

# USING DOORS®/ANALYST™ FOR MODEL-BASED REQUIREMENTS MANAGEMENT

Most requirements analysts find augmenting textual requirements with pictures or models very helpful, and many already use drawing tools to give that extra boost to a requirements-gathering session or to a team meeting. But what if the requirements are changed? How do you make sure that your models are also updated? Wouldn't it be useful if it were possible for pictures to link, to trace and to "baseline"? DOORS/Analyst provides this tool for drawing pictures, diagrams and models inside DOORS. Textual requirements and models are automatically kept in sync all the time, and models are 'baselined' and stored together with requirements ensuring complete consistency and traceability of requirements.

Telelogic's *Using DOORS/Analyst for Model-based Requirements Management* introduces the basic modeling aspects of UML within DOORS. Guided by our expert trainer, you will develop system requirements to augment with visual models by starting from the stakeholder need documents – showing you how to achieve a jump-start on system development using UML.

## KEY TOPICS

- The Generic Systems Engineering Process
- UML Overview
- DOORS/Analyst
- Producing Stakeholder Requirements
- Producing System Requirements

### WHO SHOULD ATTEND?

System architects, system engineers, project managers, and others who want to learn how they model visually their requirements within DOORS

### PREREQUISITES

Telelogic's *Using "DOORS for Requirements Management (Basic)"* course is a prerequisite.

### COURSE DURATION

Two days

### COURSE OUTLINE

Additional course information is provided on the next page.

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## INTRODUCTION

- What is Systems Engineering?
- What is Requirements Management?
- What is Systems Modeling?
- Requirements Management and System Modeling
- Use of Layers to Manage Complexity
- Requirements at Every Level
- Models Bridge Layers of Requirements
- The Role of Models
- Systems Modeling Techniques

## THE GENERIC SYSTEMS ENGINEERING PROCESS

- Activities in the Systems Engineering Process
- Generic Process for the DOORS/Analyst Data Model
- Generic Process for the DOORS/Analyst Data Model Showing Traceability
- Design Documents

## UML OVERVIEW

- What Is UML?
- UML Diagrams
- Use Case Diagram
- Class Diagram
- Sequence Diagram
- State Chart Diagram
- Flowchart Diagram
- Architecture Diagram
- UML Elements
- UML 2.0 as a Systems Modeling Language

## DOORS/ANALYST

- DOORS/Analyst Capabilities
- DOORS/Analyst Benefits
- Enabling the Module for DOORS/Analyst
- The Analyst View
- Creating New UML Diagrams
- Creating New UML Elements
- Edit in Analyst
- DOORS/Analyst—Basic Layout
- DOORS/Analyst Toolbar
- Show Elements
- Synchronization, DOORS
- DOORS/Analyst
- Synchronization, DOORS/Analyst
- DOORS
- Diagram Modification History

## PRODUCING STAKEHOLDER REQUIREMENTS

- The Problem Domain
- Mapping of UML Terminology
- The Generic Process Applied to the First Layer
- Statement of Need—BCS
- Design Document Template
- Identifying Stakeholders
- Identifying Required Capabilities
- Defining the Context of the System
- Identifying Required Capabilities
- Collecting Domain Concepts
- Design Rationale
- Deriving Stakeholder Requirements

## PRODUCING SYSTEM REQUIREMENTS

- The Solution Domain
- The System Development Layer
- Sub-system and Component Development Layers

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