



Intelligent Advisor Policy Modeling for Experts

Student Guide
D98215GC30

Copyright © 2021, Oracle and/or its affiliates.

Disclaimer

This document contains proprietary information and is protected by copyright and other intellectual property laws. You may copy and print this document solely for your own use in an Oracle training course. The document may not be modified or altered in any way. Except where your use constitutes "fair use" under copyright law, you may not use, share, download, upload, copy, print, display, perform, reproduce, publish, license, post, transmit, or distribute this document in whole or in part without the express authorization of Oracle.

The information contained in this document is subject to change without notice and is not warranted to be error-free. If you find any errors, please report them to us in writing.

Restricted Rights Notice

If this documentation is delivered to the United States Government or anyone using the documentation on behalf of the United States Government, the following notice is applicable:

U.S. GOVERNMENT END USERS: Oracle programs (including any operating system, integrated software, any programs embedded, installed or activated on delivered hardware, and modifications of such programs) and Oracle computer documentation or other Oracle data delivered to or accessed by U.S. Government end users are "commercial computer software" or "commercial computer software documentation" pursuant to the applicable Federal Acquisition Regulation and agency-specific supplemental regulations. As such, the use, reproduction, duplication, release, display, disclosure, modification, preparation of derivative works, and/or adaptation of i) Oracle programs (including any operating system, integrated software, any programs embedded, installed or activated on delivered hardware, and modifications of such programs), ii) Oracle computer documentation and/or iii) other Oracle data, is subject to the rights and limitations specified in the license contained in the applicable contract. The terms governing the U.S. Government's use of Oracle cloud services are defined by the applicable contract for such services. No other rights are granted to the U.S. Government.

Trademark Notice

Oracle and Java are registered trademarks of Oracle and/or its affiliates. Other names may be trademarks of their respective owners.

Intel and Intel Inside are trademarks or registered trademarks of Intel Corporation. All SPARC trademarks are used under license and are trademarks or registered trademarks of SPARC International, Inc. AMD, Epyc, and the AMD logo are trademarks or registered trademarks of Advanced Micro Devices. UNIX is a registered trademark of The Open Group.

Third-Party Content, Products, and Services Disclaimer

This documentation may provide access to or information about content, products, and services from third parties. Oracle Corporation and its affiliates are not responsible for and expressly disclaim all warranties of any kind with respect to third-party content, products, and services unless otherwise set forth in an applicable agreement between you and Oracle. Oracle Corporation and its affiliates will not be responsible for any loss, costs, or damages incurred due to your access to or use of third-party content, products, or services, except as set forth in an applicable agreement between you and Oracle.

300331202121A

Contents

1 Reviewing Policy Modeling Concepts

- Objectives 1-2
- Course Structure: Policy Modeling for Experts 1-3
- What Is Oracle Intelligent Advisor? 1-4
- Oracle Intelligent Advisor Components 1-5
- Oracle Policy Modeling Overview 1-6
- Oracle Policy Modeling: Rules 1-7
- Oracle Policy Modeling: Attributes 1-8
- Oracle Policy Modeling: Interviews 1-9
- Creating Screens 1-10
- Collecting Information 1-11
- Debugging 1-12
- Oracle Intelligent Advisor Hub 1-13
- Summary 1-14
- Topic 1 Practices 1-15

2 Conclusions and Conditions

- Objectives 2-2
- Identifying Conditions in Source Material 2-3
- Identifying Conditions in Source Material Example 2-4
- Example Solution – each sentence a separate, positive statement 2-5
- Networks of Rules 2-6
- Summary 2-8
- Practices for Topic 2 2-9

3 Negations and Linking Rules

- Objectives 3-2
- Writing Rules in the Negative 3-3
- Avoiding Multiple Conclusions 3-4
- Summary 3-5
- Topic 3 Practices 3-6

4 Grouping Operators and Intermediate Attributes

- Objectives 4-2
- Using a Combination of AND and OR 4-3

Using Grouping Operator: All 4-5
Using Grouping Operator: Any 4-6
Placing Grouping Operators in Rules 4-7
Using Intermediate Attributes 4-9
Summary 4-10
Topic 4 Practices 4-11

5a Testing Rules Part 1: Using the Debugger

Objectives 5a-2
Verifying Rules 5a-3
Debugger and Unit Testing 5a-4
Using the Debugger 5a-5
Data Tab 5a-6
Data Tab Actions 5a-7
Setting Input Values 5a-8
Viewing the Inferred Attributes (Data View) 5a-9
Decision tab 5a-10
Interview tab 5a-11
Interview tab: Screen List 5a-12
Interview tab: Understanding Behavior 5a-13
Navigating to Rules from the Debugger 5a-14
Re-testing after making changes 5a-15
Summary 5a-16
Topic 5 (Part 1) Practices 5a-17

5b Testing Rules Part 2 – Using Test Cases

Objectives 5b-2
Using Test Cases 5b-3
Creating Test Case Documents 5b-4
Test case structure 5b-5
Test case structure: Description 5b-6
Test case structure: Test Case ID 5b-7
Test case structure: Input attributes 5b-8
Test case structure: Expected values 5b-9
Test case structure: Actual values 5b-10
Setting up test case columns 5b-11
Creating Test Cases 5b-12
Running Test Cases 5b-14
Running Test Cases: Results 5b-15
Debugging Incorrect Test Case Results 5b-16
Keeping Values to Show Changes over Time 5b-17

Charting Results 5b-18
Summary 5b-19
Topic 5 (Part 2) Practices 5b-20

6 Comparisons in Rules

Objectives 6-2
Introduction 6-3
Using Non-Boolean Attributes in Conditions 6-4
Comparison Operators 6-5
Using Values in Rules 6-6
Example 1 6-7
Example 2 6-13
Summary 6-19
Topic 6 Practices 6-20

7a Calculations in Rules Part 1: Arithmetic Calculations

Objectives 7a-2
Methods for Calculating Non-Boolean Attributes 7a-3
Assigning a Value 7a-4
Reminder: Using Values in Rules 7a-5
Standard Arithmetic 7a-6
Common Arithmetic Functions 7a-7
Example 7a-8
Summary 7a-16
Topic 7 (Part 1) Practices 7a-17

7b Calculations in Rules Part 2: Using Functions in Rules

Objectives 7b-2
Methods for Calculating Non-Boolean Attributes 7b-3
Using Functions in Rules 7b-4
Examples of Intelligent Advisor Functions 7b-5
“Is there a function for... ?” 7b-6
Examples 7b-7
Special Functions 7b-8
Using the Rule Assistant to Write Function Rules 7b-9
Walkthrough: Writing a Function Rule 7b-10
TIP: Keep it Simple! 7b-14
Summary 7b-15
Topic 7 (Part 2) Practices 7b-16

8 Rule Tables in Word

- Objectives 8-2
- Conditional Calculations 8-3
- Alternative Conclusions 8-4
- Structure of Rule Tables 8-5
- Condition Order in Rule Tables 8-6
- Writing Rule Tables – With Rule Assistant 8-7
- Writing Rule Tables – Without Rule Assistant 8-8
- Modifying and Deleting Rule Tables 8-9
- Summary 8-10
- Topic 8 Practices 8-11

9 Practicing Writing Rules Recap

- Objectives 9-2
- Writing Rules 9-3
- Writing Rules in the Negative 9-4
- Using Grouping Operators 9-5
- Using Intermediate Attributes 9-6
- Using Non-Boolean Attributes in Conditions 9-7
- Comparison Operators 9-8
- Using Values in Rules 9-9
- Calculations 9-10
- Examples of Intelligent Advisor Functions 9-11
- Conditional Calculations 9-12
- Testing Rules 9-13
- Summary 9-14
- Topic 9 Practices 9-15

10 Rule Tables in Excel

- Objectives 10-2
- Getting Started in Excel 10-3
- Using Non-Boolean Attributes: Declarations 10-4
- Using Boolean Attributes 10-5
- Styles Used for Declarations 10-6
- Styles Used for Rule Tables 10-7
- Alternative Conclusions in Excel 10-8
- Applying Styles 10-9
- Creating Rule Tables 10-10
- Multiple Conditions 10-11
- Incomplete Cells 10-12
- Comparisons 10-13

Specifying a Range 10-14
Merged Cells 10-15
How to Merge Cells 10-16
Multiple Conclusions 10-17
Legend Keys (Abbreviations) 10-18
Legend Keys for Boolean Attributes 10-19
Choosing Whether to Use Word or Excel 10-20
Summary 10-21
Topic 10 Practices 10-22

11 Entities

Objectives 11-2
Introduction 11-3
What is an Entity? 11-5
Entity Types: Global 11-6
Entity Instances 11-7
Entity Instances: Example 11-8
How to Create Entities 11-9
Identification Attributes 11-10
Using Entity Attributes in Rules 11-11
Checking Entity Level 11-12
Writing Entity Rules 11-13
Testing Entity Rules 11-14
Summary 11-17
Topic 11 Practices 11-18

12 Relationships

Objectives 12-2
Introducing Relationships 12-3
Relationship Components 12-4
Source Entity 12-5
Target Entity 12-6
Relationship Type 12-7
Relationship Text 12-8
Relationships in Policy Modeling 12-9
Creating Additional Relationships in Policy Modeling 12-10
Reverse Relationships 12-11
Self-Referential Relationships 12-12
Inferred Relationships and Entities 12-13
Testing Relationships 12-14

Summary 12-15
Topic 12 Practices 12-16

13 Reasoning with Entities

Objectives 13-2
Prerequisites 13-3
Some Examples Where Reasoning with Entities is Useful 13-4
Rule Entity Levels 13-5
Identifying Entity Level Attributes 13-6
Identifying Entity Level in Rules 13-7
Proving an Entity Attribute from a Global Attribute 13-10
Proving a Global Attribute from an Entity Attribute 13-11
Using ForAll and Exists 13-12
Using the ForAll Operator 13-13
Using the Exists Operator 13-14
Using ForAll and Exists: Example 1 13-15
Using ForAll and Exists: Example 2 13-16
Using ForAll and Exists: Example 3 13-17
Using ForAll and Exists for Multiple Conditions 13-18
Using ForAll and Exists: Example 4 13-19
Natural Language Forms 13-20
Entity Functions 13-21
Using the Rule Assistant with Entity Functions 13-23
Reminder: Using Values in Rules 13-24
Summary 13-25
Topic 13 Practices 13-26

14 When to Use Entities Review

Objectives 14-2
Deciding When to Use Entities 14-3
Creating Entity-Level Attributes 14-4
Writing Rules with Entities 14-5
Summary 14-6
Topic 14 Practices 14-7

15 Entity and Relationship Screens

Objectives 15-2
Entity and Relationship Terminology Refresher 15-3
Collecting Entity Instances 15-4
Collecting Entity Data 15-5
Changing the Orientation of Entity Collection 15-6

- Creating Blank Instances 15-7
- Changing the Text of the Add/Remove Instance Buttons 15-8
- Entity-specific Screens 15-9
- Using Entity-Specific Values on Screens 15-10
- Using the Attribute Value in the Screen Title 15-11
- Identifying Instances belonging to Relationships 15-12
- Adding Relationships to Screens 15-13
- Adding Filters to Relationship Collection 15-15
- Testing Entity and Relationship Collect Screens 15-16
- Testing Entity-Level Screens 15-17
- Summary 15-18
- Topic 15 Practices 15-19

16 Reviewing Entities and Relationships

- Objectives 16-2
- What is an Entity? 16-3
- Entity Instances 16-4
- What is a Relationship? 16-5
- Creating Entities 16-6
- Relationships in Policy Modeling 16-7
- Using Entity Attributes in Rules 16-8
- Using Relationships in Rules 16-9
- Entity Functions 16-10
- Collecting Entity Instances 16-11
- Debugging Entity and Relationship Screens 16-12
- Summary 16-13
- Topic 16 Practices 16-14

17 Improving Attribute Text

- Objectives 17-2
- Introduction 17-3
- Nouns 17-5
- Substitution Attributes 17-6
- Pronouns 17-7
- Verbs 17-8
- Adding a new verb 17-9
- Changing Sentence Forms 17-12
- Adverbs 17-13
- Articles 17-15
- Choosing Attribute Tense 17-16
- Unusual Sentence Forms 17-18

Overriding Attribute Text 17-21
Attribute Naming Conventions 17-22
Capitalization 17-23
Summary 17-24
Topic 17 Practices 17-25

18 Data Validation

Objectives 18-2
Validating Input Data 18-3
Methods for Validating Input Data 18-4
Input Validation in the Edit Attribute Dialog 18-5
Input Validation for Text Attributes 18-6
Example Regular Expressions 18-7
Error Rules 18-8
Warning Rules 18-9
Choosing When Errors and Warnings Appear 18-10
Making Error and Warning Rules More Meaningful 18-11
Viewing Input Validation in the Debugger 18-12
Viewing Validation in the Debugger Without Interviews 18-13
Summary 18-14
Topic 18 Practices 18-15

19a Explanations and Audit Reports Part 1: Explanations

Objectives 19a-2
Report on a Decision 19a-3
Explanations 19a-4
Adding an Explanation to a Screen 19a-5
Explanation Screen Appearance 19a-6
Adding an Explanation to a Form 19a-7
Hiding Attributes in the Explanation 19a-8
Marking Attributes as Silent or Invisible 19a-9
Viewing Decisions in the Debugger 19a-10
Summary 19a-11
Topic 19 Part 1 Practices 19a-12

19b Explanations and Audit Reports Part 2: Audit Reports

Objectives 19b-2
Audit Reports 19b-3
Creating Audit Reports 19b-4
Summary 19b-5

20 Introduction To Forms

- Objectives 20-2
- What are Forms? 20-3
- Form Templates 20-4
- Creating Forms: Preparation 20-5
- Creating a New Form 20-6
- Creating Form Content 20-7
- Creating Form Content: Using Policy Model Data 20-8
- Using Policy Model Data: Step 1 20-9
- Using Policy Model Data: Step 2 20-10
- Using Policy Model Data: Advanced 20-11
- Forms: Summary of Features 20-12
- Adding Forms to Screens 20-13
- Saving Forms 20-14
- Testing Forms Available to End Users 20-15
- Testing Forms Saved on Submit 20-16
- Previewing Forms 20-17
- Summary 20-18
- Topic 20 Practices 20-19

21 Using Intelligent Advisor in Other Languages

- Objectives 21-2
- Language Support in Intelligent Advisor 21-3
- Authoring Policy Models in Other Languages 21-4
- Deploying Interviews in Other Languages 21-5
- Adding Translations 21-6
- Using Translated Interviews 21-7
- Testing a Translated Interview 21-8
- Deploying and Running a Translated Intelligent Advisor interview 21-9
- Summary 21-10
- Topic 21 Practices 21-11

22 Data Mapping

- Objectives 22-2
- Introduction 22-3
- Input Mapping 22-4
- Output Mapping 22-5
- Connecting to another Application 22-6
- Intelligent Advisor Hub Connections 22-7
- Connecting Policy Modeling to an Intelligent Advisor Hub 22-8

- Selecting a Connection 22-9
- Specifying the Mapping Settings 22-10
- Mapping Data: Entities 22-11
- Mapping Data: New Attributes 22-12
- Mapping Data: Existing Attributes 22-13
- Mapping Data: Using Value Lists 22-14
- Interview Submit 22-15
- Saving Other Interview Assets 22-16
- Choosing When to Load Data 22-17
- Testing Interviews with Mapped Data 22-18
- Testing Interviews with Dynamically Mapped Data 22-19
- Working with Complex Data Models 22-20
- Summary 22-21

23 Enhancing Interviews

- Objectives 23-2
- Introduction 23-3
- Understanding Interview Behavior 23-4
- Displaying Screens: Default Behaviour 23-5
- Displaying Screens 23-6
- Showing and Hiding Screen Controls 23-7
- Showing and Hiding Screen Controls: Advanced 23-8
- Showing Attribute Values on Screen 23-9
- How to Show Attribute Values on Screen 23-10
- Showing Attribute Values on Screen: Advanced 23-11
- Creating more personalized attribute text 23-12
- How to Personalize Attribute Text 23-13
- Using Gender 23-14
- Displaying Advice 23-15
- Displaying Advice on End Screens 23-16
- Interview Buttons 23-17
- Interview Styles 23-18
- Value Lists 23-19
- Using a Value List 23-20
- Screen Controls 23-21
- Using Defaults 23-22
- Using html to Enhance Screen Controls 23-23
- Summary 23-24
- Topic 23 Practices 23-25

24 Policy Modeling for Experts Consolidation Practice Overview

Objectives 24-2

Prerequisites 24-3

Summary 24-4

Topic 24 Course Consolidation Practice 24-5

