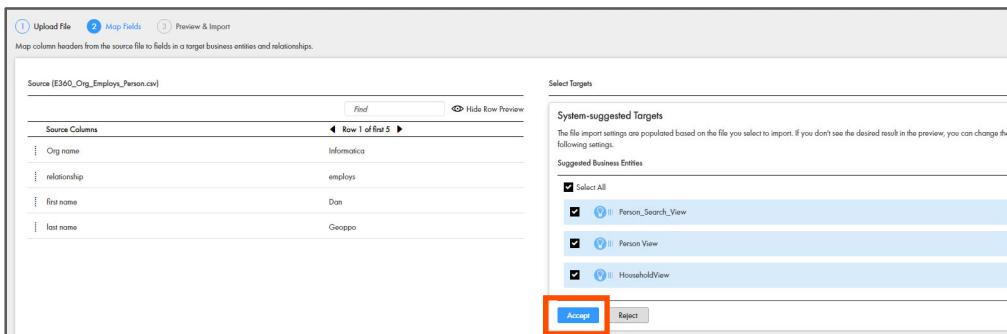


The file import settings are populated based on the file you select to import. If you don't see

Delimiter: *	Comma
Text Qualifier:	Double Quotes
Code Page:	UTF-8
Import Data from line: *	2
<input checked="" type="checkbox"/> Has column headers	

10. Click **Next**.

**11. Click Reject.**



The screenshot shows the Informatica Preview & Import interface. On the left, there's a preview of the source data from 'E360\_Org\_Employs\_Person.csv'. It shows a single row with columns: Org name (Informatica), relationship (employs), first name (Dan), and last name (Geoppo). On the right, under 'Select Targets', there's a section for 'System-suggested Targets' which includes 'Person\_Search\_View', 'Person View', and 'HouseholdView'. Below this is a 'Suggested Business Entities' section with a checkbox for 'Select All'. At the bottom right of the interface, there are 'Accept' and 'Reject' buttons, with 'Accept' being highlighted by a red box.

**12. Select the Business Entities Organization and Person, and select the Relationship Organization Employs Person.**



The screenshot shows the 'Select Targets' interface. Under 'Business Entities', 'Organization' and 'Person' are selected. Under 'Relationships', 'Organization Employs Person' is selected. Each item has a delete icon to its right.

**13. Link the source column Org name to the Display Name of the target.**



The screenshot shows the 'User Mapping' interface for the 'Target - Organization'. It maps the 'Org name' column from the source to the 'Display Name' column in the target. Other columns like 'Primary Key', 'Source Key', 'Party Type', and 'Duns Number' are also listed but not mapped.

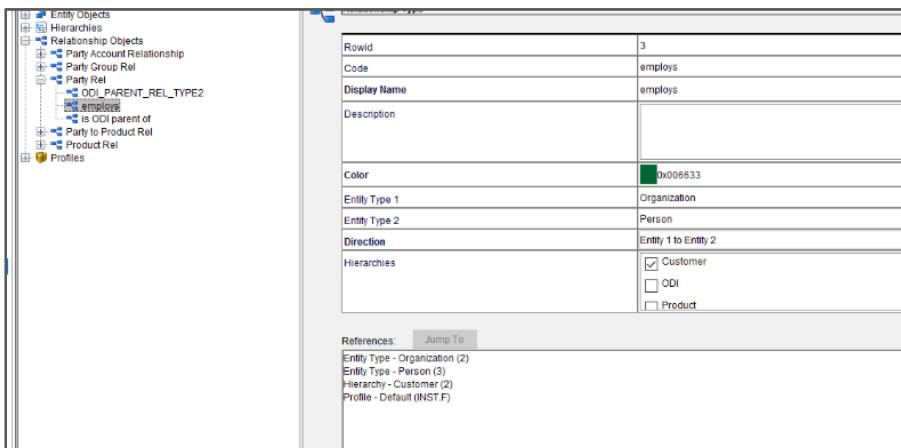
Target Field	Source Column Header
Primary Key	
Source Key	
Party Type	
Duns Number	
Display Name	Org name
Telephone Numbers	

14. Click the back button, and select the **Person** business entity.
15. Link the source columns **first name** and **last name** to the **First Name** and **Last Name** to the target fields of the **Person** entity.



The screenshot shows the 'User Mapping' interface for the 'Target - Person' entity. At the top, there's a header with a back arrow and a magnifying glass icon. Below it is a section titled 'User Mapping' with a note: 'User field mapping applied to columns in the source file.' There are buttons for 'Map Selected', 'Show All', 'Find', and a trash bin icon. The main area has two columns: 'Target Field' and 'Source Column Header'. Under 'Target Field', there's a tree view with 'Person' expanded. Under 'Source Column Header', there are two entries: 'first name' under 'Primary Key' and 'last name' under 'Party Type'. Both entries have a key icon and a lock icon.

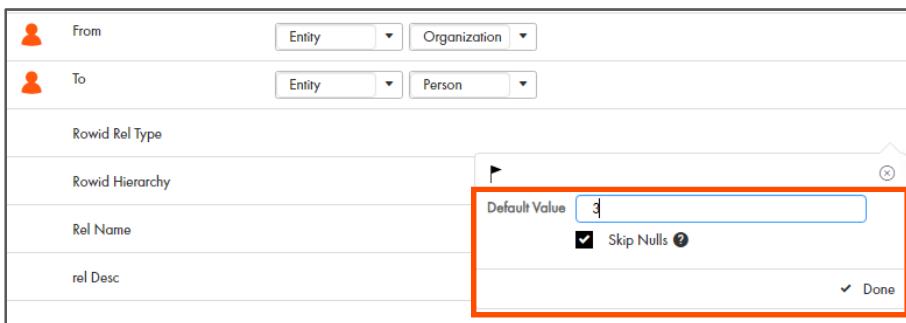
16. Click the back button and select the **Organization Employs Person** relationship.
17. Select the **From** entity as **Organization** and the **To** entity as **Person**.



The screenshot shows the 'Relationship Objects' screen. On the left is a tree view of objects: Entity Objects, Hierarchies, Relationship Objects, Party Account Relationship, Party Group Rel, Party Rel, ODI\_PARENT\_REL\_TYPE2, employ, is ODI parent of, Party to Product Rel, and Product Rel. The 'employ' node is selected. On the right is a detailed view of the 'employ' relationship. It includes fields like Rowid (3), Code (employs), Display Name (employs), Description, Color (hex 0x000633), Entity Type 1 (Organization), Entity Type 2 (Person), Direction (Entity to Entity), and Hierarchy checkboxes (Customer, ODI, Product). Below the main view is a 'References' section with a 'Jump To' button and a list of related entities: Entity Type - Organization (2), Entity Type - Person (3), Hierarchy - Customer (2), and Profile - Default (INST.F).

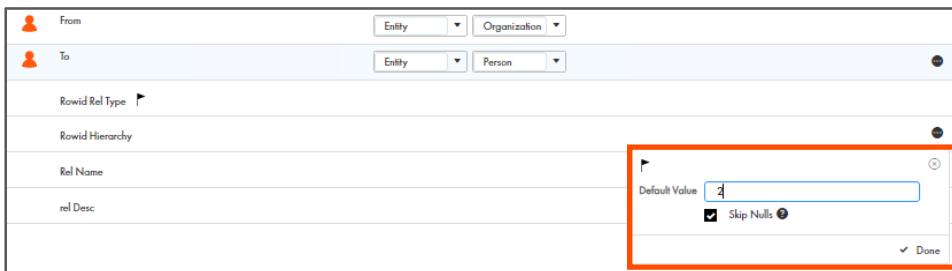
**Note:** You have checked the values for Hierarchy and Relationship type in module 2 labs.

18. Enter value 3 for **Rowid Rel Type** and click **Done**.



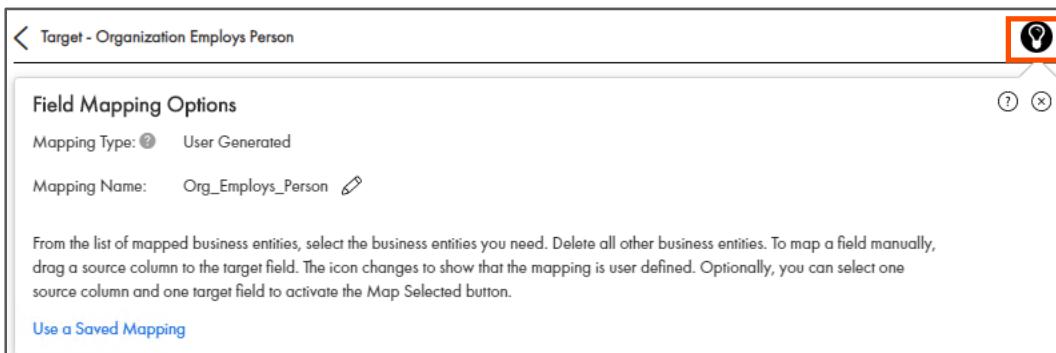
The screenshot shows a configuration dialog for 'Rowid Rel Type'. It has sections for 'From' (set to 'Entity' and 'Organization') and 'To' (set to 'Entity' and 'Person'). Below these are fields for 'Rowid Rel Type', 'Rowid Hierarchy', 'Rel Name', and 'rel Desc'. A modal dialog is open over the form, containing a 'Default Value' input field with '3' entered, a checked 'Skip Nulls' checkbox, and a 'Done' button at the bottom right. The entire 'Default Value' input field is highlighted with a red border.

19. Enter value **2** for **Rowid Hierarchy** and click **Done**.



The screenshot shows the 'Rowid Hierarchy' configuration screen. It includes fields for 'From' (Entity) and 'To' (Entity, Person). Under 'Rowid Rel Type', there is a dropdown for 'Rowid Hierarchy'. Below it are 'Rel Name' and 'rel Desc' fields. On the right, there is a panel with a 'Default Value' input field containing '2', a checked 'Skip Nulls' checkbox, and a 'Done' button.

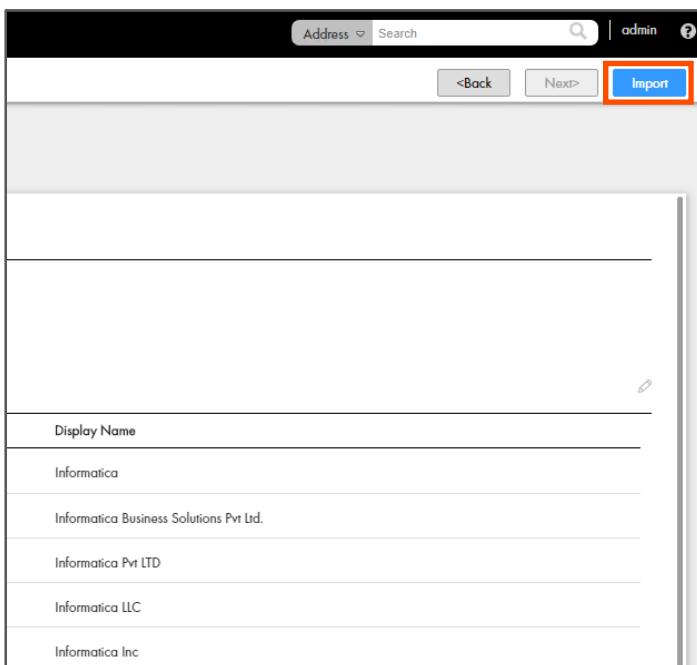
20. Click the Cog icon and save the mapping as **Org\_Employs\_Person**, and click the tick icon.



The screenshot shows the 'Field Mapping Options' dialog box. It has sections for 'Mapping Type' (User Generated), 'Mapping Name' (Org\_Employs\_Person), and instructions for selecting mapped business entities. At the bottom are 'Use a Saved Mapping' and 'Done' buttons. The top right corner features a cog icon.

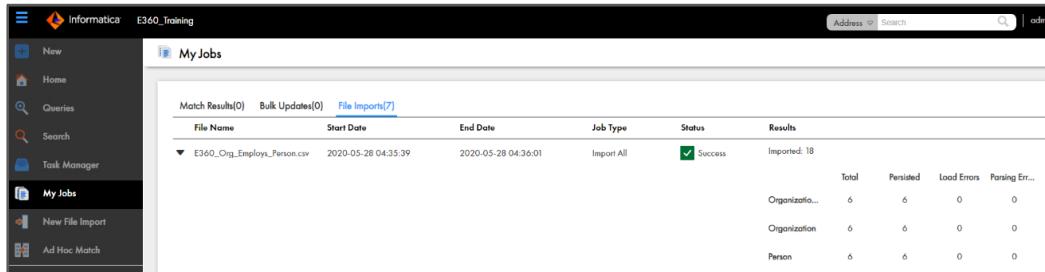
21. Click **Next**.

22. Click **Import**.



The screenshot shows the 'Import' screen. It has a header with 'Address', 'Search', and 'admin' buttons. Below are 'Back' and 'Next' buttons, and an 'Import' button which is highlighted with a red box. The main area lists display names: Informatica, Informatica Business Solutions Pvt Ltd., Informatica Pvt LTD, Informatica LLC, and Informatica Inc.

## 23. Monitor the status in the **My Jobs** page.



File Name	Start Date	End Date	Job Type	Status	Results
E360_Org_Employs_Person.csv	2020-05-28 04:35:39	2020-05-28 04:36:01	Import All	<input checked="" type="checkbox"/> Success	Imported: 10
					Total      Persisted      Load Errors      Parsing Err...
					Organization      6      6      0      0
					Organization      6      6      0      0
					Person      6      6      0      0

Next you will need to define the layouts to see the hierarchies and networks.

---

*This concludes the lab.*



# Module 5: Smart Search

## Lab 5-1: Configure Elastic Search

### Overview:

In this version of MDM, you will use either the Solr-based smart search or the Elasticsearch. In the previous labs, you have configured the columns that take part in the smart search. You will now switch from Solr-based smart search to Elasticsearch. You do not need to modify the search configuration in the Provisioning Tool and the generated indexes, as Elasticsearch will still use it.

### Objectives:

- Edit the cmxcleanse and cmxserver properties files
- Prepare the Elasticsearch
- Configure the Provisioning Tool for Elasticsearch
- Test the results

### Duration:

40 minutes

---

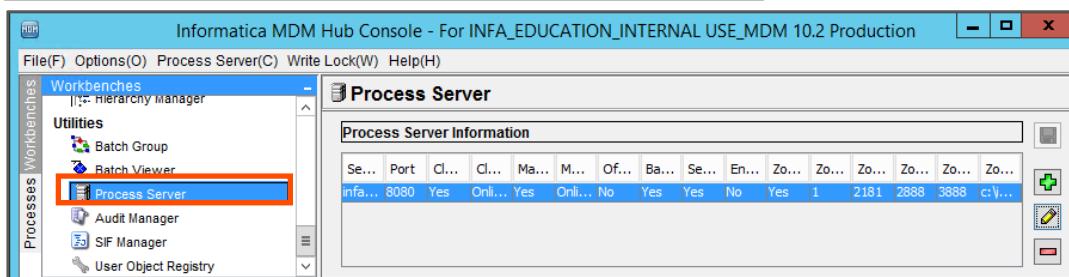
### Tasks

1. Log in to MDM Hub console as **admin/admin**.
2. Select **E360\_Training** as your ORS database.
3. Under **Utilities** workbench, click **Process Server**.
4. Acquire a **Write-lock**.
- Note:** You should already have a process server configured.
5. Select the process server details and click the **Edit** button to edit Process Server details.

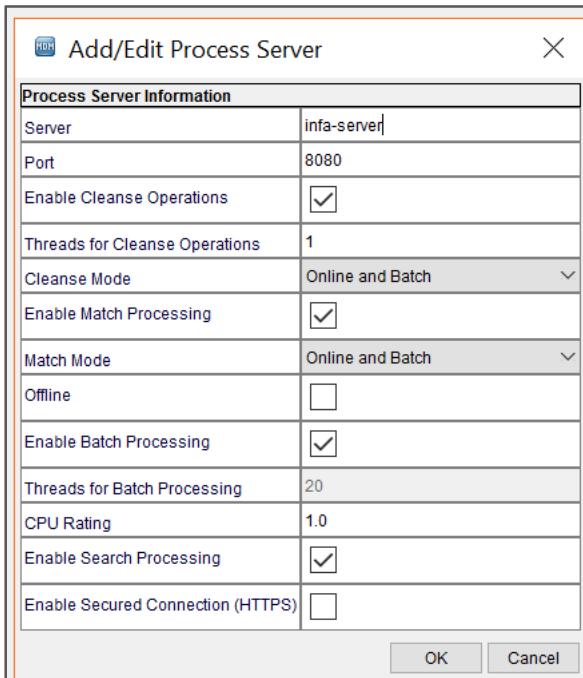
Batch	Search	Enable Secured Connection (...)
Yes	No	No

6. Set the following configuration details for the Process Server:

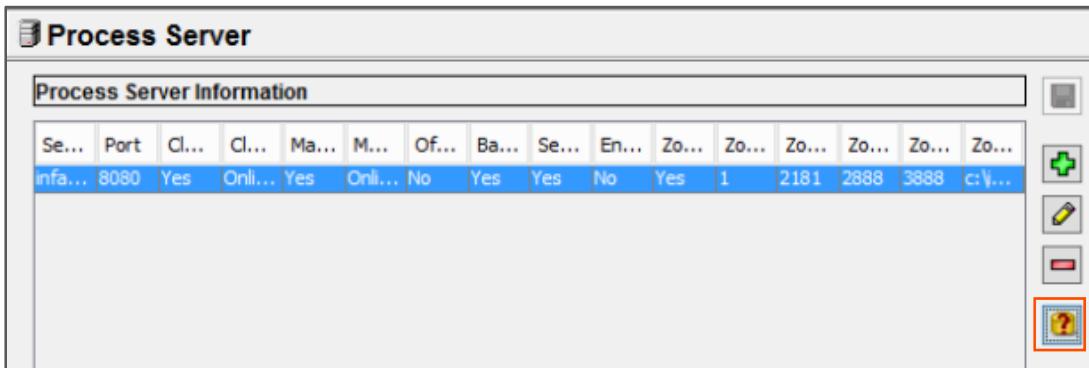
Property	Value
Server	infa-server
Enable Search Processing	Select



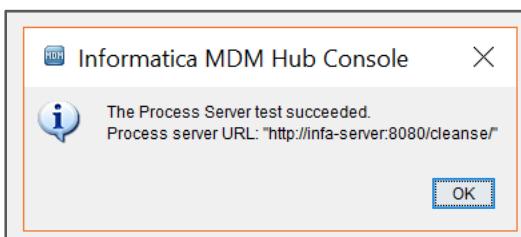
7. Click **OK** and then **Save** the changes.



8. Click the **Test** icon to verify the configuration.



Se...	Port	Cl...	Cl...	Ma...	M...	Of...	Ba...	Se...	En...	Zo...	Zo...	Zo...	Zo...	Zo...	Zo...
infa...	8080	Yes	Onli...	Yes	Onli...	No	Yes	Yes	No	Yes	1	2181	2888	3888	c:\...



9. Open the windows explorer and navigate to **c:\infadm\hub\cleanse\resources**.  
 10. Edit the **cmxcleanse.properties** file.  
 11. Scroll to the bottom and add the following.

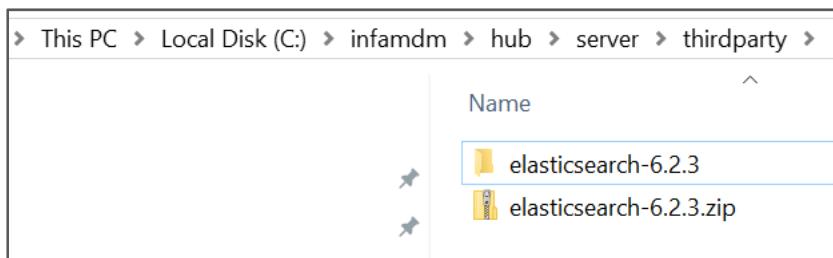
```
#Manually Added Props
cmx.ss.engine=es
ssl.keyStore=C:/infadm/hub/server/resources/certificates/MDM_ESC
LIENT_FILE_JKS.keystore
```

```

ssl.keyStore.password=infa@1234
ssl.trustStore=C:/infadm/hub/server/resources/certificates/MDM_E
STRUSTSTORE_FILE_JKS.keystore
ssl.trustStore.password=infa@1234
cmx.ss.dirtyIndex.disable=true
  
```

**Note:** You can copy the contents from the **C:\MDM\_Training\Elasticsearch\_Assets\Elasticsearch\_Properties.txt** file and paste it in the **cmxcleanse.properties** file.

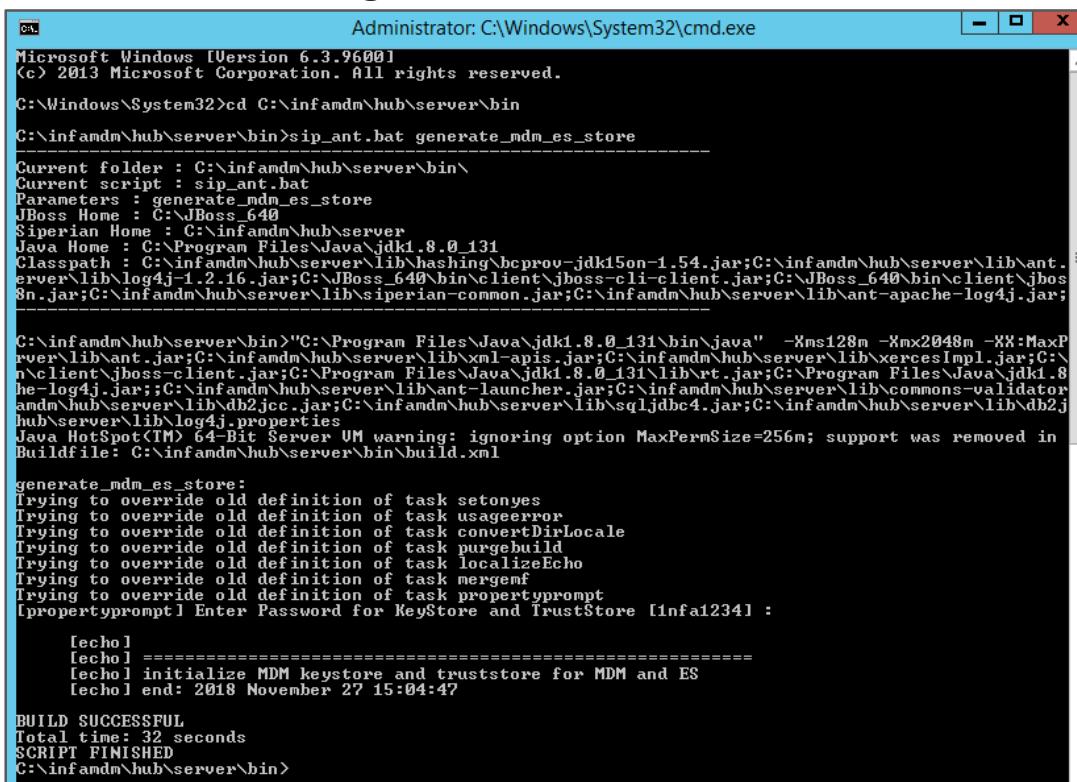
12. Add the same content to the **C:\infadm\hub\server\resources\cmxserver.properties** file as well.
13. Restart the **JBoss** application server. This will take about five minutes.
14. While the JBoss server is starting, do the following:
  - a. In the windows explorer, navigate to the location **C:\MDM\_Training\E360\_Assets\ElasticSearch**
  - b. Copy **elasticsearch-6.2.3.zip**.
  - c. Navigate to **C:\infadm\hub\server\thirdparty** and paste it.
  - d. Uncompress the **elasticsearch-6.2.3.zip** to the **elasticsearch-6.2.3** folder using 7z uncompressor.



You will now generate a keystore.

15. Click **Start** and type **cmd** in the text box.  
**Note:** This will open a command prompt.
16. Type the following command:  
`cd C:\infadm\hub\server\bin`
17. Enter the following command:  
`sip_ant.bat generate_mdm_es_store`

18. Enter the password as **infa@1234**.



```

Administrator: C:\Windows\System32\cmd.exe
Microsoft Windows [Version 6.3.9600]
(c) 2013 Microsoft Corporation. All rights reserved.

C:\Windows\System32>cd C:\infadm\hub\server\bin
C:\infadm\hub\server\bin>sip_ant.bat generate_mdm_es_store
Current folder : C:\infadm\hub\server\bin\
Current script : sip_ant.bat
Parameters : generate_mdm_es_store
JBoss Home : C:\JBoss_640
Siperian Home : C:\infadm\hub\server
Java Home : C:\Program Files\Java\jdk1.8.0_131
Classpath : C:\infadm\hub\server\lib\hashing\bcprov-jdk15on-1.54.jar;C:\infadm\hub\server\lib\ant\server\lib\log4j-1.2.16.jar;C:\JBoss_640\bin\client\jboss-client-client.jar;C:\JBoss_640\bin\client\jboss-n.jar;C:\infadm\hub\server\lib\siperian-common.jar;C:\infadm\hub\server\lib\ant-apache-log4j.jar;

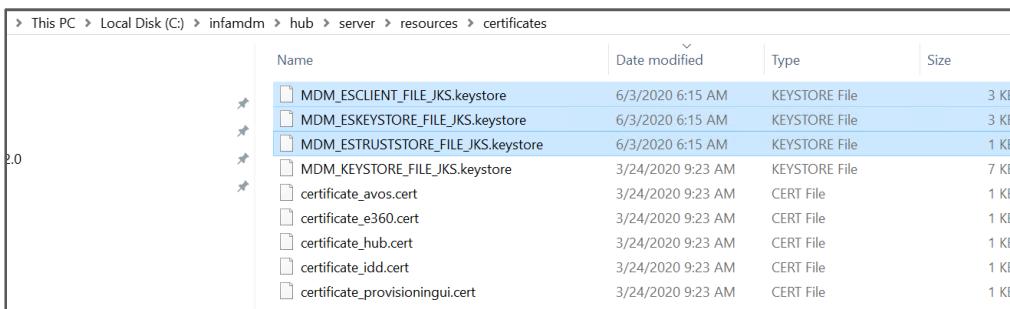
C:\infadm\hub\server\bin>"C:\Program Files\Java\jdk1.8.0_131\bin\java" -Xms128m -Xmx2048m -XX:MaxPermSize=256m -XX:MaxPermSize=256m; support was removed in Buildfile: C:\infadm\hub\server\bin\build.xml
generate_mdm_es_store:
Trying to override old definition of task setonyes
Trying to override old definition of task usageerror
Trying to override old definition of task convertDirLocale
Trying to override old definition of task purgebuild
Trying to override old definition of task localizeEcho
Trying to override old definition of task mergemf
Trying to override old definition of task propertyprompt
[propertyprompt] Enter Password for KeyStore and TrustStore [infa1234] :
[echo]
[echo] =====
[echo] initialize MDM keystore and truststore for MDM and ES
[echo] end: 2018 November 27 15:04:47

BUILD SUCCESSFUL
Total time: 32 seconds
SCRIPT FINISHED
C:\infadm\hub\server\bin>

```

**Note:** Password will not echo on the screen.

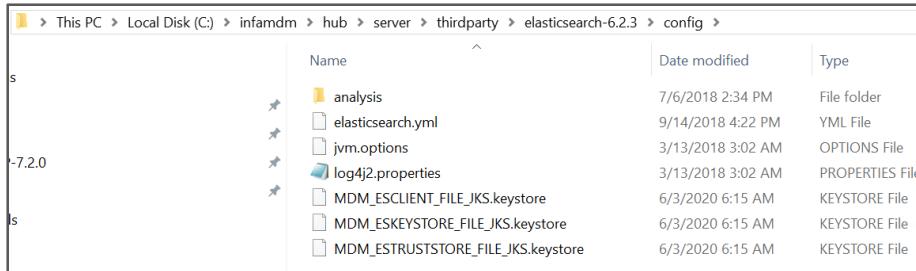
19. The command will create keystore files in the  
**C:\infadm\hub\server\resources\certificates** folder.



	Name	Date modified	Type	Size
2.0	MDM_ESCLIENT_FILE_JKS.keystore	6/3/2020 6:15 AM	KEYSTORE File	3 KB
	MDM_ESKEYSTORE_FILE_JKS.keystore	6/3/2020 6:15 AM	KEYSTORE File	3 KB
	MDM_ESTRUSTSTORE_FILE_JKS.keystore	6/3/2020 6:15 AM	KEYSTORE File	1 KB
	MDM_KEYSTORE_FILE_JKS.keystore	3/24/2020 9:23 AM	KEYSTORE File	7 KB
	certificate_avos.cert	3/24/2020 9:23 AM	CERT File	1 KB
	certificate_e360.cert	3/24/2020 9:23 AM	CERT File	1 KB
	certificate_hub.cert	3/24/2020 9:23 AM	CERT File	1 KB
	certificate_idd.cert	3/24/2020 9:23 AM	CERT File	1 KB
	certificate_provisioningui.cert	3/24/2020 9:23 AM	CERT File	1 KB

20. Copy and paste the following files to the  
**C:\infadm\hub\server\thirdparty\elasticsearch-6.2.3\config** folder:

- MDM\_ESTRUSTSTORE\_FILE\_JKS.keystore
- MDM\_ESKEYSTORE\_FILE\_JKS.keystore
- MDM\_ESCLIENT\_FILE\_JKS.keystore

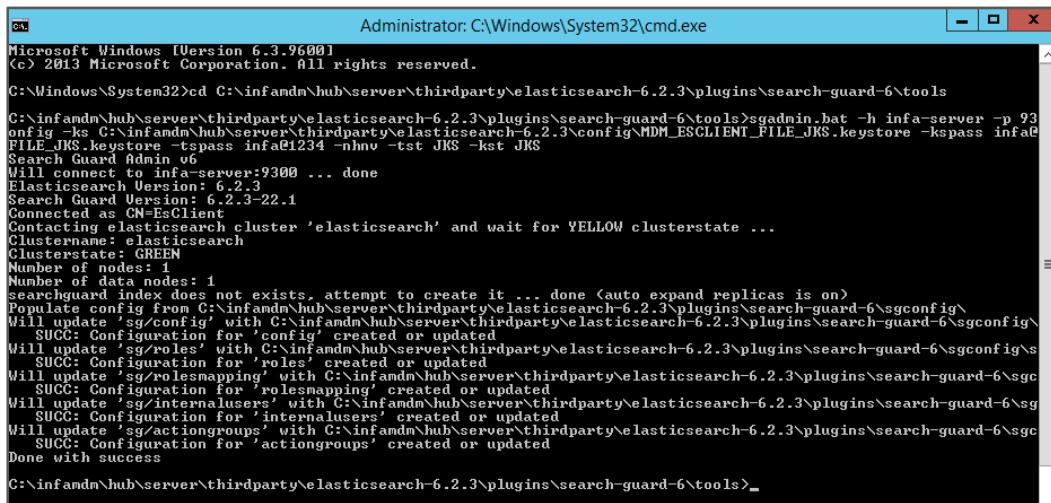


21. Navigate into the **elasticsearch-6.2.3\config** folder.
22. Open the **elasticsearch.yml** in notepad++ and make the following changes:

Property	Value
Cluster Name	Comment by adding a # at the beginning of the line <b>#cluster.name: &lt;cluster_name&gt;</b>
Network.host	infa-server
node.name	esNode1
path.data	C:\infadm\hub\server\thirdparty\elasticsearch-6.2.3\data
path.logs	C:\infadm\hub\server\thirdparty\elasticsearch-6.2.3\logs
searchguard.ssl.transport.keystore_filepath	C:\infadm\hub\server\thirdparty\elasticsearch-6.2.3\config\MDM_ESKEYSTORE_FILE_JKS.keystore
searchguard.ssl.transport.truststore_filepath	C:\infadm\hub\server\thirdparty\elasticsearch-6.2.3\config\MDM_ESTRUSTSTORE_FILE_JKS.keystore
searchguard.ssl.http.keystore_filepath	C:\infadm\hub\server\thirdparty\elasticsearch-6.2.3\config\MDM_ESCLIENT_FILE_JKS.keystore
searchguard.ssl.http.truststore_filepath	C:\infadm\hub\server\thirdparty\elasticsearch-6.2.3\config\MDM_ESTRUSTSTORE_FILE_JKS.keystore

23. Save the **elasticsearch.yml** file.
24. Switch to the command prompt and navigate to:  
**C:\infadm\hub\server\thirdparty\elasticsearch-6.2.3\bin**
25. Run the **elasticsearch.bat** file and minimize the window. **Do not close it.**
26. Open another command prompt and navigate to:  
**C:\infadm\hub\server\thirdparty\elasticsearch-6.2.3\plugins\search-guard-6\tools**

27. Copy the command from **C:\MDM\_Training\E360\_Assets\Elasticsearch\sgadmin\_command** file and paste it in the command prompt and run it.



```

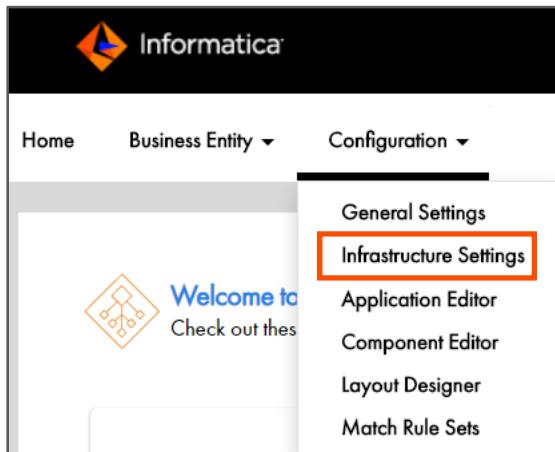
Administrator: C:\Windows\System32\cmd.exe
Microsoft Windows [Version 6.3.9600]
(c) 2013 Microsoft Corporation. All rights reserved.

C:\infadm\hub\server\thirdparty\elasticsearch-6.2.3\plugins\search-guard-6\tools>cd C:\infadm\hub\server\thirdparty\elasticsearch-6.2.3\plugins\search-guard-6\tools>sgadmin.bat -h infa-server -p 9300 -ks C:\infadm\hub\server\thirdparty\elasticsearch-6.2.3\config\MDM_ESCLIENT_FILE_JKS.keystore -kpass infaEFILE_JKS_keystore -tspass infa@1234 -nhnv -tst JKS -kst JKS
Search Guard Admin v6
Will connect to infa-server:9300 ... done
Elasticsearch Version: 6.2.3
Search Guard Version: 6.2.3-22.1
Connected as CN=EcClient
Connecting elasticsearch cluster 'elasticsearch' and wait for YELLOW clusterstate ...
Clustername: elasticsearch
Clusterstate: GREEN
Number of nodes: 1
Number of data nodes: 1
searchguard index does not exists, attempt to create it ... done <auto expand replicas is on>
Populate config from C:\infadm\hub\server\thirdparty\elasticsearch-6.2.3\plugins\search-guard-6\sgconfig\Will update 'sg/config' with C:\infadm\hub\server\thirdparty\elasticsearch-6.2.3\plugins\search-guard-6\sgconfig\>
    SUCC: Configuration for 'config' created or updated
    Will update 'sg/roles' with C:\infadm\hub\server\thirdparty\elasticsearch-6.2.3\plugins\search-guard-6\sgconfig\>
        SUCC: Configuration for 'roles' created or updated
    Will update 'sg/rolesmapping' with C:\infadm\hub\server\thirdparty\elasticsearch-6.2.3\plugins\search-guard-6\sgconfig\>
        SUCC: Configuration for 'rolesmapping' created or updated
    Will update 'sg/internalusers' with C:\infadm\hub\server\thirdparty\elasticsearch-6.2.3\plugins\search-guard-6\sgconfig\>
        SUCC: Configuration for 'internalusers' created or updated
    Will update 'sg/actiongroups' with C:\infadm\hub\server\thirdparty\elasticsearch-6.2.3\plugins\search-guard-6\sgconfig\>
        SUCC: Configuration for 'actiongroups' created or updated
Done with success
C:\infadm\hub\server\thirdparty\elasticsearch-6.2.3\plugins\search-guard-6\tools>_

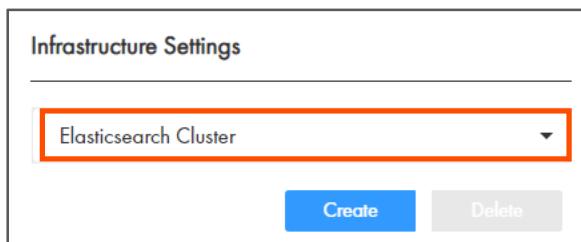
```

**Note:** You should see a success message towards the end of the messages.

28. Close the command window and switch to the Provisioning Tool.  
 29. From the Provisioning Tool, click **Configuration > Infrastructure Settings**.



30. Select **Elasticsearch Cluster** from the drop down, and click **Create**.



31. In the right most panel, click **Apply**.  
 32. In the ESCluster, select **esNode** and click **Create**.  
 33. Enter the name as **esNode1**, and URL as <https://infa-server:9200>.

**34. Click Apply.**

[New ES Node]

Name:	<input type="text" value="esNode1"/>	Apply	Discard
URL:	<input type="text" value="https://infa-server:9200"/>		

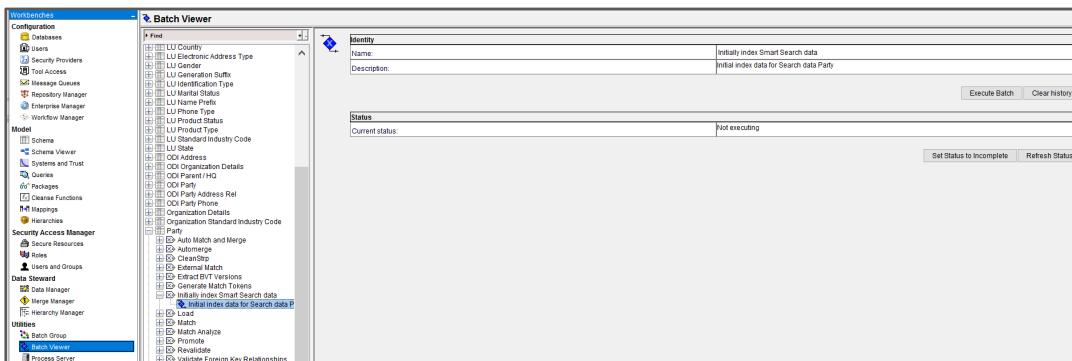
**35. Publish the changes.**

**Note:** The ElasticSearch configuration is now complete.

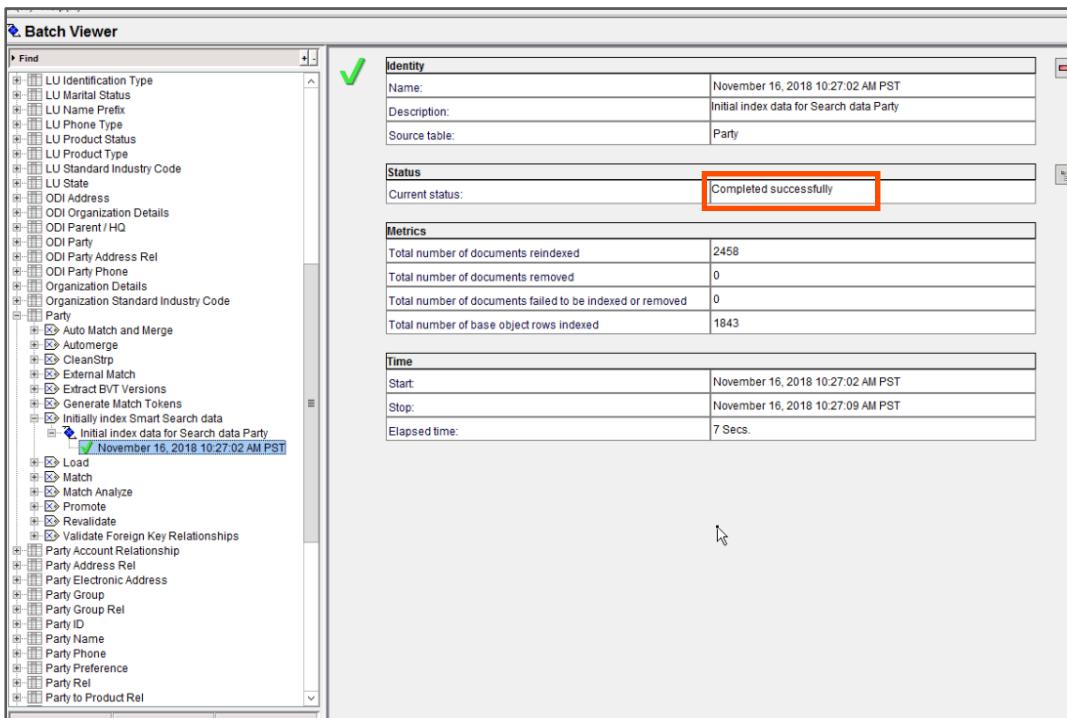
**36. In the MDM hub, navigate to Utilities > Batch Viewer.**

**37. Navigate to Party > Initially index Smart Search Data > Initial index data for Search data Party.**

**38. Click Execute Batch to run the smart search job for the party and address base objects.**



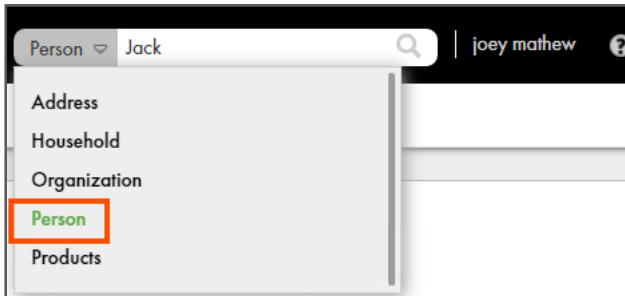
This will take about 30 seconds. You will see that the batch executes successfully.



**Note:** Click **Refresh Status** to check the execution status.

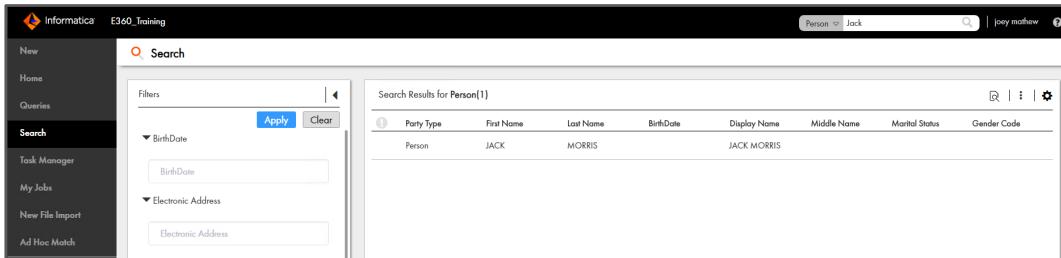
39. Access the **MDM Data Director** application as the Senior Manager (**joey/mdi**) to test the search results. Click **Search** and search for any of the records you have added earlier.

**Note:** To search for a Person select **Person** from the drop-down list.



**Note:** If the search results do not appear, clear the browser cache and try again.

The smart search does not need queries and runs based on the searchable columns selected in the business entity configuration.



Party Type	First Name	Last Name	BirthDate	Display Name	Middle Name	Marital Status	Gender Code
Person	JACK	MORRIS		JACK MORRIS			

*This concludes the lab.*

# Module 5: Smart Search

## Lab 5-2: Set a Custom Search View

### Overview:

In this lab exercise, you will create a new Business Entity to View, View to Business Entity, Business Entity to Business Entity transformations and set a custom search view.

### Objectives:

- Define transformations for custom search

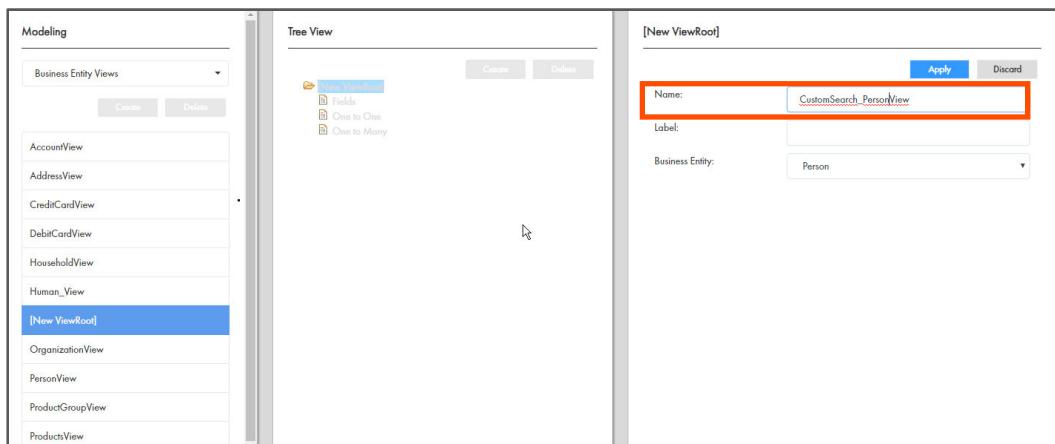
### Duration:

30 minutes

---

### Tasks

- In the Provisioning Tool, create a Business Entity view (**Business Entity > Modeling > Business Entity Views**) named **CustomSearch\_PersonView** and select the Business Entity as **Person**.



- Click **Publish** to save changes to MDM Hub.
- Create the following two fields under **CustomSearch\_PersonView > Fields**.

Name	Label
FirstName	First Name
LastName	Last Name

CustomSearch\_PersonView

**Create**

- CustomSearch\_PersonView
- Fields
  - FirstName
  - LastName
  - One to One
  - One to Many

4. Click **Business Entity > Transformations**.
5. Create a **Business Entity to View** transformation named **CS\_CSView** and select the view as **CustomSearch\_PersonView**.

[New BE to View]

**Apply**   **Discard**

Name:	CS_CSView
View:	CustomSearch_PersonView

6. Create a **direct** transformation under **CS\_CSView > Transformations** with the following input and output fields:

Input Fields	Output Fields
firstName	FirstName
lastName	LastName

7. Click **Apply** to save the changes.

[New Transformation]

**Apply**   **Discard**

Name:	direct
Status Output:	
Status Success:	
Type:	direct

Input Fields	Value	Output Fields	+
firstName		FirstName	...
lastName		LastName	...

8. Create a **View to Business Entity** transformation named **CSView\_CS** and select the view as **CustomSearch\_PersonView**.

[New View to BE]

**Apply**   **Discard**

Name:	CSView_CS
View:	CustomSearch_PersonView

9. Create a **direct** transformation under **CSView\_CS > Transformations** with the following input and output fields:

Input Fields	Output Fields
FirstName	firstName
LastName	lastName

10. Click **Apply** to save the changes.

11. Create a **Business Entity to Business Entity** transformation named **CS\_CS** and select the Business Entity as **Person**.

NEW\_CO2CO

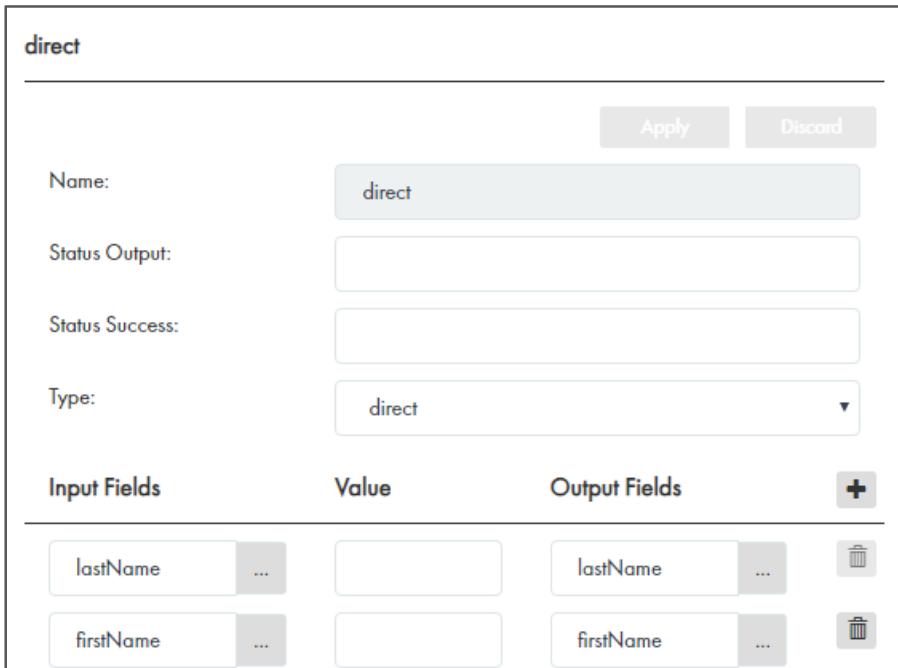
**Apply**   **Discard**

Name:	CS_CS
Business Entity:	Person

12. Create a **direct** transformation under **CS\_CS > Transformations** with the following input and output fields:

Input Fields	Output Fields
firstName	firstName
lastName	lastName

13. Click **Apply** to save the changes.

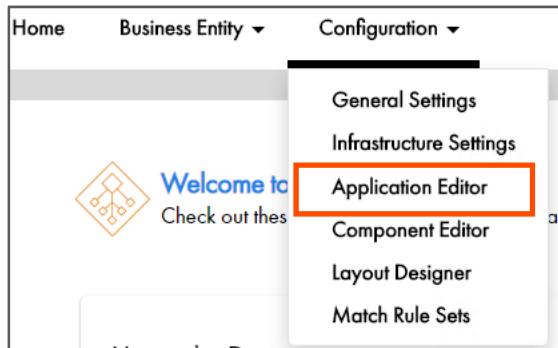


The screenshot shows a configuration named "direct". It has four fields: Name (direct), Status Output (empty), Status Success (empty), and Type (direct). Below these are two rows of Input Fields and Output Fields. Each row consists of an input field (lastName or firstName), a value placeholder (empty), and an output field (lastName or firstName) with a trash can icon. A plus sign icon is at the top right of the input/output grid.

Input Fields	Value	Output Fields
lastName		lastName
firstName		firstName

14. Click **Publish** to save the changes to MDM Hub.

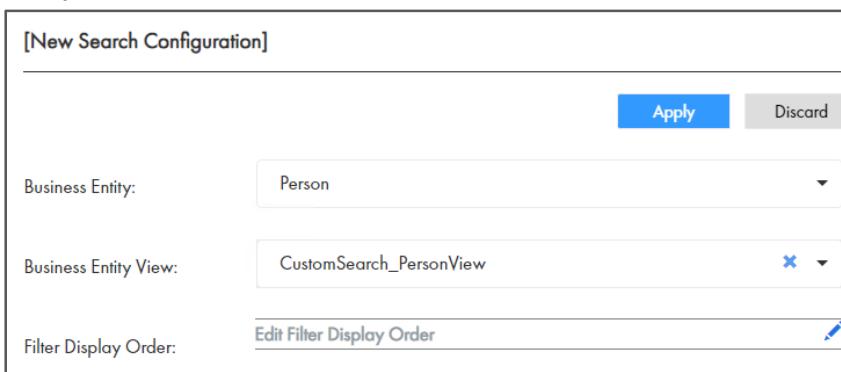
15. In the Provisioning Tool, click **Configuration > Application Editor**.



16. Select the **E360\_Training** application.

17. Select **Search Configuration** and click **Create**.

18. In the Search Configuration panel, select Business Entity as **Person**, and Business Entity View as **CustomSearch\_PersonView**.



The screenshot shows the "New Search Configuration" panel. It has three fields: Business Entity (Person), Business Entity View (CustomSearch\_PersonView), and Filter Display Order (with a pencil icon). At the top are "Apply" and "Discard" buttons.

Business Entity:	Person
Business Entity View:	CustomSearch_PersonView
Filter Display Order:	<a href="#">Edit Filter Display Order</a>

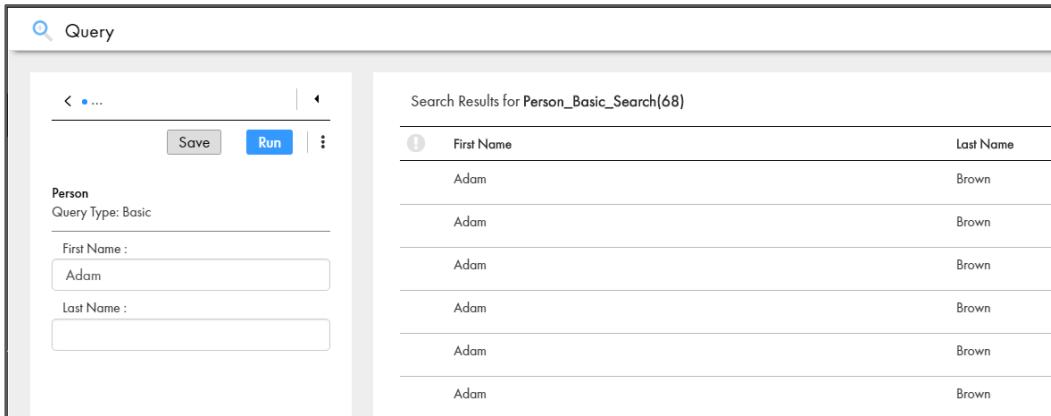
Credit Card	Select a view for search
Household	Select a view for search
Products	Select a view for search
ProductGroup	Select a view for search
Account	Select a view for search
Address	Select a view for search
Person	CustomSearch_PersonView <span style="border: 1px solid red; padding: 2px;">X</span> <span style="border: 1px solid black; padding: 2px;">▼</span>

19. Click **Apply**.

20. **Publish** the changes.

You will now test in the MDM Data Director application.

21. Log into the **MDM Data Director** application as the Senior Manager (**joeys/mdm**).
22. Select **E360\_Training** application.
23. Click the **Queries** tab.
24. Run a search query for a person (Select **Person > Person\_Basic\_Search**) and observe that the search view now differs from the default view.



The screenshot shows the 'Query' interface in the MDM Data Director. On the left, there's a search bar labeled 'Query' and a navigation bar with back, forward, save, run, and more options. Below that, it says 'Person' and 'Query Type: Basic'. There are two input fields: 'First Name:' containing 'Adam' and 'Last Name:' containing an empty field. On the right, the results are displayed in a table titled 'Search Results for Person\_Basic\_Search(68)'. The table has columns for 'First Name' and 'Last Name', showing multiple rows of Adam and Brown.

	First Name	Last Name
1	Adam	Brown
2	Adam	Brown
3	Adam	Brown
4	Adam	Brown
5	Adam	Brown
6	Adam	Brown

**Note:** It should display only First Name and Last Name columns.

*This concludes the lab.*



# Module 5: Smart Search

## Lab 5-3: Define Filters

### Overview:

You can define filters in the Provisioning Tool to restrict data access to specific user roles. In this lab, you will create the field filter and node filter types so that users with the Business User role cannot see the Organization business entity information.

### Objectives:

- Create a field filter and a node filter
- Test the results in MDM Data Director application

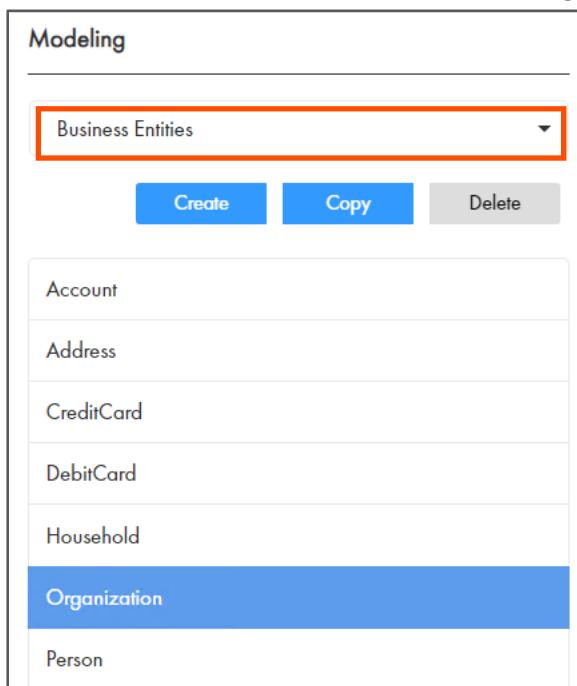
### Duration:

15 minutes

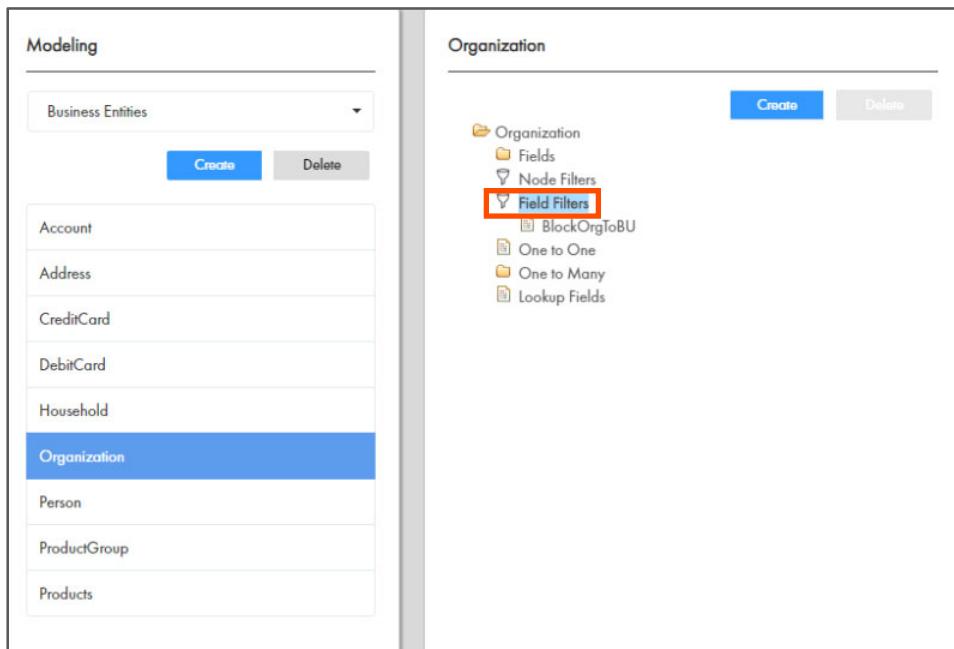
---

### Tasks

1. In the Provisioning Tool, navigate to **Business Entity > Modelling**.
2. Select **E360\_Training** application.
3. From the drop-down, select **Business Entities**.
4. From the list of business entities, select **Organization**.

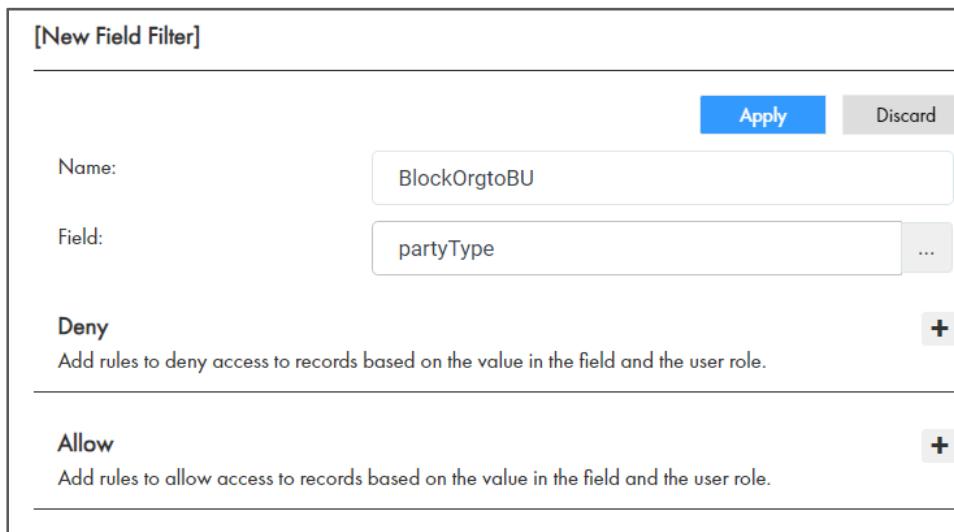


5. Select **Field Filters** and click **Create**.



The screenshot shows two panels. The left panel, titled 'Modeling', contains a dropdown menu 'Business Entities' with options: Account, Address, CreditCard, DebitCard, Household, Organization (which is selected and highlighted in blue), Person, ProductGroup, and Products. Below this is a 'Create' button and a 'Delete' button. The right panel, titled 'Organization', shows a tree structure under 'Organization': Fields, Node Filters, and Field Filters (which is also highlighted in red). Under 'Field Filters', there are sub-options: BlockOrgToBU, One to One, One to Many, and Lookup Fields. At the top of the right panel are 'Create' and 'Delete' buttons.

6. Enter the name as **BlockOrgtoBU** and select the field as **partyType**.

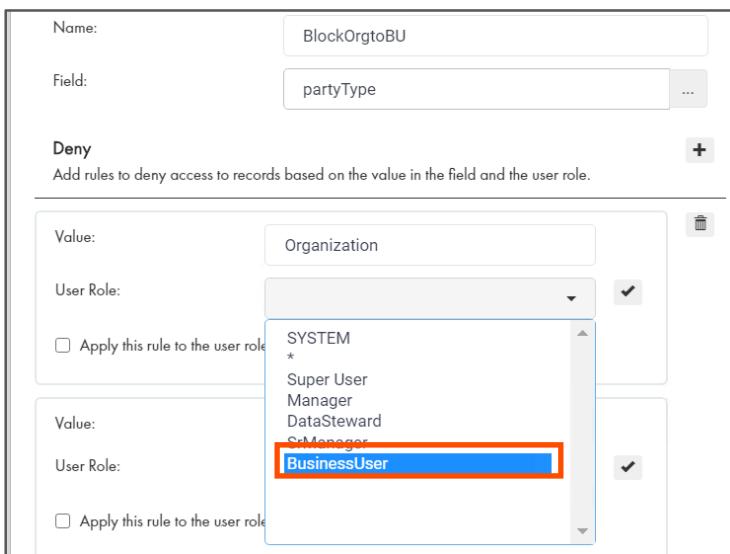


The dialog box has a title '[New Field Filter]' and two buttons at the top: 'Apply' (blue) and 'Discard' (grey). Below these are two input fields: 'Name:' containing 'BlockOrgtoBU' and 'Field:' containing 'partyType'. There is also a '...' button next to the 'Field' input field. Below the inputs are two sections: 'Deny' and 'Allow', each with a '+ Add rule' button. A note under 'Deny' says: 'Add rules to deny access to records based on the value in the field and the user role.' A note under 'Allow' says: 'Add rules to allow access to records based on the value in the field and the user role.'

7. From the **Deny** section, click the **+** button.

8. Set the Value to **Organization** and the User Role as **Business\_User**.

9. Click the **tick** icon.



Name: BlockOrgtoBU  
Field: partyType

**Deny**  
Add rules to deny access to records based on the value in the field and the user role.

Value:	Organization
User Role:	<input checked="" type="checkbox"/> SYSTEM <input checked="" type="checkbox"/> Super User <input checked="" type="checkbox"/> Manager <input checked="" type="checkbox"/> DataSteward <input checked="" type="checkbox"/> SrManager <input checked="" type="checkbox"/> <b>BusinessUser</b>
Value:	
User Role:	

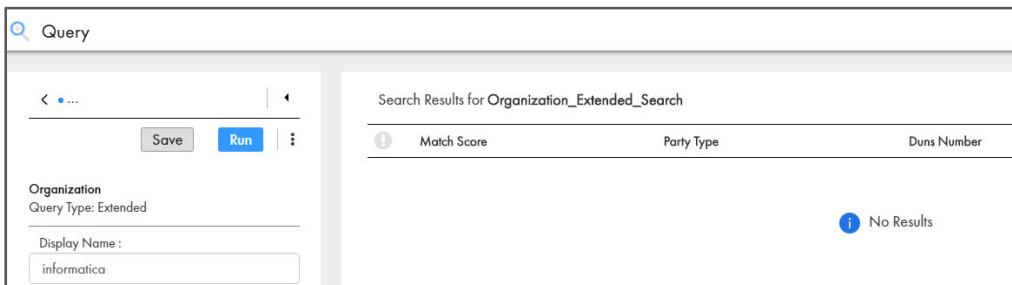
10. Click **Apply**.

11. **Publish** the changes.

12. Log in to the MDM Data Director application as the Business User (**jimmy/mdm**).

13. Import **Queries.json** from the Desktop.

14. Select the **Organization\_Extended\_Search** query and search for “**informatica**”.



**Query**

Save Run

Organization  
Query Type: Extended  
Display Name: informatica

Search Results for Organization\_Extended\_Search

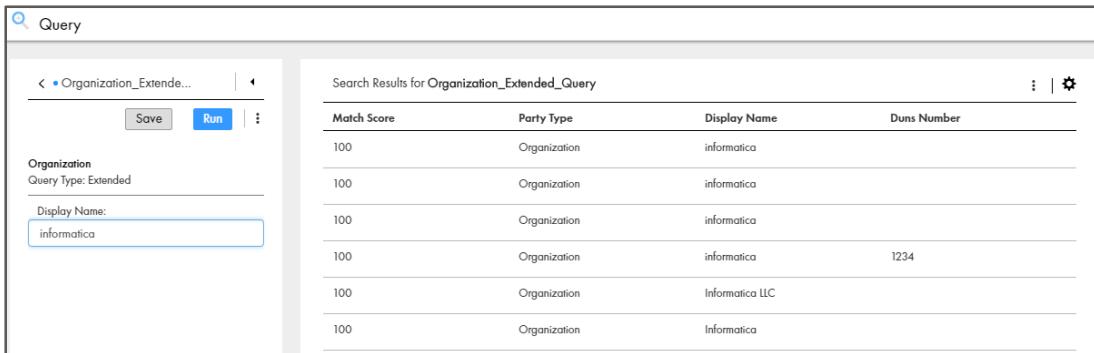
Match Score	Party Type	Duns Number
No Results		

**Note:** The results will not appear due to the filter you defined for this role.

15. Log out as the Business User and log in as the Manager (**mark/mdm**).

16. Import **Queries.json** from the Desktop.

17. Run the same **Organization\_Extended\_Search** query to see the results. This time, the organization results should appear.



**Query**

Save Run

Organization  
Query Type: Extended  
Display Name: informatica

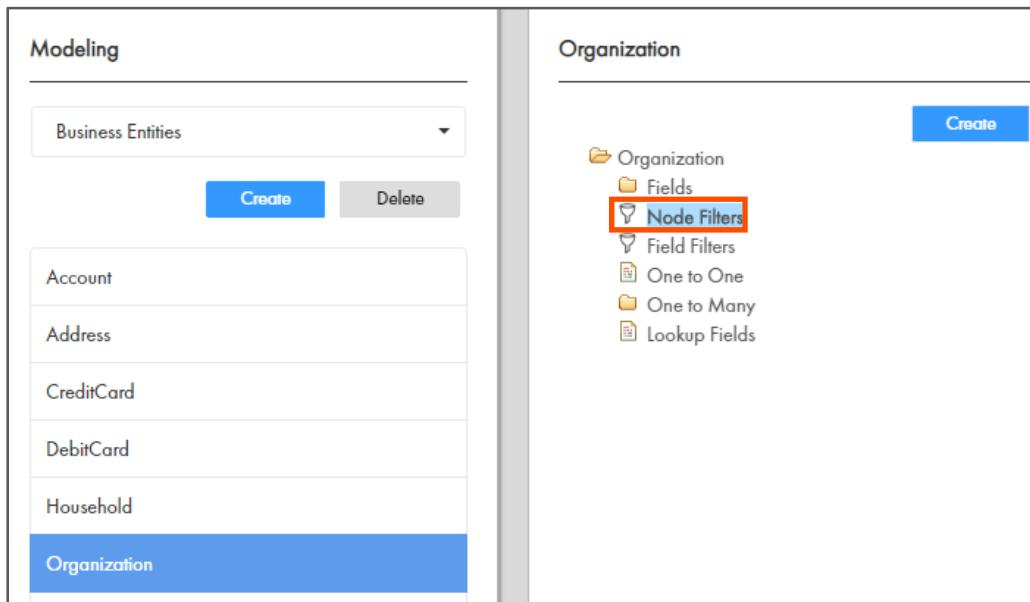
Search Results for Organization\_Extended\_Query

Match Score	Party Type	Display Name	Duns Number
100	Organization	informatica	
100	Organization	informatica	
100	Organization	informatica	
100	Organization	informatica	1234
100	Organization	Informatica LLC	
100	Organization	Informatica	

## Node Filter

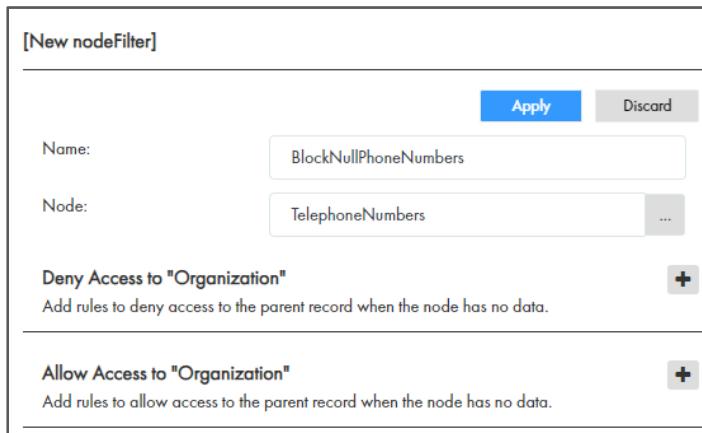
You will now define a node filter to hide all organization records without a phone number from the manager user role.

18. Switch to the Provisioning Tool and navigate to **Business Entity > Modelling**.
19. From the drop-down, select **Business Entities** and select **Organization**.
20. Select **Node Filters** and click **Create**.



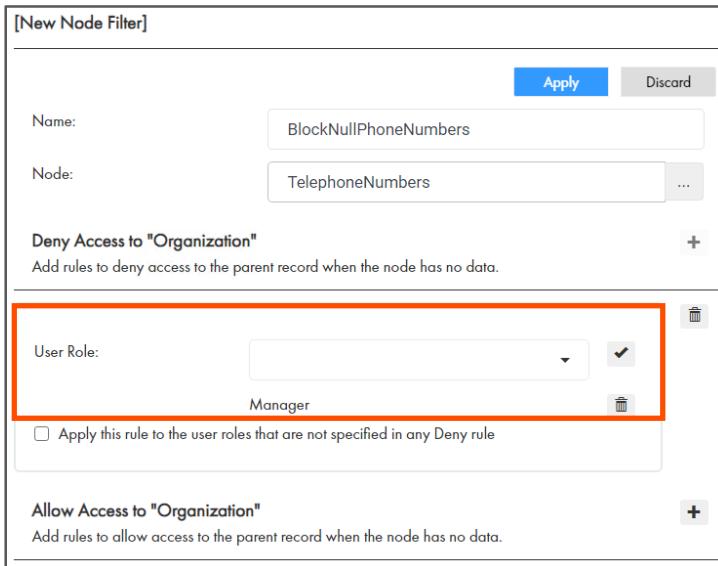
The screenshot shows two panels. The left panel, titled 'Modeling', has a dropdown menu set to 'Business Entities' with options like Account, Address, CreditCard, DebitCard, Household, and Organization. The 'Organization' option is highlighted with a blue bar at the bottom. Below the dropdown are 'Create' and 'Delete' buttons. The right panel, titled 'Organization', shows a sidebar with 'Organization' expanded, revealing 'Fields', 'Node Filters' (which is highlighted with a red box), 'Field Filters', 'One to One', 'One to Many', and 'Lookup Fields'. A 'Create' button is located at the top right of the right panel.

21. Enter the Name as **BlockNullPhoneNumbers** and set the Node as **TelephoneNumber**s.



The dialog box is titled '[New nodeFilter]'. It contains fields for 'Name:' (set to 'BlockNullPhoneNumbers') and 'Node:' (set to 'TelephoneNumber'). Below these are two sections: 'Deny Access to "Organization"' and 'Allow Access to "Organization"'. Each section has a note about adding rules and a '+' button to add new rules.

22. In the Deny section, click **+** and set the user role as **Manager**.



[New Node Filter]

Name: BlockNullPhoneNumbers

Node: TelephoneNumbers

**Deny Access to "Organization"**

Add rules to deny access to the parent record when the node has no data.

User Role: Manager

Apply this rule to the user roles that are not specified in any Deny rule

**Allow Access to "Organization"**

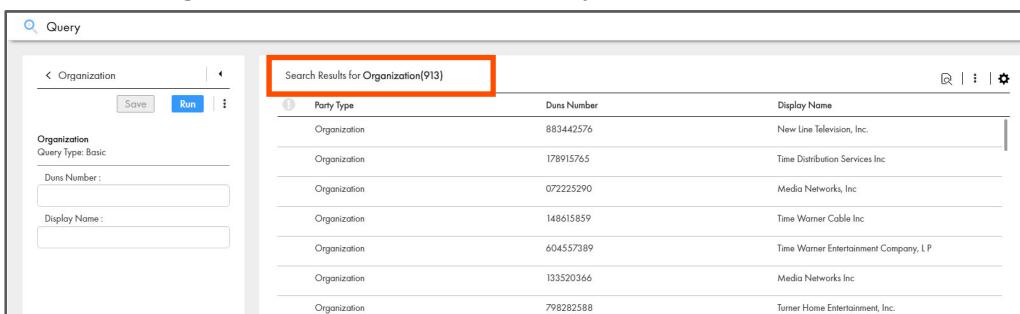
Add rules to allow access to the parent record when the node has no data.

23. Click **Apply**.

24. Click **Publish** to save the changes to the MDM Hub.

25. Log in to the MDM Data Director application as the Manager (**mark/mdm**).

26. To run the **Organization\_Basic** search query, click **Run**.



Query

Organization

Save Run

Organization  
Query Type: Basic

Duns Number :  
Display Name :

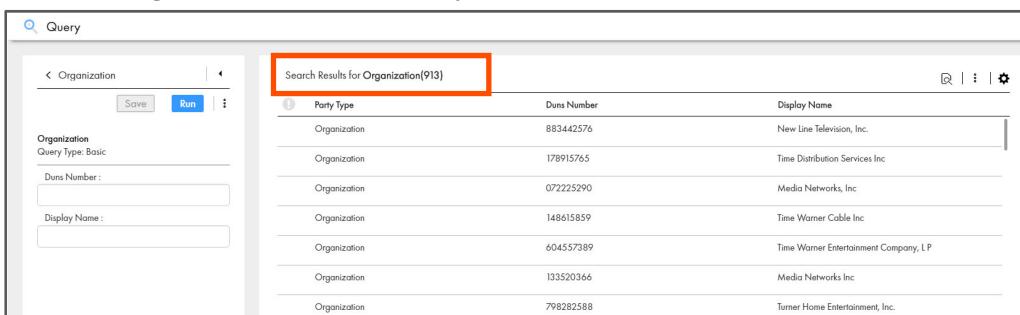
Search Results for Organization(913)

Party Type	Duns Number	Display Name
Organization	883442576	New Line Television, Inc.
Organization	178915765	Time Distribution Services Inc
Organization	072225290	Media Networks, Inc
Organization	148615859	Time Warner Cable Inc
Organization	604557389	Time Warner Entertainment Company, L P
Organization	133520366	Media Networks Inc
Organization	798282588	Turner Home Entertainment, Inc.

**Note:** Observe the number of results. The records without the phone numbers will be filtered out from the search results.

27. Log out and log in as the Senior Manager (**joeys/mdm**).

28. Run the **Organization\_Basic** query and compare the number of results.



Query

Organization

Save Run

Organization  
Query Type: Basic

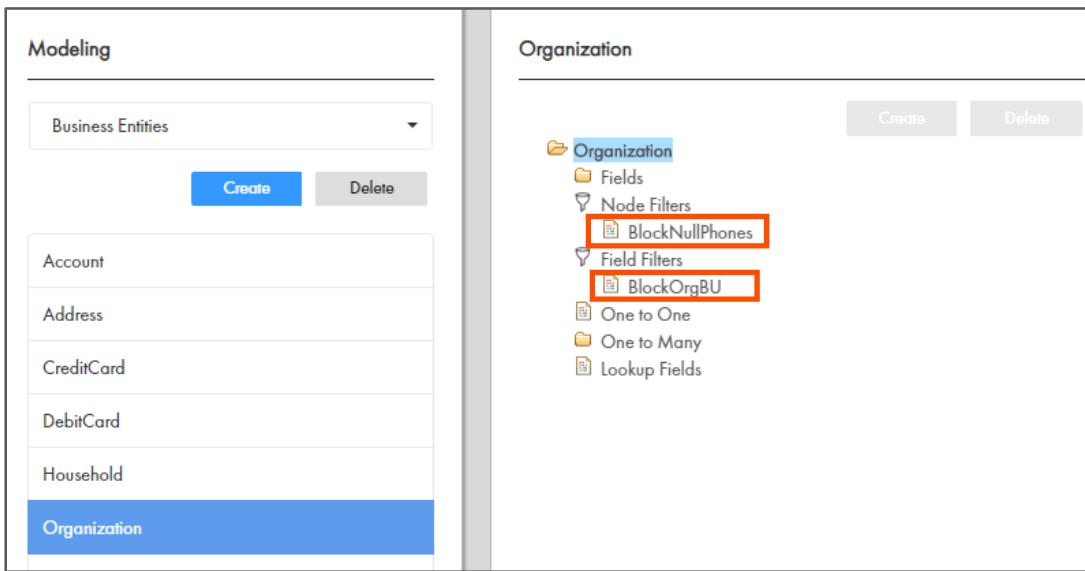
Duns Number :  
Display Name :

Search Results for Organization(913)

Party Type	Duns Number	Display Name
Organization	883442576	New Line Television, Inc.
Organization	178915765	Time Distribution Services Inc
Organization	072225290	Media Networks, Inc
Organization	148615859	Time Warner Cable Inc
Organization	604557389	Time Warner Entertainment Company, L P
Organization	133520366	Media Networks Inc
Organization	798282588	Turner Home Entertainment, Inc.

29. After you complete this lab, delete the field and node filters you created as a part of this exercise.

## 30. Publish the changes.



The screenshot shows two main sections: 'Modeling' on the left and 'Organization' on the right.

**Modeling Tab:**

- A dropdown menu is open under 'Business Entities' with options: Create (highlighted in blue) and Delete.
- A list of entities: Account, Address, CreditCard, DebitCard, Household, and Organization. 'Organization' is highlighted in blue.

**Organization Tab:**

- Two buttons: Create and Delete.
- A tree view under 'Organization':
  - Fields
  - Node Filters
    - BlockNullPhones (highlighted with a red box)
  - Field Filters
    - BlockOrgBU (highlighted with a red box)
  - One to One
  - One to Many
  - Lookup Fields

**Note:** If you do not delete the filters, the Manager will not be allowed to access everything in the subsequent labs on the workflows.

---

*This concludes the lab.*

# Module 6: Configure Workflows

## Lab 6-1: ActiveVOS Integration

### Overview:

Workflow binds people and tasks together to complete a larger operation. It specifies:

- the type of tasks to be performed
- the order in which it is performed (linear/parallel)
- the permission to perform each task

In this lab exercise, you will configure a workflow engine in MDM hub and define user roles and privileges. You will test a multi-level workflow in the MDM Data Director application.

### Objectives:

- Define a workflow engine in the MDM Hub console
- Define user roles and privileges
- Test the workflows in the classic view

### Duration:

40 minutes

---

### Tasks

1. Log in to the MDM Hub console as **admin/admin**.
2. Under the **Configuration** workbench, choose **Workflow Manager**.

**Note:** If it prompts you to connect to the master database, click to do so.

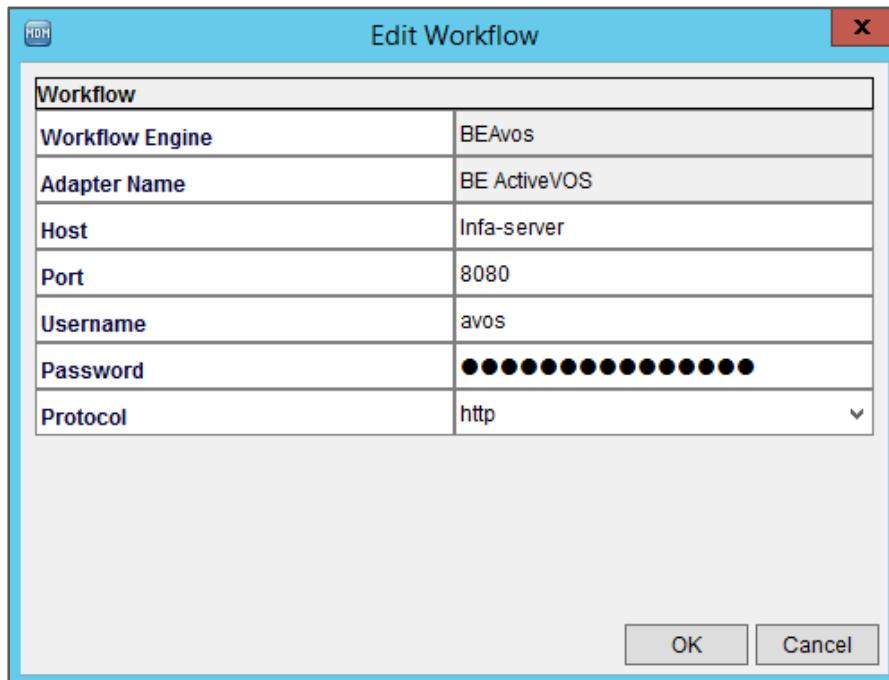
3. Acquire a **Write Lock(A)**.
4. Click the **Workflow Engines** tab.

**Note:** Ensure that the following workflow manager exists. If it doesn't, add a new workflow engine with the following information.

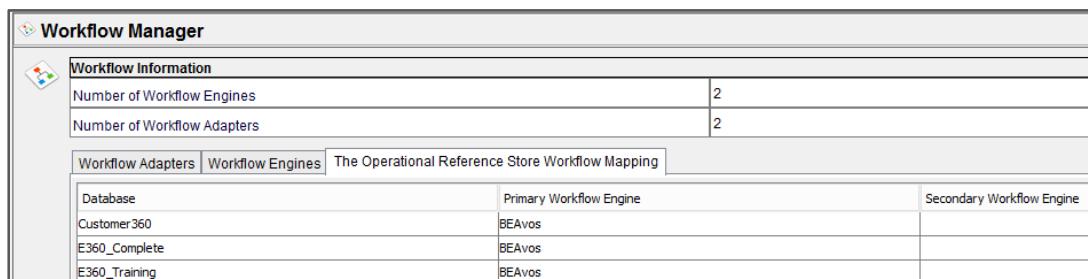
Property	Value
Workflow Engine	BEAvos
Adapter Name	BE ActiveVOS
Host	infa-server
Port	8080
Username	avosadmin
Password	Infa@123
Protocol	http

**Note:** If the Workflow engine exists, but with different values, click the **Edit** icon and modify the values.

- Click **OK** to save the workflow manager configuration.



- Click the **The Operational Reference Store Workflow Mapping** tab.
- For the E360\_Training database, ensure that the Primary Workflow Engine is **BEAvos**.



Workflow Information		
Number of Workflow Engines	2	
Number of Workflow Adapters	2	
<a href="#">Workflow Adapters</a> <a href="#">Workflow Engines</a> <b>The Operational Reference Store Workflow Mapping</b>		
Database	Primary Workflow Engine	Secondary Workflow Engine
Customer360	BEAvos	
E360_Complete	BEAvos	
E360_Training	BEAvos	

**Note:** There should be no Secondary Workflow Engine associated with this ORS.

Next, you need to configure a Message Queue so that, when a workflow is triggered, the user will be notified.

- Under the **Configuration** workbench, click **Message Queues**.
- From the middle section of the screen, expand **Message Queues**.

**Note:** To save the time, the lab environment already includes a message queue in JBoss and the configuration is defined in the MDM hub.

10. Click **Queue Status** on the right side of the screen.

Queue Status	
Data Changes Monitoring	Enabled
<a href="#">Toggle Data Changes Monitoring Status</a>	

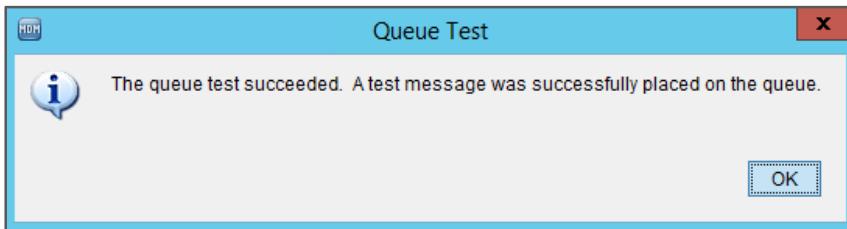
**Note:** If the status is disabled, click **Toggle Data Changes Monitoring Status** to enable it.

11. Click the queue and observe the values.

Message Queues	
<input type="button" value="Find"/> <input type="button" value="New"/> <input type="checkbox"/> Message Queues <input checked="" type="checkbox"/> Siperian.Mrn.Jms.Xaconnectionfactory <input checked="" type="checkbox"/> Queue/Myqueue	<b>Queue Identity</b> Display Name: Queue/Myqueue Description: Name: queue/MyQueue Type: Embedded Message Queue1 Queue Server: Siperian.Mrn.Jms.Xaconnectionfactory  <b>Queue Assignments</b> <small>The message queue is currently in use by message triggers.</small>

12. Click **Test** towards the lower right side of the screen.

13. You should see a success message in the Queue Test window. Click **OK**.



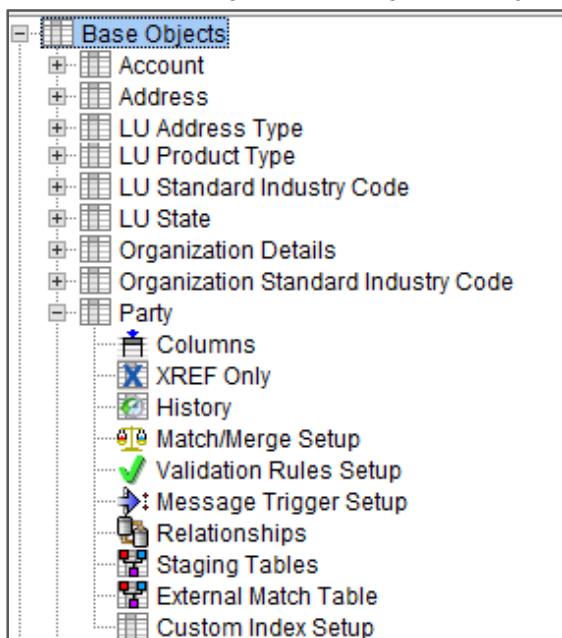
Next, associate this queue with the **Party** base object.

14. From the Model workbench, click **Schema**.

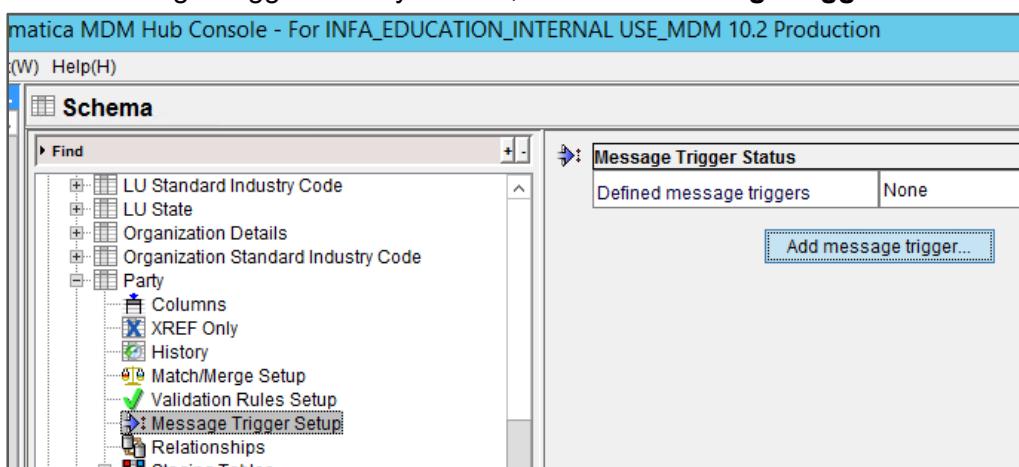
15. Select **E360\_Training** as the database and click **Connect**.

16. Acquire a **Write Lock(A)**.

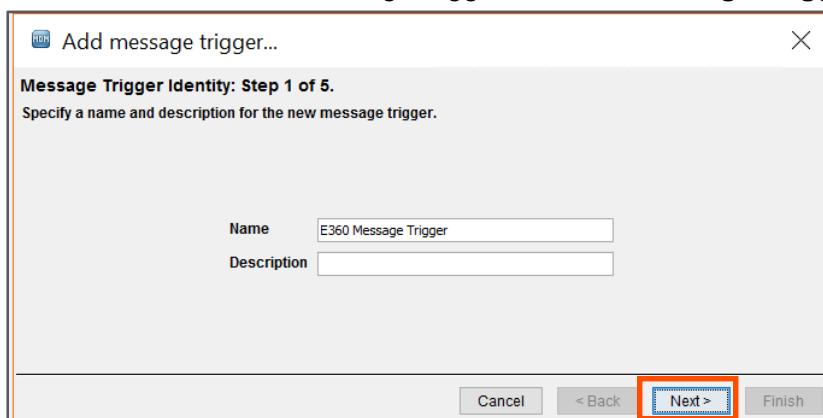
17. Expand **Base Objects > Party** base object and select **Message Trigger Setup**.



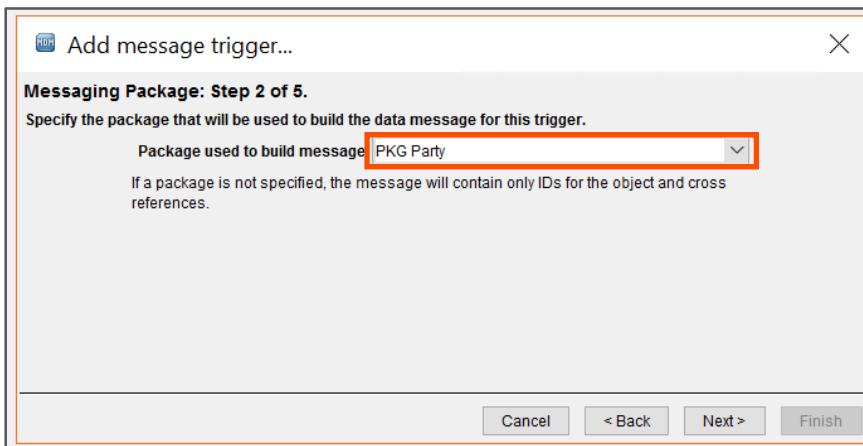
18. In the Message Trigger Identity section, click **Add message trigger**.



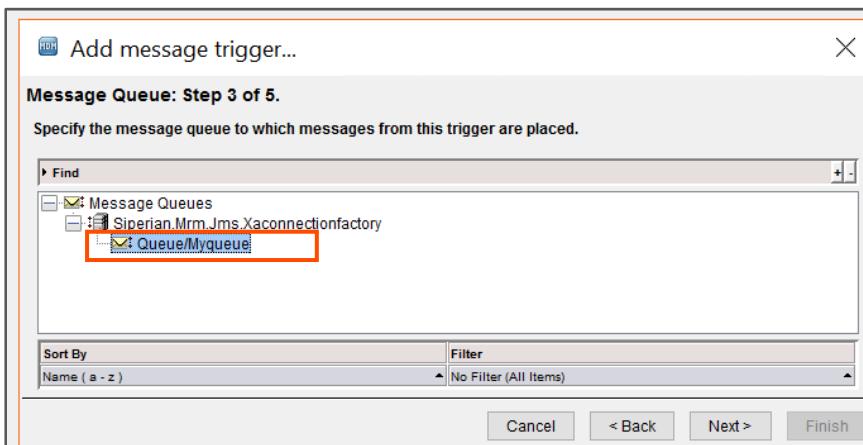
19. Enter the name of the message trigger as **E360 Message Trigger** and click **Next**.



20. Select **PKG Party** from **Package used to build message** drop-down and click **Next**.



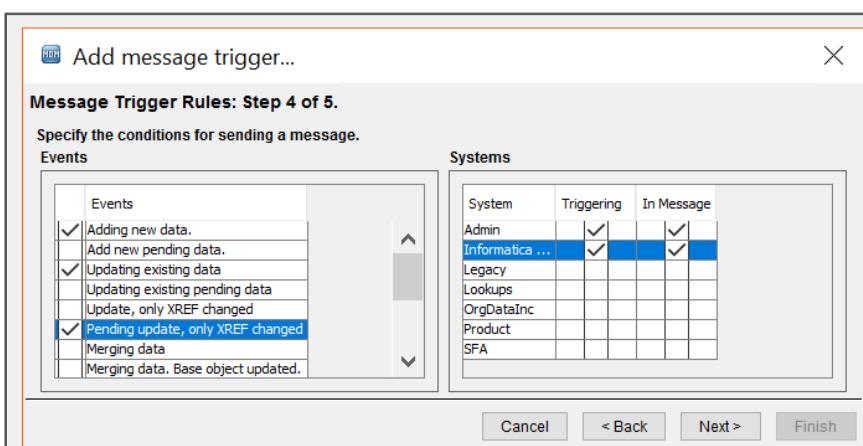
21. Select **Queue/MyQueue** as your message queue and click **Next**.



22. In the **Events** section, select **Adding new data**, **Updating existing data**, and **Pending update, only XREF changed** events.

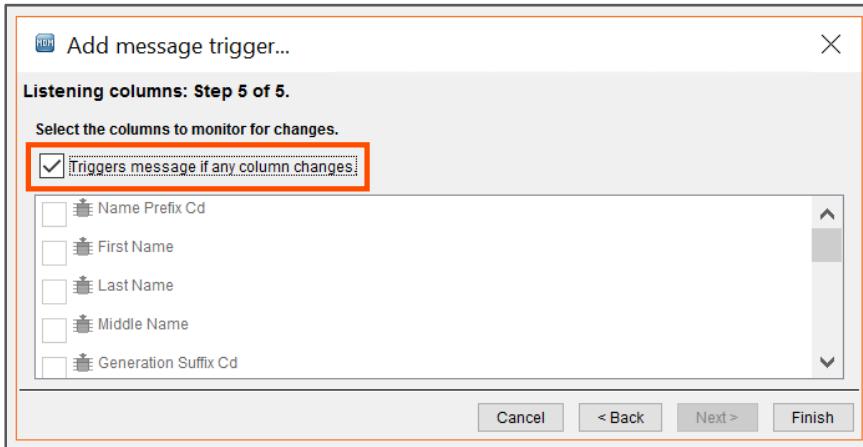
23. In the **Systems** section, select **Admin** and **Informatica** for both **Triggering** and **In Message** options.

24. Click **Next**.

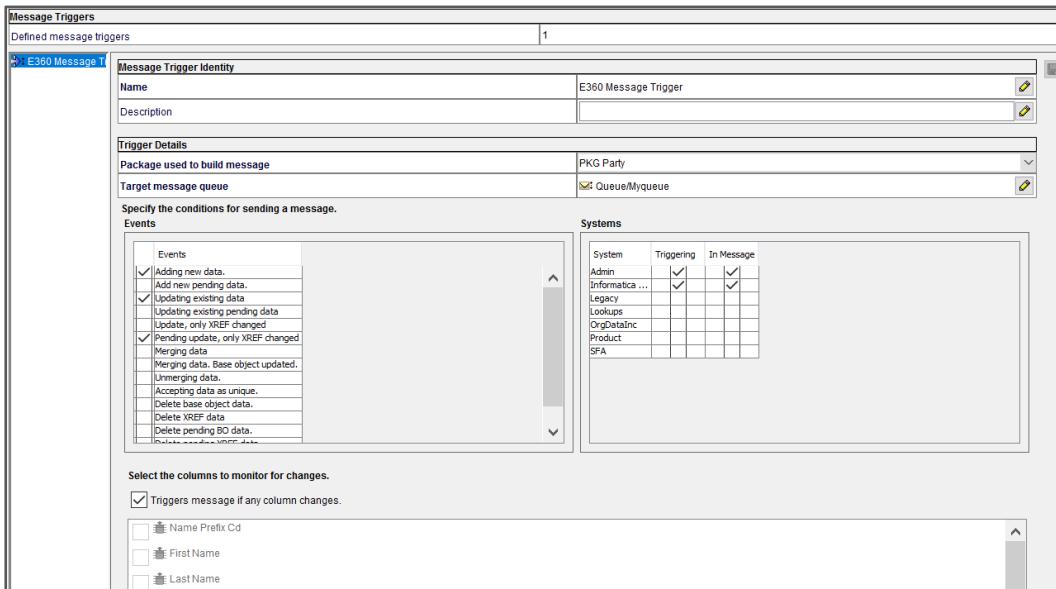


25. Select the **Trigger message if any column changes** checkbox.

26. Click **Finish**.



27. The message trigger gets updated.



Next, you will assign roles to users.

28. Under **Security Access Manager** workbench, select **Roles**.

29. Select the **DataSteward** role.

30. Under **Resource Privileges** tab, expand **Resource Groups** and ensure that all the checkboxes for **ALL\_GLOBAL\_RESOURCES** are selected.

Roles		Role					
	Name	DataSteward					
	Description						
	External Name						
<b>Resource Privileges</b>							
Resources		Read	Create	Update	Delete	Merge	Execute
Base Objects Cleanse Function Hierarchy Manager Profiles Hierarchy Manager Hierarchy Types Hierarchy Manager Relationship Types Packages Custom Resources Other Resources <b>Resource Groups</b>							
ALL_BASE_OBJECTS ALL_CLEANSE_FUNCTIONS ALL_CONTENT_METADATA <b>ALL_GLOBAL_RESOURCES</b> ALL_HISTORY ALL_HM_OBJECTS ALL_MAPPINGS ALL_MATCH_RULE_SETS ALL_PACKAGES ALL_RAW ALL_REMOTE_PACKAGES ALL_XREF ALL_XREF_HISTORY		<input checked="" type="checkbox"/>					

31. Expand **Custom Resources > MDM\_Sample**. Ensure that the following privileges are assigned to the DataSteward role:

Resources	READ	CREATE	UPDATE	DELETE	MERGE	EXECUTE
CHART/View	✓	✓	✓	✓	✓	✓
Export_Profile/CreatePrivate	✓	✓	✓	✓	✓	✓
Export_Profile/CreatePublic	✓	✓	✓	✓	✓	✓
Export_Profile/Execute	✓	✓	✓	✓	✓	✓
SAVED_HM_FILTER/Create	✓	✓	✓	✓	✓	✓
SAVED_HM_FILTER/CreatePublic	✓	✓	✓	✓	✓	✓
SEARCH_QUERY/Create	✓	✓	✓	✓	✓	✓
SEARCH_QUERY/CreatePublic	✓	✓	✓	✓	✓	✓
SUBJECT_AREA/Household	✓	✓	✓	✓	✓	✓
SUBJECT_AREA/Organization	✓	✓	✓	✓	✓	✓
SUBJECT_AREA/Person	✓	✓	✓	✓	✓	✓
SUBJECT_AREA/Products	✓	✓	✓	✓	✓	✓
SUBJECT_AREA/ProductGroup	✓	✓	✓	✓	✓	✓

32. Enable the following checkboxes:

- TASK\_TYPE/Person:UpdateRejectedRecord
- TASK\_TYPE/Person:UpdateWithApproval
- TASK\_TYPE/Person:UpdateWithOptionalApproval

TASK_TYPE/Person Merge	<input type="checkbox"/>					
TASK_TYPE/Person:ReviewNoApprove	<input type="checkbox"/>					
TASK_TYPE/Person:Unmerge	<input type="checkbox"/>					
TASK_TYPE/Person:UpdateRejectedRecord	<input checked="" type="checkbox"/>					
TASK_TYPE/Person:UpdateWithApproval	<input checked="" type="checkbox"/>					
TASK_TYPE/Person:UpdateWithOptionalApproval	<input checked="" type="checkbox"/>					
TASK_TYPE/ProductGroup:FinalReview	<input type="checkbox"/>					
TASK_TYPE/ProductGroup:Merge	<input type="checkbox"/>					

33. Click the **Save** button to add the changes to MDM Hub.
34. Similarly, select **Manager**, expand **Custom Resources > MDM\_Sample**.
35. Ensure that the following privileges are assigned to the Manager role:

Resources	R E A D	C R E A T E	U P D A T E	D E L E T E	M E R G E	E X E C U T E
CHART/View	✓	✓	✓	✓	✓	✓
Export_Profile/CreatePrivate	✓	✓	✓	✓	✓	✓
Export_Profile/CreatePublic	✓	✓	✓	✓	✓	✓
Export_Profile/Execute	✓	✓	✓	✓	✓	✓
SAVED_HM_FILTER/Create	✓	✓	✓	✓	✓	✓
SAVED_HM_FILTER/CreatePublic	✓	✓	✓	✓	✓	✓
SEARCH_QUERY/Create	✓	✓	✓	✓	✓	✓
SEARCH_QUERY/CreatePublic	✓	✓	✓	✓	✓	✓
SUBJECT_AREA/Household	✓	✓	✓	✓	✓	✓
SUBJECT_AREA/Organization	✓	✓	✓	✓	✓	✓
SUBJECT_AREA/Person	✓	✓	✓	✓	✓	✓
SUBJECT_AREA/Products	✓	✓	✓	✓	✓	✓
SUBJECT_AREA/ProductGroup	✓	✓	✓	✓	✓	✓
TASK_TYPE/Person:Merge	✓	✓	✓	✓	✓	✓
TASK_TYPE/Person:ReviewNoApprove	✓	✓	✓	✓	✓	✓
TASK_TYPE/Person:Unmerge	✓	✓	✓	✓	✓	✓

36. Save the changes and select the **SrManager** role.
37. Click the **Roles** tab.  
**Note:** Ensure that the **Manager** checkbox is not selected.
38. Click the **Resource Privileges** tab.
39. Expand **Custom Resources > MDM\_Sample**.

40. Ensure that the following privileges are assigned to the **SrManager** role.

Resources	READ	CREATE	UPDATE	DELETE	MERGE	EXECUTE
CHART/View	✓	✓	✓	✓	✓	✓
Export_Profile/CreatePrivate	✓	✓	✓	✓	✓	✓
Export_Profile/CreatePublic	✓	✓	✓	✓	✓	✓
Export_Profile/Execute	✓	✓	✓	✓	✓	✓
SAVED_HM_FILTER/Create	✓	✓	✓	✓	✓	✓
SAVED_HM_FILTER/CreatePublic	✓	✓	✓	✓	✓	✓
SEARCH_QUERY/Create	✓	✓	✓	✓	✓	✓
SEARCH_QUERY/CreatePublic	✓	✓	✓	✓	✓	✓
SUBJECT_AREA/Household	✓	✓	✓	✓	✓	✓
SUBJECT_AREA/Organization	✓	✓	✓	✓	✓	✓
SUBJECT_AREA/Person	✓	✓	✓	✓	✓	✓
SUBJECT_AREA/Products	✓	✓	✓	✓	✓	✓
SUBJECT_AREA/ProductGroup	✓	✓	✓	✓	✓	✓
TASK_TYPE/Person:FinalReview	✓	✓	✓	✓	✓	✓
TASK_TYPE/Person:Merge	✓	✓	✓	✓	✓	✓
TASK_TYPE/Person:Unmerge	✓	✓	✓	✓	✓	✓

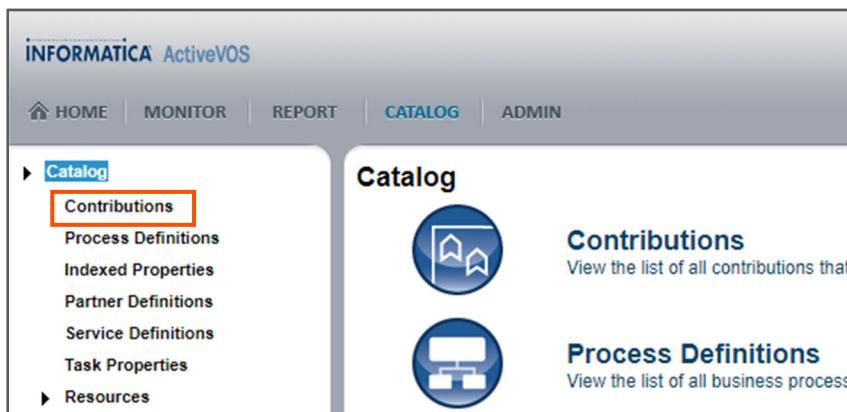
41. **Save** the changes.

42. Open the Chrome web browser, click the bookmark **Informatica > Misc > ActiveVOS Console** and login to the console using the following credentials.

- Username – **avosadmin**
- Password – **Informatica@123**

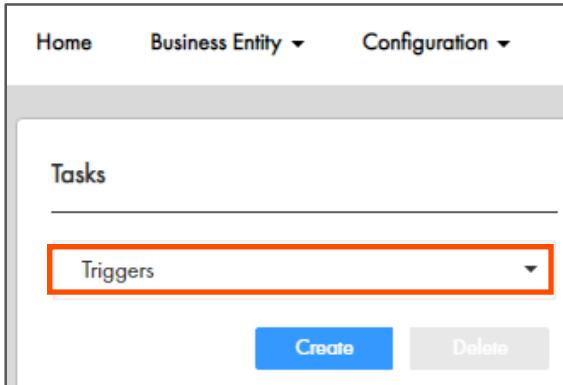
43. Click the **Catalog** tab.

44. In the left panel, select **Contributions**.



45. Log in to the Provisioning Tool and click **Business Entities > Tasks**.

46. Select **Triggers** from the drop-down list and click **Create**.

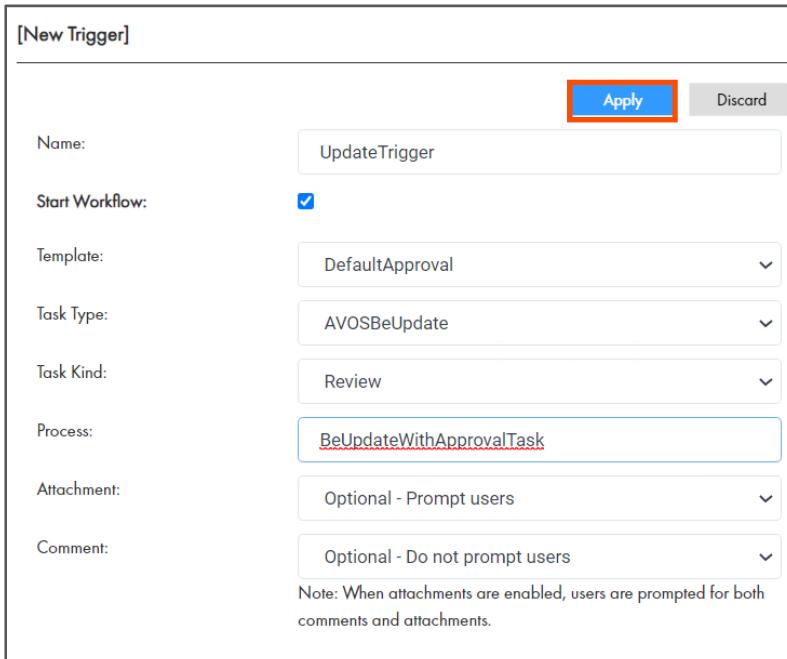


The screenshot shows a top navigation bar with 'Home', 'Business Entity', and 'Configuration' tabs. Below this is a 'Tasks' section. A dropdown menu is open, showing 'Triggers' which is highlighted with a red box. At the bottom are 'Create' and 'Delete' buttons.

47. Create a trigger with the following values:

Field	Value
Name	UpdateTrigger
Start Workflow	Enable
Template	DefaultApproval
TaskType	AVOSBeUpdate
Task Kind	Review
Process	BeUpdateWithApprovalTask
Attachment	Optional - Prompt users
Comment	Optional - Do not prompt users

48. Click **Apply** to save the changes.

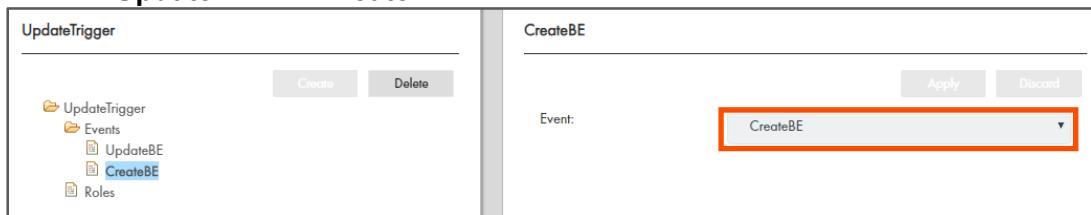


The screenshot shows a 'New Trigger' dialog. It has fields for Name (UpdateTrigger), Start Workflow (checked), Template (DefaultApproval), Task Type (AVOSBeUpdate), Task Kind (Review), Process (BeUpdateWithApprovalTask), Attachment (Optional - Prompt users), and Comment (Optional - Do not prompt users). The 'Apply' button is highlighted with a red box.

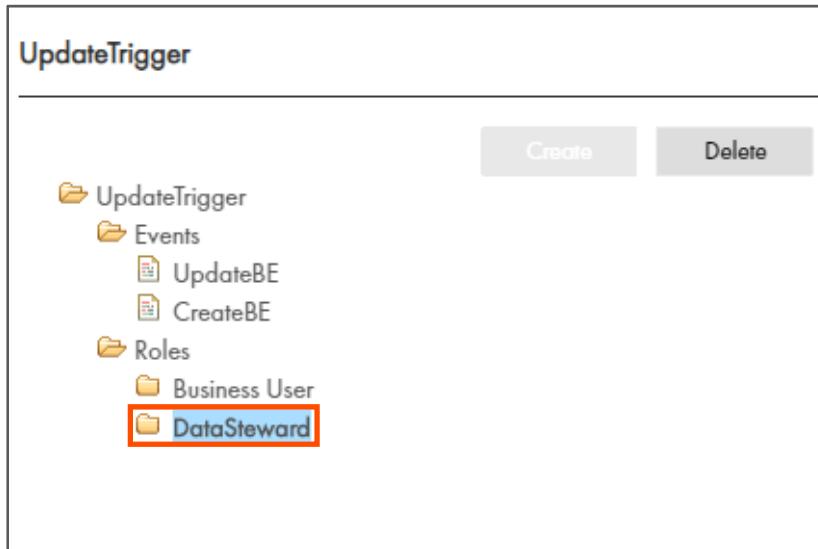
Note: When attachments are enabled, users are prompted for both comments and attachments.

49. In the UpdateTrigger section, click **UpdateTrigger > Events**.

50. Add the **UpdateBE** and **CreateBE** events.



51. Select **Roles** and add **Business User** and **DataSteward** roles.



**Note:** This workflow starts when the DataSteward or the BusinessUser makes an update or creates new business entities.

52. Click **Publish** to save the changes to the MDM Hub.

You will now set the **SrManager** as the default approver.

53. Click **Business Entity > Tasks**.

54. Select **Triggers** from the drop-down list.

55. Click **DefaultApproval** from the list of triggers in the left panel.

56. Click **Roles** and select \*.

57. From the right panel, select **SrManager** from the drop-down list.

58. Click **Apply** to save the changes.

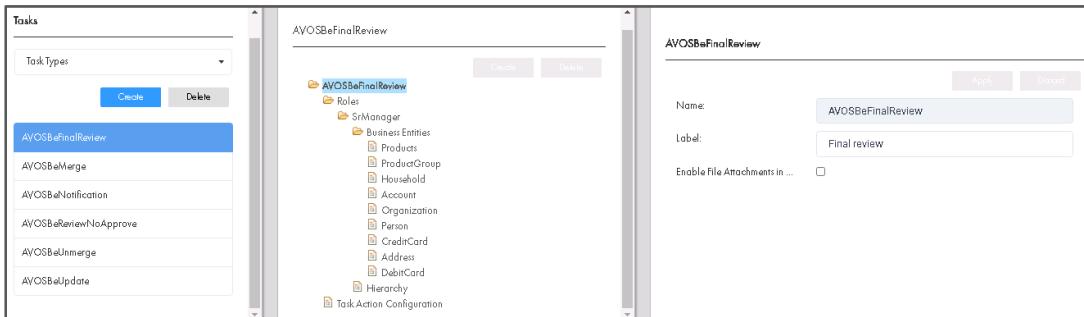


Once triggers are set, you will bind users to their respective tasks.

59. Select **Task Types** from the drop-down list.

60. Select **AVOSBeFinalReview**.

61. Set the role to **SrManager** and add all business entities for this role as shown in the screenshot.

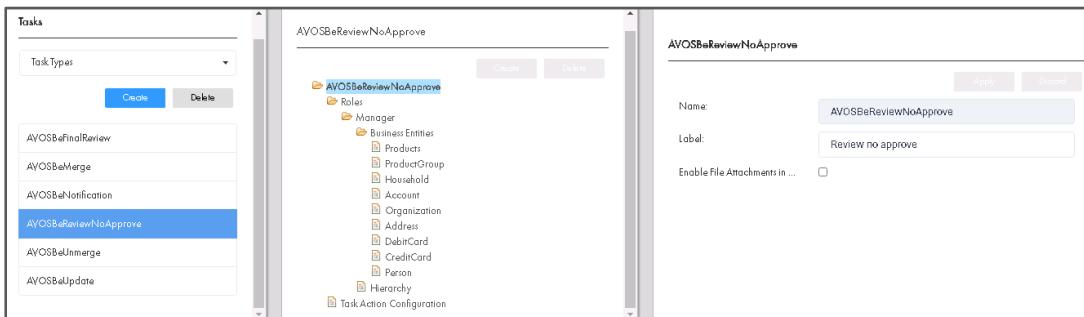


The screenshot shows the Informatica interface with three main panels:

- Left Panel (Tasks):** A list of Task Types. **AVOSBeFinalReview** is selected and highlighted in blue.
- Middle Panel (AVOSBeFinalReview):** A tree view of roles and business entities. Under the **Roles** node, **SrManager** is expanded, showing its associated **Business Entities**. These include Product, ProductGroup, Household, Account, Organization, Person, CreditCard, Address, DebitCard, and Hierarchy.
- Right Panel (AVOSBeFinalReview):** Configuration details for the task. Name is set to **AVOSBeFinalReview**, Label is set to **Final review**, and the checkbox for **Enable File Attachments in ...** is unchecked.

**Note:** If you do not see the Person or Organization business entities listed, select **AVOSBeFinalReview > Roles > SrManager > Business Entities** and click **Create** to add them.

62. Select the **AVOSBeReviewNoApprove**, set the role to **Manager** and add all the business entities under the Manager role as shown.

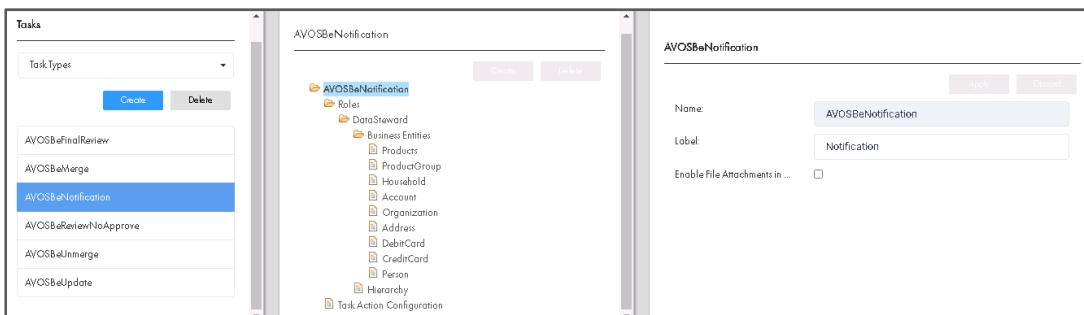


The screenshot shows the Informatica interface with three main panels:

- Left Panel (Tasks):** A list of Task Types. **AVOSBeReviewNoApprove** is selected and highlighted in blue.
- Middle Panel (AVOSBeReviewNoApprove):** A tree view of roles and business entities. Under the **Roles** node, **Manager** is expanded, showing its associated **Business Entities**. These include Product, ProductGroup, Household, Account, Organization, Person, CreditCard, Address, DebitCard, and Hierarchy.
- Right Panel (AVOSBeReviewNoApprove):** Configuration details for the task. Name is set to **AVOSBeReviewNoApprove**, Label is set to **Review no approve**, and the checkbox for **Enable File Attachments in ...** is unchecked.

**Note:** If you do not see the Person or Organization business entities listed, select **AVOSBeReviewNotApprove > Roles > Manager > Business Entities** and click **Create** to add them.

63. Select the **AVOSBeNotification**, set the role to **DataSteward** and add the business entities under the DataSteward role as shown.

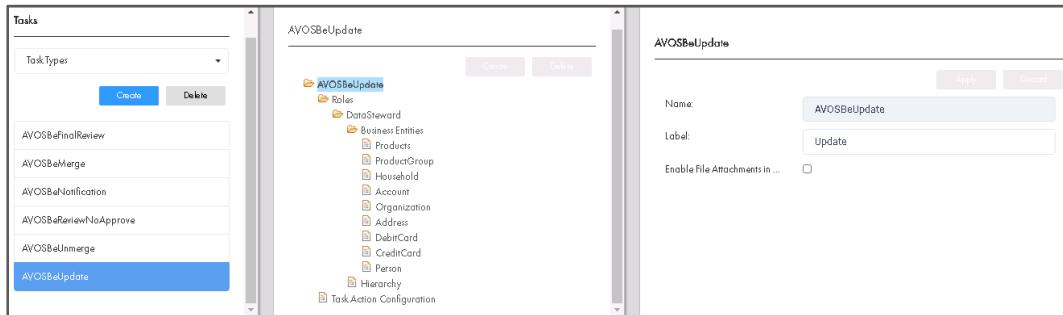


The screenshot shows the Informatica interface with three main panels:

- Left Panel (Tasks):** A list of Task Types. **AVOSBeNotification** is selected and highlighted in blue.
- Middle Panel (AVOSBeNotification):** A tree view of roles and business entities. Under the **Roles** node, **DataSteward** is expanded, showing its associated **Business Entities**. These include Product, ProductGroup, Household, Account, Organization, Person, CreditCard, Address, DebitCard, and Hierarchy.
- Right Panel (AVOSBeNotification):** Configuration details for the task. Name is set to **AVOSBeNotification**, Label is set to **Notification**, and the checkbox for **Enable File Attachments in ...** is unchecked.

**Note:** If you do not see the Person or Organization business entities listed, select **AVOSBeNotification > Roles > DataSteward > Business Entities** and click **Create** to add them.

64. Select the **AVOSBeUpdate** and set the role to **DataSteward**, and add the business entities as shown:



**Note:** If you do not see the Person or Organization business entities listed, select **AVOSBeUpdate > Roles > DataSteward > Business Entities** and click **Create** to add them.

65. Click **Publish** to save the changes to the MDM Hub.

You have now configured a trigger to start a workflow when an update or create operation is performed by the Business User.

Workflow is as follows:

- Data Steward starts the update
- Manager performs a review without approval
- Senior Manager performs the final approval
- Data Steward is notified

You will now test the workflow.

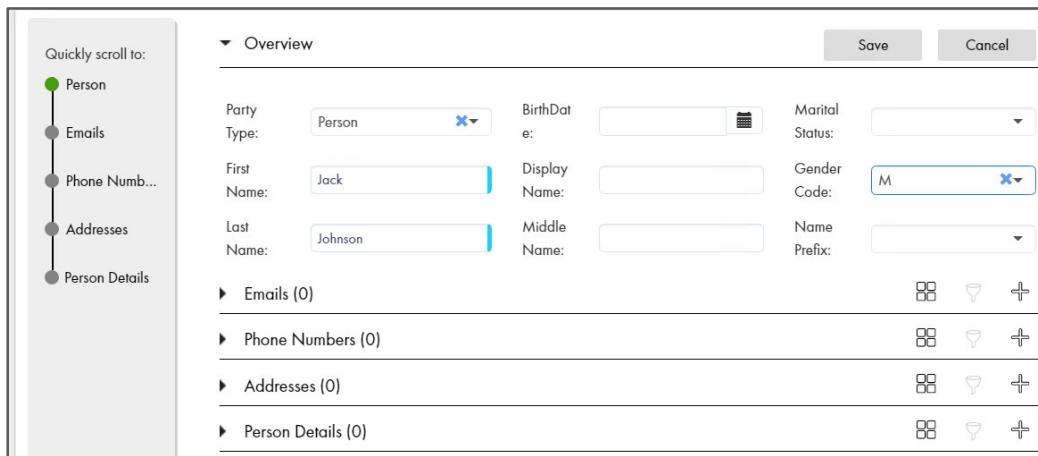
66. Log in to the MDM Data Director application as the Business User (**jimmy/mdm**).  
 67. To create a **Person** business entity, click **New > Person**.



68. Enter the first name as **Jack** and the last name as **Johnson**.

69. Set the Gender Code to **M**.

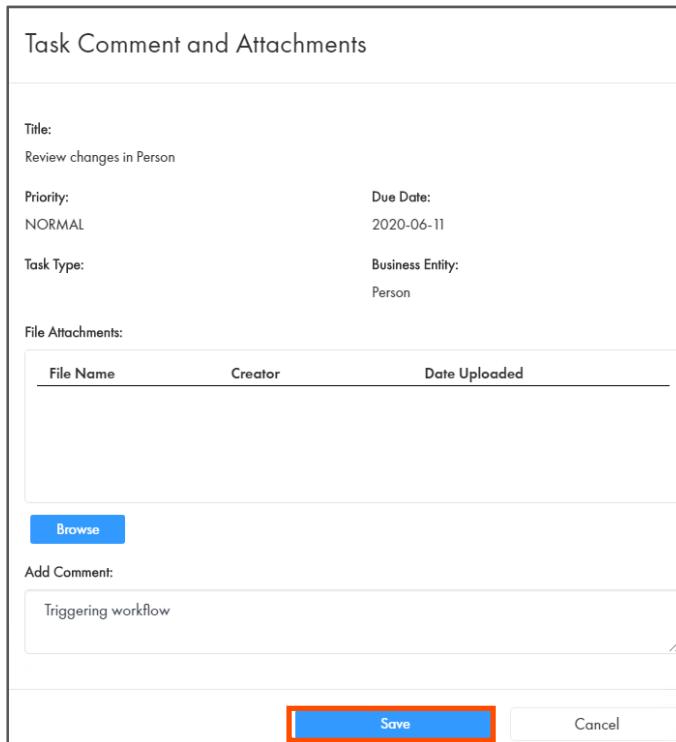
**70. Click Save.**



The screenshot shows the 'Overview' tab of a person entity edit screen. On the left is a sidebar with a tree view: 'Person' (selected), 'Emails', 'Phone Numbers', 'Addresses', and 'Person Details'. The main area has tabs for 'Overview', 'Emails (0)', 'Phone Numbers (0)', 'Addresses (0)', and 'Person Details (0)'. The 'Overview' tab contains fields for Party Type (Person), Birth Date, Marital Status, First Name (Jack), Display Name, Gender Code (M), Last Name (Johnson), Middle Name, and Name Prefix. Buttons for 'Save' and 'Cancel' are at the top right.

**Note:** This will trigger the workflow.

**71. Enter a comment and click Save.**



The screenshot shows a 'Task Comment and Attachments' dialog box. It includes sections for 'Title' (Review changes in Person), 'Priority' (NORMAL), 'Due Date' (2020-06-11), 'Task Type' (Business Entity: Person), and 'File Attachments' (a table with columns: File Name, Creator, Date Uploaded). A 'Browse' button is available for file uploads. An 'Add Comment' section contains the text 'Triggering workflow'. At the bottom are 'Save' and 'Cancel' buttons, with 'Save' highlighted.

**72. Log in to the ActiveVOS admin console and click Monitor.**

73. Click **Active Processes**. You should see a **BeUpdateWithApprovalWorkflow** running.



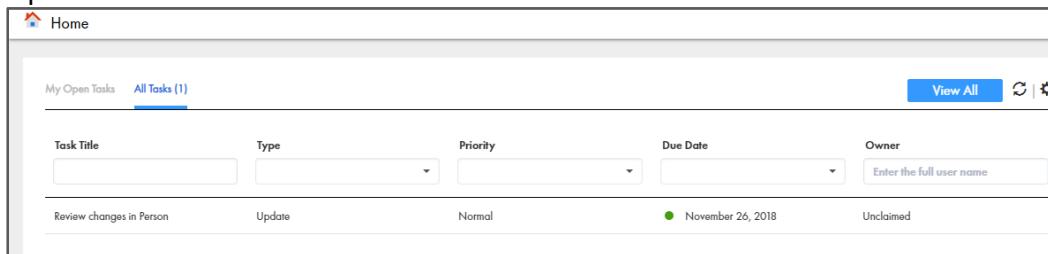
ID	Title	Ver	Start Date	End Date	State	Group
4533	BeUpdateWithApprovalWorkflow	1.0	2018-11-15 17:43		Running	
4525	BeUpdateWithApprovalWorkflow	1.0	2018-11-15 17:36		Running	
4520	BeUpdateWithApprovalWorkflow	1.0	2018-11-15 17:34		Running	
4514	BeUpdateWithApprovalWorkflow	1.0	2018-11-15 10:27		Running	
4510	BeUpdateWithApprovalWorkflow	1.0	2018-11-15 10:24		Running	
4505	BeUpdateWithApprovalWorkflow	1.0	2018-11-15 10:22		Running	
4225	BeMergeWorkflow	1.0	2018-11-12 00:10	2018-11-12 00:13	Completed	
4103	BeUpdateWithApprovalWorkflow	1.0	2018-11-11 23:47	2018-11-11 23:59	Completed	

74. Switch back to the **MDM Data Director** application as the Data Steward (ray/mdm).

75. From the home page, click **All Tasks**.

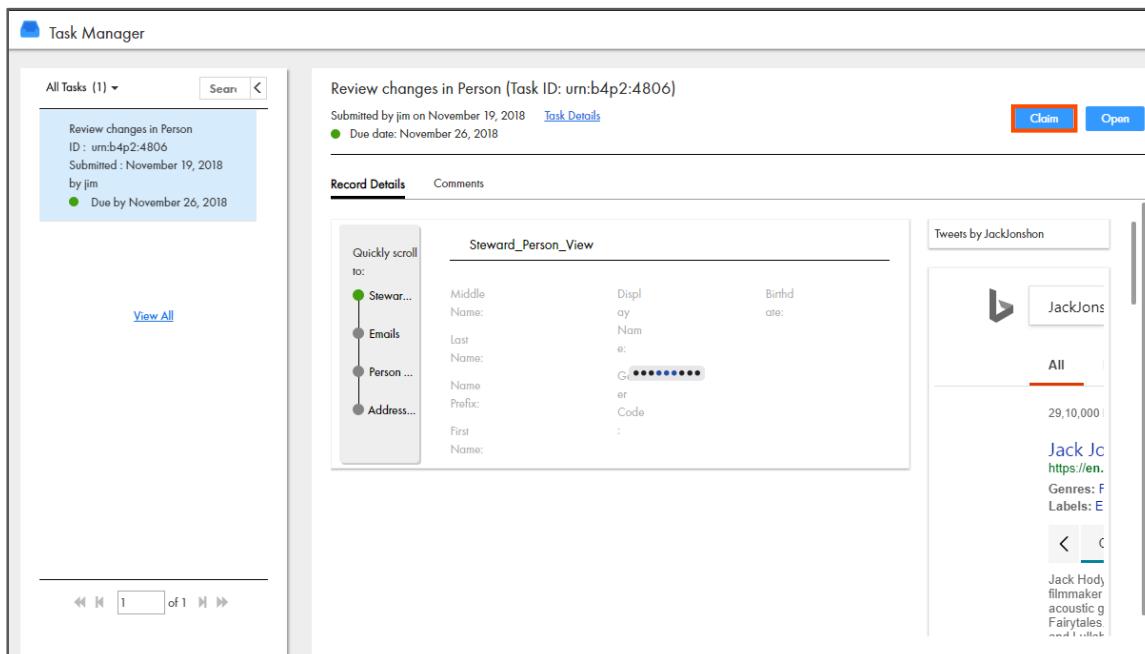
**Note:** You should see a **Review Changes in Person** task.

76. Open the **Unclaimed** task.



Task Title	Type	Priority	Due Date	Owner
Review changes in Person	Update	Normal	November 26, 2018	Unclaimed

77. Click **Claim**.



Task Manager

All Tasks (1) ▾

Review changes in Person (Task ID: urn:b4p2:4806)

Submitted by jim on November 19, 2018 [Task Details](#)

● Due date: November 26, 2018

**Record Details**

Steward\_Person\_View

Quickly scroll to:

- Steward...
- Emails
- Person ...
- Address...

Middle Name:	Display Name:	Birhd ate:
Last Name:	Gender:	
Name Prefix:	Code:	
First Name:		

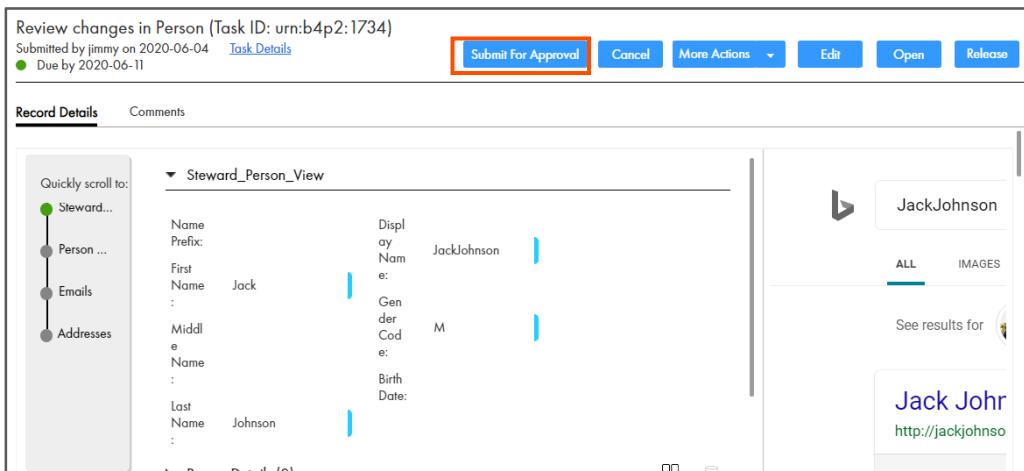
Tweets by JackJons

All 29,10,000

Jack Jc https://en. Genres: F Labels: E

Jack Hodj filmmaker acoustic g Fairytales www.JackHodj.com

**78. Click Submit for Approval.**



Review changes in Person (Task ID: urn:b4p2:1734)  
 Submitted by jimmy on 2020-06-04 [Task Details](#)  
 Due by 2020-06-11

**Submit For Approval** **Cancel** **More Actions** **Edit** **Open** **Release**

**Record Details** **Comments**

Quickly scroll to:  
 Steward...  
 Person ...  
 Emails  
 Addresses

**Steward\_Person\_View**

Name Prefix:	JackJohnson
First Name:	Jack
Middle Name:	M
Last Name:	Johnson
Display Name:	JackJohnson
Gender Code:	
Birth Date:	

**JackJohnson**  
[ALL](#) [IMAGES](#)  
 See results for 

**Jack Johr**  
<http://jackjohnso>

**79. Review changes and click Submit for Approval.**

**Submit For Approval Review changes in Person**

You are about to Submit For Approval this task

<b>Task Title:</b>	Review changes in Person
<b>Priority:</b>	<b>Due Date:</b>
Normal	2020-06-11
<b>Task Type:</b>	<b>Business Entity:</b>
Update	Person
<b>Add Comment:</b>	
Type your comment here...	

**Release** **Submit For Approval** **Cancel**



Review changes in Person (Task ID: urn:b4p2:1734)  
 Submitted by jimmy on 2020-06-04 [Task Details](#)  
 Task Closed

**Record Details** **Comments**

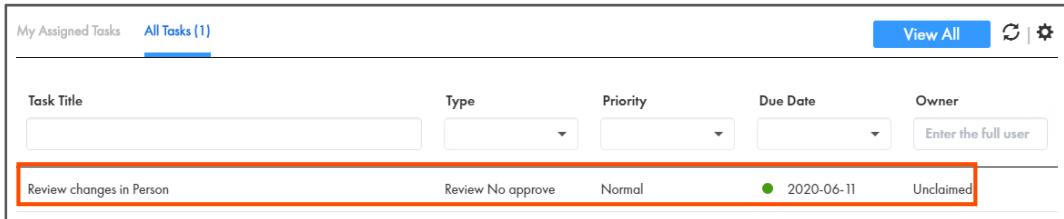
This task has been closed

**Note:** You should see a notification that the task is closed.

**80. Log out as ray.**

81. Log in as the Manager (**mark/mdm**).

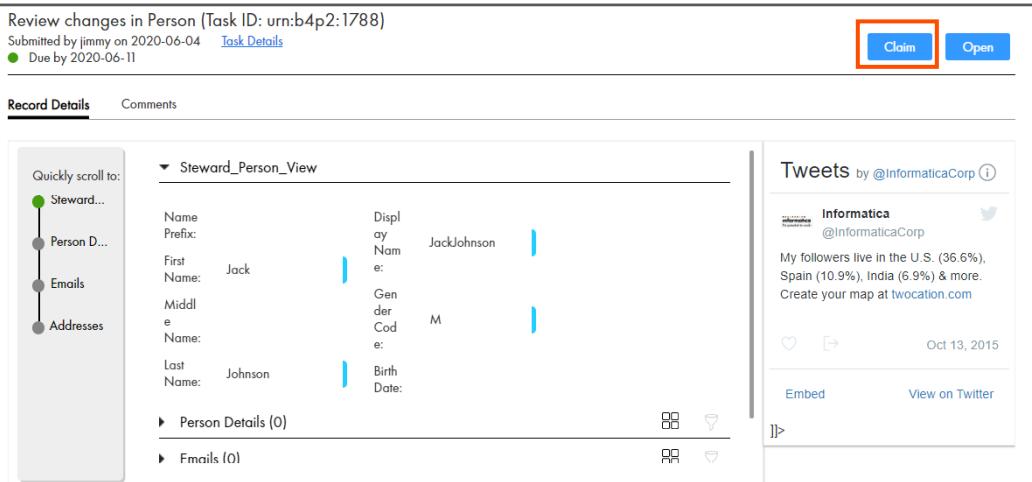
82. Click **All Tasks** and open the **Unclaimed** task.



The screenshot shows the 'All Tasks' page with a single task listed:

- Task Title:** Review changes in Person
- Type:** Review No approve
- Priority:** Normal
- Due Date:** 2020-06-11
- Owner:** Unclaimed

83. Click **Claim**.



The screenshot shows the task details page for the 'Review changes in Person' task:

- Record Details:** Shows a summary of the person's details: First Name: Jack, Middle Name: , Last Name: Johnson, Gender: M, Display Name: JackJohnson.
- Tweets:** A sidebar showing a tweet from @InformaticaCorp.
- Action Buttons:** Includes 'Claim' (highlighted with a red box), 'Open', and other options.

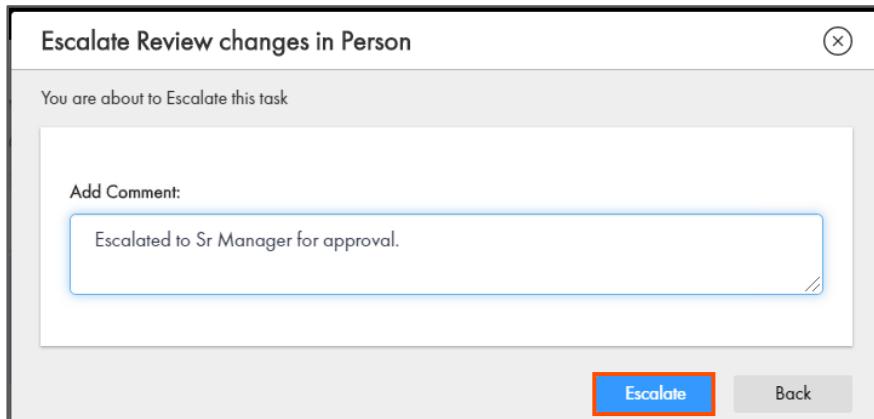
84. Click **Escalate**.



The screenshot shows the task details page for the 'Review changes in Person' task:

- Record Details:** Shows a summary of the person's details: First Name: Jack, Middle Name: , Last Name: Johnson, Gender: M, Display Name: JackJohnson.
- Action Buttons:** Includes 'Escalate' (highlighted with a red box), 'Reject', 'More Actions', 'Open', and 'Release'.
- Tweets:** A sidebar showing a tweet from @InformaticaCorp.

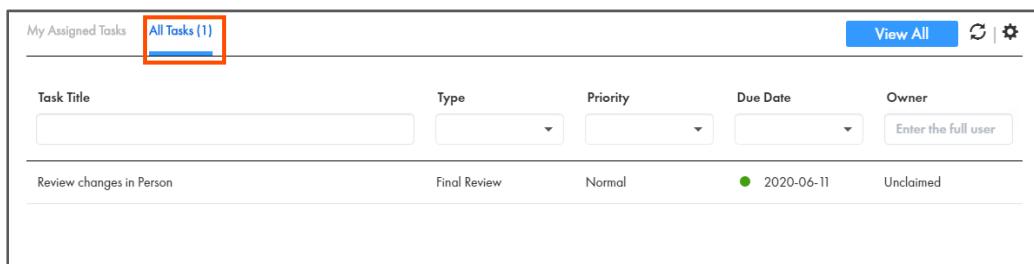
85. Enter a comment and click **Escalate**.



The dialog box title is "Escalate Review changes in Person". It contains a message: "You are about to Escalate this task". Below it is a text area labeled "Add Comment:" containing the text "Escalated to Sr Manager for approval." At the bottom are two buttons: "Escalate" (highlighted with a red box) and "Back".

86. Log out as the mark and log in as the Senior Manager (joey/mdm).

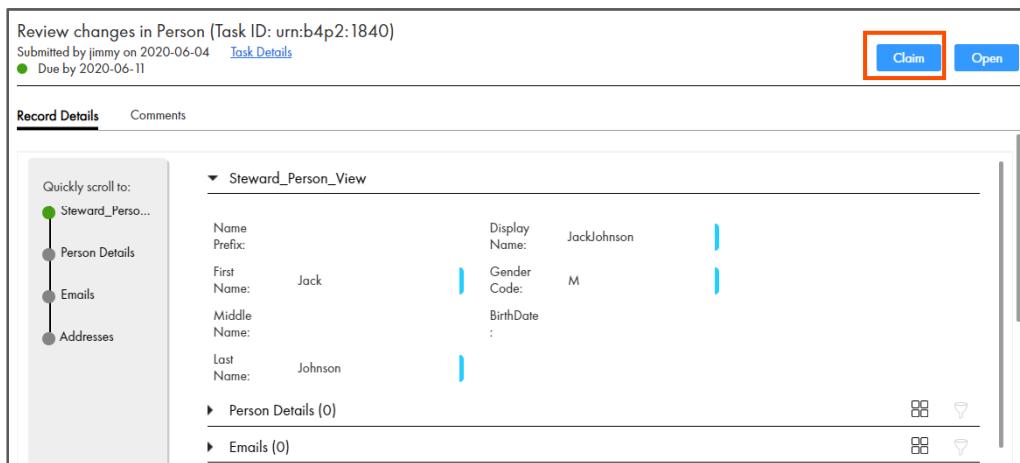
87. Click **All Tasks** and select the unclaimed task.



The screenshot shows a list of tasks under "My Assigned Tasks". A red box highlights the "All Tasks (1)" button. The first task listed is "Review changes in Person" with details: Type "Final Review", Priority "Normal", Due Date "2020-06-11", and Owner "Unclaimed".

**Note:** Notice that the Type is now **Final Review**.

88. Click **Claim**.



The screenshot shows the task details for "Review changes in Person" (Task ID: urn:b4p2:1840). The "Type" field is highlighted with a red box. The "Comments" tab is selected. The "Record Details" section shows a summary of the person's details: Name (Jack Johnson), Gender (M), and Birth Date (not specified). The "Person Details" and "Emails" sections are collapsed. At the top right are "Claim" and "Open" buttons, with "Claim" highlighted by a red box.

89. Click **Approve** to approve the task.



Review changes in Person (Task ID: urn:b4p2:1840)  
 Submitted by jimmy on 2020-06-04 [Task Details](#)  
 Due by 2020-06-11

**Approve** **Reject** **More Actions** **Edit** **Open** **Release**

**Record Details** **Comments**

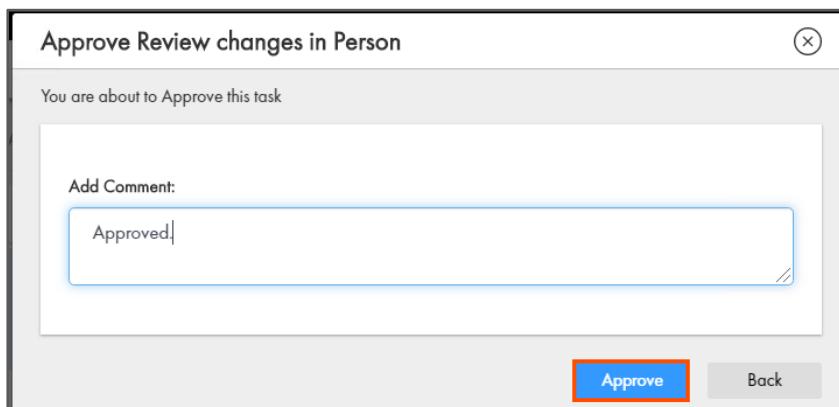
Quickly scroll to:  
 Steward\_Perso...  
 Person Details  
 Emails  
 Addresses

**Steward\_Person\_View**

Name Prefix:	Display Name:	JackJohnson
First Name:	Gender Code:	M
Middle Name:	BirthDate	:
Last Name:	Johnson	

**Person Details (0)** **\_emails (0)**

90. Enter your comment and click **Approve**.



Approve Review changes in Person

You are about to Approve this task

Add Comment:  
 Approved.

**Approve** **Back**



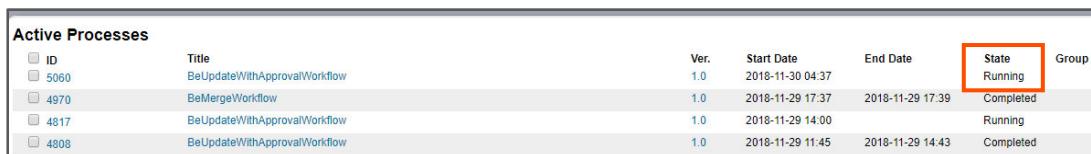
Review changes in Person (Task ID: urn:b4p2:1840)  
 Submitted by jimmy on 2020-06-04 [Task Details](#)  
 Task Closed

**Record Details** **Comments**

This task has been closed

**Note:** You will see a notification that the task is closed.

91. Switch to the ActiveVOS admin console to check the status of the job.

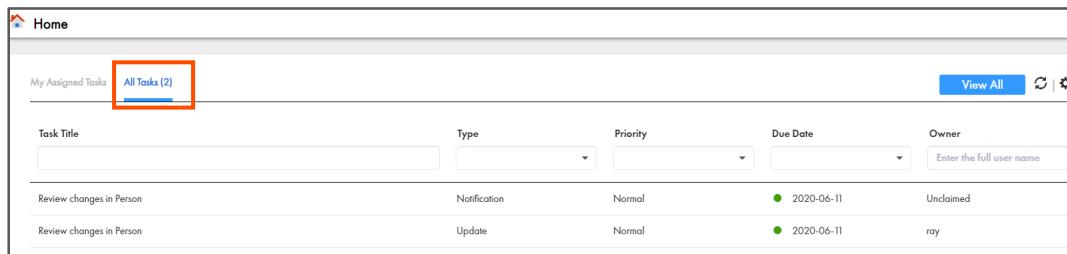


Active Processes		Title	Ver.	Start Date	End Date	State	Group
<input type="checkbox"/>	5060	BeUpdateWithApprovalWorkflow	1.0	2018-11-30 04:37		Running	
<input type="checkbox"/>	4970	BeMergeWorkflow	1.0	2018-11-29 17:37	2018-11-29 17:39	Completed	
<input type="checkbox"/>	4817	BeUpdateWithApprovalWorkflow	1.0	2018-11-29 14:00		Running	
<input type="checkbox"/>	4808	BeUpdateWithApprovalWorkflow	1.0	2018-11-29 11:45	2018-11-29 14:43	Completed	

**Note:** The workflow should still be running.

92. Log in to the **MDM Data Director** application as the Data Steward (**ray/mdm**).

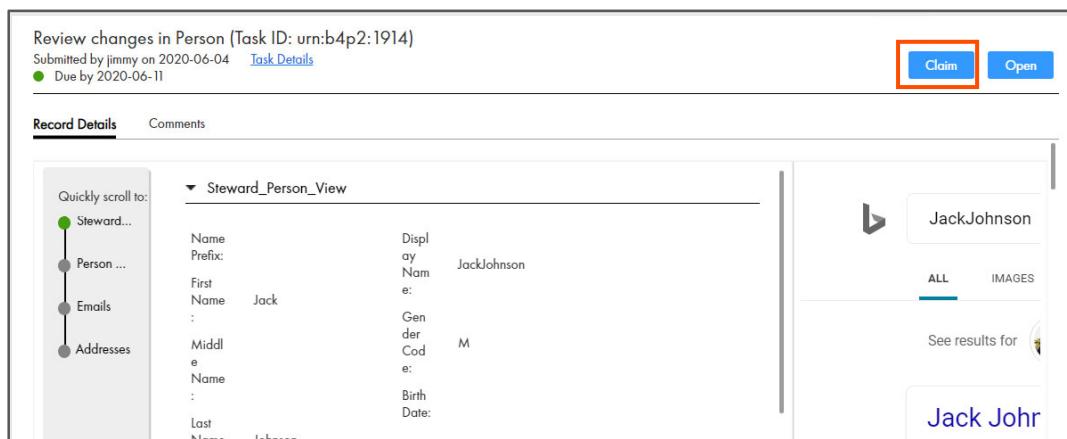
93. Open the task from the **All Tasks** tab.



Task Title	Type	Priority	Due Date	Owner
Review changes in Person	Notification	Normal	● 2020-06-11	Undelained
Review changes in Person	Update	Normal	● 2020-06-11	ray

**Note:** Notice that the Type is now **Notification**.

94. Claim the task.



Review changes in Person (Task ID: urn:b4p2:1914)  
 Submitted by jimmy on 2020-06-04 [Task Details](#)  
 ● Due by 2020-06-11

**Record Details** **Comments**

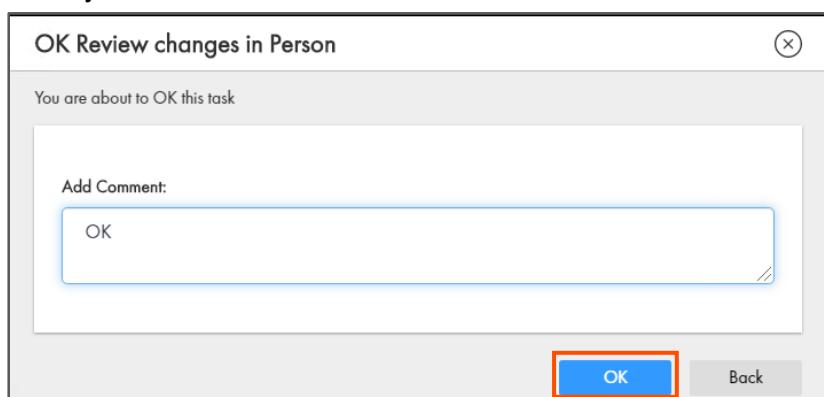
Steward\_Person\_View

Name	Displ
Prefix:	ay
First Name	Jack
Middle Name	Gen
Last Name	der
	Cod
	e:
	Birth
	Date:

JackJohnson  
 ALL IMAGES  
 See results for Jack Johr

95. Click **OK**.

96. Enter your comment and click **OK**.

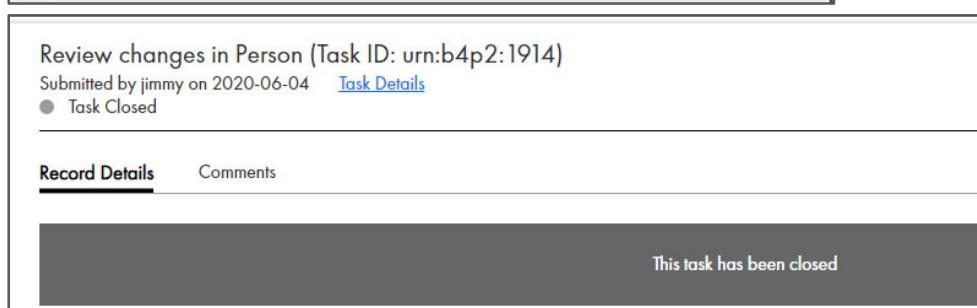


OK Review changes in Person

You are about to OK this task

Add Comment:  
 OK

**OK** **Back**



Review changes in Person (Task ID: urn:b4p2:1914)  
 Submitted by jimmy on 2020-06-04 [Task Details](#)  
 ● Task Closed

**Record Details** **Comments**

This task has been closed

**Note:** You will see a notification that the task is closed.

97. Check the status in ActiveVOS. The status should now be **Completed**.

Active Processes		Ver.	Start Date	End Date	State	Group
<input type="checkbox"/>	ID 1730	Title BeUpdateWithApprovalWorkflow	1.0	2020-06-04 08:54	2020-06-04 10:48	Completed

This concludes the multi-level workflow.

---

*This concludes the lab.*



# Module 6: Configure Workflows

## Lab 6-2: Custom Merge Layout

### Overview:

In this lab, you will define a role-based Entity Layout in the Provisioning Tool and test the layout in the Entity 360 user interface.

### Objectives:

- Define role-based Entity Layouts using the Provisioning tool

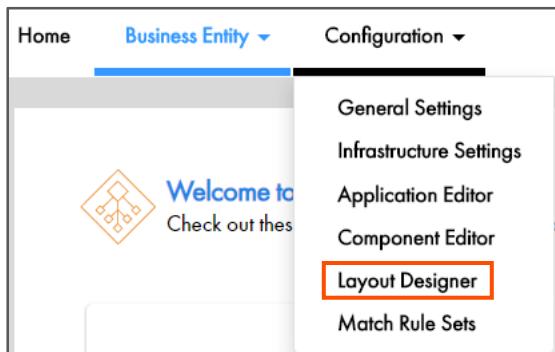
### Duration:

5 minutes

---

### Tasks

1. In the Provisioning Tool, click Configuration > Layout Designer.



2. Expand Create > Record View Layout.
3. In the Define Layout Properties window, enter the following values:

Property	Value
Layout Type	Merge Task
View_Name	Person_Merge_Layout
Layout ID	This gets auto-populated
Layout Name	This gets auto-populated
List Option Icon	Select any icon
List Order	1

4. Select **Person** and click **Next**.

Layout Designer      1 Properties    2 User Roles    3 Purpose    4 Template    5 Design

Select the type of record view layout you want to design and specify a unique name and label for the layout.

Layout Type: \*      Merge Task

View Name: \*      Person\_Merge\_Layout

Layout ID: \*      Person\_Merge\_Layout

Description: Enter a description for users editing this layout.

Layout Name: \*      Person\_Merge\_Layout

List Option Icon:

List Order: 1

Which type of business entity or business entity view do you want to associate with this layout?

- ▶ Household
- ▶ Products
- ▶ ProductGroup
- ▶ Address
- ▶ **Person**
- ▶ Organization
- ▶ Debit Card
- ▶ Account
- ▶ Credit Card

5. In the **Select User Roles** page, select **DataSteward** and click **Next**.

Layout Designer      1 Properties    2 User Roles    3 Purpose    4 Template    5 Design

Select User Roles

Select the user roles that can access the record view.

Anyone       Super User       Manager

**DataSteward**       SrManager       BusinessUser

6. In the **Define Purpose** page, select both the checkboxes and click **Next**.

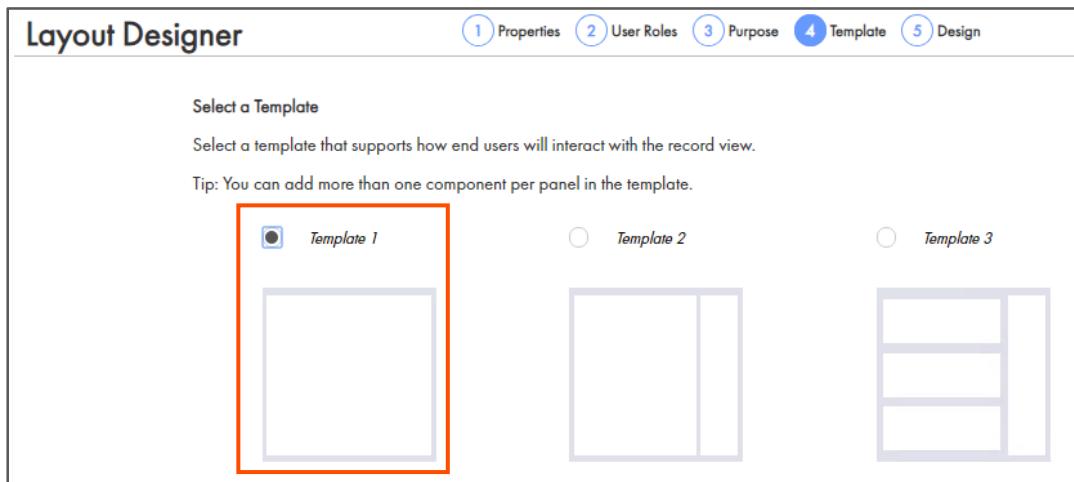
Layout Designer      1 Properties    2 User Roles    3 Purpose    4 Template    5 Design

Define Purpose

Select the actions that end users can perform using this record view.

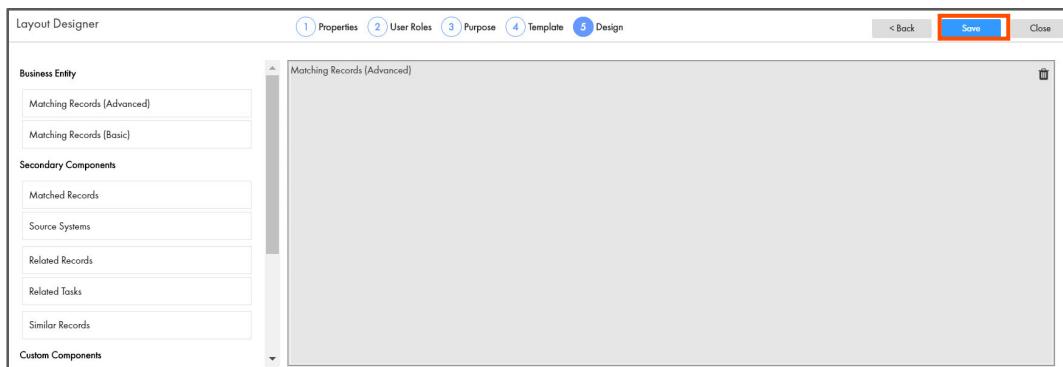
Merge tasks for business entity workflows  
 Merge tasks for subject area workflows

7. In the **Template** page, select **Template 1** and click **Next**.



8. Drag the **Matching Records(Advanced)** into the blank area on the right.

9. Click **Save**.



10. **Publish** the changes to the MDM Hub.

*This concludes the lab.*



## Module 6: Configure Workflows

### Lab 6-3: Two-step Merge Approval

#### Overview:

In this lab, you will implement the two-step merge workflow that you configured in the previous lab.

#### Objectives:

- Configure the Provisioning Tool to define a workflow for merging two records
- Define triggers to start a workflow based on the user role and the business entity involved in the merge
- Configure task types to associate tasks to user roles
- Perform a two-step merge workflow

#### Duration:

30 minutes

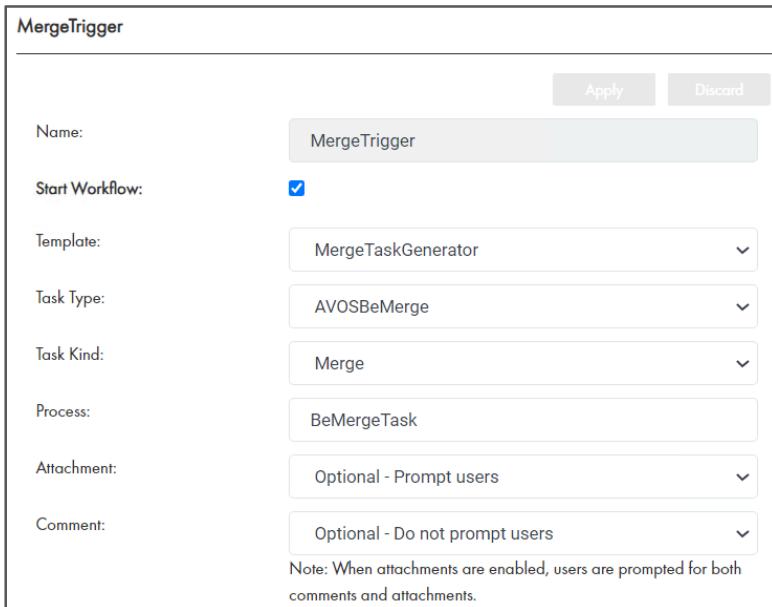
---

#### Tasks

1. Log in to the Provisioning Tool.
2. Select **E360\_Training** as the database.
3. Click **Business Entity** menu and select **Tasks**.
4. From the drop-down, select **Triggers** and click **Create**.
5. In the **New Trigger** window, enter the following values.

Header	Value
Name	MergeTrigger
Start Workflow	Select
Template	MergeTaskGenerator
Task Type	AVOSBeMerge
Task Kind	Merge
Process	BeMergeTask
Attachment	Optional - Prompt users
Comment	Optional - Do not prompt users

6. Click **Apply** to save the changes.



MergeTrigger

Apply      Discard

Name: MergeTrigger

Start Workflow:

Template: MergeTaskGenerator

Task Type: AVOSBeMerge

Task Kind: Merge

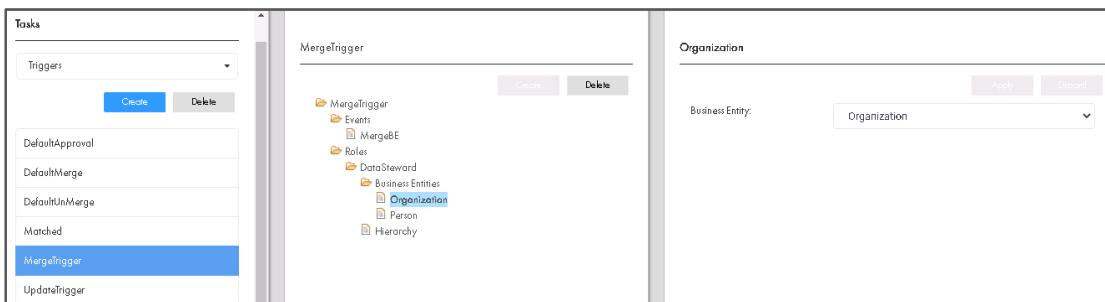
Process: BeMergeTask

Attachment: Optional - Prompt users

Comment: Optional - Do not prompt users

Note: When attachments are enabled, users are prompted for both comments and attachments.

7. Select **Events** and click **Create**.
8. Select **MergeBE** from the list and click **Apply** to save changes.
9. Select **Roles** and click **Create**.
10. Select **Data Steward** from the list and click **Apply** to save changes.
11. Select **Data Steward > Business Entities** and click **Create**.
12. Select **Person** from the Business Entity drop-down list.
13. Add **Organization** business entity under Data Steward.



The screenshot shows the Informatica interface with three panels:

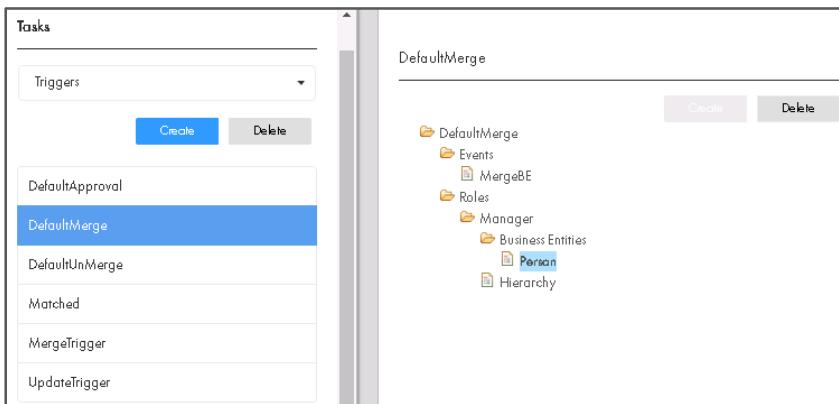
- Tasks** panel on the left: Shows a list of triggers including DefaultApproval, DefaultMerge, DefaultUnMerge, Matched, MergeTrigger (which is selected and highlighted in blue), and UpdateTrigger.
- MergeTrigger** configuration panel in the center: Shows the configuration for the MergeTrigger, including the template (MergeTaskGenerator), task type (AVOSBeMerge), and task kind (Merge). It also includes sections for Process, Attachment, and Comment.
- Organization** panel on the right: Shows the selection of the Organization business entity under the Data Steward category.

14. Click the **DefaultMerge** trigger and set the following values:

Field	Value
Name	DefaultMerge
Events	MergeBE
Roles	Click * and select Manager from the right panel

15. Click **Apply** to save the changes.

16. Navigate to **DefaultMerge > Roles > Manager > Business Entities** and add a **Person**.

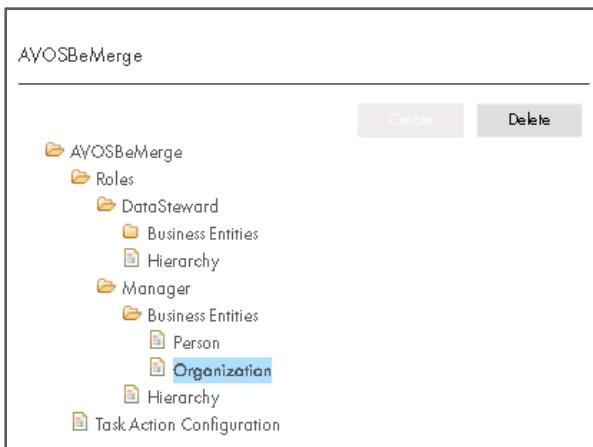


The screenshot shows the MDM Hub's navigation pane on the left and the main content area on the right. The navigation path is: DefaultMerge > Roles > Manager > Business Entities. In the Business Entities folder, a node labeled "Person" is highlighted in blue.

17. Open Task Types, select the **AVOSBeMerge** task and set the role to **Manager**.

18. Expand **AVOSBeMerge > Roles > Manager > Business Entities**

Add the **Person** and **Organization** business entities if they do not already appear.



The screenshot shows the Task Types interface with the navigation path: AVOSBeMerge > Roles > Manager > Business Entities. Under Business Entities, "Person" and "Organization" are listed.

19. Click **Publish** to save the changes to the MDM Hub.

20. Open the MDM Hub to set the privileges to the workflows.

21. Select **Roles** under the **Security Access Manager** workbench.

22. For the Manager role, under **Custom Resources > MDM\_Sample**, enable all the checkboxes for the task type **TASK\_TYPE/Person:Merge**.

23. Click **Save**.

...TASK_TYPE/Organization:UpdateWithApproval	<input type="checkbox"/>						
...TASK_TYPE/Organization:UpdateWithOptionalApproval	<input type="checkbox"/>						
...TASK_TYPE/Person:FinalReview	<input type="checkbox"/>						
<b>...TASK_TYPE/Person:Merge</b>	<b><input checked="" type="checkbox"/></b>						
...TASK_TYPE/Person:ReviewNoApprove	<input checked="" type="checkbox"/>						
...TASK_TYPE/Person:Unmerge	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
...TASK_TYPE/Person:UpdateRejectedRecord	<input type="checkbox"/>						
...TASK_TYPE/Person:UpdateWithApproval	<input checked="" type="checkbox"/>						
...TASK_TYPE/Person:UpdateWithOptionalApproval	<input checked="" type="checkbox"/>						
...TASK_TYPE/ProductGroup:FinalReview	<input type="checkbox"/>						

24. Select the **DataSteward** role and enable all the checkboxes for the **Person:Merge** task.

25. Click **Save**.

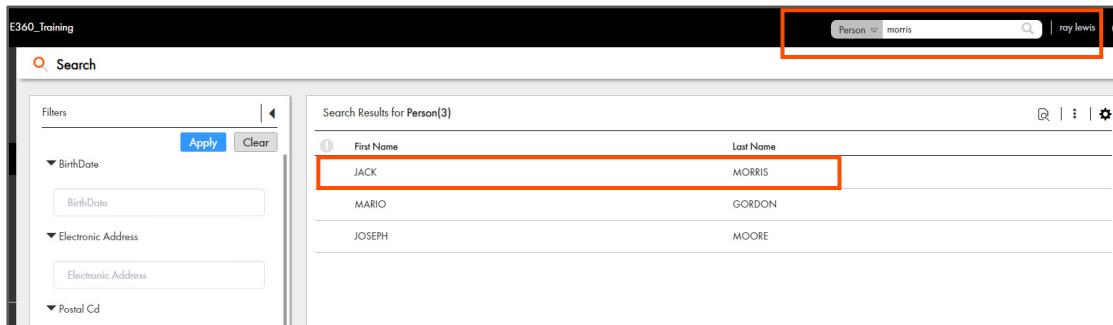
You will now test the workflow.

26. Log in to the **MDM Data Director** application as the Data Steward (**ray/mdm**).

27. From the global search textbox, select **Person** and enter **morris**.

The search results are displayed.

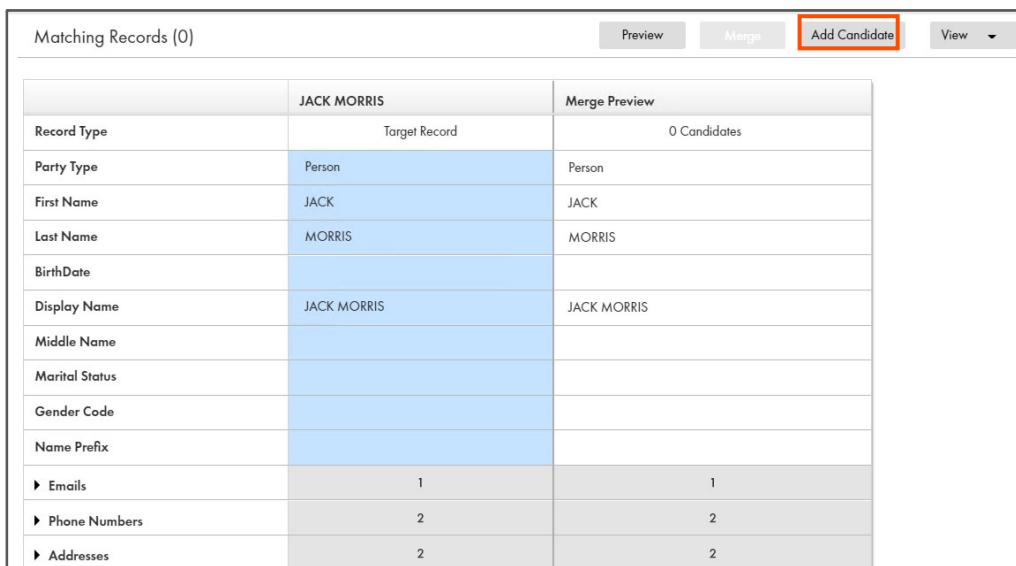
28. Click to open **Jack Morris**.



Search Results for Person(3)	
First Name	Last Name
JACK	MORRIS
MARIO	GORDON
JOSEPH	MOORE

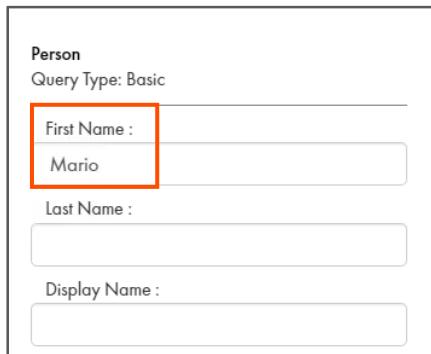
29. Scroll down to the **Matching Records** section.

30. Click **Add Candidate**.



	JACK MORRIS	Merge Preview
Record Type	Target Record	0 Candidates
Party Type	Person	Person
First Name	JACK	JACK
Last Name	MORRIS	MORRIS
BirthDate		
Display Name	JACK MORRIS	JACK MORRIS
Middle Name		
Marital Status		
Gender Code		
Name Prefix		
▶ Emails	1	1
▶ Phone Numbers	2	2
▶ Addresses	2	2

31. Select the **Person\_Basic\_Search** query and search for **Mario** as First Name.



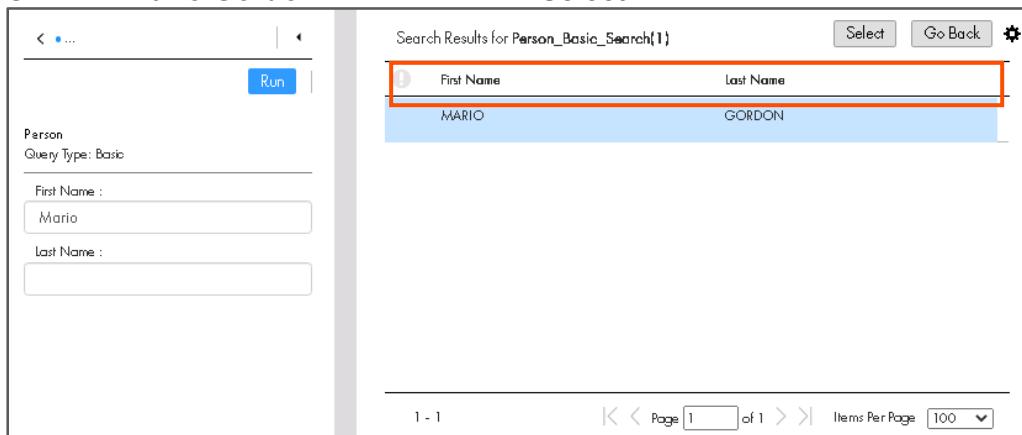
Person  
Query Type: Basic

First Name : **Mario**

Last Name :

Display Name :

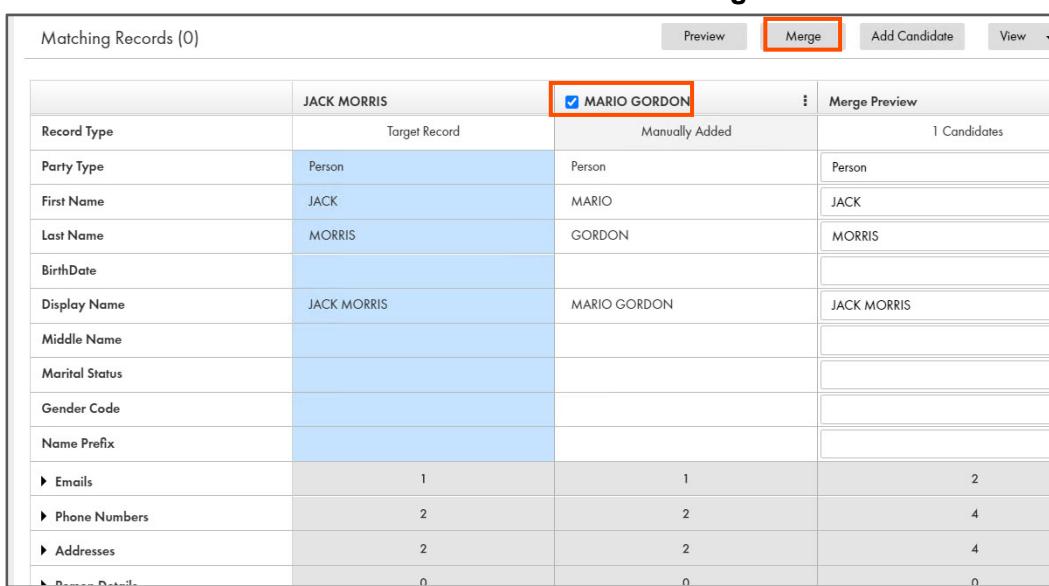
32. Click the **Mario Gordon** record and click **Select**.



The screenshot shows the Informatica search interface. On the left, there's a search configuration panel with fields for First Name ('Mario') and Last Name (''). On the right, the search results are displayed under the heading 'Search Results for Person\_Basic\_Search(1)'. A single result is shown: 'First Name: MARIO' and 'Last Name: GORDON'. This result is highlighted with a red box. At the bottom right of the search results area, there are buttons for 'Select', 'Go Back', and a gear icon.

33. Both the records appear side by side.

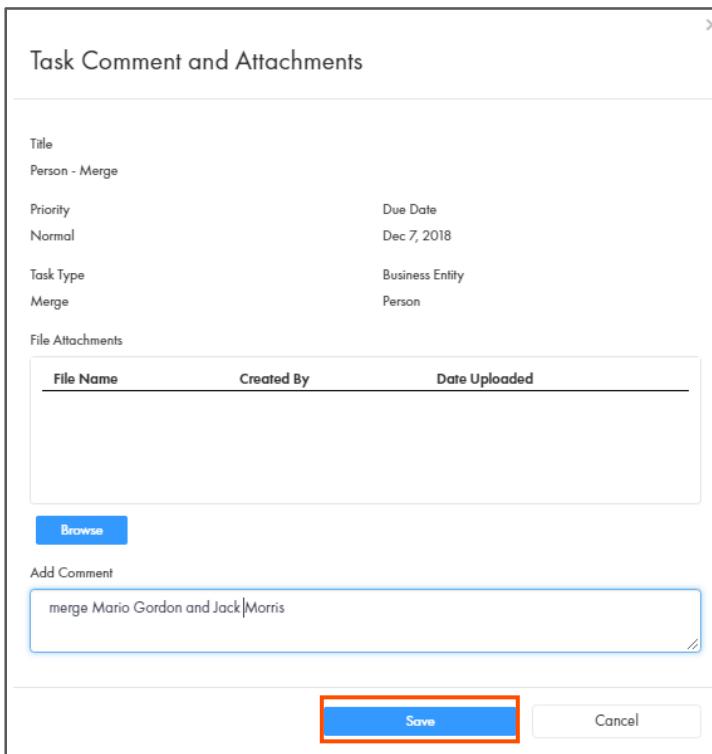
34. Select **Person** checkbox for Mario Gordon and click **Merge**.



The screenshot shows the 'Matching Records (0)' page. It displays two records side-by-side: 'JACK MORRIS' (Target Record) and 'MARIO GORDON' (Manually Added). The 'Merge' button at the top right is highlighted with a red box. The table has columns for Record Type, Party Type, First Name, Last Name, BirthDate, Display Name, Middle Name, Marital Status, Gender Code, and Name Prefix. Below the table, there are sections for Emails (1 each), Phone Numbers (2 each), Addresses (2 each), and Person Details (0 each).

Matching Records (0)		Preview	Merge	Add Candidate	View
Record Type	JACK MORRIS	Target Record	<input checked="" type="checkbox"/> MARIO GORDON	Manually Added	1 Candidates
Party Type	Person	Person		Person	
First Name	JACK	MARIO		JACK	
Last Name	MORRIS	GORDON		MORRIS	
BirthDate					
Display Name	JACK MORRIS	MARIO GORDON		JACK MORRIS	
Middle Name					
Marital Status					
Gender Code					
Name Prefix					
► Emails	1	1		2	
► Phone Numbers	2	2		4	
► Addresses	2	2		4	
► Person Details	0	0		0	

35. Enter a comment and click **Save**.



Task Comment and Attachments

Title  
Person - Merge

Priority  
Normal

Due Date  
Dec 7, 2018

Task Type  
Merge

Business Entity  
Person

File Attachments

File Name	Created By	Date Uploaded

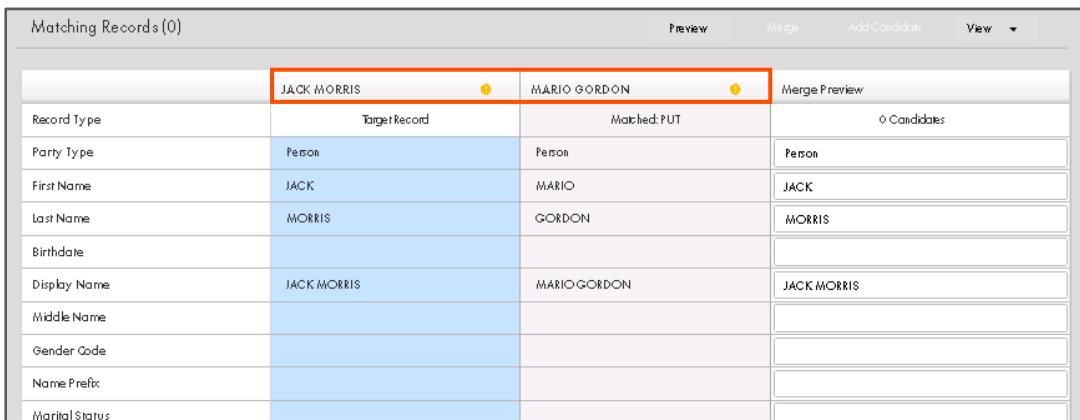
**Browse**

Add Comment

merge Mario Gordon and Jack Morris

**Save** **Cancel**

36. The orange exclamation icon indicates that the merge is pending. It will be removed after the manager approves the task.



Matching Records (0)		Merge Preview	
JACK MORRIS	!	MARIO GORDON	!
Record Type	Target Record	Matched PUF	0 Candidates
Party Type	Person	Person	Person
First Name	JACK	MARIO	JACK
Last Name	MORRIS	GORDON	MORRIS
Birthdate			
Display Name	JACK MORRIS	MARIOGORDON	JACK MORRIS
Middle Name			
Gender Code			
Name Prefix			
Marital Status			

37. Check the **ActiveVOS** for a running task.



INFORMATICA ActiveVOS

Logged in as: avosadmin | Logout | Deploy | Help

HOME MONITOR REPORT CATALOG ADMIN

Search: Process Id or Resource Name

**Active Processes**

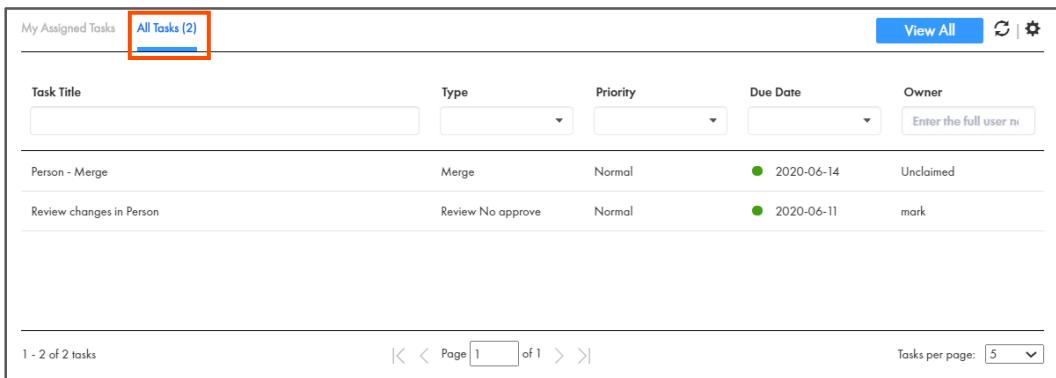
ID	Title	Ver.	Start Date	End Date	State	Group
2206	BeMergeWorkflow	1.0	2020-06-07 22:10	N/A	Running	N/A
1730	BeUpdateWithApprovalWorkflow	1.0	2020-06-04 08:54	2020-06-04 10:48	Completed	N/A

38. Toggle back to the **MDM Data Director** application.

39. Log out as the Data Steward and log in as the Manager (**mark/mdm**) to claim the merge task.

40. Click the **All Tasks** tab.

41. To open the task, click **Person-Merge** link.



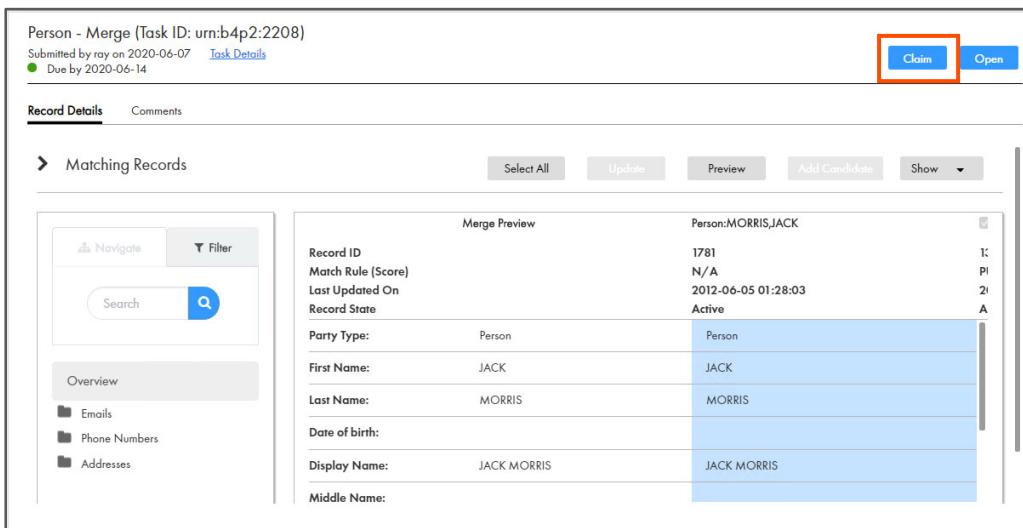
My Assigned Tasks

All Tasks (2)

Task Title	Type	Priority	Due Date	Owner
Person - Merge	Merge	Normal	● 2020-06-14	Unclaimed
Review changes in Person	Review No approve	Normal	● 2020-06-11	mark

1 - 2 of 2 tasks | Page 1 of 1 | Tasks per page: 5

42. Click **Claim**.



Person - Merge (Task ID: urn:b4p2:2208)  
 Submitted by ray on 2020-06-07 [Task Details](#)  
 Due by 2020-06-14

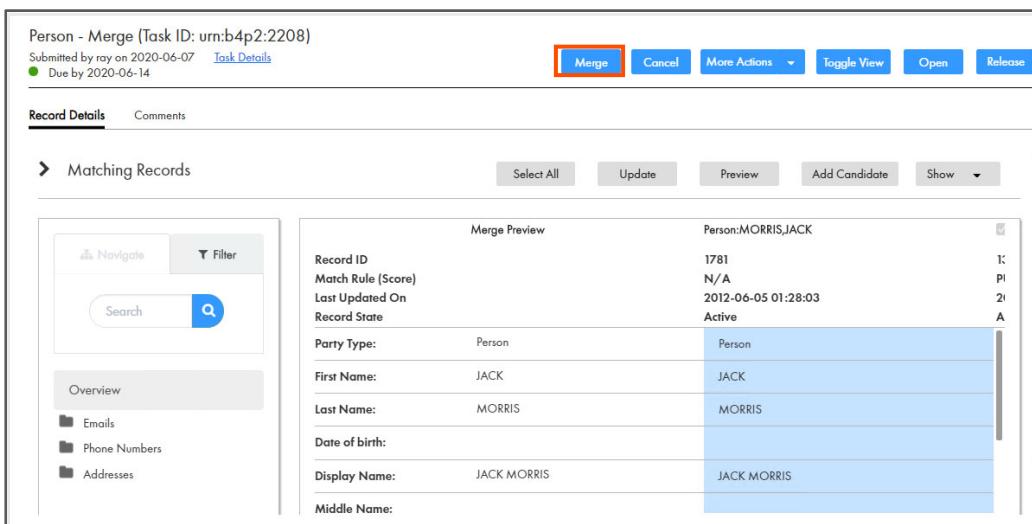
**Record Details** **Comments**

**Matching Records**

Select All		Update	Preview	Add Candidate	Show
<input type="checkbox"/>	<input type="checkbox"/>				

Merge Preview		Person:MORRIS,JACK
Record ID	1781	1
Match Rule (Score)	N/A	P1
Last Updated On	2012-06-05 01:28:03	2
Record State	Active	A
Party Type:	Person	Person
First Name:	JACK	JACK
Last Name:	MORRIS	MORRIS
Date of birth:		
Display Name:	JACK MORRIS	JACK MORRIS
Middle Name:		

43. Click **Merge** to complete the task.



Person - Merge (Task ID: urn:b4p2:2208)  
 Submitted by ray on 2020-06-07 [Task Details](#)  
 Due by 2020-06-14

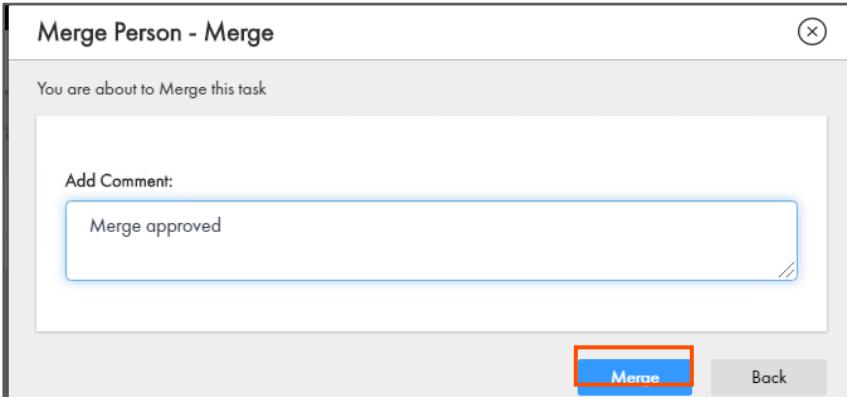
**Record Details** **Comments**

**Matching Records**

Select All		Update	Preview	Add Candidate	Show
<input type="checkbox"/>	<input type="checkbox"/>				

Merge Preview		Person:MORRIS,JACK
Record ID	1781	1
Match Rule (Score)	N/A	P1
Last Updated On	2012-06-05 01:28:03	2
Record State	Active	A
Party Type:	Person	Person
First Name:	JACK	JACK
Last Name:	MORRIS	MORRIS
Date of birth:		
Display Name:	JACK MORRIS	JACK MORRIS
Middle Name:		

44. Enter a comment and click **Merge**.


**Note:** You will see a notification that the task is closed.

45. Open ActiveVOS and click **Monitor > Active Processes** to check the status of the workflow.



ID	Title	Ver.	Start Date	End Date	State	Group
2206	BeMergeWorkflow	1.0	2020-06-07 22:10	2020-06-07 22:24	Completed	
1730	BeUpdateWithApprovalWorkflow	1.0	2020-06-04 08:54	2020-06-04 10:48	Completed	

**Note:** You will see the status as **Completed**.

*This concludes the lab.*

# Module 6: Configure Workflows

## Lab 6-4: Custom Unmerge Layout

### Overview:

In this lab, you will define role-based UnMerge Entity Layout in the Provisioning Tool and test the layout in the MDM Data Director UI.

### Objectives:

- Define role-based entity layouts using the Provisioning Tool for UnMerge

### Duration:

5 minutes

---

### Tasks

1. In the Provisioning Tool, click **Configuration > Layout Designer**.
2. Click **Create > Record View Layout**.
3. In the **Define Layout Properties** page, enter values as listed in the following table:

Property	Value
Layout type	Unmerge Task
View Name	Person_UnMerge
Layout ID	Person_UnMerge
Layout Name	Person_Unmerge
List Option icon	* (Browse)
List Order	1 (default)

4. Select **Person** and click **Next**.

**Layout Designer**

Define Layout Properties

Select the type of record view layout you want to design and specify a unique name and label for the layout.

Layout Type:*	Unmerge Task
View Name:*	Person_UnMerge
Layout ID:*	Person_UnMerge
Description:	Enter a description for users editing this layout.
Layout Name:*	Person_UnMerge
List Option Icon:	<input checked="" type="image"/> Browse
List Order:	1

Which type of business entity or business entity view do you want to associate with this layout?

- ▶ Credit Card
- ▶ Household
- ▶ **Person**
- ▶ Products
- ▶ ProductGroup
- ▶ Account
- ▶ Organization
- ▶ DebitCard
- ▶ Address

**Next >**

5. In the **Select User Roles** page, select **Data Steward** and click **Next**.

**Layout Designer**

Select User Roles

Select the user roles that can access the record view.

<input type="checkbox"/> Anyone	<input type="checkbox"/> Super User	<input type="checkbox"/> Manager
<input checked="" type="checkbox"/> DataSteward	<input type="checkbox"/> SrManager	<input type="checkbox"/> BusinessUser
<input type="checkbox"/> abAdmin		

6. In the **Define Purpose** page, select both the checkboxes and click **Next**.

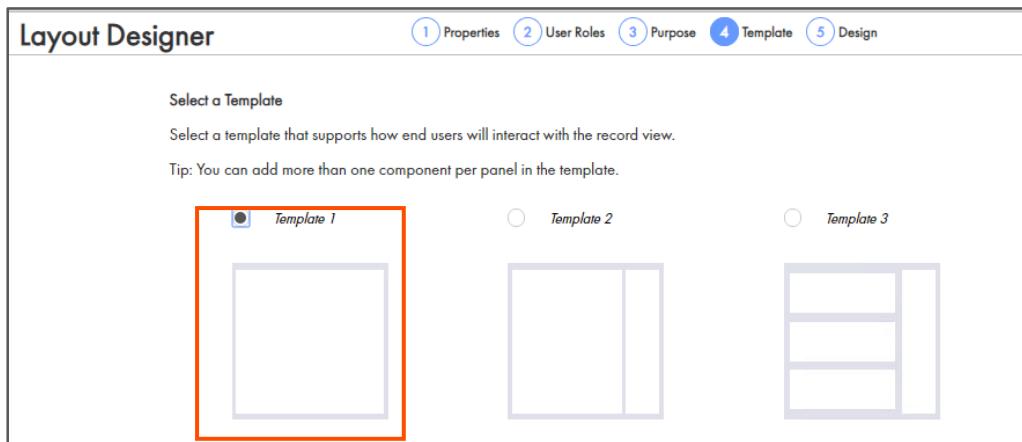
**Layout Designer**

Define Purpose

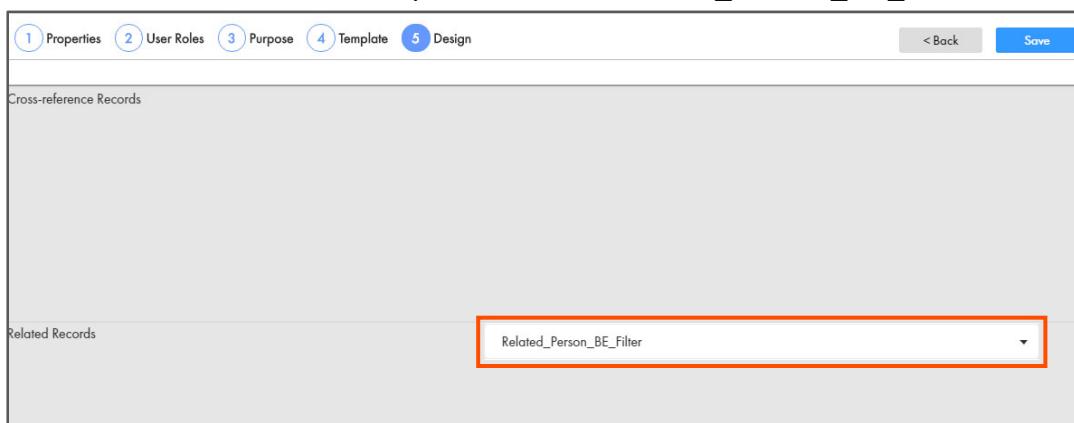
Select the actions that end users can perform using this record view.

<input checked="" type="checkbox"/> Unmerge tasks for business entity workflows
<input checked="" type="checkbox"/> Unmerge tasks for subject area workflows

7. In the **Select a Template** page, select **Template 1** and click **Next**.



8. Drag and drop **Cross Reference Records** and **Related Records**.  
 9. From the **Related Records** drop-down, select **Related\_Person\_BE\_Filter**.



10. Click **Save**.  
 11. Click **Publish** to save the changes to the MDM Hub.

*This concludes the lab.*



## Module 6: Configure Workflows

### Lab 6-5: Two-step Unmerge Approval

#### Overview:

In this lab, you will implement a two-step un-merge workflow that you configured in the previous lab.

#### Objectives:

- Define a workflow engine in the MDM Hub console
- Define user roles and privileges
- Test the workflows in the classic view

#### Duration:

30 minutes

---

#### Tasks

1. Log in to the Provisioning Tool.
2. Select **E360\_Training** as the database.
3. Click **Business Entity** menu and select **Tasks**.
4. From the drop-down list, select **Triggers** and click **Create**.
5. In the **New Trigger** window, enter the following values and click **Apply** to save the changes:

Header	Value
Name	UnMergeTrigger
Start Workflow	Select
Template	DefaultApproval
Task Type	AVOSBeUnMerge
Task Kind	Unmerge
Process	BeUnmergeTask
Attachment	Optional - Prompt users
Comment	Optional - Do not prompt users

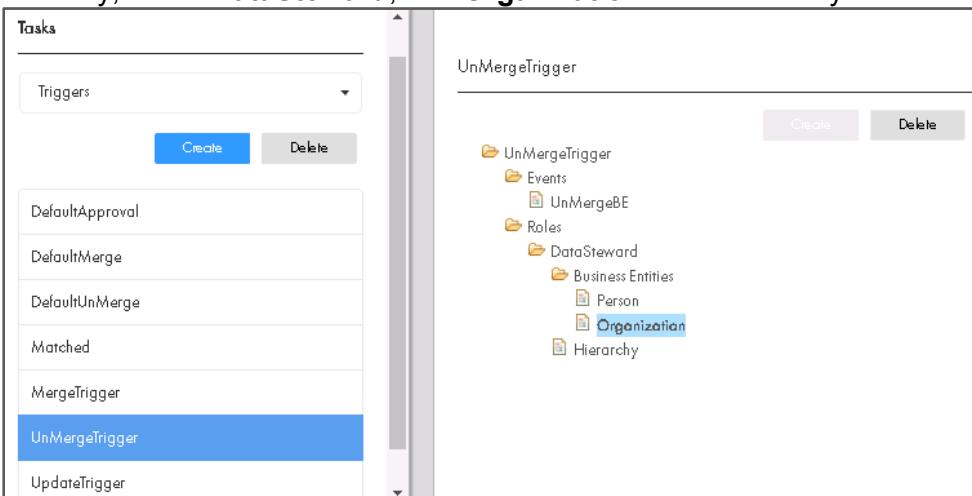
**UnMergeTrigger**

**Apply**   **Discard**

Name:	UnMergeTrigger
Start Workflow:	<input checked="" type="checkbox"/>
Template:	DefaultApproval
Task Type:	AVOSBeUnmerge
Task Kind:	Unmerge
Process:	BeUnmergeTask
Attachment:	Optional - Prompt users
Comment:	Optional - Do not prompt users

Note: When attachments are enabled, users are prompted for both comments and attachments.

6. Select **Events** and click **Create**.
7. Select **UnMergeBE** from the list and click **Apply** to save changes.
8. Select **Roles** and click **Create**.
9. From the list, select **Data Steward**.
10. Click **Apply** to save the changes.
11. Expand **Data Steward > Business Entities** and click **Create**.
12. From the Business Entity drop-down, select **Person**.
13. Similarly, under **DataSteward**, add **Organization** business entity.



The screenshot shows the Informatica interface with two main windows. On the left, the 'Tasks' panel is open, showing a list of triggers: DefaultApproval, DefaultMerge, DefaultUnMerge, Matched, MergeTrigger, UnMergeTrigger (which is selected and highlighted in blue), and UpdateTrigger. Below this list are 'Create' and 'Delete' buttons. On the right, a configuration window for 'UnMergeTrigger' is displayed. The window has tabs for 'Events', 'Roles', 'DataSteward', 'Business Entities', and 'Hierarchy'. Under 'Business Entities', 'Person' and 'Organization' are listed. The 'Organization' item is also highlighted in blue, indicating it is selected or being configured.

14. Click the **DefaultUnMerge** trigger and set the following values:

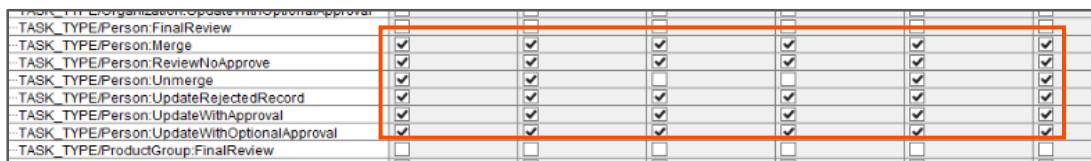
Field	Value
Name	DefaultUnMerge
Events	UnMergeBE
Roles	Click * and select Manager from the right panel
DefaultUnMerge > Roles > Manager > Business Entities	Person and Organization

15. Click **Apply** to save the changes.

16. **Publish** the changes.

You will configure the roles and assign the roles to these users.

17. In the MDM Hub Console, under **Security Access Manager** workbench, select **Roles**.
18. Select the **E360\_Training** ORS and click **Connect**.
19. Acquire a **Write Lock (A)**.
20. Select the **DataSteward** role and enable the checkboxes for the **Person:Unmerge** task under **Custom Resources > MDM\_sample**.

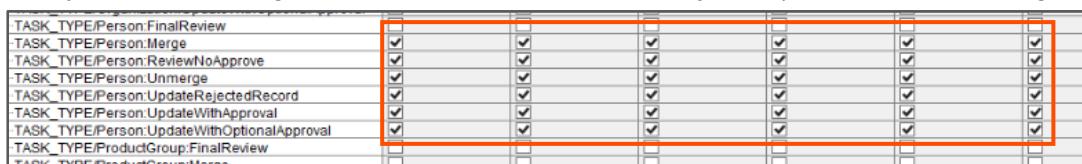


TASK_TYPE/Person:FinalReview								
TASK_TYPE/Person.Merge	<input checked="" type="checkbox"/>							
TASK_TYPE/Person:ReviewNoApprove	<input checked="" type="checkbox"/>							
TASK_TYPE/Person:Unmerge	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
TASK_TYPE/Person:UpdateRejectedRecord	<input checked="" type="checkbox"/>							
TASK_TYPE/Person:UpdateWithApproval	<input checked="" type="checkbox"/>							
TASK_TYPE/Person:UpdateWithOptionalApproval	<input checked="" type="checkbox"/>							
TASK_TYPE/ProductGroup:FinalReview	<input type="checkbox"/>							

21. Click **Save** to add the changes to MDM Hub.

22. Similarly, select **Manager** role.

23. Verify that the privileges are added for all the base objects. (Else add the privileges.)

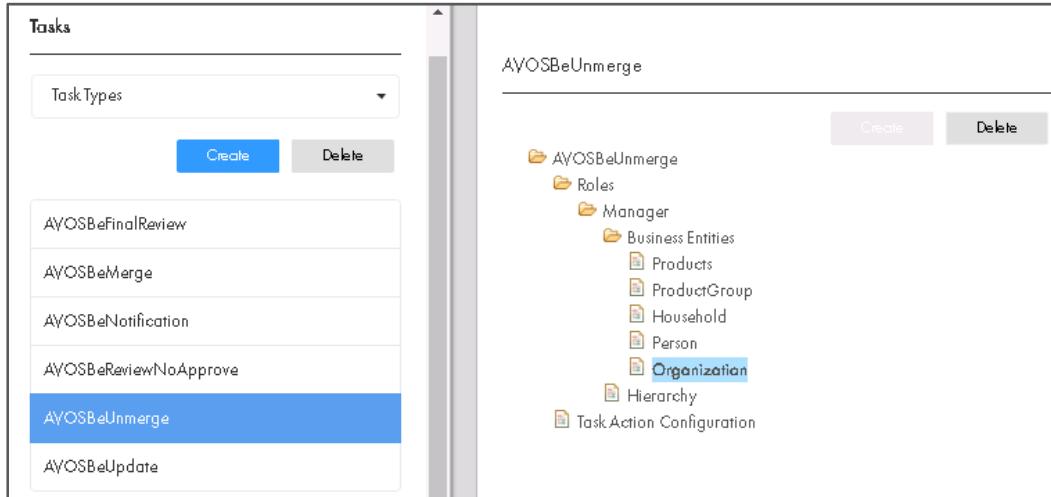


TASK_TYPE/Person:FinalReview								
TASK_TYPE/Person.Merge	<input checked="" type="checkbox"/>							
TASK_TYPE/Person:ReviewNoApprove	<input checked="" type="checkbox"/>							
TASK_TYPE/Person:Unmerge	<input checked="" type="checkbox"/>							
TASK_TYPE/Person:UpdateRejectedRecord	<input checked="" type="checkbox"/>							
TASK_TYPE/Person:UpdateWithApproval	<input checked="" type="checkbox"/>							
TASK_TYPE/Person:UpdateWithOptionalApproval	<input checked="" type="checkbox"/>							
TASK_TYPE/ProductGroup:FinalReview	<input type="checkbox"/>							

Now that the permissions are set, configure triggers for the unmerge.

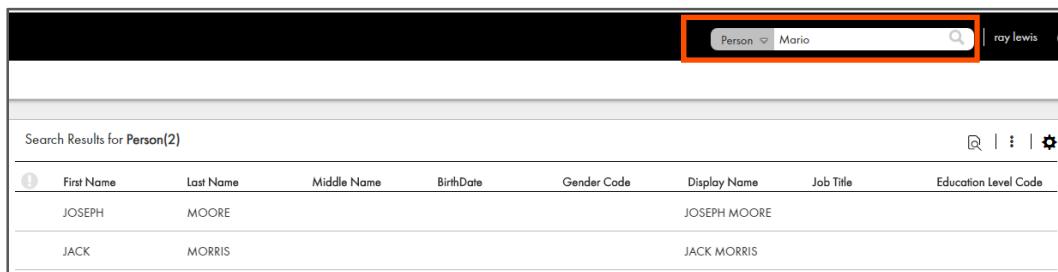
24. Log in to the Provisioning Tool and click **Business Entities > Tasks > Task Types**.
25. From the drop-down, select the **AVOSBeUnMerge** task.
26. Change the role to **Manager**.

27. Under **AVOSBeUnMerge > Roles > Manager > Business Entities**, add the **Person** and **Organization** business entities.



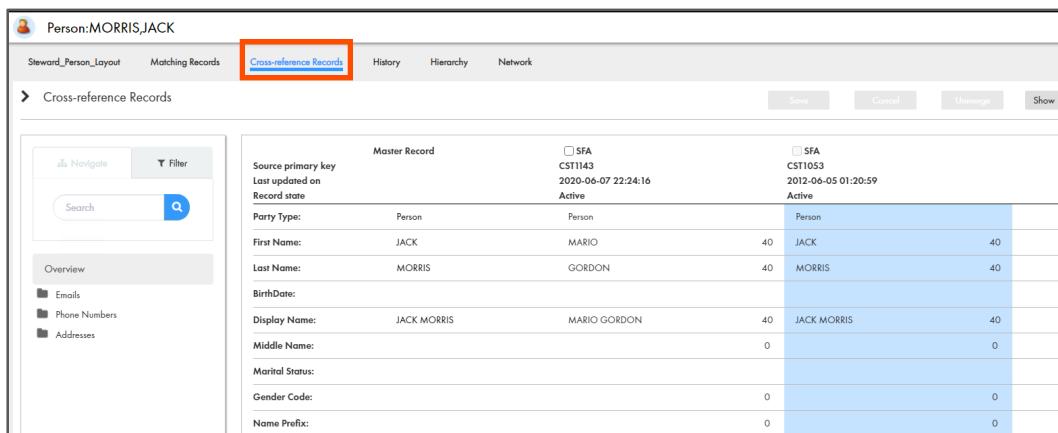
The screenshot shows the Informatica MDM Hub interface. On the left, there is a sidebar titled "Tasks" with several items listed: "AVOSBeFinalReview", "AVOSBeMerge", "AVOSBeNotification", "AVOSBeReviewNoApprove", "AVOSBeUnmerge" (which is highlighted in blue), and "AVOSBeUpdate". Below the tasks is a "Task Types" dropdown with "Create" and "Delete" buttons. On the right, under the heading "AVOSBeUnmerge", there is a tree structure: "AVOSBeUnmerge" (with a "Create" and "Delete" button), "Roles" (with a "Manager" node), "Business Entities" (with "Products", "ProductGroup", "Household", and "Person" nodes), "Organization" (which is highlighted in blue), "Hierarchy", and "Task Action Configuration".

28. To save the changes to the MDM Hub, click **Publish**.  
 29. Log in to the **MDM Data Director** application as the Data Steward (**ray/mdm**).  
 30. Search for either **Mario** or **Morris** in the global search.  
 31. The record for Jack Morris appears. **Double-click** to open.



The screenshot shows the MDM Data Director search results for "Person(2)". The search bar at the top contains "Person" and "Mario". The results table has columns: First Name, Last Name, Middle Name, BirthDate, Gender Code, Display Name, Job Title, and Education Level Code. Two records are listed: JOSEPH MOORE and JACK MORRIS. The "Display Name" column shows "JOSEPH MOORE" and "JACK MORRIS" respectively. The "Job Title" and "Education Level Code" columns are empty.

32. Select **Cross-reference Records** tab.

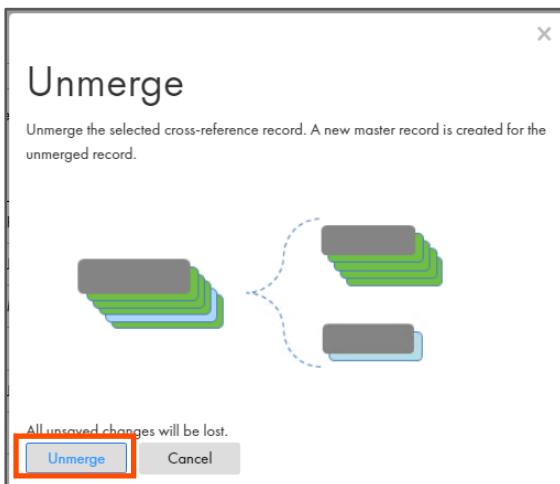


The screenshot shows the "Cross-reference Records" tab for the record "Person:MORRIS,JACK". The tab bar includes "Steward\_Person\_Layout", "Matching Records", "Cross-reference Records" (which is highlighted in red), "History", "Hierarchy", and "Network". The main area displays the "Cross-reference Records" table. The table has two sections: "Master Record" and "Party Type: Person". The "Master Record" section shows SFA CST1143 (Active) and SFA CST1053 (Active). The "Party Type: Person" section shows two rows: one for JACK MORRIS (Display Name: JACK MORRIS, Middle Name: GORDON, Job Title: 40, Education Level Code: 40) and one for MARIO (Display Name: MARIO, Middle Name: 0, Job Title: 40, Education Level Code: 40). The table also includes columns for "Source primary key", "Last updated on", "Record state", "First Name", "Last Name", "BirthDate", "Display Name", "Middle Name", "Marital Status", "Gender Code", and "Name Prefix".

33. Select checkbox for Mario Gordon and click **Unmerge**.

Master Record			
Source primary key	<input checked="" type="checkbox"/> SFA	CST1143	
Last updated on		2020-06-07 22:24:16	
Record state	Active		
Party Type:	Person	Person	Person
First Name:	JACK	MARIO	40
Last Name:	MORRIS	GORDON	40
BirthDate:			
Display Name:	JACK MORRIS	MARIO GORDON	40
Middle Name:	JACK MORRIS		
Marital Status:	0		
Gender Code:	0		
Name Prefix:	0		

34. Click **Unmerge**.



35. Enter a comment and click **Save**.

Task Comment and Attachments								
<p>Title Review changes in Person</p> <p>Priority Normal</p> <p>Due Date 2020-06-15</p> <p>Task Type Unmerge</p> <p>Business Entity Person</p> <p>File Attachments</p> <table border="1"> <thead> <tr> <th>File Name</th> <th>Created By</th> <th>Date Uploaded</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td></td> </tr> </tbody> </table> <p><b>Browse</b></p> <p>Add Comment <u>Unmerge</u></p>			File Name	Created By	Date Uploaded			
File Name	Created By	Date Uploaded						
<p><b>Save</b> <b>Cancel</b></p>								

### 36. Navigate to ActiveVOS.



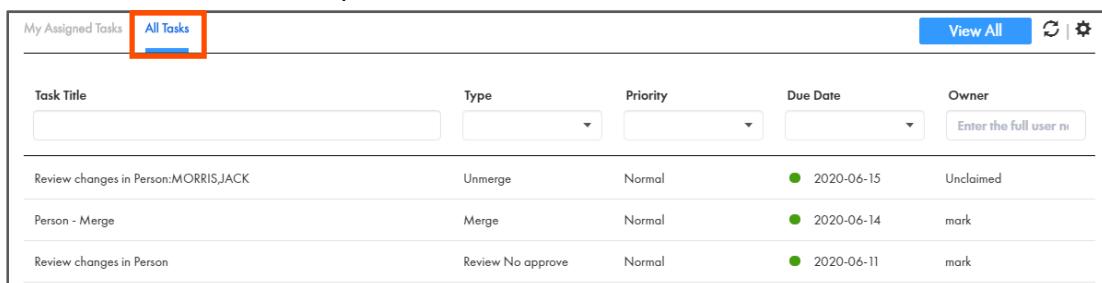
The screenshot shows the INFORMATICA ActiveVOS interface. In the top navigation bar, 'LOGGED IN AS: avosadmin' is displayed along with 'Logout' and 'Deploy' links. Below the navigation bar, there are tabs for HOME, MONITOR, REPORT, CATALOG, and ADMIN. On the left, a sidebar menu includes Monitor, Process Monitoring, Active Processes (which is selected and highlighted in blue), Alarm Queue, Receive Queue, and Dispatch Service. The main content area is titled 'Active Processes' and lists three entries:

ID	Title	Ver.	Start Date	End Date	State	Group
2264	BeUmergeWorkflow	1.0	2020-06-08 00:23		Completed	
2206	BeMergeWorkflow	1.0	2020-06-07 22:10	2020-06-07 22:24	Completed	
1730	BeUpdateWithApprovalWorkflow	1.0	2020-06-04 08:54	2020-06-04 10:48	Completed	

**Note:** You can see the task state as **Running** for unmerge.

### 37. In the MDM Data Director, log out as ray and log in as the Manager (mark/mdm).

### 38. From the All Tasks tab, open the Unclaimed task.

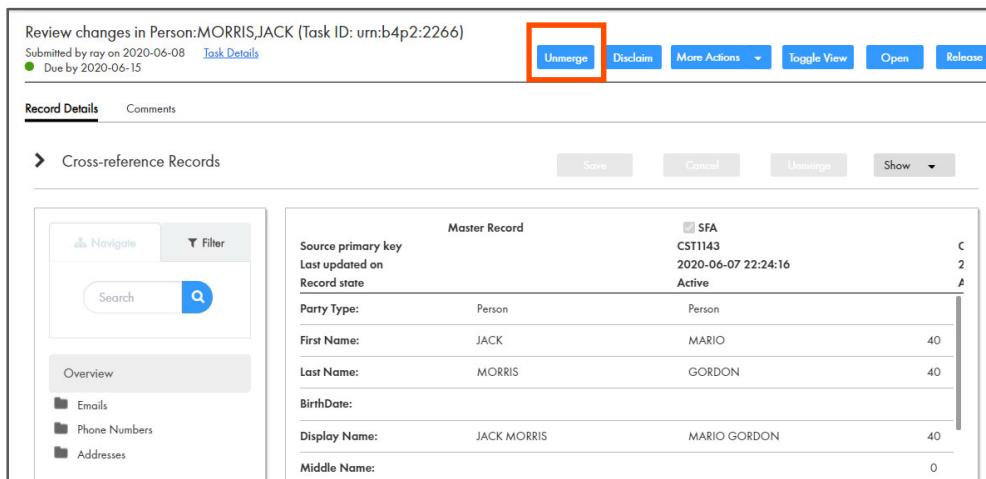


The screenshot shows the 'All Tasks' tab in the MDM Data Director. The table displays the following tasks:

Task Title	Type	Priority	Due Date	Owner
Review changes in Person:MORRIS,JACK	Unmerge	Normal	2020-06-15	Unclaimed
Person - Merge	Merge	Normal	2020-06-14	mark
Review changes in Person	Review No approve	Normal	2020-06-11	mark

### 39. Click Claim.

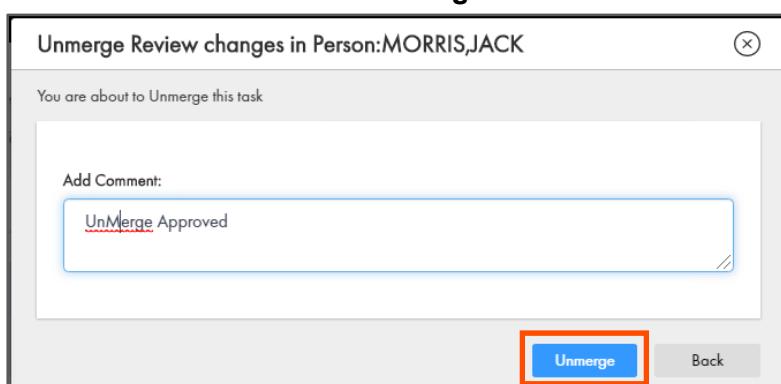
### 40. Click Unmerge.



The screenshot shows the 'Task Details' page for a task titled 'Review changes in Person:MORRIS,JACK'. The top navigation bar includes 'Task Details' and 'Unmerge' (which is highlighted with a red box). The page has sections for 'Record Details' and 'Cross-reference Records'. The 'Record Details' section shows the following information:

Source primary key	Master Record
CST1143	SFA
Last updated on	CST1143
Record state	2020-06-07 22:24:16
Party Type:	Person
First Name:	JACK
Last Name:	MORRIS
Display Name:	MARIO GORDON
Middle Name:	

### 41. Enter a comment and click Unmerge.



The screenshot shows the 'Unmerge' dialog box for the task 'Review changes in Person:MORRIS,JACK'. The dialog contains a message: 'You are about to Unmerge this task.' Below this is a text input field labeled 'Add Comment:' containing the text 'UnMerge Approved'. At the bottom of the dialog, there are two buttons: 'Unmerge' (highlighted with a red box) and 'Back'.

Review changes in Person:MORRIS,JACK (Task ID: urn:b4p2:2266)

Submitted by ray on 2020-06-08 [Task Details](#)

Task Closed [Open](#)

Record Details	Comments
This task has been closed	

**Note:** You will see a notification that the task is closed.

42. Refresh the status in ActiveVOS, and you should now see the task as **Completed**.

Active Processes					
<input type="checkbox"/> ID	Title	Ver.	Start Date	End Date	State
<input type="checkbox"/> 2264	BeUnmergeWorkflow	1.0	2020-06-08 00:23	2020-06-08 00:27	Completed
<input type="checkbox"/> 2206	BeMergeWorkflow	1.0	2020-06-07 22:10	2020-06-07 22:24	Completed
<input type="checkbox"/> 1730	BeUpdateWithApprovalWorkflow	1.0	2020-06-04 08:54	2020-06-04 10:48	Completed

*This concludes the lab.*



# Module 7: Customize Customer360

## Lab 7-1: Extend C360 Data Model

### Overview:

In this lab exercise, you will extend the Customer 360 data model by adding a custom lookup and business entity.

### Objectives:

- Populate the reference base object with data
- Add a custom lookup and business entity

### Duration:

30 minutes

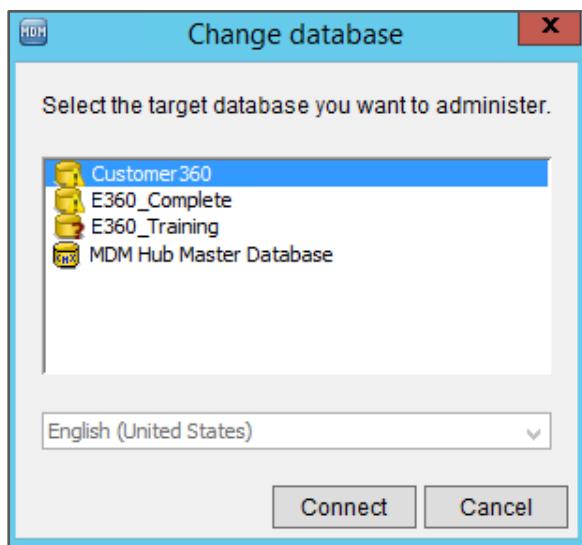
---

### Tasks:

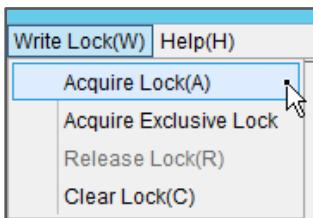
**In this lab, Chrome/Firefox will prompt to stop the web page often. Do not stop it. Always choose to wait. This is a relatively large data model, and validations will take time.**

You will extend the customer 360 data model by adding a custom lookup and business entity .

1. Log into the MDM Hub Console with username and password as **admin** and connect to the **Customer 360 ORS**.

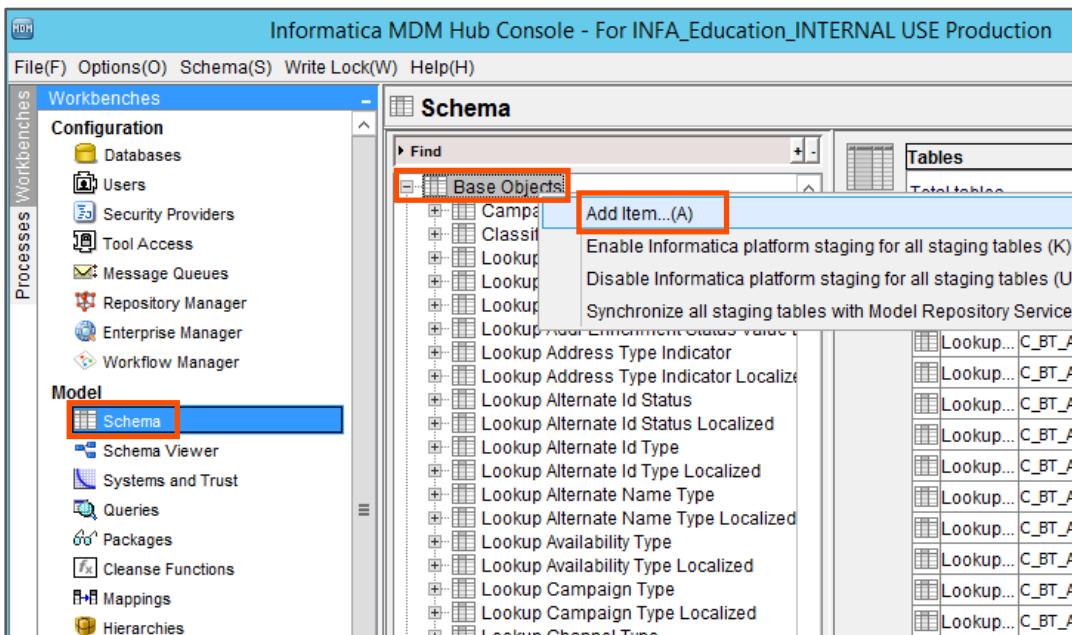


2. Acquire a **Write Lock(A)**.



3. Under Model, click **Schema**.

4. Right-click **Base Objects** and select **Add Item**.



5. Enter Display name as **Lookup Product Type**.

6. Enter Physical name as **C\_BT\_PRODUCT\_TYPE** and click **OK**.

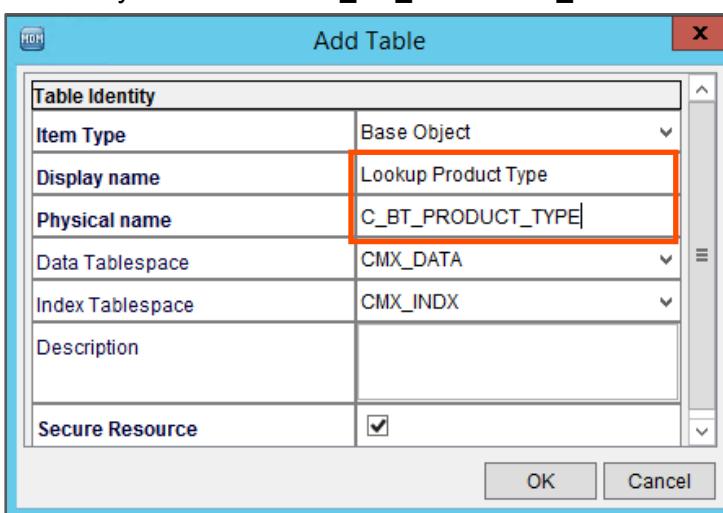
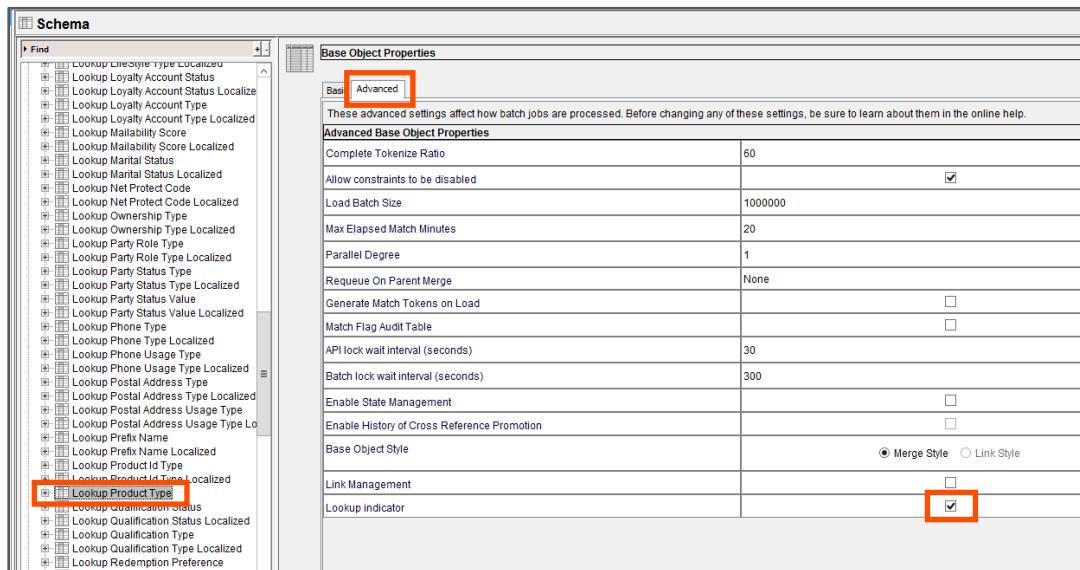


Table Identity	
Item Type	Base Object
Display name	Lookup Product Type
Physical name	C_BT_PRODUCT_TYPE
Data Tablespace	CMX_DATA
Index Tablespace	CMX_INDX
Description	
Secure Resource	<input checked="" type="checkbox"/>

7. Expand Base Object and select the **Lookup Product Type** from the Schema section.  
 8. In the Base Object Properties panel, click the **Advanced** tab.

9. Select the **Lookup indicator** checkbox as shown in the following image, and click the **Save** icon.

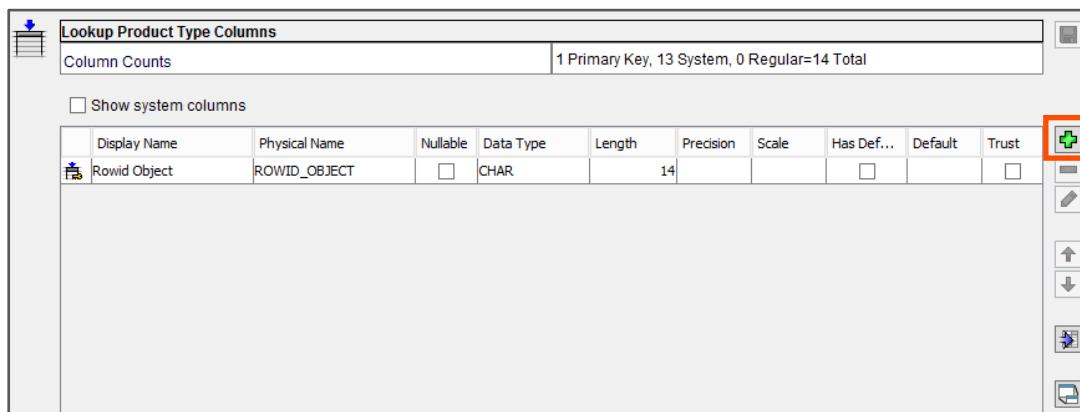


A **Save table** pop-up window appears. Do not click anything. The window disappears by itself.



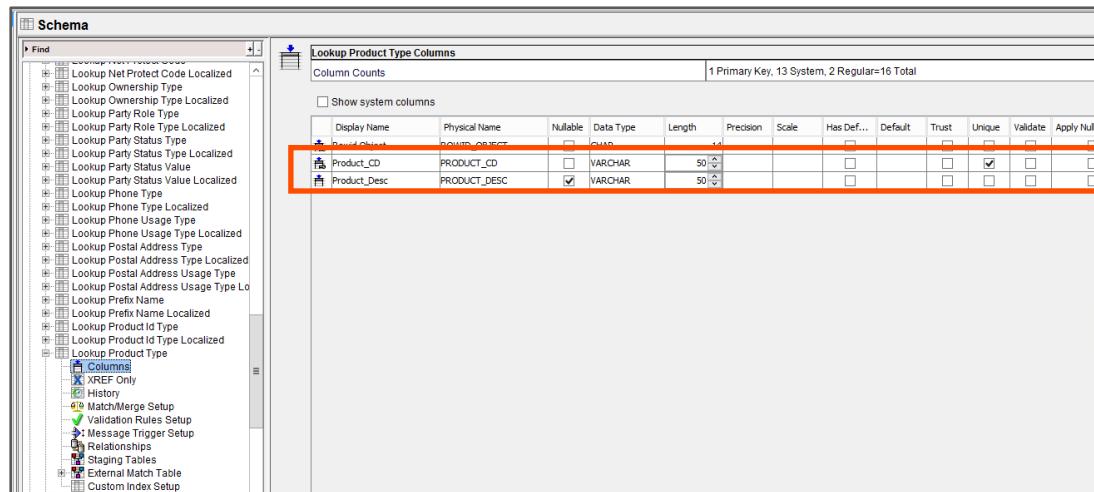
10. Expand the **Lookup Product Type** and click **Columns**.

11. Click the **+** icon to create a new column.



12. Add the following columns and click **Save**.

Display Name	Physical Name	Data Type	Length	Nullable	Unique
Product_CD	PRODUCT_CD	VARCHAR	50	Deselect	Select
Product_Desc	PRODUCT_DESC	VARCHAR	50	Select	Deselect



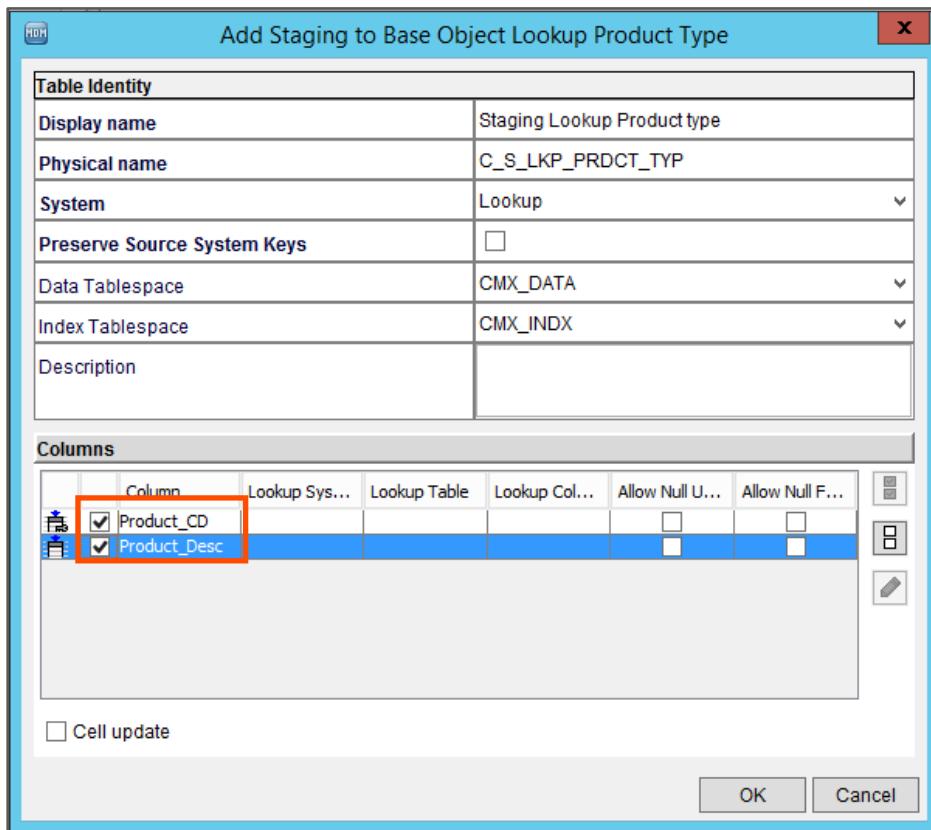
Display Name	Physical Name	Nullable	Data Type	Length	Precision	Scale	Has Def...	Default	Trust	Unique	Validate	Apply Null
Product_CD	PRODUCT_CD	<input type="checkbox"/>	VARCHAR	50			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Product_Desc	PRODUCT_DESC	<input checked="" type="checkbox"/>	VARCHAR	50			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

13. Select **Staging Tables** for the **Lookup Product Type** object from the Schema panel and click the **+** icon to create a new staging table.

14. In the **Add Staging to Base Object Lookup Product Type** window, enter the following details:

- Display name: **Staging Lookup Product type**
- Physical name: **C\_S\_LKP\_PRDCT\_TYP**
- System: **Lookup**

15. Select **Product CD** and **Product Desc** from the Columns panel and click **OK**.



You will now add data to the staging table.

16. Open the command prompt and type **sqlplus** and press enter
17. Enter the user name as **c360** and password as **infa**
18. At the sql prompt, type the command:

**@C:\MDM\_Training\E360\_Assets\Scripts\Product\_Lookup.sql**; and press enter

```
Administrator: Command Prompt - sqlplus
Microsoft Windows [Version 10.0.14393]
(c) 2016 Microsoft Corporation. All rights reserved.

C:\Users\Administrator>sqlplus

SQL*Plus: Release 12.2.0.1.0 Production on Thu Sep 17 22:35:26 2020

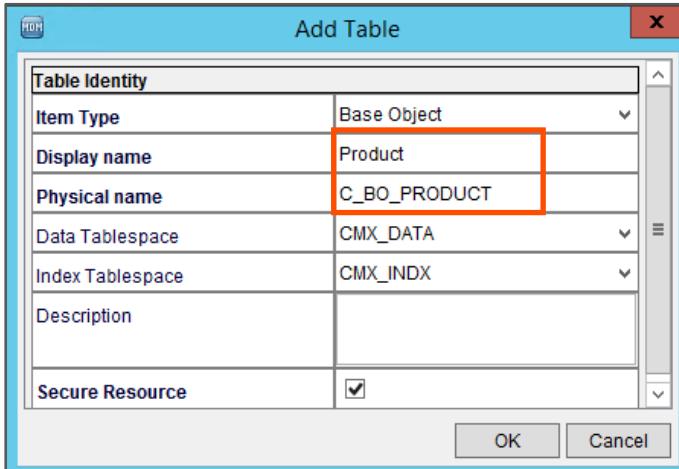
Copyright (c) 1982, 2016, Oracle. All rights reserved.

Enter user-name: c360
Enter password:
Last Successful login time: Thu Sep 17 2020 17:42:42 -07:00

Connected to:
Oracle Database 12c Enterprise Edition Release 12.2.0.1.0 - 64bit Production

SQL> @C:\MDM_Training\E360_Assets\Scripts\Product_Lookup.sql;
```

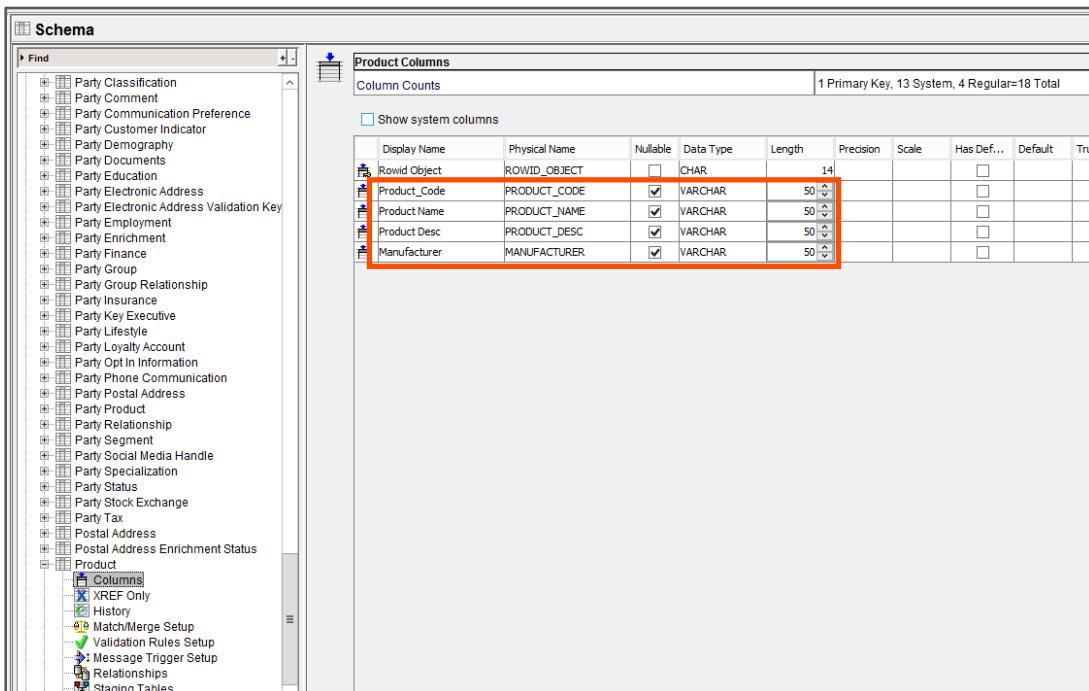
19. Back in MDM Hub, create another base object named **Product** as shown in the following image.



20. In the **Schema** panel, under **Product**, expand **Columns**.

21. Add the following columns and click **Save**.

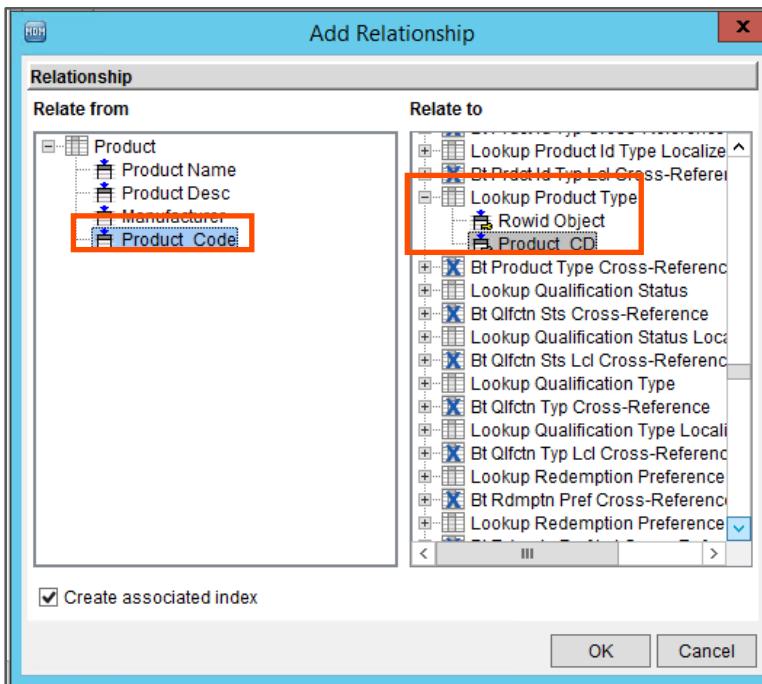
Display Name	Physical Name	Nullable	Data Type
Product_Code	PRODUCT_CODE	Checked	VARCHAR
Product Name	PRODUCT_NAME	Checked	VARCHAR
Product Desc	PRODUCT_DESC	Checked	VARCHAR
Manufacturer	MANUFACTURER	Checked	VARCHAR



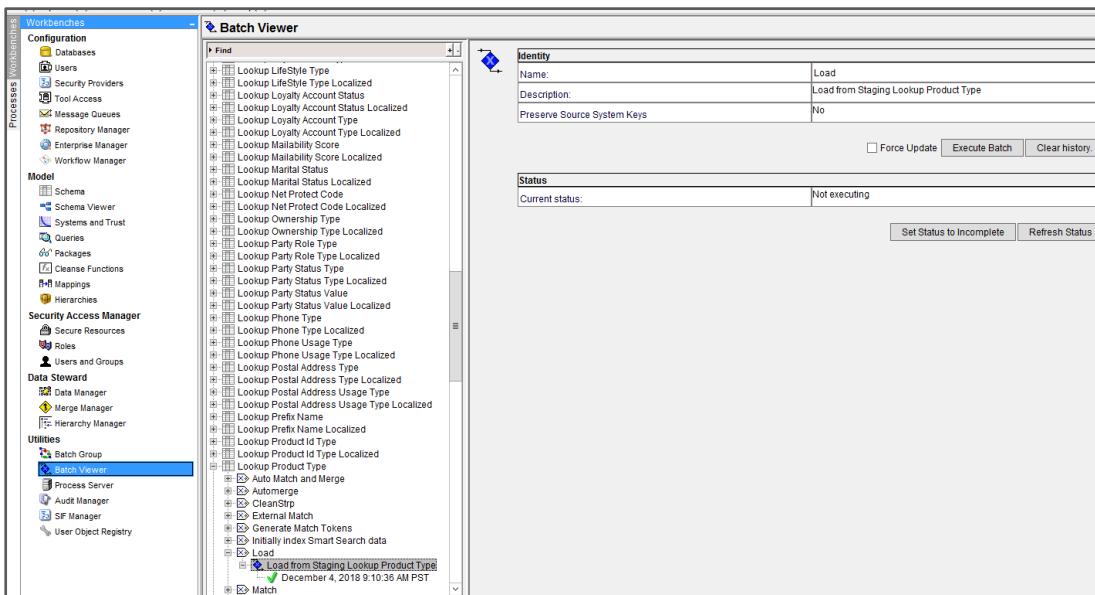
Display Name	Physical Name	Nullable	Data Type	Length	Precision	Scale	Has Def...	Default	True
Rowid Object	ROWID_OBJECT	<input type="checkbox"/>	CHAR	14			<input type="checkbox"/>		<input type="checkbox"/>
Product_Code	PRODUCT_CODE	<input checked="" type="checkbox"/>	VARCHAR	50			<input type="checkbox"/>		<input type="checkbox"/>
Product Name	PRODUCT_NAME	<input checked="" type="checkbox"/>	VARCHAR	50			<input type="checkbox"/>		<input type="checkbox"/>
Product Desc	PRODUCT_DESC	<input checked="" type="checkbox"/>	VARCHAR	50			<input type="checkbox"/>		<input type="checkbox"/>
Manufacturer	MANUFACTURER	<input checked="" type="checkbox"/>	VARCHAR	50			<input type="checkbox"/>		<input type="checkbox"/>

You will now define a relationship.

22. In the **Schema** panel, under **Product**, select **Relationships**.
23. To add a new relationship, click the **+** icon.
24. In the Add Relationship window, select **Product\_Code** from the **Relate from** column, and select **Lookup Product Type > Product\_CD** from the **Relate to** column.



25. Click **OK**.
26. From **Utilities > Batch Viewer** select **Lookup Product Type > Load > Load from Staging Lookup Product Type** and click **Execute Batch**.



**Note:** The data is now in the product type base object. This will act as a reference entity, while the product base object will act as a business entity.

---

*This concludes the lab.*

# Module 7: Customize Customer 360 Application

## Lab 7-2: Custom Business Entity Configuration

### Overview:

You have extended the data model and populated the reference tables. In this lab, you will extend the BE configuration for the Customer 360 application.

### Objectives:

- Extend the Customer 360 business entity configuration
- Define a custom reference entity
- Define a custom business entity

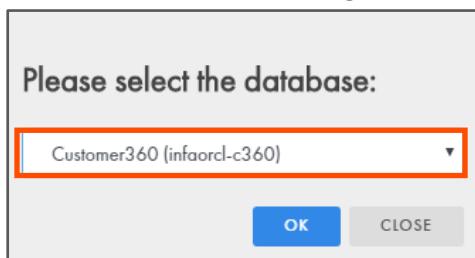
### Duration:

30 minutes

---

### Tasks

1. Switch to the **Provisioning Tool** and select the **Customer360** database.



2. Click **Business Entity > Modeling**.
3. Select **Reference Entities** and click **Create**.
4. In the New Reference Entity page, enter Name as **LookupProductType** and Label as **Lookup Product Type**.
5. Select the Base Object as **C\_BT\_PRODUCT\_TYPE**.

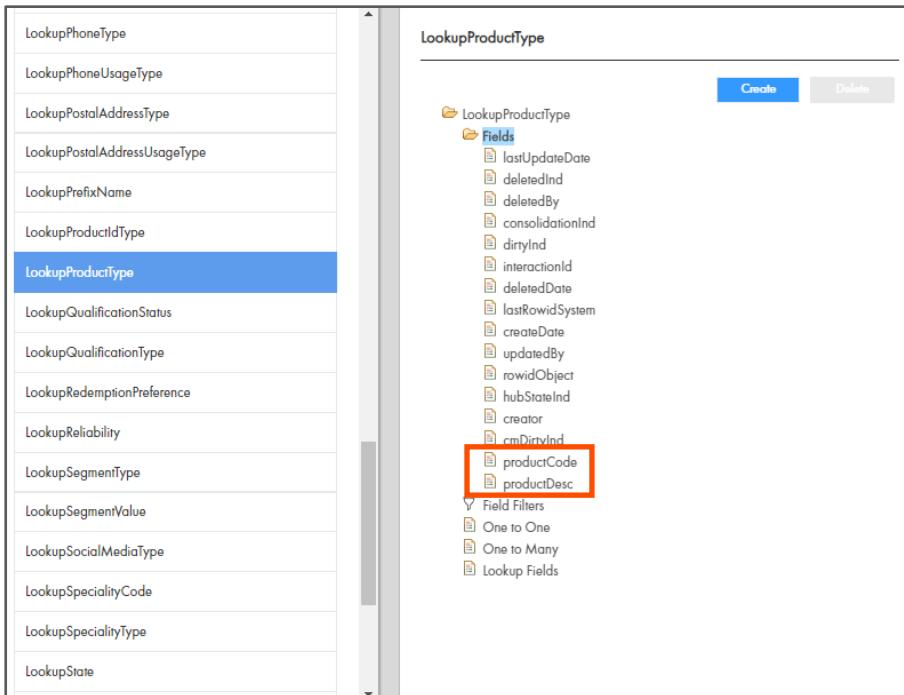
6. Click **Apply** to save the changes.

[New Reference Entity]

		<b>Apply</b>	Discard
Name:	LookupProductType		
Label:	Lookup Product Type		
Description:			
State Management Enabled:	<input type="checkbox"/>		
Base Object:	C_BT_PRODUCT_TYPE		
Localization:	<input type="checkbox"/>		
Label Format:	<input type="checkbox"/>		

7. **Publish** the changes to the MDM hub.  
 8. Click **Business Entity > Modeling > Reference Entities > LookupProductType**.  
**Note:** The system fields will appear.  
 9. Create the **productCode** and **productDesc** fields.

Name	Label	Column
productCode	Product Code	PRODUCT_CD
productDesc	Product Description	PRODUCT_DESC



The screenshot shows the Informatica Business Entity Modeling interface. On the left, a list of existing reference entities is displayed, including 'LookupPhoneType', 'LookupPhoneUsageType', 'LookupPostalAddressType', 'LookupPostalAddressUsageType', 'LookupPrefixName', 'LookupProductIdType', 'LookupProductType' (which is selected and highlighted in blue), 'LookupQualificationStatus', 'LookupQualificationType', 'LookupRedemptionPreference', 'LookupReliability', 'LookupSegmentType', 'LookupSegmentValue', 'LookupSocialMediaType', 'LookupSpecialityCode', 'LookupSpecialityType', and 'LookupState'. On the right, the details for 'LookupProductType' are shown. The 'Fields' section lists several system fields such as lastUpdateDate, deletedInd, deletedBy, consolidationInd, dirtyInd, interactionId, deletedDate, lastRowidSystem, createDate, updatedBy, rowidObject, hubStateInd, creator, and cmDirtyInd. Below this, two new fields are highlighted with a red box: 'productCode' and 'productDesc'. There are also sections for 'Field Filters', 'One to One', 'One to Many', and 'Lookup Fields'.

10. Create a **Product** Business Entity.
11. Click **Modeling > Business Entities** with following values:
  - a. Name: **Product**
  - b. Label: **Product**
  - c. Base Object: **C\_BO\_PRODUCT**

**Modeling**

Business Entities

**Create**   **Copy**   **Delete**

- Address
- Campaign
- Classification
- Contact
- CustomerOrg
- CustomerPerson
- Household
- [New Business Entity]**
- RelatedOrg

**[New Business Entity]**

**Apply**   **Discard**

Name:	Product
Label:	Product
Description:	
State Management Enabled:	<input type="checkbox"/>
Base Object:	C_BO_PRODUCT
Label Format:	<input type="checkbox"/>
Color:	
Business Entity Icon:	Default
Business Entity Record Icon:	

12. Click **Apply** to save the changes.
13. Click **Publish** to save the changes to the MDM Hub.

14. Navigate to the **Product** business entity and add the following fields:

Name	Label	Column
productCode	Product Code	PRODUCT_CODE
productDescription	Product Description	PRODUCT_DESC
productName	Product Name	PRODUCT_NAME
Manufacturer	Manufacturer	MANUFACTURER

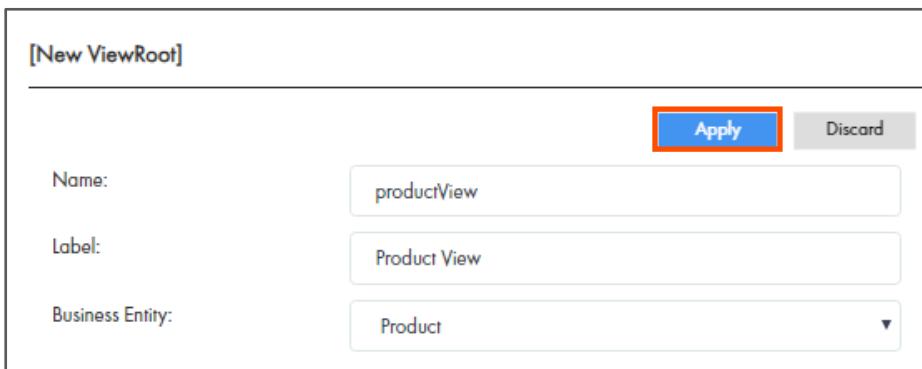
15. Create a **Business Entity View**.

16. From Modeling, select **Business Entity Views**, and click **Create**.

17. Enter the following values:

- a. Name: **productView**
- b. Label: **Product View**
- c. Business Entity: **Product**

18. Click **Apply**.



[New ViewRoot]

Name: productView

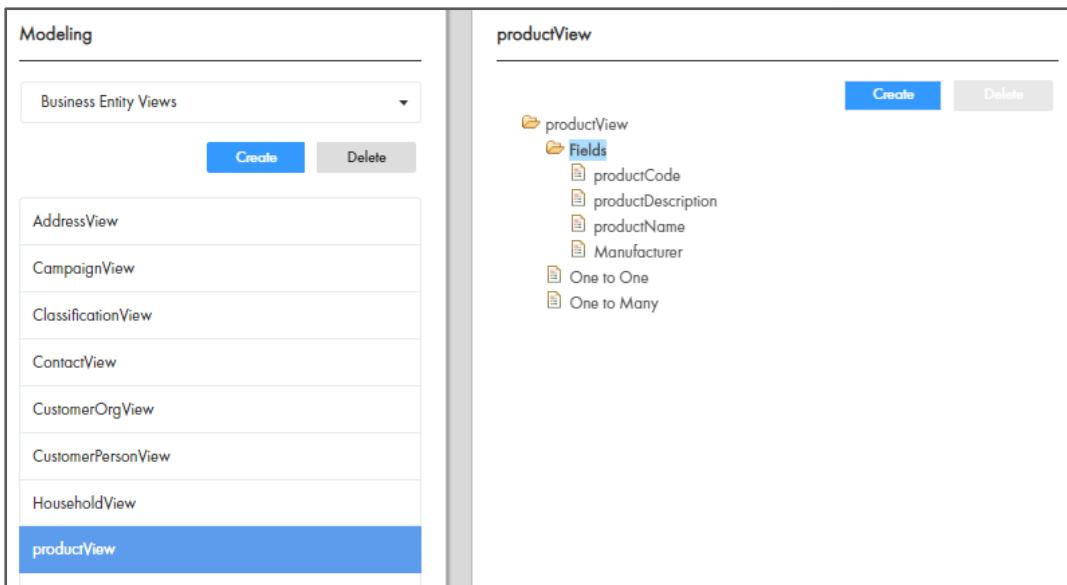
Label: Product View

Business Entity: Product

Apply Discard

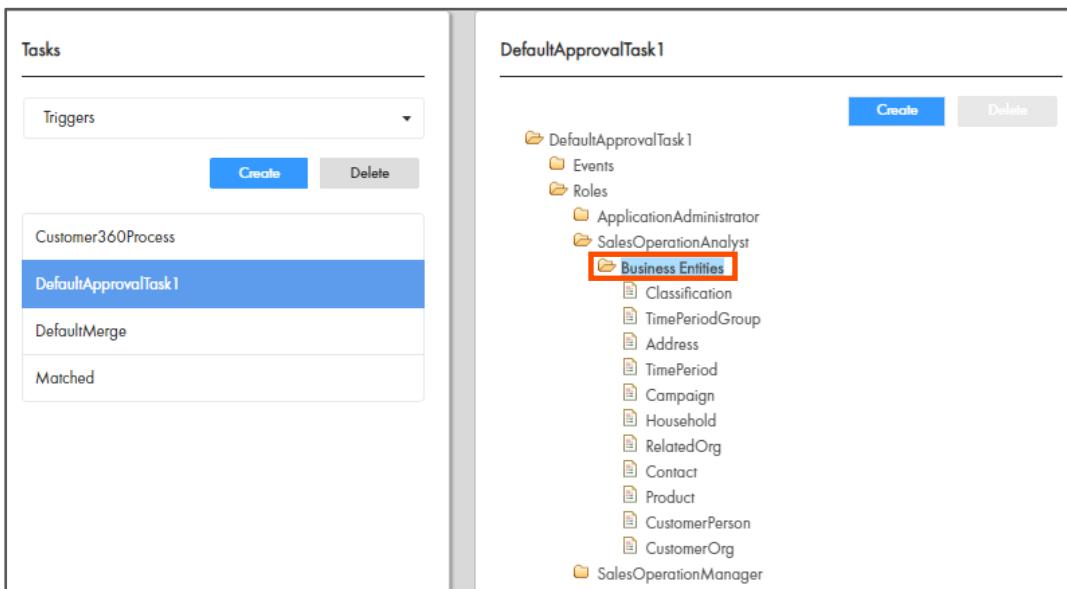
19. Under **productView**, add the following fields:

Name	Label
productCode	Product Code
productDescription	Product Description
productName	Product Name
Manufacturer	Manufacturer



The screenshot shows two panels. The left panel, titled 'Modeling', contains a dropdown menu 'Business Entity Views' with options like AddressView, CampaignView, ClassificationView, ContactView, CustomerOrgView, CustomerPersonView, HouseholdView, and productView. The 'productView' option is highlighted with a blue selection bar at the bottom. The right panel, titled 'productView', shows a tree structure under 'Fields': productCode, productDescription, productName, Manufacturer, One to One, and One to Many. There are 'Create' and 'Delete' buttons at the top of both panels.

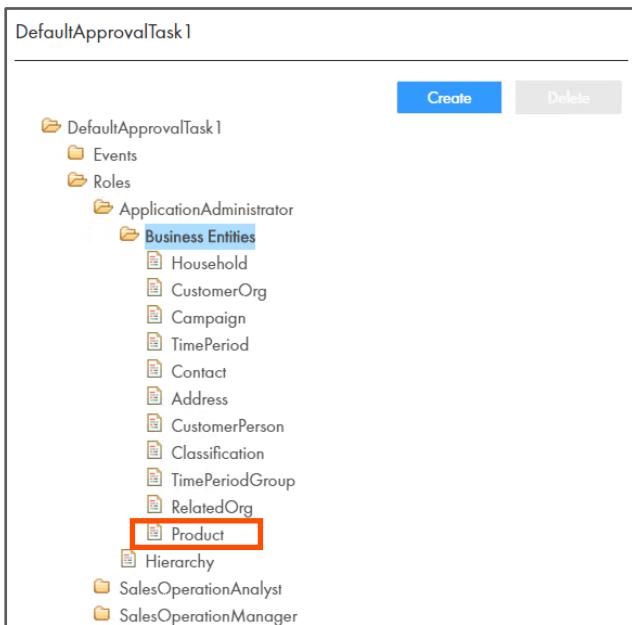
20. Click **Business Entity > Tasks**.
21. Select **Triggers**.
22. Navigate to **DefaultApprovalTask1 > Roles > SalesOperationAnalyst > Business Entities**.
23. Create three new business entities named **Product**, **CustomerPerson**, and **Customer Org**.



The screenshot shows two panels. The left panel, titled 'Tasks', contains a dropdown menu 'Triggers' with options like Customer360Process, DefaultApprovalTask1, DefaultMerge, and Matched. The 'DefaultApprovalTask1' option is highlighted with a blue selection bar. The right panel, titled 'DefaultApprovalTask1', shows a tree structure under 'Business Entities': Classification, TimePeriodGroup, Address, TimePeriod, Campaign, Household, RelatedOrg, Contact, Product, CustomerPerson, CustomerOrg, and SalesOperationManager. The 'Business Entities' folder is highlighted with a red box. There are 'Create' and 'Delete' buttons at the top of both panels.

24. Similarly, click **DefaultApprovalTask1 > Roles > ApplicationAdministrator > Business Entities**.

25. Click **Create** and add **Product** business entity.



26. Click **Publish** to save the changes to the MDM Hub.

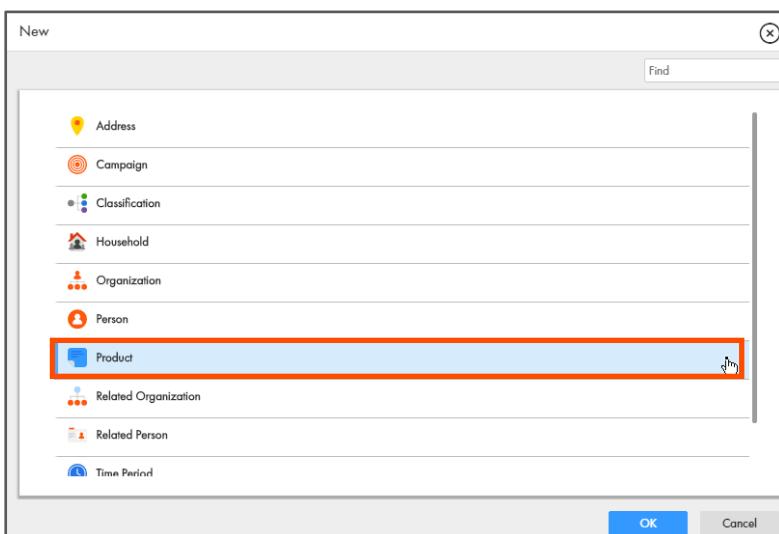
**Note:** This will take approximately 5-8 minutes.

27. Log in to **MDM Data Director** as **admin/admin**.

28. Click **Customer 360**.

29. Click **New**.

30. Select **Product** and click **OK**.



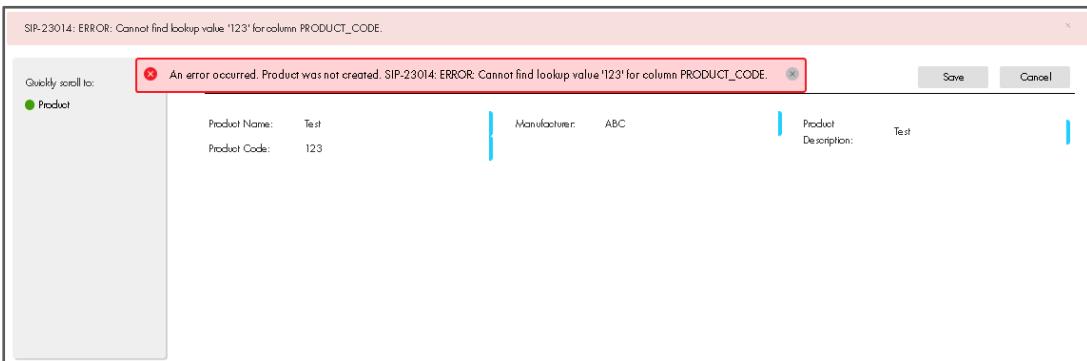
31. Add a product with test values and click **Save**.



Product Name: Test  
Product Description: Test  
Product Code: 123  
Manufacturer: ABC

Save Cancel

32. You will see an error notification.



SIP-23014: ERROR: Cannot find lookup value '123' for column PRODUCT\_CODE.

An error occurred. Product was not created. SIP-23014: ERROR: Cannot find lookup value '123' for column PRODUCT\_CODE. ✖

Quickly scroll to: ● Product

Product Name:	Test	Manufacturer:	ABC	Product Description:	Test
Product Code:	123				

Save Cancel

**Note:** You will fix this in the next lab.

---

*This concludes the lab.*



# Module 7: Customize Customer 360 Application

## Lab 7-3: Define Business Entity Views for Product

### Overview:

So far, you have extended the Customer 360's data model and defined the business entity and a reference entity. You will now complete the business entity configuration by defining the views required to manage the master data.

### Objectives:

- Define views for the product business entity

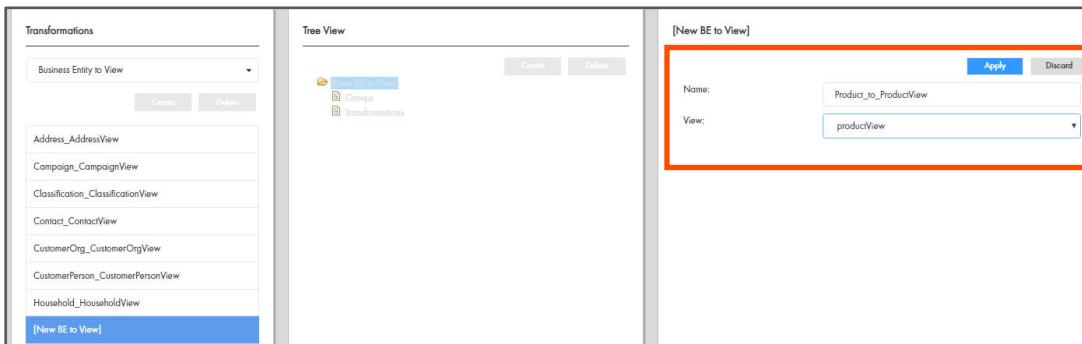
### Duration:

30 minutes

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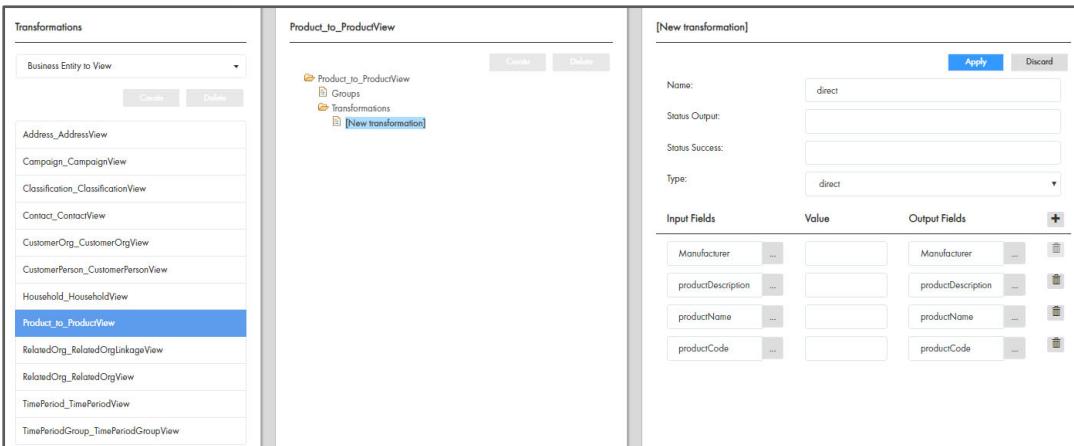
### Tasks

- Log in to the Provisioning Tool and select the **Customer360** as the database.
- Click **Business Entity > Transformations**.
- Retain the default **Business Entity to View** selection and click **Create**.
- Use the skills you learned in the preceding labs and create a **Business Entity to View** named **Product\_to\_ProductView**.



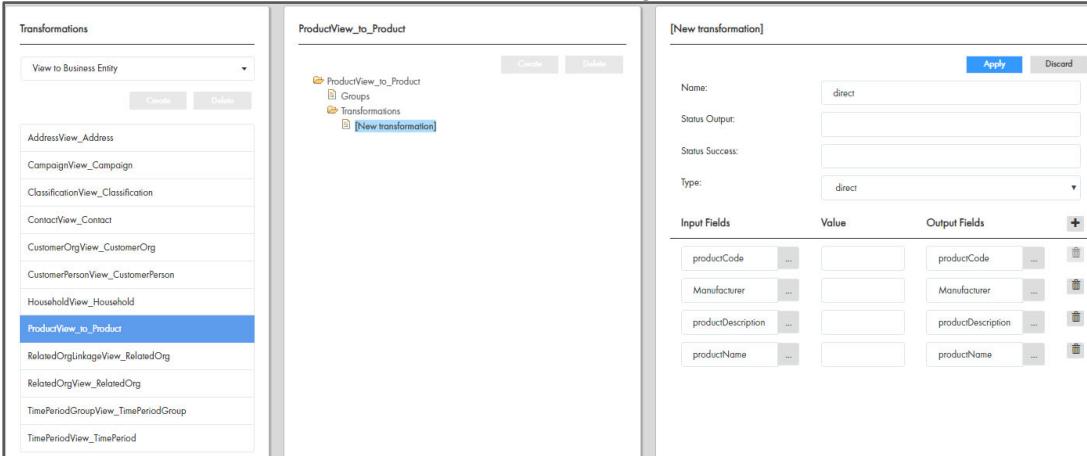
- Create a **direct** transformation under **Product\_to\_ProductView**.
- Enter Name as **direct**.
- From the Type drop-down, select **direct**.
- Map the following input fields to the output fields:

Input Fields	Output Fields
Manufacturer	Manufacturer
productDescription	productDescription
productName	productName
productCode	productCode



The screenshot shows the 'Transformations' screen in the Informatica Designer. On the left, under 'Business Entity to View', there is a list of views including 'Address\_AddressView', 'Campaign\_CampaignView', 'Classification\_ClassificationView', 'Contact\_ContactView', 'CustomerOrg\_CustomerOrgView', 'CustomerPerson\_CustomerPersonView', 'Household\_HouseholdView', 'Product\_to\_ProductView' (which is selected and highlighted in blue), 'RelatedOrg\_RelatedOrgView', 'TimePeriod\_TimePeriodView', and 'TimePeriodGroup\_TimePeriodGroupView'. In the center, under 'Product\_to\_ProductView', there is a 'Create' and 'Delete' button. Below these buttons, there is a list of transformations: 'Product\_to\_ProductView', 'Groups', 'Transformations', and '[New transformation]'. On the right, the '[New transformation]' panel is open, showing fields for 'Name' (set to 'direct'), 'Status Output', 'Status Success', and 'Type' (set to 'direct'). The 'Input Fields' section lists 'Manufacturer', 'productDescription', 'productName', and 'productCode'. The 'Output Fields' section lists 'Manufacturer', 'productDescription', 'productName', and 'productCode'. There are 'Apply' and 'Discard' buttons at the top right of the transformation panel.

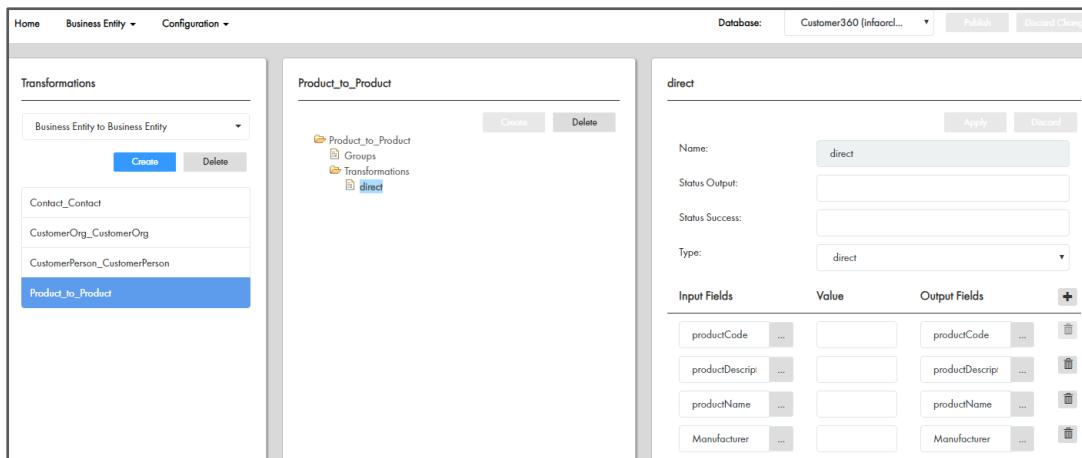
9. Click **Apply** to save the changes.
10. Create a **View to Business Entity** transformation named **ProductView\_to\_Product** with view as **productView**.
11. Add a **direct** transformation and map the following input fields to the output fields.



The screenshot shows the 'Transformations' screen in the Informatica Designer. On the left, under 'View to Business Entity', there is a list of views including 'AddressView\_Address', 'CampaignView\_Campaign', 'ClassificationView\_Classification', 'ContactView\_Contact', 'CustomerOrgView\_CustomerOrg', 'CustomerPersonView\_CustomerPerson', 'HouseholdView\_Household', 'ProductView\_to\_Product' (which is selected and highlighted in blue), 'RelatedOrgLinkageView\_RelatedOrg', 'RelatedOrgView\_RelatedOrg', 'TimePeriodGroupView\_TimePeriodGroup', and 'TimePeriodView\_TimePeriod'. In the center, under 'ProductView\_to\_Product', there is a 'Create' and 'Delete' button. Below these buttons, there is a list of transformations: 'ProductView\_to\_Product', 'Groups', 'Transformations', and '[New transformation]'. On the right, the '[New transformation]' panel is open, showing fields for 'Name' (set to 'direct'), 'Status Output', 'Status Success', and 'Type' (set to 'direct'). The 'Input Fields' section lists 'productCode', 'Manufacturer', 'productDescription', and 'productName'. The 'Output Fields' section lists 'productCode', 'Manufacturer', 'productDescription', and 'productName'. There are 'Apply' and 'Discard' buttons at the top right of the transformation panel.

12. Create a **Business Entity to Business Entity** transformation named as **Product\_to\_Product** with **Product** as the Business Entity.
13. Add a **direct** transformation.
14. Map the following input fields to the output fields:

Input Fields	Output Fields
productCode	productCode
productDescription	productDescription
productName	productName
Manufacturer	Manufacturer

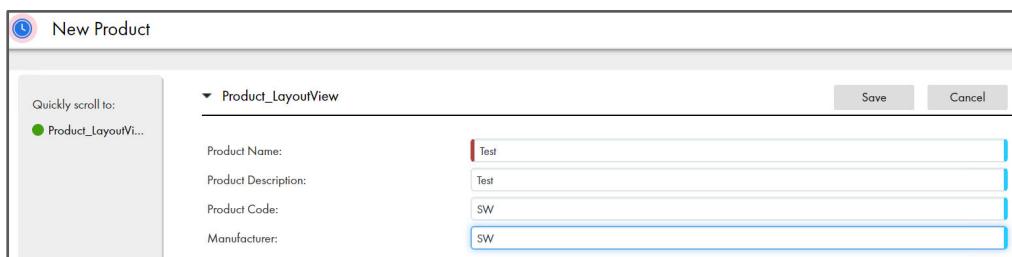


The screenshot shows the MDM Data Director interface with the following details:

- Top Bar:** Home, Business Entity, Configuration, Database: Customer360 [info...], Publish, Discard Changes.
- Left Sidebar (Transformations):**
  - Business Entity to Business Entity
  - Contact\_Contact
  - CustomerOrg\_CustomerOrg
  - CustomerPerson\_CustomerPerson
  - Product\_to\_Product** (highlighted in blue)
- Middle Panel (Product\_to\_Product):**
  - Create, Delete buttons.
  - Product\_to\_Product group.
  - Groups, Transformations, direct (highlighted in blue).
- Right Panel (direct):**
  - Name: direct
  - Status Output: (empty)
  - Status Success: (empty)
  - Type: direct
  - Input Fields** table:
 

Input Fields	Value	Output Fields
productCode	[...]	productCode
productDescript	[...]	productDescript
productName	[...]	productName
Manufacturer	[...]	Manufacturer

15. Click **Apply** to save the changes.
16. **Publish** the changes.
17. Log in to **MDM Data Director** with **Customer 360** user interface.
18. Create a new **Product** record.
19. Add some test values and click **Save**.



The screenshot shows the "New Product" form with the following fields:

Product Name:	Test
Product Description:	Test
Product Code:	SW
Manufacturer:	SW

Buttons: Save, Cancel.

This concludes extending the data model.

*This concludes the lab.*



# Module 7: Customize Customer 360 Application

## Lab 7-4: Data Cleansing for Customer 360

### Overview:

Now that the Customer 360's data model is extended and the business entity configuration in place, we can configure data cleansing such as the address medic to enrich the addresses in the Customer 360 Application.

### Objectives:

- Configure address enrichment for the Customer 360
- Configure ElasticSearch for Customer 360

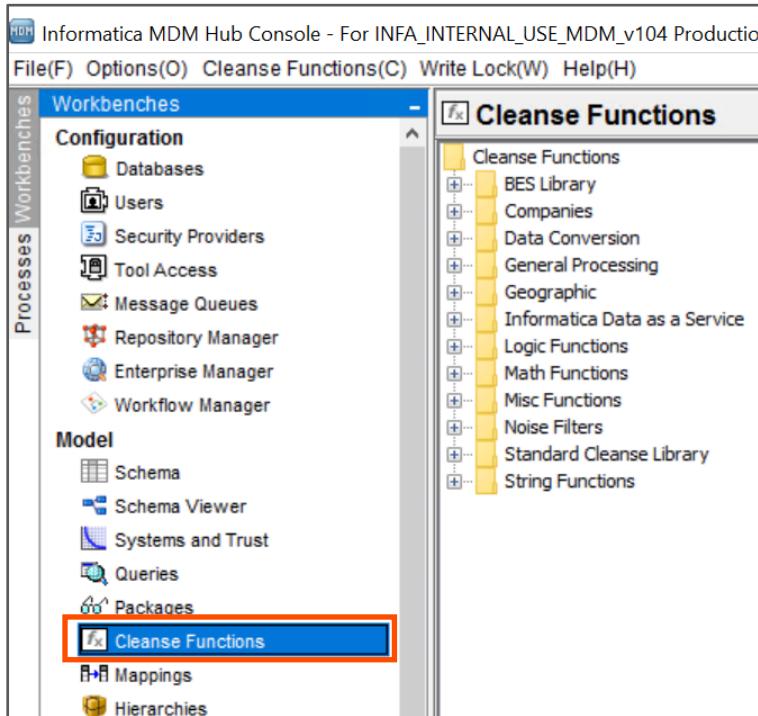
### Duration:

30 minutes

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### Tasks

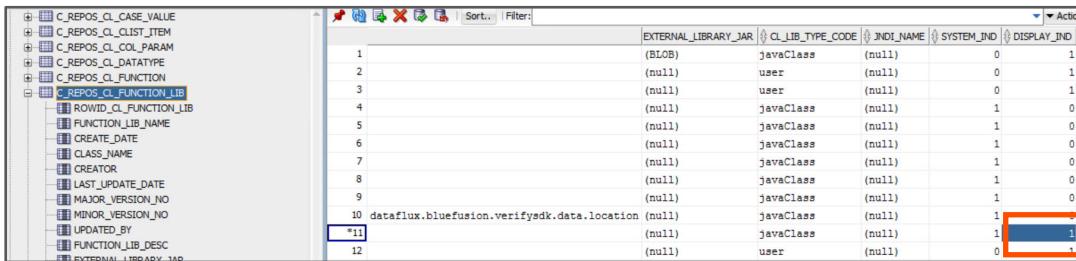
- Log in to the MDM Hub Console as **admin/admin** and connect to the **Customer 360** ORS, if you have disconnected.
- Navigate to **Model > Cleanse Functions**.



**Note:** Observe that the address doctor is missing.

- Open the SQL Developer and connect to the **Customer 360** connection.
- Expand **Tables > C\_REPO\_CL\_FUNCTION\_LIB**, and click the **Data** tab.

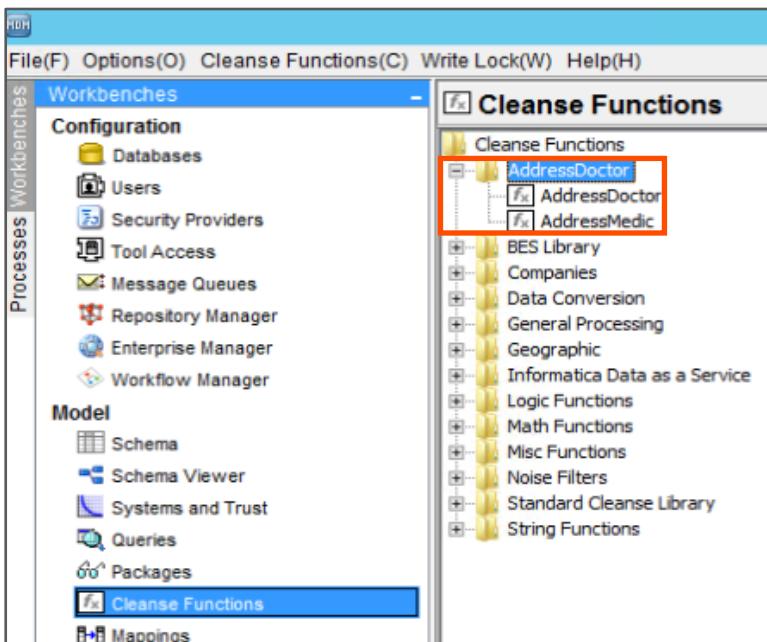
5. Select **AddressDoctor** and change the value of **DISPLAY\_IND** column from 0 to 1.
6. To save the changes, click the **Commit** icon.



The screenshot shows the Informatica Repository Manager interface. On the left, there's a tree view of repository objects under 'C\_REPO5\_CL\_FUNCTION\_LIB'. On the right, a table named 'C\_REPO5\_CL\_FUNCTION\_LIB' is displayed with 12 rows. The 11th row, which corresponds to the 'AddressDoctor' function, has its 'DISPLAY\_IND' column value highlighted and set to 1. The 'Action' column at the top right has a 'Commit' button highlighted with a red box.

	EXTERNAL_LIBRARY_JAR	CL_LIB_TYPE_CODE	JNDI_NAME	SYSTEM_IND	DISPLAY_IND	Action
1	(BLOB)	javaClass	(null)	0	1	
2	(null)	user	(null)	0	1	
3	(null)	user	(null)	0	1	
4	(null)	javaClass	(null)	1	0	
5	(null)	javaClass	(null)	1	0	
6	(null)	javaClass	(null)	1	0	
7	(null)	javaClass	(null)	1	0	
8	(null)	javaClass	(null)	1	0	
9	(null)	javaClass	(null)	1	0	
10	dataflux.bluefusion.verifysdk.data.location	(null)	javaClass	(null)	1	
11	(null)	javaClass	(null)	1	1	Commit
12	(null)	user	(null)	0	1	

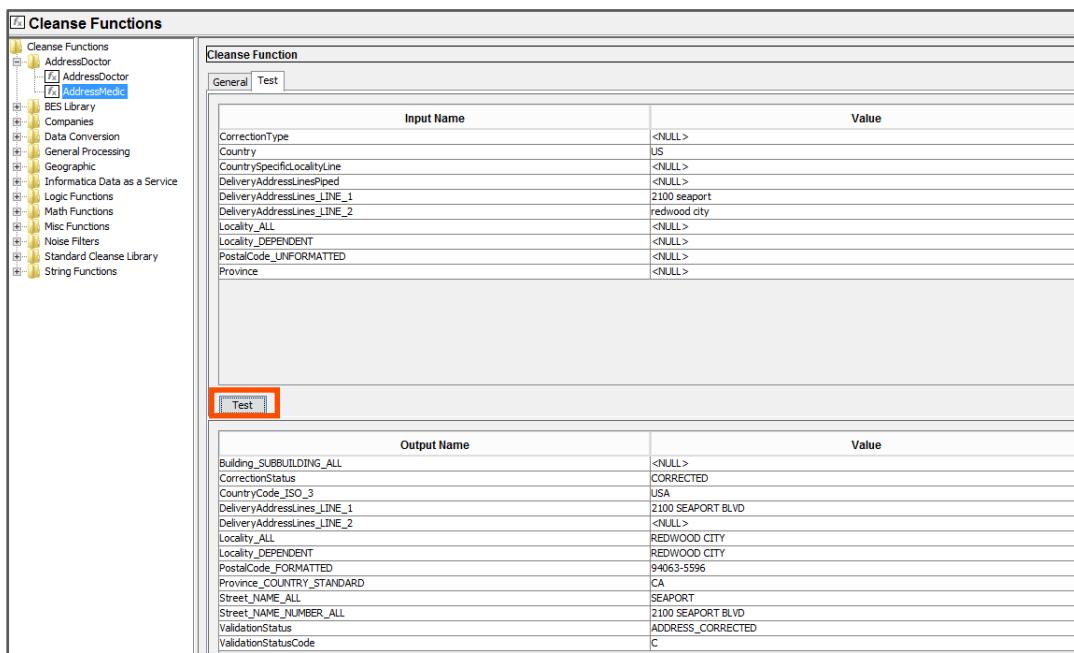
7. Return to the **MDM Hub Console** window, release the write lock and acquire it again.



**Note:** The address doctor should appear.

8. Select **AddressMedic** and click the **Test** tab.
9. Enter Country as **US**, DeliveryAddressLines\_LINE\_1 as **2100 seaport** and DeliveryAddressLines\_LINE\_2 as **redwood city**.

**10. Click Test.**



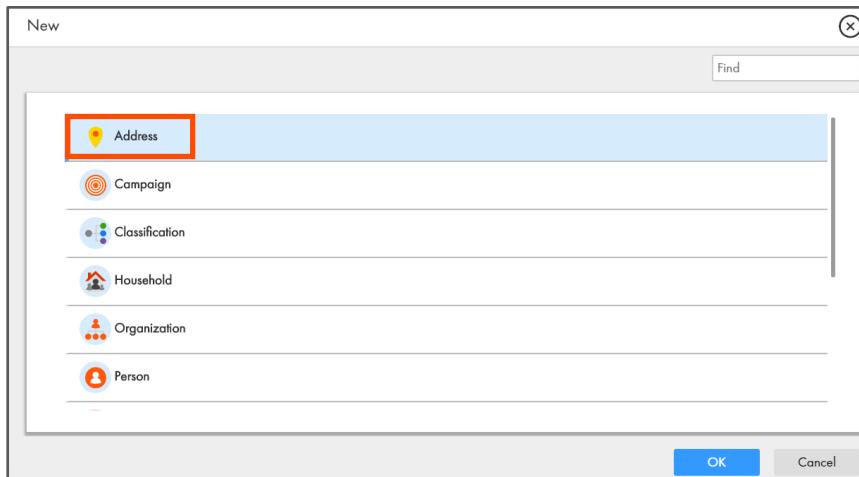
Input Name	Value
CorrectionType	<NULL>
Country	US
CountrySpecificLocalityLine	<NULL>
DeliveryAddressLinesPiped	<NULL>
DeliveryAddressLines_LINE_1	2100 seaport
DeliveryAddressLines_LINE_2	redwood city
Locality_ALL	<NULL>
Locality_DEPENDENT	<NULL>
PostalCode_UNFORMATTED	<NULL>
Province	<NULL>

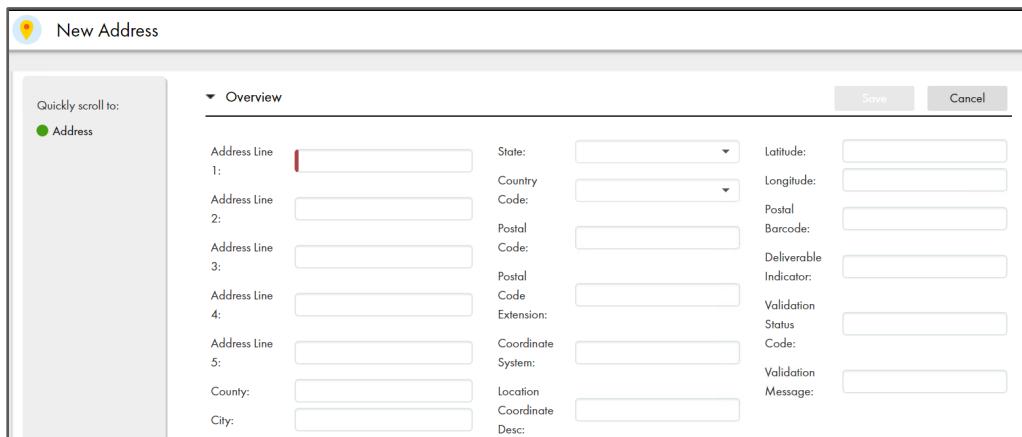
Output Name	Value
Building_SUBBUILDING_ALL	<NULL>
CorrectionStatus	CORRECTED
CountryCode_ISO_3	USA
DeliveryAddressLines_LINE_1	2100 SEAPORT BLVD
DeliveryAddressLines_LINE_2	<NULL>
Locality_ALL	REDWOOD CITY
Locality_DEPENDENT	REDWOOD CITY
PostalCode_FORMATTED	94063-5596
Province_COUNTRY_STANDARD	CA
Street_NAME_ALL	SEAPORT
Street_NAME_NUMBER_ALL	2100 SEAPORT BLVD
ValidationStatus	ADDRESS_CORRECTED
ValidationStatusCode	C

**Note:** You will see the Validation Status in the Output table as **ADDRESS\_CORRECTED**.

11. In the **MDM Data Director** application C360 user interface, log in as **c360admin/mdm**.
12. Click **New > Address** and click **OK**.



13. Observe the fields.



The screenshot shows the 'New Address' form with the title 'New Address' at the top. On the left, there's a sidebar with a 'Quickly scroll to:' dropdown set to 'Address'. The main area is titled 'Overview' and contains several groups of input fields:

- Address Line 1:** A text input field.
- Address Line 2:** A text input field.
- Address Line 3:** A text input field.
- Address Line 4:** A text input field.
- Address Line 5:** A text input field.
- County:** A text input field.
- City:** A text input field.
- State:** A dropdown menu.
- Postal Code:** A dropdown menu.
- Latitude:** A text input field.
- Longitude:** A text input field.
- Postal Barcode:** A text input field.
- Deliverable Indicator:** A text input field.
- Validation Status Code:** A text input field.
- Coordinate System:** A text input field.
- Location Coordinate Desc:** A text input field.

At the bottom right are 'Save' and 'Cancel' buttons.

14. Switch to the **Provisioning Tool** and connect to the **Customer 360** database.

The Business Entity View, Business Entity to View, and View to Business Entity for the address is already created. You will now create the Business Entity to Business Entity and use the Address Medic to cleanse the address.

15. Select **Business Entity > Transformations**.

16. Select **Business Entity to Business Entity** and click **Create**.

17. Enter the following values:

- Name: **Address\_Address**
- Business Entity: **Address**

18. Click **Apply** to save the changes.

19. Add a cleanse transformation with the following values:

Name: **AddressMedic\_Cleanse**

Type: **cleanse**

Cleanse Library: **AddressDoctor**

Function: **AddressMedic**

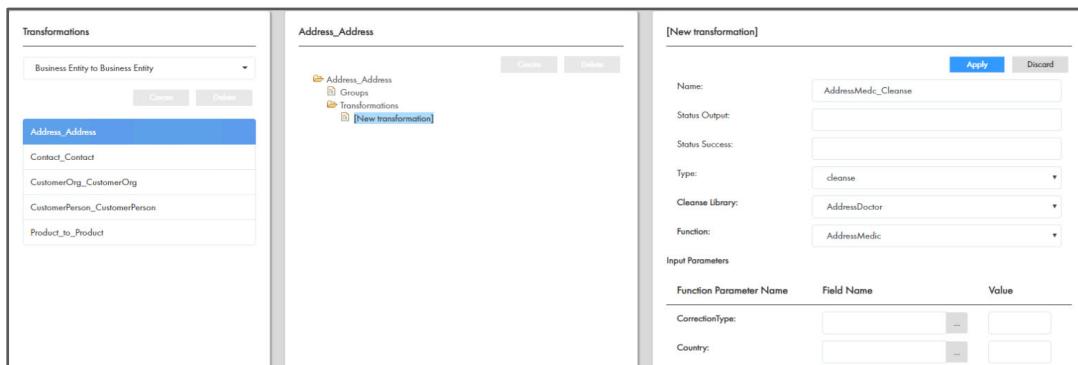
20. Enter the following Input Parameters:

Function Parameter Name	Field Name
Country	county
DeliveryAddressLines_Line1	addrLn1
DeliveryAddressLines_Line2	addrLn2
PostalCode_UNFORMATTED	pstlCd

21.

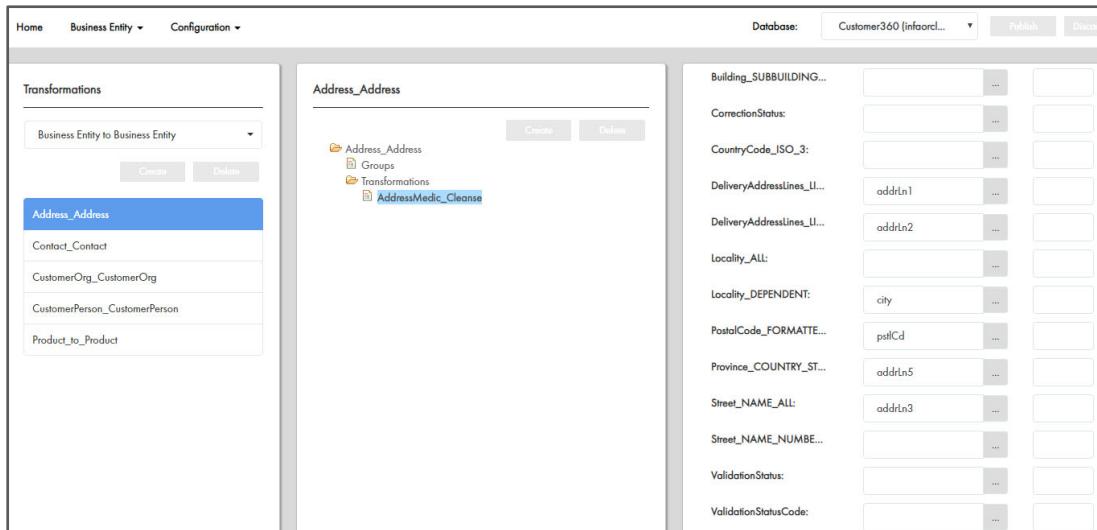
22. Enter the following Output Parameters:

Function Parameter Name	Field Name
DeliveryAddressLines_Line1	addrLn1
DeliveryAddressLines_Line2	addrLn2
Locality_DEPENDENT	city
PostalCode_FORMATTED	pslCd
Province_COUNTRY_STANDARD	addrLn5
Street_NAME_ALL	addrLn3



The screenshot shows the 'Transformations' section of the MDM Hub. A new transformation named 'AddressMedic\_Cleanse' is being created. The transformation details are as follows:

- Name: AddressMedic\_Cleanse
- Status Output: (empty)
- Status Success: (empty)
- Type: cleanse
- Cleanse Library: AddressDoctor
- Function: AddressMedic
- Input Parameters (empty)



The screenshot shows the completed transformation setup. The input parameters are mapped to the following field names:

- Building\_SUBBUILDING...: (empty)
- CorrectionStatus: (empty)
- CountryCode\_ISO\_3: (empty)
- DeliveryAddressLines\_LI...: addrLn1
- DeliveryAddressLines\_LI...: addrLn2
- Locality\_All: city
- Locality\_DEPENDENT: city
- PostalCode\_FORMATTE...: pslCd
- Province\_COUNTRY\_ST...: addrLn5
- Street\_NAME\_ALL: addrLn3
- Street\_NAME\_NUMBE...: (empty)
- ValidationStatus: (empty)
- ValidationStatusCode: (empty)

23. Click **Apply** to save the changes.

24. **Publish** the changes to the MDM Hub.

25. Log in to **MDM Data Director C360** user interface as **c360admin/mdm**.

26. Create a new **Address** Business Entity.

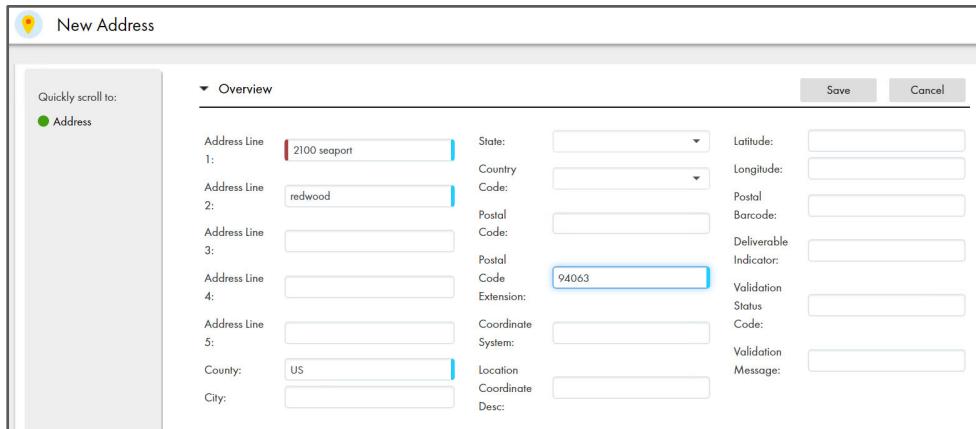
27. Enter the following details:

Address Line 1: **2100 seaport**

Address Line 2: **redwood**

County: **US**

Postal Code: **94063**



New Address

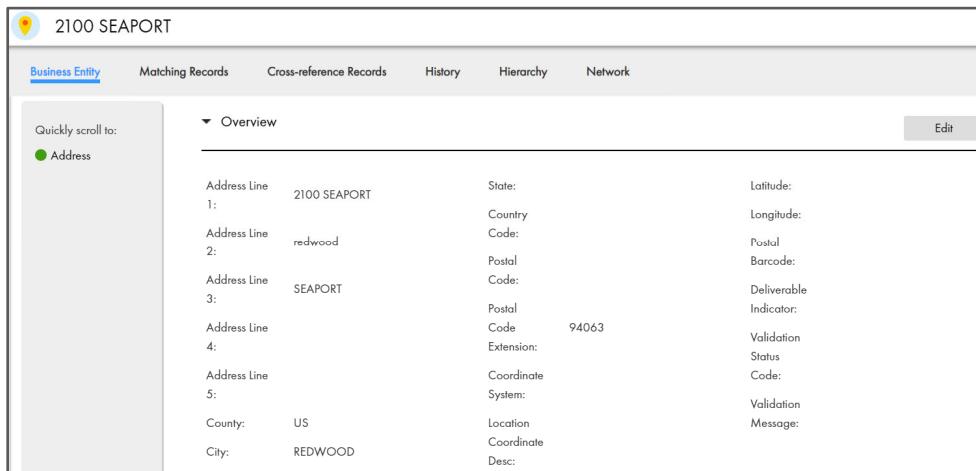
Quickly scroll to:  
● Address

Overview

Address Line 1:	2100 seaport	State:	Latitude:
Address Line 2:	redwood	Country Code:	Longitude:
Address Line 3:		Postal Code:	Postal Barcode:
Address Line 4:		Postal Code Extension:	Deliverable Indicator:
Address Line 5:		Coordinate System:	Validation Status Code:
County:	US	Location Coordinate Desc:	Validation Message:
City:			

Save Cancel

28. Click **Save** and the address doctor enriches the address as shown:



2100 SEAPORT

Business Entity Matching Records Cross-reference Records History Hierarchy Network

Quickly scroll to:  
● Address

Overview

Address Line 1:	2100 SEAPORT	State:	Latitude:
Address Line 2:	redwood	Country Code:	Longitude:
Address Line 3:	SEAPORT	Postal Code:	Postal Barcode:
Address Line 4:		Postal Code Extension:	Deliverable Indicator:
Address Line 5:		Coordinate System:	Validation Status Code:
County:	US	Location Coordinate Desc:	Validation Message:
City:	REDWOOD		

Edit

29. Navigate to the **Provisioning Tool** and select **Configuration > Infrastructure Settings**.

**Note:** The **Elastic search Cluster** is selected by default.

30. Click **ESCluster > esNode** and click **Create**.

31. Enter Name as **esNode1** and URL **https://infa-server:9200**.



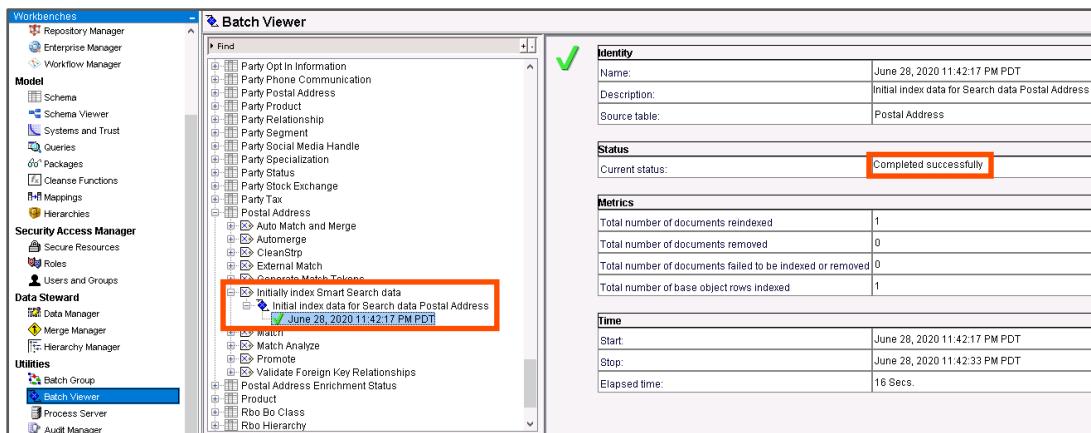
esNode

Name:	esNode1	Apply	Discard
URL:	https://infa-server:9200		

32. Click **Apply** to save the changes.

33. Click **Publish**.

34. From **C:\infadm\hub\server\thirdparty\elasticsearch-6.2.3\bin\elasticsearch.bat**, run the **elasticsearch** file.
35. From the MDM hub for the **Address**, run the smart search job.
36. Navigate to **Utilities > Batch Viewer**.
37. Select **Postal Address > Initially Index Smart Search data > Initially index data for Search data Postal Address**.
38. From the right panel, click **Execute Batch**.
39. Click **Refresh Status**.



**Note:** The status will change to “Completed successfully”.

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*This concludes the lab.*