



Oracle Process Cloud Service

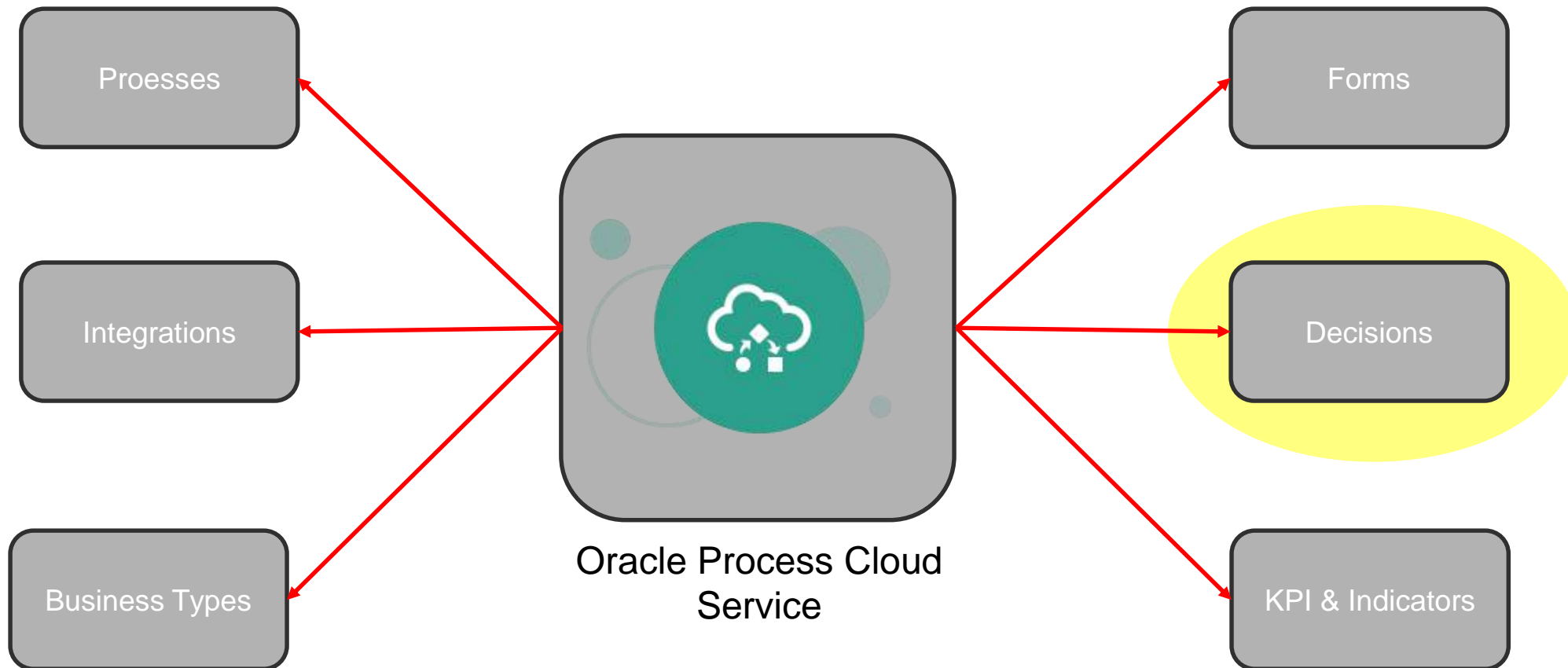
Boost business process agility with DMN

April 2017

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Oracle PCS Product Strategy and Management

Oracle DMN Decision Service Overview



Oracle DMN Decision Service

Micro Service with independent Lifecycle



Oracle Process Cloud Service

Independent Lifecycles



Oracle DMN Decision Service

Oracle DMN Decision Service

100% FEEL and browser based experience

The screenshot displays the Oracle Process Cloud Service Composer interface. The main workspace shows a 'Decisions' tab with two decision services: 'Expense Approval' and 'NA Expense Item Compliance Decision'. The 'NA Expense Item Compliance Decision' is selected, and its 'Decision Table' is visible. The table has a header row with a condition 'F' and a variable 'expenseReport.Items.Code'. Below the header are two rows: '1' with 'Lunch' and '2' with 'Dinner'. A yellow circle highlights the 'NA Expense Item Compliance Decision' entry in the table, which contains the following FEEL rules:

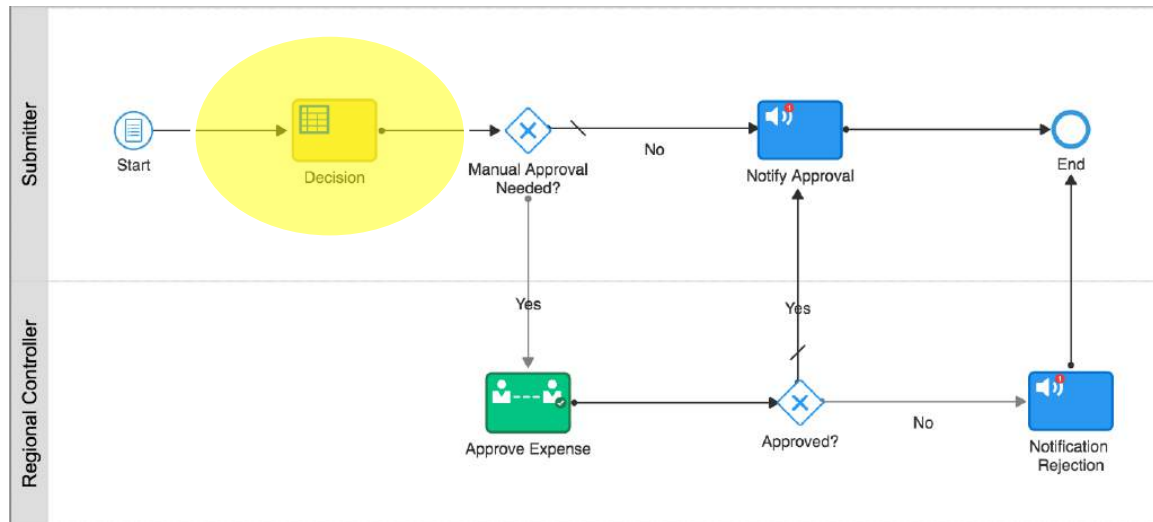
Condition	Rule
F	expenseReport.Items.Code
1	Lunch
2	Dinner

The highlighted entry shows the following FEEL rules:

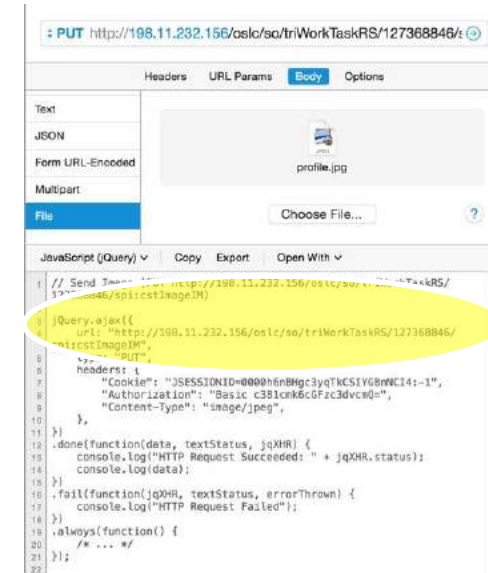
- Enter Allowed Values
- expenseReport.Items.Amount < 25
- expenseReport.Items.Amount < 50

Oracle DMN Decision Service

Easy integration from PCS + Callable from any REST client



Native Integration with Oracle PCS



Any REST Client Application

Oracle DMN Decision Service

Top Down Decomposition Modeling

The screenshot displays the Oracle DMN Decisions interface. At the top, a header bar labeled "Decisions" contains a plus sign icon. Below this, three decision items are listed in a scrollable container. Each item includes a yellow icon with a grid pattern, the decision name, its output type, a description, and a "Q&A" link. A blue dropdown arrow is visible on the right side of each item. Two large red arrows are overlaid on the interface: one points from the "Expense Approval" decision down to the "NA Expense Item Compliance Decision", and the other points from the "Expense Approval" decision down to the "EMEA Expense Item Compliance Decision".

Decision Name	Output Type	Description
Expense Approval	boolean	Expense Approval Decision Service
NA Expense Item Compliance Decision	boolean	North America Expense Item Compliance Decision
EMEA Expense Item Compliance Decision	boolean	EMEA Expense Item Compliance Policies

Oracle DMN Decision Service

Rich set of Decision Implementation Options

- Decision Tables
- FEEL Expressions
- If-Then-Else
- Function
- Context
- Relation
- List

Create Decision

Name *
LAD Expense Item Compliance Decision

Description
LAD Expense Item Corporate Compliance Rules and Policies

Question
Does the Expense Item comply with LAD regional guidelines?

Allowed Answers
true, false

Output Type
boolean

Decision Table
Create a table of rules with tests matching inputs on the one side, and output on the other side

Expression
Create logic that evaluates to a single value by entering text using FEEL (Friendly Enough Expression Language)

If-Then-Else
Create logic with three logic parts: If (Boolean test), Then (result if the test is true), and Else (result if the test is not true)

Function
Create parameterized logic to apply multiple times with different parameter values

Create **Cancel**

Oracle DMN Decision Service

Common Input Parameter and Multiple Services

The screenshot displays the Oracle DMN Decision Service interface. The main area shows a list of decision services under the 'Decisions' tab. The services listed are:

- Expense Approval**: Output type: boolean, Expense Approval Decision Service, Q&A
- NA Expense Item Compliance Decision**: Output type: boolean, North America Expense Item Compliance Decision, Q&A
- EMEA Expense Item Compliance Decision**: Output type: boolean, EMEA Expense Item Compliance Policies, Q&A
- LAD Expense Item Compliance Decision**: Output type: boolean, LAD Expense Item Corporate Compliance Rules and Policies, Q&A

On the left, the 'Services' panel is visible, showing a list of services: isNACompliant, isLADCompliant, isCompliant, and isEMEACompliant. Below this list are sections for 'Output Decisions' (containing 'Expense Approval') and 'Input Data' (containing 'expenseReport').

On the right, the 'Input Data' panel is highlighted, showing the 'expenseReport' input parameter with the type 'Expense Report'. Below it, the 'Type Definition' panel is visible, showing 'Expense Report (type: Complex)'.

Oracle DMN Decision Service Built-In Testing Capabilities

The screenshot displays the Oracle DMN Decision Service interface. The top navigation bar includes 'Product Mana...' and 'Expense Appr...'. The main area is divided into three sections: 'Services', 'Decisions', and 'Input Data'. The 'Decisions' section lists two decision services: 'Expense Approval' (Output type: boolean, Expense Approval Decision Service, Q&A) and 'NA Expense Item Compliance Decision' (Output type: boolean, North America Expense Item Compliance Decision). The 'Input Data' section shows an 'expenseReport (type: Expense Report)'.

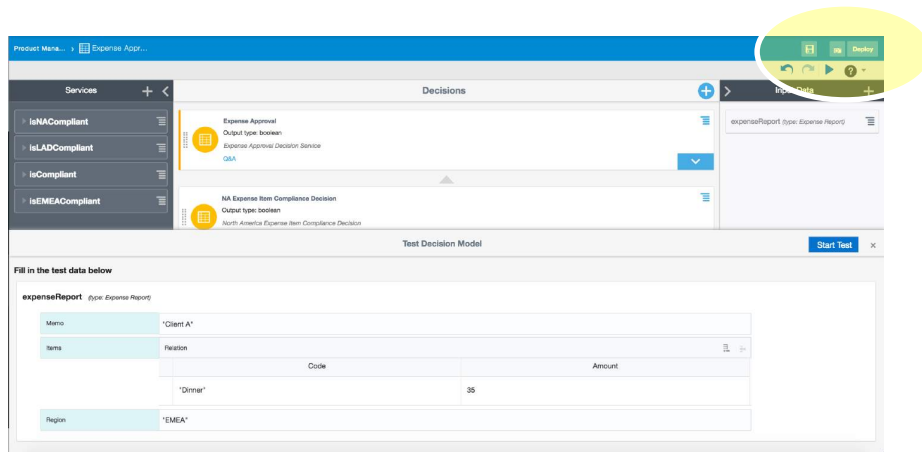
Below the main area is a 'Test Decision Model' section with a 'Start Test' button. The 'Fill in the test data below' section contains a form for 'expenseReport (type: Expense Report)' with the following fields:

Memo	*Client A*		
Items	Relation		
	Code	Amount	
	Dinner	35	
Region	*EMEA*		

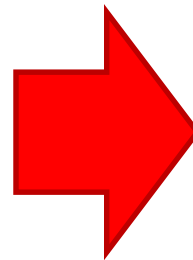
Oracle DMN Decision Service

Runtime REST Stateless Performant Decision Services

Expense Approval Decision Service



DMN Decision Service Modeler



DEPLOY

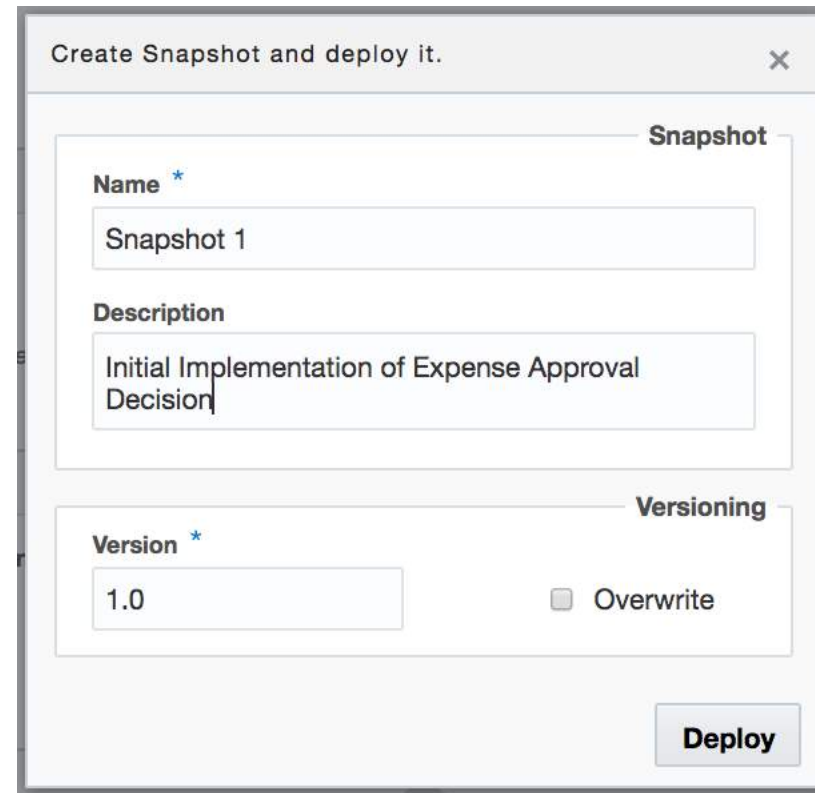


DMN Decision Service Engine Micro Service

Oracle DMN Decision Service

Runtime REST Stateless Performant Decision Services

- Multiple Versioning Options
- Snapshot-based approach
- Multiple Versions
- Patching (overwrite)
- On the fly changes



The screenshot shows a dialog box titled "Create Snapshot and deploy it." with a close button (X) in the top right corner. The dialog is divided into two main sections: "Snapshot" and "Versioning".

Snapshot Section:

- Name ***: A text input field containing "Snapshot 1".
- Description**: A text input field containing "Initial Implementation of Expense Approval Decision".

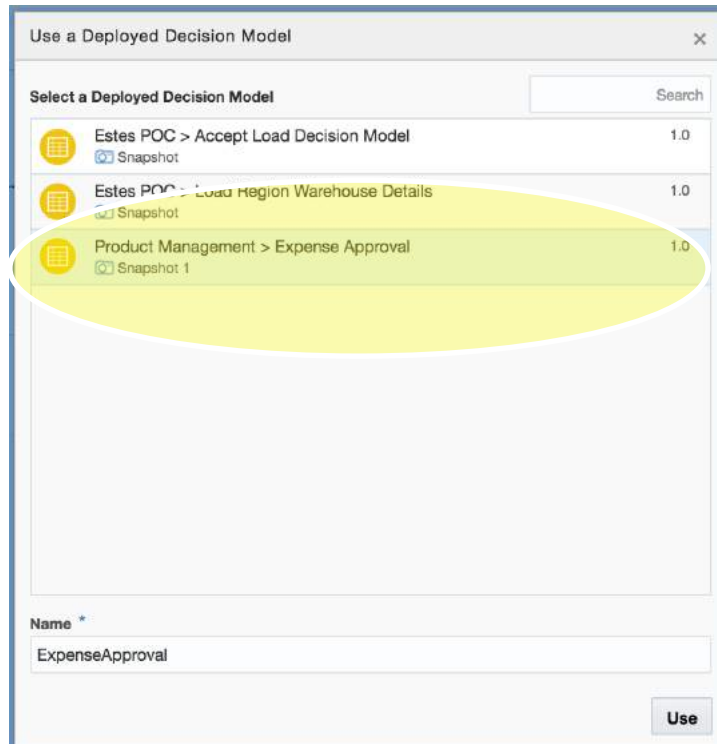
Versioning Section:

- Version ***: A text input field containing "1.0".
- Overwrite**: A checkbox that is currently unchecked.

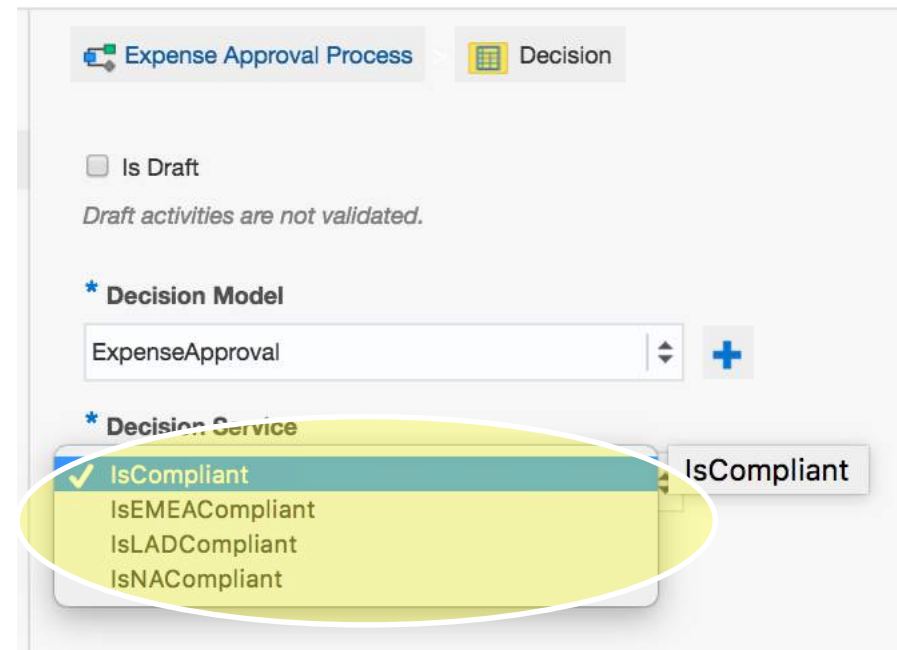
A **Deploy** button is located at the bottom right of the dialog.

Oracle DMN Decision Service

Easy DMN Decision Discovery from PCS



1. Select Decision Model



1. Select Decision Service

Oracle DMN Decision Service

Easy to patch or version a Decision Model

Create Snapshot and deploy it. ✕

Snapshot

Name *
Snapshot 2

Description

Versioning






Version *
1.0

Overwrite

Deploy

Manage Snapshots ✕

Click on the snapshot menu to see the available operations +

 Snapshot 2 No Description	 1.0	
 Snapshot 1 Initial Implementation of Expense Approval Decision		

Close

Oracle DMN Decision Service

Where do changes take place more frequently?



Rule/Decision
Changes

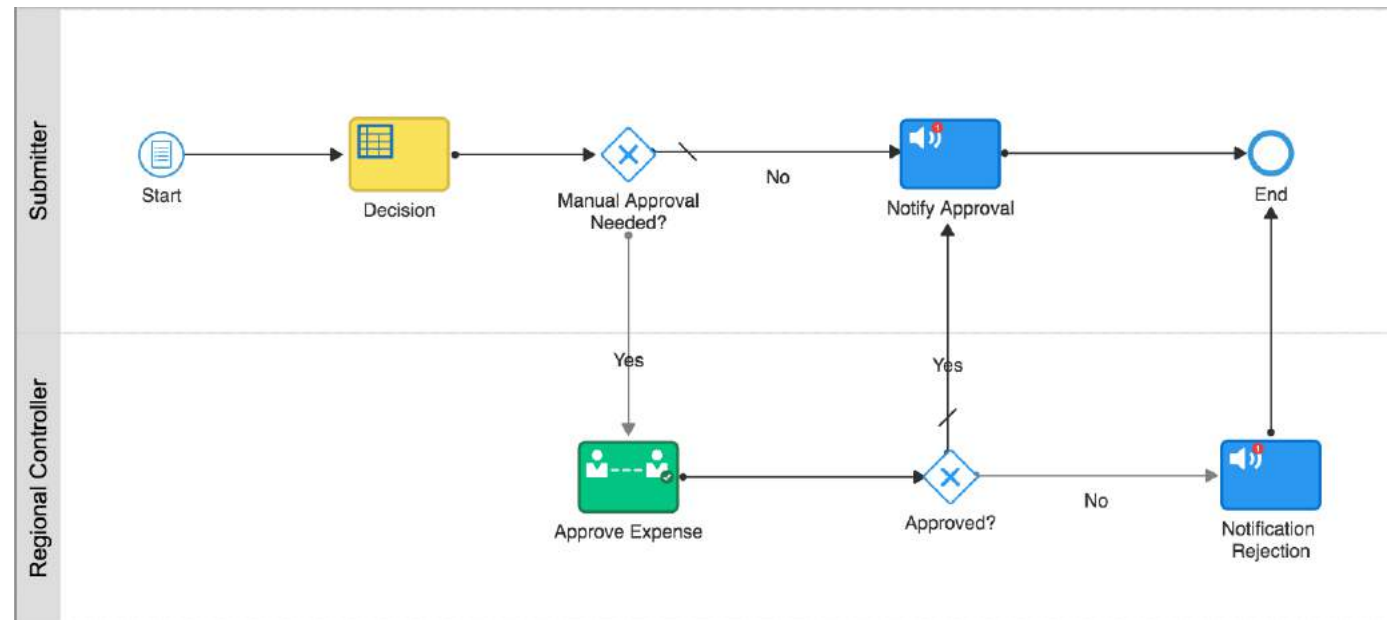


Process Flow
Changes

Oracle DMN Decision Service

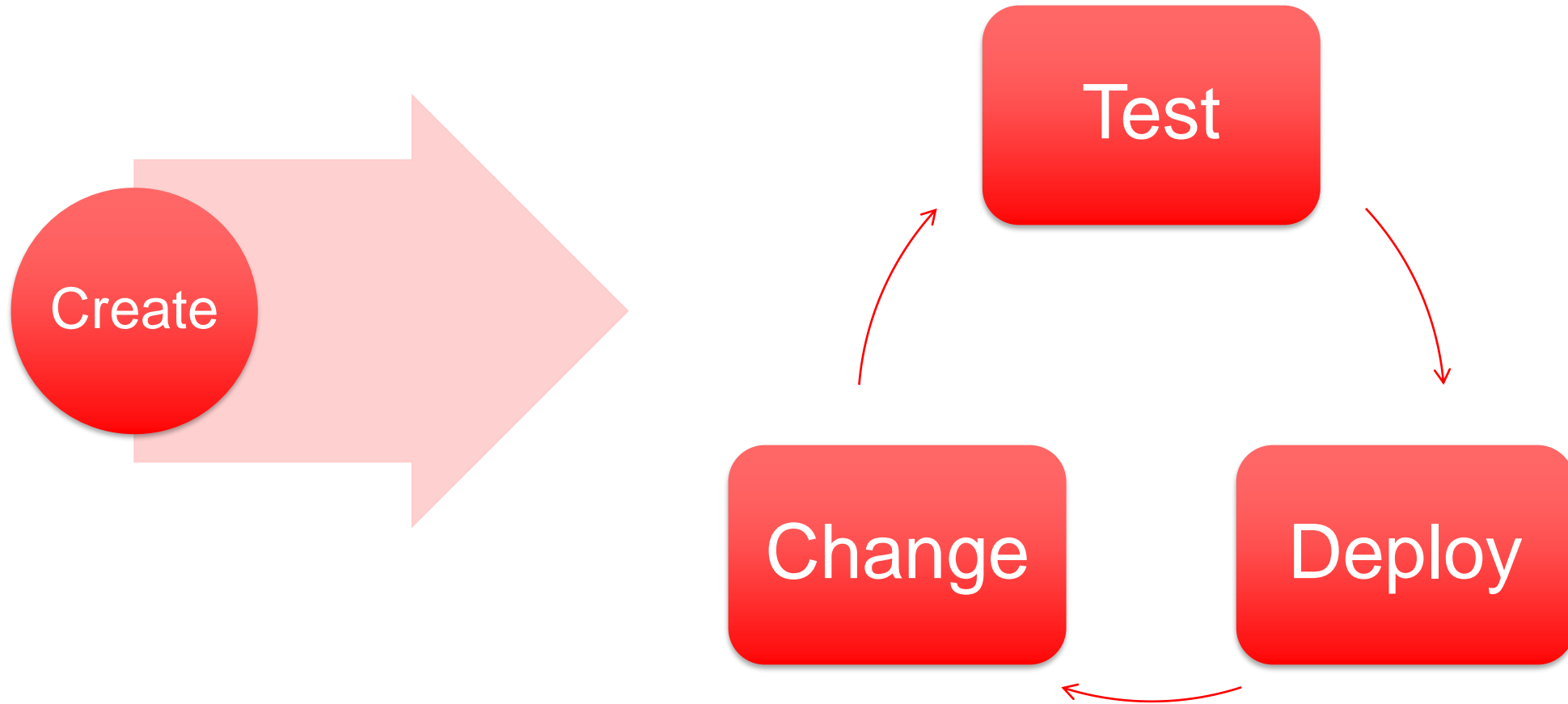
Demo Example – Expense Approval Process

- Minimize human intervention
- Automate and Streamline
- Exception Manual approval
- Consistent behavior



Oracle DMN Decision Service

Born with Iterative Lifecycle in Mind ...



Oracle DMN Decision Service Target Personas



**Business
Professionals**

Vs



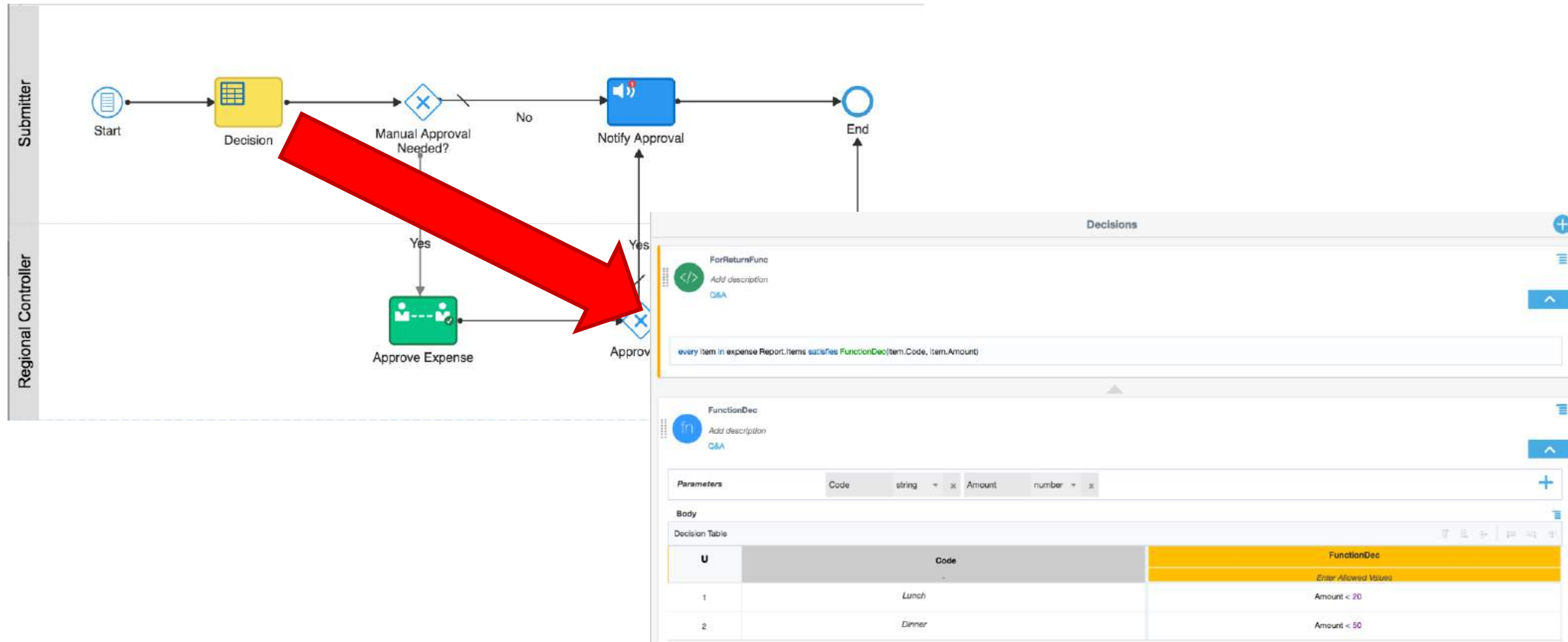
**IT
Professionals**

Oracle DMN Decision Service Summary

- FEEL language provides a common ground for understanding and learning by its user community
- No vendor proprietary and lock in



Oracle DMN Decision Service Demo Scenario



Demo

ORACLE®