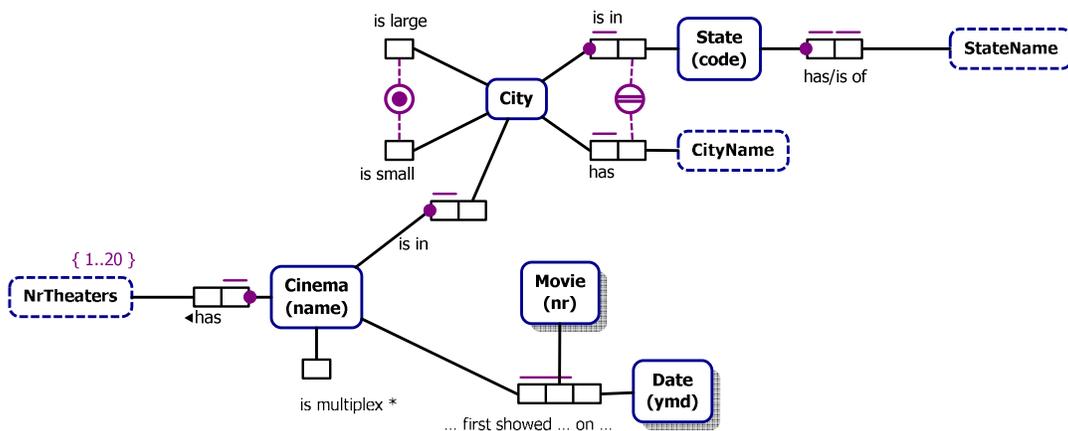Neumont Object-Role Modeling Architect

Duplicating Model Elements
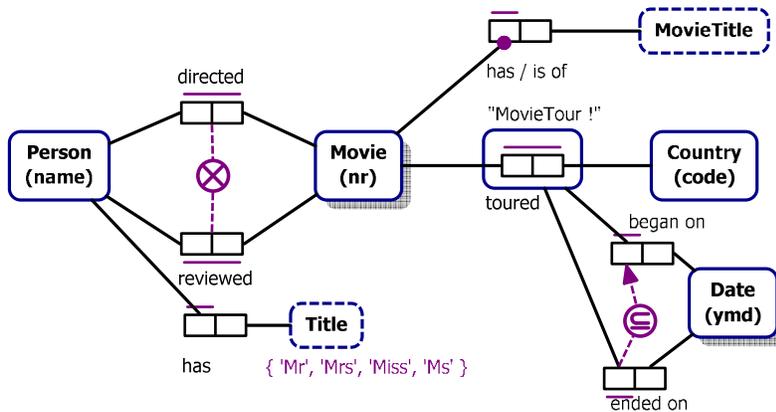
Purpose: The ability to represent the same object multiple times on a model can be very useful when creating complex ORM models which span multiple pages or in the same page for easier reading. The NORMA tool now supports this feature. This document will give the user an overview of how to duplicate objects in their ORM models when using the NORMA tool.

This example is created using the ORM file that was completed using NORMA Lab 3. We begin by opening the Lab 3 ORM file in the NORMA tool.
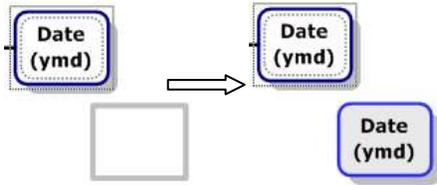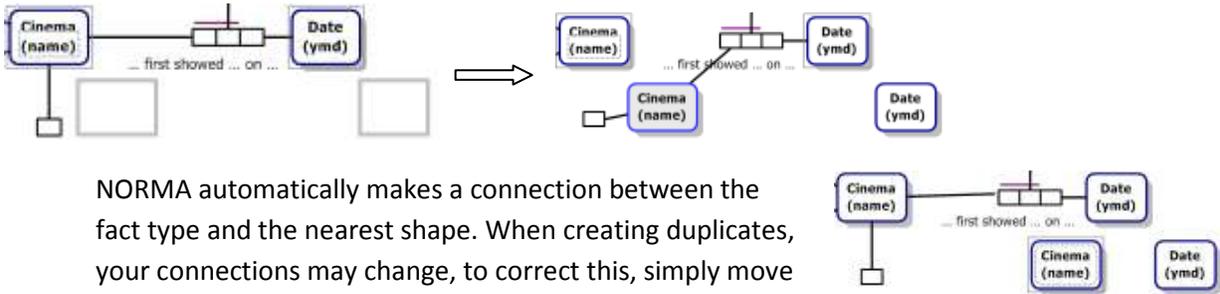
On the 'Cinema' page of the model, we find:

On the 'Movie' page of the model, we find:

To duplicate a shape for the same page, begin by selecting the desired shape, hold the CTRL key, and drag a copy of the shape to the desired location. A second shape will be created at the drop location.
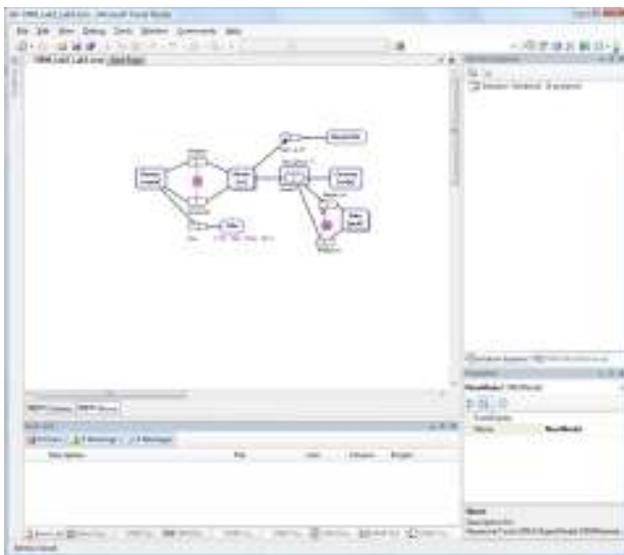

Duplicating multiple shapes can also be done by selecting the shapes to be copied, holding the CTRL key, and then dragging the shapes to the desired location.
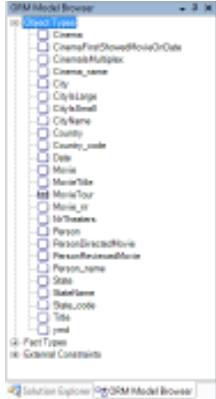

NORMA automatically makes a connection between the fact type and the nearest shape. When creating duplicates, your connections may change, to correct this, simply move your duplicate object further away, and the connection will reconnect to the closest shape.

To create a duplicate shape on a second page, the process is different, and requires interaction with the model browser.

The Visual Studio IDE looks like the following with the 'Movie' page selected:
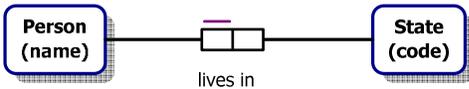
To create a duplicate object, select the 'ORM Model Browser.' This will show the Model Browser in place of the Solution Explorer (depending on your VS2005 setting).

Expand the Object Types node in the Model Browser. All Object Types in the Model (all pages) are shown.

Add Person(name) to the model by dragging and dropping ⬭ Person from the Model Browser to the ORM Diagram.

The ⬓Person (name)⬓ shape will appear on your page. By dragging and dropping ⬭ State from the Model Browser as well, and adding a fact type, Person lives in State can be displayed.

Each Person lives in at most one State.
It is possible that more than one Person lives in the same State.