

TIBCO® MDM Studio UI Builder Tutorial

*Software Release 5.0
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Contents

TIBCO Documentation and Support Services	4
Tutorial Overview	5
Creating a Project	5
Defining Repository Data	8
Creating a New Custom Page - Adding Client Details	8
Creating a New Custom Page - Modifying Client Details	15
Generating WSDL	23
Exporting the Custom Page	27
Deploy the Custom Page	29
Accessing the Custom Page from the TIBCO MDM Server	30

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Documentation for this and other TIBCO products is available on the TIBCO Documentation site:

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Documentation for TIBCO products is not bundled with the software. Instead, it is available on the TIBCO Documentation site. To directly access documentation for this product, double-click the following file:

```
TIBCO_HOME/release_notes/TIB_bstudio-mdm_5.0.0_docinfo.html
```

where *TIBCO_HOME* is the top-level directory in which TIBCO products are installed. On Windows, the default *TIBCO_HOME* is C:\tibco. On UNIX systems, the default *TIBCO_HOME* is /opt/tibco.

The following documents for this product can be found on the TIBCO Documentation site:

- TIBCO MDM Studio Release Notes
- TIBCO MDM Studio Installation Guide
- TIBCO MDM Studio Process Designer Tutorial
- TIBCO MDM Studio Process Designer User's Guide
- TIBCO MDM Studio Repository Designer Tutorial
- TIBCO MDM Studio Repository Designer User's Guide
- TIBCO MDM Studio Rulebase Designer Tutorial
- TIBCO MDM Studio Rulebase Designer User's Guide
- TIBCO MDM Studio UI Builder Tutorial
- TIBCO MDM Studio UI Builder User's Guide

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<http://www.tibco.com/services/support>

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<https://www.tibcommunity.com>

Tutorial Overview

To get started with the UI Builder custom page, use this tutorial to create, add, and modify the custom page and deploy it on the TIBCO MDM server.

This tutorial explains how to do the following:

- [Create a new Project to contain the custom pages](#)
- [Create a repository model](#)
- [Create a custom page for adding a new client details](#)
- [Create a custom page for modifying the existing client details](#)
- [Generate a wsdl](#)
- [Export the UI artifacts](#)
- [Deploy the custom pages along with the web service and metadata on the TIBCO MDM server.](#)

A **PersonAddressClient (PACModel)** repository model serves as the base data for creating the Custom Page. The Repository model contains the following:

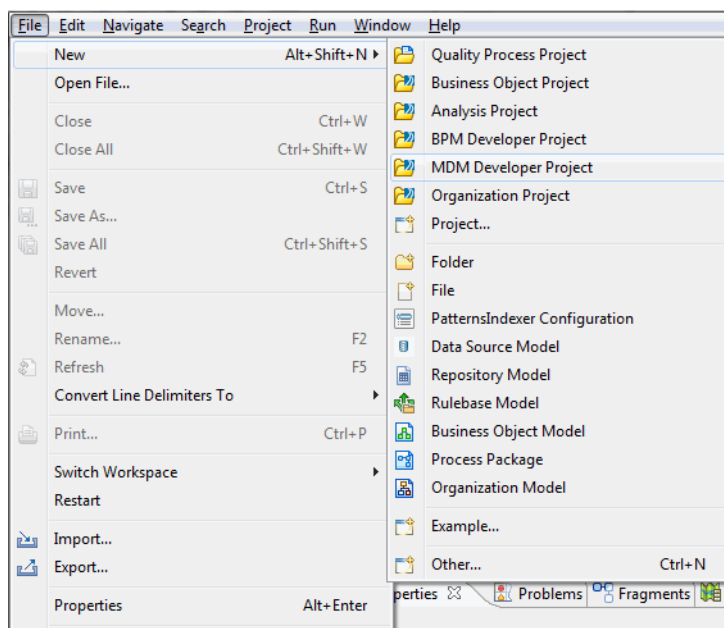
- A **Client** repository (which contains Client data) on which the UI page is built on. This Repository contains the following attributes - Name, DepartmentName, BusinessType, ProjectName, StartDate, Duration, Enddate, ProjectDescription.
- A **Person** repository (which contains Person data). This repository contains the following attributes - FirstName, MiddleName, LastName, DOB.
- A **PersonalInformation** Attribute Group within the **Person** Repository containing Religious, Gender, Height, Weight, Eyecolor, phone1, phone2 as attributes.
- A **SocialNetwork** Attribute Group within the **Person** repository containing Email, Twitterid, Yahooid, Facebookid, LinkedIn as attributes.
- An **Address** repository (which contains Address data). This repository contains the following attributes - Addressline1, Addressline2, City, State, Country, Zipcode.
- A **Relationship** between **Client** and **Address** with Type (string) as Relationship Attributes.
- A **Relationship** between **Address** and **Person** with Type (string) as Relationship Attributes.
- A **Relationship** between **Person** and **Client** with HourlyRate (Amount) as Relationship Attributes.

Creating a Project

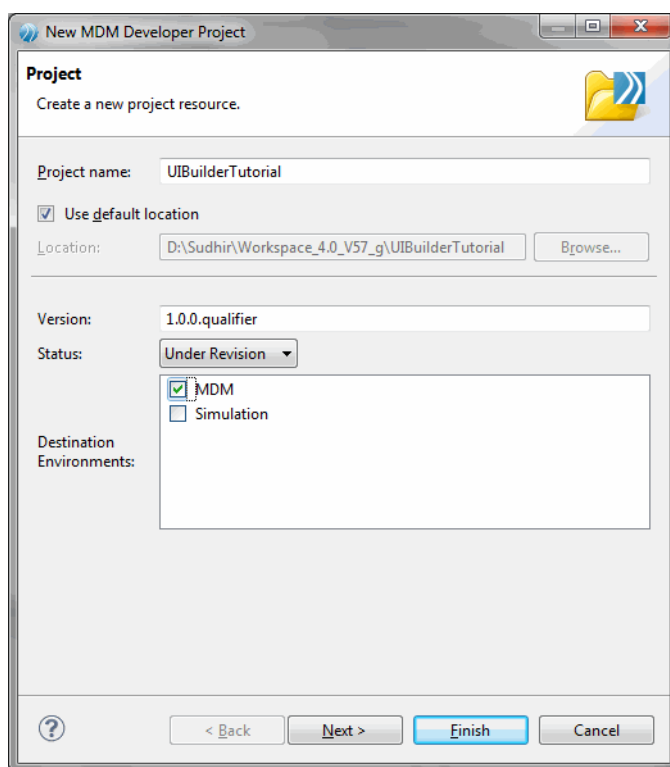
First, create a new Project to hold the Custom Page.

Procedure

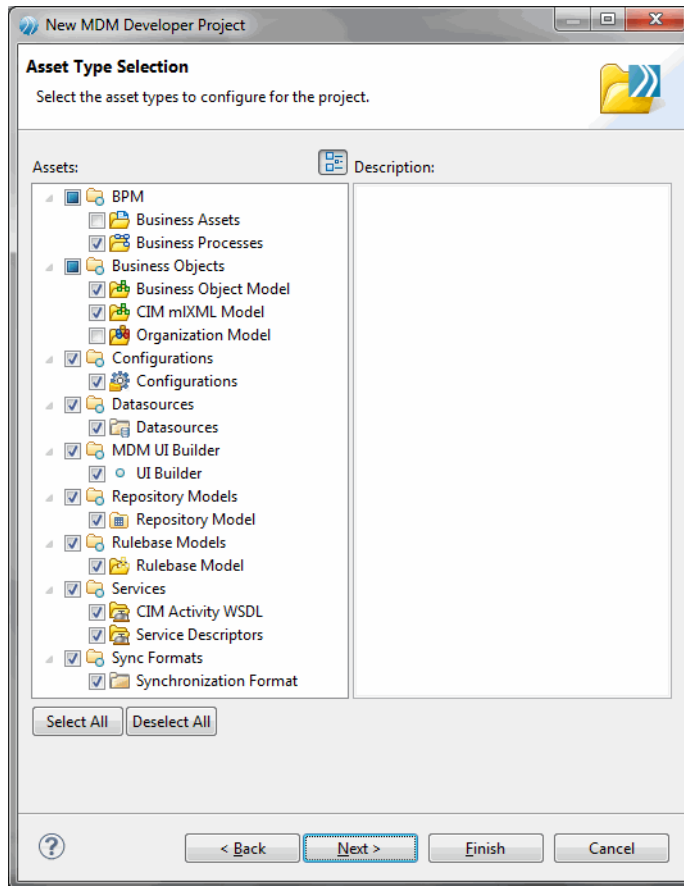
1. Go to **File > New > MDM Developer Project** .



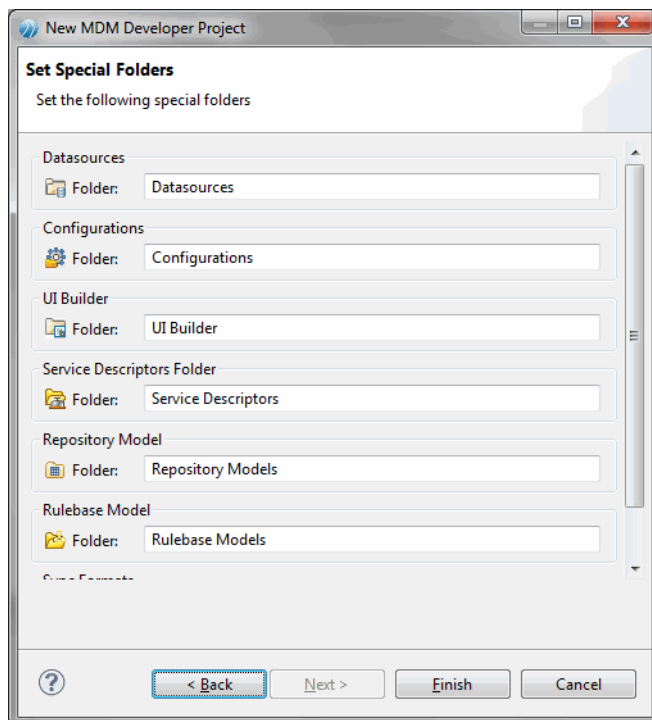
2. The Create a new project resource wizard is displayed.



3. Provide a name for the project: **UIBuilderTutorial**. Clear the **Use default location** check box if you want to provide a different location for the project (by default, the current workspace). Select Destination Environment as **MDM**. Click **Next**.
4. The **Asset Type Selection** dialog is displayed.



5. By default, all the asset types are selected. Click **Next**.
6. The **Business Object Model**, the **Business Processes**, the **Package Information**, the **Template Selection** wizards are displayed, select the relevant options and click **Next**.
7. The **Set Special Folders** wizard is displayed.

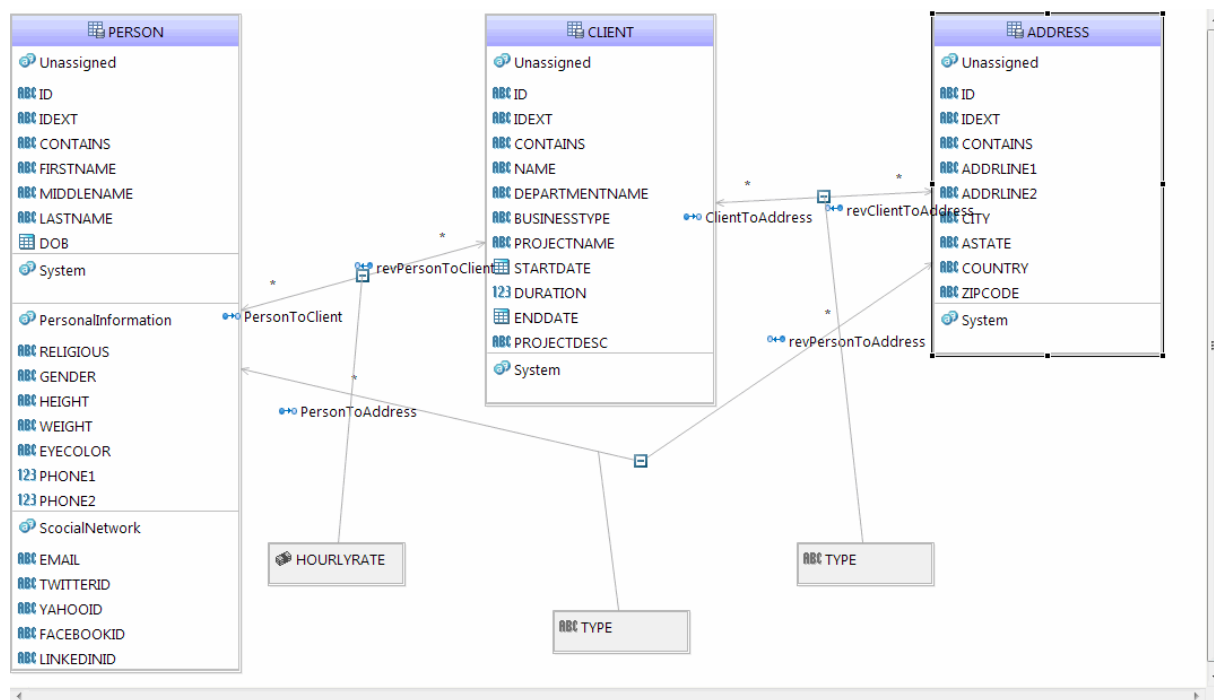


8. Click **Finish**.

Defining Repository Data

In the Project Explorer, create a new repository model under the **Repository Models** folder (by right-clicking the **Repository Models** folder, selecting **New > Repository Model**, and following the wizard). Call the file **PACModel.rep**.

Double-click the newly created **.rep** file and create the following repository and relationship structure.



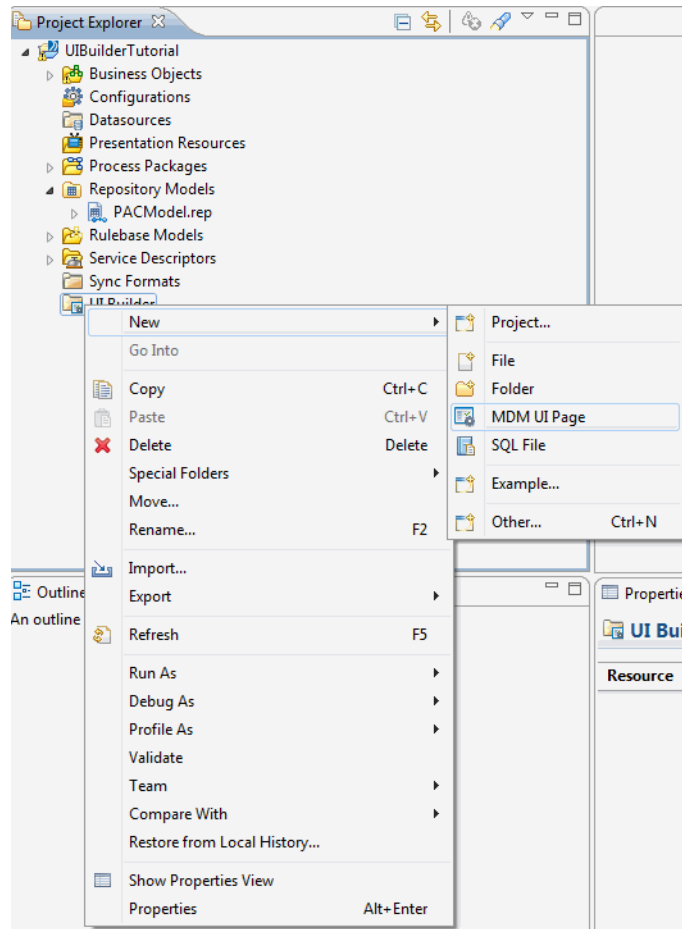
This forms the base data on which a UI page is created.

Creating a New Custom Page - Adding Client Details

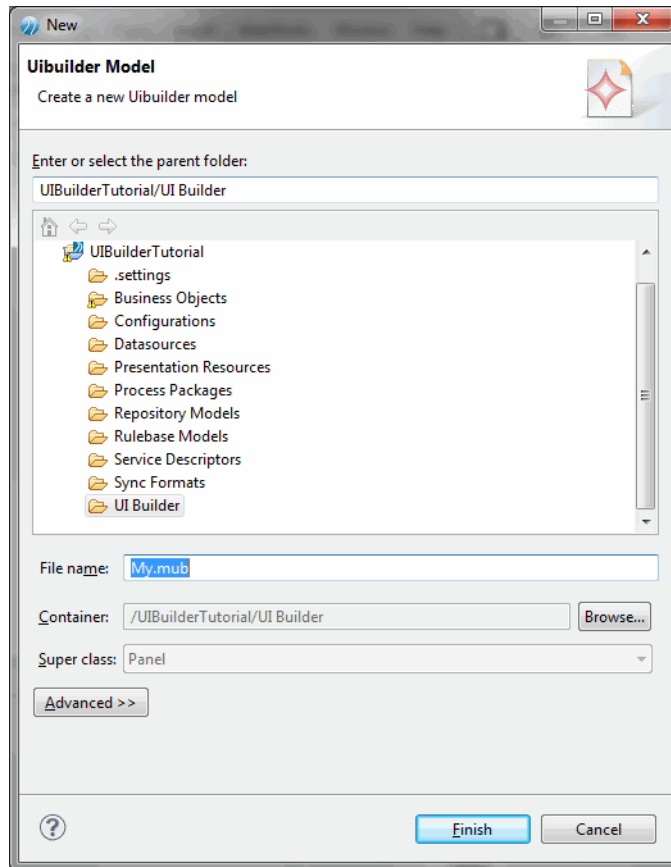
Create a new page with the **Client** repository attributes and relationship.

Procedure

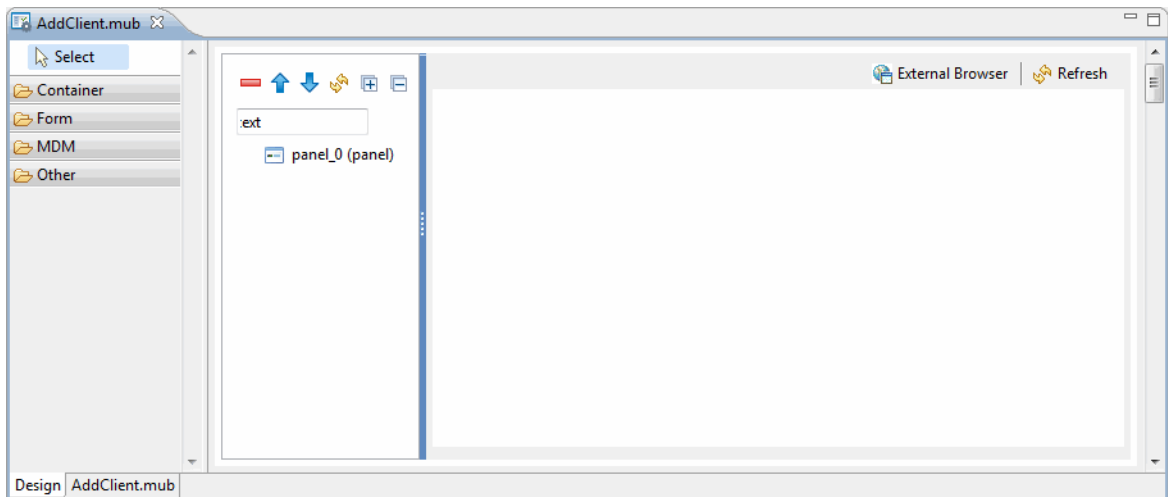
1. Right-click the **UIBuilder** folder in the Project Explorer and select **New > MDM UI Page**.



2. The **UIbuilder Model** wizard is displayed.

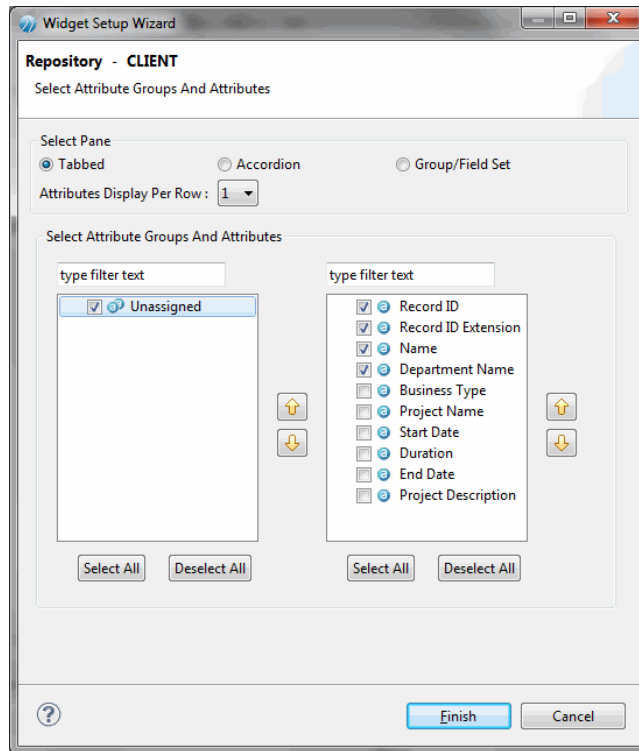


3. Enter the file name as **AddClient.mub** and click **Finish**.
4. The **Add Client** page is displayed on the Canvas.

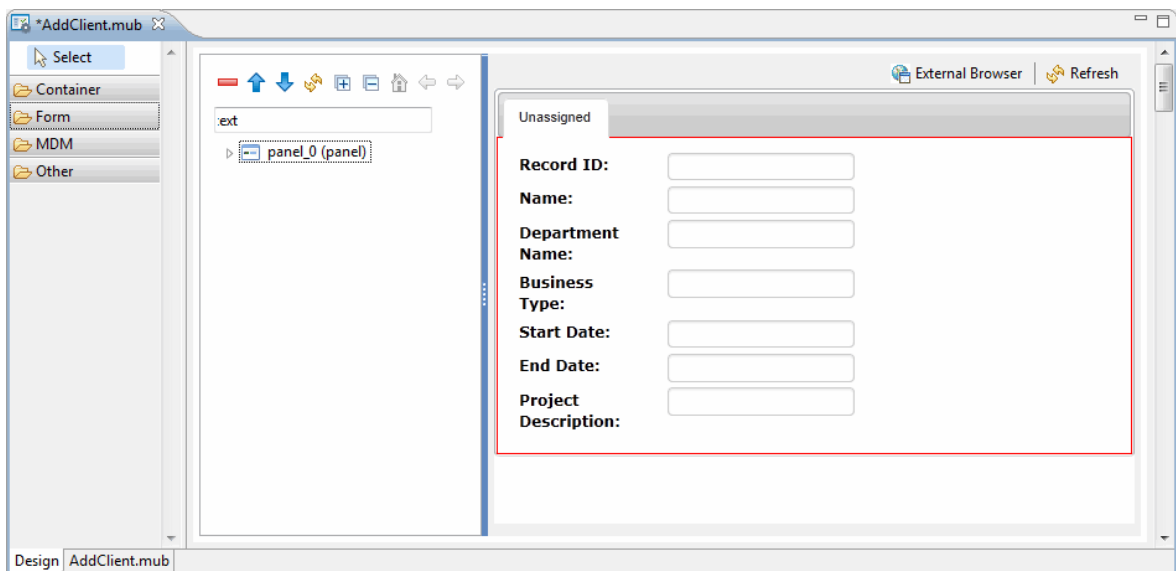


After creating the canvas add the Client Repository to the canvas. Drag the Client Repository attributes and drop it on the panel.

5. Expand the PAC repository model and select the **Client** repository. Drag and drop it on the **panel_0(panel)**.
6. The **Select Attribute Groups and Attributes** wizard is displayed.

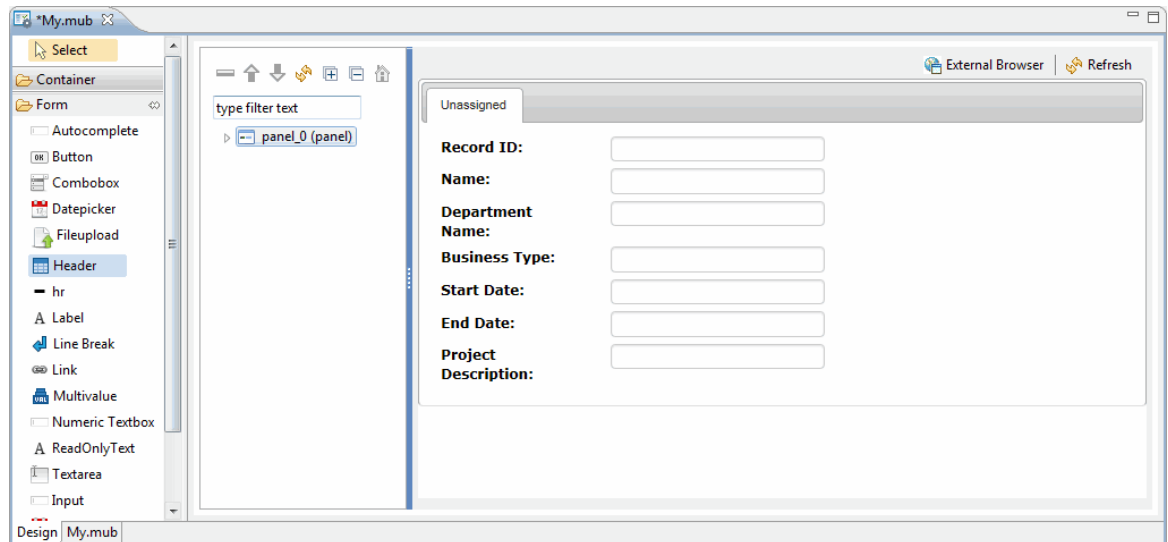


7. Select the **Tabbed** pane check box. Select the **Unassigned** check box, all the attributes in the Unassigned Group are displayed.
8. Select the check box corresponding to the repository attributes and click **Finish**.
9. A form is created with selected attributes and displayed on the canvas.

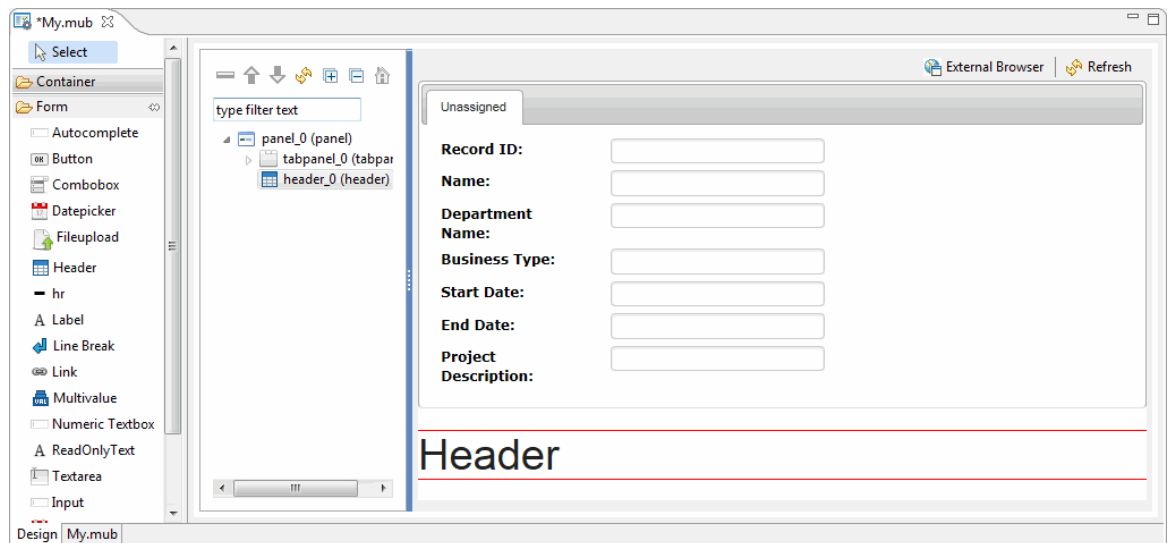



Add a header to the form. The header widget is available in the **Form** container.

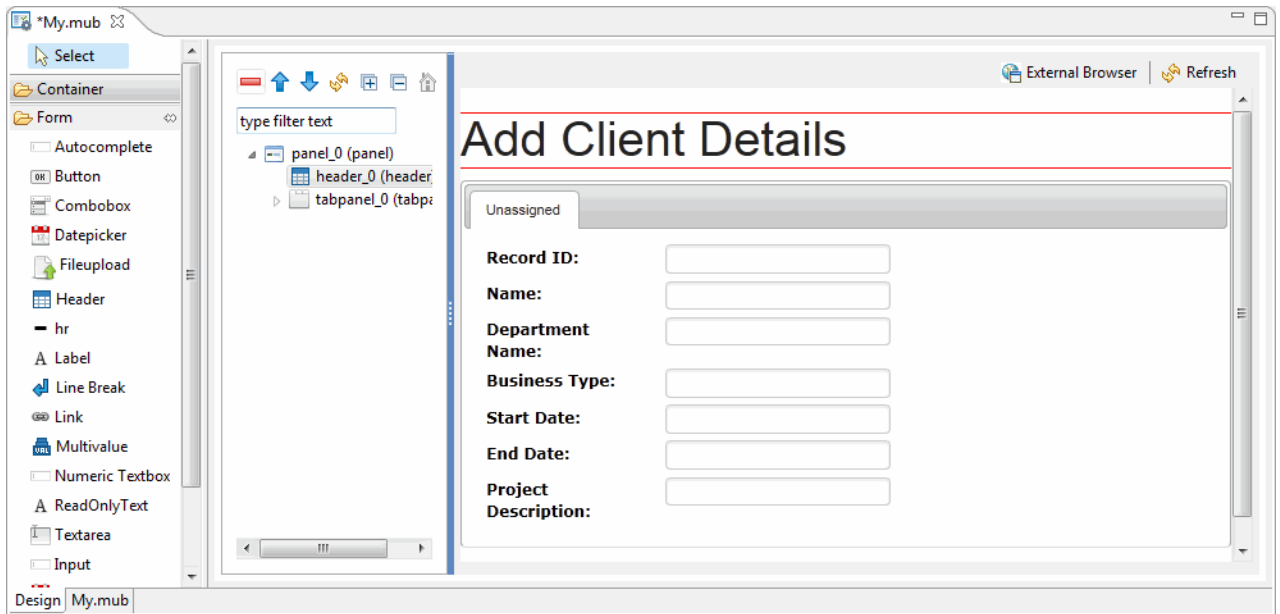
10. Expand the **Form** container and select the **Header** widget.



11. The header is displayed on the canvas.

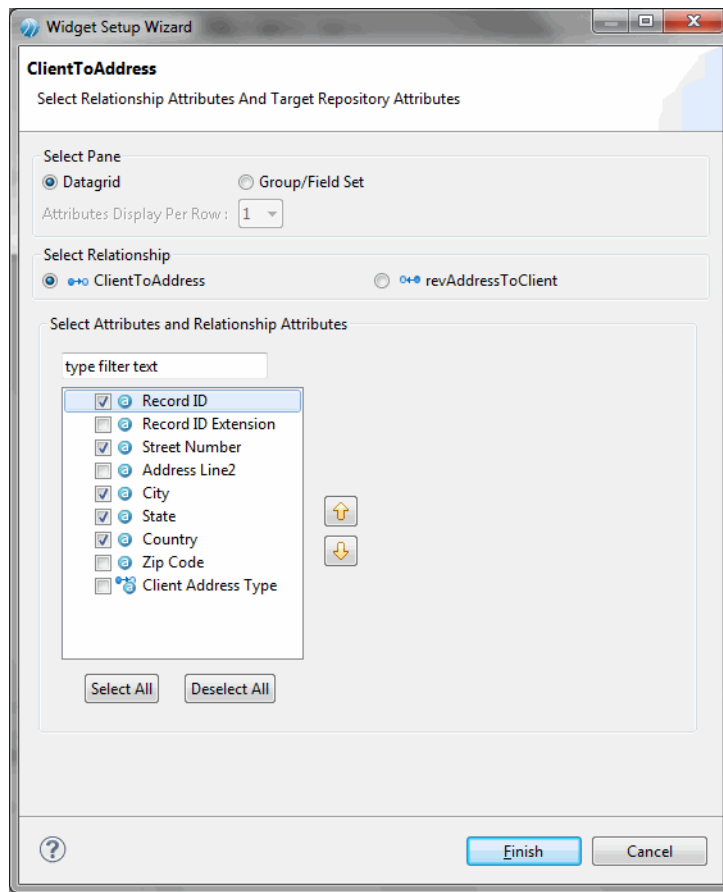


12. Modify the header text to **Add Client Details**. To reorder the header text to the top of the canvas, select the **header_0(header)** and click  on the Tree Outline toolbar and move it before **tabpanel_0(tabpanel)** and after **panel_0(panel)**.

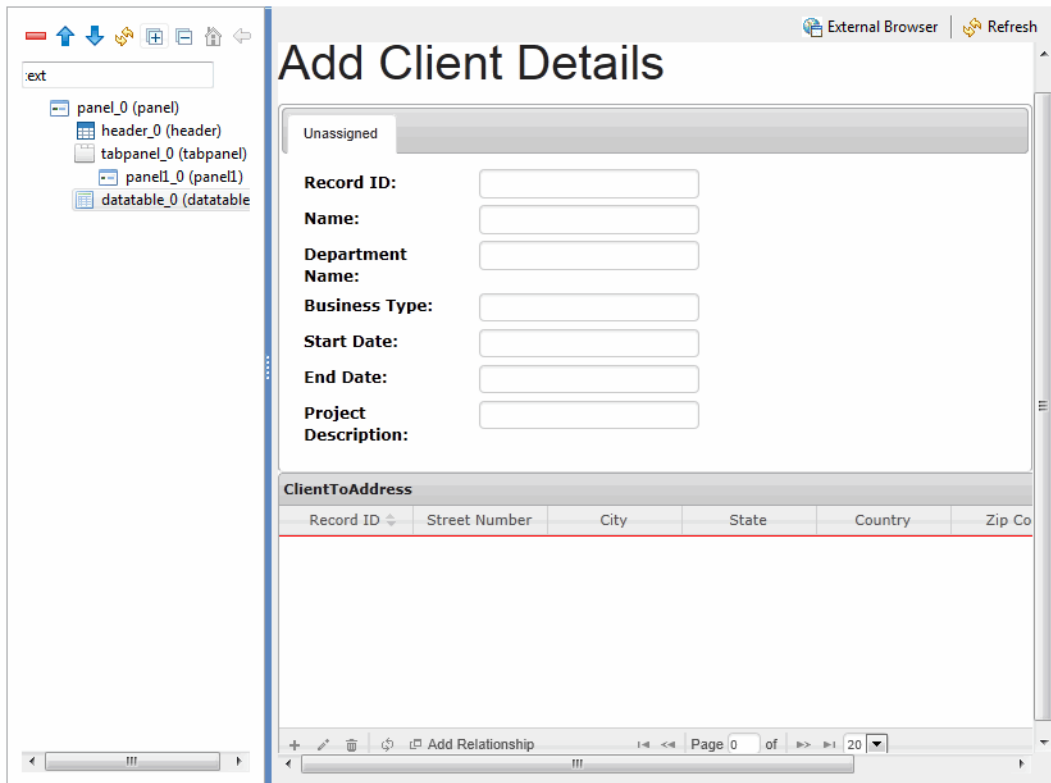


After adding the repository attributes, add the ClientToAddress relationship to the form by dragging it on the panel.

14. Select the **ClientToAddress** relationship and drag and drop on the **panel_0(panel)**. The Widget Setup Wizard is displayed to create a **ClientToAddress** relationship.

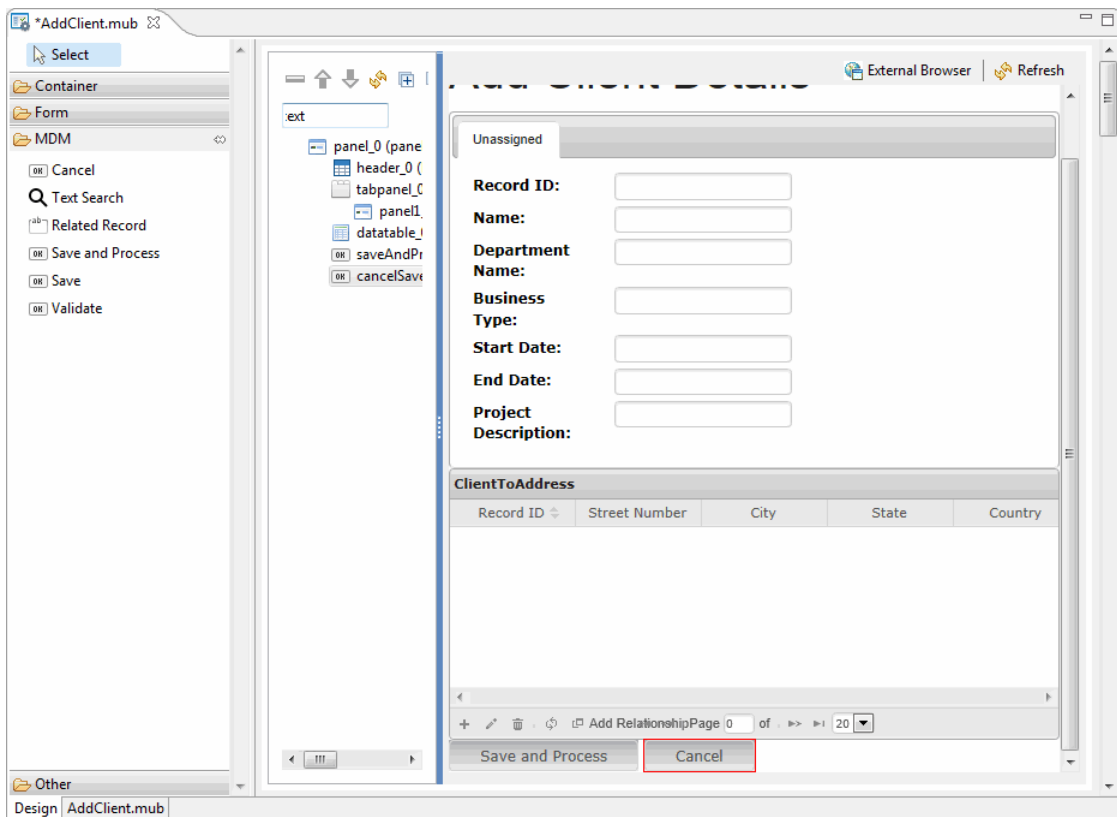


15. Select the **Datagrid** pane and select the check box corresponding to the attributes and click **Finish**.
16. The selected attributes are displayed in the canvas.



Add the **Save and Process** and **Cancel** buttons to the form. The buttons are available in the **MDM** widget container.

- Expand the MDM widget, select the **Save and Process** button, and click the **panel_0(panel)**. Similarly, select the **Cancel** button and click the **panel_0(panel)**.



The **Add Client** page is ready. Save the page and view it in the system default browser.

- Click the **External Browser** on the top of the canvas. The **Add Client** page is displayed in the browser.

Add Client Details

Unassigned

Record ID:

Name:

Department Name:

Business Type:

Start Date:

End Date:

Project Description:

ClientToAddress					
Record ID	Street Number	City	State	Country	Zip Code

+ Add Relationship

Page 0 of 20

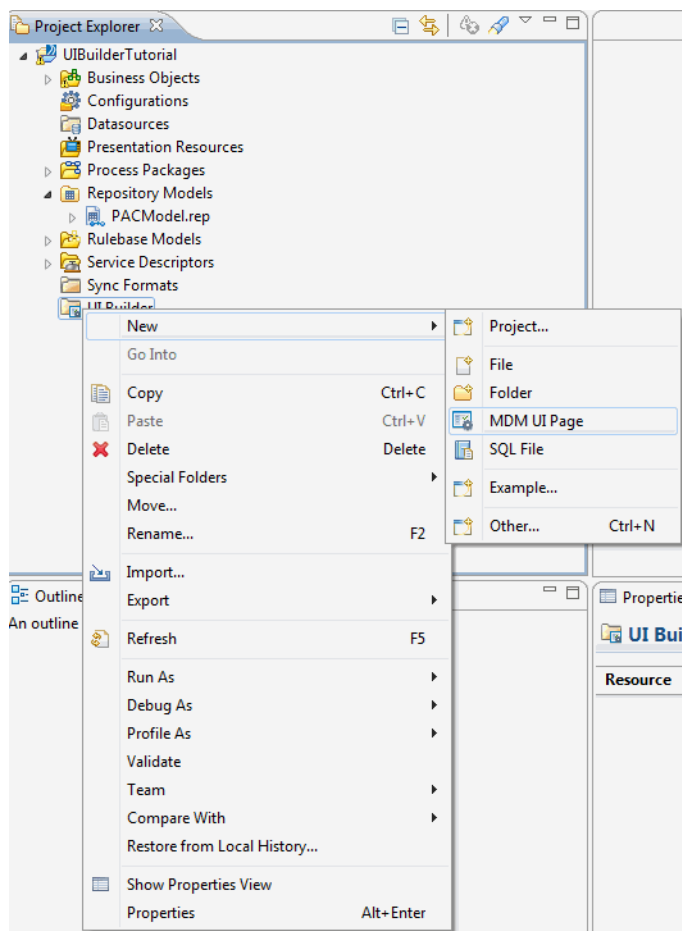
Save and Process

Creating a New Custom Page - Modifying Client Details

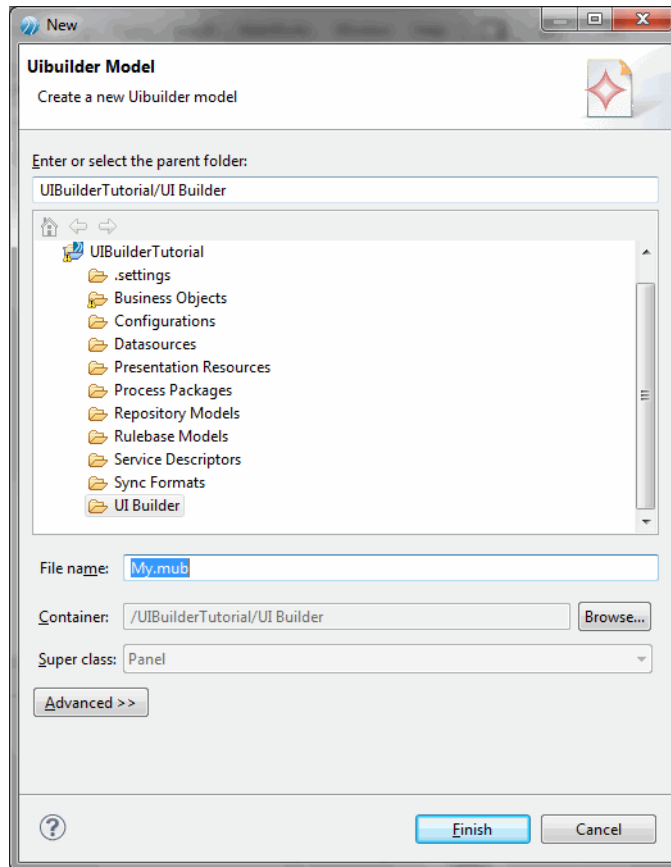
Create a new page with the **Client** repository attributes and relationship.

Procedure

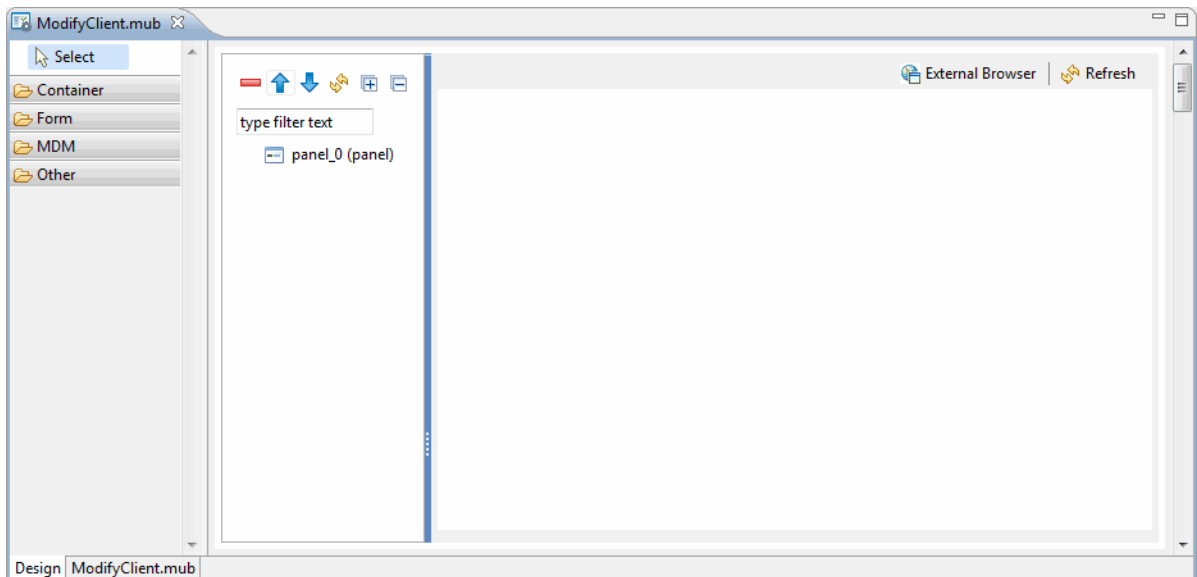
- Right click the **UIBuilder** folder in the Project Explorer and select **New > MDM UI Page**.



2. The **UIbuilder Model** wizard is displayed.

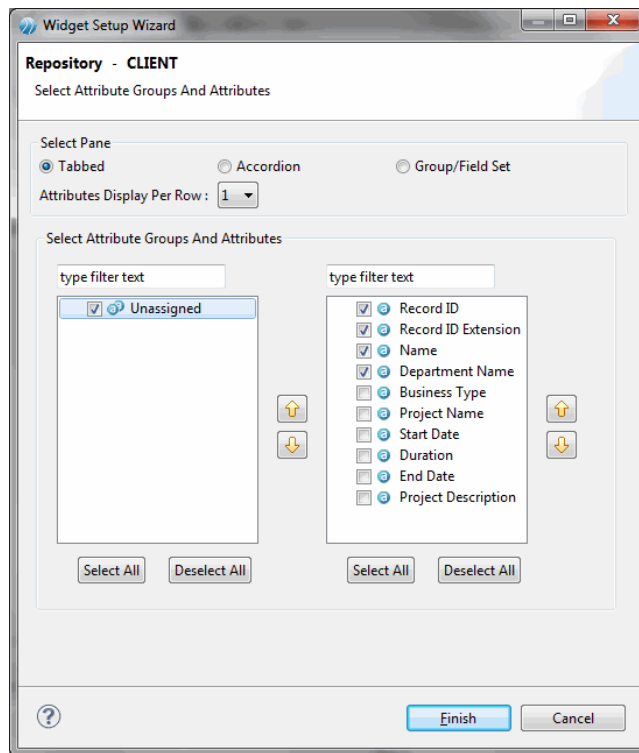


3. Enter the file name as **ModifyClient.mub** and click **Finish**.
4. The Modify Client page is displayed in the canvas.

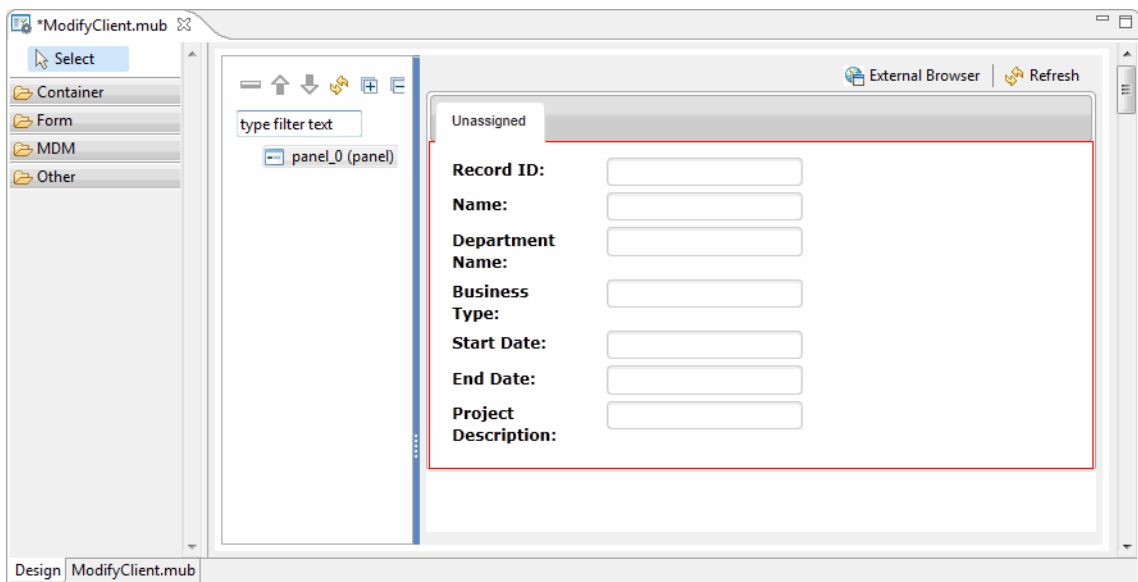


After creating the canvas, add the Client Repository to the canvas. Drag the Client Repository attributes and drop it on the panel.

5. Expand the PAC repository model, select the **Client** repository and drag and drop it on the **panel_0(panel)**.
6. The **Select Attribute Groups and Attributes** wizard is displayed.

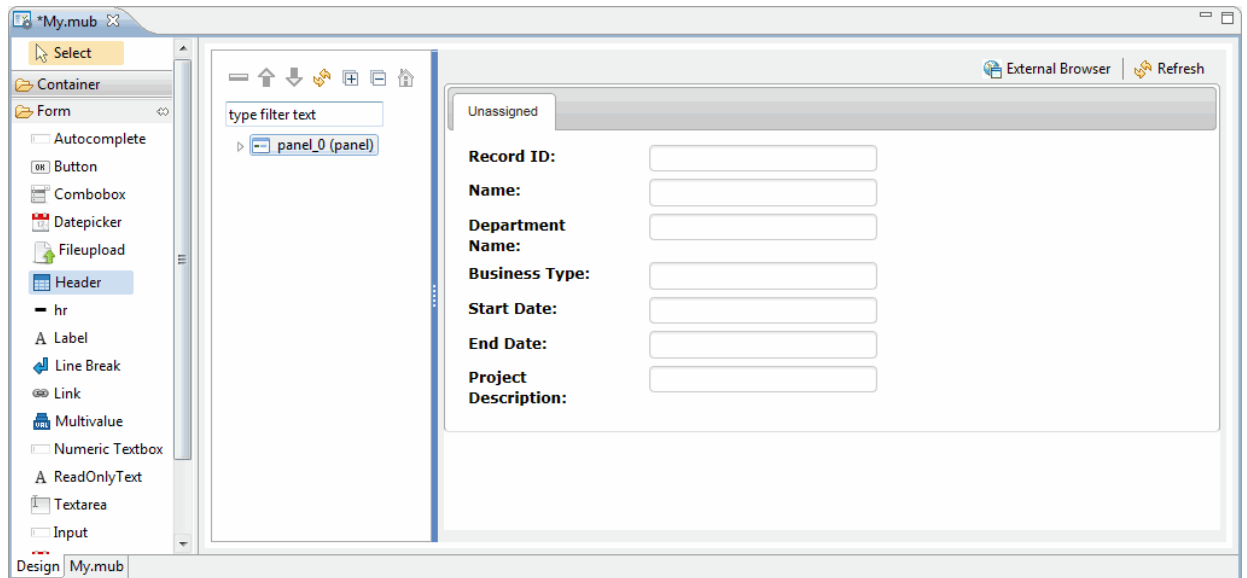


7. Select the **Tabbed** pane check box. Select the **Unassigned** check box, all the attributes in the Unassigned Group are displayed.
8. Select the check box corresponding to the repository attributes and click **Finish**.
9. A form is created with selected attributes and displayed on the canvas.

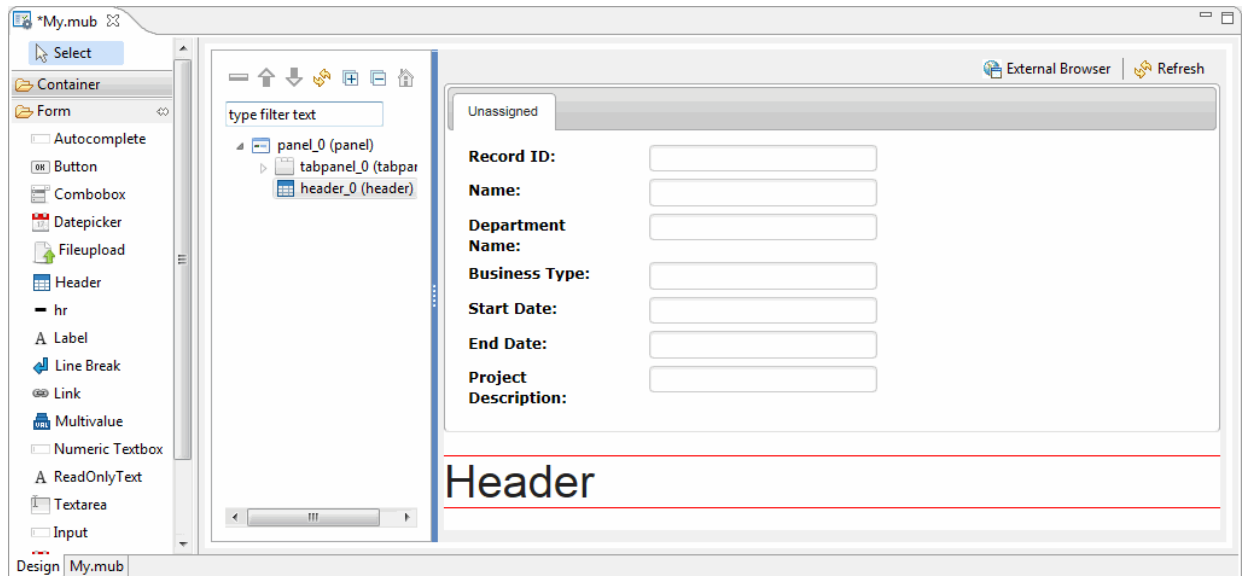


Add a header to the form, the header widget is available in the **Form** container.

10. Expand the **Form** container and select the **Header** widget.



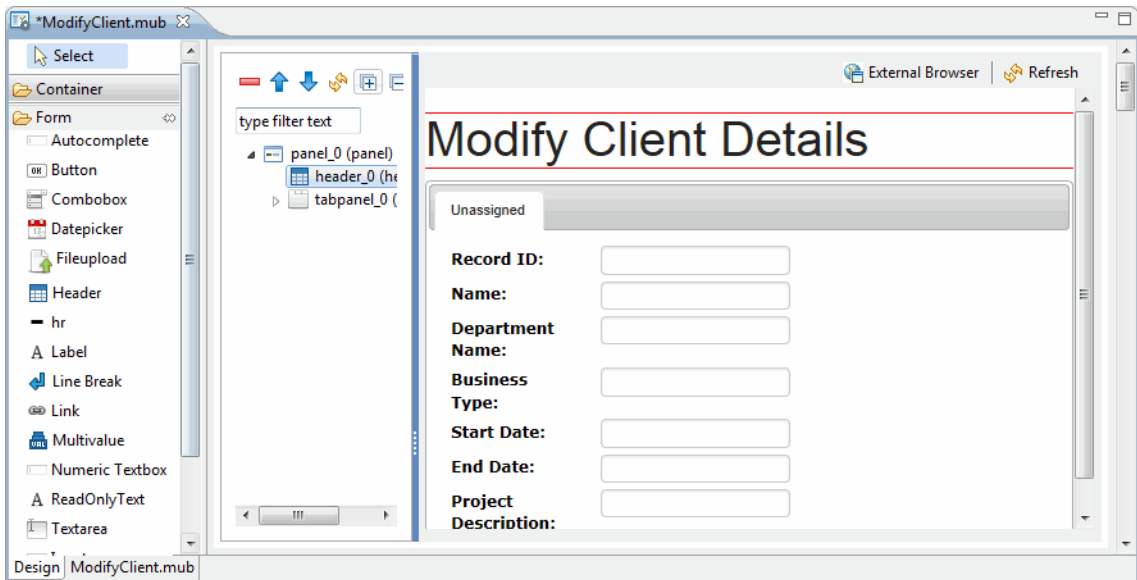
11. The header is displayed on the canvas.



12. Modify the header text to **Modify Client Details**. To reorder the header text to the top of the canvas, select the **header_0(header)** and click

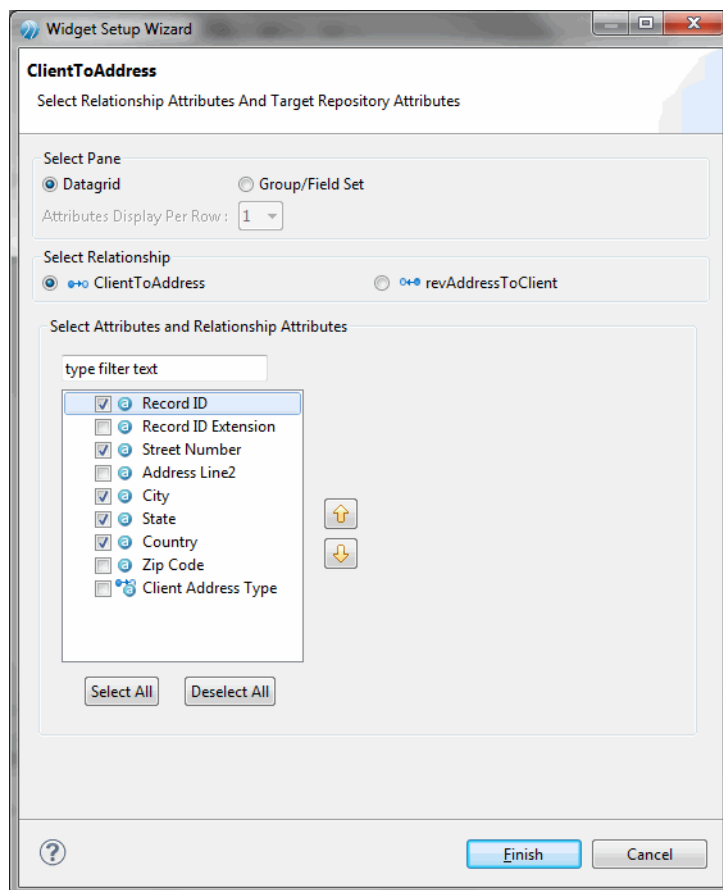
13. 

14. on the Tree Outline toolbar and move it before **tabpanel_0(tabpanel)** and after **panel_0(panel)**.



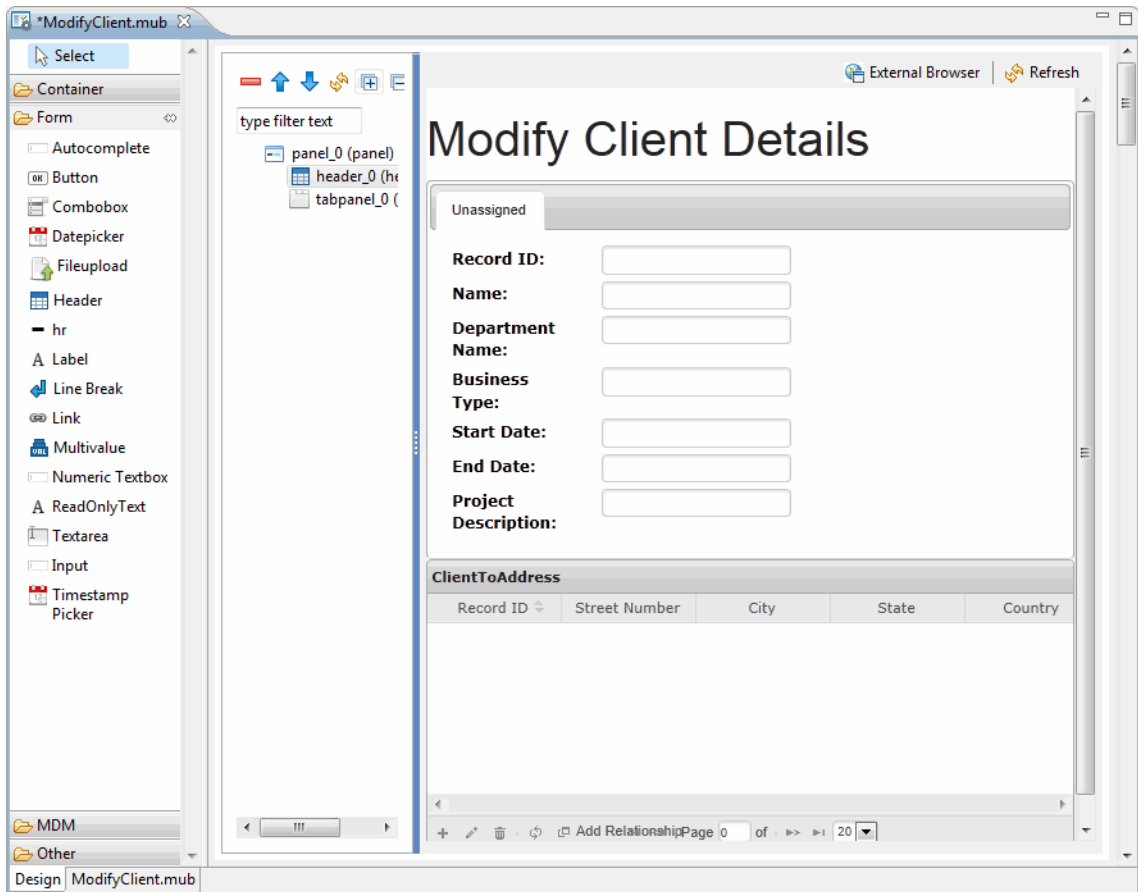
After adding the repository attributes, add the `ClientToAddress` relationship to the form by dragging it on the panel.

15. Select the `ClientToAddress` relationship and drag and drop on the `panel_0(panel)`. The `ClientToAddress` wizard is displayed.



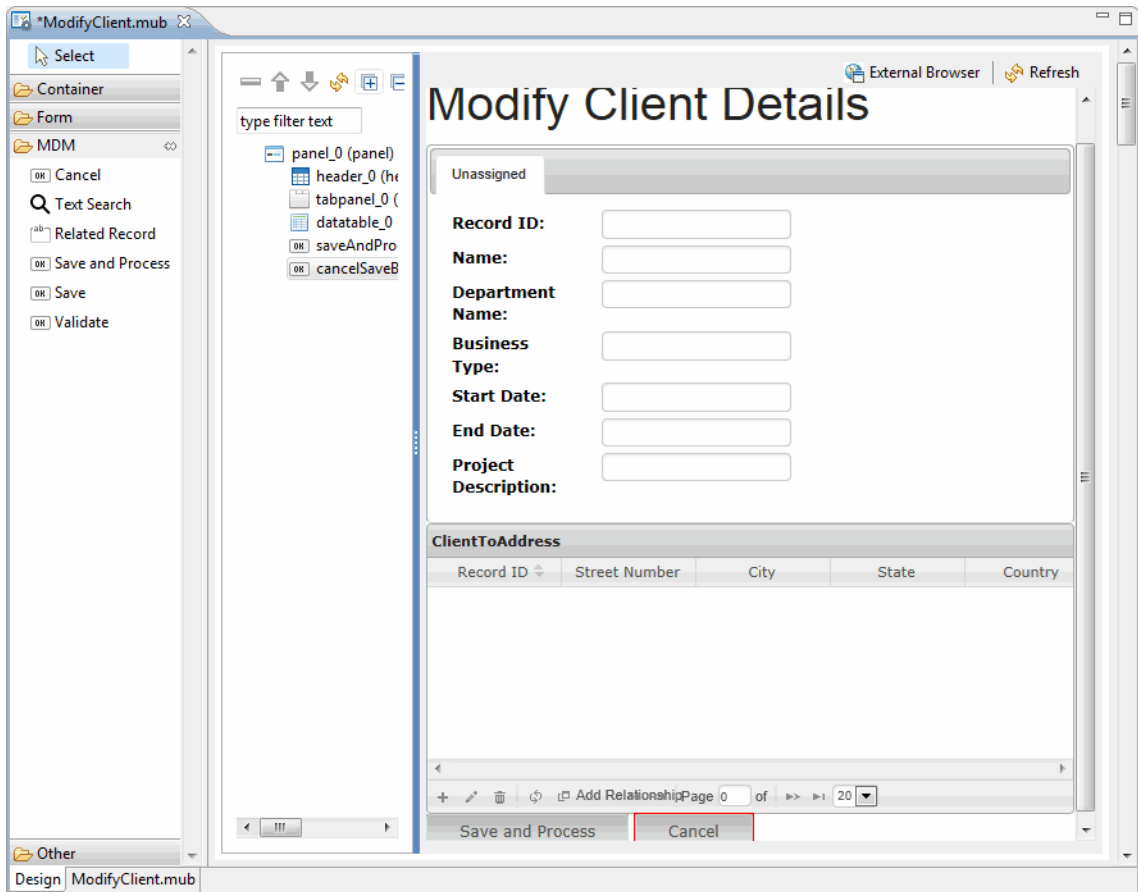
16. Select the **Datagrid** pane and select the check box corresponding to the attributes and click **Finish**.

17. The selected attributes are displayed in the canvas.



Add the **Save and Process** and **Cancel** buttons to the form. The buttons are available in the **MDM** widget container.

18. Expand the MDM widget, select the **Save and Process** button, and click the **panel_0(panel)**. Similarly, select the **Cancel** button and click the **panel_0(panel)**.



The Modify Client page is ready, save the page and view it in the system default browser.

19. Click the **External Browser** on the top of the canvas. The Modify Client Page is displayed in the browser.

Result

Modify Client Details

Unassigned

Record ID:

Name:

Department Name:

Business Type:

Start Date:

End Date:

Project Description:

ClientToAddress

Record ID	Street Number	City	State	Country	Zip Code

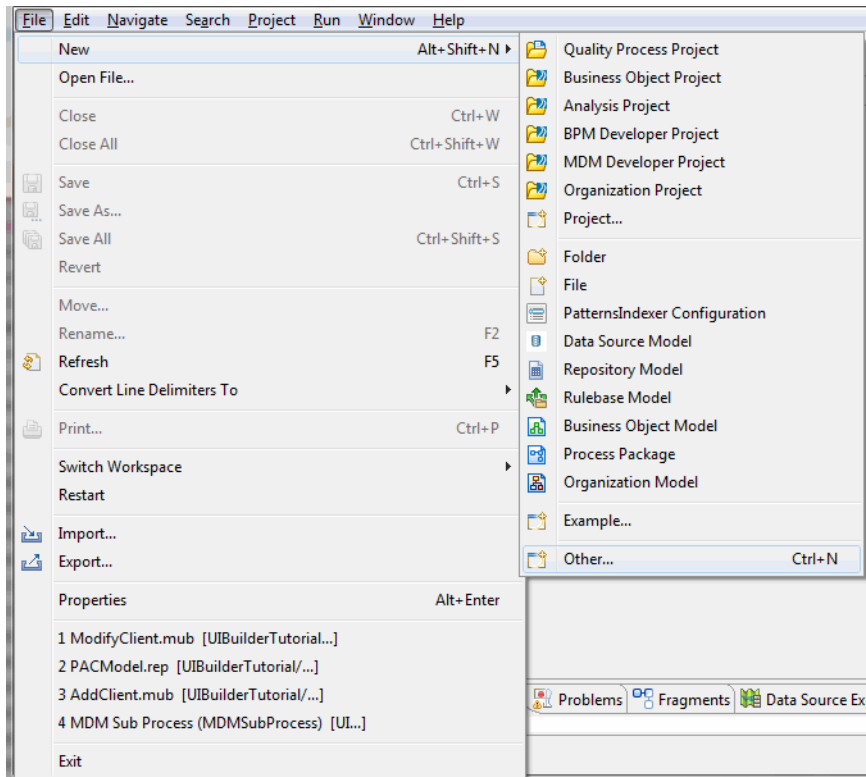
+ Add Relationship
Page 0 of 20

Generating WSDL

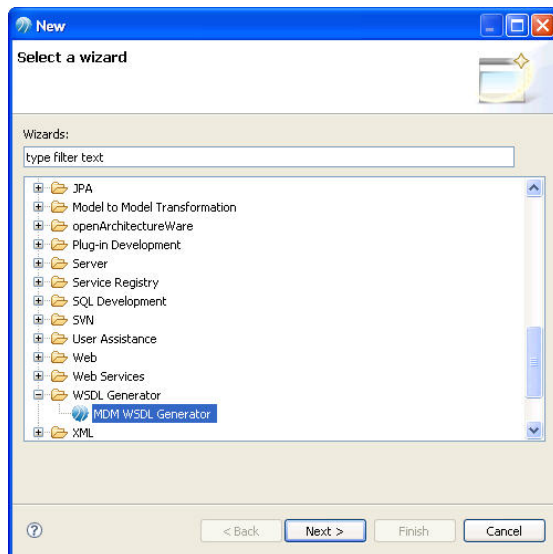
You can now Generate WSDL for the Client repository.

Procedure

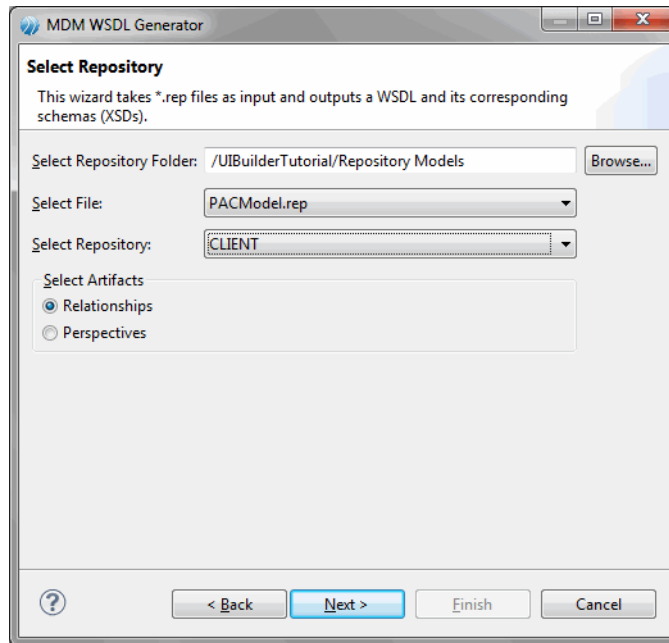
1. Using the WSDL Generator wizard, generate WSDL for the Client repository. Follow the wizard to complete the web service project creation.
2. Navigate to **File > New > Other**.



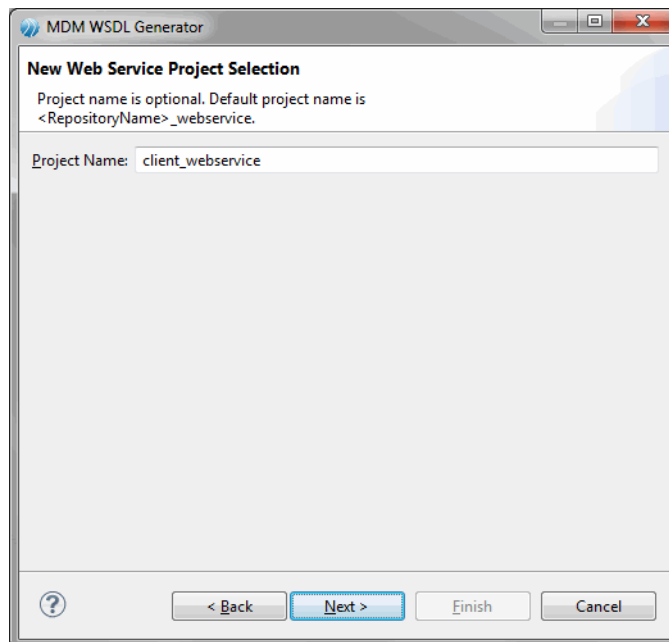
3. Navigate to **File > New > Other**.



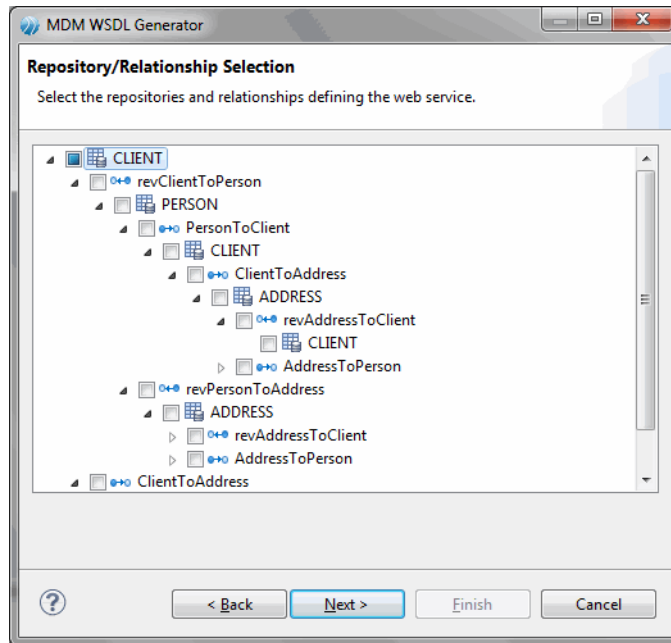
4. Select **WSDL Generator** from the **WSDL Generator** tree node and click **Next**.
5. The wizard to select the repository is displayed.



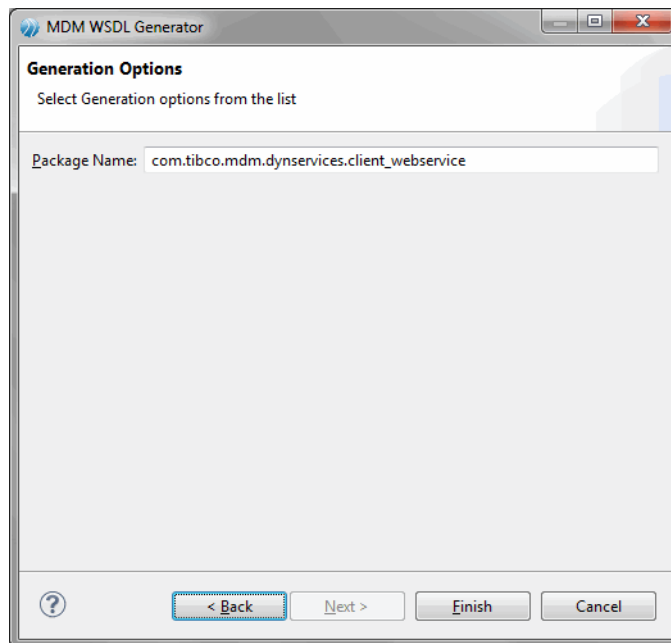
6. Browse to the repository folder in the project. From the **Select File** field, select the **PACModel.rep**. Similarly, from the **Select Repository** field, select the **Client** repository.
7. Select the **Relationship** option from the **Select Artifacts** section and click **Next**.
8. The **New Web Service Project Selection** screen is displayed.



9. Type the appropriate project name in the **Project Name** field. By default, the project name is `<repository name>_webservice`.
10. Click **Next**. The **Repository/Relationship Selection** screen is displayed.



11. Select the relationship depth, UI Builder supports multiple levels of relationship.
12. Click **Next**. The **Generation Options** screen is displayed.



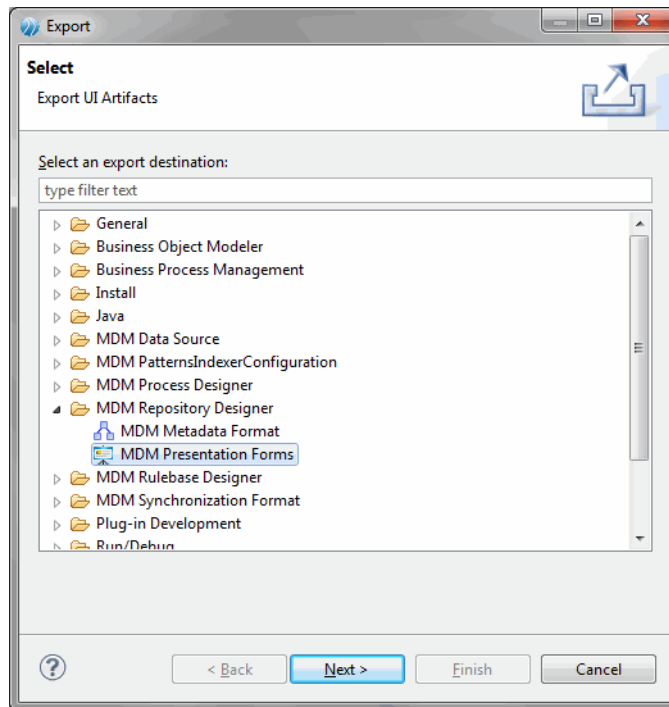
13. Type the appropriate package name in the **Package Name** field. By default, a package name is provided. The package name convention is `com.tibco.mdm.dynservices.webservice.<repository name>_webservice`. You can modify the package name.
14. Click **Finish**.

Exporting the Custom Page

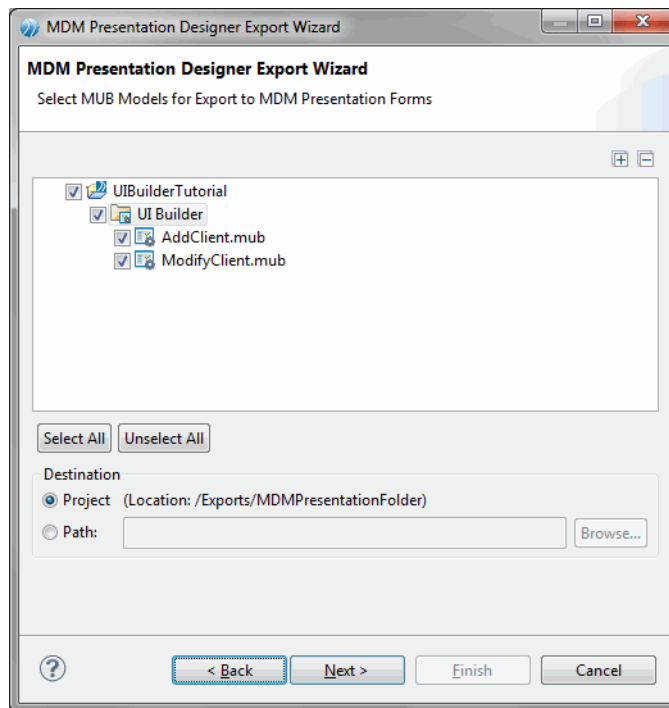
Next, export the UI artifacts. The Export Wizard is used to export the custom page to TIBCO MDM presentation forms.

Procedure

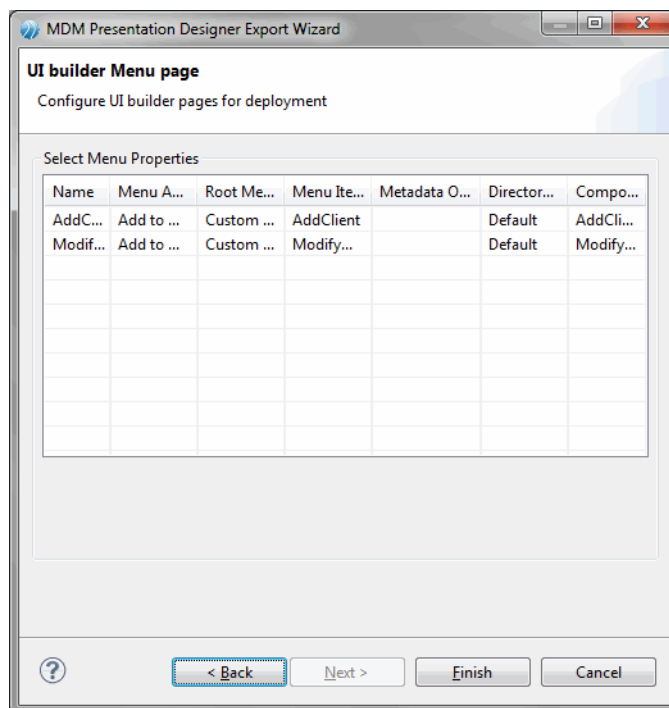
1. Select the **UIBuilder** folder in the Project Explorer and click **File > Export** or right click the project and select **Export**.
2. Select **MDM Presentation Forms** under **MDM Repository Designer**. Click **Next**.



3. The **MDM Presentation Designer Export Wizard** screen is displayed.

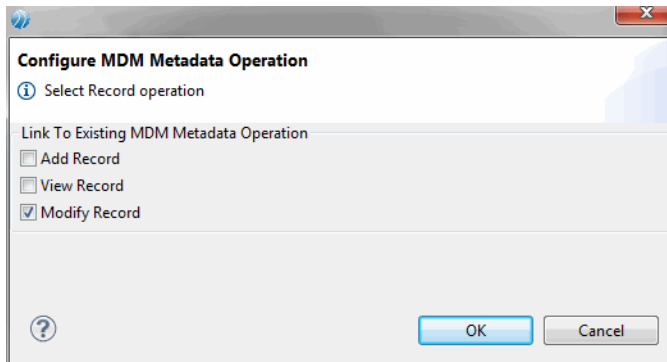


4. Select the MUB models for export by selecting the check box. The default location to which the file is exported is displayed in the **Destination** section under Project (/Exports/MDMPresentationFolder). You can change the path if required.
5. Click **Next**.
6. The **UI builder Menu Page** screen is displayed.



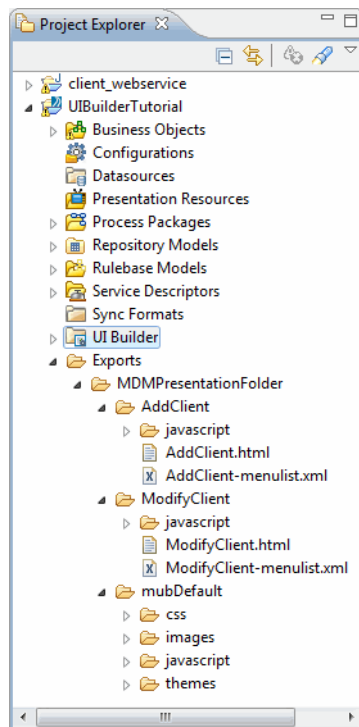
7. Configure the UI Builder pages. For the **Add Client** page, select **Add to Menu** from the **Menu Action** column. Retain the default values in all the other columns. Similarly for the **Modify Client** page, select **Link to Metadata Operation** from the **Menu Action** column. On selecting the **Link to metadata Operation** option, the **Metadata Operation** column is enabled.

- Click the **Metadata Operation** column. The **Configure MDM Metadata Operation** screen is displayed. Select **Modify Record** options to link the Modify page to the existing modify metadata operation and click **OK**.



- Click **Finish**.

In the **Project Explorer**, you will see a new folder **Exports** created which contains the mub, xml, Javascript, html files generated.



Deploy the Custom Page

The created Custom Page can be directly deployed to TIBCO MDM.

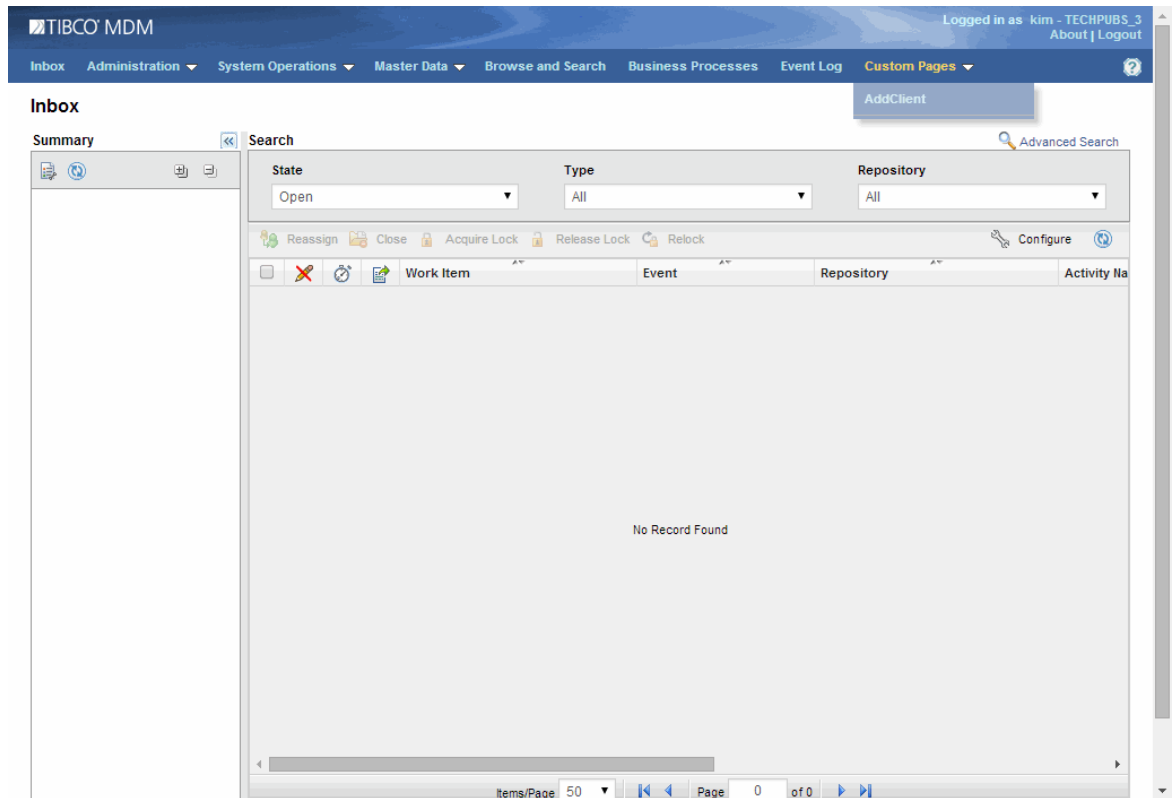
For deployment steps, refer to the section **Deploying the MDM UI page** in the *TIBCO MDM Studio UI Builder User's Guide*.

Accessing the Custom Page from the TIBCO MDM Server

Next, login to the TIBCO MDM server and access the custom pages.

Procedure

1. On the web browser, type URL `http://<localhost:Port no>/eml/Login` and login using the TIBCO MDM server credentials.
2. The TIBCO MDM server login page is displayed.



3. Click **Customs Pages > AddClient** . The **Add Client Details** page is displayed.

TIBCO MDM Logged in as kim - TECHPUBS_3
About | Logout

Inbox Administration System Operations Master Data Browse and Search Business Processes Event Log Custom Pages

Add Client Details

Unassigned

Record ID:

Name:

Department Name:

Business Type:

Start Date:

End Date:

Project Description:

Record ID	Street Number	City	State	Country	Zip Code
Rec_3	53232	PA	CA	US	6696898

+ Add Relationship Page 1 of 1 20

Save and Process Cancel

4. Type the new client details and the relationship details.
5. Click **Save and Process**.
6. The record is saved successfully.

TIBCO MDM Logged in as kim - TECHPUBS_3
About | Logout

Inbox Administration System Operations Master Data Browse and Search Business Processes Event Log Custom Pages

Add Client Details

Unassigned

Record ID:

Name:

Department Name:

Business Type:

Start Date:

End Date:

Project Description:

Record ID	Street Number	City	State	Country	Zip Code
Rec_3	53232	PA	CA	US	6696898

+ Add Relationship Page 1 of 1 20

Save and Process Cancel

Success!

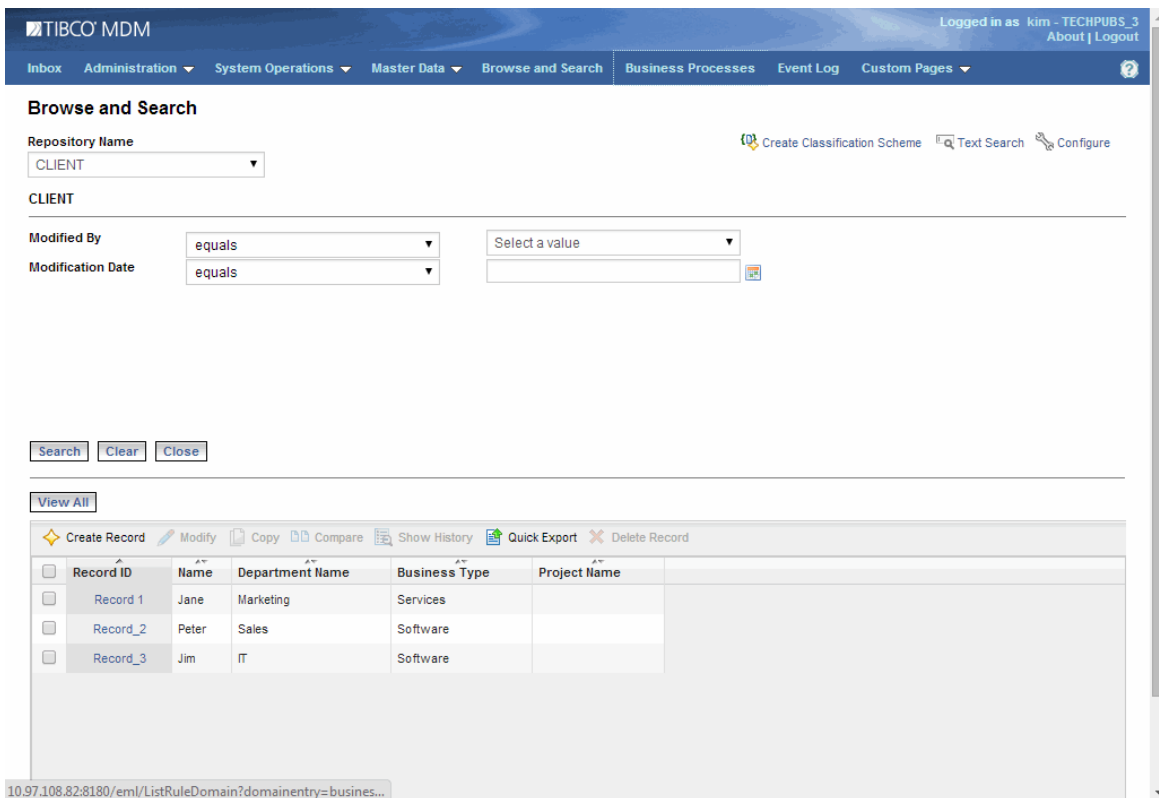
Record is saved.

Ok

10.97.108.82:8180/eml/BrowseProduct?menulink=Browse&rec...

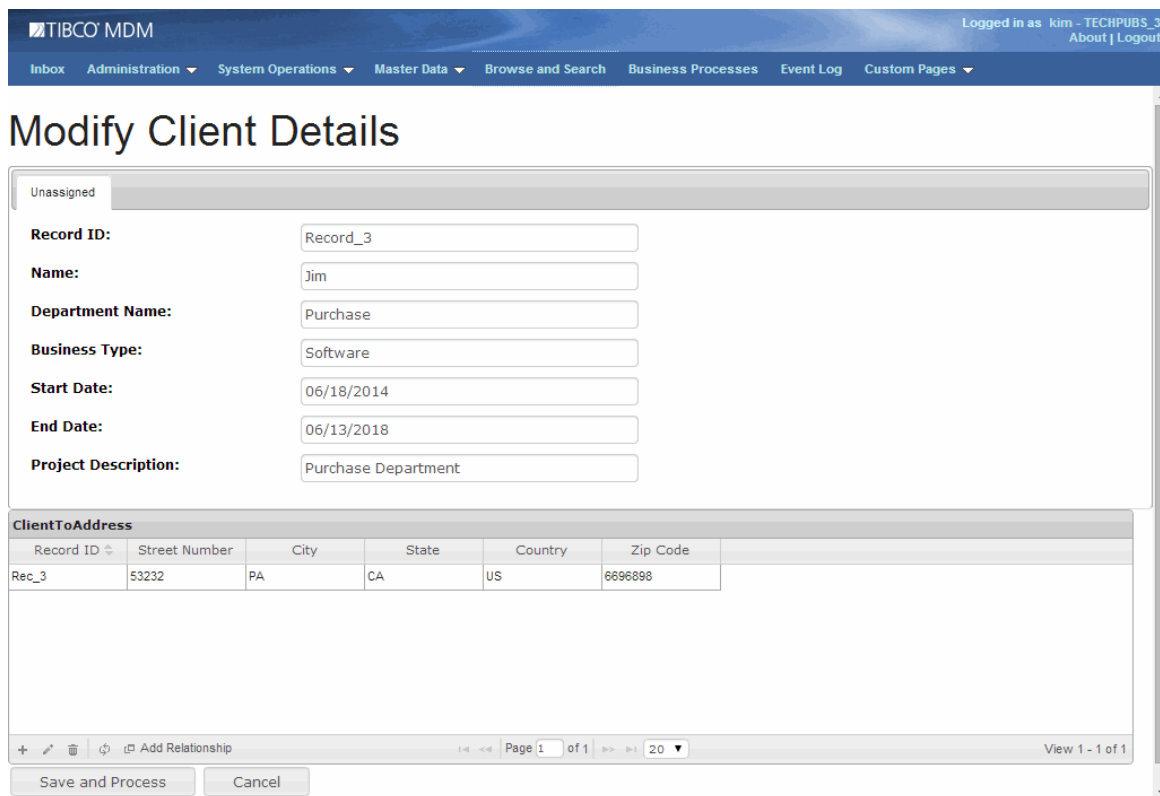
7. Click **OK**.

- Click **Browse and Search**. Select the **Client** repository. Click **View All**. The newly added record is displayed.



Next, modify an existing record.

- Select the check box corresponding to **Record_3** and click **Modify**. The **Modify Client Details** page is displayed.



- Modify the record and click **Save and Process**.

The screenshot shows the 'Modify Client Details' form in TIBCO MDM. The form fields are as follows:

- Record ID: Record_3
- Name: Jim
- Department Name: Purchase
- Business Type: Software
- Start Date: 06/18/2014
- End Date: 06/13/2018
- Project Description: Purchase Deps

A 'Success!' dialog box is displayed in the center, containing the text 'Record is saved.' and an 'Ok' button.

Below the form is a table titled 'ClientToAddress' with the following data:

Record ID	Street Number	City	State	Country	Zip Code
Rec_3	53232	PA	CA	US	6896898

At the bottom of the form, there are 'Save and Process' and 'Cancel' buttons.

- Click **Ok**.

- The modified record is displayed.

The screenshot shows the 'Browse and Search' page in TIBCO MDM. The repository name is 'CLIENT'. The search criteria are:

- Modified By: equals
- Modification Date: equals

The search results are displayed in a table:

Record ID	Name	Department Name	Business Type	Project Name
Record_1	Jane	Marketing	Services	
Record_2	Peter	Sales	Software	
Record_3	Jim	Purchase	Software	

The table includes a toolbar with actions: Create Record, Modify, Copy, Compare, Show History, Quick Export, and Delete Record. The 'Record_3' row is highlighted.