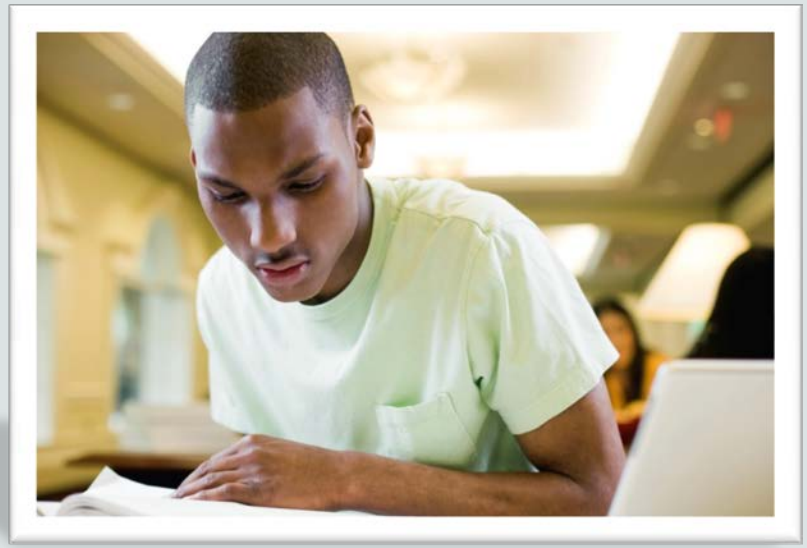

ORACLE
ACADEMY

Database Foundations

5-2
Mapping Primary and Foreign Keys



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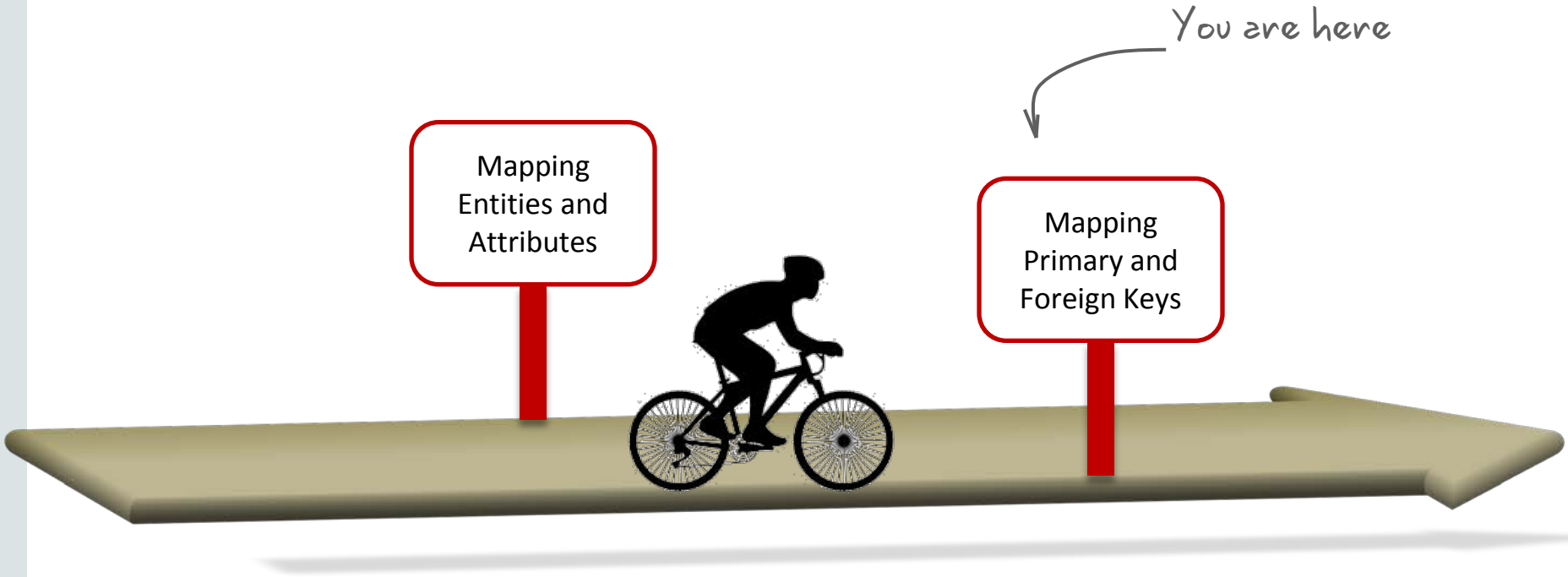
Road Map

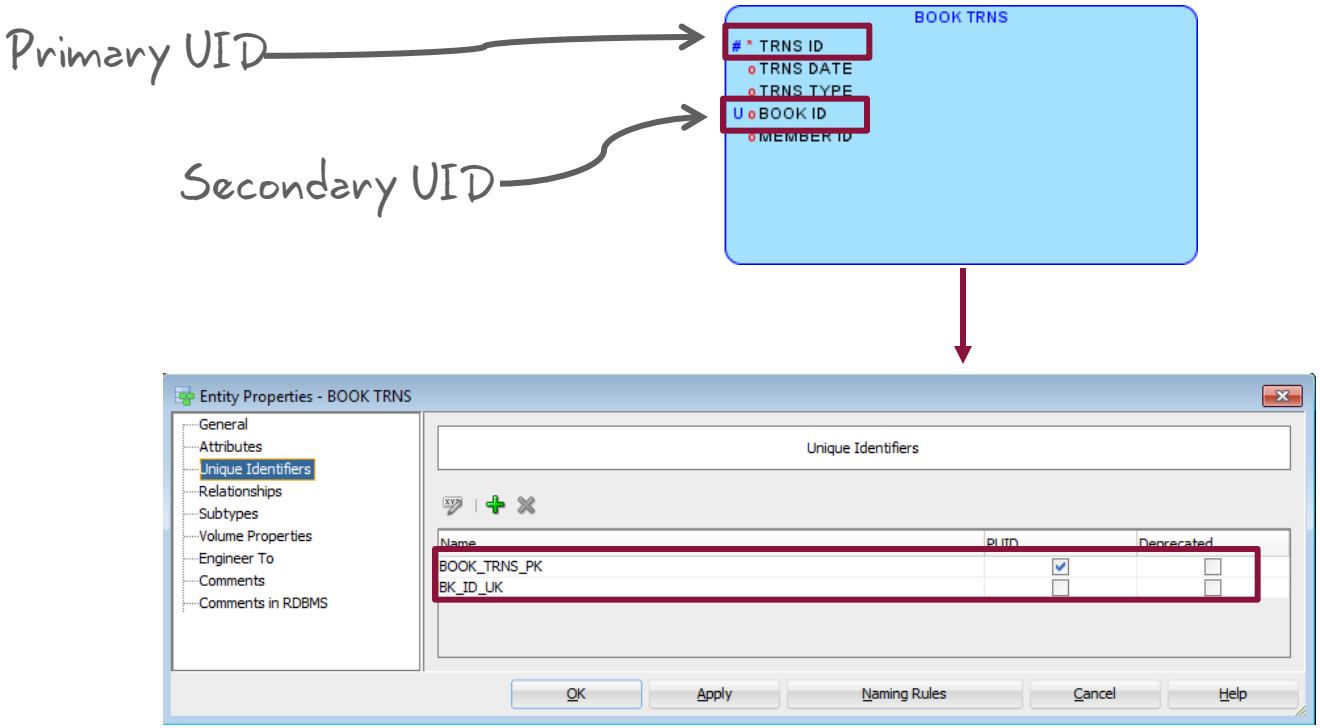


Objectives

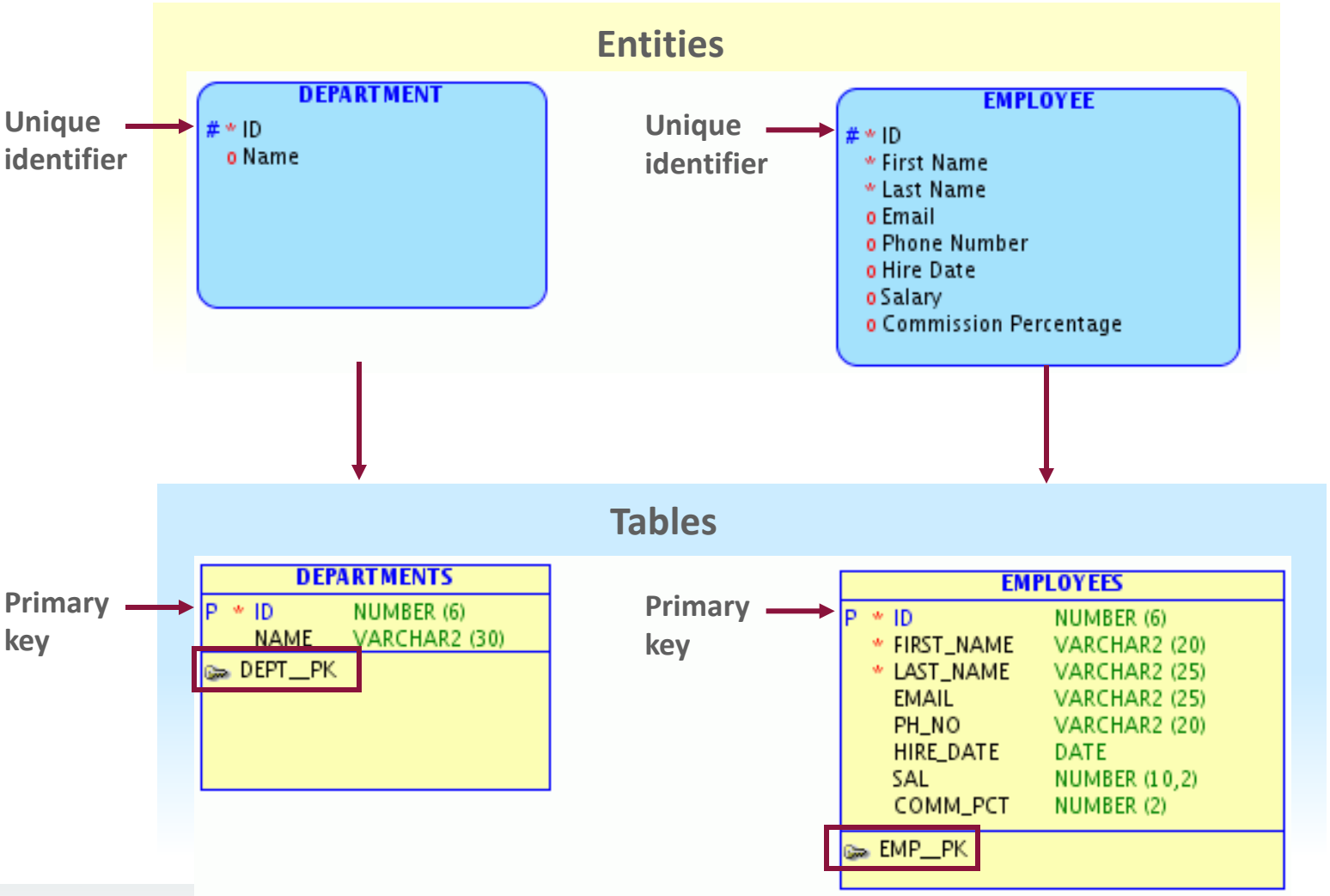
This lesson covers the following objectives:

- Map UIDs to primary keys
- Engineer UIDs
- Map relationships to foreign keys
- Define naming templates
- Apply templates to the relational model
- Map exclusive relationships to foreign keys
- Map subtypes to tables
- Identify overlapping and folding keys

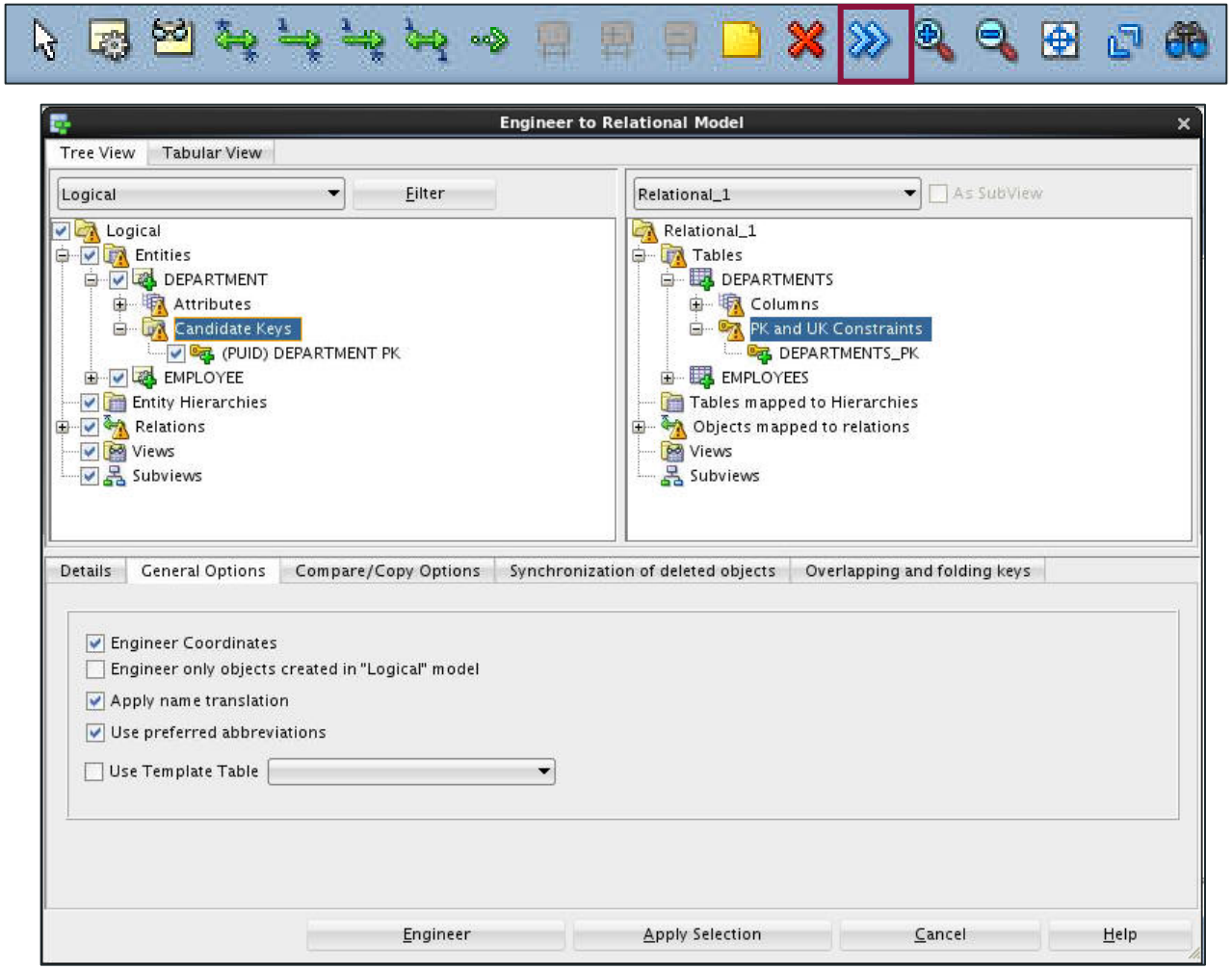
Basic Mapping: Unique Identifiers



Mapping UIDs to Primary Keys

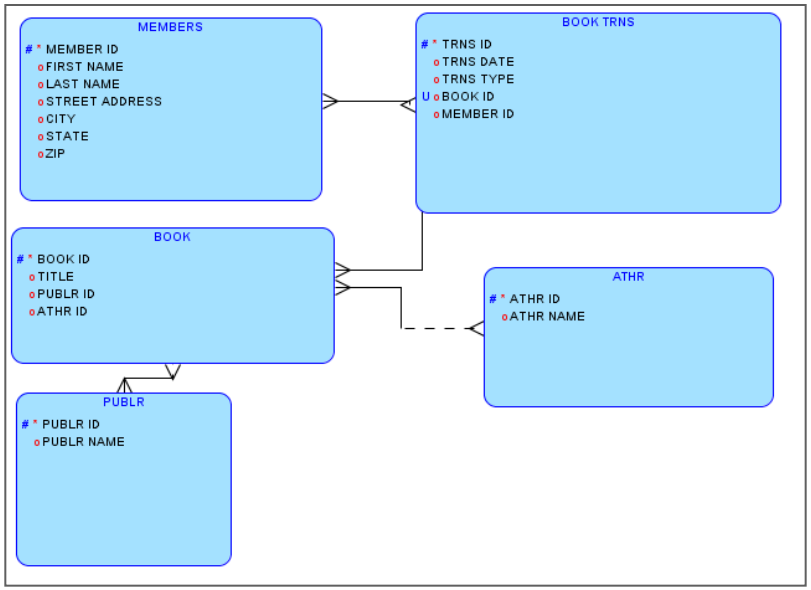


Engineering UIDs

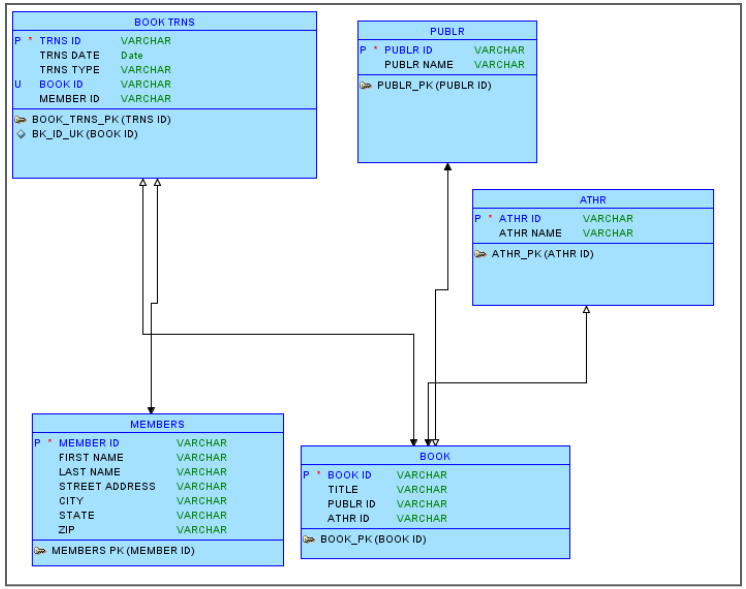


Relationship Mapping

Barker Notation

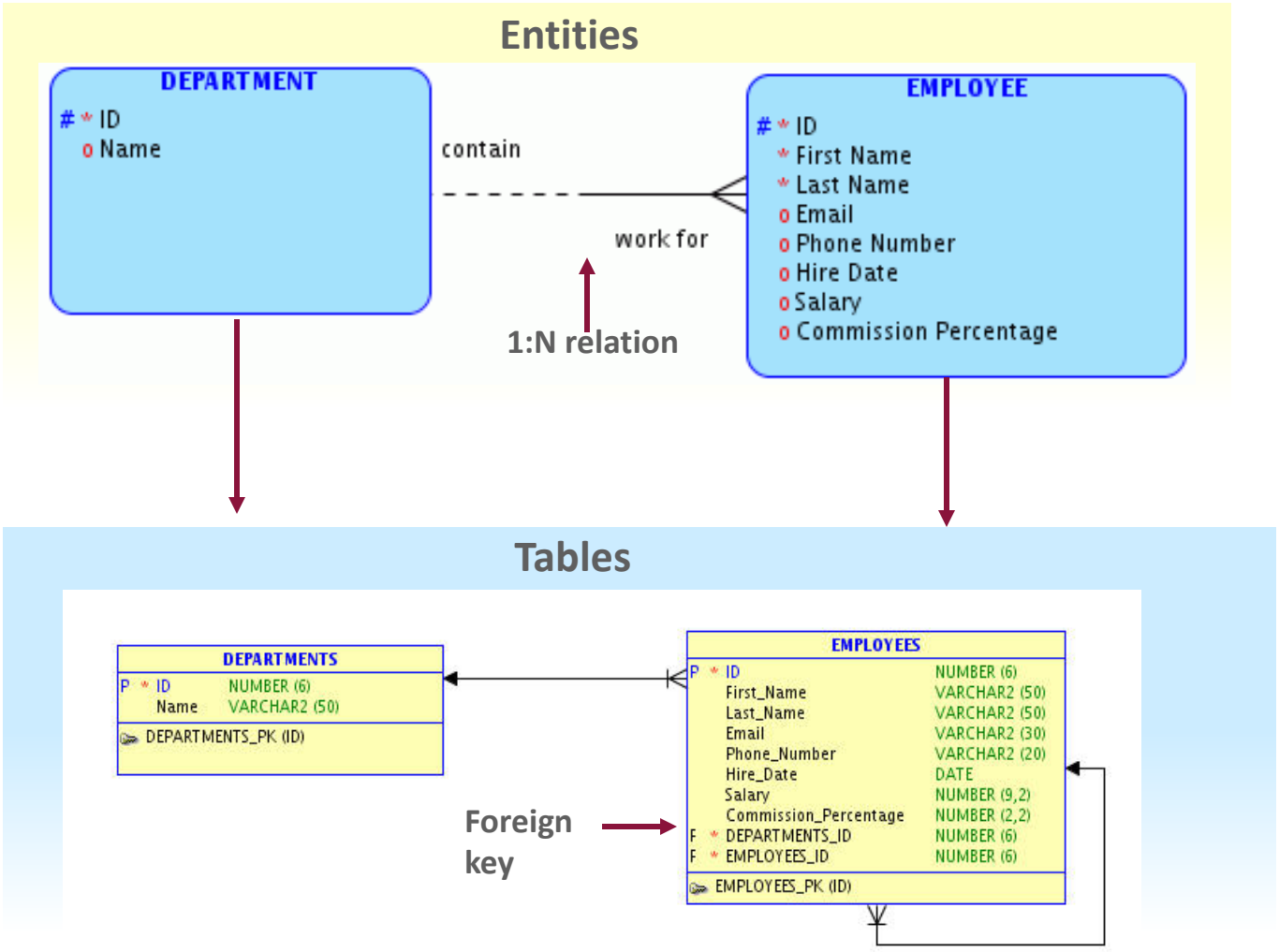


Bachman Notation

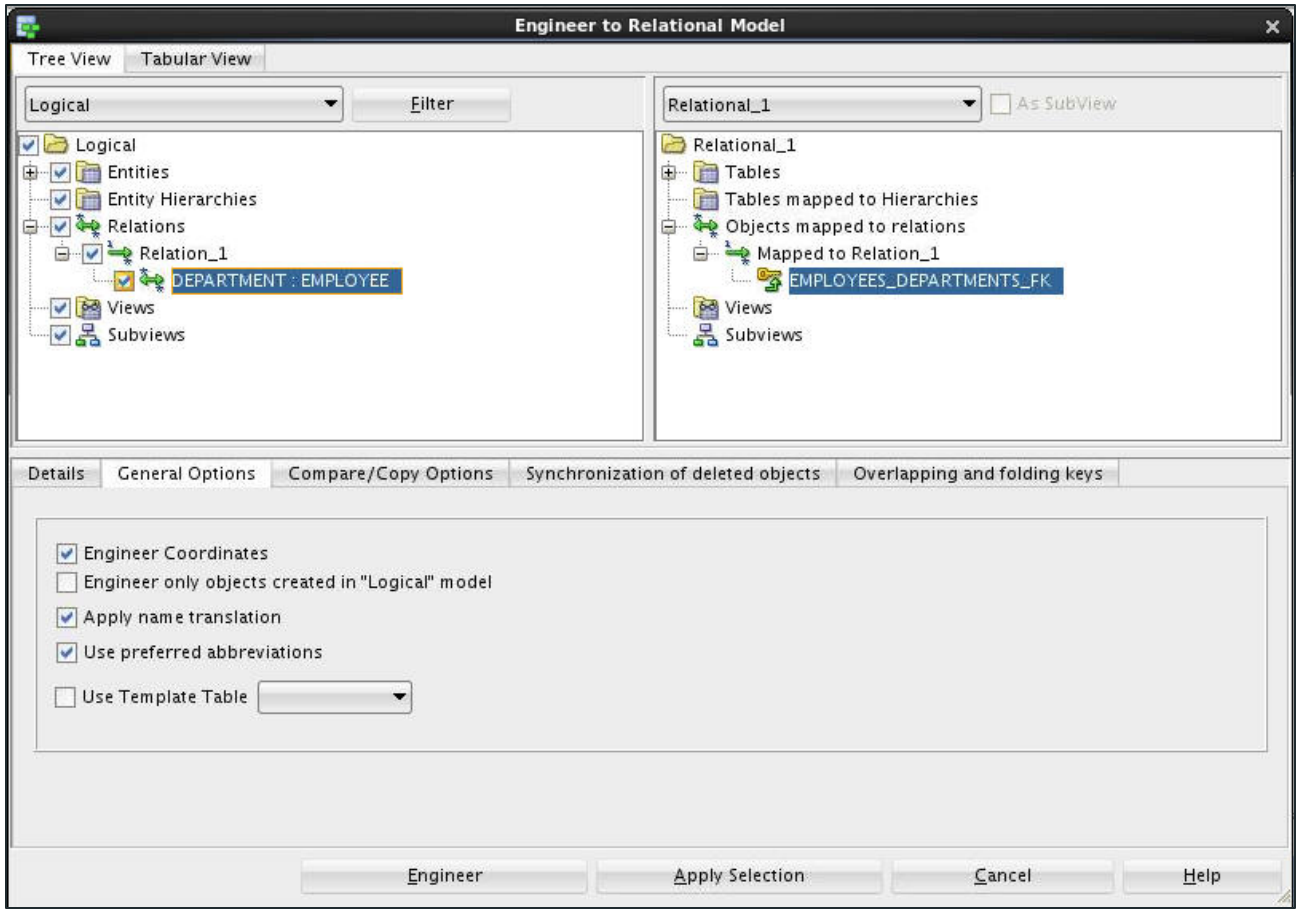


Barker Notation	Bachman Notation	Transformed To
#	P	Primary Key
U	U	Unique Key
Relationship	Relationship	Foreign Key

Mapping Relationships to Foreign Keys

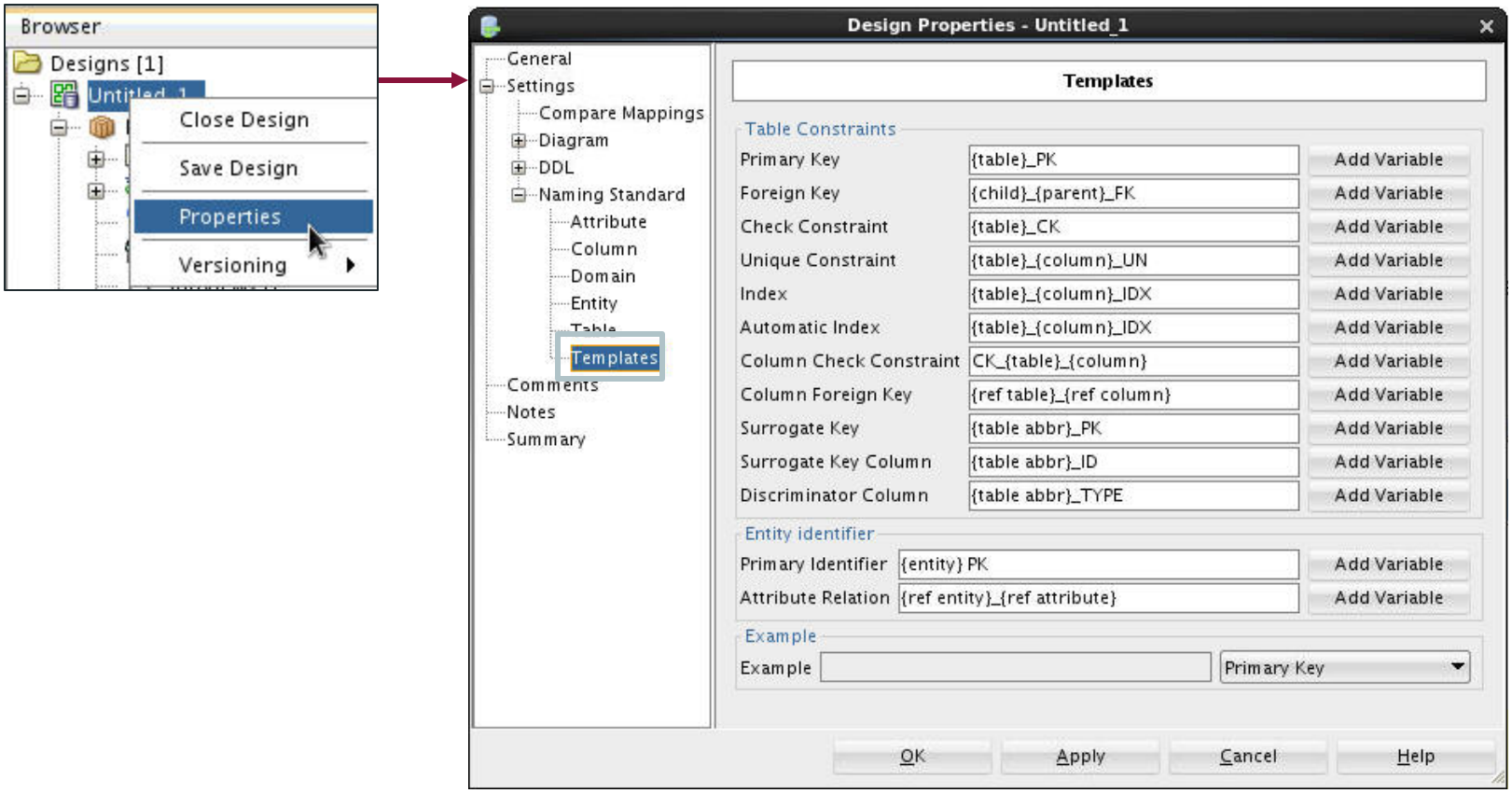


Mapping Relationships to Foreign Keys



Defining Naming Templates

Right-click Design > Properties > Naming Standard > Templates.

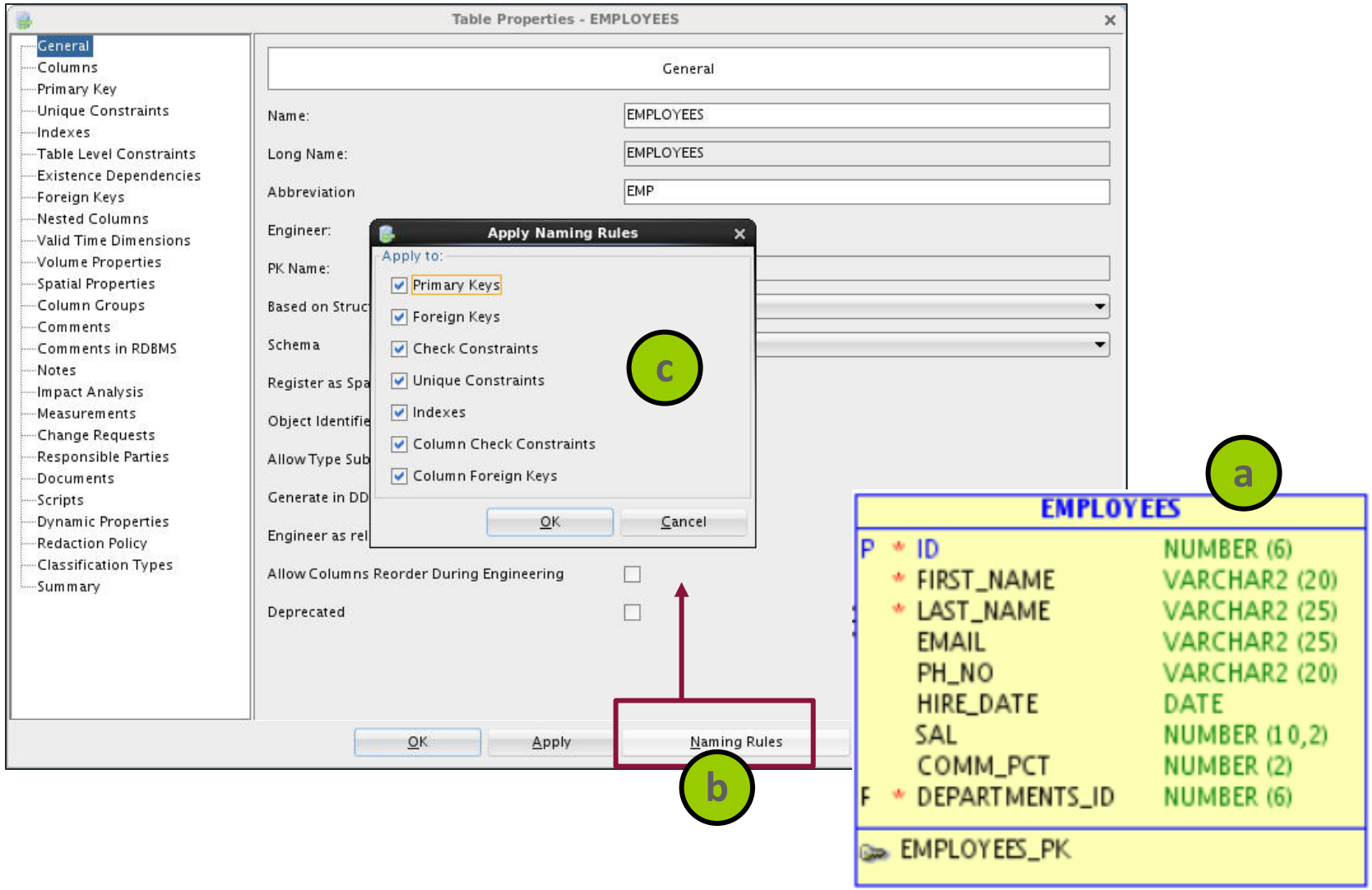


Example: Naming Templates

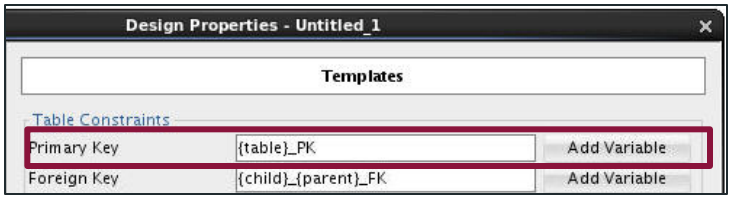
- Table name: ADMIN
- Model name: ORACLEDEMO

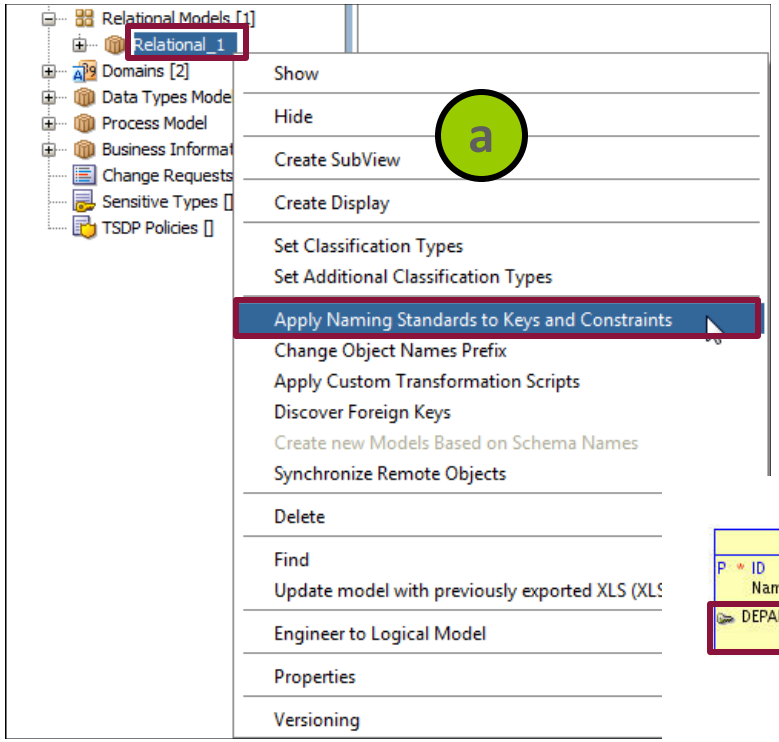
Template	Result
{table}_PK	ADMIN_PK
SUBSTR(7,4,FRONT,{model})	DEMO
SUBSTR(1,3,FRONT,{table})	ADM
SUBSTR(1,3,FRONT,TABLE)	TAB (where "TABLE" is a constant rather than a variable)
IX_SUBSTR(7,4,FRONT,{model})_SUBSTR(1,3,FRONT,{table})_{seq nr}	IX_DEMO_ADM_1

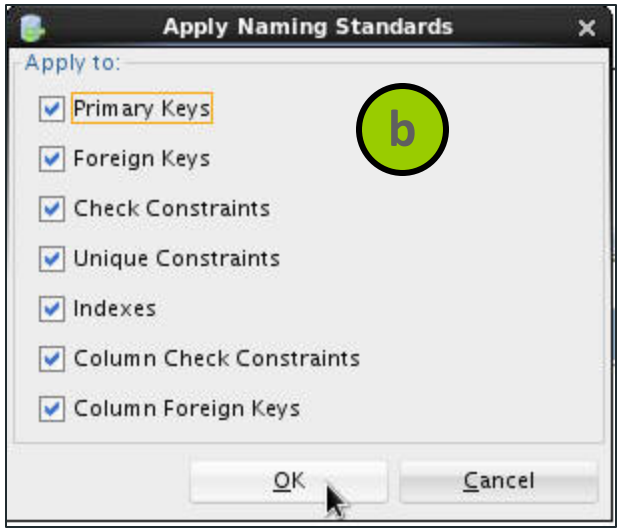
Applying Templates to One Table

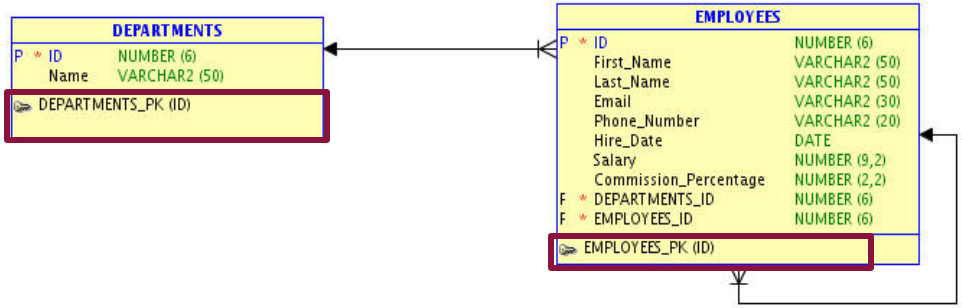


Applying Templates to the Relational Model

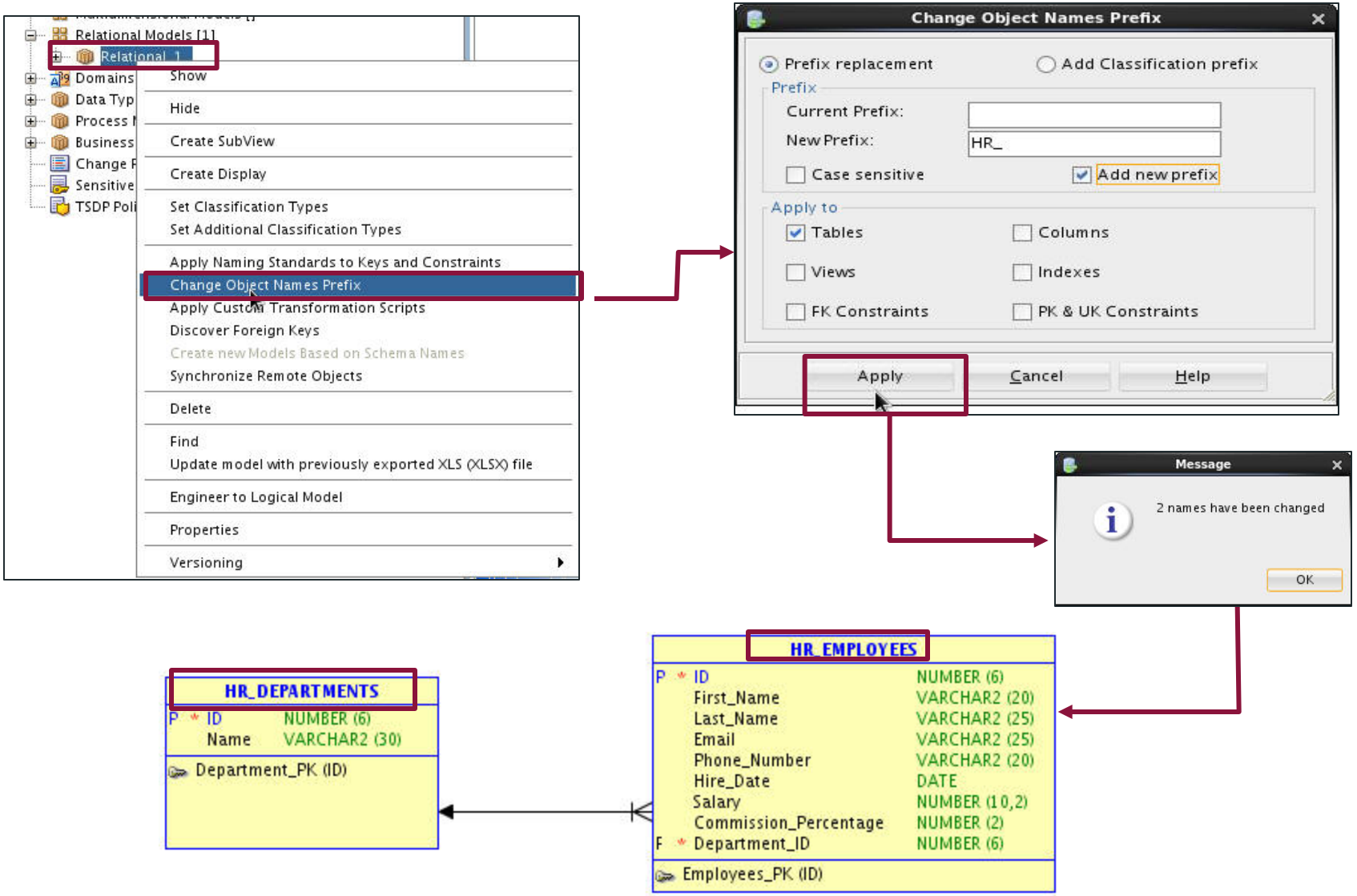








Managing Prefixes

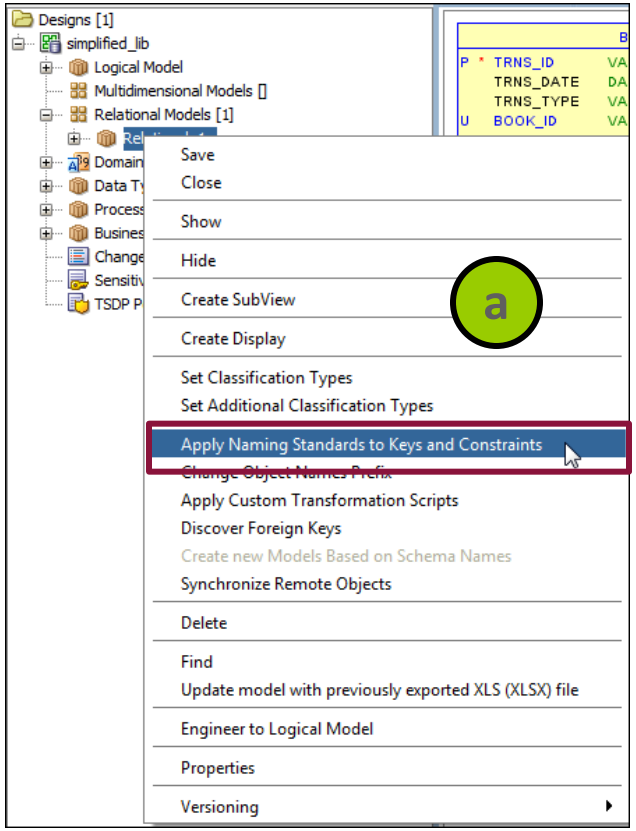


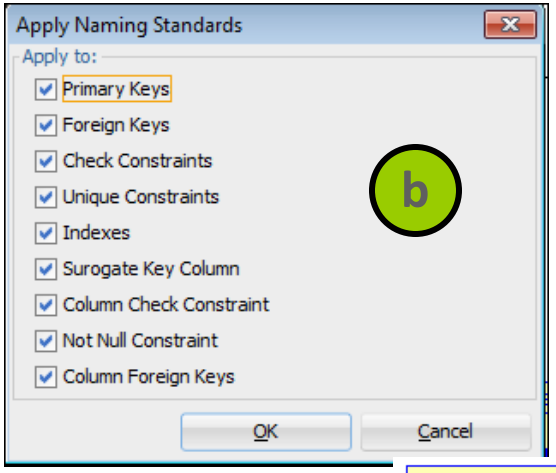
Case Scenario: Template and Prefix

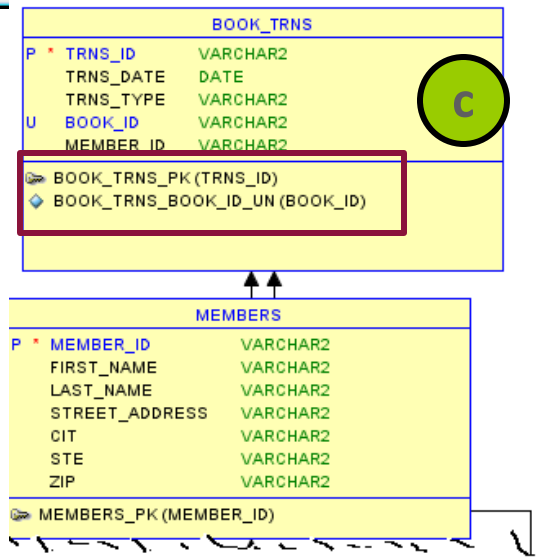
How about applying the naming templates to the Simplified Library Management Relational Model?

Maybe it might be a good idea to prefix the objects with "SLM"?

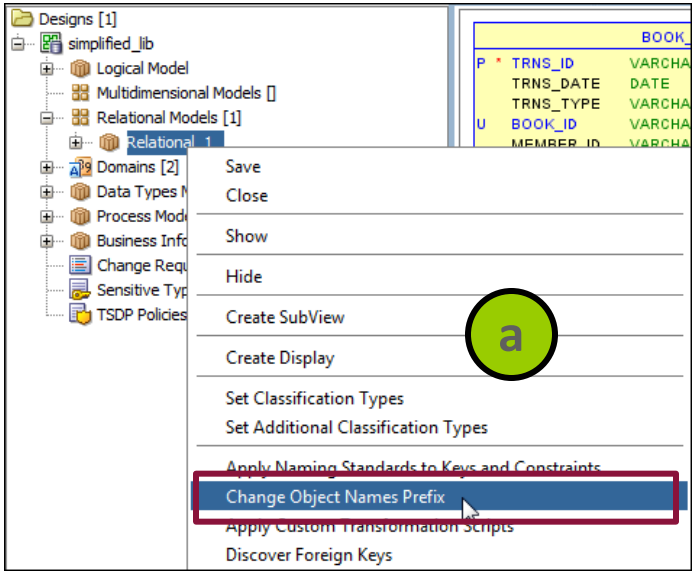
Case Scenario: Applying Naming Templates

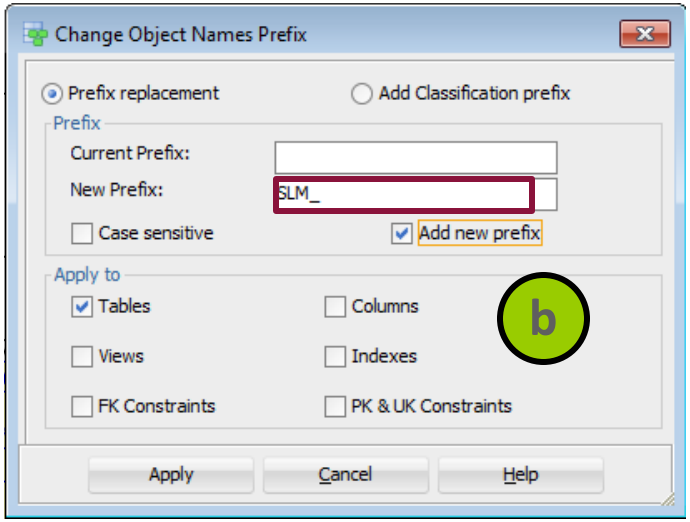


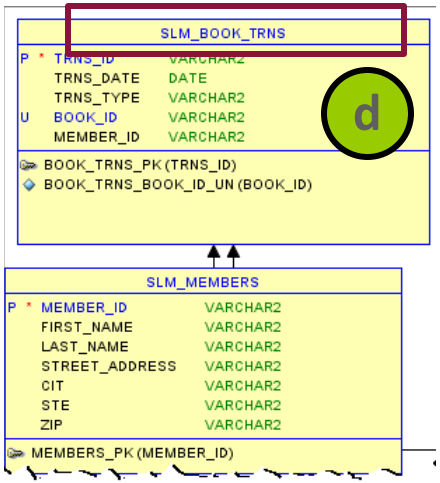


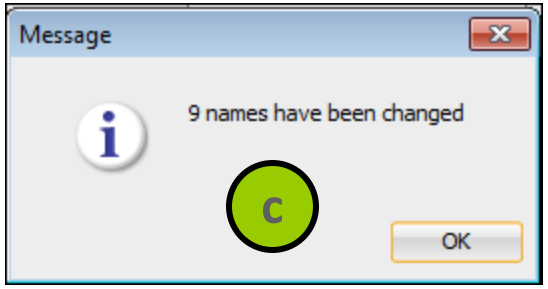


Case Scenario: Applying the Prefix

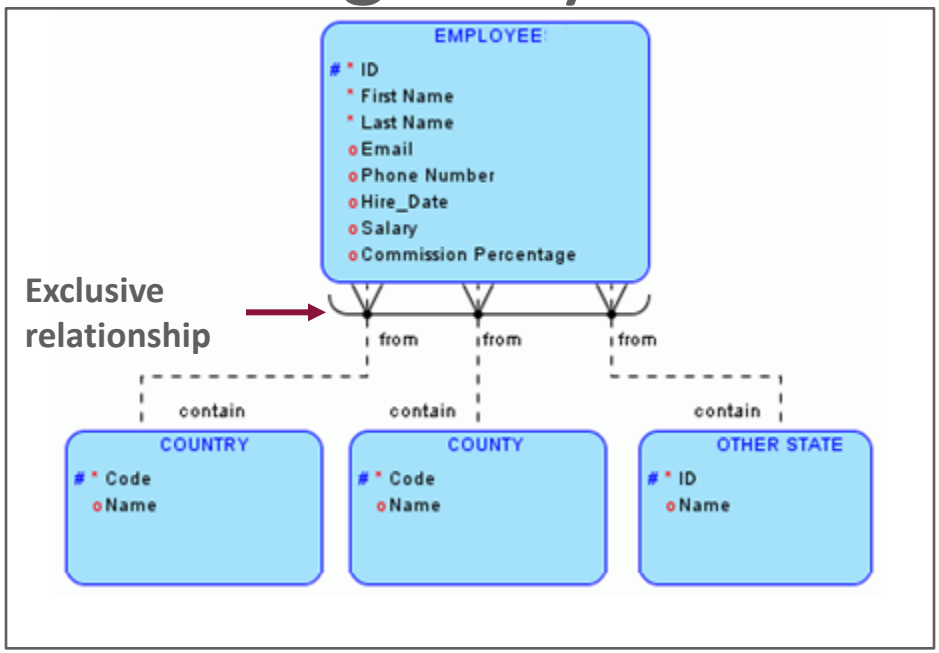




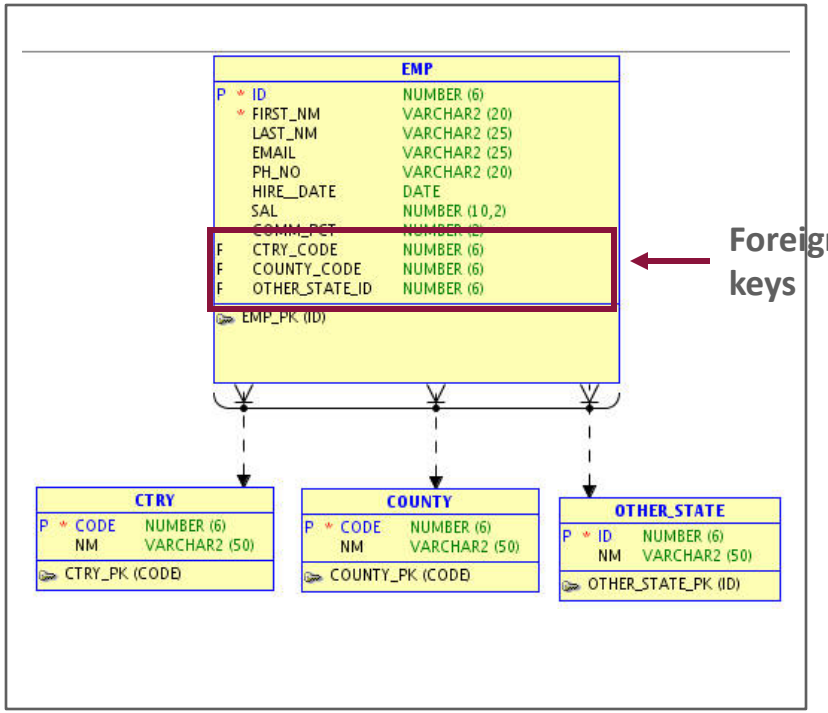




Mapping Exclusive Relationships to Foreign Keys



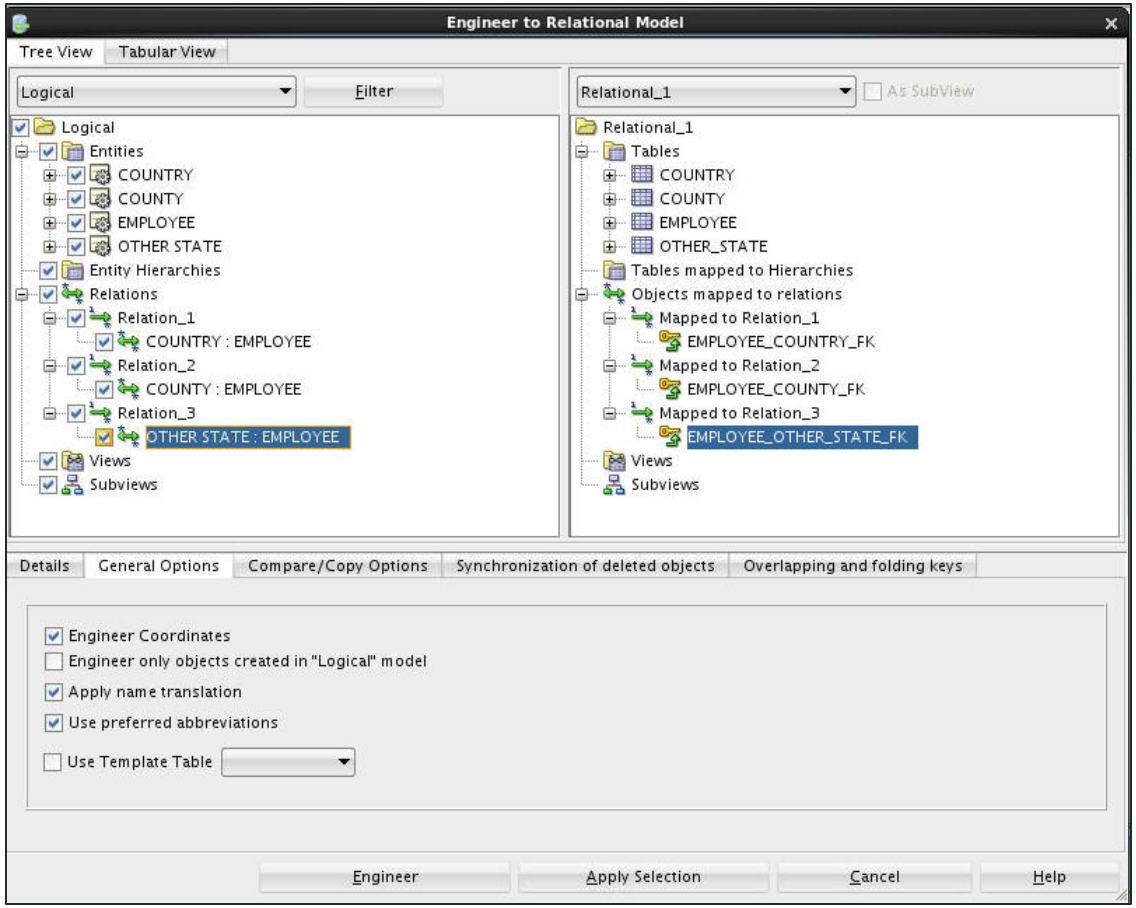
Entities



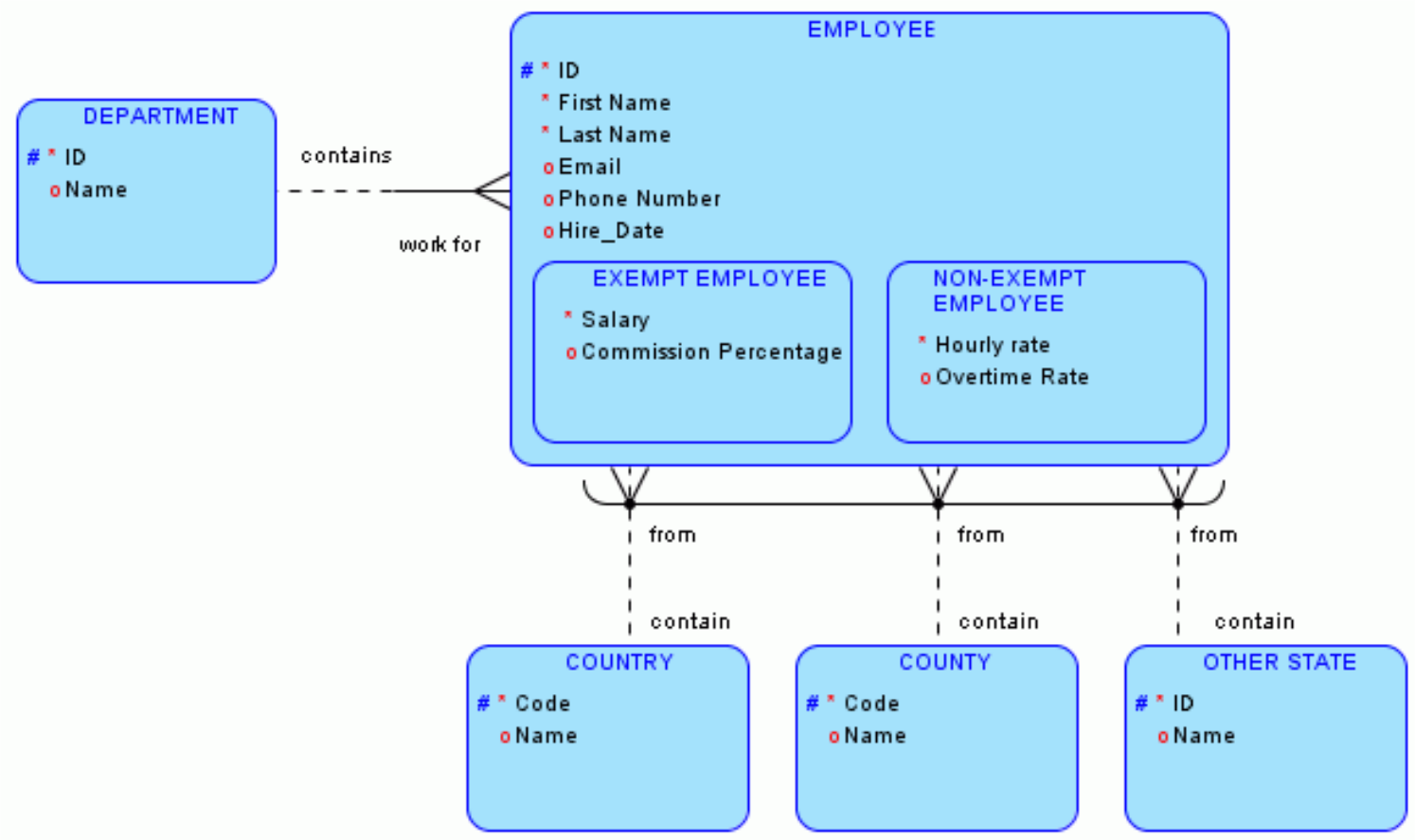
Foreign keys

Tables

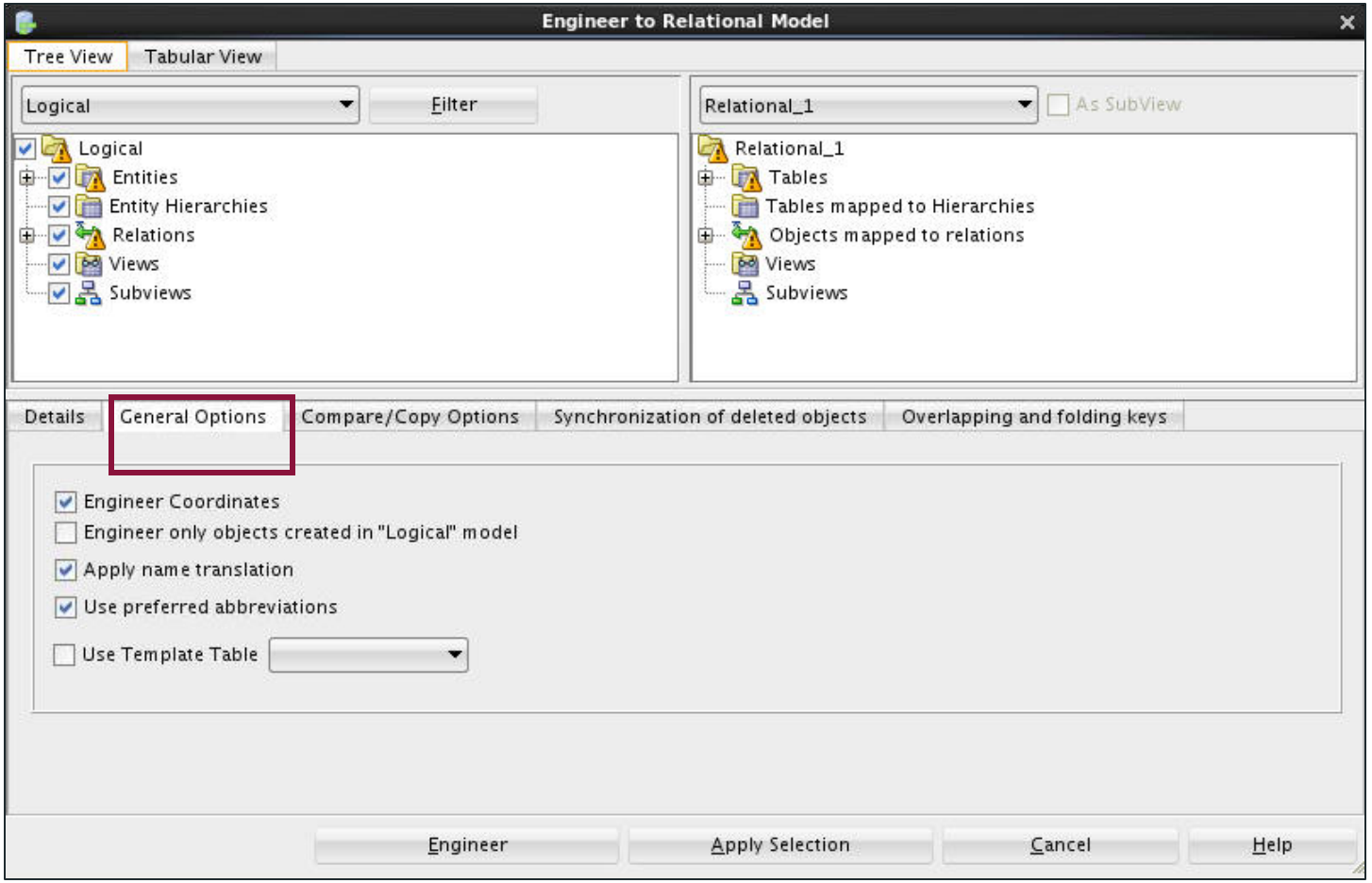
Engineering Exclusive Relationships



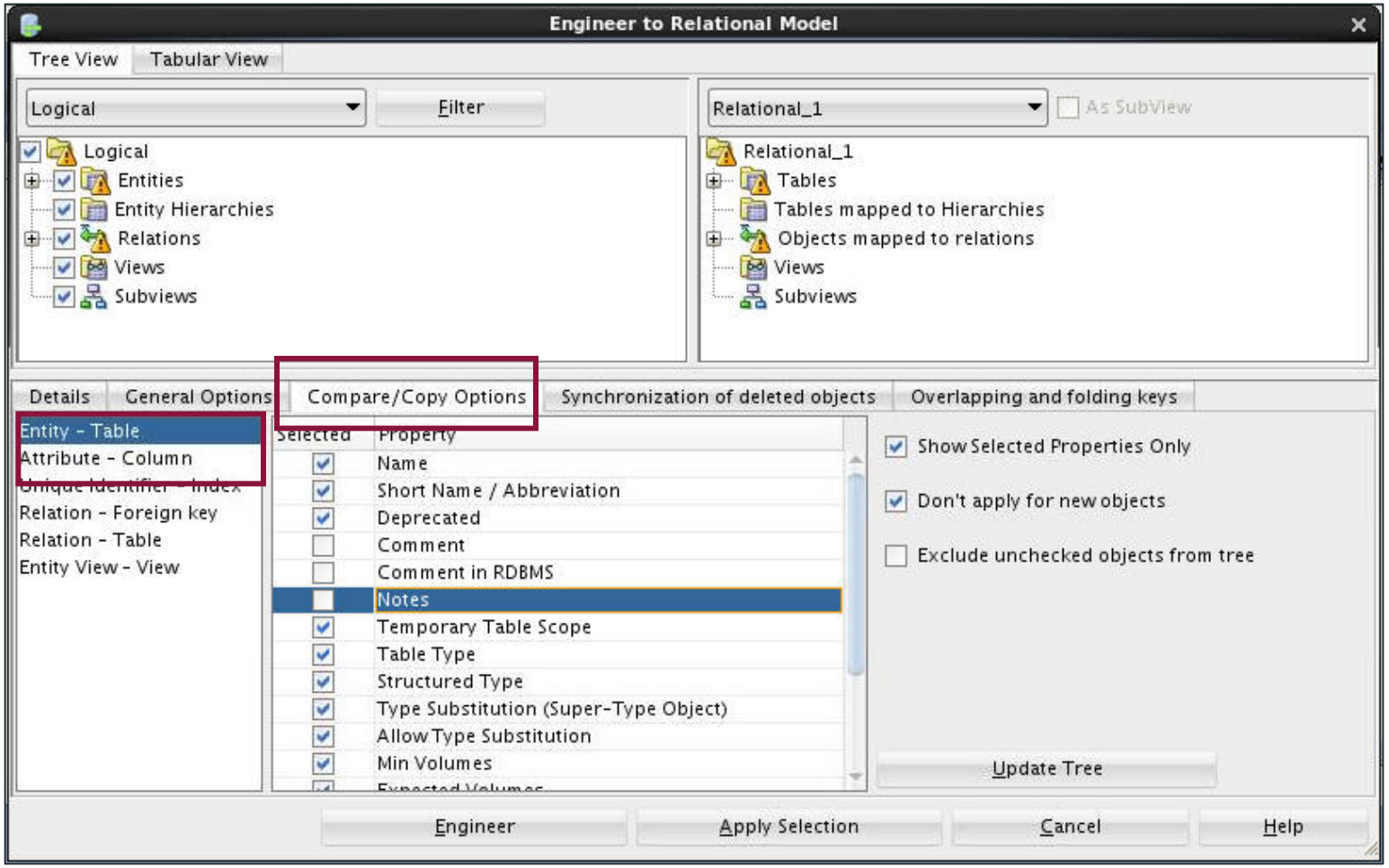
Mapping Subtypes to Tables



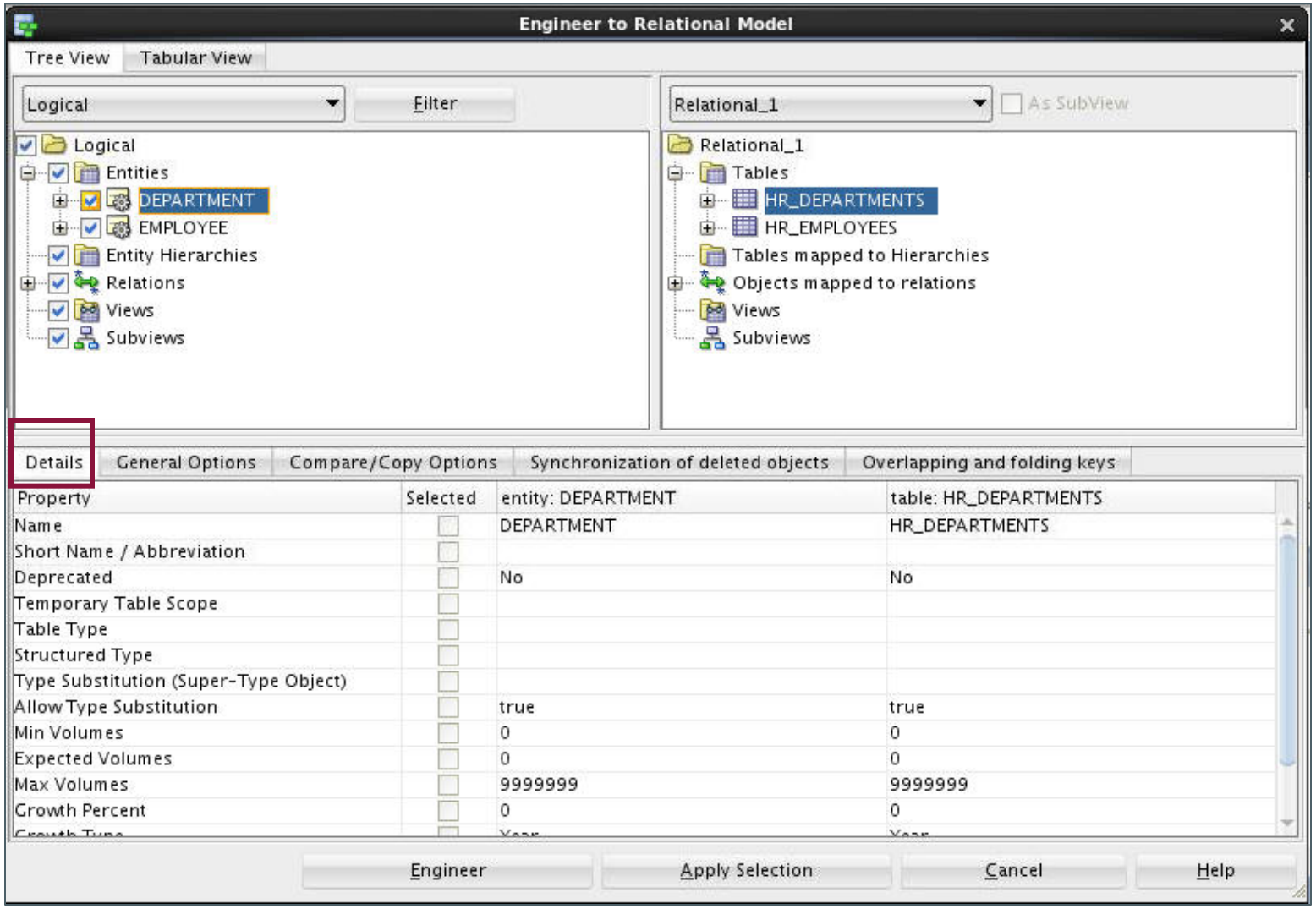
Applying General Options



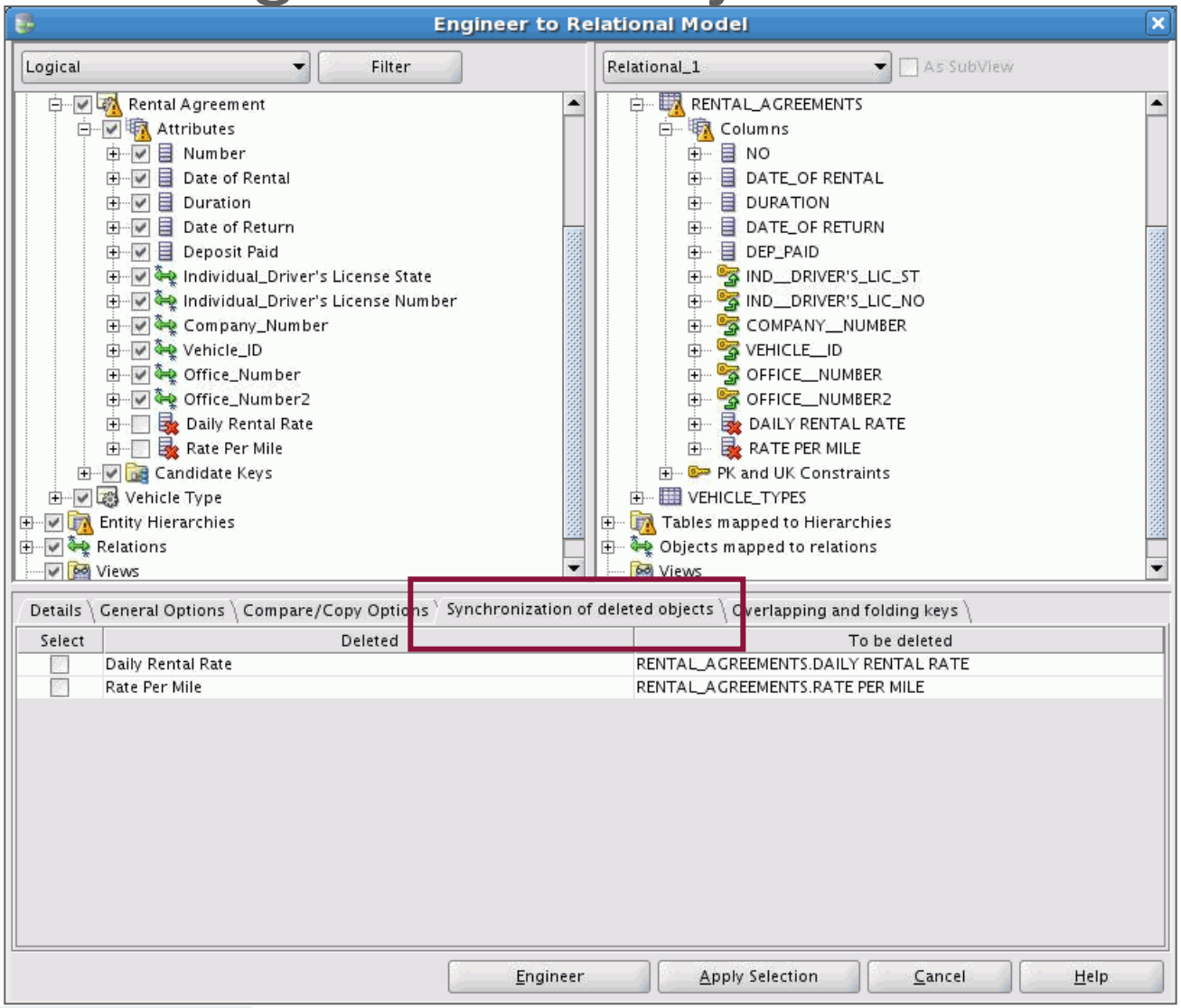
Setting Compare/Copy Options



Viewing the Mapping Comparison

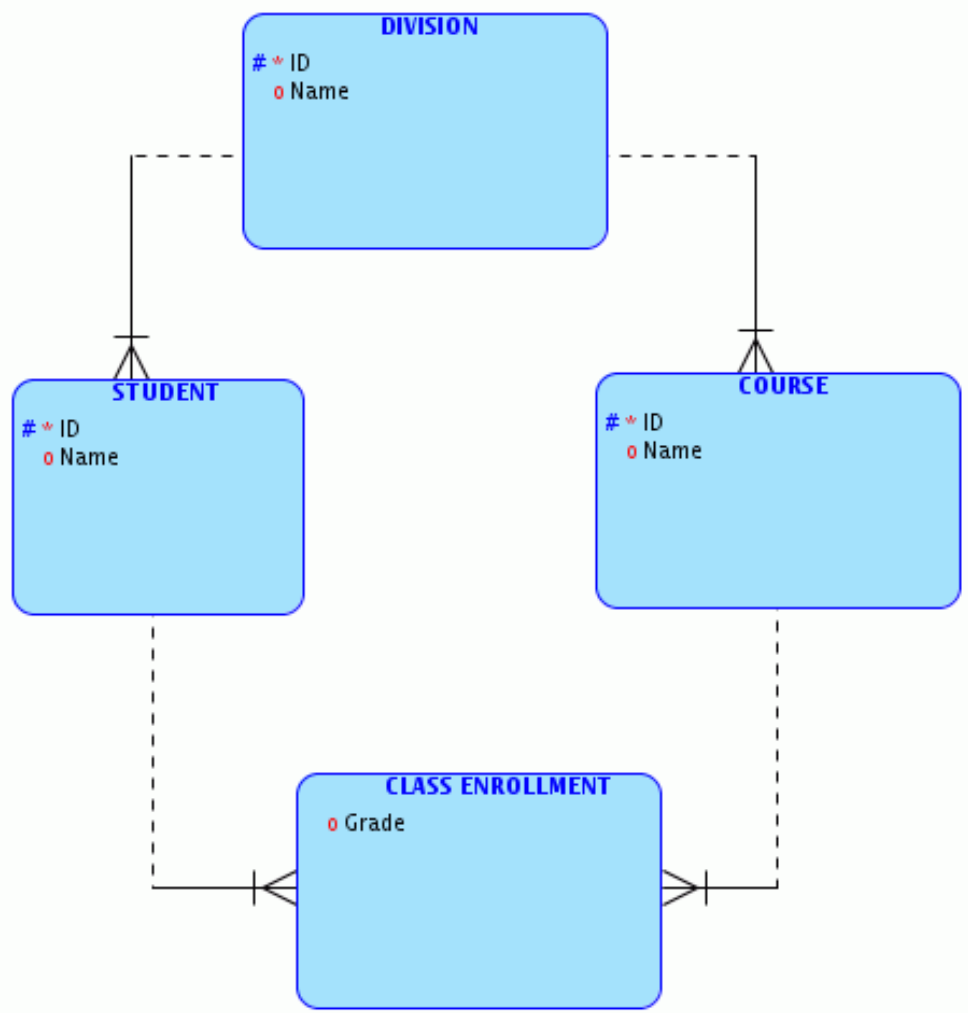


Synchronizing Deleted Objects

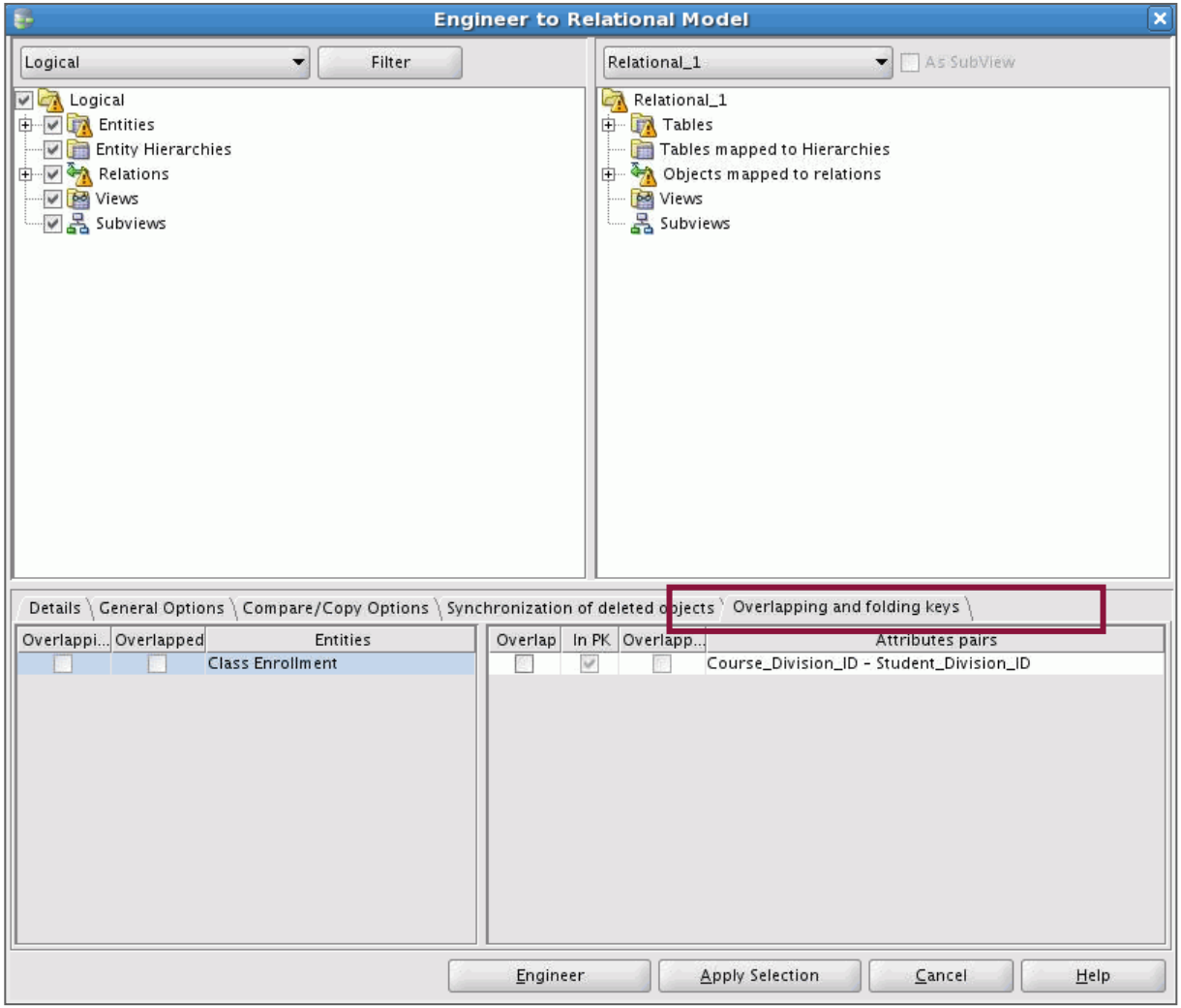


Identifying Overlapping and Folding Keys

- Two attributes in the same entity relate to the same UID attribute.
- You can fold the keys into one column in the relational model during engineering.



Identifying Overlapping and Folding Keys



Summary

In this lesson, you should have learned how to:

- Map UIDs to primary keys
- Engineer UIDs
- Map relationships to foreign keys
- Define naming templates
- Apply templates to the relational model
- Map exclusive relationships to foreign keys
- Map subtypes to tables
- Identify overlapping and folding keys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