



IBM Software Group

Essentials of Rational XDE

Organizing Models in XDE

Rational software

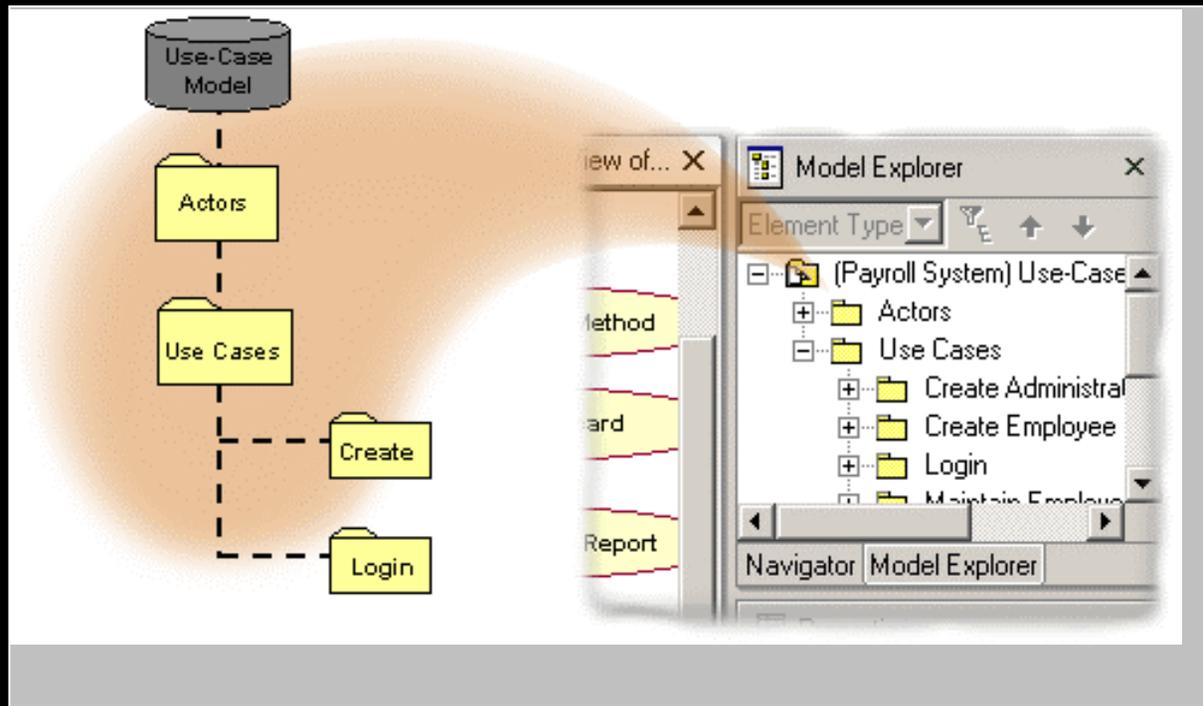


Objectives

- ◆ Explain how packages group and organize your model
- ◆ Show how to use model templates for organizing projects by employing a:
 - Use-case model
 - Analysis model
 - Design model

Create Packages to Organize Your Model

- ◆ Packages group and organize your model
- ◆ Each package name should be simple and adequately describe the package contents



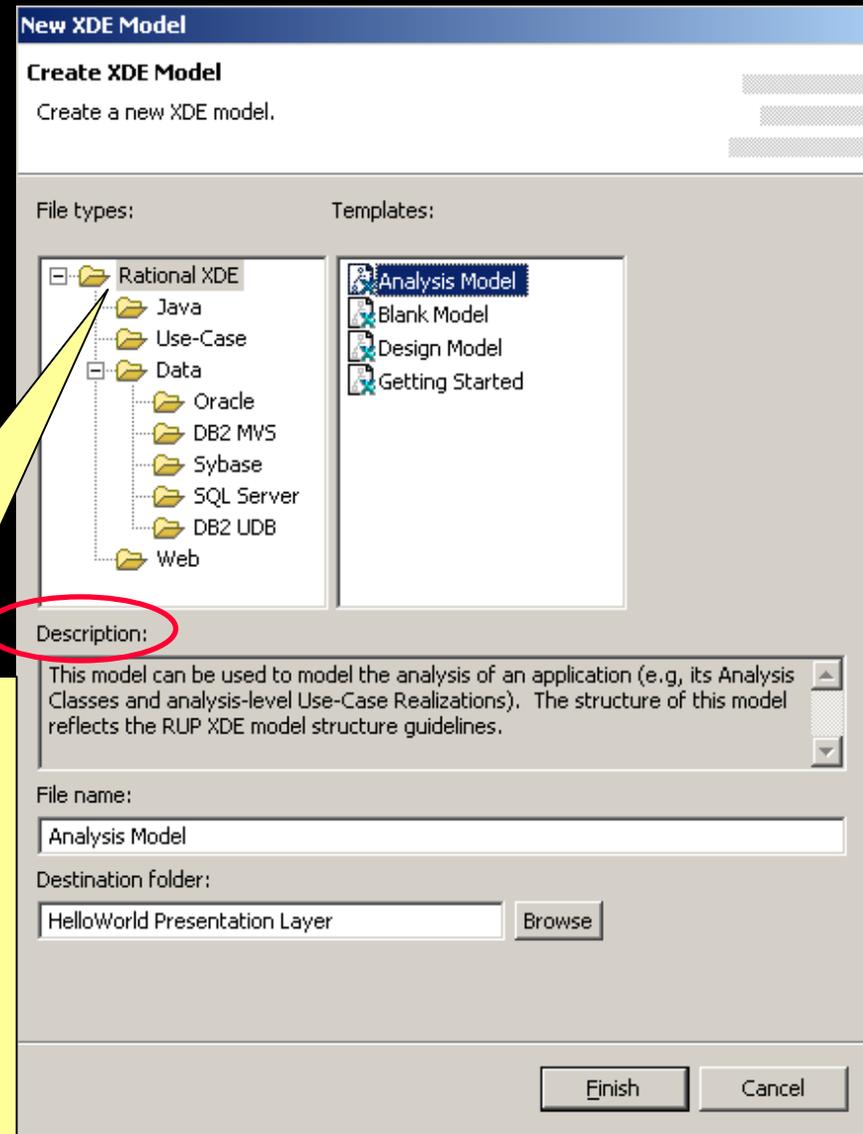
Rational XDE Model Templates

- ◆ Use model templates for organizing project artifacts:
 - Use-Case model
 - Analysis model
 - Design model
- ◆ Provide RUP support via package structure
- ◆ Number of projects and model configuration is an architectural decision
 - Templates provide a starting point

Rational XDE Model Templates (continued)

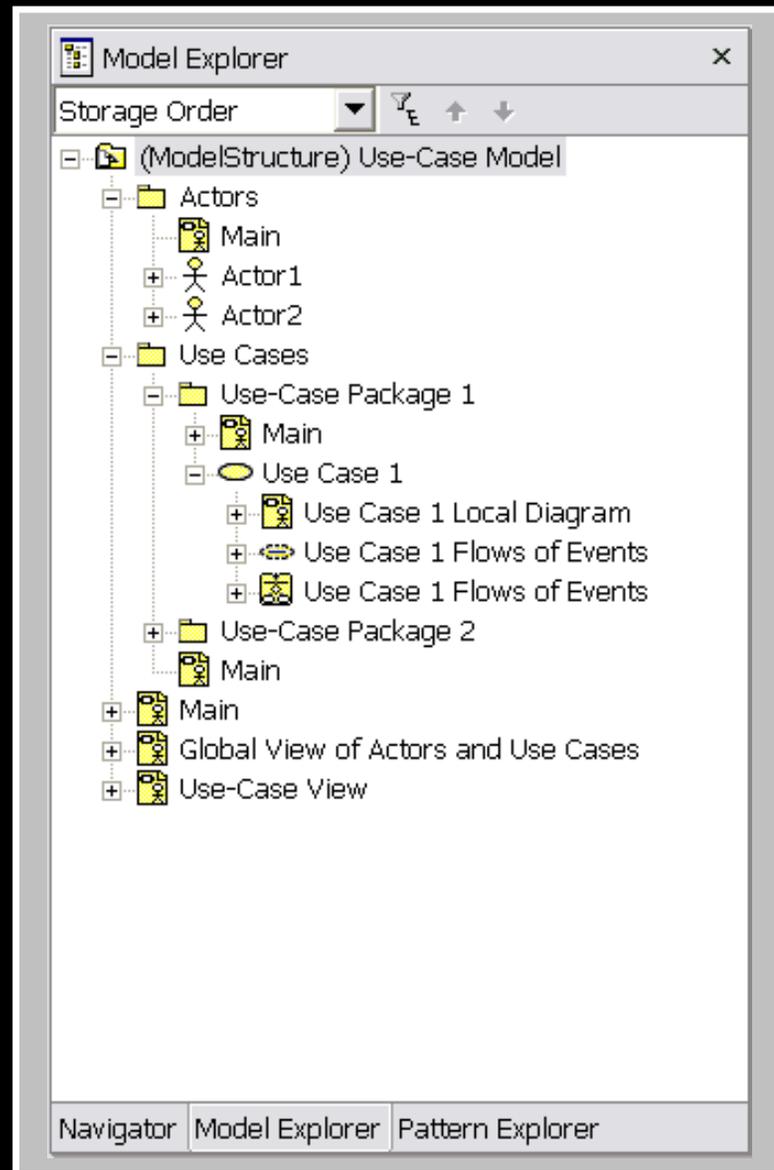
- ◆ Assist you when starting a project
- ◆ Meet most modeling objectives
- ◆ Come with descriptions, displayed in the dialog box

To select a model template, click on **Rational XDE** in the **File types** list box and select a model template from the **Templates** list box that meets your needs.



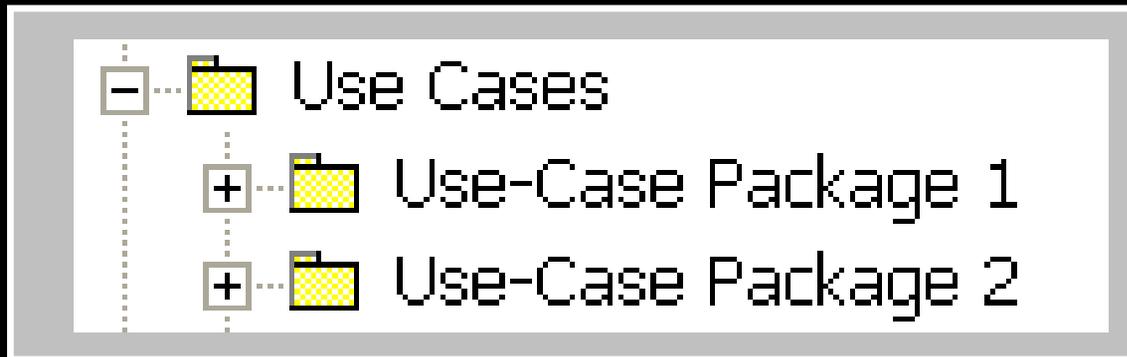
Use-Case Model

- ◆ Contains the actors and use cases and any diagrams that are needed to clarify different aspects of the use cases.
- ◆ Maintains the recommended structure illustrated here:



Create Additional Use-Case Packages

- ◆ To organize the contained model elements in the **Actors** and **Use-Case** packages
- ◆ For example:

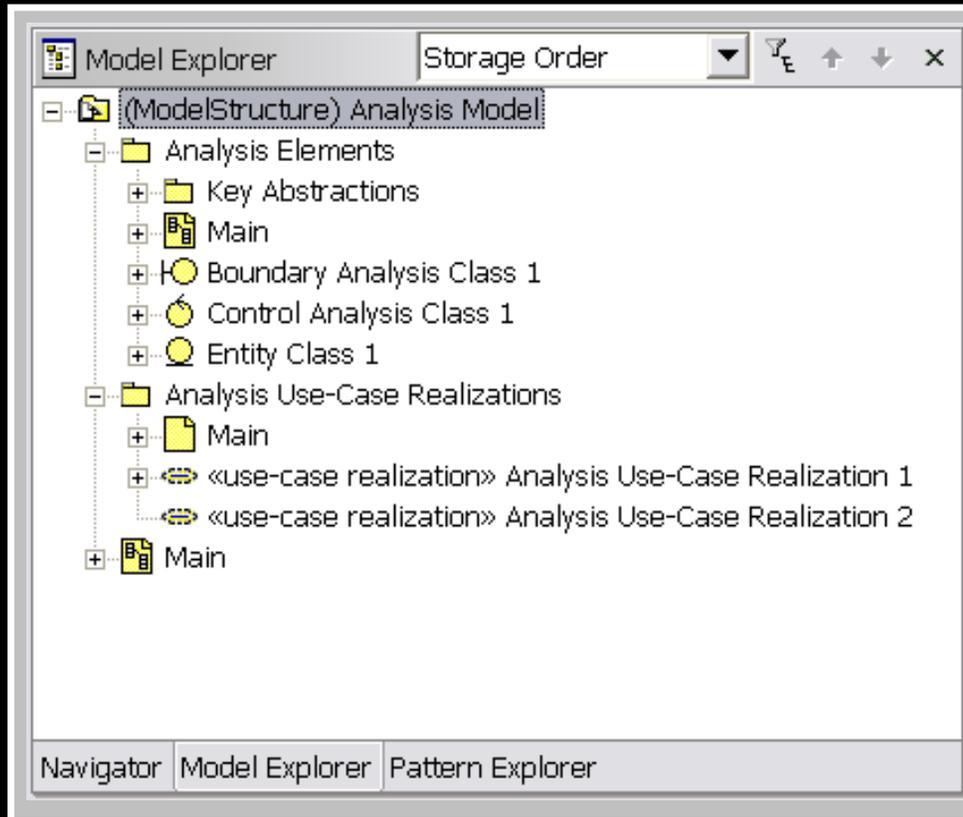


Additional Use-Case Model Diagrams

- ◆ In addition to the use-case model diagrams that contain actors and use cases, additional diagrams can be included to clarify different aspects of the use cases.
 - Local use-case diagram
 - Specifies a single use case and the actors that participate in that use case
 - Sequence diagram
 - Specifies a Single Flow of Events for a particular use case
 - Activity diagram
 - Graphically describes the flow of events described in a use-case description

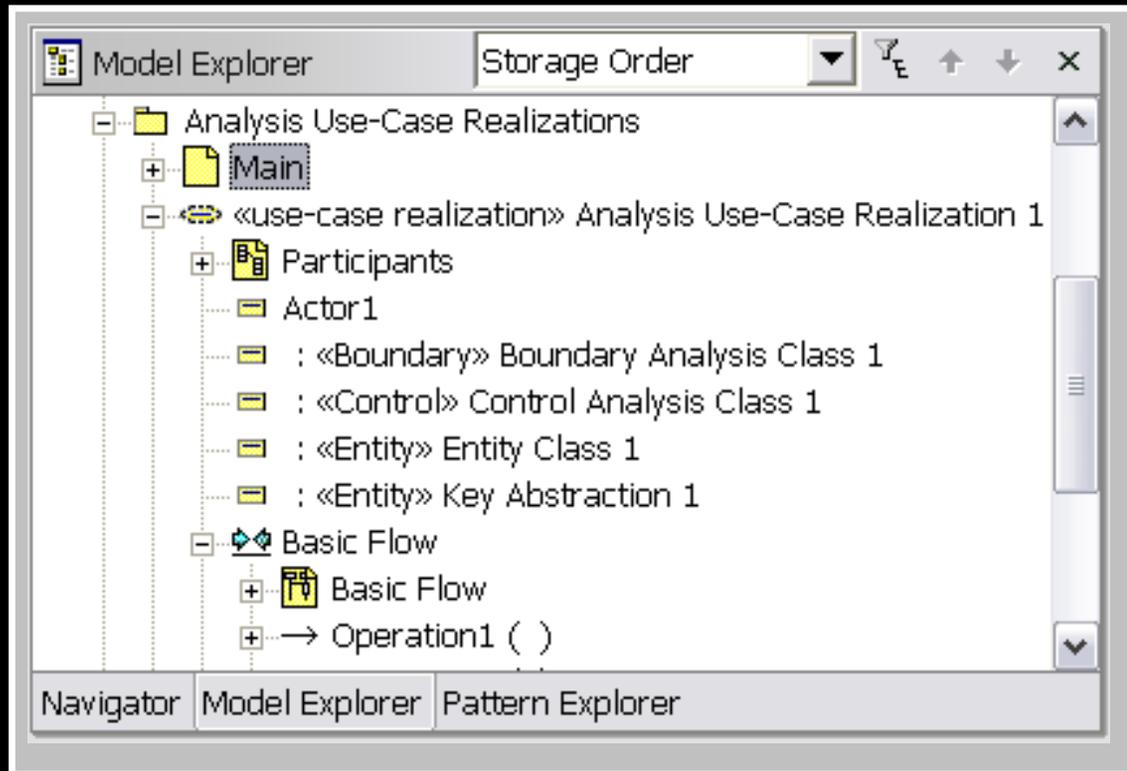
Analysis Model

- ◆ Is where the analysis classes and use-case realizations reside.
- ◆ Maintains the recommended structure illustrated here:



Analysis Use-Case Realization Package

- ◆ Contains the analysis-level use-case realizations
- ◆ Maintains the recommended structure illustrated here:

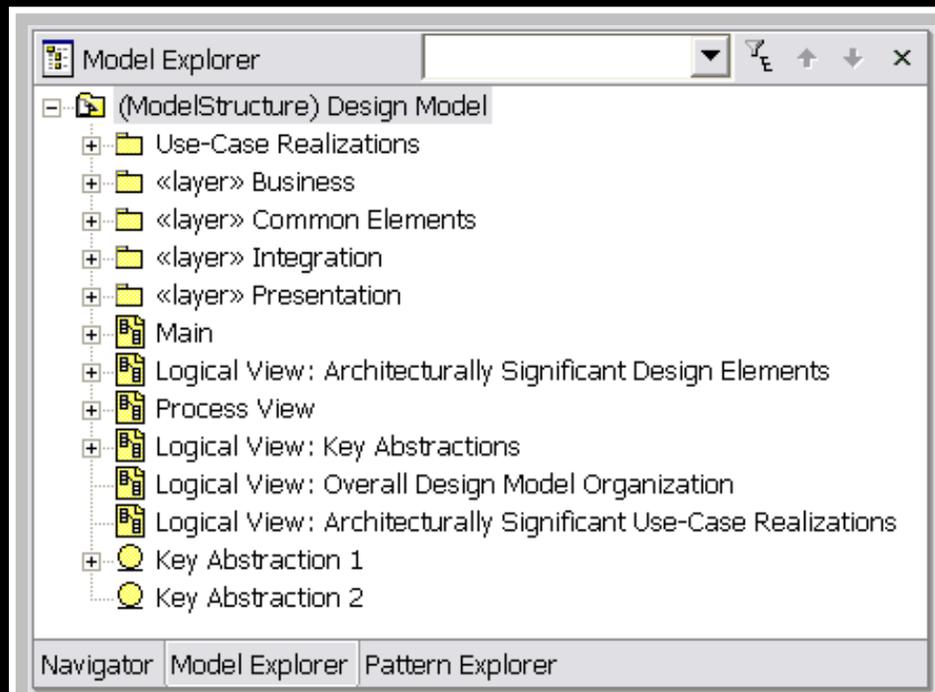


The Design Model

- ◆ Describes the design of the application
- ◆ Contains elements that span multiple XDE code models
- ◆ Contains the logical partitions that inspire the organization of the individual code models
- ◆ Provides a place for design elements

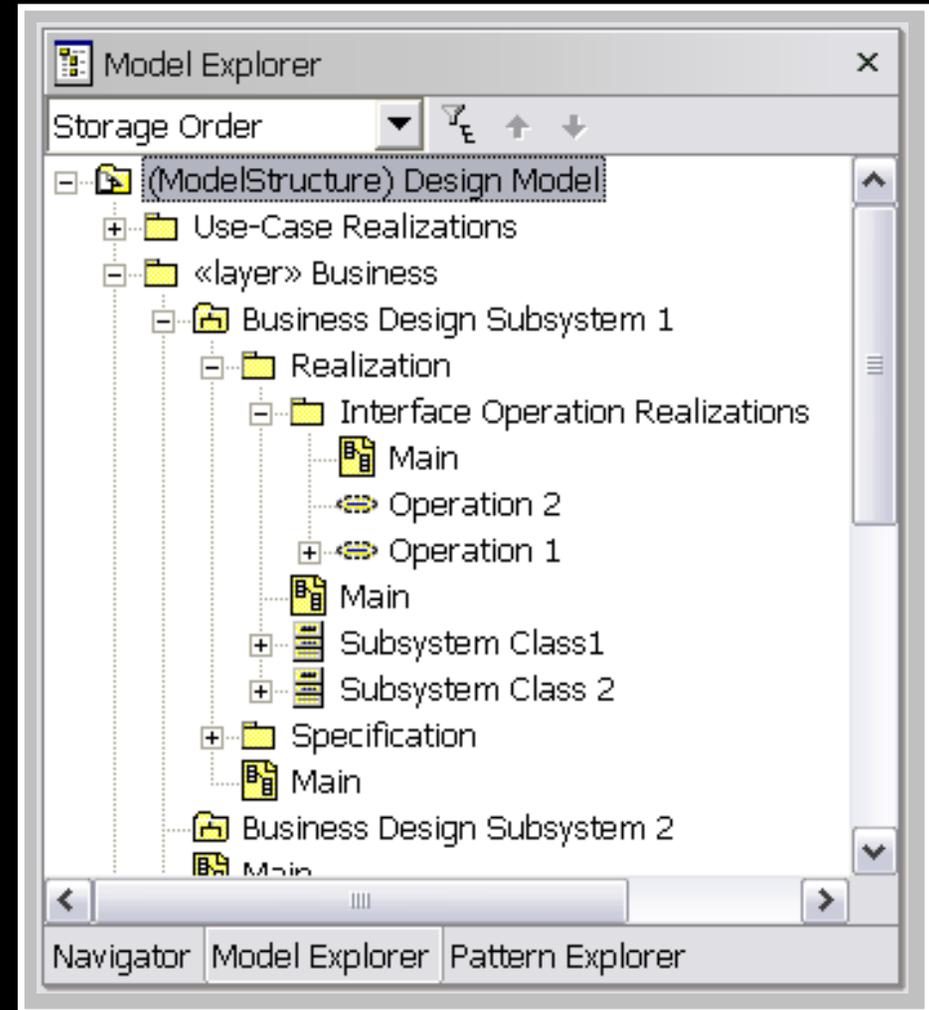
The Design Model (continued)

- ◆ Contains layer packages that reference the design elements of the system, such as:
 - Design classes
 - Interfaces
 - Design subsystems
- ◆ Maintains the recommended structure illustrated here:



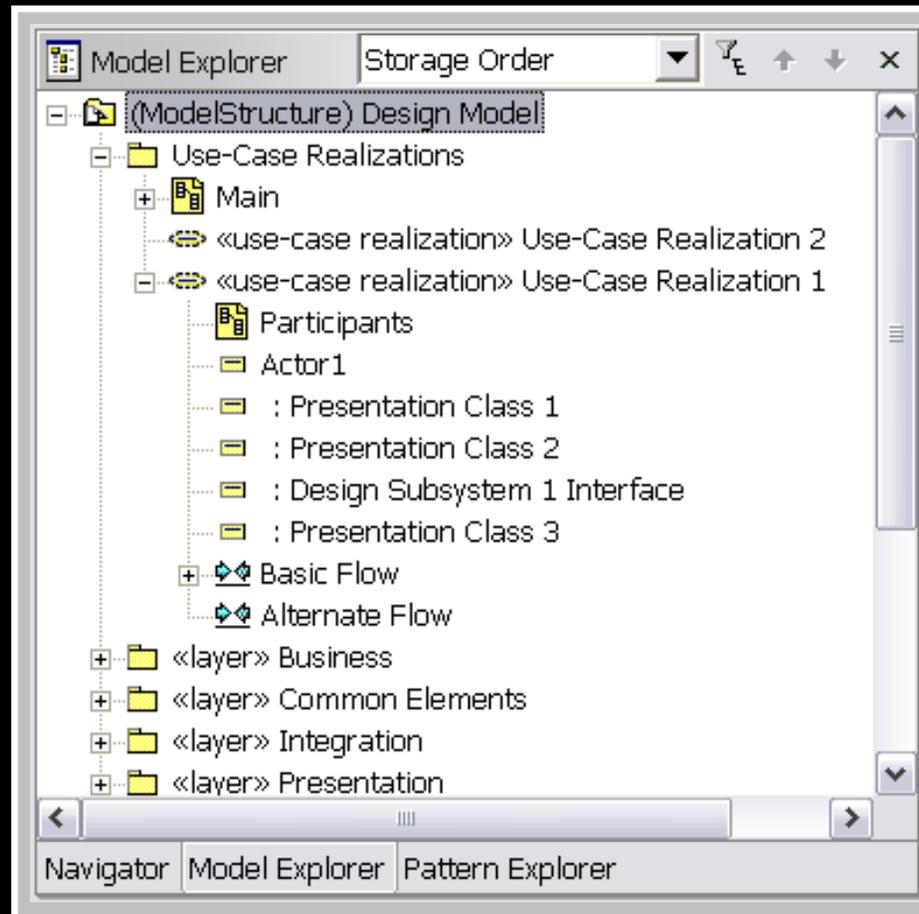
Design Subsystem

- ◆ Supports the definition of separate “Specification” and “Realization” packages within the design subsystem package.
- ◆ Maintains the recommended structure illustrated here:



Design Use-Case Realization

- ◆ Each use-case realization is associated with a use case in the use-case model



Lab: Organizing Models in Rational XDE

- ◆ In this lab, you will:
 - Create a new project
 - Add model templates for:
 - Use case
 - Analysis
 - Design
 - Explore models



More Information

- ◆ Other IBM courseware that provides insights into the RUP and XDE includes:
 - PRJ270: Essentials of the Rational Unified Process
 - DEV475: Mastering Object-Oriented Analysis and Design with UML
 - DEV490: Mastering Rational XDE for J2EE Enterprise Development with WSAD 5.0

Summary

- ◆ Model templates assist you in starting a project. Choose the model template that best suits your modeling objectives.
- ◆ A use case is a model element that describes behaviors that a system performs to yield observable, valuable results for actors.
- ◆ Analysis classes represent an early conceptual model for things in the system that have responsibilities and behavior.
- ◆ The design model contains architecture definitions and the design details of the architecture.

