

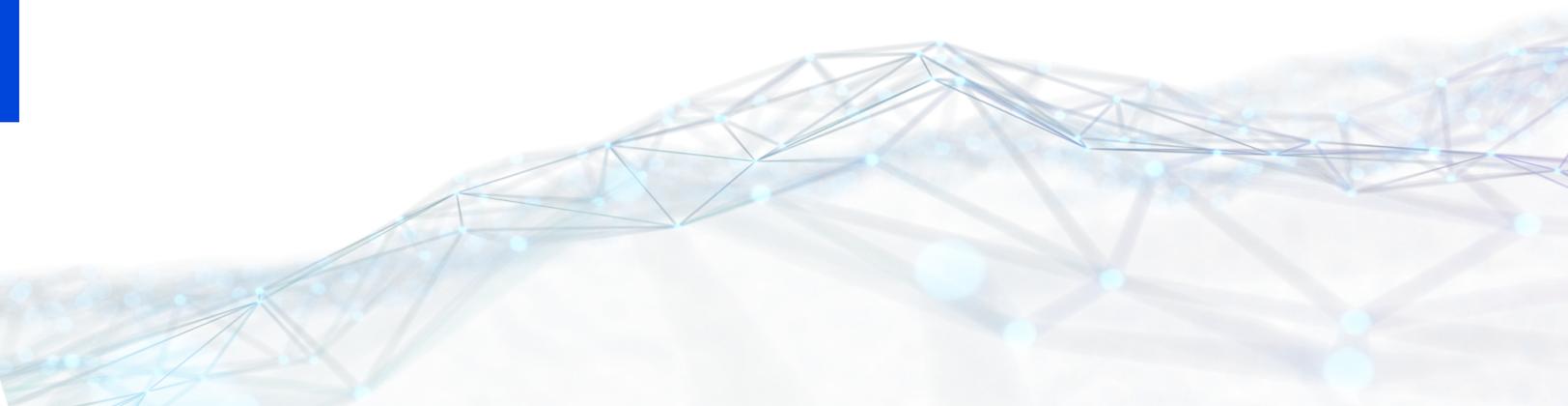


# TIBCO® MDM Studio

## UI Builder Tutorial

Version 6.1.1 | June 2024

Document Updated | October 2024



# Contents

---

<b>Contents</b> .....	<b>2</b>
<b>Tutorial Overview</b> .....	<b>3</b>
Creating a Project .....	4
Defining Repository Data .....	7
Creating a New Custom Page - Adding Client Details .....	8
Creating a New Custom Page - Modifying Client Details .....	17
Generating WSDL .....	26
Exporting the Custom Page .....	30
Deploy the Custom Page .....	33
Accessing the Custom Page from the TIBCO MDM Server .....	34
<b>TIBCO Documentation and Support Services</b> .....	<b>39</b>
<b>Legal and Third-Party Notices</b> .....	<b>41</b>

# 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 - Addresline1, Addressline2, City, State, Country, Zipcode.
- A **Relationship** between **Client** and **Address** with Type (string) as Relationship Attributes.

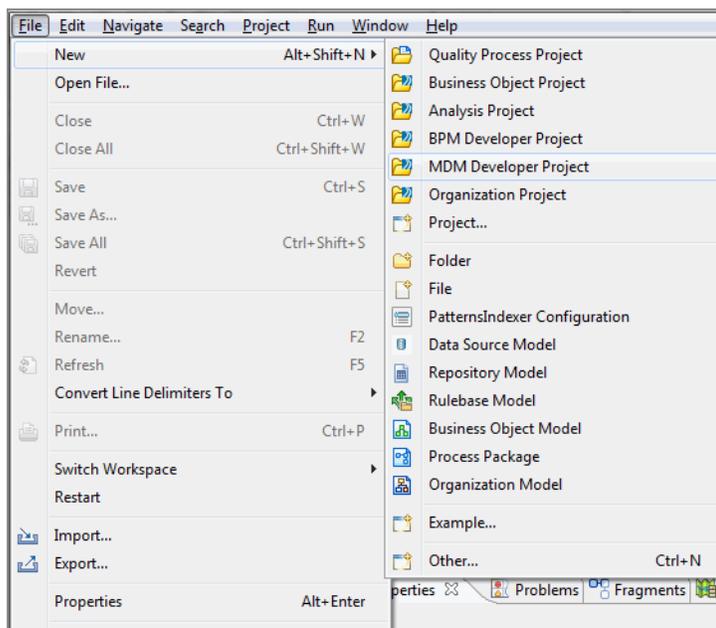
- A **Relationship** between **Address** and **Person** with Type (string) as Relationship Attributes.
- A **Relationship** between **Person** and **Client** with HourlyRate (Amount) as Relationship Attributes.

## Creating a Project

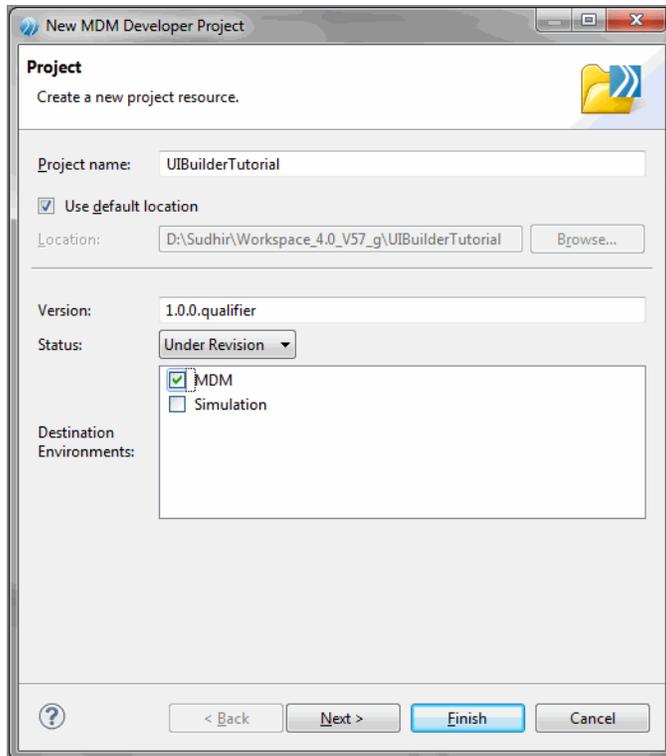
First, create a new Project to hold the Custom Page.

### Procedure

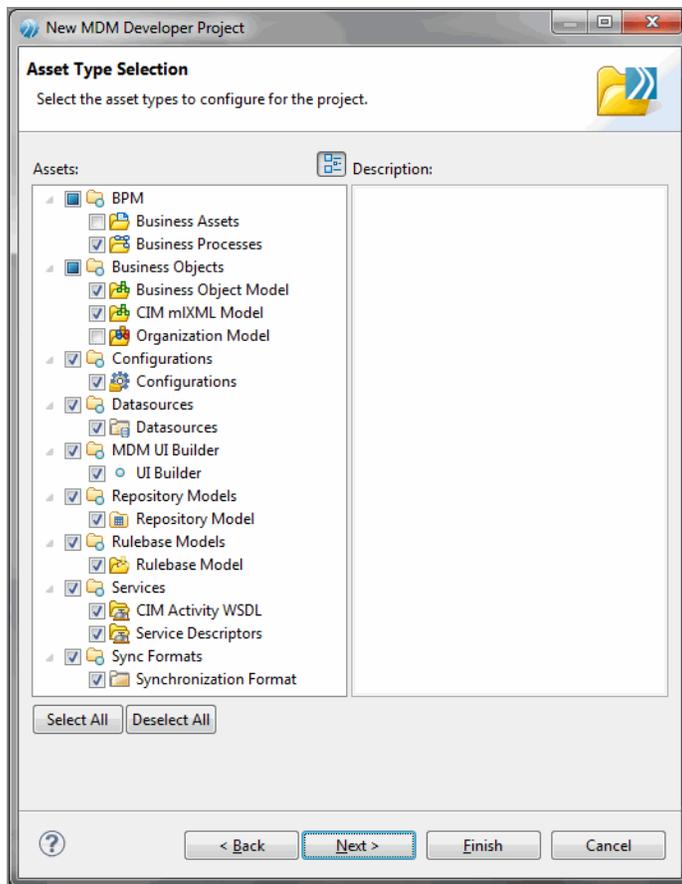
1. Go to **File > New > MDM Developer Project**.



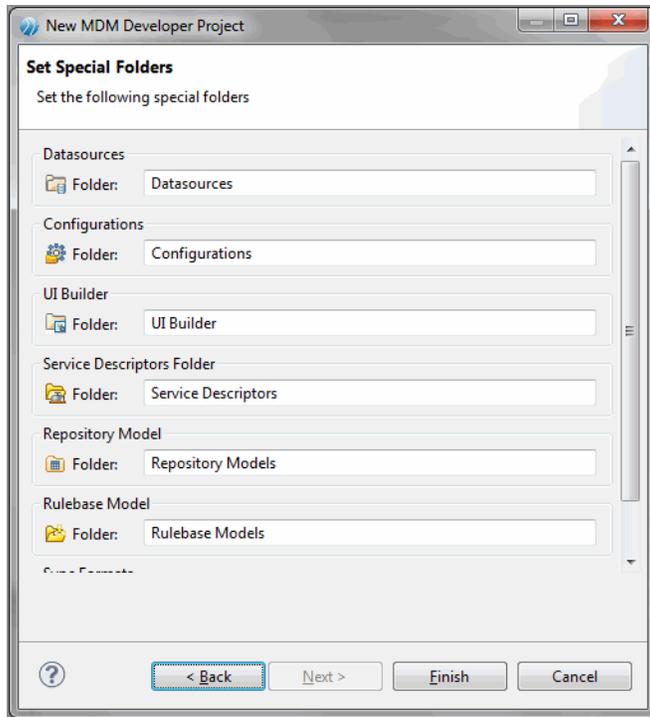
2. The Create a new project resource wizard is displayed.



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.

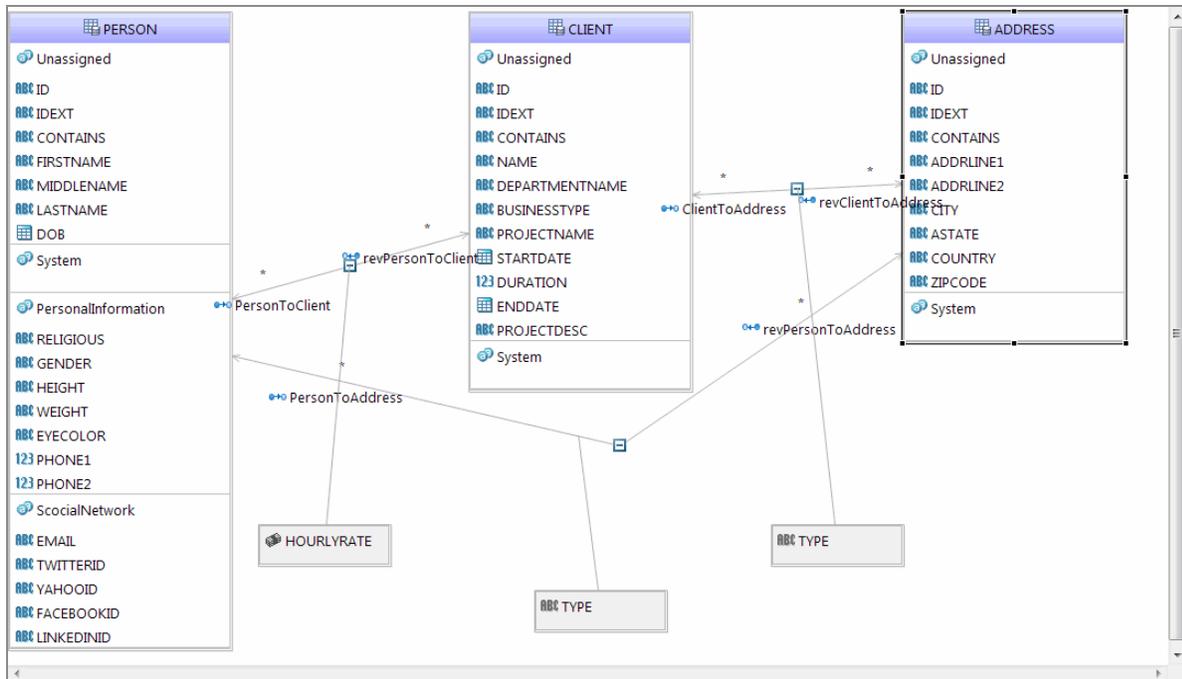


8. Click **Finish**.

## Defining Repository Data

In the Project Explorer, create a new repository model under the **Repository Models** folder (right click the **Repository Models** folder, select **New > Repository Model**, and then complete the wizard). Call the file **PACModel.rep**.

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



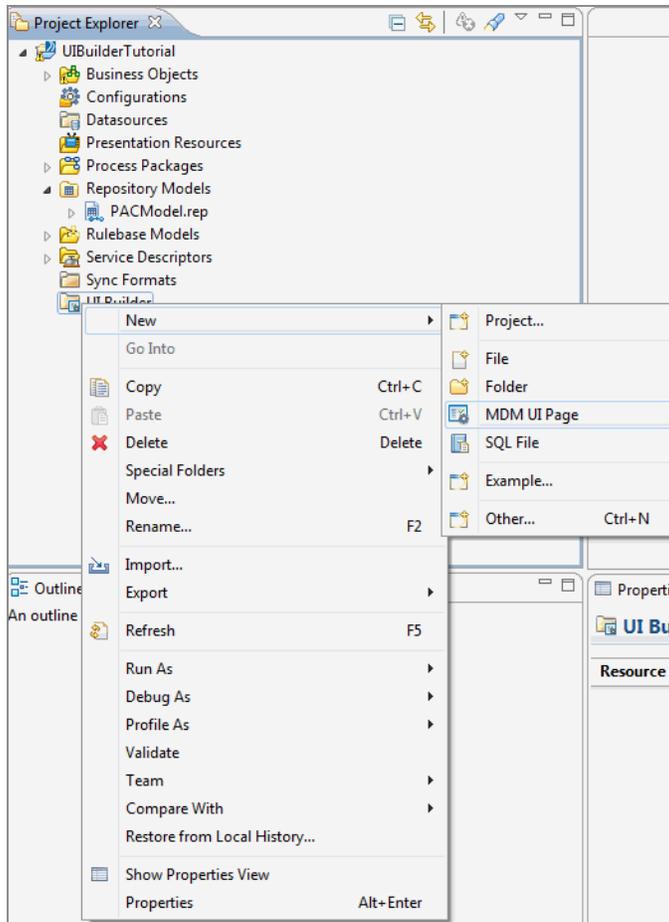
This forms the base data on which a UI page is created.

## Creating a New Custom Page - Adding Client Details

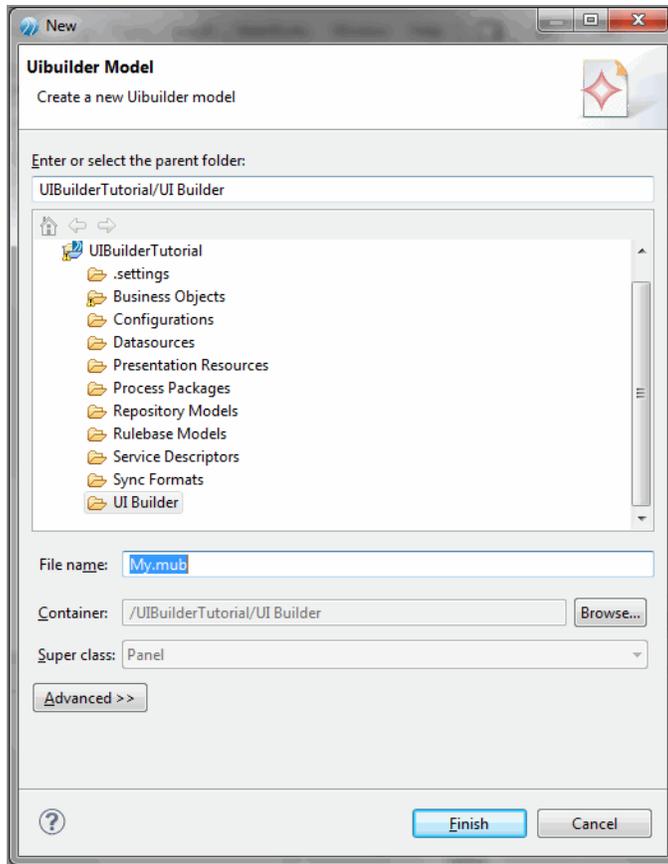
Create a new page with the **Client** repository attributes and relationship.

### Procedure

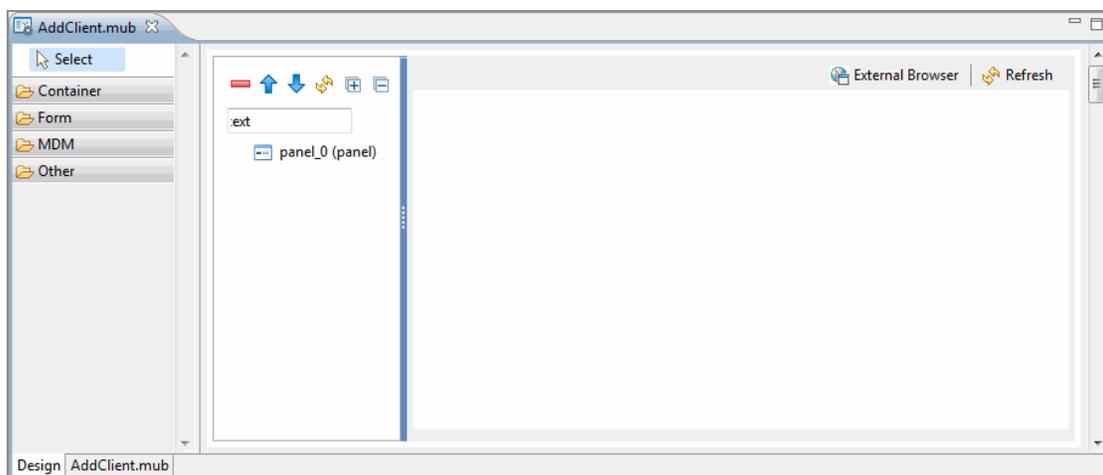
1. Right-click the **UIBuilder** folder in the Project Explorer and select **New > MDM UI Page**.



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

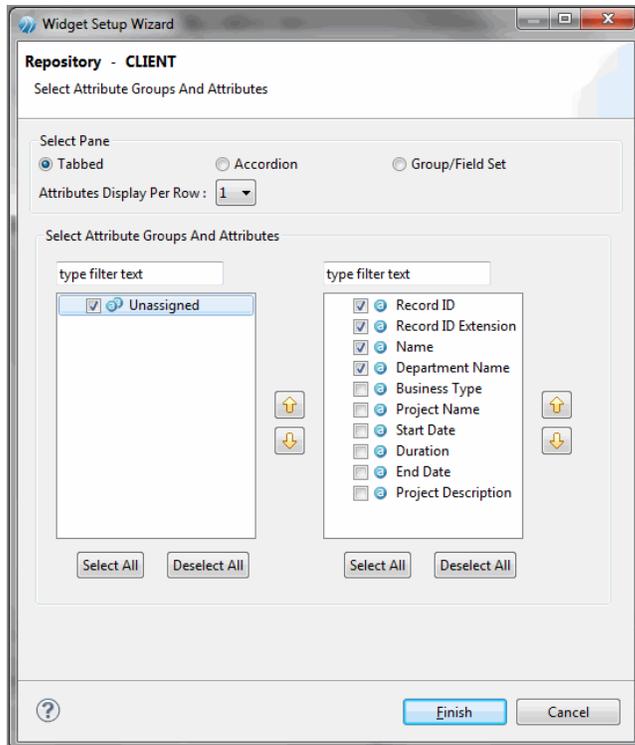


3. Enter the file name as **AddClient.mub** and click **Finish**.
4. The **Add Client** page is displayed on the Canvas.

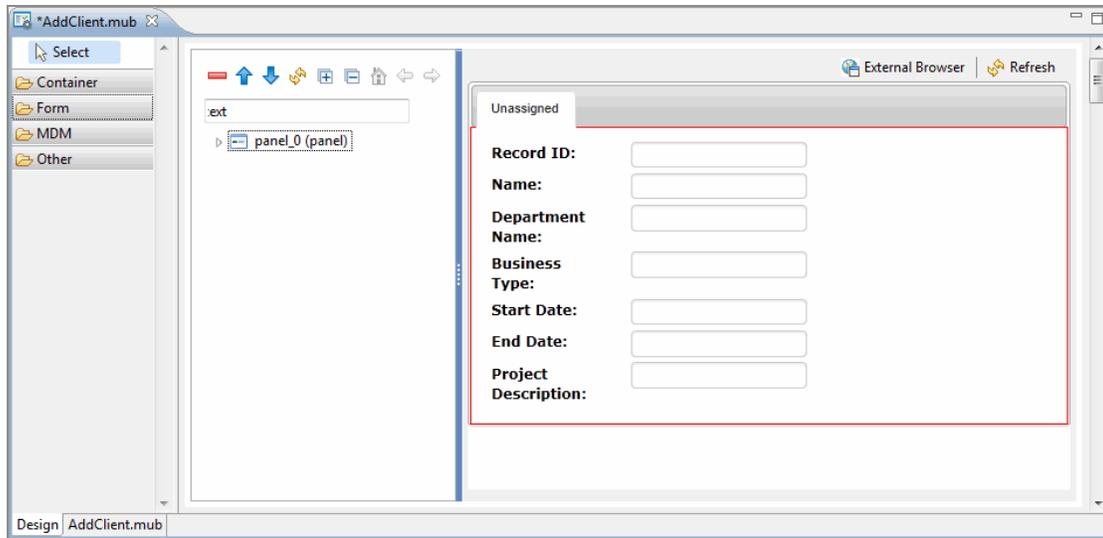


After creating the canvas add the **Client Repository** to the canvas. Drag the **Client Repository** attributes and drop it on the panel.

- Expand the PAC repository model and select the **Client** repository. Drag and drop it on the **panel\_0(panel)**.
- The **Select Attribute Groups and Attributes** wizard is displayed.

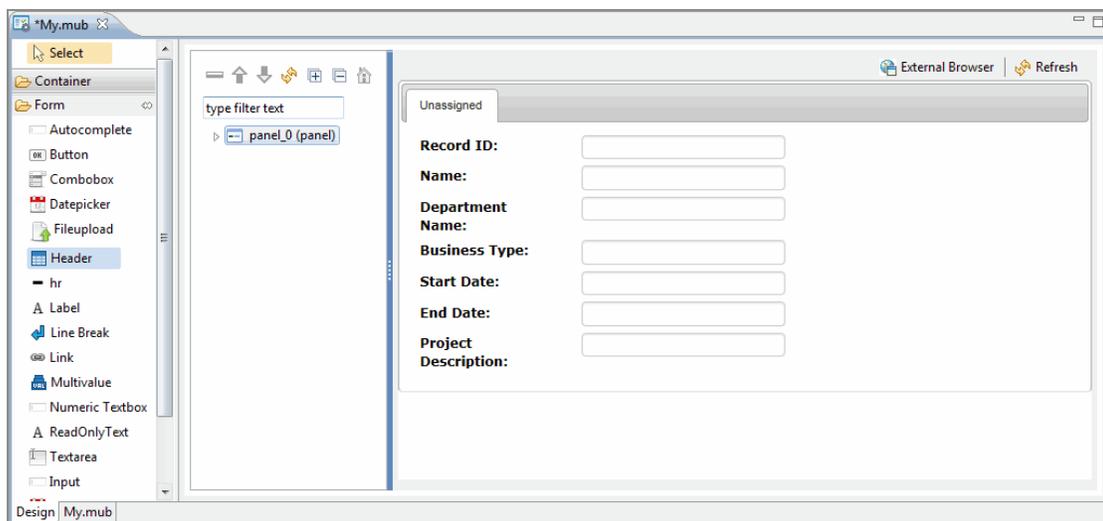


- Select the **Tabbed** pane check box. Select the **Unassigned** check box, all the attributes in the Unassigned Group are displayed.
- Select the check box corresponding to the repository attributes and click **Finish**.
- A form is created with selected attributes and displayed on the canvas.

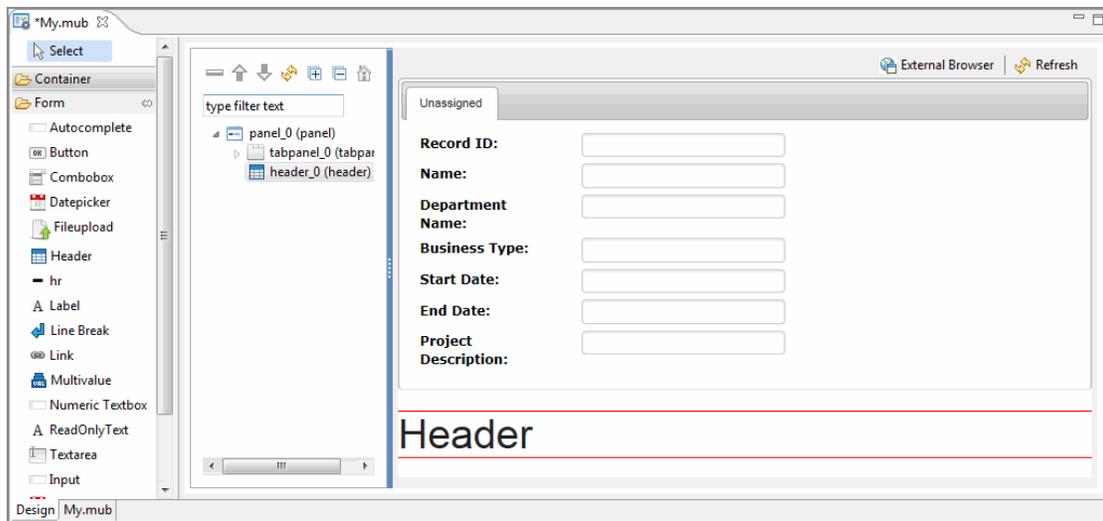


**Add a header to the form. The header widget is available in the Form container.**

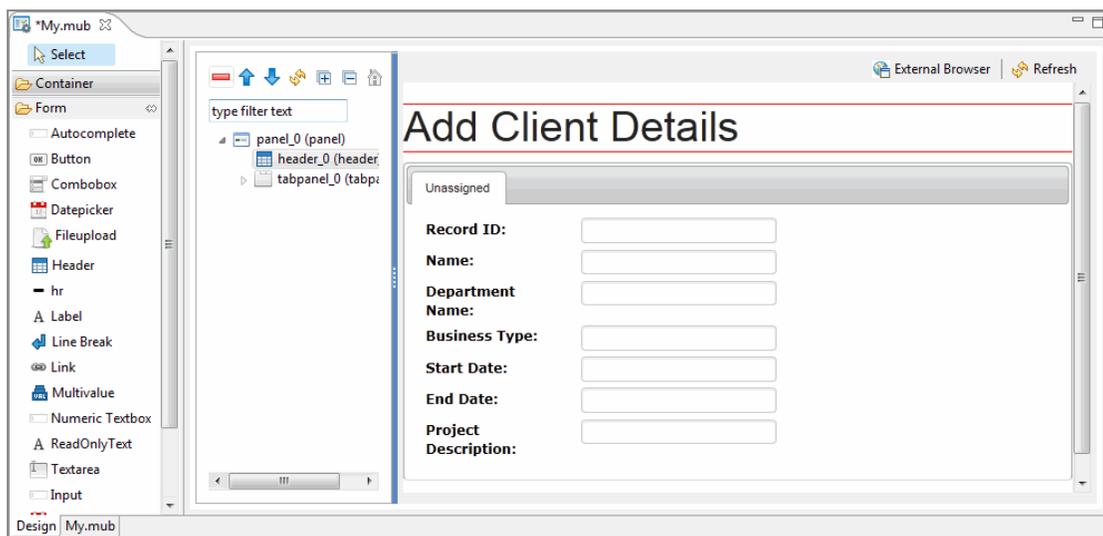
- Expand the **Form** container and select the **Header** widget.



- The header is displayed on the canvas.

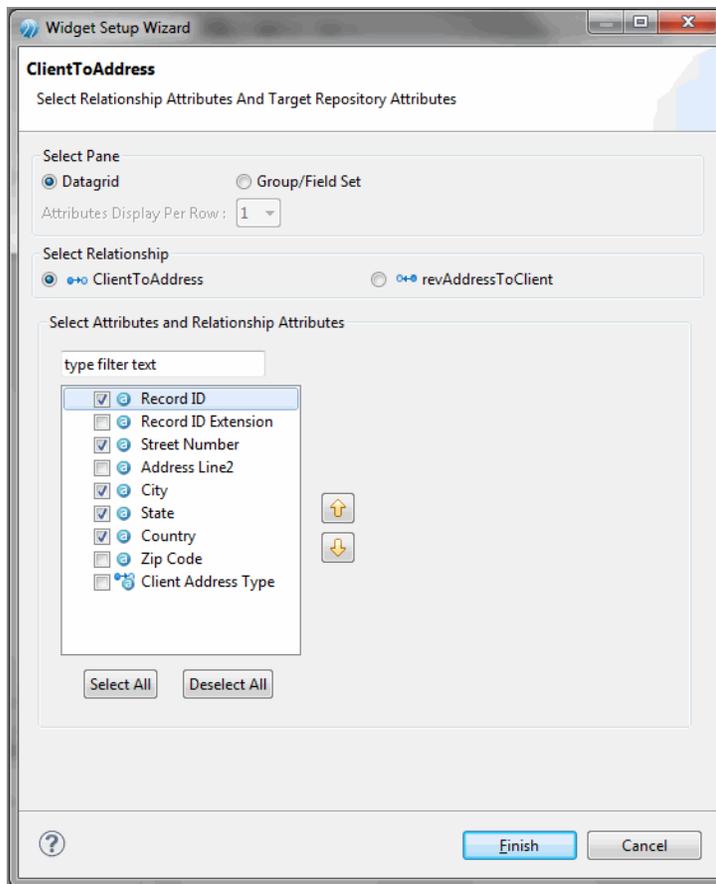


12. Modify the header text to **Add Client Details**. To reorder the header text to the top of the canvas, select the **header\_o(header)** and click .
13. on the Tree Outline toolbar and move it before **tabpanel\_0(tabpanel)** and after **panel\_0(panel)**.

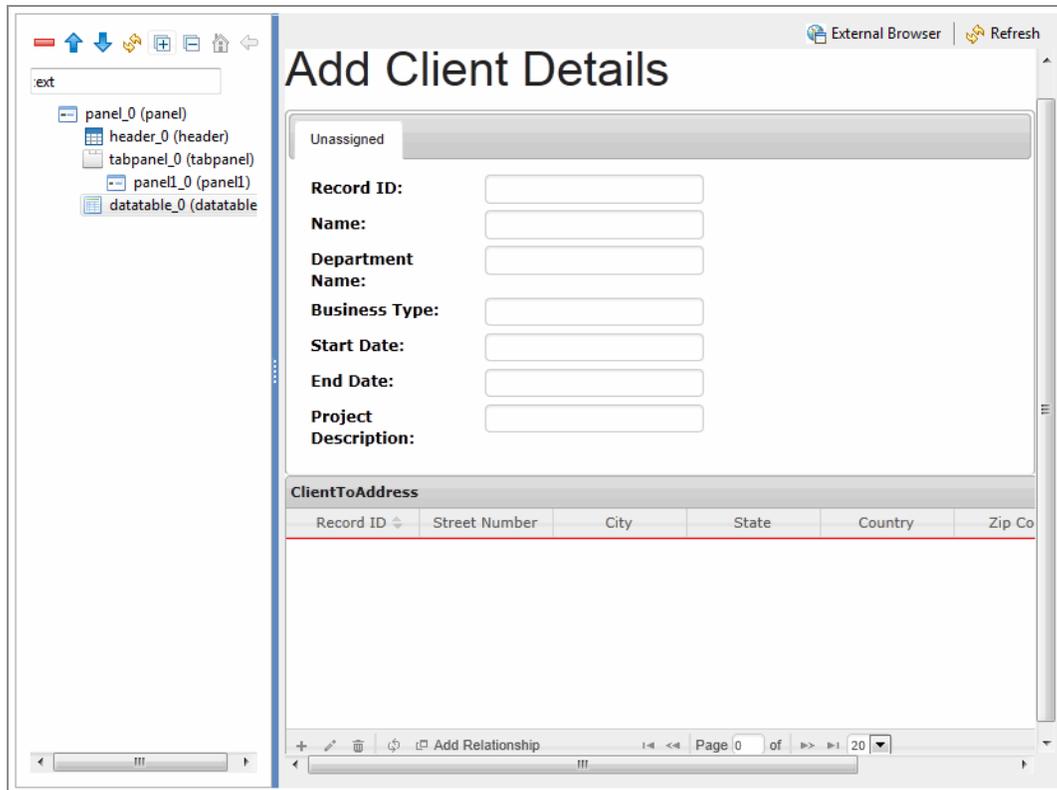


**After adding the repository attributes, add the ClientToAddress relationship to the form by dragging it on the panel.**

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.

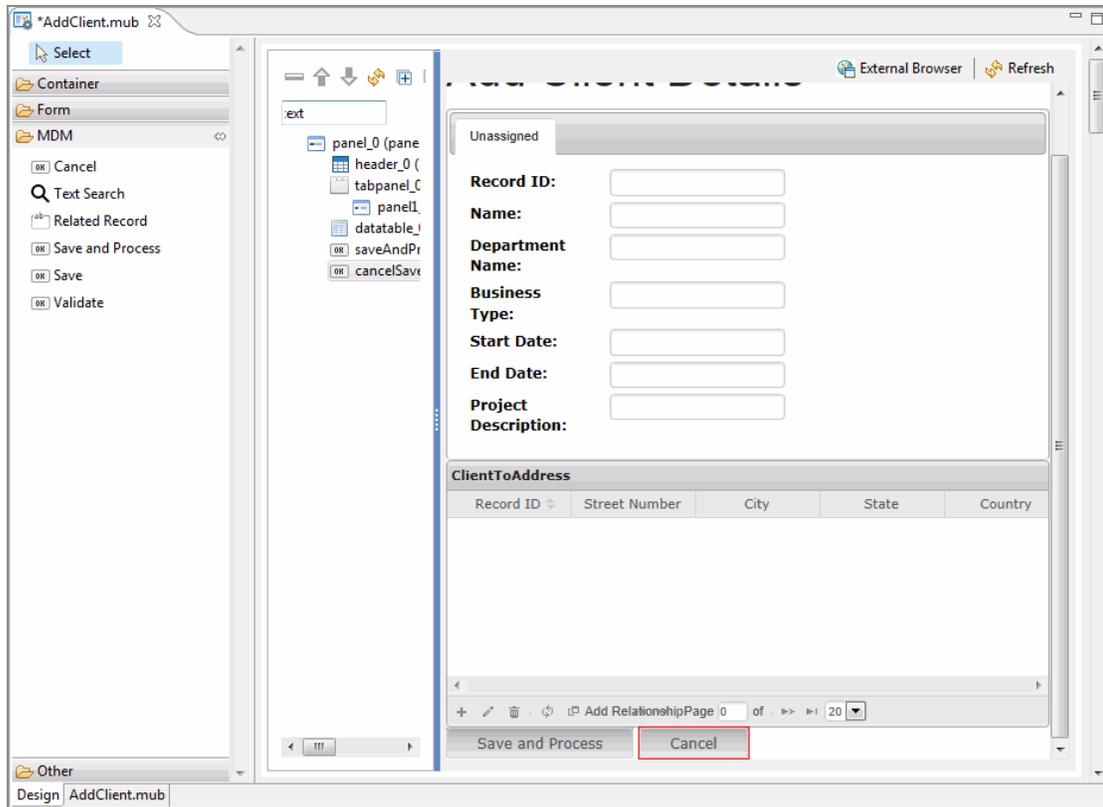


15. Select the **Datagrid** pane and select the check box corresponding to the attributes and click **Finish**.
16. The selected attributes are displayed in the canvas.



**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.**

18. 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

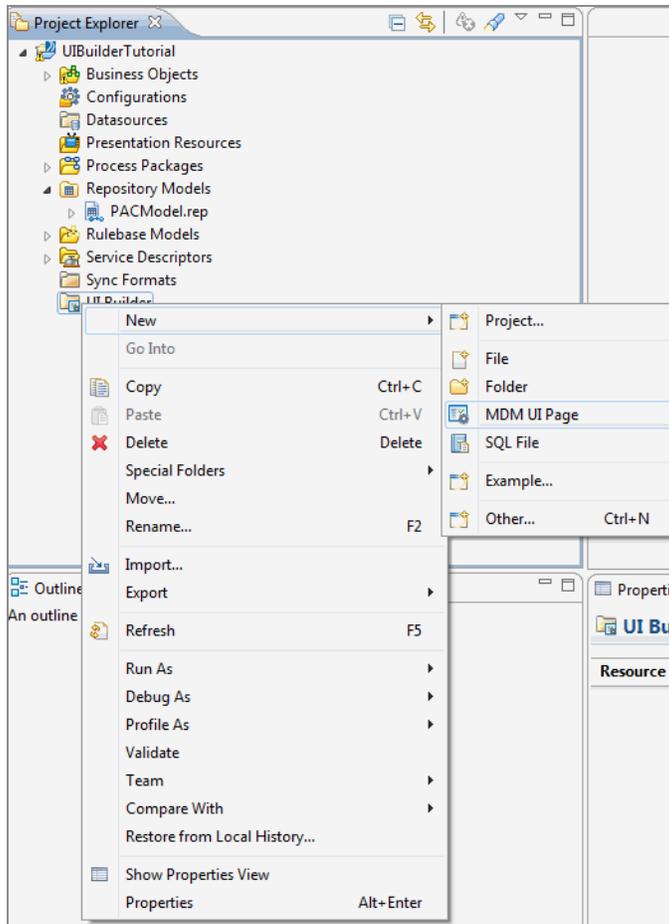
Save and Process Cancel

## Creating a New Custom Page - Modifying Client Details

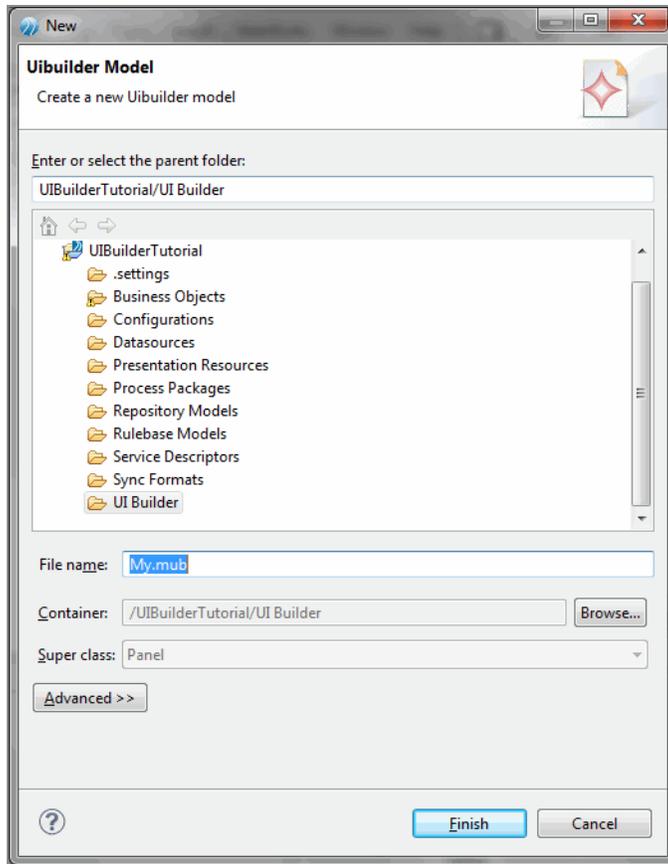
Create a new page with the **Client** repository attributes and relationship.

### Procedure

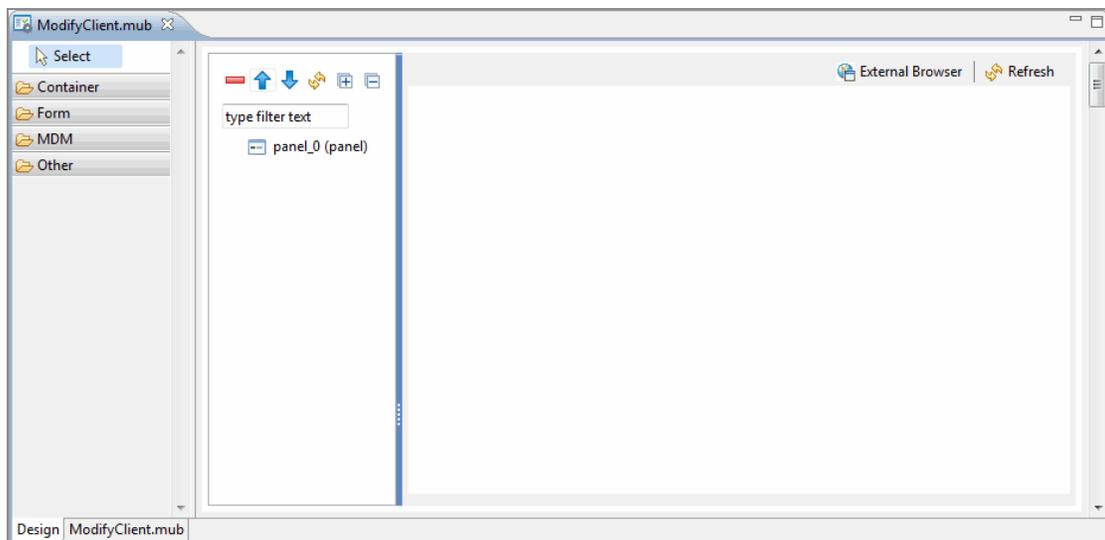
1. Right click the **UIBuilder** folder in the Project Explorer and select **New > MDM UI Page**.



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

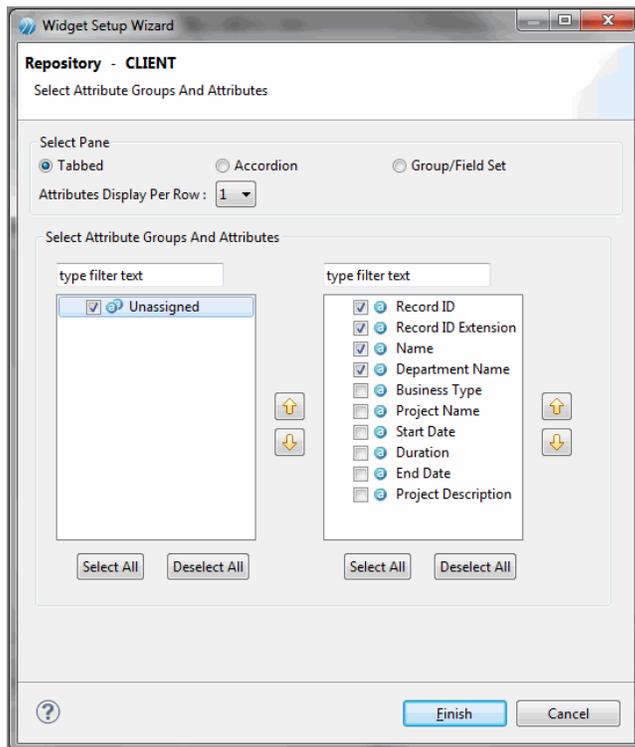


3. Enter the file name as **ModifyClient.mub** and click **Finish**.
4. The Modify Client page is displayed in the canvas.

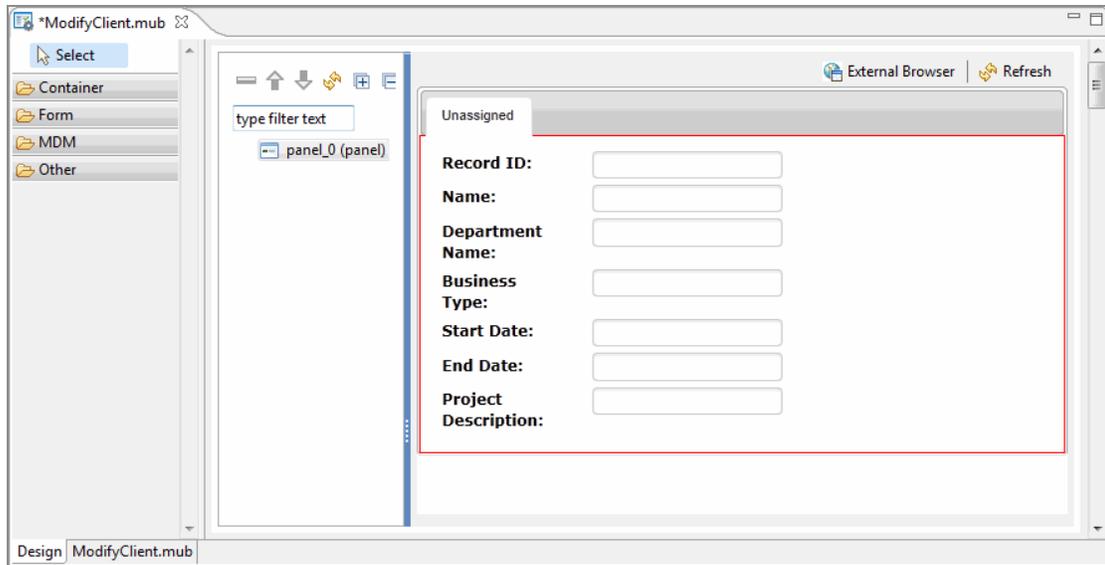


**After creating the canvas, add the Client Repository to the canvas. Drag the Client Repository attributes and drop it on the panel.**

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.

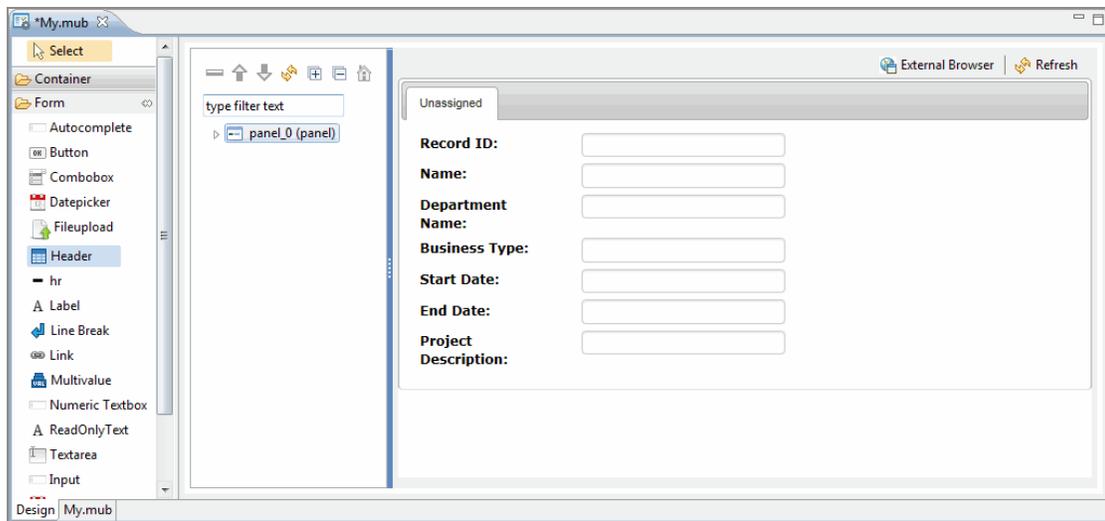


7. Select the **Tabbed** pane check box. Select the **Unassigned** check box, all the attributes in the Unassigned Group are displayed.
8. Select the check box corresponding to the repository attributes and click **Finish**.
9. A form is created with selected attributes and displayed on the canvas.

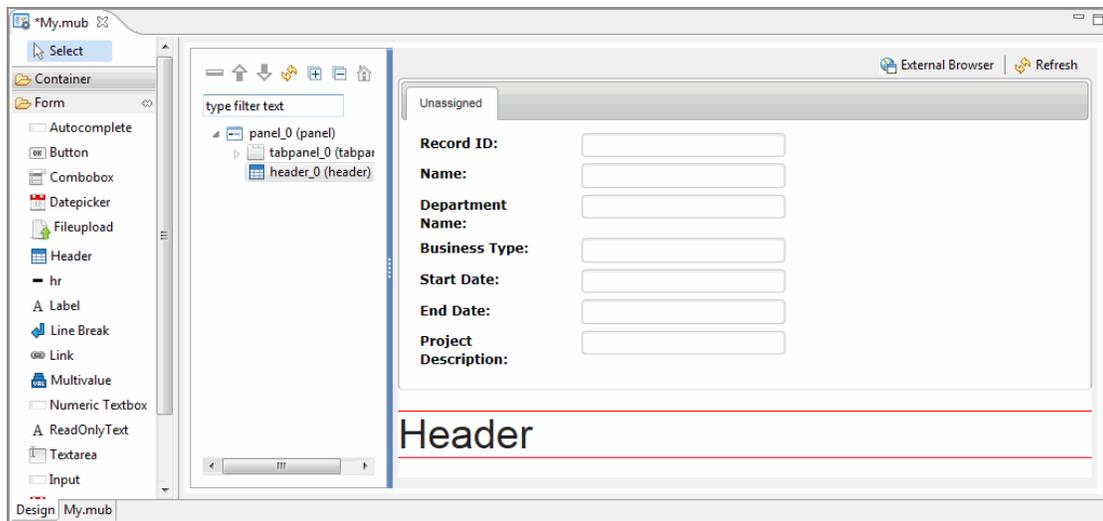


**Add a header to the form, the header widget is available in the Form container.**

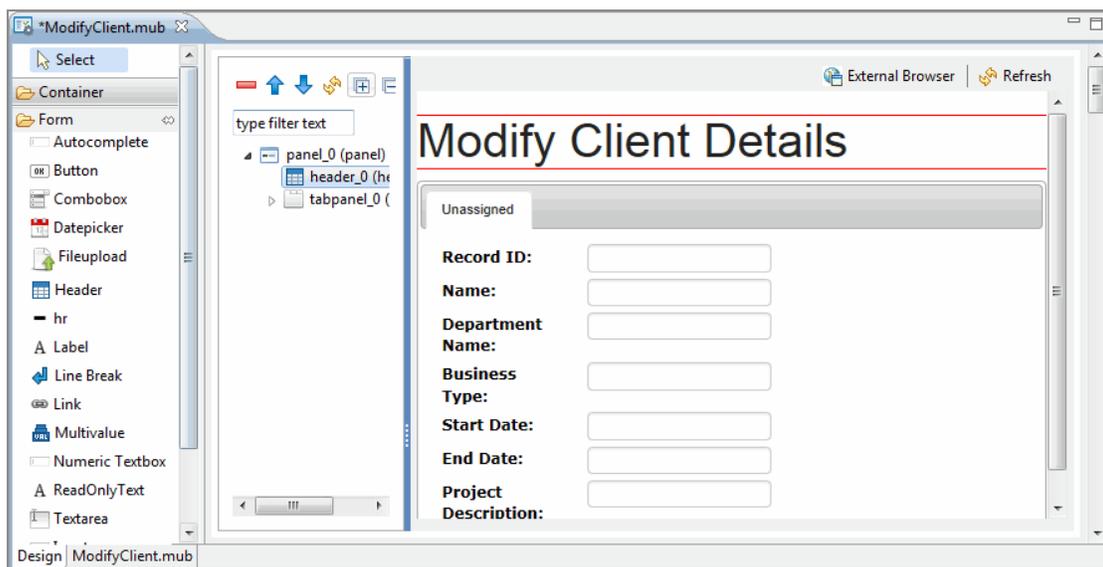
- Expand the **Form** container and select the **Header** widget.



- The header is displayed on the canvas.

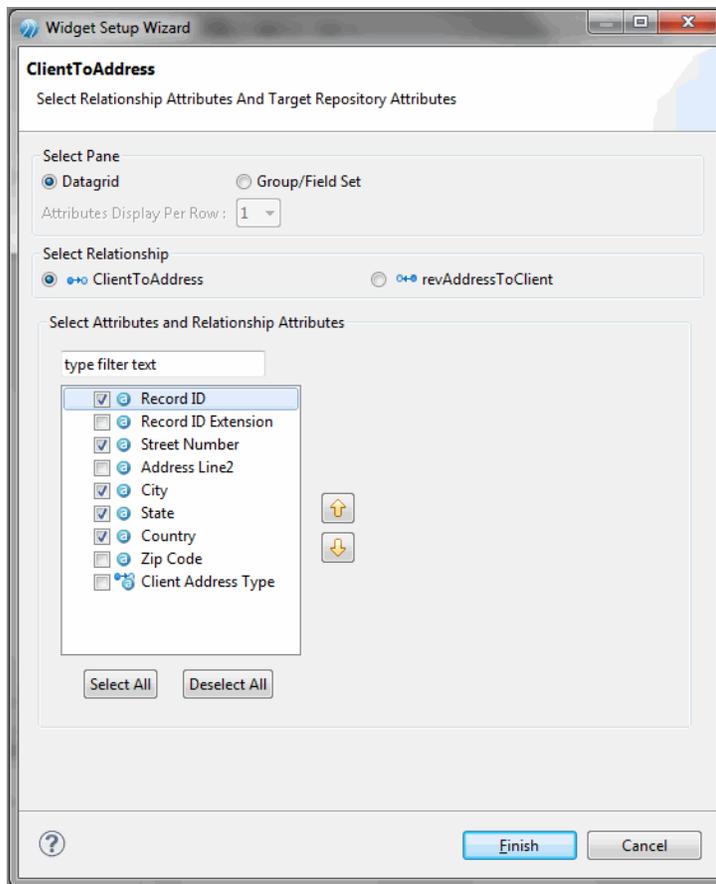


12. Modify the header text to **Modify Client Details**. To reorder the header text to the top of the canvas, select the **header\_o(header)** and click  .
13. on the Tree Outline toolbar and move it before **tabpanel\_0(tabpanel)** and after **panel\_0(panel)**.

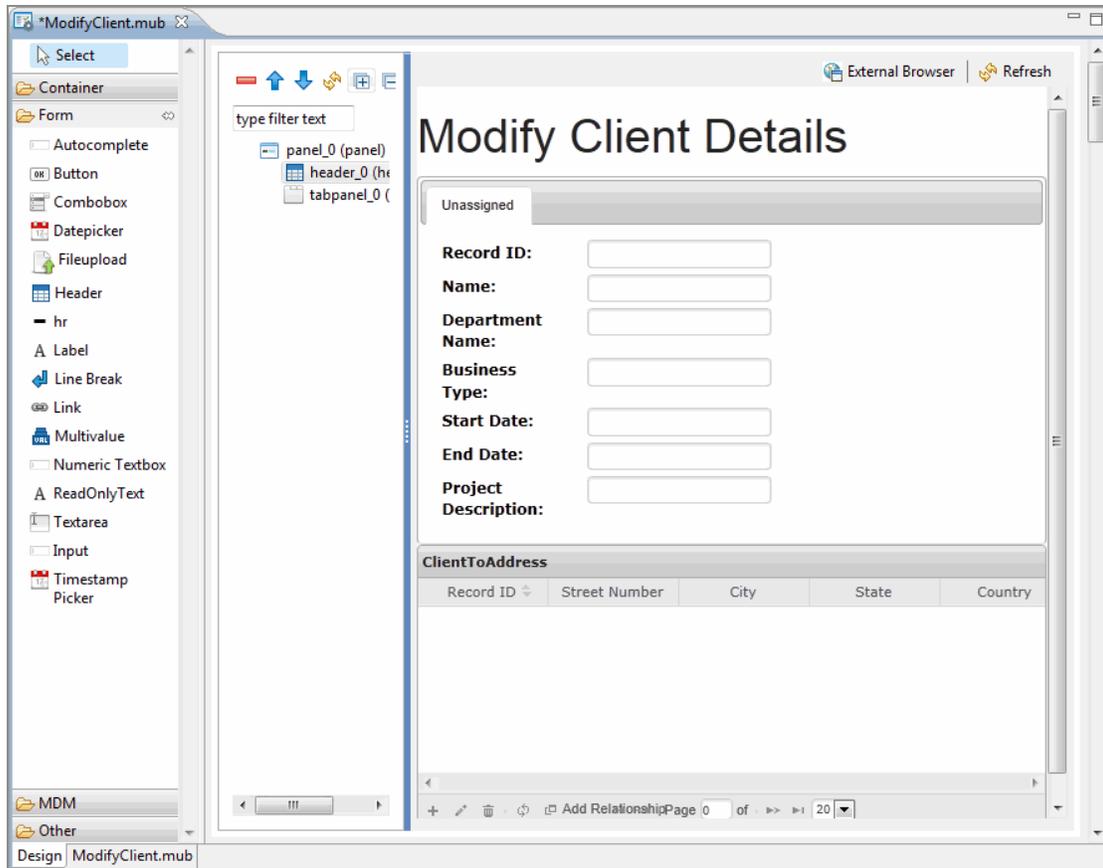


**After adding the repository attributes, add the ClientToAddress relationship to the form by dragging it on the panel.**

14. Select the **ClientToAddress** relationship and drag and drop on the **panel\_0(panel)**. The ClientToAddress wizard is displayed.

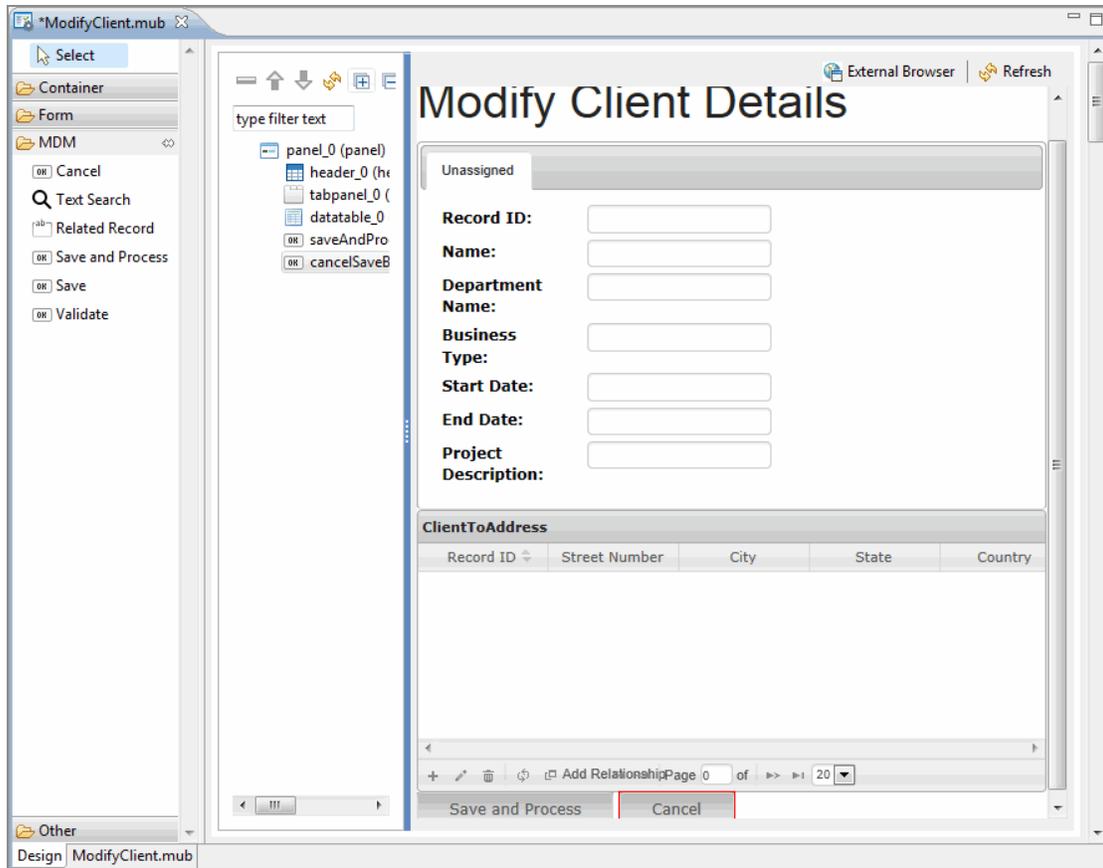


15. Select the **Datagrid** pane and select the check box corresponding to the attributes and click **Finish**.
16. The selected attributes are displayed in the canvas.



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

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

## Result

Unassigned

**Record ID:**

**Name:**

**Department Name:**

**Business Type:**

**Start Date:**

**End Date:**

**Project Description:**

Record ID	Street Number	City	State	Country	Zip Code
-----------	---------------	------	-------	---------	----------

+  Add Relationship

Page 0 of 20

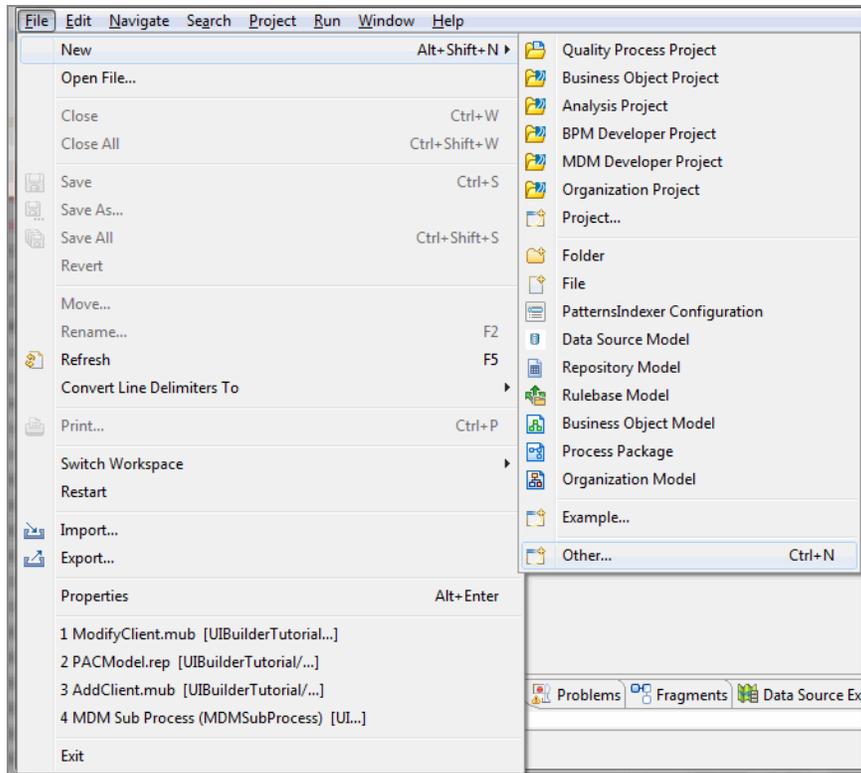
Save and Process Cancel

## Generating WSDL

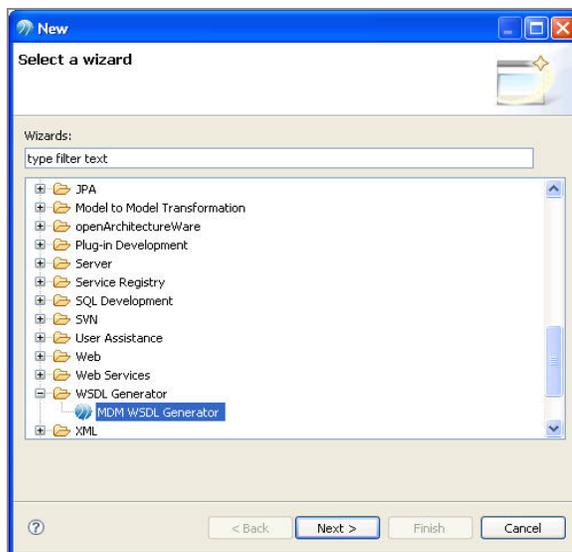
You can now Generate WSDL for the Client repository.

### 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**.

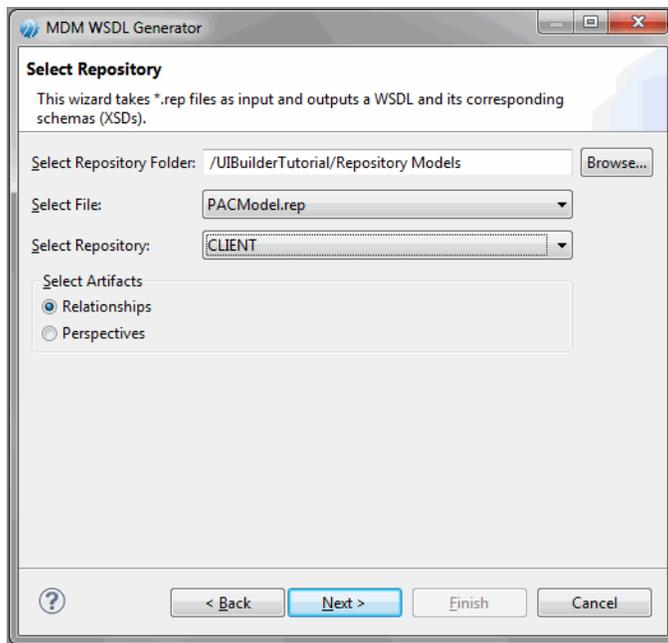


3. Navigate to **File > New > Other**.

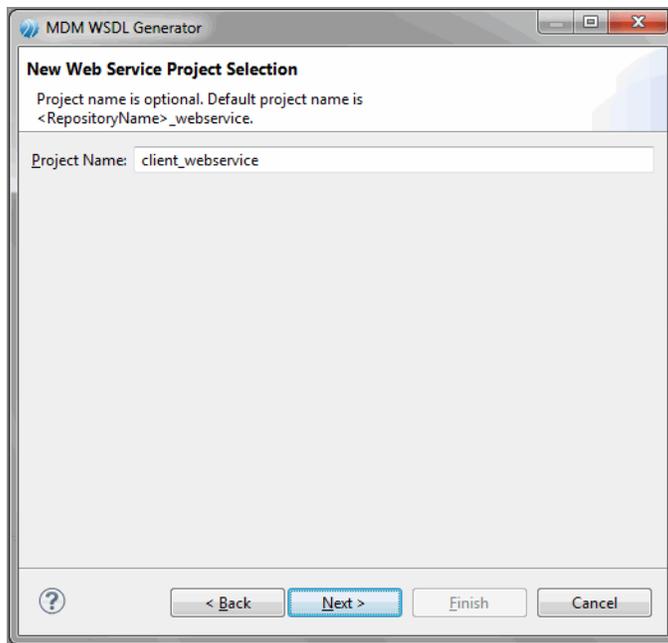


4. Select **WSDL Generator** from the **WSDL Generator** tree node and click **Next**.

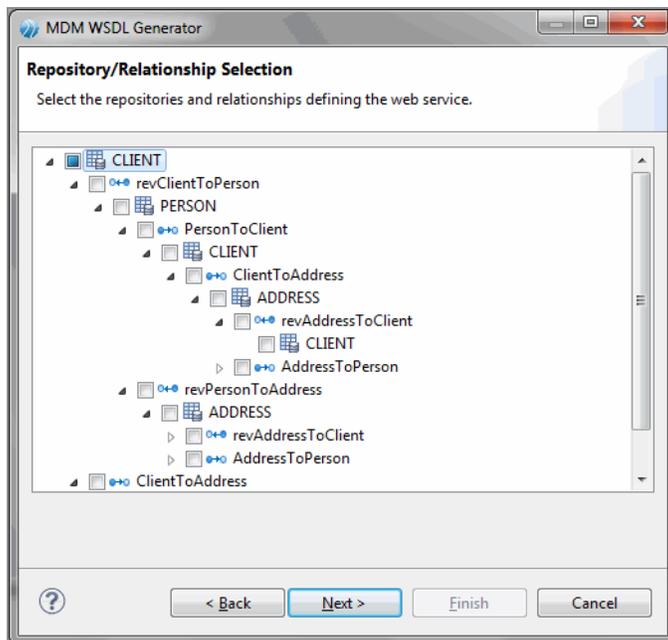
5. The wizard to select the repository is displayed.



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.

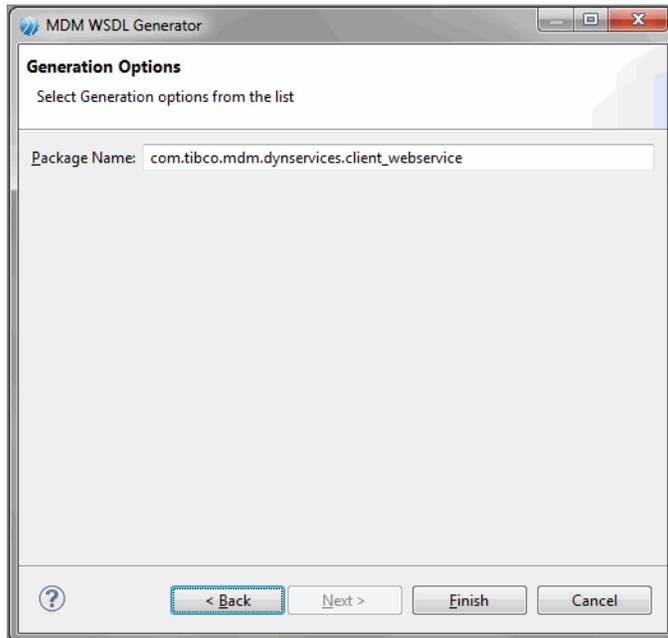


9. Type the appropriate project name in the **Project Name** field. By default, the project name is <repository name>\_webservice.
10. Click **Next**. The **Repository/Relationship Selection** screen is displayed.



11. Select the relationship depth, UI Builder supports multiple levels of relationship.

- Click **Next**. The **Generation Options** screen is displayed.



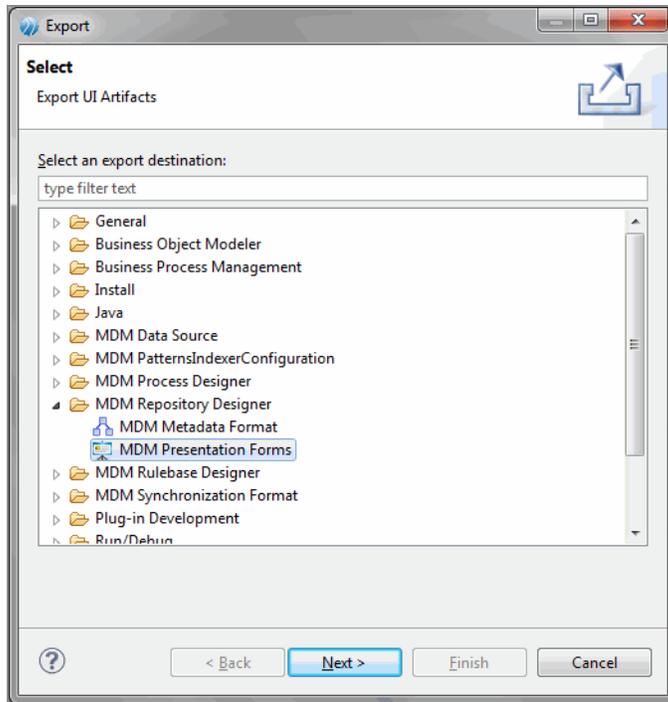
- Type the appropriate package name in the **Package Name** field. By default, a package name is provided. The package name convention is `com.tibco.mdm.dynservices.webservice.<repository name>_webservice`. You can modify the package name.
- Click **Finish**.

## Exporting the Custom Page

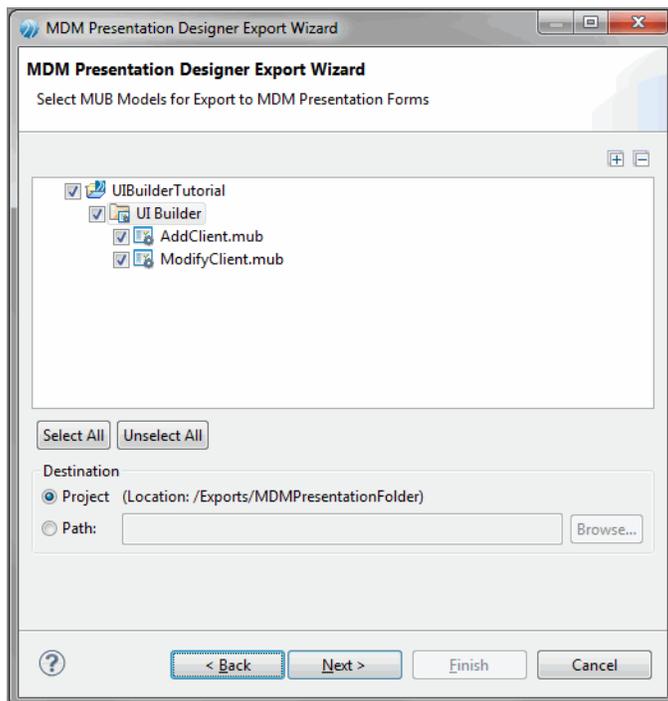
Next, export the UI artifacts. The Export Wizard is used to export the custom page to TIBCO MDM presentation forms.

### Procedure

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



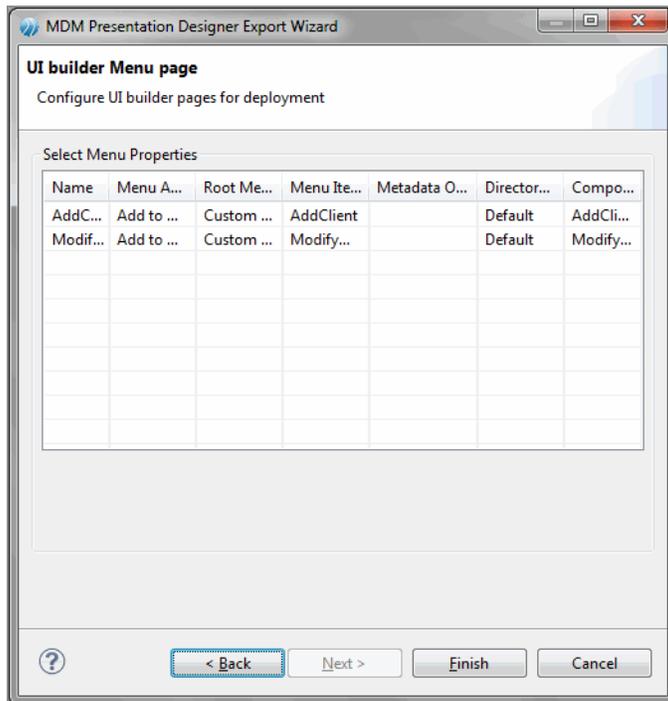
3. The **MDM Presentation Designer Export Wizard** screen is displayed.



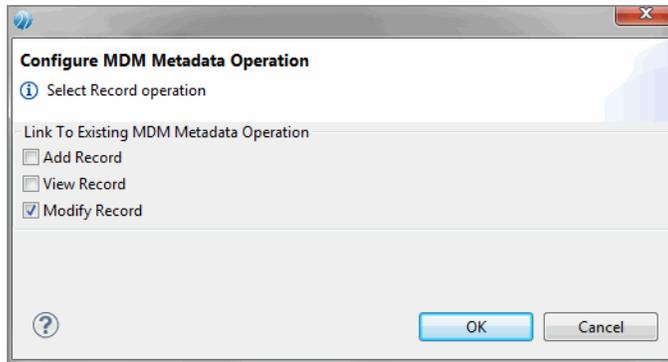
4. Select the MUB models for export by selecting the check box. The default location to

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.

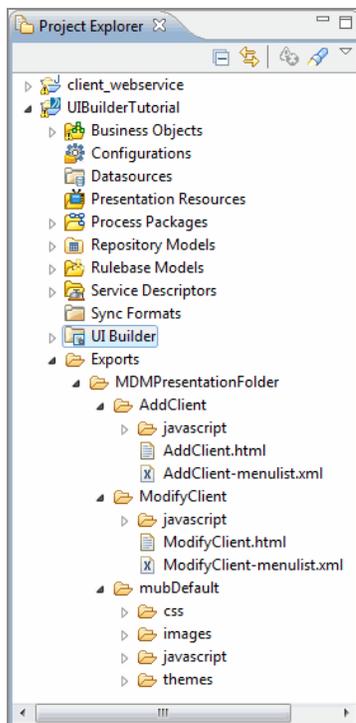


7. Configure the UI Builder pages. For the **Add Client** page, select **Add to Menu** from the **Menu Action** column. Retain the default values in all the other columns. Similarly for the Modify Client page, select **Link to Metadata Operation** from the Menu Action column. On selecting the **Link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



8. 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.

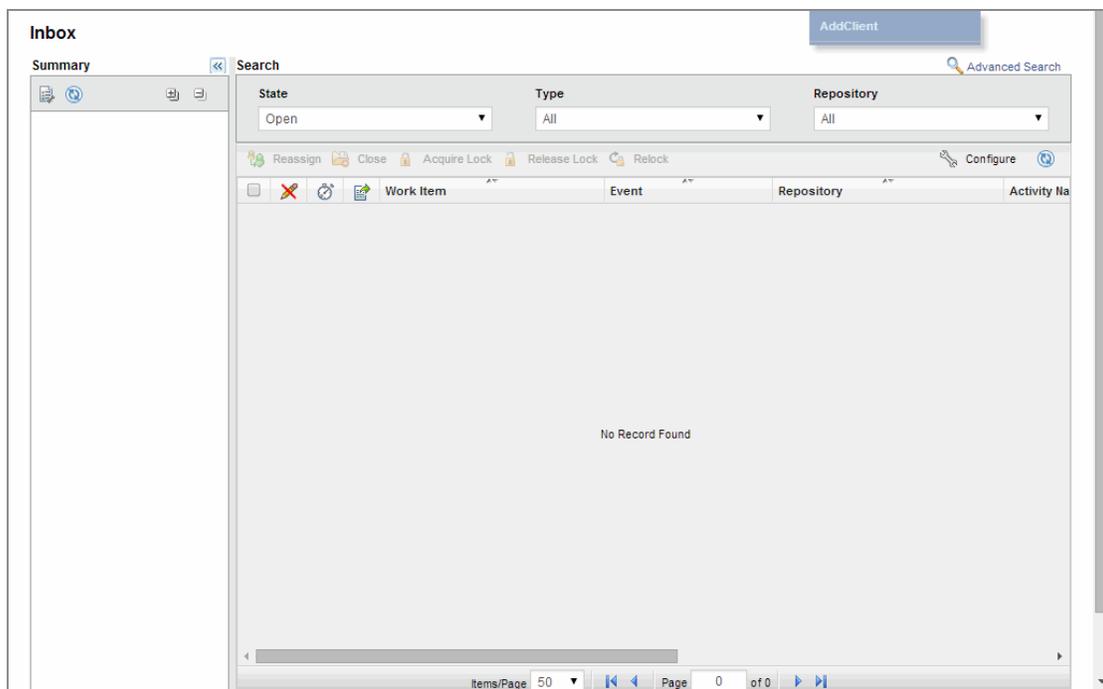
For deployment steps, refer to the section **Deploying the MDM UI page** in the TIBCO MDM Studio UI Builder User Guide

# 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.

## 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
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.

## Add Client Details

Unassigned

Record ID: Record\_3

Name: Jim

Department Name: IT

Business Type: Software

Start Date: 06/18/2014

End Date: 06/13/2018

Project Description: IT department

**ClientToAddress**

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

Page 1 of 1

Save and Process Cancel

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

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

## Browse and Search

Repository Name: CLIENT

Modified By: equals

Modification Date: equals

Search Clear Close

View All

Create Record Modify Copy Compare Show History Quick Export Delete Record

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

10.97.108.82:8180/em/ListRuleDomain?domainentry=busines...

**Next, modify an existing record.**

9. Select the check box corresponding to **Record\_3** and click **Modify**. The **Modify Client Details** page is displayed.

The screenshot displays the 'Modify Client Details' interface. At the top, there is a tab labeled 'Unassigned'. Below this, a form contains the following fields:

- 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 Department

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	6696098

At the bottom of the page, there is a navigation bar with the following elements:

- Buttons: +, -, Add Relationship, Save and Process, Cancel
- Page navigation: Page 1 of 1, 20
- View information: View 1 - 1 of 1

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

## Modify Client Details

Unassigned

**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 Depa

**Success!**

Record is saved.

Ok

**Client To Address**

Record ID	Street Number	City	State	Country	Zip Code
Rec_3	53232	PA	CA	US	8696898

Page 1 of 1 20 View 1 - 1 of 1

Save and Process Cancel

11. Click **Ok**.
12. The modified record is displayed.

### Browse and Search

Repository Name: CLIENT Create Classification Scheme Text Search Configure

**CLIENT**

Modified By: equals Select a value

Modification Date: equals

Search Clear Close

View All

Record ID	Name	Department Name	Business Type	Project Name
Record 1	Jane	Marketing	Services	
Record 2	Peter	Sales	Software	
Record 3	Jim	Purchase	Software	

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

# TIBCO Documentation and Support Services

---

For information about this product, you can read the documentation, contact Support, and join Community.

## How to Access TIBCO Documentation

Documentation for TIBCO products is available on the [Product Documentation website](#), mainly in HTML and PDF formats.

The [Product Documentation website](#) is updated frequently and is more current than any other documentation included with the product.

## Product-Specific Documentation

The documentation for this product is available on the [TIBCO® MDM Studio Documentation page](#).

## How to Contact Support for TIBCO Products

You can contact the Support team in the following ways:

- To access the Support Knowledge Base and getting personalized content about products you are interested in, visit our [product Support website](#).
- To create a Support case, you must have a valid maintenance or support contract with a Cloud Software Group entity. You also need a username and password to log in to the [product Support website](#). If you do not have a username, you can request one by clicking **Register** on the website.

## How to Join TIBCO Community

TIBCO Community is the official channel for TIBCO customers, partners, and employee subject matter experts to share and access their collective experience. TIBCO Community offers access to Q&A forums, product wikis, and best practices. It also offers access to extensions, adapters, solution accelerators, and tools that extend and enable customers to gain full value from TIBCO products. In addition, users can submit and vote on feature

requests from within the [TIBCO Ideas Portal](#). For a free registration, go to [TIBCO Community](#).

# Legal and Third-Party Notices

---

SOME CLOUD SOFTWARE GROUP, INC. (“CLOUD SG”) SOFTWARE AND CLOUD SERVICES EMBED, BUNDLE, OR OTHERWISE INCLUDE OTHER SOFTWARE, INCLUDING OTHER CLOUD SG SOFTWARE (COLLECTIVELY, “INCLUDED SOFTWARE”). USE OF INCLUDED SOFTWARE IS SOLELY TO ENABLE THE FUNCTIONALITY (OR PROVIDE LIMITED ADD-ON FUNCTIONALITY) OF THE LICENSED CLOUD SG SOFTWARE AND/OR CLOUD SERVICES. THE INCLUDED SOFTWARE IS NOT LICENSED TO BE USED OR ACCESSED BY ANY OTHER CLOUD SG SOFTWARE AND/OR CLOUD SERVICES OR FOR ANY OTHER PURPOSE.

USE OF CLOUD SG SOFTWARE AND CLOUD SERVICES IS SUBJECT TO THE TERMS AND CONDITIONS OF AN AGREEMENT FOUND IN EITHER A SEPARATELY EXECUTED AGREEMENT, OR, IF THERE IS NO SUCH SEPARATE AGREEMENT, THE CLICKWRAP END USER AGREEMENT WHICH IS DISPLAYED WHEN ACCESSING, DOWNLOADING, OR INSTALLING THE SOFTWARE OR CLOUD SERVICES (AND WHICH IS DUPLICATED IN THE LICENSE FILE) OR IF THERE IS NO SUCH LICENSE AGREEMENT OR CLICKWRAP END USER AGREEMENT, THE LICENSE(S) LOCATED IN THE “LICENSE” FILE(S) OF THE SOFTWARE. USE OF THIS DOCUMENT IS SUBJECT TO THOSE SAME TERMS AND CONDITIONS, AND YOUR USE HEREOF SHALL CONSTITUTE ACCEPTANCE OF AND AN AGREEMENT TO BE BOUND BY THE SAME.

This document is subject to U.S. and international copyright laws and treaties. No part of this document may be reproduced in any form without the written authorization of Cloud Software Group, Inc.

TIBCO, the TIBCO logo, the TIBCO O logo, BusinessConnect, ActiveMatrix BusinessWorks, and Enterprise Message Service are either registered trademarks or trademarks of Cloud Software Group, Inc. in the United States and/or other countries.

All other product and company names and marks mentioned in this document are the property of their respective owners and are mentioned for identification purposes only. You acknowledge that all rights to these third party marks are the exclusive property of their respective owners. Please refer to Cloud SG’s Third Party Trademark Notices (<https://www.cloud.com/legal>) for more information.

This document includes fonts that are licensed under the SIL Open Font License, Version 1.1, which is available at: <https://scripts.sil.org/OFL>

Copyright (c) Paul D. Hunt, with Reserved Font Name Source Sans Pro and Source Code Pro.

Cloud SG software may be available on multiple operating systems. However, not all operating system platforms for a specific software version are released at the same time. See the “readme” file for the availability of a specific version of Cloud SG software on a specific operating system platform.

THIS DOCUMENT IS PROVIDED “AS IS” WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR NON-INFRINGEMENT.

THIS DOCUMENT COULD INCLUDE TECHNICAL INACCURACIES OR TYPOGRAPHICAL ERRORS. CHANGES ARE PERIODICALLY ADDED TO THE INFORMATION HEREIN; THESE CHANGES WILL BE INCORPORATED IN NEW EDITIONS OF THIS DOCUMENT. CLOUD SG MAY MAKE IMPROVEMENTS AND/OR CHANGES IN THE PRODUCT(S), THE PROGRAM(S), AND/OR THE SERVICES DESCRIBED IN THIS DOCUMENT AT ANY TIME WITHOUT NOTICE.

THE CONTENTS OF THIS DOCUMENT MAY BE MODIFIED AND/OR QUALIFIED, DIRECTLY OR INDIRECTLY, BY OTHER DOCUMENTATION WHICH ACCOMPANIES THIS SOFTWARE, INCLUDING BUT NOT LIMITED TO ANY RELEASE NOTES AND "README" FILES.

This and other products of Cloud SG may be covered by registered patents. For details, please refer to the Virtual Patent Marking document located at <https://www.cloud.com/legal>.

Copyright © 2007-2024. Cloud Software Group, Inc. All Rights Reserved.