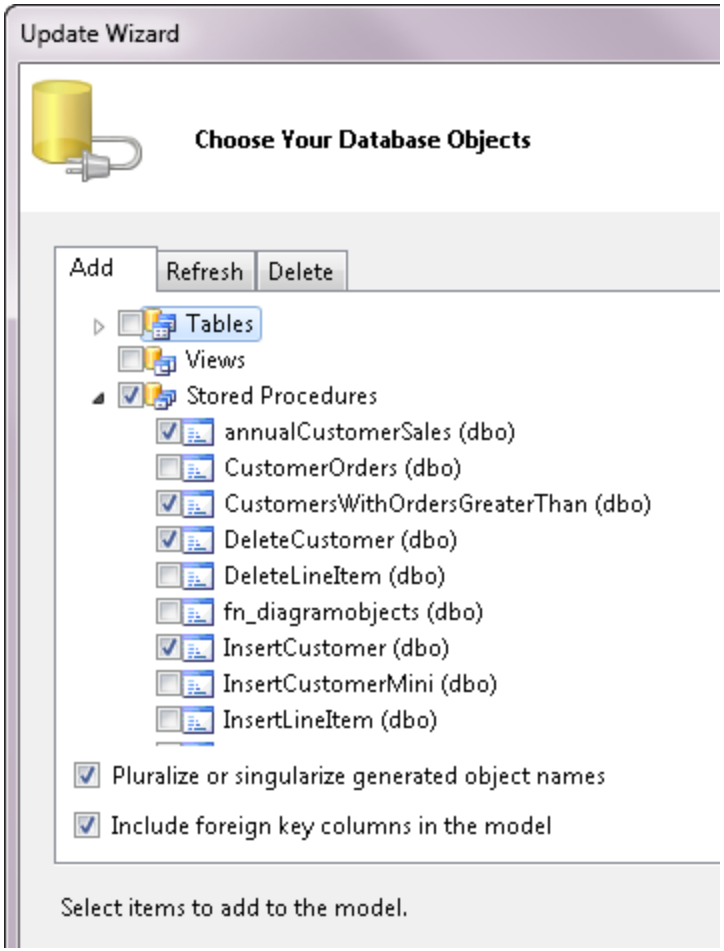
Mapping Stored Procedures

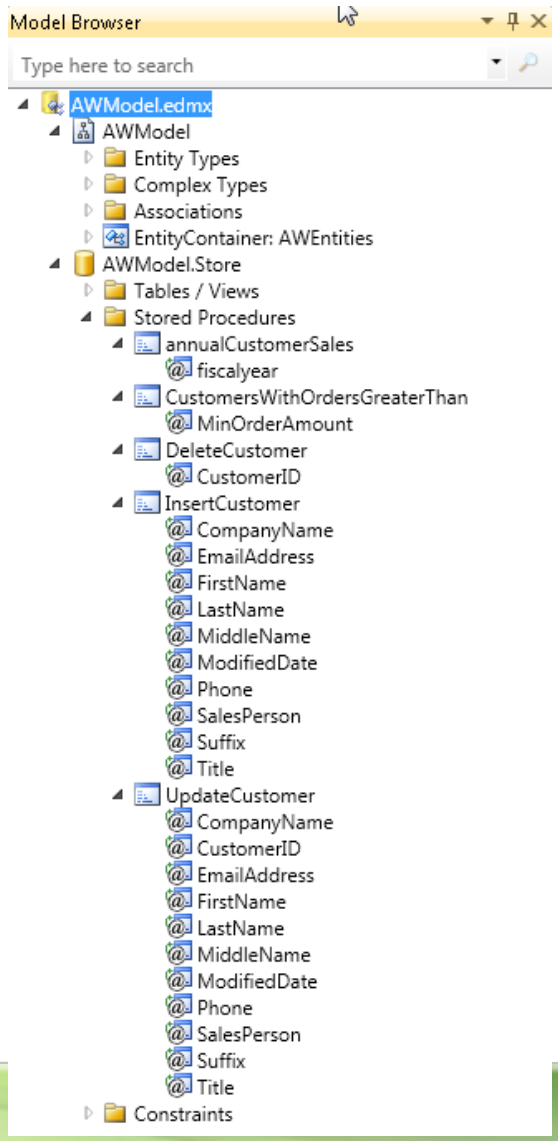
Using the Entity Data Model Designer to Implement Stored Procedures into your Entity Framework Model

Objectives

- Bringing Database Stored Procedures into the Model
- Mapping Modification Procedures to Entities
- Importing Stored Procedures that Return Entities
- Importing Stored Procedures that Return Non-Entity Data
- Implementing Stored Procedures that Impact the Database

Stored Procedure Represented in Metadata





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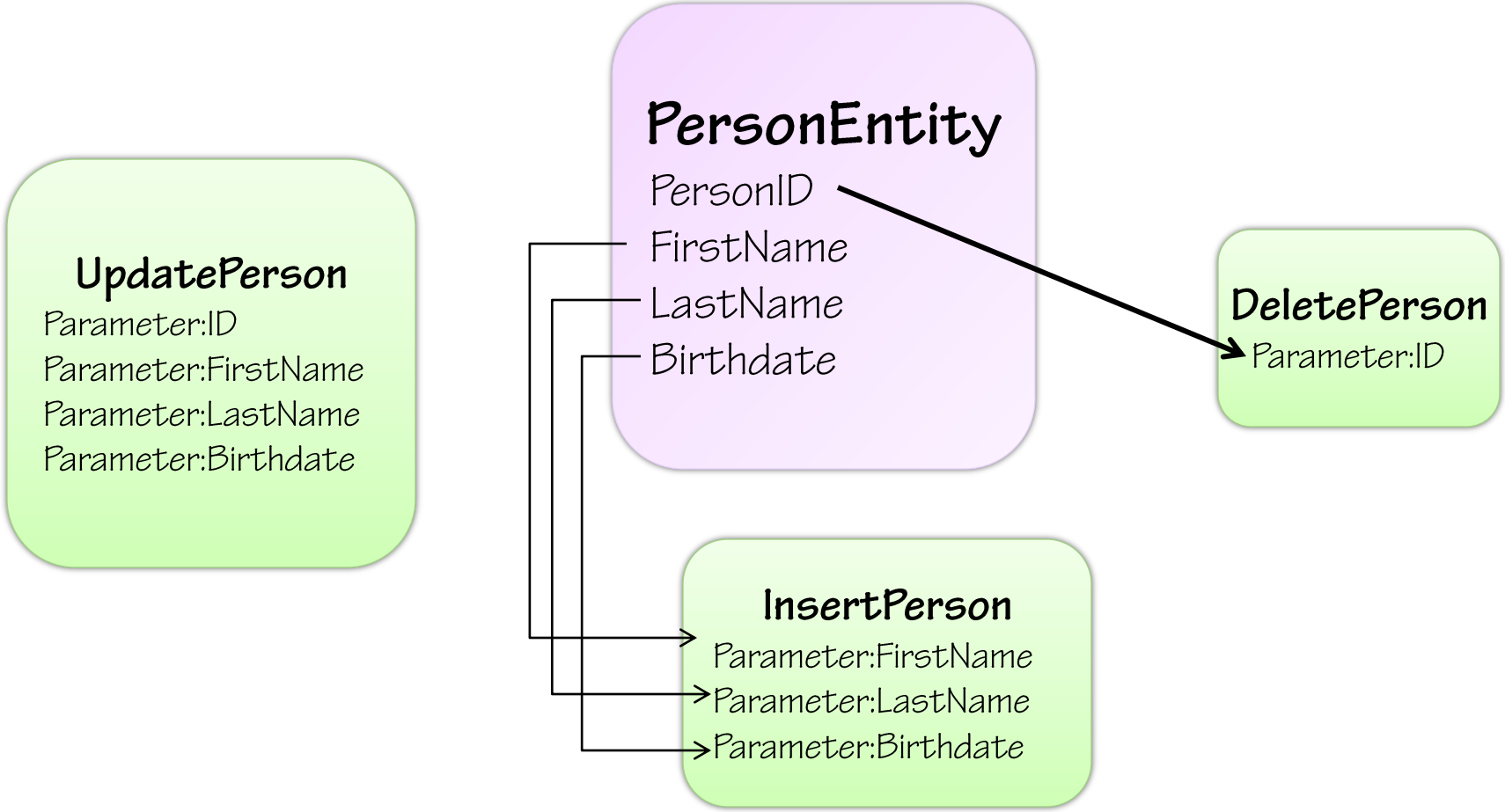
Modification Stored Procedure Mapping



Importing Stored Procs that Return Entities

NewCustomersInPastYear

```
SELECT P.PersonID,
   FirstName as First,
   LastName as Last,
   Birthdate,H.CustomerDate,
   H.RecommendedBy
FROM Person P, History H
WHERE P.PersonID=H.PersonID
AND DateDiff(yy,
                  H.CustomerDate,
                  GetDate())<=1
```

Person Entity

PersonID
First
Last
Birthdate
CustomerDate
RecommendedBy

Person maps back to Person & History tables using Entity Splitting

Importing Stored Procs that Return Non-Entities

```
ALTER PROCEDURE [CustomersWithOrdersGreaterThan]
@MinOrderAmount int
AS
SELECT    Max(CompanyName)
FROM      Customer C INNER JOIN
          SalesOrderHeader  O ON C.CustomerID = O.CustomerID
WHERE     (SubTotal > @minorderamount)
GROUP BY C.CustomerID
```

Returns series of strings

- Acme Trading
- Eastside Sports
- Metro Bikes
- Main Street Cycles

```
ALTER PROCEDURE [TotalOfOrdersGreaterThanByCustomer]
@MinOrderAmount int
AS
SELECT    Max(CompanyName), Sum(SubTotal),Max(C.CustomerID)
FROM      Customer C INNER JOIN
          SalesOrderHeader  O ON C.CustomerID = O.CustomerID
WHERE     (SubTotal > @minorderamount)
GROUP BY C.CustomerID
```

Returns series of string | decimal | int

- Acme Trading | 53012.25 | 57
- Eastside Sports | 2428.10 | 129
- Metro Bikes | 2428.10 | 241
- Main Street Cycles | 4538.75 | 32

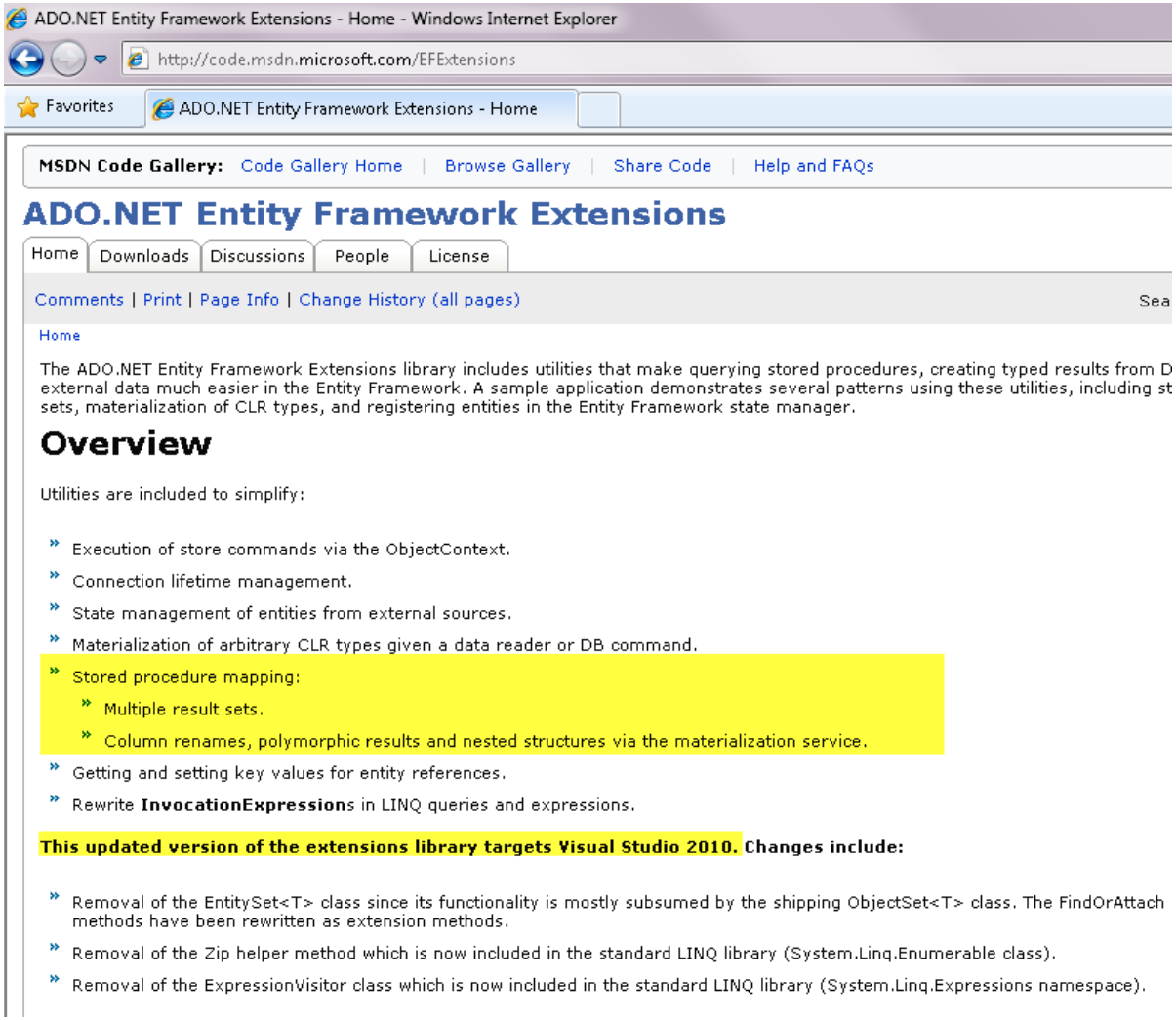
Importing Stored Procs that Affect the Database

```
ALTER PROCEDURE [ApplyShipDateToOrder]
 @orderId int,
 @shipDate datetime
AS
…
```

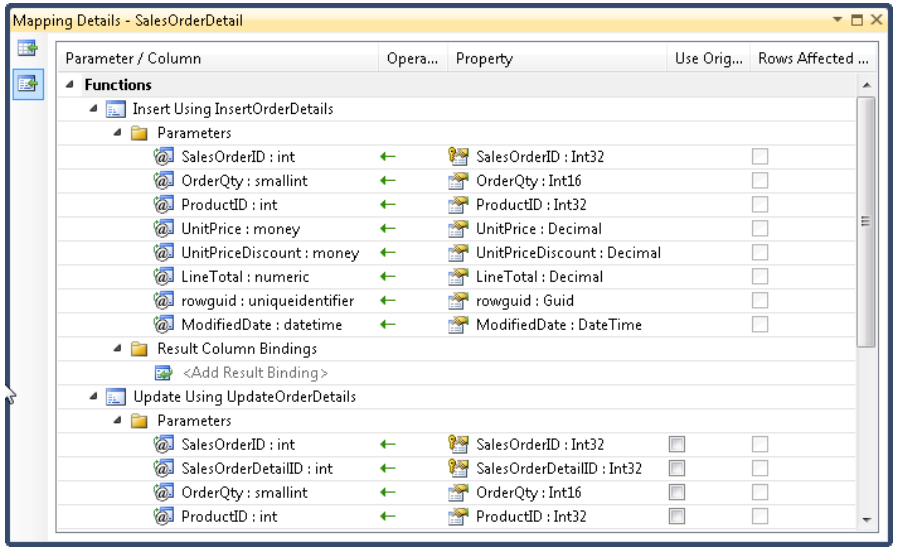
```
ALTER PROCEDURE [UpdateOrderTotals]
AS
…
```

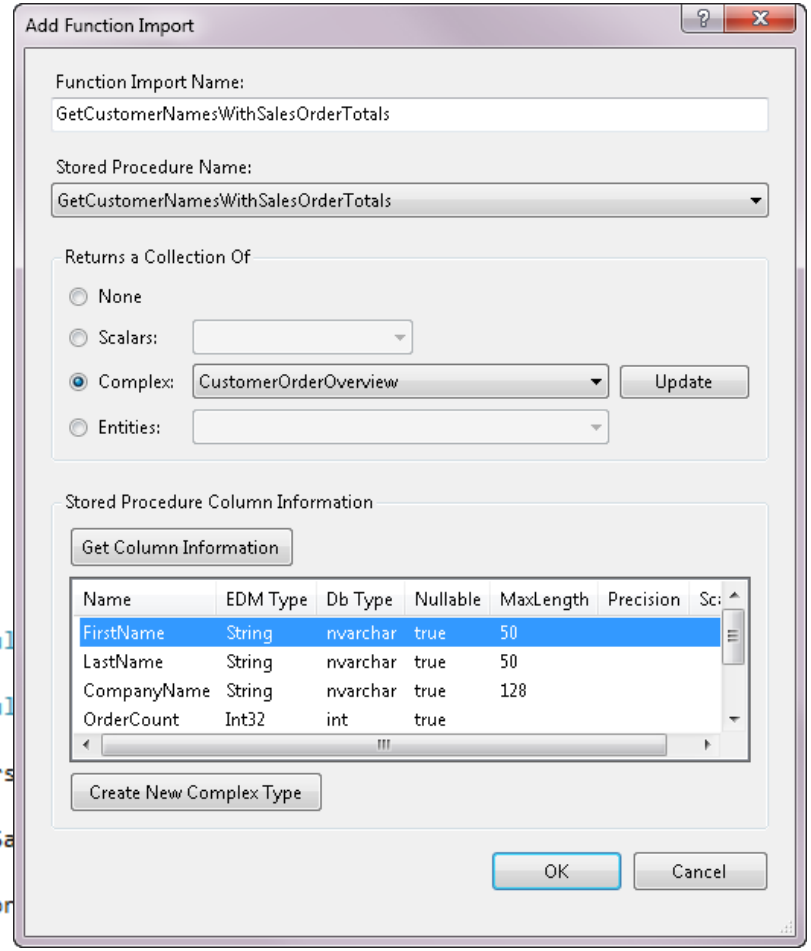
```
ALTER PROCEDURE [CreateCustomerFromContact]
 @ContactID int
AS
…
```

Stored Procs that Return Multiple Resultsets



Summary






```
#region Function Imports

public ObjectResult<SalesOrderDetail> GetOrderDetailsForOrder(Nul

public ObjectResult<SalesOrderDetail> GetOrderDetailsForOrder(Nul

public ObjectResult<global::System.String> GetCustomersWithOrders

public ObjectResult<CustomerOrderOverview> GetCustomerNamesWithSa

public int ApplyShipDateToOrder(Nullable<global::System.Int32> or

#endregion
```

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Resources

- **Pluralsight On Demand**
  - http://www.pluralsight.com
- **Programming Entity Framework, 2nd Edition, Julie Lerman**
  - O'Reilly Media, August 2010
  - http://www.learnentityframework.com
- **Microsoft Data Developer Center**
  - http://msdn.com/data