Getting started with decision services
Abstract

In this tutorial, you will create and test a driver's license suspension scenario.
# Table of Contents

PREFACE ........................................................................................................... 3

CHAPTER 1. CREATING THE TRAFFIC VIOLATIONS PROJECT ........................................ 4

CHAPTER 2. DATA OBJECTS ................................................................................ 5
  2.1. CREATING THE VIOLATION DATA OBJECT ........................................... 6
     2.1.1. Adding the Violation data object constraints ....................................... 6
  2.2. CREATING THE DRIVER DATA OBJECT ................................................ 8
     2.2.1. Adding the Driver data object constraints ........................................... 9

CHAPTER 3. GUIDED RULES ............................................................................. 12
  3.1. CREATING THE DRIVER LICENSE SUSPENSION RULE ......................... 12
  3.2. SETTING THE SUSPENSION RULE CONDITIONS .................................... 13
  3.3. SETTING THE SUSPENSION RULE ACTIONS .......................................... 15

CHAPTER 4. GUIDED DECISION TABLES .......................................................... 17
  4.1. CREATING A TRAFFIC VIOLATION GUIDED DECISION TABLE .............. 17
     4.1.1. Inserting Violation Type columns ...................................................... 18
     4.1.2. Inserting Fine Amount and Points columns ...................................... 22
     4.1.3. Inserting guided decision table rows ................................................ 23

CHAPTER 5. TEST SCENARIOS ......................................................................... 25
  5.1. TESTING THE SPEED LIMIT SCENARIO ............................................... 25
  5.2. TESTING THE DRIVER LICENSE SUSPENSION SCENARIO ..................... 27
  5.3. TESTING THE MULTIPLE VIOLATIONS SCENARIO ................................... 29

APPENDIX A. VERSIONING INFORMATION ...................................................... 31
PREFACE

As a business analyst or rules developer, you can use Business Central in Red Hat Process Automation Manager to design a variety of decision services. In this tutorial, you will create and test a driver’s license suspension scenario.

Prerequisites

- Red Hat JBoss Enterprise Application Platform 7.1.0 is installed. For details, see Red Hat JBoss EAP 7.1.0 Installation Guide.

- Red Hat Process Automation Manager is installed and configured with Process Server. For more information, see Installing and configuring Red Hat Process Automation Manager on Red Hat JBoss EAP 7.1.

- Red Hat Process Automation Manager is running and you can log in to Business Central with the developer role. For more information, see Planning a Red Hat Process Automation Manager installation.
CHAPTER 1. CREATING THE TRAFFIC VIOLATIONS PROJECT

A project is the container for assets such as data objects, guided decision tables, and guided rules. For this tutorial, you will create the Driver_department_traffic_violations project.

Procedure

1. Log in to Business Central.

2. Go to Menu → Design → Projects.
   Tip: Red Hat Decision Manager provides a default space called MySpace, as shown in the following image. You can use the default space to create and test example projects.

   Figure 1.1. Default spaces

3. Click Add Project.

4. Enter Driver_department_traffic_violations in the Name field.

5. Click Add.

   Figure 1.2. Add Project window

The Assets view of the project opens.
CHAPTER 2. DATA OBJECTS

Data objects are the building blocks for the rule assets that you create. Data objects are custom data types implemented as Java objects in specified packages of your project. For example, you might create a `Person` object with data fields `Name`, `Address`, and `DateOfBirth` to specify personal details for loan application rules. These custom data types determine what data your assets and your decision services are based on.

The following tables show the `Violation` and `Driver` data objects that you will create in this tutorial.

### Table 2.1. Violation data object

<table>
<thead>
<tr>
<th>ID</th>
<th>Label</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>code</td>
<td>Code</td>
<td>String</td>
</tr>
<tr>
<td>points</td>
<td>Points</td>
<td>Integer</td>
</tr>
<tr>
<td>violationDate</td>
<td>Violation Date</td>
<td>Date</td>
</tr>
<tr>
<td>type</td>
<td>Type</td>
<td>String</td>
</tr>
<tr>
<td>fineAmount</td>
<td>Fine Amount</td>
<td>Double</td>
</tr>
<tr>
<td>speedLimit</td>
<td>Speed Limit</td>
<td>Integer</td>
</tr>
<tr>
<td>actualSpeed</td>
<td>Actual Speed</td>
<td>Integer</td>
</tr>
</tbody>
</table>

### Table 2.2. Driver data object

<table>
<thead>
<tr>
<th>ID</th>
<th>Label</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>name</td>
<td>Name</td>
<td>String</td>
</tr>
<tr>
<td>age</td>
<td>Age</td>
<td>Integer</td>
</tr>
<tr>
<td>state</td>
<td>State</td>
<td>String</td>
</tr>
<tr>
<td>city</td>
<td>City</td>
<td>String</td>
</tr>
<tr>
<td>violations</td>
<td>Violations</td>
<td>Violation (org.jboss.example.traffic_violations.Violation) Note: The violations field is set to &quot;List&quot; to hold multiple items for the given type.</td>
</tr>
<tr>
<td>fineAmount</td>
<td>Fine Amount</td>
<td>Double</td>
</tr>
<tr>
<td>totalPoints</td>
<td>Total Points</td>
<td>Integer</td>
</tr>
</tbody>
</table>
2.1. CREATING THE VIOLATION DATA OBJECT

The **Violation** data object contains data fields based on violation details, such as **Violation Date**, **Fine Amount**, and **Speed Limit**.

**Prerequisites**

You have created the *Driver_department_traffic_violations* project.

**Procedure**

1. Click *Add Asset → Data Object*.
2. In the *Create new Data Object* wizard, enter the following values:
   - **Data Object**: Violation
   - **Package**: select `com.myspace.driver_department_traffic_violations`
3. Click *Ok*.

![Create new Data Object window](image)

2.1.1. Adding the Violation data object constraints

Populate the **Violation** data object fields with the constraints that you will select when you define your rules.

**Prerequisites**

You have created the **Violation** data object.
Procedure

1. In the 'Violation'-general properties section, enter Violation in the Label field.

Figure 2.2. General properties

2. Click + add field.

3. Enter the following values:
   - Id: code
   - Label: Code
   - Type: String

4. Click Create and continue, then enter the following values:
   - Id: points
   - Label: Points
   - Type: Integer

5. Click Create and continue, then enter the following values:
   - Id: violationDate
   - Label: Violation Date
   - Type: Date

6. Click Create and continue, then enter the following values:
   - Id: type
   - Label: Type
   - Type: String

7. Click Create and continue, then enter the following values:
   - Id: fineAmount
8. Click **Create and continue**, then enter the following values:
   - **Id**: speedLimit
   - **Label**: Speed Limit
   - **Type**: Integer

9. Click **Create and continue**, then enter the following values:
   - **Id**: actualSpeed
   - **Label**: Actual Speed
   - **Type**: Integer

10. Click **Create**.

11. Click **Save**, and then click **Save** to confirm your changes.

12. Click the **Driver_department_traffic_violations** label to return to the **Assets** view of the project.

Figure 2.3. Violation data object fields

### 2.2. CREATING THE DRIVER DATA OBJECT

The **Driver** data object contains data fields based on driver details, such as **Name**, **Age**, and **Total Points**.

**Prerequisites**
You have created the **Driver_department_traffic_violations** project.
Procedure

1. Click Add Asset → Data Object.

2. In the Create new Data Object wizard, enter the following values:
   - Data Object: Driver
   - Package: select com.myspace.driver_department_traffic_violations

3. Click Ok.

Figure 2.4. Create new Data Object window

2.2.1. Adding the Driver data object constraints

Populate the Driver data object fields with the constraints that you will select when you define your rules.

Prerequisites

You have created the Driver data object.

Procedure

1. In the 'Driver'-general properties section, enter Driver in the Label field.

2. Click + add field

3. Enter the following values:
   - Id: name
   - Label: Full Name
   - Type: String

4. Click Create and continue, then enter the following values:
• Id: age
  • Label: Age
  • Type: Integer

5. Click **Create and continue**, then enter the following values:
  • Id: state
  • Label: State
  • Type: String

6. Click **Create and continue**, then enter the following values:
  • Id: city
  • Label: City
  • Type: String

7. Click **Create and continue**, then enter the following values:
  • Id: violations
  • Label: Violations
  • Type: Violation(com.myspace.driver_department_traffic_violations.Violation)
  • List: Select this check box to enable the field to hold multiple items for the specified type.

8. Click **Create and continue**, then enter the following values:
  • Id: fineAmount
  • Label: Fine Amount
  • Type: Double

9. Click **Create and continue**, then enter the following values:
  • Id: totalPoints
  • Label: Total Points
  • Type: Integer

10. Click **Create and continue**, then enter the following values:
    • Id: reason
    • Label: Reason
    • Type: String

11. Click **Create**.

12. Click **Save**, and then click **Save** to confirm your changes.
13. Click the `Driver_department_traffic_violations` label to return to the `Assets` view of the project.

**Figure 2.5. Driver data object fields**

<table>
<thead>
<tr>
<th>Identifier</th>
<th>Label</th>
<th>Type</th>
<th>Delete</th>
</tr>
</thead>
<tbody>
<tr>
<td>name</td>
<td>Full Name</td>
<td>String</td>
<td></td>
</tr>
<tr>
<td>age</td>
<td>Age</td>
<td>Integer</td>
<td></td>
</tr>
<tr>
<td>state</td>
<td>State</td>
<td>String</td>
<td></td>
</tr>
<tr>
<td>city</td>
<td>City</td>
<td>String</td>
<td></td>
</tr>
<tr>
<td>violations</td>
<td>Violations</td>
<td>Violation [List]</td>
<td></td>
</tr>
<tr>
<td>fineAmount</td>
<td>Fine Amount</td>
<td>Double</td>
<td></td>
</tr>
<tr>
<td>totalPoints</td>
<td>Total Points</td>
<td>Integer</td>
<td></td>
</tr>
<tr>
<td>reason</td>
<td>Reason</td>
<td>String</td>
<td></td>
</tr>
</tbody>
</table>
CHAPTER 3. GUIDED RULES

Guided Rules are business rules that you can create in a UI-based Guided Rules designer that leads you through the rule creation process. The rule designer provides fields and options for acceptable input based on the object model of the rule being edited. All data objects related to the rule must be in the same project package as the rule. Assets in the same package are imported by default. You can use the Data Objects tab of the rule designer to verify that all required data objects are listed or to import any other needed data objects.

Figure 3.1. The Guided Rule designer

3.1. CREATING THE DRIVER LICENSE SUSPENSION RULE

Create the Driver license suspension rule using the Guided Rule wizard.

Prerequisite
You have created both the Violation and Driver data objects.

Procedure

1. Log in to Business Central.
2. Click Menu → Design → Projects, then Driver_department_traffic_violations.
3. Click Add Asset → Guided Rule, then enter:
   - Guided Rule: DriverLicenseSuspensionRule
   - Package: com.myspace.driver_department_traffic_violations
4. Click Ok to open the Guided Rule designer.
3.2. SETTING THE SUSPENSION RULE CONDITIONS

Set the Suspension rule conditions that are used to determine the driver’s violation.

Prerequisite

You have created the Driver License Suspension rule.

Procedure

1. Click ( + ) next to the WHEN label to open the Add a condition to the rule window.

2. Select Driver and click Ok.
3. Click the **There is a Driver** label to open the **Modify constraints for Driver** window.

4. Enter **driver** in the **Variable name** field and click **Set**.

5. Click **There is a Driver[driver]** and click **Expression editor**.

6. Click **[not bound]** to open the **Expression editor**.

7. In the **Bind the Expression to a new variable** field, enter: **previousPts** and click **Set**.

8. From the **Choose** menu, select **totalPoints**.

9. Click (.JWT ) next to line 1 (the **previousPts** label) to open the **Add a condition to the rule** window.

10. Select **From Accumulate** and click **Ok**.
11. Click **click to add pattern** above the **From Accumulate** label and select **Number** from the **choose fact type** menu.

12. Click **There is a number** label to open the **Modify contraints for Driver** window.

13. Click **Expression editor** and select **intValue()** from the **[not bound]: Choose** menu.

14. Click **[not bound]** to open the **Expression editor**.

15. In the **Bind the Expression to a new variable** field, enter: **totalNewPoints** and click **Set**.

16. Click **click to add pattern** and select **Violation** from the **choose fact type** menu.

17. Click **All Violation with:** to open the **Modify contraints for Violation** window and select **points** from the **Add a restriction on a field** menu.

18. Click **please choose** next to the **points** label and select **greater than**.

19. Click ( ), and then click **Literal value**.

20. Click the **points** label to open the **Add a field** window.

21. Enter **vPoints** and click **Set**.

22. In the **Function** field, enter **sum(vPoints)**.

23. Select **greater than or equal to** from the **totalNewPoints → please choose** menu.

24. Click ( ), click **New formula**, and enter **20-previousPts** in the new field.

25. Click **Save**, and then click **Save** to confirm your changes.

**Figure 3.4. Suspension Rule conditions**

<table>
<thead>
<tr>
<th>Driver</th>
<th>License</th>
<th>Suspension</th>
<th>Rule.rdr - Guided Rules</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Editor</strong></td>
<td><strong>Overview</strong></td>
<td><strong>Source</strong></td>
<td><strong>Data Objects</strong></td>
</tr>
<tr>
<td><strong>EXTENDS</strong></td>
<td><strong>WHEN</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. There is a Driver [driver] with:
   - [previousPts]: totalPoints: Choose:
   - **— please choose —**

2. There is a Number with:
   - [totalNewPoints]: intValue(): Choose:
   - greater than or equal to
   - 20-previousPts

3.3. SETTING THE SUSPENSION RULE ACTIONS

Set the Suspension rule actions that are used to determine a driver’s resulting penalties, including points and fine amounts, based on the Suspension rule conditions.

**Prerequisite**

You have set the Suspension rule conditions.
Procedure

1. Click (show options...).

   Figure 3.5. show options selection

   THEN
   (show
   options...)

2. Click (+) next to the THEN label and select Change field values of driver, and click Ok.

3. Click the Set value of Driver [driver] field and select state from the Add field menu.

4. Click ( ) next to state in the Set value of Driver [driver] section to open the Field value window.

5. Click Literal value and enter suspend in the new field.

   Figure 3.6. New field

   THEN
   ↓. Set value of Driver [driver] state suspend

6. Click (+) next to the (options) label below the Set value of Driver [driver] section.

7. From the Add an option to the rule window, select the ruleflow-group option from the Attribute menu.

8. Enter trafficViolation in to the ruleflow-group field.

9. Click Save, and then click Save to confirm your changes.

   Figure 3.7. Suspension rule actions

   THEN
   ↓. Set value of Driver [driver] state suspend
   Attribute:
   dialect
   ruleflow-group: trafficViolation
CHAPTER 4. GUIDED DECISION TABLES

Guided decision tables are a wizard-led alternative to uploaded decision table spreadsheets for defining business rules in a tabular format. With guided decision tables, you are led by a UI-based wizard in Business Central that helps you define rule attributes, metadata, conditions, and actions based on specified data objects in your project. After you create your guided decision tables, the rules you defined are compiled into Drools Rule Language (DRL) rules as with all other rule assets.

All data objects related to a guided decision table must be in the same project package as the guided decision table. Assets in the same package are imported by default. After you create the necessary data objects and the guided decision table, you can use the **Data Objects** tab of the guided decision tables designer to verify that all required data objects are listed or to import other existing data objects by adding a **New item**.

### 4.1. CREATING A TRAFFIC VIOLATION GUIDED DECISION TABLE

Use the Guided Decision Table designer to create the traffic violation guided decision table, which specifies the driver’s specific violation and the resulting fine and points.

**Prerequisite**

You have created both the **Violation** and **Driver** data objects.

**Procedure**

1. Log in to Business Central.

2. Click **Menu → Design → Projects**, then **Driver_department_traffic_violations**.

3. Click **Add Asset → Guided Decision Table**, then enter:
   - Guided Decision Table: **SpeedViolationRule**
   - Package: **com.myspace.driver_department_traffic_violations**

4. Select **Unique Hit** from the **Hit Policy** menu.

5. Select **Extended entry, values defined in table body** in the **Table format** section.

6. Click **Ok** to open the **Guided Decision Tables** designer.
4.1.1. Inserting Violation Type columns

The Violation Type column contains the violation details such as the driver’s speed and if the driver was under the influence of drugs or alcohol.

**Prerequisite**

You have created the traffic violation guided decision table.

**Procedure**

1. Click **Columns → Insert Column** and then select **Include advanced options**.

   ![Figure 4.2. Column tab](image)

2. Select **Add an Attribute column** and click **Next**.
3. Select Ruleflow-group and click Finish.

4. Expand Attribute columns and enter trafficViolation in the Default value field.

5. Click Insert Column, select Add a Condition → Pattern → +Create a new Fact Pattern

6. Select Violation from the Fact type menu, enter v in the Binding field, and click OK.
Figure 4.5. Create a new fact pattern window

Create a new fact pattern

Fact type: Violation
Binding:
Negate pattern match:

Figure 4.6. Calculation type options

7. Select Calculation type → Literal value.

8. Select Field and then select type from the Field menu.

9. Select Operator and then equal to from the Operator menu.

10. Select Value options and enter Speed, Driving while intoxicated, DWI=Driving while under the influence of drugs in the Value list (optional) field.

11. Select Additional info, enter Violation Type in the Header (description) field, and click Finish.
12. Click Insert Column, select Add a Condition → Pattern, and select Violation[v] from the Pattern menu.

13. Select Calculation type → Predicate → Field and enter actualSpeed-speedLimit > $param.

14. Select Value options, then select Additional info and enter Speed Limit (MPH) > in the Header (description) field.

15. Click Finish.

16. Click Insert Column, select Add a Condition → Pattern, and select Violation[v] from the Pattern menu.

17. Select Calculation type → Predicate.

18. Select Field and enter actualSpeed-speedLimit < $param in the Field field.
19. Select **Operator**, select **Value options**, then select **Additional info**.

20. Enter **Speed Limit (MPH) <** in the **Header (description)** field and click **Finish**.

**Figure 4.9. Condition columns**

<table>
<thead>
<tr>
<th>SpeedViolationRule.gdst - Guided Decision Tables</th>
</tr>
</thead>
<tbody>
<tr>
<td>Editor</td>
</tr>
<tr>
<td>--------</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
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<td></td>
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<tr>
<td></td>
</tr>
</tbody>
</table>

### 4.1.2. Inserting Fine Amount and Points columns

The **Fine Amount** and **Points** columns contain the fines and points based on the corresponding **Violation Type** field values.

**Prerequisite**

You have inserted the **Violation Type** column in to the traffic violation guided decision table.

**Procedure**

1. Click **Insert Column**, select **Set the value of a field** → **Pattern**, and select **Violation[v]** from the **Pattern** menu.

2. Select **Field** and then **fineAmount** from the **Field** menu.

3. Select **Value options**, and then select **Additional info**, and enter **Fine Amount** in the **Header (description)** field.
4. Select the **Update engine with changes** option and click **Finish**.

![Figure 4.10. Fine Amount header](image)

5. Click **Insert Column**, select **Set the value of a field** → **Pattern**, and select **Violation[v]** from the **Pattern** menu.

6. Select **Field** and then **points** from the **Field** menu.

7. Select **Value options**, then select **Additional info** and enter **Points** in the **Header (description)** field.

8. Select the **Update engine with changes** option and click **Finish**.

![Figure 4.11. Action columns](image)

### 4.1.3. Inserting guided decision table rows

After you have created your columns in the guided decision table, you can add rows and define rules within the decision table designer.

**Prerequisite**

You have created the **Violation Type**, **Fine Amount**, and **Points** columns in the traffic violation guided decision table.
Procedure

1. Click Editor → Insert → Append row. Repeat this step to add a total of five table rows.

2. Fill out the table as shown in the following example:

   **Figure 4.12. Populated data fields**

<table>
<thead>
<tr>
<th>Violation Type</th>
<th>Speed Limit (MPH)</th>
<th>Speed Limit (MPH)</th>
<th>Fix Amount</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>trafficViolation</td>
<td>Speed 10</td>
<td>Speed 20</td>
<td>100</td>
<td>1</td>
</tr>
<tr>
<td>trafficViolation</td>
<td>Speed 20</td>
<td>Speed 30</td>
<td>200</td>
<td>2</td>
</tr>
<tr>
<td>trafficViolation</td>
<td>Speed 30</td>
<td>Speed 40</td>
<td>300</td>
<td>3</td>
</tr>
<tr>
<td>trafficViolation</td>
<td>Driving while intoxicated</td>
<td>Speed 50</td>
<td>500</td>
<td>4</td>
</tr>
<tr>
<td>trafficViolation</td>
<td>Driving while under the influence of drugs</td>
<td>Speed 60</td>
<td>600</td>
<td>5</td>
</tr>
</tbody>
</table>

3. Click Save, and then click Save to confirm your changes.
CHAPTER 5. TEST SCENARIOS

Test Scenarios in Red Hat Process Automation Manager enable you to validate the functionality of rules, models, and events before deploying them into production. A test scenario uses data for conditions that resemble an instance of your fact or project model. This data is matched against a specific set of rules and if the expected results match the actual results, the test is successful. If the expected results do not match the actual results, then the test fails.

After you run all test scenarios, the status of the scenarios is reported in a Reporting panel.

Test scenarios can be executed one at a time or as a group. The group execution contains all the scenarios from one package. Test scenarios are independent, so that one scenario cannot affect or modify the other.

5.1. TESTING THE SPEED LIMIT SCENARIO

Test the speed limit scenario using the data that you specified when you created the traffic violation guided decision table.

Prerequisites

- You have created the Driver_department_traffic_violations project.
- You have created the Violation and Driver data objects.
- You have created the speed violation guided decision table.

Procedure

1. Log in to Business Central.
2. Click Menu → Design → Projects, then Driver_department_traffic_violations.
3. Click Add Asset → Test Scenario.
4. In the Create new Test Scenario window wizard, enter the following values:
5. Click Ok.
6. Click +GIVEN to open the New input window.
7. Select Violation from the Insert a new fact menu.
8. Enter violation in the Fact name field and click Add.
9. Click Add a field located under Insert 'Violation'[violation] to open the Choose a field to add window.
10. Select speedLimit from the Choose a field to add menu and click OK.
11. Click ( ), and then click Literal value next to speedLimit.
12. Click **Literal value** in the **Field value** window, then enter 40 in the **speedLimit** field.

13. Click **Insert 'Violation'[violation]**.

14. Select **type** from the **Choose a field to add** menu in the **Choose a field to add** window, and click **OK**.

15. Click ( ), and then click **Literal value** next to **Literal value**.

16. Enter **Speed** in the **type** field.

17. Click **Insert 'Violation'[violation]**.

18. Select **actualSpeed** from the **Choose a field to add** menu, and click **OK**.

19. Click ( ), and then click **Literal value** next to **Literal value**.

20. Enter 55 in the **actualSpeed** field.

21. Click **+Expect** to open the **New expectation** window.

22. Expand the **Rule** menu, select **Row 1 SpeedViolationRule**, and click **OK**.

23. Click **+GIVEN** to open the **New input** window, enter **trafficViolation** in the **Activate rule flow group** field, and click **Add**.

24. Click **+Expect** to open the **New expectation** window and click **Add** next to **Fact value: violation**.

25. Click **Violation 'violation' has values:** to open the **Choose a field to add** window.

26. Select **fineAmount** from the **Choose a field to add** menu and click **OK**.

27. Enter 100.0 in the **fineAmount: equals** field.

28. Click **Violation 'violation' has values:** to open the **Choose a field to add** window.

29. Select **points** from the **Choose a field to add** menu and click **OK**.

30. Enter 1 in the **points: equals** field.

31. Click **Save**, and then click **Save** to confirm your changes.

32. Click **Run scenario**.
5.2. TESTING THE DRIVER LICENSE SUSPENSION SCENARIO

Test the driver license suspension scenario using the data that you specified when you set the Driver License Suspension rules and actions.

Prerequisites

- You have created the Driver_department_traffic_violations project.
- You have created the Violation and Driver data objects.
- You have set the Driver License Suspension rules and actions.

Procedure

1. Log in to Business Central.
2. Click Menu → Design → Projects, then Driver_department_traffic_violations.
3. Click Add Asset → Test Scenario.
4. In the Create new Test Scenario window wizard, enter the following values:
   a. Test Scenario: Suspend due to total points.
5. Click **Ok**.

6. Click **+GIVEN** to open the **New input** window.

7. Select **Driver** from the **Insert a new fact** menu.

8. Enter **driver** in the **Fact name** field and click **Add**.

9. Click **Add a field** located under **'Driver'[driver]** to open the **Choose a field to add** window.

10. Select **totalPoints** from the **Choose a field to add** menu and click **OK**.

11. Click ( ) next to **totalPoints**, click **Literal value**, then enter **10** in the **totalPoints** field.

12. Click **+GIVEN** to open the **New input** window.

13. Select **Violation** from the **Insert a new fact** menu.

14. Enter **violation** in the **Fact name** field and click **Add**.

15. Click **Add a field** located under **Insert 'Violation'[violation]** to open the **Choose a field to add** window.

16. Select **points** from the **Choose a field to add** menu and click **OK**.

17. Click ( ), and then click **Literal value** next to **Literal value**.

18. Enter **10** in the **points** field.

19. Click **+Expect** to open the **New expectation** window.

20. Expand the **Rule** menu, select **DriverLicenseSuspensionRule**, and click **OK**.

21. Click **+GIVEN** to open the **New input** window, enter **trafficViolation** in the **Activate rule flow group** field, and click **Add**.

22. Click **+Expect** to open the **New expectation** window and click **Add** next to **Fact value: driver**.

23. Click **Driver 'driver' has values**: to open the **Choose a field to add** window.

24. Select **state** from the **Choose a field to add** menu and click **OK**.

25. Enter **suspend** in the **state: equals** field.

26. Click **Save**, and then click **Save** to confirm your changes.

27. Click **Run scenario**.

**Result**

The rule is fired and the driver’s license is suspended because the total number of points is >= 20.
If the values and conditions set in the test scenario meet the requirements that you specified when you set the Driver License Suspension rules and actions, the Reporting section at the bottom of the window displays a Success message.

5.3. TESTING THE MULTIPLE VIOLATIONS SCENARIO

Copy the Suspend due to total points asset and modify it to create the driver license suspension scenario for drivers with multiple violations using the data that you specified when you set the Driver License Suspension rules and actions.

Prerequisites

- You have created the Driver_department_traffic_violations project.
- You have created the Violation and Driver data objects.
- You have set the driver license suspension rules and actions.

Procedure

1. Log in to Business Central.
2. Click Menu → Design → Projects, then Driver_department_traffic_violations.
3. Click Suspend due to total points → Copy, enter Suspend due to multiple violations in the New Asset Name field, and click Make a Copy.
4. Click Space → MySpace → Driver_department_traffic_violations, and then select the Suspend due to multiple violations Asset.
5. Click +GIVEN to open the New input window.

6. Select Violation from the Insert a new fact menu.

7. Enter violation2 in the Fact name field and click Add.

8. Click ( ) next to points, click Literal value, then enter 5 in the points → violation2 field.

9. In the totalPoints field, change the value from 10 to 5.

10. Click Save, and then click Save to confirm your changes.

11. Click Run scenario.

**Figure 5.3. Suspension test results screen**

If the values and conditions set in the test scenario meet the requirements that you specified when you set the Driver License Suspension rules and actions, the Reporting section at the bottom of the window displays a Success message.
APPENDIX A. VERSIONING INFORMATION

Documentation last updated on Friday, May 22, 2020.