

## COURSE ABSTRACT

# Merative SPM Express Rules for Developers (Application Integration)

9D61G

### Course Description

This self-paced course provides students with a technical understanding of integrating Cúram Express Rules (CER) with Merative Social Program Management (SPM) applications.

This course describes how to develop CER rules using the CER Application Development Environment (ADE). This course describes how to integrate CER rules with SPM Applications and covers the following topics: rules for Triage, Screening, and Intake; Dynamic Evidence; rules for Eligibility and Entitlement; rules for other applications; customizing rules and evidence.

During the course, students will develop rules and evidence for a simple product.

### General Information

**Delivery Method:** Self-paced with lab.

**Audience:** This course is intended primarily for developers and technical architects who will work on SPM implementation projects.

**Topics:** The course covers the following topics:

- How CER rules integrate with SPM products
- How to build dynamic products and Dynamic Evidence Types
- How to customize Application rule sets and evidence types.

- Learning Objectives:** After completing the course, learners should be able to:
- Configure rule sets for the following SPM applications:
    - Triage, Screening, and Intake
    - Dynamic Evidence
    - Eligibility and Entitlement (Determination and Explanation)
    - Advice
    - Other applications
  - Use the Dynamic Evidence Editor to define evidence types.
  - Outline the approach to customize Application rule sets and evidence types.
  - Access and interpret product guides for integrating CER rules into SPM Applications.

**Prerequisites:** You must complete the following course before taking this course:

- *Merative SPM Express Rules for Developers (ADE)*

**Duration:** 24 Hours

**Skill Level:** Intermediate

**Version:** CER training was last updated for SPM V6. However, there have been very few changes to CER since then. The main change is that Key Decision Factor rules were deprecated in V7. The remaining exercises were validated on V7 and run fine.

## Notes

The course duration gives learners an estimate of how much time they need to allocate to the course. The course duration does not specify the actual time required to complete the course, which varies by learner. The course agenda shows the schedule for a classroom (ILT) delivery. Learners taking this course in a self-paced environment should allow more time for exercises.

## Course Agenda

### Unit 1 – Integrating CER with SPM Applications

#### Lesson 1 : Course Introduction

**Duration:** 5 minutes

**Learning objectives:** After completing this lesson, students should be able to:

- List the course objectives

## Lesson 2. CER Integration Overview

Duration: 25 minutes

**Learning objectives:** After completing this lesson, students should be able to:

- Determine the requirements for integrating CER rule sets into SPM applications
- Outline how SPM applications create and maintain rule objects
- Explain the purpose of interface and generated rule sets
- List the SPM Solutions that provide out-of-the-box application rules

## Exercise 2-1. Determine Requirements for FIS Product

Duration: 40 minutes

**Learning objectives:** After completing this exercise, students should be able to:

- Consider the key information and tasks that are required to implement simple rules in an SPM product

## Unit 2 – Rules for Triage, Screening, and Intake

### Lesson 1. Introduction to Triage, Screening, and Intake

Duration: 15 minutes

**Learning objectives:** After completing this lesson, students should be able to:

- Explain the purpose of Triage in SPM
- Explain the purpose of Screening in SPM
- State the purpose of SPM Common Intake (CCI)

### Exercise 2-2. Interpret Screening Configuration

Duration: 30 minutes

**Learning objectives:** After completing this exercise, students should be able to:

- Execute simple screening rules
- Determine screening configuration

### Lesson 2. Accessing the SPM Datastore (CDS)

Duration: 10 minutes

**Learning objectives:** After completing this lesson, students should be able to:

- Briefly explain how SPM Universal Access uses the SPM Datastore (CDS) for Screening
- Explain how the CDS is defined and populated
- Outline the operation of DataStoreRuleObjectCreator for mapping data in CDS to rule objects

### Exercise 2-3. Interpret a Datastore Schema

Duration: 20 minutes

- Learning objectives:** After completing this exercise, students should be able to:
- Interpret the Datastore schema that is used to store the answers to the screening questions

### Lesson 3. Configuring Rules for Triage, Screening, and Intake

Duration: 25 minutes

- Learning objectives:** After completing this lesson, students should be able to:
- Describe the purpose of the classes and attributes in the Screening Interface rule set
  - List the classes and attributes in the Triage Interface rule set
  - List the types of rules that can be configured for SPM Intake

### Exercise 2-4. Implement a Screening Rule Set

Duration: 60 minutes

- Learning objectives:** After completing this exercise, students should be able to:
- Implement screening rules

## Unit 3 - Dynamic Evidence

### Lesson 1. Overview of SPM Evidence

Duration: 15 minutes

- Learning objectives:** After completing this lesson, students should be able to:
- Define the terms Evidence Type, Evidence Record, and Evidence Object
  - Distinguish between Dynamic and Non-Dynamic Evidence types in SPM

### Exercise 2-5. Access Evidence Types

Duration: 30 minutes

- Learning objectives:** After completing this exercise, students should be able to:
- Define evidence records
  - Access Dynamic Evidence configuration

## Lesson 2. Defining Dynamic Evidence Types

Duration: 35 minutes

**Learning objectives:** After completing this lesson, students should be able to:

- List the steps to define a new Dynamic Evidence Type
- Describe the Model View and User Interface View in the Dynamic Evidence Editor
- List the artifacts that are generated for a Dynamic Evidence Type

### Exercise 2-6. Configure a Dynamic Evidence Type

Duration: 50 minutes

**Learning objectives:** After completing this exercise, students should be able to:

- Define a Dynamic Evidence type for the sample product
- Associate an Evidence Type with a Product Delivery Case

## Lesson 3. Handcrafted Rules for Evidence Processing

Duration: 20 minutes

**Learning objectives:** After completing this lesson, students should be able to:

- Outline the relationship between handcrafted and generated rule sets for evidence processing
- Outline the steps to configure handcrafted rule sets for the following types of evidence processing:
  - Summarizing evidence
  - Validating evidence
  - Calculating evidence

### Exercise 2-7. Define a Validation Rule Set

Duration: 70 minutes

**Learning objectives:** After completing this exercise, students should be able to:

- Configure a simple validation rule set for your Dynamic Evidence type

## Lesson 4. Extracting Dynamic Evidence Types

Duration: 15 minutes

**Learning objectives:** After completing this lesson, students should be able to:

- List the extraction strategies and properties for the Dynamic Evidence Configuration Extractor
- List the outputs from the Dynamic Evidence Configuration Extractor
- Outline the tools for downloading and uploading Evidence Types
- List references for defining Dynamic Evidence Types

### Exercise 2-8. Extract Dynamic Evidence Types

Duration: 20 minutes

**Learning objectives:** After completing this exercise, students should be able to:

- Execute the Dynamic Evidence Configuration Generator to extract Dynamic Evidence type configuration data

## Unit 4 - Rules for Eligibility and Entitlement

### Lesson 1. Overview of Eligibility and Entitlement

Duration: 20 minutes

**Learning objectives:** After completing this lesson, students should be able to:

- List the stages in Eligibility and Entitlement processing
- Outline the steps that the Eligibility and Entitlement Engine follows during Assessment and Reassessment
- List the steps for designing and implementing a dynamic product
- Describe how to save product configuration to the file system

### Exercise 2-9. Configure a Dynamic Product

Duration: 30 minutes

**Learning objectives:** After completing this exercise, students should be able to:

- Configure an Integrated Case type and Product Delivery Case type

### Lesson 2. Accessing Product Data and Evidence

Duration: 20 minutes

**Learning objectives:** After completing this lesson, students should be able to:

- Outline the CER execution environment for Eligibility and Entitlement
- Describe the purpose of the Rule Object Converters and Propagators that Eligibility and Entitlement use
- State the purpose of the combineSuccessionSets element

### Exercise 2-10. Combine Succession Sets

Duration: 30 minutes

**Learning objectives:** After completing this exercise, students should be able to:

- Configure a rule set to combine Succession Sets from evidence records to create a single timeline of eligibility

### Lesson 3. Specifying Determination Rules

Duration: 30 minutes

**Learning objectives:** After completing this lesson, students should be able to:

- Define the terms Objective and Objective Tag
- Outline the structure of the generated Eligibility and Entitlement rule set
- List the typical steps for configuring Eligibility and Entitlement Determination rules
- List reference guides that explain how to create products and cases

## **Exercise 2-11. Configure an Eligibility and Entitlement Rule Set**

**Duration:** 80 minutes

**Learning objectives:** After completing this exercise, students should be able to:

- Configure Eligibility and Entitlement Determination rules

## **Lesson 4. Rules for Explanation: Key Decision Factors**

**Duration:** 40 minutes

**Learning objectives:** After completing this lesson, students should be able to:

- State the purpose of Key Decision Factors
- List the design considerations for Key Decision Factors
- List the steps for implementing Key Decision Factors
- Explain the purpose of the interface classes when configuring rules for Key Decision Factors

## **Exercise 2-12. Configure Key Decision Factors**

**Duration:** 70 minutes

**Learning objectives:** After completing this exercise, students should be able to:

- Configure a simple Key Decision Factor rule set

## **Lesson 5. Rules for Explanation: Decision Details**

**Duration:** 40 minutes

**Learning objectives:** After completing this lesson, students should be able to:

- State the purpose of Decision Details
- Describe how to develop Decision Details rules by using the Interface rule classes
- Describe how to develop custom pages by using Dynamic UIM
- List the DMX files that are used to configure Decision Details

## **Exercise 2-16 – Configure Decision Details**

**Duration:** 65 minutes

**Learning objectives:** After completing this exercise, students should be able to:

- Configure a simple Decision Details rule set

## **Unit 5 – Rules for Other Applications**

### **Lesson 1. Additional Applications that use CER Rules**

**Duration:** 60 min

**Learning objectives:** After completing this lesson, students should be able to:

- Briefly describe how to configure CER rules for the following applications:
  - Advisor
  - Outreach
  - Work Allocation Rules
  - PCR
  - O&M assessments

#### **Exercise 2-14. Configure an Advisor Rule Set**

**Duration:** 70 minutes

**Learning objectives:** After completing this exercise, students should be able to:

- Configure a simple Advisor rule set

### **Unit 6 - Implementation Approach**

#### **Lesson 1. Implementation Approach**

**Duration:** 30 min

**Learning objectives:** After completing this lesson, students should be able to:

- Outline the incremental design approach for developing product rules
- List the compliancy guidelines for CER, Dynamic Evidence, and Eligibility and Entitlement
- Describe the customization options and approach for customizing Dynamic Evidence and rule sets
- Set properties for tracing and troubleshooting
- List reference documents for CER rules development

#### **Exercise 2-15. Trace Evidence Propagation**

**Duration:** 30 minutes

**Learning objectives:** After completing this exercise, students should be able to:

- Set trace properties to trace Propagator and Dynamic Evidence operations