Govern Model Designer (MoD) Reference

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MS Govern

Model Designer (MoD)

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Table of Contents

Disclaimer or Warranties and Limitations of Liabilities i
Introduction: Model Designer (MoD) 1

Chapter 1: Getting Started 2
System Requirements and Installation 2
Prerequisites 2
Authentication Mode 2
Datasource Connection Keys 3
Logging in to Govern MoD 3
Starting Govern MoD 4

Chapter 2: Govern Model Designer User Interface 5
Main Menu 5
Status Bar 5
Govern MoD Version 6
Connection Key Name 6
Operation Status 6
Windows System Information 6
MoD Business Models Toolbar 6
OF Models 6
Business Models 7
Loaded Business Models 8
MoD Toolbar Actions 8
MoD Editor 9
Changing the Position of Entities in the MoD Editor 9
MoD Property Explorer 11
Business Model 11
Business Entity 11
Element Key 12
Property Explorer Actions 12

Chapter 3: Setting Up Business Models 14
Prerequisites 14
The Model Designer Business Models 14
Creating a New Business Model in the Govern Model Designer 15
Opening a MoD Model 17
Integrating Business Entity Designer Models 17
Synchronizing BED and MoD Models 18
Updating a MoD Business Model 19
Organizing Dividers into Groups 19

Duplicating a MoD Business Model 20
Duplicating the OpenForms Model in the Model Designer 21
Adding the New Form to a Profile 22
Synchronizing the New Model and Setting the Security 24
Viewing the New Form 24
Deleting a MoD Business Model 25
Deleting a Business Model from the OF Models Section 25
Deleting a Business Entity from the MoD Editor 26

Chapter 4: Viewing and Defining MoD Properties 28
Defining MoD Business Model Properties 29
Checkout 30
Datasource 30
Description 31
Grouping 31
Misc 32
Defining MoD Entity Properties 34
Cell Zone Properties 34
Content 34
Grouping 34
Miscellaneous 35
Order By 39
Position 40
Row 41
UI 41
Content Zone Properties 41
Datasource 41
Database Actions 42
Default Access Rights 42
Zone Actions 43
Defining Element Properties 44
Datasource 44
Default Access Rights 44
Miscellaneous 45
UI Control Mapping 46
Mapping Settings 46
Adding a Hyper link to an Element 50
Creating a Query that Calls a Hyper link 50
Linking the Query to an Attribute 51
Defining User Properties for the Element 52
Synchronizing the Model and Setting the Security 53
Testing the Hyper link 53

Chapter 5: Designing the Form 55
Organizing the Parameters on the Form 55
Changing the Position of the Parameters 55

Deleting a Parameter 55
Changing the Divider of a Parameter 56
Changing the Position of Dividers on the Form 58
Changing the Position of Dividers within a Group 58
Changing the Position of Dividers on the Form 58
Adding Parameters to the Form 59
Adding a New Action Button 59
Modifying an Action Button 59
Scenario: Setting up a Group of Entities 61
Defining the Group within the Model 62
Assigning Properties within the Group 63
Index 65

Introduction: Model Designer (MoD)

Overview

The Govern Model Designer (MoD) is used in conjunction with the Govern Business Entity Designer (BED) to set up custom end-user forms for governing your data.

Forms are based on business models and business entities. The initial setup of the business models is performed in the Business Entity Designer. This includes setting the datasource, creating the business models, adding the entities, mapping the attributes and defining their properties, creating links between business entities and between datasource tables, and adding validation rules.

In the Govern Model Designer (MoD), you perform the final setup for the end-user forms. The models you create in this application are the basis of the end-user forms, such as Govern. In this application, you define the position of the parameters on the form and the dividers on the form. In this application you can add custom controls and action buttons.

The two applications are synchronized. The business models that you create in the Business Entity Designer (BED) are automatically imported into the Model Designer. If you want to make modifications to the business models, entities, or attributes, it is recommended to use the Business Entity Designer. The changes are automatically imported to the Model Designer.

This guide describes how to set up the Model Designer business models, how to integrate the Business Entity Designer entities an attributes, and how to define the position of the parameters and the dividers.

The *Govern Model Designer Troubleshooting* guide provides screen shots of the Model Designer business models with their business entities, custom controls, action buttons, and key element keys. It can be used as a trouble-shooting reference.

Chapter 1: Getting Started

Overview

This chapter provides references for the system requirements, installation procedures, and required applications for the Govern Model Designer 4.5.

System Requirements and Installation

The Model Designer (MoD) is installed by the Govern Deploy EZ. For details on the system requirements and installation procedures for the MoD, refer to the System Requirements guide.

Prerequisites

Before launching the Model Designer (MoD) and configuring your business models, launch the Govern New Administration (GNA) and configure the following:

- Authentication Mode
- Datasource Connection Keys

After defining the prerequisites for your deployment, launch the Business Entity Designer (BED) and configure your business entities and models as described in the *Govern Business Entity Designer (BED)* guide. After that you are ready to run the MoD.

Authentication Mode

You define the authentication mode when you set up your deployment in Govern Deploy EZ. According to the type of authentication you are running, you need to perform one of the following setups. This has to be done only once for all applications.

- **MSAD Authentication**: If you are running Microsoft Active Directory (MSAD) Authentication, set up your user accounts in Active Directory. Then, run the Active Directory and Govern Integration Tool in the Govern New Administration (GNA) application.
- **Govern Authentication**: If you are running Govern authentication, create an administrator account for the user, who is running MoD, in the

USR_USRFILE validation table, using the User Maintenance form in Govern Admin (GNA).

For full details on authentication, refer to the *Govern Deploy EZ* guide.

Datasource Connection Keys

Before you can integrate your data with MS Govern applications, you need valid connection keys for all the datasources that you will be using. The connection key to your primary datasource is generated when you configure your deployment.

You can then run the Connection Key Management utility in the GNA and configure connection keys for as many secondary datasources as required.

For details on setting up a deployment and connection key for your primary datasource, refer to the *Govern Deploy EZ* guide. For details on creating connections keys for your secondary datasources, refer to the *Govern New Administration Application (GNA)* guide.

Logging in to Govern MoD

To log in, launch the Model Designer as follows according to the authentication mode you are running.

- **Govern**: With this Authentication mode, the user needs a Govern user name and password and is authenticated against the Govern user table: USR_USERFILE.
- **Microsoft Active Directory (MSAD)**: This is the default. It requires prior setup to integrate the Active Directory user and group accounts with the MS Govern applications. User information is maintained in Active Directory and users log in with their Windows user name and password.

Refer to the Govern Deploy EZ and Govern New Administration (GNA) guide for more information.

Starting Govern MoD

Launch the Model Designer (**MoD**). from the Govern program group in the *Windows* Start menu or from a desktop shortcut:

If you are using Govern Authentication:

1. At the login window, enter your assigned *Username* and *Password.*
2. Click **OK** to start the program.
3. Click **OK** to start the program.

   If an incorrect username or password is entered, an error message is displayed;
4. Click **OK**, and enter the correct information.

Note: After three failed attempts to enter the correct login credentials, the login screen and application shut down.

If you are running MSAD Authentication, you are automatically logged in with your Active Directory user name and password.

If you select None as the authentication mode, there is no log in. However, this mode is not recommended.

Chapter 2: Govern Model Designer User Interface

Overview

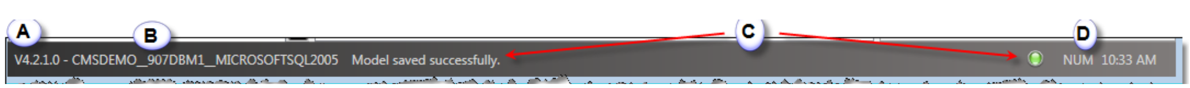
This chapter provides a brief overview of the Govern Model Designer (MoD) user interface (UI). This interface includes the Main Menu, Status Bar, MoD Toolbar, MoD Editor, and Property Explorer window.

Main Menu

The Main Menu of the Govern Model Designer includes the following items:

- File options: New, Open, Save, and Exit
- Icons for New, Open, Save, and Delete actions
- Windows (Show Property Explorer, Show Toolbar)
  The Property Explorer and Toolbar can be hidden in order to provide more room for the MoD Editor.These menu items are used to show these components after they have been hidden.
- Windows Communication Foundation (WCF).
  The WCF option has two menus items: Load Models and Change Connection.
- Language Selection English or French / Anglais or Français: All translated data appear in the selected language.

Status Bar



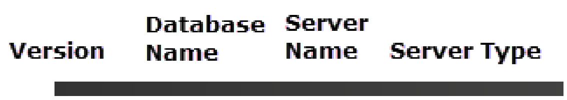
The MoD status bar displays the MoD software version number (**A**), Connection Key Name (**B**), Operation Status (**C**), and Windows system information (**D**).

Govern MoD Version

The software version number (**A**) of the Govern Model Designer is displayed to the left of the Connection Key Name.

Connection Key Name

The name of the connection key to your primary datasource is displayed at the bottom of the application window (**B**).



The Connection Key Name comprises the name of the datasource, the datasource server name, and the datasource type. The connection key provides access to your datasource from Govern applications. It is generated by Govern Deploy EZ when you configure your deployment. For details, refer to the *Govern Deploy EZ* guide.

Operation Status

A message indicating the status of the last operation (**C**), such as "Model saved successfully," is indicated to the right of the connection key name. The green light indicates that the operation was successful.

Windows System Information

The system time is displayed in the right corner of the application. Beside this, the status of the various locks is displayed, such as the Num Lock, the Caps Lock, and the Scroll Lock (**D**).

MoD Business Models Toolbar

The MoD toolbar displays three types of Business Models on the left of the interface, as follows:

OF Models

At the top of the toolbar, the OpenForms (OF) Models are displayed. These are the business models that have been created in the Govern Model

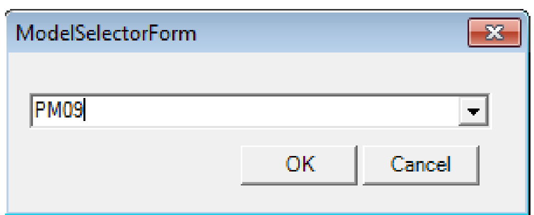
Designer, as described under *Creating a New Business Model in the Govern Model Designer on page 15*.

To open an OF Model in the MoD Editor:

1. Launch the MoD.
2. Expand the OF Models section in the MoD Toolbar on the left.
3. Right click on the model you want to open.
4. Select **Open**.

An alternative way to open an OF Model is:

1. Select **File** > **Open** or click the Open icon in the main menu.



2. Select the model code for the OF Model you want to open.
3. Click **OK**.

Business Models

The middle section of the MoD Toolbar lists the Business Entity Designer (BED) business models. These are automatically imported into the Model Designer. In order to use a BED model in the Model Designer and eventually a user form, you need to load it to the Loaded Business Models section. From there, you can open it in the MoD Editor and make the required modifications.

To load a BED business model:

1. Expand the Business Models section in the MoD Toolbar.
2. Select the model you want to load.
3. Click **Load**.

Loaded Business Models

You can expand the business models in the Loaded Business Models section of the toolbar to display a list of the business entities in each model. Then, expand a business entity to view a list of the attributes it includes.

The Loaded Business Models section:

- Lists the OF business models that are open in the MoD Editor. When you open an OF Model in the top section of the toolbar, it is automatically listed under Loaded Models.
- Lists the Business Entity Designer (BED) models loaded from the Business Models section.

Once a business model has been loaded to the Loaded Business Models section or opened in the MoD Editor, it can be integrated with a new or existing MoD business model.

To integrate a loaded business model:

1. Open a business model from the OF Models section or create a new one.
2. Expand the Loaded Business Models section of the MoD Toolbar.
3. Select a loaded model and, holding down the mouse, drag it into position on the MoD Editor.

For details, see Integrating Business Entity Designer Models on page 17.

MoD Toolbar Actions

The MoD Business Models Toolbar has two buttons:

Auto Hide: Select this button to dock the Toolbar on the side of the interface and provide more room for the MoD Editor. To return the toolbar to its normal position, select this button again.

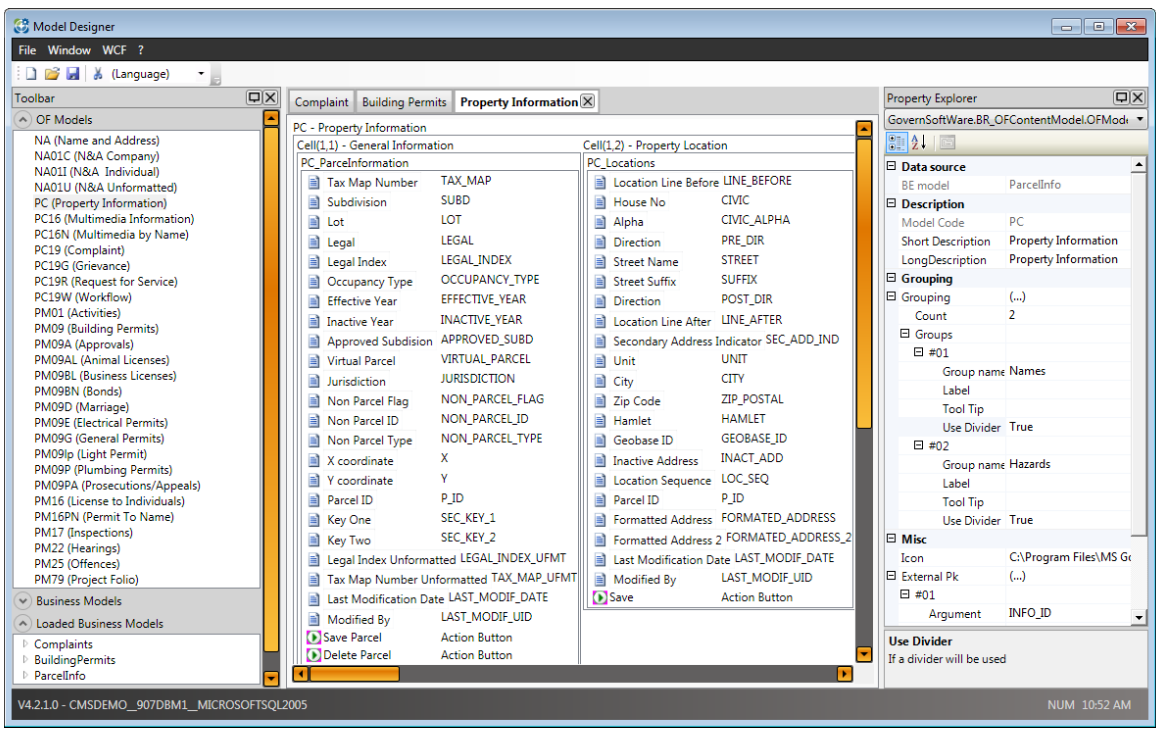
Close: Select this button to close or hide the Toolbar. To restore or display the Toolbar, select **Window** > **Show Toolbar** from the main menu.

MoD Editor

The MoD Editor In the center of the Govern Model Designer displays the open business models.

Each model is displayed on a separate divider. Select a divider, at the top of the form to bring the model into focus. Each business entity in the model is displayed in a separate column. The element keys in each business entity are listed in the order they will appear on the end-user form.

The following screen shot displays three fully loaded MoD business models on the MoD Editor. The Property Information model is in focus. Its properties are displayed in the Property Explorer window.

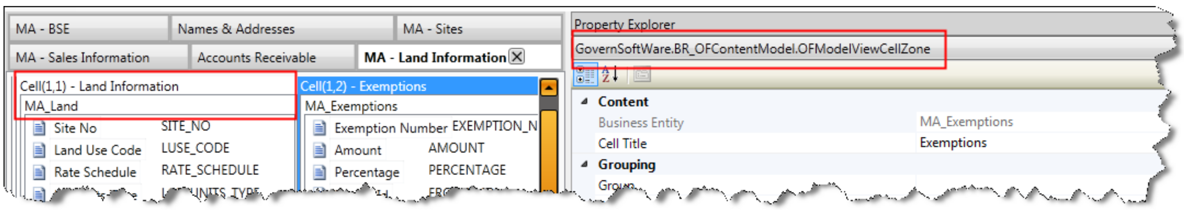


Changing the Position of Entities in the MoD Editor

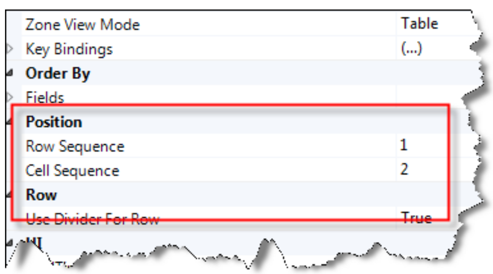
To facilitate the administrative setup, you can change the order of the business entities as they are laid out on the MoD Editor.

To change the position of an entity on the MoD Editor:

1. Launch the Model Designer.
2. Expand the OF Models section of the MoD Toolbar.
3. Right-click on the model that you want to modify and select **Open**. This opens the business model in the MoD Editor.



4. Select the cell title bar of the model in the MoD Editor.



5. Select **Position** > **Cell Sequence** in the Properties window.
6. Enter the number corresponding to the column where you want the divider to appear.
7. Click **Save**.

The other dividers on the form are repositioned automatically.

For example, on the Building Permits form, to change the Activities divider from column 2 to 16:

1. Select the Activities column in the Model Designer.
2. Enter **16** for the **Position** > **Cell Sequence** parameter.
3. The Multimedia divider will shift from position 16 to 15. The Linked Names divider will shift from position 3 to 2. Similarly, all other dividers will shift one position to the left.

Note: Changing the position of the entities on the MoD Editor doesn't change the end-user form. To change the position of entities on the end-user form, use the Grouping parameters in the Cell Zone section See page 34.

MoD Property Explorer

This section provides a brief overview of the properties by model, entity, and element. The properties in the MoD Property Explorer are, by default, sorted and displayed by category. You can change the order to alphabetic. For detailed descriptions, see *Viewing and Defining MoD Properties on page 28*.

Business Model

For a business model the property categories are:

- **Checkout:** The data required for the Mass Appraisal and Inspection data can be checked out and imported to a tablet or other mobile device for making modifications in the field. The properties in this section allow the data in the business model to be checked out when set to **True**.
- **Datasource**: This property displays the name of the Model Designer business model. Once the model is saved, this property is read-only.
- **Description**: This section displays three items, the Model Code (or form number), the Short Description, and the Long Description.
- **Grouping** These properties are used for creating groups within the business model. *For details, see Grouping on page 31*.
- **Misc**: This section displays the path to the icon used for the end-user form

For details, see Defining MoD Business Model Properties on page 29.

Business Entity

For a business entity, the sections and properties are:

- **Datasource**: Displays two properties:
  - **Current BE**: This property displays the name of the business entity currently selected in the MoD editor.
  - **Parent BE**: The name of the root entity of the currently selected business entity.
- **DB Action Add / Delete / Update**: Methods and classes that provide instructions for modifying the database.
- **Default Access Rights**: Logical Expression to allow adding, deleting or updating data.
- **Zone Action**: In this section, add instructions for viewing.

For details, see Defining MoD Entity Properties on page 34.

Element Key

For a business entity, the sections and properties are:

- **Datasource**: Displays the Element Key name.
- **defaultaccessrights**: Logical expressions to define the access rights.
- **Misc**: DividerTabSequence (appears for elements assigned to dividers with multiple subdividers), the filter settings, and the label text.
- **Filter settings**: Optional attribute, filter operator, use negation and label text for restricting values.
- **Mapping settings**: as follows:
  - **Attribute type**: Real (Total Fee, Last fee, Building Permits > BE Attribute Type), text, datetime, or int.

    > **Note:** In the Business Entity Designer, the equivalent is Data Type and be: varchar, bit, datetime, or int

    Edition mode: Select UI control
  - **IsLookUp**: True (for an element with a query) or False The equivalent in the Business Entity Designer is Lookup Value: True or False.
  - **UI Map ID** Code for Control Type: Select the Code to display the UI Control type: Displays 2 for Textbox or 12 for Checkbox
  - **UI Control type**: Displays Checkbox or Textbox depending on what is selected for the UI Map ID.
  - **Width / Height**: 0 for default or a number in pixels.
  - **Text Wrapping** True or False, according to whether you want the text to continue on the next line or on the same horizontal line.
  - **Spell Checker** True or False, according to whether or not you want to use the spell check feature.
  - **Ignore Columns**: If multiple columns are defined for the form, select True to have a field span across multiple columns.

For details, see Defining Element Properties on page 44.

Property Explorer Actions

Like the MoD Toolbar, the Property Explorer has two buttons:

Auto Hide: Select this button to dock the Property Explorer on the side of the interface and provide more room for the editor. To return the toolbar to its normal position, select this button again.

Close: Select this button to close or hide the Property Explorer. To restore or display the Explorer, select **Window** > **Show Property Explorer** from the main menu.

Chapter 3: Setting Up Business Models

Overview

This chapter describes how to set up a new business model in the Govern Model Designer (MoD) and how to integrate business models from the Business Entity Designer (BED) into this application.

The Model Designer business models are the basis of the end-user form. To facilitate management of models, it is recommended to use the same name for both the Business Entity Designer models and the MoD models.

The Business Entity Designer (BED) is used for creating models and entities, adding attributes, mapping data to the datasource, and adding validation rules. The Model Designer (MoD) is used for adding the look and feel and setting up the parameters on end-user applications and for setting up the parameters on end-user forms.

The chapter provides the prerequisites and the procedures for setting up a Model Designer business model and integrating the Business Entity Designer business models into this application. It also provides the procedures for synchronizing and for deleting MoD business models.

Prerequisites

Before using the MoD, create and configure your business models, entities, and attributes in the Govern Business Entity Designer (BED) and establish links between your entities and between tables. For detailed procedures and descriptions, refer to the *Govern Business Entity Designer (BED)* guide.

Note: All Govern Business Entity Designer (BED) prerequisites are applicable to the Model Designer.

The Model Designer Business Models

The MoD business models are displayed in user applications as end-user forms. They are based on Business Entity Designer (BED) models. In the BED application, you create the models, define the business entities that are included with each model, define properties and database mappings for the attributes with the model, and define the relationships between business entities and database tables.

This section describes how to set up a new MoD model and integrate Business Entity Designer (BED) to it.

Creating a New Business Model in the Govern Model Designer

The first step in creating an end-user form is to create a Business Entity Designer (BED) model. This model defines the properties for the form and for the parameters included in the form, the datasource mapping, the entities that are included, the attributes, the validation rules, and the relationships between entities and between datasource tables. Details are provided in the *Govern Business Entity Designer (BED)* guide.

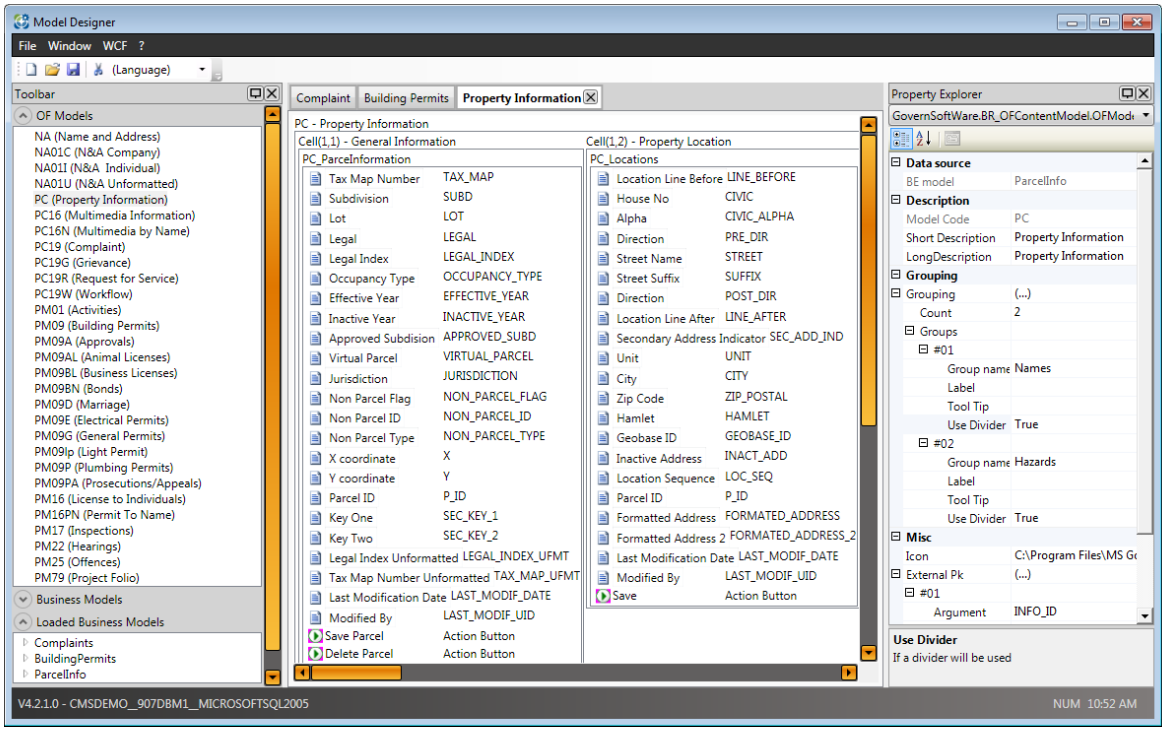
Once you have defined your BED models, you are ready to define your MoD models. MoD business models are the basis of end-user forms. The name given to the MoD model is displayed on the form. The entities within the model are displayed as dividers on the form. The organization of parameters on the end-user form and the general look and feel of the form are defined in the Govern Model Designer.

Each Model Designer business model contains a Business Entity Designer model. The BED models are displayed in the Model Designer on the MoD Toolbar under Business Models.

The next step is to create a MoD business model and to integrate a BED model with it.

To create a new MoD business model:

1. Launch the Govern Model Designer (MoD).
2. Select **File** > **New** or click on the **New Model** icon .



A New Model divider is added to the MoD Editor.

> **Note:** Before you can save the new model, you need to name it, assign a code, and integrate a Business Entity Designer (BED) business model to the new MoD model.

3. Enter a name for the new model in the **Short Description** text box in the Property Explorer.
4. The text box for the long description is filled automatically with the text from the short description. You can expand the definition if required.
5. Enter a code for the new model in the **Model Code** text box. This is a unique combination of alphanumeric characters to identify the model.
6. Follow the instructions for integrating a Business Entity Designer business model to the new model.
7. Select **File** > **Save** or click the **Save** button to add the new model to the Open Forms (OF) business models list at the top of the business models tree view on the left of the MoD UI.
8. Select the tab for the new model to begin defining the new MoD business model.

Opening a MoD Model

To open an existing Model Designer business model:

1. Launch the Govern Model Designer.
2. Expand the OF Models section
3. Do one of the following:
   - Right click on the applicable MoD Model and click **Open** to open it in the MoD editor.
   - Select **File** > **Open** or click the **Open** button and select the model from the Model Sector Form.

   Note: Models are listed by Model Code.

4. Follow the procedures for defining model properties under *Viewing and Defining MoD Properties on page 28* or for positioning the parameters and dividers under *Designing the Form on page 55*.

Integrating Business Entity Designer Models

The next step is to add Business Entity Designer (BED) models to the new MoD business model.

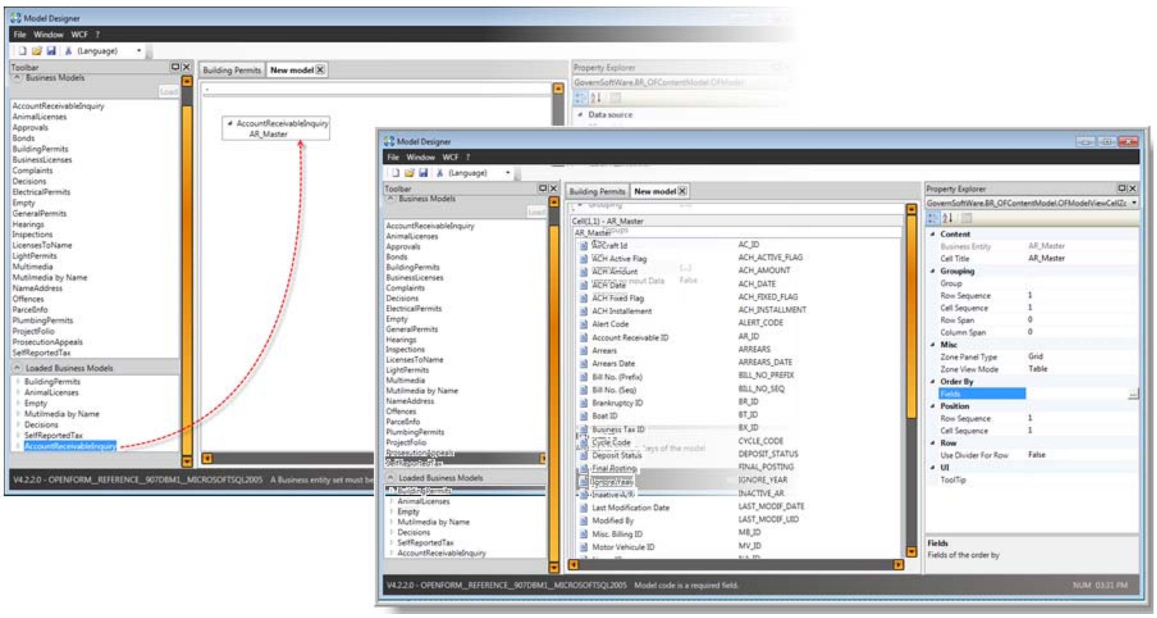
Note: It is recommended to assign the same name to both the MoD and the BED business models. this facilitates the management of business models and the creation and maintenance of end-user forms.

The business models that you created in the Business Entity Designer are listed in the middle section of the MoD under business models. In order to add these models to the new MoD business model and use them with the Model Designer, you need to load them.

To integrate BED Models to a new MoD Model:

1. Launch the Govern MoD.
2. Expand the OF Model section in the MoD Toolbar.
3. Create a new OF Model or open an existing one.
4. Expand the Business Models section of the MoD toolbar.

5. Select a Business Entity model and click **Load** Load . This adds the model to the Loaded Business Models section of the MoD Editor.
6. Select the model in the Loaded Business Models section, drag it to the MoD Editor, and release the mouse.



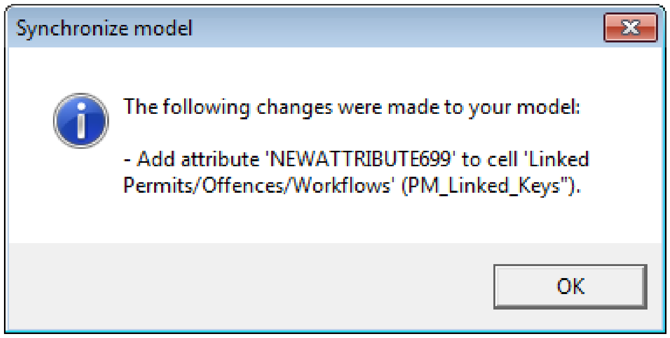
7. Select **File** > **Save** or the **Save** button to save your changes to the Model. new model to the Open Forms (OF) business models list at the top of the business models tree view on the left of the MoD UI.

Once the MoD business model is created, you can define properties for the model, entity, and elements. Procedures are described under *Viewing and Defining MoD Properties on page 28*.

Procedures for positioning the attributes or elements on the forms and dividers are provided under *Designing the Form on page 55*.

Synchronizing BED and MoD Models

When you open a business model in the Govern Model Designer (MoD), you are notified of any new changes to the business models, entities, and attributes made in the Business Entity Designer (BED). The following message appears:



Click **OK** on this message box to continue.

Note: This message is provided for informational purposes only. The Model is automatically updated when you click **Save**.

Updating a MoD Business Model

In the end-user application, such as Govern, MoD business models are represented as forms and MoD business entities are represented as dividers on the form.

Use the Govern Model Designer to:

- Organize the dividers into groups within the form.
- Position the dividers on the form.
- Position the parameters on the divider to facilitate user input.

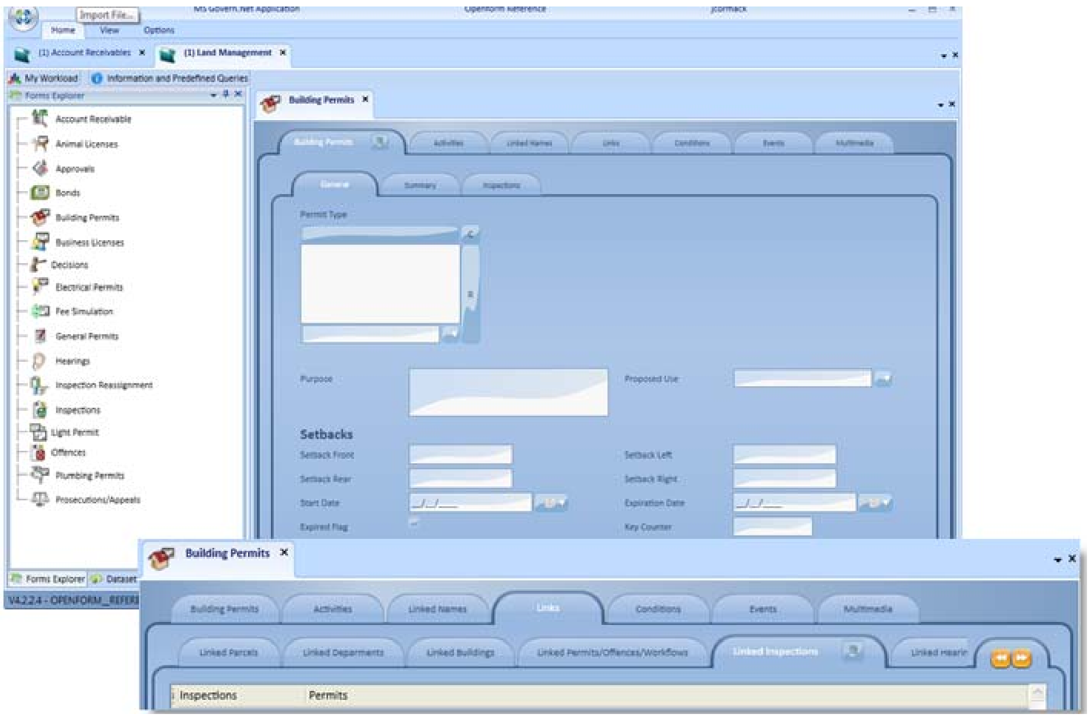
Organizing Dividers into Groups

If you have multiple dividers on a form, you can organize these into groups. This will provide a cleaner look and enhance the end-user experience.

For example, the Building Permits form has a group called Links. This group includes all the Linked business entities.

As illustrated in the following screen shot, when you open the Business Permits form, all the dividers in the Linked group — Linked Parcels, Linked Departments, Linked Buildings, Linked Permits/Offenses/Workflows, Linked Inspections, Linked Hearings, Linked UB Accounts, Linked MB Accounts, Linked Project Folio, and Linked ST Accounts — appear as a single divider.

When you click on the Links divider, all these entities appear on separate dividers.



You can change the order, or position, of the dividers on the form.

Duplicating a MoD Business Model

Use the following procedure to create a copy of an existing Open Forms (OF) Business Model. This can be useful if you want to create a second form that uses only certain fields from the original. You could maintain two separate forms, one for commercial and one for residential data.

To complete this procedure follow the instructions under:

- Duplicating the OpenForms Model in the Model Designer on page 21
- Adding the New Form to a Profile on page 22
- Synchronizing the New Model and Setting the Security on page 24
- Viewing the New Form on page 24

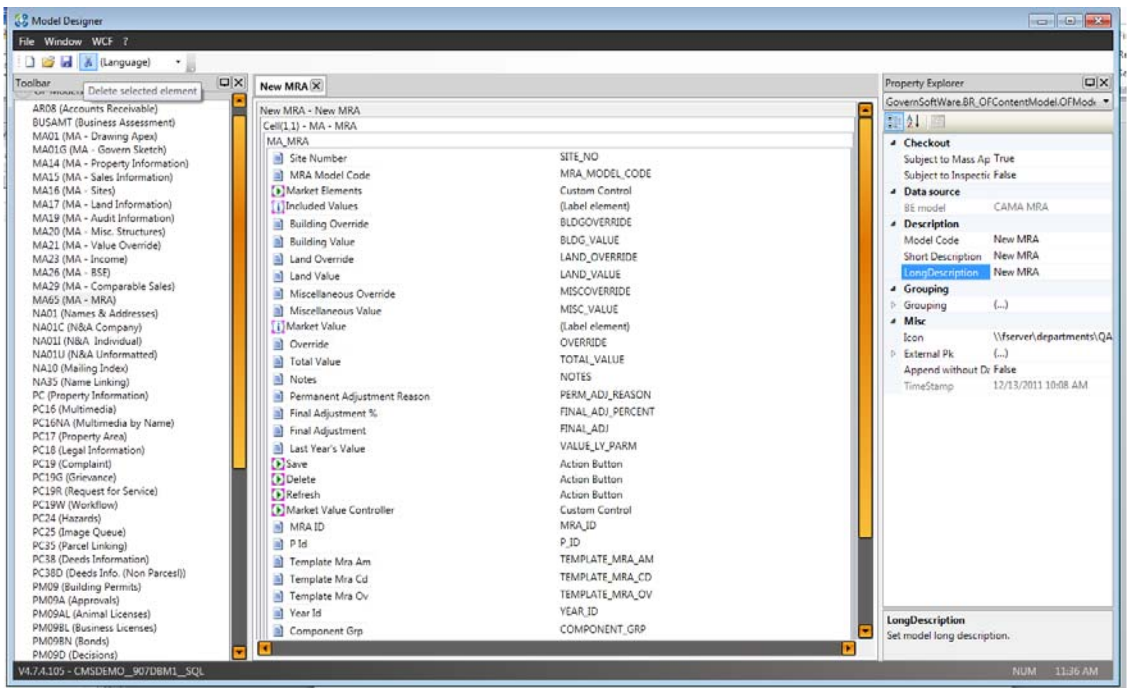
Duplicating the OpenForms Model in the Model Designer

The procedure in this section creates a new form by duplicating an existing one.

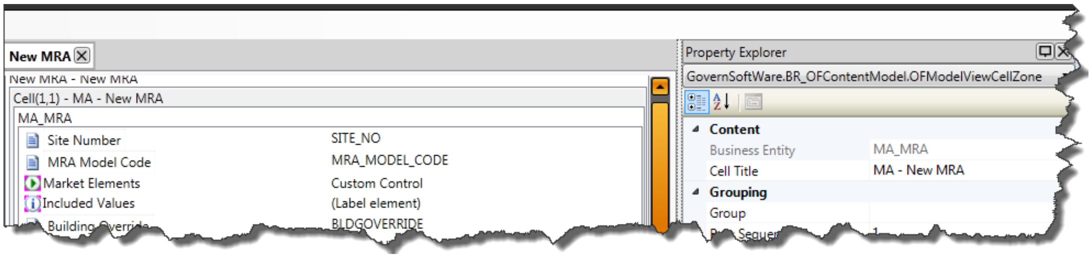
To duplicate a form:

1. Launch the MoD.
2. Select the model that you want to duplicate from the OF Models Treeview.

   In this example, MA65 (MA - MRA) is selected.
3. Right-click on the Model and select **Open** to open the OF Model in the MoD Editor.



4. Enter a new code for the model in the **Model Code** text box in the Property Explorer.
5. Enter a new short and long description in the **Short** and **Long Description** fields.
6. Click on the **Cell** title bar in the MoD Editor.



7. Enter a new name for the divider in the **Cell Title** field.
8. Make any other required modifications.
9. Click the **Save** icon.

Adding the New Form to a Profile

The next step is to add the new form to one or more Profiles, as required.

To add the new form to a Profile:

1. Launch GNA.
2. Select **Setup** > **OpenForms Configuration** > **Profile Editor** to open the Profile Editor.
3. Select the Profile that you want to update in the List of Profiles.
4. Click the **Add** button to add to select the new model.

5. Select the new model from **Select Object in List** and click **OK**.

The new model is added to the Profile and displayed under **Linked Models**.

6. Click **Save**.

Synchronizing the New Model and Setting the Security

The next step is to Synchronize the new form in order to add it to Govern and set the security for the data entry fields on the new form.

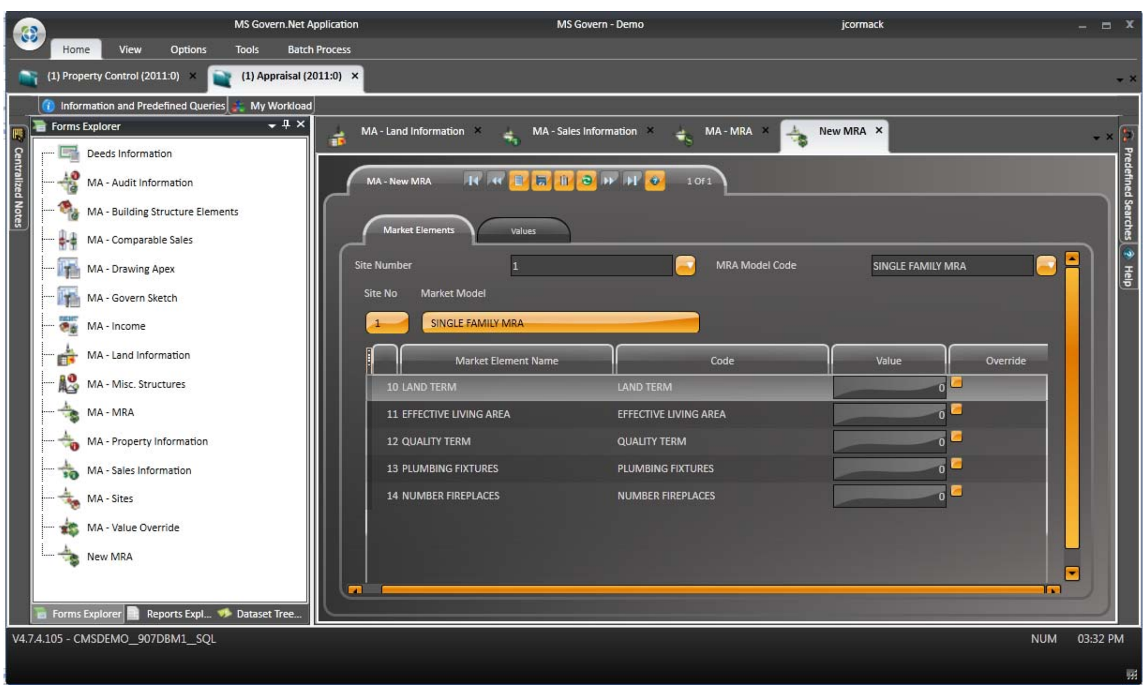
Note: The security settings are not automatically copied from one form to the other. You need to set them separately.

Refer to the Govern Security Manager (GSM) guide for details about these procedures.

Viewing the New Form

To view and test the new form:

1. Launch Govern.
2. Open the Profile to which you added the new form.
3. Open the new form.



In the example, the new form is called New MRA. Both the New MRA and the MA - MRA form that already existed are fully functional. Data could be updated on either form.

Deleting a MoD Business Model

The MoD Toolbar displays three types of business models: Open Forms (OF), Business Entity Designer (BED), and Loaded. This section provides a procedure for deleting the OF Models. These models are created in the MoD Designer. You cannot delete the other types of models. The BED models can be created and deleted in the Business Entity Designer (BED) only. The Loaded business models are there for the duration of the session.

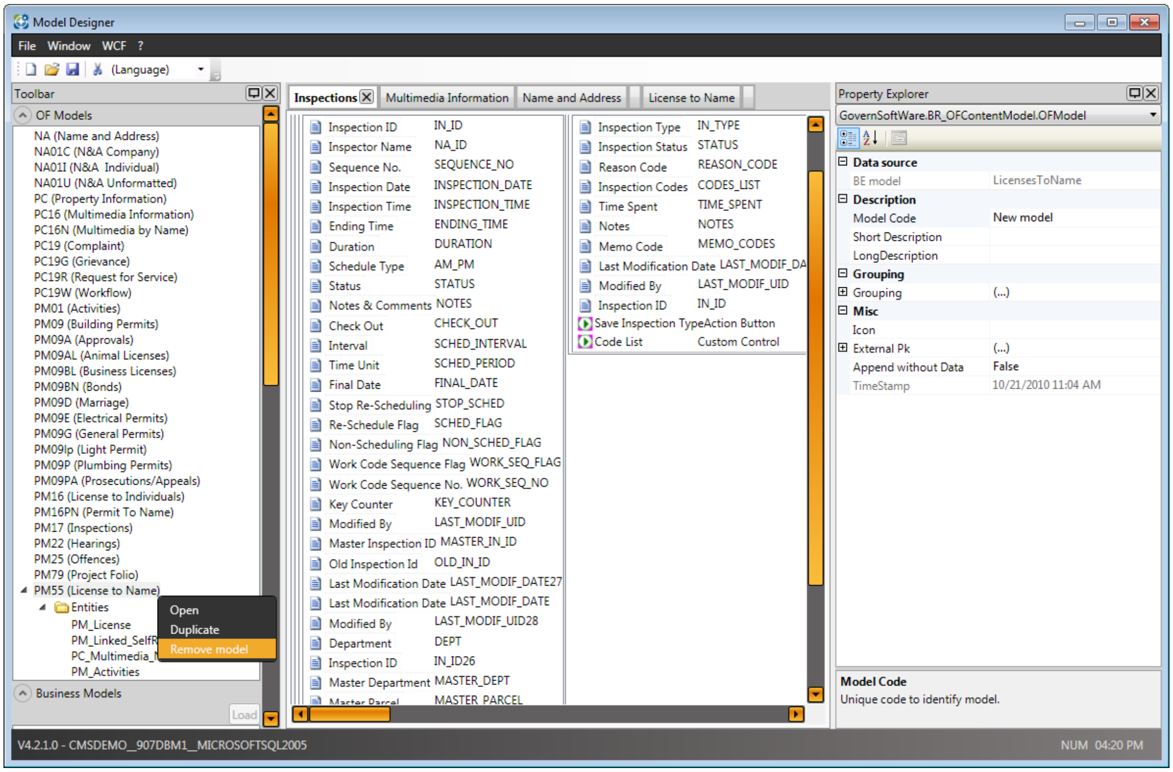
The MoD Toolbar on the left lists three types of Business Models. The top section lists the OF Business Models. These are created in the Model Designer and used directly in the end-user forms. They can be deleted as described in the following procedure.

The middle section lists the Business Models created in the Business Entity Designer (BED). These can be created, updated, and deleted in the BED only. To use these models in a MoD Model, you need to load them to the Loaded Business Models section of the MoD Toolbar. From there, you integrate them with Govern Model Designer Business Models. Once a Business Model is loaded to the Loaded Business Models section, it is there for the remainder of the session.

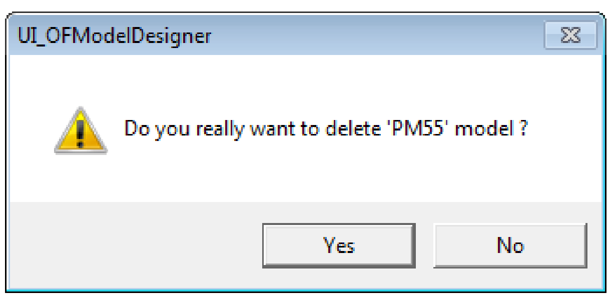
Deleting a Business Model from the OF Models Section

To delete a model from the OF Model section:

1. Launch the Govern Model Designer.
2. Expand the OF Models, at the top of the MoD Toolbar.
3. Right click on the model you are deleting.



4. Select **Remove Model**. A confirmation message appears:



5. Click **Yes** to continue.

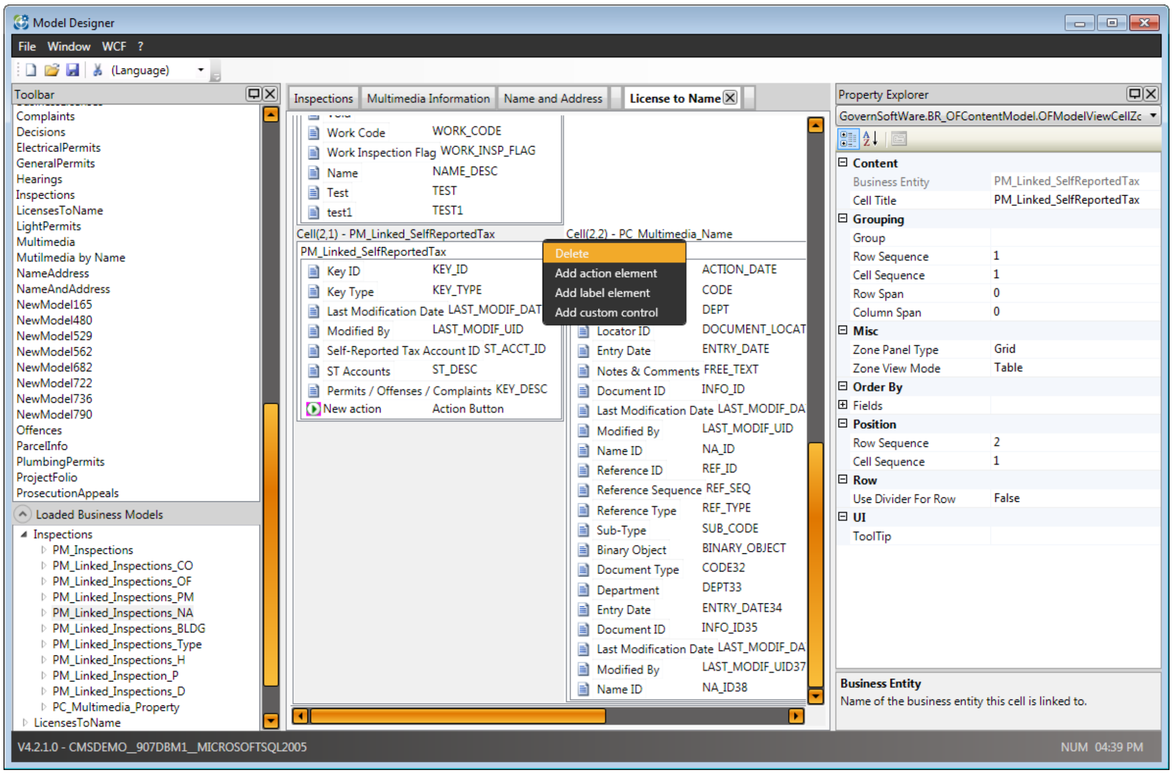
The Business Model is removed from the list.

Deleting a Business Entity from the MoD Editor

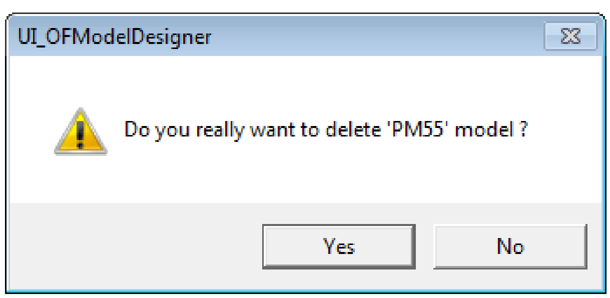
To delete a Business Entity from the MoD Editor:

1. Open the applicable business model in the MoD editor.

2. Select the business entity that you want to remove.
3. Click **Delete**.



4. Click **Delete**. A confirmation appears. This message indicates that dependencies will be deleted.



5. Click **Yes** to continue.

Chapter 4: Viewing and Defining MoD Properties

Overview

In the Govern Model Designer (MoD) properties are defined for the business model, the business entity at both the cell and content zone, and the element key. All properties can be viewed and set in the Property Explorer window, located on the right of the MoD Editor.

Properties are used to name the business models, entities, and elements in the Govern Model Designer. They provide references to the corresponding items in the Govern Business Entity Designer (BED). They set the paths for the icon and external attributes, define groups of entities, define user permissions and restrictions for viewing, creating, updating, and deleting data, and set filters for retrieving data.

A brief overview of this window and the general property categories is provided under MoD Property Explorer on page 11. This section provides details for defining properties are described under the following headings:

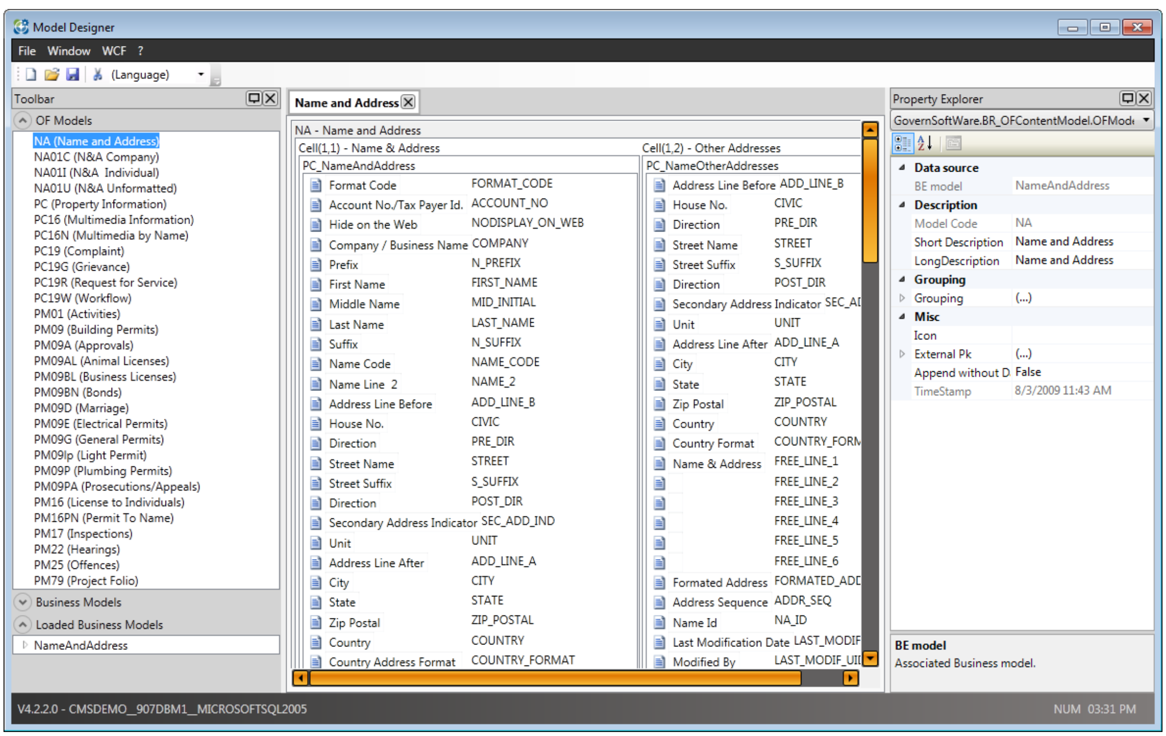
- Defining MoD Business Model Properties on page 29
- Defining MoD Entity Properties on page 34
- Defining Element Properties on page 44

Defining MoD Business Model Properties

The MoD properties set at the business model level provide a reference for the Business Entity Designer (BED) model and define general properties for the form. They determine how the dividers are grouped, how the parameters on each entity are presented on the end-user forms, and the paths for the icon and external keys.

To view or define the properties for the business model:

1. Launch the Model Designer (MoD).
2. Scroll to the MoD Toolbar on the left and expand the OF Models section at the top of the toolbar.



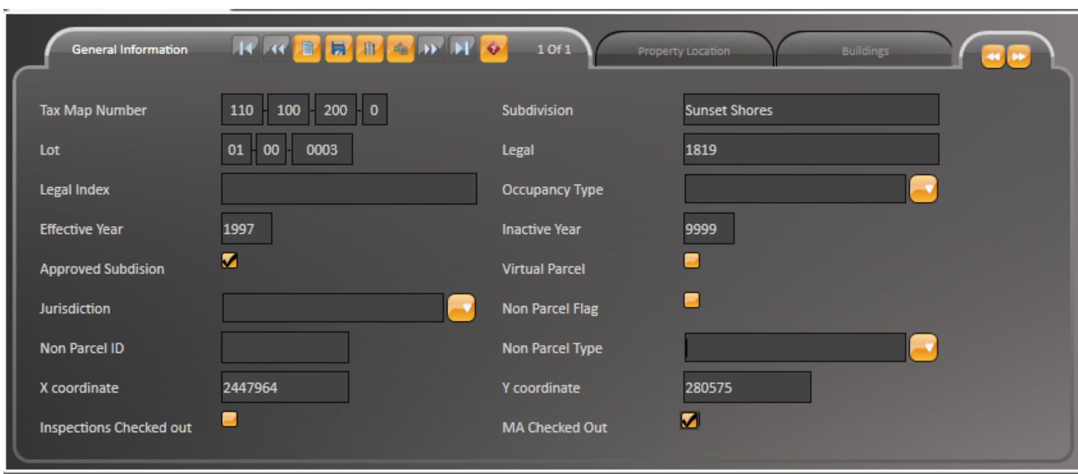
3. Scroll to the OF model you want to open.
4. Right-click on it and select **Open** to display it in the MoD Editor.
5. Open the Property Explorer window if it is not already open.
6. Select the title bar of the business model to view and define the properties under the following headings:

Checkout

Checkout

- **Subject to Mass Appraisal Checkout**: Select **True** if the business model can be checked out. For example, on the Mass Appraisal Land Information business model, select True for this property to allow appraisers to check out the land information data and import it to a tablet or other mobile device for making modifications in the field.
- Subject to Inspection Checkout:

When, for example the Mass Appraisal Land Information data are checked out, the MA Checked Out option is selected on the General Information form for the property.



Datasource

This section has one property.

BE model: This field displays the name of the BED business model that is integrated with the selected Model Designer (MoD) model. It is read-only. If you want to change the BE model name, you can do so in the Business Entity Designer (BED) application.

Description

The properties in this section define the code, short description, and long description for the selected business model.

Model Code: When you create a new MoD business model, you need to assign it a form number. This is a unique code that is used for identification in several places. For example, if you open business models from the main menu, they are listed by code. This code is displayed on the title bar of the business model and in the MoD Toolbar on the left. For existing models, this field is read-only. Once a model is saved, the code cannot be modified.

Short Description: Enter a short description for the model. This description is displayed with the model code on the title bar of the business model in the MoD Editor and in the OF Models listing in the MoD Toolbar. You can modify this description at any time. However, a short description is required. This field cannot be left blank.

Long Description: Enter a long description for the model. This field can be used to provide more information on the model.

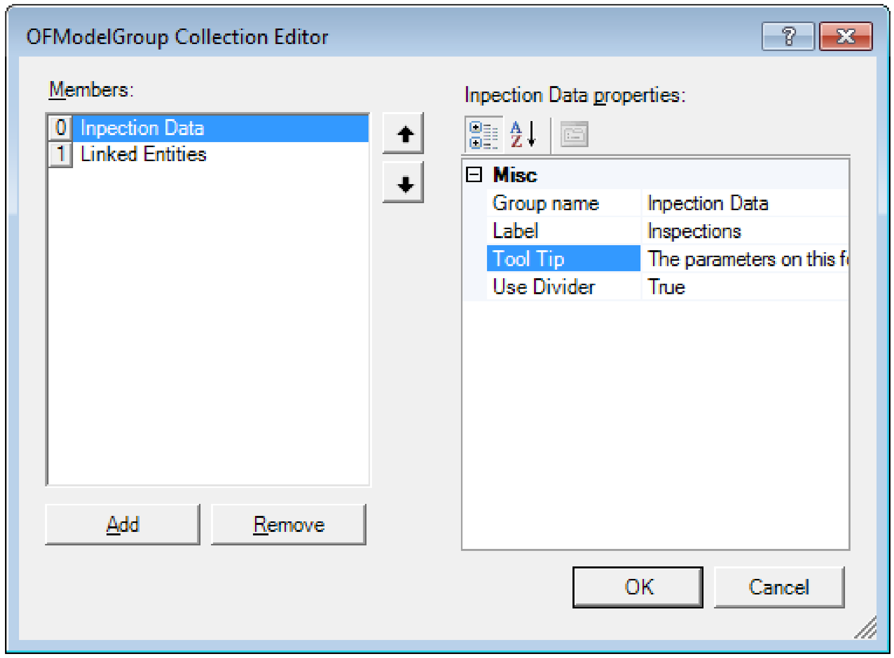
Grouping

When multiple entities are included on a form, you can divide them into groups. This creates a cleaner look and a facilitates user input. A scenario describing the procedure for setting up a group of entities is provided on page 61.

Grouping: Use the parameters in this section to set up groups of entities for displaying on the end-user form.

- **Count**: Enter the number of groups in the Business Model.
- **Groups**: Each group is automatically assigned a number. 01, 02, 03 etc.

  Click inside the **Groups** text box and select the ellipsis button ... to open the Collection Editor window and define the following parameters:



This window facilitates the management of MoD Model groups. The left pane is used for setting the order of the business models on the end-user form, for adding new models, and for removing existing ones. When you add or remove models, the **Count** property in the Grouping section increases or decreases respectively.

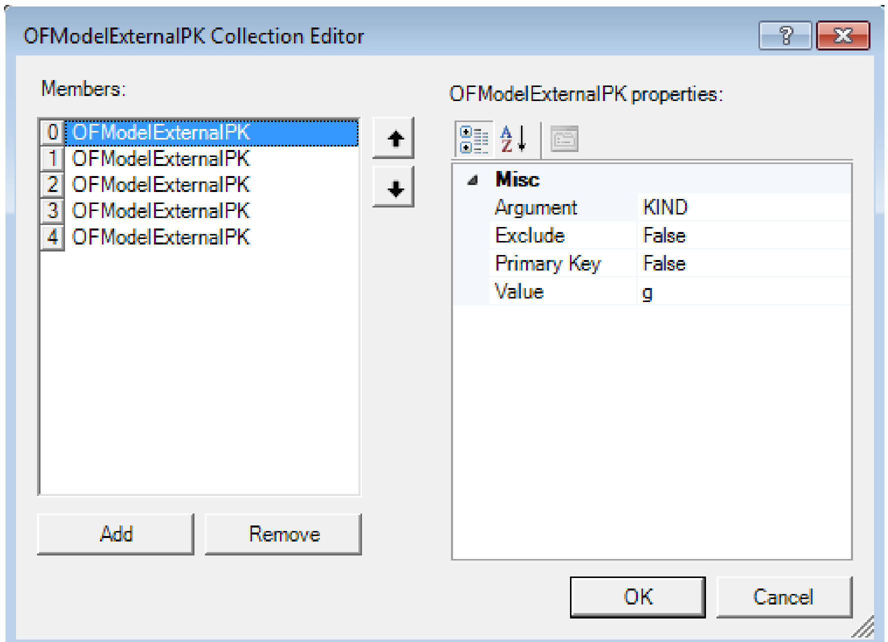
- **Add**: If you are creating a new group, click **Add** to enable the fields on the right.
- **Group Name**: Enter the name of group.
- **Label**: Enter a label to identify the group on the end-user form.
- **Tooltip**: Enter an optional brief description of the Model Group to help the user when filling out the form. The tooltip appears when the mouse is held over the Group Name.
- **Use Divider**: Select **True** to display each business entity within the group on a separate divider. Otherwise, select **False**.
- **OK**: Click **OK** to apply your changes.

Misc

Use the parameters in this section to define paths for the icon and the external keys, and to define settings for the timestamp and for creating entries.

Icon: Enter the file name and path for the icon for the Business Model.

External Pk: Click inside the **External Pk** text box and select the ellipsis button ... to open the Collection Editor window for external element keys or parameters.



- **Add**: If you are adding a new key, click **Add** to enable the fields on the right and define the properties.
- **Argument**: Enter the argument name.
- **Exclude**: Select True or False.
- **Primary Key**: Select True if the selected element is a primary key. Otherwise, select False.
- **Value**: Enter the value.
- **OK**: Click **OK** to apply your changes.

For example, in permit functions starting with PM09, the KIND key is used for retrieving data for the root entity. Each business model has a different value.

Append Without Data: Select **True** if the Create button for the Root Entity in the Model can be activated without data. Otherwise, select False.

Time Stamp: The time stamp is automatically added when you save the MoD Business Model. It includes the day, month, year, hour, and minute.

Defining MoD Entity Properties

Entity properties can be defined for the Content Zone or the Cell Zone, as follows:

1. Launch the Model Designer (MoD).
2. Scroll to the MoD Toolbar on the left and expand the OF Models section at the top of the toolbar.
3. Scroll to the OF model with the business entity you want to modify.
4. Right-click on it and select **Open** from the menu.
5. Open the Property Explorer window if it is not already open
6. Select the title bar of the business entity cell zone or content zone to view and define the properties under the following headings:

Cell Zone Properties

The following Cell Zone Properties can be defined:

Content

Business Entity: Displays the name of the Business Entity to which the cell is linked. This field is read-only.

Cell Title: Displays the name of the cell on the end-user form.

Grouping

To create a group of entities, define the Grouping properties for the business model as described under Grouping on page 31. Then, set the following properties for each entity in the group:

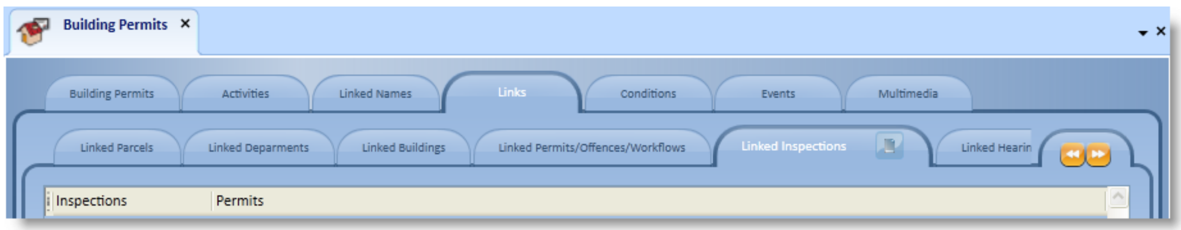
Group: If groups were set up, select the group for the entity from the drop-down list.

Use the following properties to set the position of the entities within the group on the end-user form using the Row and Cell Sequence parameters.

Row Sequence: Enter the row number of the cell inside the group.

Cell Sequence: Enter the column for the cell inside the group.

For example, as illustrated in the following screen shot, the Linked_ Departments business entity is in Row Sequence 1 and Cell Sequence 2.



To change the Linked Departments divider from column 2 to 10:

1. Open the Building Permits model in the MoD Editor.
2. Select **Cell (1,2) Linked Departments**.
3. Enter **10** for the **Grouping** > **Cell Sequence** parameter in the Property Explorer window.

The other dividers within the group are repositioned automatically.

The Linked ST Accounts divider will shift from position 10 to 9. The Linked Buildings divider will shift from position 3 to 2. Similarly, all other dividers will shift one position to the left.

Row Span: Enter the number of rows that the cell will span or merge. Otherwise use the default 0 to indicate no span.

Column Span: Enter a number of columns that the cell will span or merge. Otherwise, use the default 0 to indicate no span.

Miscellaneous

Zone Panel Type: Select Grid or Canevas depending on how you want to arrange the data.

Zone View Mode: Select Table, One by One, or Divider.

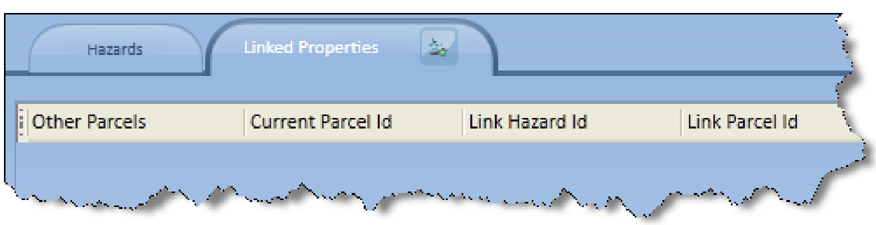
The following examples illustrate the different zone panel types and zone view modes:

Example 1: Canevas and One by One

The Buildings business entity in the Property Information business model uses Canevas and OnebyOne.

Example 2: Grid and Table

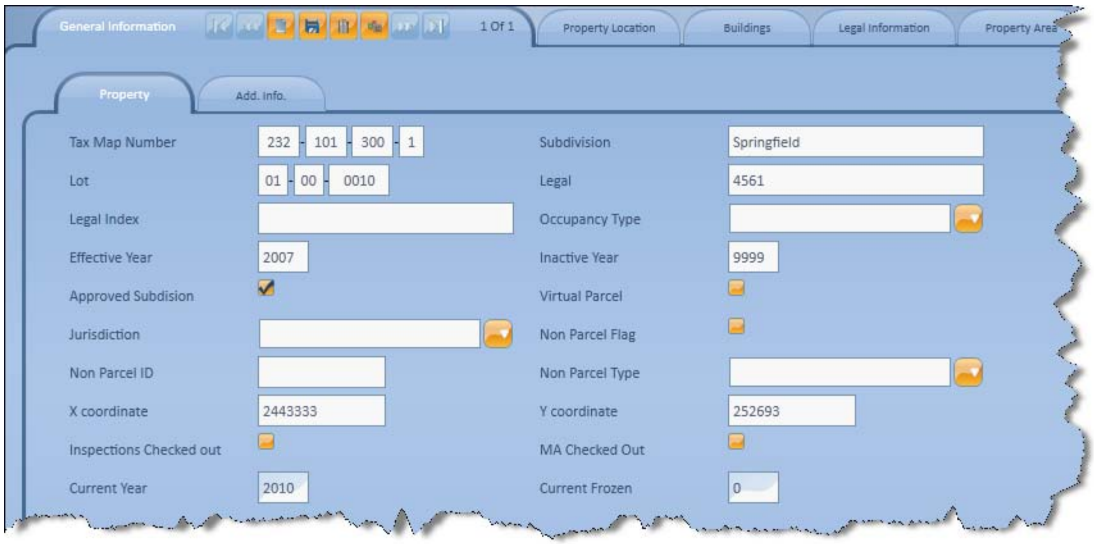
The Linked Properties business entity in the Property Information business model uses Grid as the Zone Panel Type and Table as the Zone View Mode:



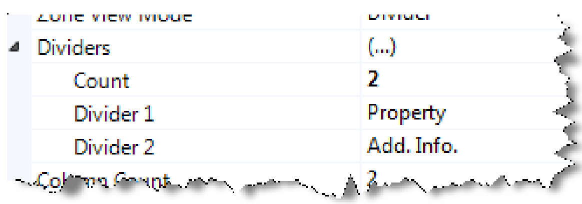
Example 1: Canevas and Divider

The General Information business entity uses Canevas as the Zone Panel Type and Divider as the Zone View Mode.

Note: If you select Divider as the Zone View Mode, you need to configure the dividers as described in the following section.



Dividers: Expand the Dividers section and configure the parameters as follows:



- Enter the number of dividers in the **Count** field.
- Enter a name for each divider.

Note: The Dividers parameters are displayed only if you select Divider as the Zone View Type.

Column Count: Enter the number of columns to display on each divider in the selected entity. The following screen shot shows the Summary divider. All dividers in the Building Permits entity have two columns.

Key Bindings: Two types of Key Bindings can be configured for the business entities Filter and Reposition:

Filter type Key Bindings serve the following purposes:

- For the root entity, it is mandatory to have at least one key binding. This forms the link between the data retrieved in a search and the data displayed on the form.

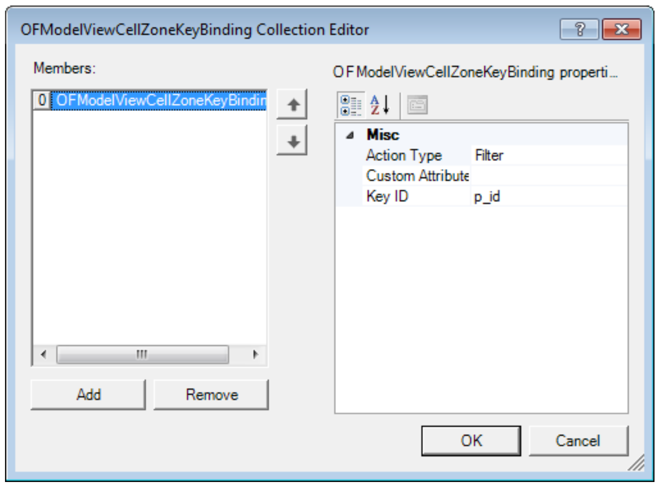
  For example, the General Information business entity is the root or parent entity in the Parcel Information business model. The P_ID is selected as the Key ID for this entity. Records are displayed on the form, according to the P_ID. The links to the child entities in the form are made according to 8the relationships specified for the business model in the Business Entity Designer (BED). For information on creating relationships between entities in a business model, refer to the *Govern Business Entity Designer (BED)* guide.
- Additional Key Bindings can be added to refine the data retrieved.

  For example, Land Information is the root entity in the MA: Land Information business model. Three Key Bindings are added to this entity P_ID, Year_ID, and Frozen_ID. The P_ID forms the initial link to display data on the form. The Year ID and Frozen ID refine the data retrieved to display only that matching the selected year and frozen IDs.

Reposition type Key Bindings are used to select the record that is displayed as the first record when multiple records are retrieved.

To configure a Key Binding:

1. Click the ellipsis button ... beside Key Bindings in the Property Explorer and add the following configuration:

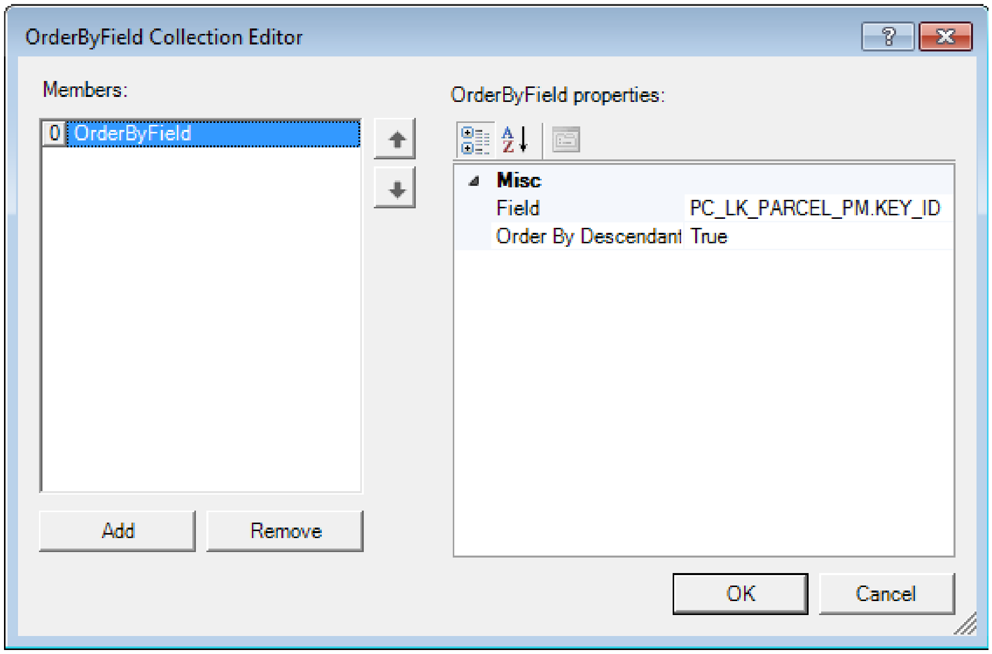


2. Select **Filter** or **Reposition** from the **Action Type** drop-down list according to the type of Key Binding you are creating.
3. Select the Key ID that you want to use for the key binding from the **Key ID** field; for example, select P_ID.
4. If the name of the Key ID in the drop-down list is different from the Key ID displayed in the MoD Editor, enter the name as it appears in the MoD Editor in the **Column Attribute** field:
5. Click **OK**.

Order By

The parameters in this section define the sort order for retrieving and presenting data on the form.

Fields: Select the ellipsis button ... in the Fields text box to open the Fields Collection Editor.



Click **Add** to enable the parameters on the right.

Field: Enter the name of the element or field to use for retrieving and presenting data. For the Building Permits model, the field is the permit number or PMKEY_ID.

Order by Descendant: Select **True** to retrieve the data in descending order so that the most recent data, in this case sorted by Permit ID is presented first. Otherwise, select **False**.

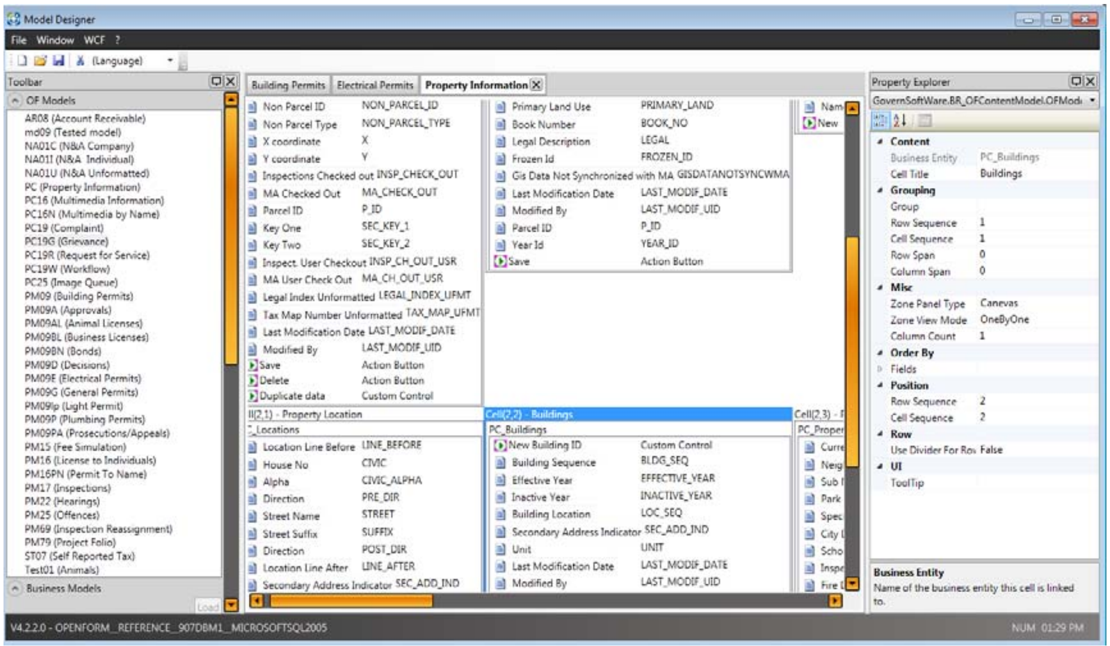
Position

The properties in this group are for organizing the entities in the MoD Editor.

Row Sequence: Enter the row on which you the model to appear in the MoD Editor.

Cell Sequence: Enter the column on which you want the cell to appear in the MoD Editor.

For example, in the following screen shot, PM_Buildings is positioned in the second cell or column and the second row in the MoD Editor.



Row

Use Divider for Row: Select True to display the cells in the selected row on dividers.

UI

Tooltip: Enter a brief description of the Group to help the user when filling out the form. The Tool Tip appears when the mouse is held over the Group Name.

Content Zone Properties

Content Zone Properties are used to define the database actions.

Datasource

Business Entity: Displays the name of the Business Entity to which the cell is linked. This field is read-only.

Cell Title: Displays the name of the cell for the form.

Database Actions

The following properties can be set for adding data to the database, deleting or updating them. To define the properties, click inside the text box and select the items from the drop-down list. Properties can be set for modifying the database after, before, or on executing the control.

To define the properties, click inside the text box and select the items from the drop-down list.

DBAction — Add: For adding to the database, properties can be set after, before, or on execution of the control and are grouped under OnAfterAdd, OnBeforeAdd, and OnExecuteAdd. The properties are the same for each.

DBAction — Delete: For deleting from the database, properties can be set for OnAfterDelete, OnBeforeDelete, and OnExecuteDelete.

DBAction — Update: For updating the database, properties can be set for OnAfterUpdate, OnBeforeUpdate, and OnExecuteUpdate.

- **Assembly Name**: Select an assembly from the drop-down list. Assemblies are saved in
- **Class Name**: Select from the drop-down list the class where the appropriate method is located. The class must implement the interface `GovernSoftwareIActionClass` from `UI_OFLoader`.dll
- **Method Name**: Select the method to call when the action is invoked.
- **Arguments**: Set up mapping between function arguments and attributes.
- **Return Property**: Select the property name with additional values.
- **Special Feature**: Select an action button such as **Create**, **Delete**, **Save**, **DeleteNonGeneric**, or **None**.
- **Activate Force Refresh**: Select **True** to activate the Force Refresh in other open form applications. Otherwise, select **False**.
- **Call Without Data**: Select **True** if the control will be called when there is no data.
- **To be Audited**: Select **True** to activate the audit trail for the control.

Default Access Rights

Select logical expressions for viewing and updating rights from the drop-down lists. You can create Logical Expressions and view existing ones n the Logical Expression editor in GNA.

The following logical expression are selected under **defaultaccessrights**:

- CanUpdateLogExp: Permit Update Rules
- CanDeleteLogExp: Permit Delete Rules

These logical expressions state that a permit cannot be updated or deleted once it is approved.

Zone Actions

The zone action properties are the same as the database action properties. They are set before viewing or after changing the zone. To define the properties, click inside the text box and select items from the drop-down list.

Defining Element Properties

To view and define properties for each element, select the element in the MoD Editor and open the Property Explorer on the right.

1. Launch the Model Designer (MoD).
2. Scroll to the MoD Toolbar on the left and expand the OF Models section at the top of the toolbar.
3. Scroll to the OF model with the business entity that has the entity or entities you want to modify.
4. Right-click on it and select **Open** from the menu.
5. Open the Property Explorer window if it is not already open
6. Scroll to the applicable entity and element.
7. Select the element.

Datasource

Element Key: Displays the name of the element. This property is view-only. It can be changed in the Business Entity Designer (BED).

Default Access Rights

CanViewLogExp and CanUpdateLogExp: Select logical expressions from the drop-down lists for controlling viewing and updating rights. You can create new logical expressions for these rights n the Logical Expression editor in GNA or use existing ones. Refer to the *Govern New Administration (GNA)* guide for details.

NotUpdatable: Set this property to **True** to allow modifications to the element only when it is created. For example, tax exemptions are applied on several values including Real Property and Mass Appraisal values. If an exemption changes, multiple values are affected. It can be easier to restrict all modifications to an exemption. Users can delete an exemption and create a new on if required.

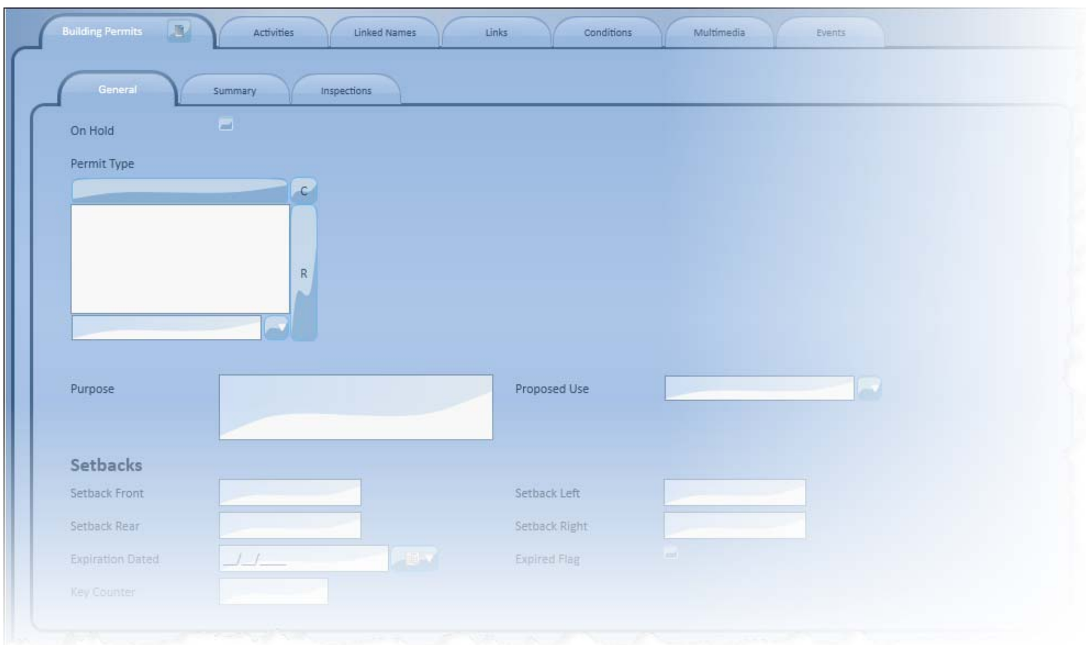
Set this property to **False** to allow modifications at any time.

Miscellaneous

Divider Tab Sequence Number:

Note: This property is displayed only if the **Zone View Mode** property is set to Divider for the business model. *See* Zone View Mode on page 35.

If multiple dividers are defined for a business entity, this property defines the divider on which the element is located. For example, the PM_BuildingPermits entity in the Building Permits model has three dividers.



Each element in the divider is assigned a tab sequence number according to the divider on which it is positioned, 1, 2, or 3.

Filter Settings: Use these parameters to set up restrictions on certain values.

- **Attribute**: Name of the attribute
- **FilterOperator**: None, Equals, Less than, Less than or Equal to, Greater than, Greater than or Equal to, Between, Like, In, or IsNull
- **Use Negation**: Select **True** to use reverse filter settings; i.e., to hide the items that match the criteria. Otherwise, select **False**.

Label Text: Enter a label to appear beside the field on the form.

Note: If labels are defined in both the Business Entity Designer and Model Designer, the one defined for the Model Designer appears on the end-user form. However, the label written for the MoD does not override the label written for the BED.

UI Control Mapping

Mapping Settings

Use the properties in this section to define the element or parameter on the form.

BE Attribute Type: The BE Attribute Type displays the Data Type defined for the attribute in the Business Entity Designer or for the datasource column corresponding to the selected element.

The BE Attribute Type can be text:, Boolean, Datetime, Integer, or Real. This field is read only. It can be modified in the Business Entity Designer.

Edition Mode: Select UI Control.

Is LookUp: Displays True or False depending on what is set in the BED.

Lookup values are linked to a predefined query or a User or System Validation table. *Refer to the Managing Attributes chapter in the Govern Business Entity Designer guide for further details.*

UI Map ID: The UI Map ID is for selecting the UI Control Type.

Control Type: The following table lists the available control types for each attribute type.

BE Attribute Type (Data Type)	UI Control Type
Text	Textbox, Textblock, Label, Checkbox, Hyperlink
Boolean	Checkbox, Combo box, or Radio Button
Datetime	Datetime, Textbox, Date Only, Time Only

BE Attribute Type (Data Type)	UI Control Type
Integer	Textbox, Checkbox, Textbox Currency, Textbox Thousand
Real	Textbox, Checkbox, Textbox Currency, Textbox Thousand

To define a UI Control Type, click inside the **UI Map ID** field and select the **UI Control Type**.

See page for the procedure on defining a Hyperlink

Width: Enter he width of the field or enter 0 to use the default value.

Height: Enter the height of the field in pixels or enter 0 to use the default value.S

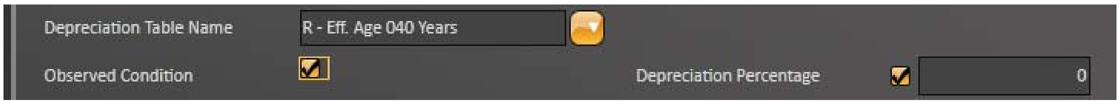
Overrides: Use this option to connect an Override checkbox with a field and to add an Override checkbox to that field. When the checkbox is selected, the connected field becomes enabled.

For example, as shown in the following screen shot, the **Observed Condition** check box is linked to the **Depreciation Percentage** on the *MA - Miscellaneous Structures* field.

An appraiser who feels that the appraised value of a structure should be different from the calculated value can check the **Observed Condition** check box and then modify the amount in the **Depreciation Percentage** field.

If you would like to add an override right next to the field that it is overriding, or to a field that is not yet connected to an override checkbox, use the following procedure.

This gives the following result:



You can then hide the **Observed Condition** field or make it read-only.

For details on hiding fields or changing the security, refer to the Govern Security Manager (GSM) guide.

To connect an Override check box with a field:

1. Launch the MOD.
2. Open the business model with the business entity that you modified in the Business Entity Designer.

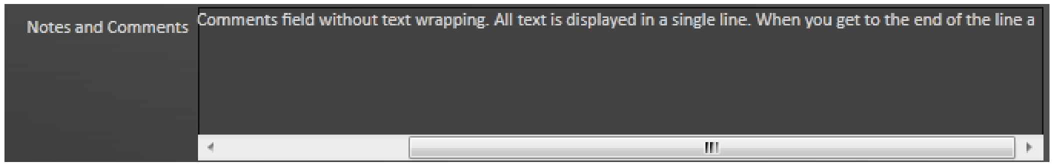
   In this example, this is MA - Misc. Structures.
3. Select the field that you are connecting to the override.

   In this example, this is **Depreciation Percentage**.
4. Select the element you are using for the Override checkbox from the **Overrides** drop-down list. All elements with the UI Control Type set to Checkbox are displayed in this list.

   In this example, this is **OBSERVED_COND**.
5. Click **Save**.

You can then select the override checkbox beside the **Depreciation Percentage** field.

Text Wrapping: Select **True** for Notes and Comments or other text fields to have the text continue on the next line. If you select **False**, continuous text remains on one line. A scroll bar appears if the text has more characters than can fit on a single line.



Select **False** for non-text fields.

Spell Checker: Select **True** to turn on automatic Spell Checking. You can use this setting for Text fields. When it is on, a red line appears under misspellings. Select **False** for non-text fields.

Ignore Columns: This setting is applicable to forms with multiple columns. Use it when you have a field that requires more than a single column, such as a Notes field that would require two or more columns.

You need to select **True** for the Ignore Columns property of the field that is positioned before the field you want to span across multiple columns on the user form.

To have a field span across multiple columns:

1. Look for the field before the one you want to span across more than one field.
2. Select the Ignore Columns property to True for this field.
3. Modify the height and width of the column you want to span across multiple fields, as required.

This is illustrated in the following series of screen shots. **Ignore Columns** is set to **True** on the **NHBD Adjustment** field. The **Width** of the **Notes** field is set to **600**.

Adding a Hyperlink to an Element

Use the following procedure to add a hyperlink to an element:

The procedure comprises multiple steps:

- Creating a Query that Calls a Hyperlink
- Linking the Query to an Attribute
- Defining User Properties for the Element
- Synchronizing the Model and Setting the Security
- Testing the Hyperlink

Creating a Query that Calls a Hyperlink

The following hyperlink opens Google Maps and zooms in on a parcel, based on the current Parcel ID.

To create a query that calls a hyperlink:

1. Launch GNA.

2. Open the **SQL Editor**.
3. Enter a query similar to the following in the Query Editor text box:

```
SELECT
'http://maps.google.com/maps?q='||
FORMATED_ADDRESS || ' ' || ISNULL(CITY,'') || ' ' ||
ISNULL(ZIP_POSTAL,'')
FROM PC_ADDRESS
WHERE P_ID = Parcel ID
```

4. Save the query.

For further details on creating queries, refer to the Govern New Administration (GNA) guide.

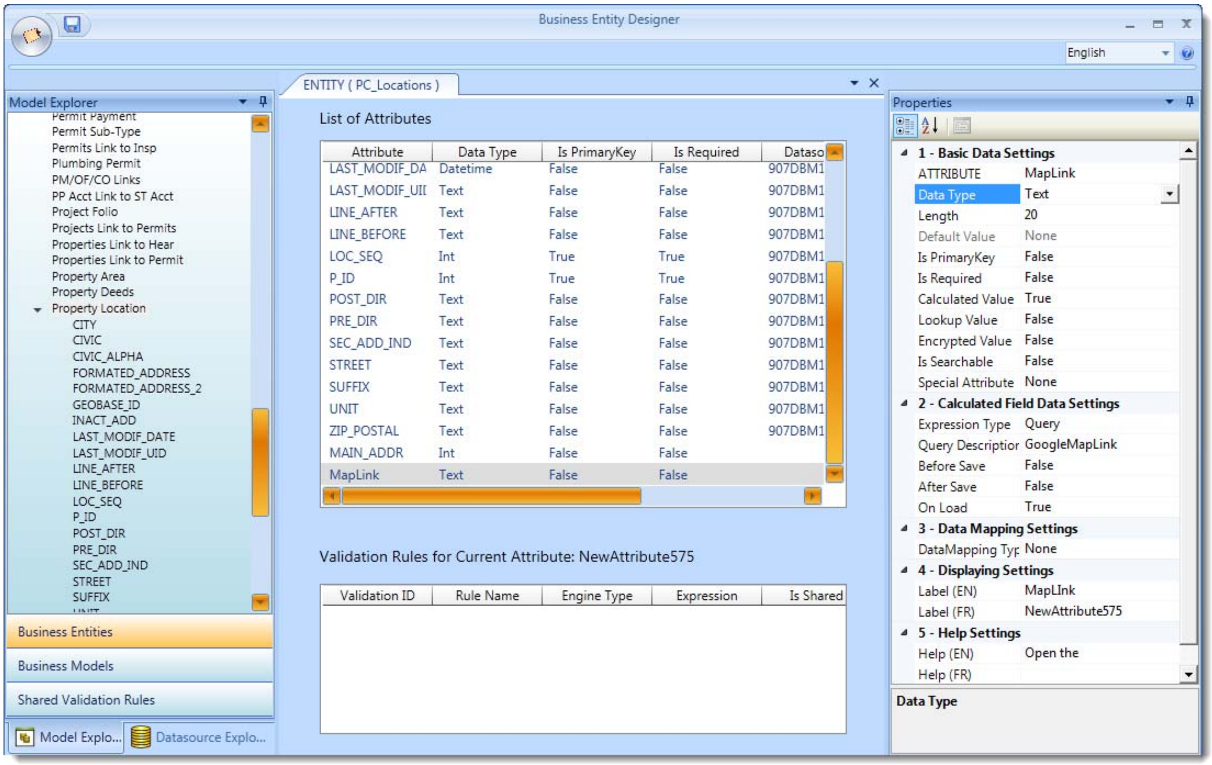
Linking the Query to an Attribute

Use the following procedure to link the query to an attribute, or parameter. When the user clicks on the parameter, in Govern, Google Maps is launched and opens to the parcel.

To link an query to a new stand-alone attribute. Make it a calculated field that calls a query. LInk the query that created in GNA to that attribute.

To link a query to an attribute:

1. Launch the Business Entity Designer (BED).



2. Open the Business Entity to which you want to add the hyperlink.
3. Create a New Attribute.
4. Set the **Calculated Value** to **True** in the Property Explorer.
5. Set the **Expression Type** to **Query** in the **Calculated Field Data Settings**.
6. Select the query that you created in GNA from the **Query Description** drop-down list.
7. Click **Save**.

Defining User Properties for the Element

The next step is define the Map Settings for the element in the Model Designer.

To define the map settings:

1. Launch the Model Designer.

2. Open the Open Forms model that contains the attribute you mapped to the query.
3. Select the element.
4. Modify the label in the **Label Text** field in the Property Explorer
5. Change the **UI Control Type** to **Hyperlink**.
6. Click **Save**.

Synchronizing the Model and Setting the Security

Use the following procedure In order to make the model visible in Govern. Then set the security for the new element. *For details on these procedures, refer to the Govern Security Manager (GSM)*.

Testing the Hyperlink

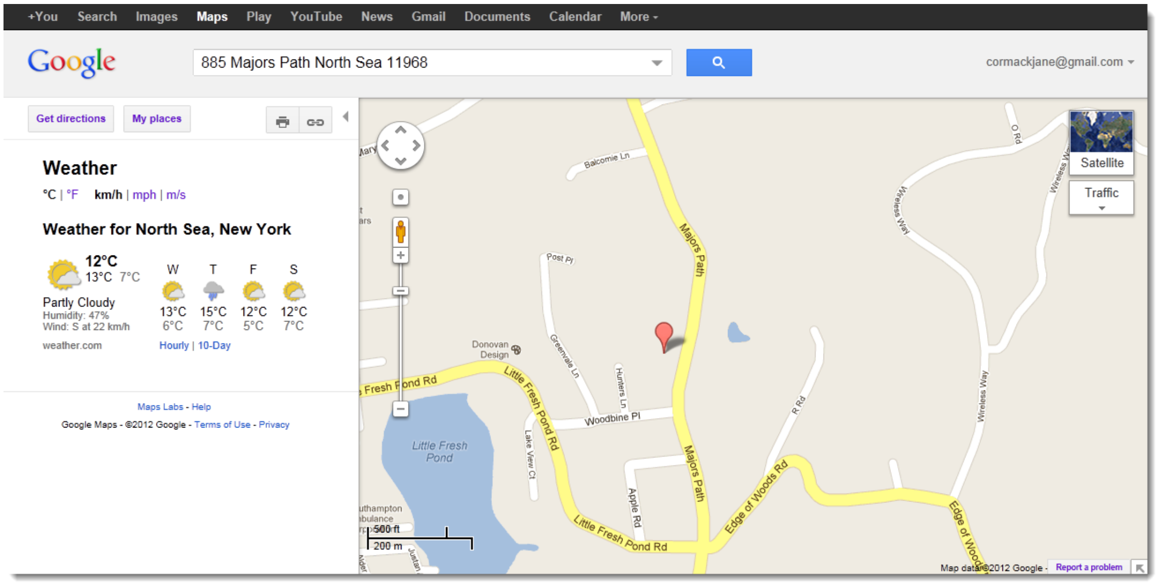
The next step is to test the hyper link in Govern.

To test the hyperlink:

1. Launch Govern.
2. Open the Profile containing the model to which you added the hyperlink.
3. Open the form and divider with your new element.

4. A tooltip displays the hyperlink path.

5. Click on the link.



You can use the same procedure to open an external application directly from an attribute.

To open an application from an attribute:

1. Follow the procedure for adding a hyperlink to the element. with the following modification:
   - When you create the query, enter the path to the application, for example:

```
SELECT 'C:\Program Files\Notepad.exe' FROM
PC_ADDRESS
where p_id = Parcel ID
```

Chapter 5: Designing the Form

Overview

This chapter describes the procedures for giving the end-user forms their look and feel. Procedures include arranging the parameters within the entity and arranging entities into groups on the form.

Procedures for defining the initial setup of the form are described under *Viewing and Defining MoD Properties on page 28*.

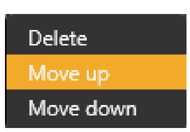
Organizing the Parameters on the Form

When you open the MoD Editor, the elements are listed in the order they will appear on the end-user form. Using the procedure in this section, you can move the elements up or down or even put them on another divider as required to facilitate end- user input.

Changing the Position of the Parameters

To modify the position of a parameter on a form:

1. Launch the MoD.
2. Open the corresponding Open Forms (OF) model in the MoD Editor.
3. Scroll to the business entity with the element you want to reposition.
4. Select the icon beside the element you are modifying.



5.Right-click and select **Move Up** or **Move Down** from the menu.

6.Click **Save**.

The modification will be in place the next time you open the user application.

Deleting a Parameter

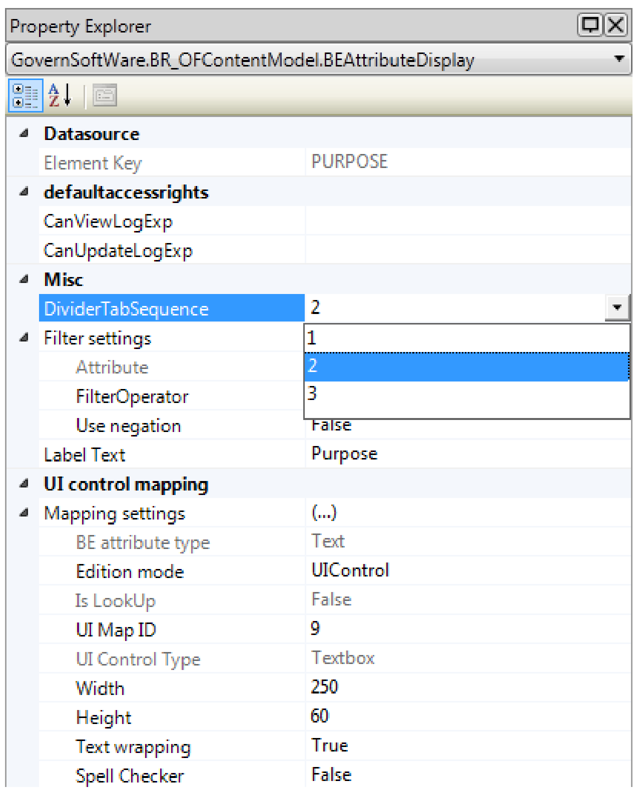
Although it is possible to delete an element using this menu, it is not recommended. It is possible to hide a parameter using the Govern Security Manager (GSM). This is described in the *Govern Security Manager* guide.

Changing the Divider of a Parameter

If an entity has multiple dividers, you can change the divider on which any of the elements are located.

To change a divider:

1. Launch the MoD.
2. Open the applicable OF Model in the MoD Editor.
3. Modify the value of the **DividerTabSequence** parameter under **Misc** in the Property Explorer.



4. Click **Save**.

For example, the root entity in the Building Permits form, PM_BuildingPermits, has three dividers. The Purpose field is located on the first tab, General, by default. The following example illustrates how to move it to the second tab.

To change the divider that the **Purpose** field is located on:

1. Open the Building Permits model in the MoD Editor.
2. Select the **Purpose** element.
3. Select the **Misc** > **DividerTabSequence** property in the Property Explorer.
4. Select **2** from the drop-down list.
5. Click **Save**.
6. Open Govern to view the change.

Changing the Position of Dividers on the Form

When a business model has multiple entities, you can organize the entities into groups. This facilitates user input and retrieval of information. You can modify the position of the dividers on the form at any time:

Changing the Position of Dividers within a Group

The following scenario illustrates how to set up a group of entities.

To change the position of the dividers within a group:

1. Launch the MoD.
2. Open the OF business model for the entity.
3. Select the cell title bar of the business entity.
4. Under Grouping in the Property Explorer, set a new position of the Row and Cell Sequence.

The other entities are automatically repositioned.

Changing the Position of Dividers on the Form

To change the position of the dividers on the form:

1. Launch the MoD.
2. Open the OF business model for the entity.
3. Select the cell title bar of the business entity.
4. Under Position in the Property Explorer, set a new position of the Row and Cell Sequence.

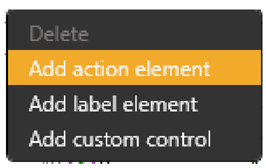
Adding Parameters to the Form

Use the procedures in this section to add new action buttons, custom controls, and label elements.

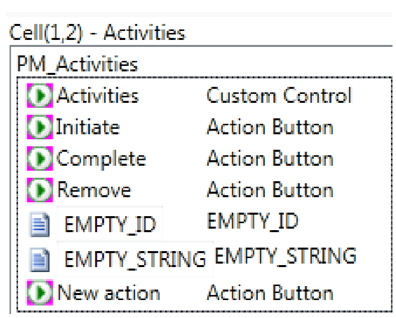
Adding a New Action Button

To add a new action button:

1. Launch the Model Designer.
2. Open the OF Business Model.
3. Scroll to the business entity. and select the cell title or cell zone.



4. Right-click and select **Add action element**.



   A new action button is added to the entity.

5. Edit the properties for the action button as described in the following procedure.
6. Click **Save**,

Modifying an Action Button

To edit the action button properties:

1. Select the action button in the entity.

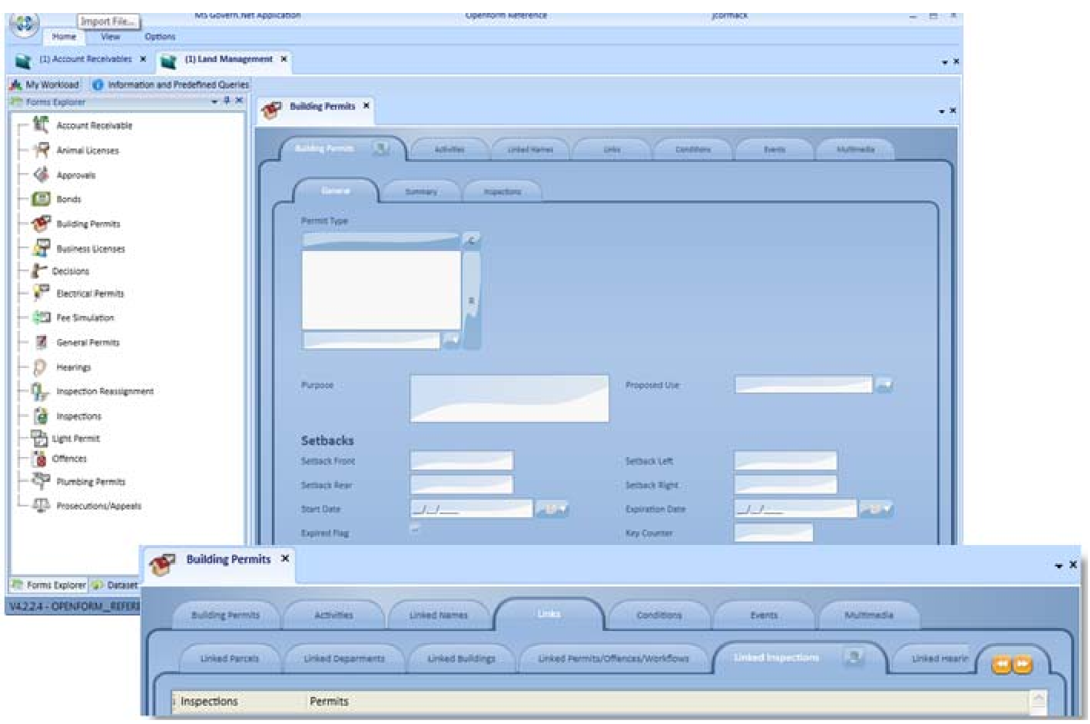
2. Modify the following properties:
   - default access rights: Select a logical expression to enable the action button.
   - Misc
   - Action Settings: Set the following properties for the action button.
   - Assembly Name: Select the assembly from the drop-down list.
   - Class Name: Set the class where the appropriate method is located. The class must implement the interface GovernSoftwareIActionClass from UIOFLoader.dll
   - Method Name: Select the method for the action.
   - Embedded image: Select an icon from the drop-down list if you are not using an external image.
   - External image: Select the path to the external image for the action button if you are not using an embedded image.
   - Tooltip: Enter a tooltip to appear when users hover their mouse over the action button.
   - Arguments: Define the mapping between the function arguments and the attributes.
   - Return Property: Enter the property name that contains additional return values.
   - Special Feature: Select one of the following from the drop-down list: None, Create, Delete, Save, or DeleteNonGeneric.
   - IsEnabledProperty: Select a property from the drop-down list.
   - Visibility Property: Select a property from the drop-down list.
   - Activate Force Refresh: Select True or False depending on whether or not you want to enable the force refresh in other applications.
   - Call Without Data: Select True or False
   - Label Text: Overwrite the default label New action with a new label.

Scenario: Setting up a Group of Entities

If multiple entities are included on an end-user form, arranging them into groups will create a cleaner look, and make it easier for users to enter data. As an example, the Building Permits form includes 17 entities — as do all the permit and license forms beginning with PM09.

A number of the entities on the permits and licenses form are built from Linked tables. These include: PM_Linked_Parcels, PM_Linked_Departments, PM_Linked_Buildings, PM_Linked_Keys, PM_Linked_Inspections_PM, PM_Linked_Hearing, PM_Linked_UtilityBilling, PM_Linked_MiscBilling, PM_Linked_Folio, PM_Linked_Conditions, PM_Linked_Events, and PM_Linked_SelfReportedTax.

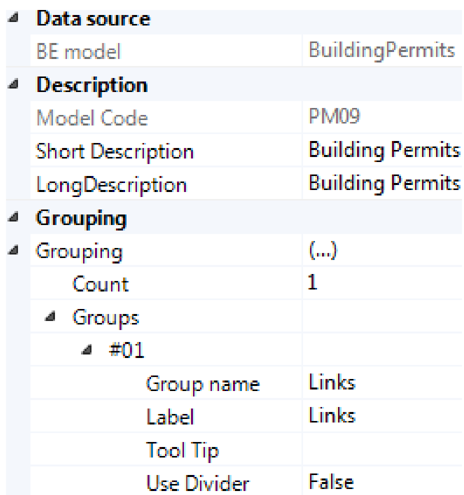
On the Building Permits business model, they are grouped together under the group name Links: When you open the Building Permits form, these entities appear together under the divider Links. When you click on this divider, each entity in the group is displayed on a separate divider, as illustrated in the following screen shot:



Defining the Group within the Model

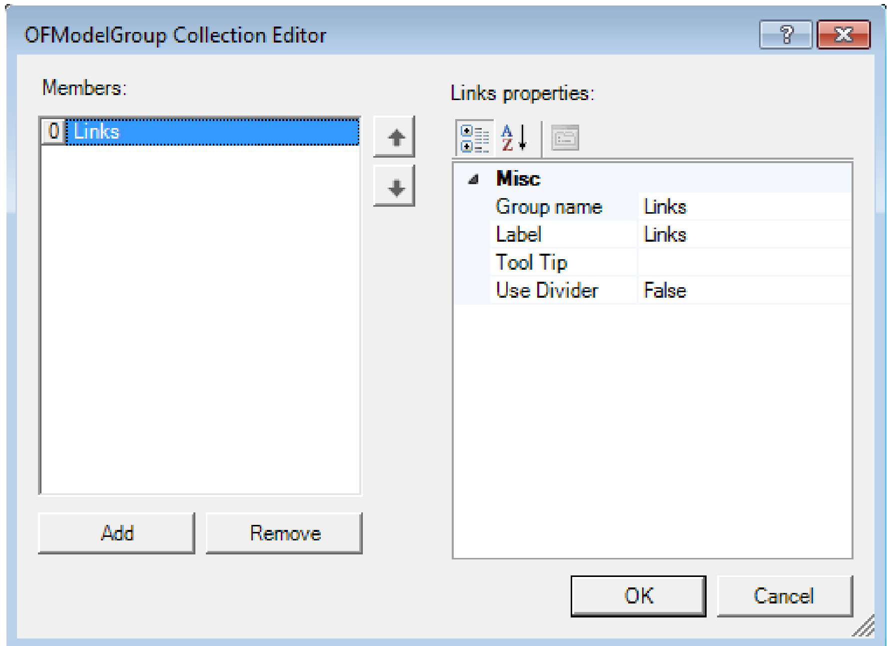
The first step in setting up a group of entities is performed at the business model level, as follows:

1. Launch the MoD.
2. Expand the OF Models section in the MoD Toolbar.
3. Right-click on the Building Permits model to open it in the MoD Editor.
4. Open the Property Explorer window if it is not already open.
5. Expand the **Grouping** category.



Data source	
BE model	BuildingPermits
Description	
Model Code	PM09
Short Description	Building Permits
LongDescription	Building Permits
Grouping	
Grouping	(...)
Count	1
Groups	
#01	
Group name	Links
Label	Links
Tool Tip	
Use Divider	False

6. Enter **1** in the Count Field.
7. Click on the ellipsis button ... inside the Groups text to open the Collection box.

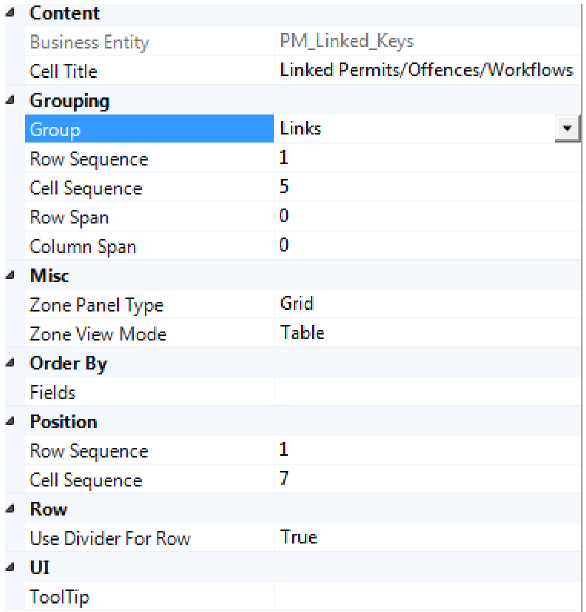


8. The group is automatically assigned a name comprising the business entity name and the group number.
9. Overwrite this name.
10. Enter a label.
11. Click **OK**.

Assigning Properties within the Group

For each entity that is part of the group, you need to assign it the group name property and give it a position within the group.

1. Select the title bar of the cell for the business entity in the MoD Editor.
2. Open the Property Explorer window if it is not already open.
3. Expand the **Grouping** category.



Content	
Business Entity	PM_Linked_Keys
Cell Title	Linked Permits/Offences/Workflows
Grouping	
Group	Links
Row Sequence	1
Cell Sequence	5
Row Span	0
Column Span	0
Misc	
Zone Panel Type	Grid
Zone View Mode	Table
Order By	
Fields	
Position	
Row Sequence	1
Cell Sequence	7
Row	
Use Divider For Row	True
UI	
ToolTip	

4. Select the group to which you want to assign the entity.
5. Enter the Row Sequence for the entity, 1 to place it in the top row.
6. Enter the Cell Sequence for the entity. This is the column for the entity within the group.
7. Click **Save**.

Index

A
Assembly Name 42
Authentication Mode 2
Auto Hide 8, 12
B
BE Attribute Type 46
BE model 30
Business Entity Designer Models 17
Business Models 7
C
Call Without Data 42
Cell Sequence 35, 40
Cell Title 34, 41
Cell Zone Properties 34
Class Name 42
Close 8
Column Count 37
Column Span 35
Connection Key Name 6
Content Zone Properties 41
Create 42
D
Database Actions 42
Datasource 30
Datasource Connection Keys 3
Default Access Rights 42, 44
Delete 42
DeleteNonGeneric 42
Divider Tab Sequence Number 45
E
Element Key 44
Element Properties 44
External Pk 33
F
Field 40
Fields 39
File options 5
Filter Settings 45
FilterOperator 45
G
Govern Authentication 2
Govern Model Designer Troubleshooting Guide 1
Group Name 32
Grouping 34
I
Installation 2
Is LookUp 46
L
Label 32
Label Text 46
Language Selection 5
Loaded Business Models 8
Long Description 31
M
Main Menu 5
Mapping Settings 46
Method Name 42
MoD business models 14
MoD Business Models Toolbar 6
MoD Editor 9
MoD Entity Properties 34
MoD Model, Creating 15
MoD Model, Deleting 25
MoD Model, Opening 17
MoD status bar 5
MoD Toolbar Actions 8
MoD Version 6
Model Code 31
Model Properties 29
MSAD Authentication 2
O
OF Models 6
Operation Status 6
Order By 39
P
Position 40
Prerequisites 2, 14
Primary Key 33
R
Row Sequence 34, 40
Row Span 35
S
Save 42
Short Description 31
Show Property Explorer 5

Show Toolbar 5
Special Feature 42
Spell Checker 49
Starting Govern MoD 4
Starting the Govern QueryTool 3
Status Bar 5
Synchronizing BED and MoD Models 18
System Requirements and Installation 2
T
Text Wrapping 48
To be Audited 42
Tooltip 32, 41
U
UI Control Mapping 46
Use Divider 32
Use Divider for Row 41
W
Windows System Information 6
Z
Zone Actions 43
Zone Panel Type 35
Zone View Mode 35, 45