

Ejercicio 9 Día 7 -Process Modeling 101, Part 2 – Orlando Sánchez

Create the Maintenance Custom Data Type

Create Data Type

- Create from scratch
- Duplicate existing data type
- Create from database table or view
- Import XSD

Data Source *

jdbc/Appian (Tomcat) ▼

Table or View *

aamaintenance ▼

CANCEL

CONTINUE

Create Data Type

namespace ↕

urn:com:appian:types:AX

Formatted as a URI, for example 'urn:com:appian:types:COB' for a client onboarding application

Name *

AX_Maintenance

Description

Base data [structure](#) for a single [Maintenance record](#).

Column Name	Field Name	Column Type	Field Type	Key	Nulls	Unique			
MaintenanceRequestID	maintenanceReques	INT	Number (Integer)		<input type="checkbox"/>	<input checked="" type="checkbox"/>	↑	↓	×
VehicleID	vehicleId	INT	Number (Integer)		<input type="checkbox"/>	<input type="checkbox"/>	↑	↓	×
MaintenanceRequestDate	maintenanceReques	DATE	Date		<input type="checkbox"/>	<input type="checkbox"/>	↑	↓	×
MaintenanceScheduled	maintenanceSchedu	BIT	Boolean		<input type="checkbox"/>	<input type="checkbox"/>	↑	↓	×
MaintenanceIssue	maintenanceIssue	VARCHAR(255)	Text		<input type="checkbox"/>	<input type="checkbox"/>	↑	↓	×

GO BACK CANCEL CREATE

Create the Request Maintenance Form

Create Interface

Create from scratch Duplicate existing interface

Name*

AX_RequestMaintenance

Description

Request Maintance Form

Save In*

 AX Interfaces ×



Cre AX Interfaces folder

CANCEL

CREATE

Choice Labels (List of Text String)

Array of options for the user to select.

1 ▾ {"Scheduled", "Unscheduled"}

Place cursor on function, rule, or constant to display help

Clear expression and reset value

CANCEL

OK

AX_RequestMaintenance DESIGN MODE EXPRESSION MODE

TEST SAVE CHANGES

appian

PALETTE

COMPONENTS PATTERNING

Q pa

PARAGRAPH

FILE UPLOAD

PROGRESS BAR

PIE CHART

New Maintenance Request

Vehicle Details

Year 2019
Make Ford
Model F150
VIN 2F2DE48C8N4309374
Mileage 500

Maintenance Details

Request Date *
mm/dd/yyyy

Type of Maintenance *
 Scheduled Unscheduled

Issue *

CANCEL SUBMIT

Name	Value
cancel	null
vehicle	[vehicleId=1, vehic...
maintenance	null

LOCAL VARIABLES

COMPONENT CONFIGURATION

Contents

Paragraph

Height
Medium

Visibility
 Always show
 Only show when...

Required

Required Message



Read-only

Create the Approve Maintenance Form

Create Interface

Create from scratch Duplicate existing interface

Interface to Duplicate *

 AX_RequestMaintenance 



Name *

AX_ApproveMaintenance

Description

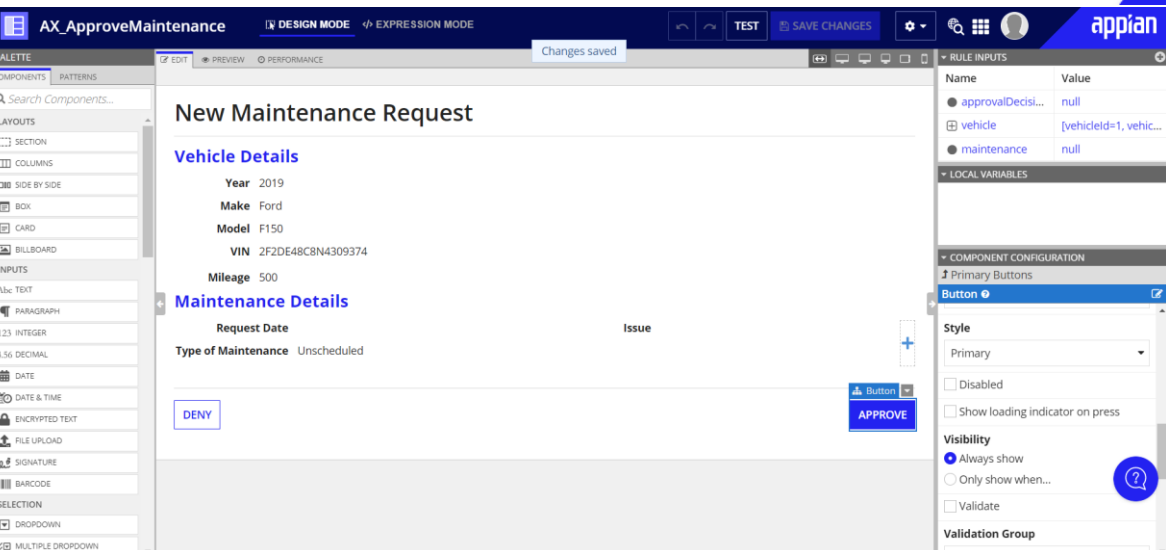
Supervisor form for approving or denying a vehicle maintenance request.

Save In *

 AX Interfaces 

Create New Rule Folder

CANCEL **CREATE**



The screenshot shows the Appian interface design tool. The main canvas displays a form titled "New Maintenance Request". The form is divided into two sections: "Vehicle Details" and "Maintenance Details". Under "Vehicle Details", there are fields for Year (2019), Make (Ford), Model (F150), VIN (2FZDE48C8N4309374), and Mileage (500). Under "Maintenance Details", there are fields for Request Date and Type of Maintenance (Unscheduled). There are two buttons: "DENY" and "APPROVE". The interface includes a component palette on the left, a top toolbar with "DESIGN MODE" and "EXPRESSION MODE" tabs, and a right-hand configuration panel for the selected "Button" component. The configuration panel shows settings for Style (Primary), Visibility (Always show), and Validation Group.

Create the Request Maintenance Process Model

Create the Process Model

Create Process Model

Create from scratch Duplicate existing process model


Name*

AX Request Maintenance

Description

Process model for requesting maintenance for a vehicle in the fleet.

Save In*

 AX Process Models ×



[Create New Process Model Folder](#)

CANCEL

CREATE



Review Process Model Security



Tip: Process models do not inherit security from their parent folders. To start a process model, basic users must have at least initiator rights. [Learn more](#)

Name

 AX Request Maintenance

User or Group	Permission Level	
Default (All Other Users)	No Access	
 AX Administrators ×	Administrator ▼	×
 AX All Users ×	Viewer ▼	×
+ Add Users or Groups		

SAVE

Process Model Properties » AX Request Maintenance



General Variables **Process Start Form** Deadlines Alerts Data Management

English (US) Spanish (MX) French (CA) English (GB) Chinese (CN) Chinese (HK) Dutch
French (FR) German Italian Japanese Polish Portuguese Russian Spanish
Swedish Arabic Greek Korean

Enable this language

Interface

"AX_RequestMaintenance" Clear

EDIT INTERFACE

Specify the data to pass between the process and interface Refresh

Rule Input	Type	Multiple?	Value	
cancel	Boolean	No	cancel	+
vehicle	AX_Vehicle	No	vehicle	+
maintenance	AX_Maintenance	No	maintenance	+

CANCEL

OK

Process Model Properties » AX Request Maintenance



General Variables Process Start Form Deadlines Alerts Data Management

New Process Variable



Name

Type

Value True
 False

Parameter Allow the value for the variable to be provided when starting a process

Required Value is required in order to start a process

Multiple Variable can store multiple values

Hidden Variable is hidden from parent processes, reports and process history

CANCEL

OK

CANCEL

OK

Expression Editor



```
1 "Request Maintance: " & pv!vehicle.vehicleYear & " " &  
2 pv!vehicle.vehicleMake & " " & pv!vehicle.vehicleModel
```

pv!vehicle

Type: AX_Vehicle

CANCEL

SAVE AND CLOSE

CANCEL



OK

Process Model Properties » AX Request Maintenance



General Variables Process Start Form Deadlines Alerts Data Management

Alert Recipients Who will be notified of errors in this process?

- Use system defaults for error alerts.
- Use custom error alert settings.
 - Send alerts to the process initiator.
 - Send alerts to the process model owner.
 - Send alerts to the recipients defined by this expression: 
 - Send alerts to the following users & groups: 

CANCEL

OK

Process Model Properties » AX Request Maintenance



General Variables Process Start Form Deadlines Alerts **Data Management**

Automatic Process Clean-Up Selected configuration will apply to all versions of this process model

- Use system default (currently: auto-archive processes 7 days after completion or cancellation)
- Archive processes days after completion or cancellation (0-999 days)
- Delete processes days after completion or cancellation (0-999 days)
- Do not automatically clean-up processes

CANCEL **OK**

Appian Process Modeler **appian**

File Modify View Process Details **MONITOR PROCESS VIEW** **EDIT PROCESS VIEW**

AX Request Mai

Process Details » AX Request Maintenance

Process History **Variables** Process Nodes Current Tasks Errors Sub-Processes Quick Tasks

Show (25) 100

Name	Type	Multiple	Value	
approvalDecision	Boolean	No	(No value)	Edit
cancel	Boolean	No	(No value)	Edit
maintenance	AX_Maintenance	No	[maintenanceRequestId=, vehicleId=, maintenanceRequestDate=8/18/2022, maintenanceScheduled=false, maintenancesue+NN, maintenanceStatus=, maintenanceStartDate=, maintenanceEstimatedCompletedate=, maintenanceActualCompleteDate=, maintenanceDuration=, maintenanceCost=, maintenanceRequester=, maintenanceMechanics=, maintenanceReviewStatus=, maintenanceReviewer=, maintenanceReviewDate=, maintenanceLastModifiedBy=, maintenanceLastModifiedDate=, maintenanceAttachment=]	
vehicle	AX_Vehicle	No	(No value)	

CLOSE

Configure the Cancel XOR Gateway

Configure Cancel?



Gene

Expression Editor



Flow



```
1 pv!cancel
```

Con



Else i

NEW

Order

pv!cancel

Type: Boolean

CANCEL

SAVE AND CLOSE

CANCEL

OK

Configure Cancel?



General **Decision**

Flows

- **Incoming Path(s):** 1 or more paths can enter an XOR gateway
- **Outgoing Paths:** 1 or more paths can exit an XOR gateway, but only ONE gets executed

Conditions

	Condition	Result	Path Label	Order
✖	If <input type="text" value="=pv:cancel"/> <input type="checkbox"/> is True	go to <input type="text" value="End - Cancel"/>	<input type="text" value="Yes"/>	
	Else if no rules are TRUE	go to <input type="text" value="Scheduled?"/>		
NEW CONDITION				

CANCEL

OK

The screenshot shows the Appian Process Modeler interface. The main workspace displays a workflow diagram for 'AX Request Maintenance v3.0'. The process starts at a 'Start Node' and leads to an XOR gateway labeled 'Cancel?'. From this gateway, there are two outgoing paths: one labeled 'Yes' leading to an 'End - Cancel' node, and another labeled 'No' leading to another XOR gateway labeled 'Scheduled?'. From the 'Scheduled?' gateway, the process flows to an 'End Node'. A 'Font' dialog box is open over the diagram. On the left, a 'Suggested' list includes 'Send E-Mail', 'User Input Task', and 'Delete from Data Store Ent'. Below that, a 'Workflow' list includes 'Human Tasks', 'Activities', 'Events', 'Gateways', and 'Automation Smart Services'. At the bottom, a status bar indicates a warning: 'This process model contains a process variable that it does not reference. Remove the variable if you do not intend to use it and have confirmed that it is not in use by a process report. Unused process variables can complicate comprehension and maintainability. Process variables: "approvalDecision".' A 'Dismiss' button is next to the warning.

Configure the Scheduled XOR Gateway

Configure Scheduled?



Gene

Expression Editor



Flow



```
1 pv!maintenance.maintenanceScheduled
```

Con



Else i

NEW

Order

pv!maintenance

Type: AX_Maintenance

CANCEL

SAVE AND CLOSE

CANCEL

OK

Configure Scheduled?



General **Decision**

Flows

- ➔ **Incoming Path(s):** 1 or more paths can enter an XOR gateway
- ➔ **Outgoing Paths:** 1 or more paths can exit an XOR gateway, but only ONE gets executed

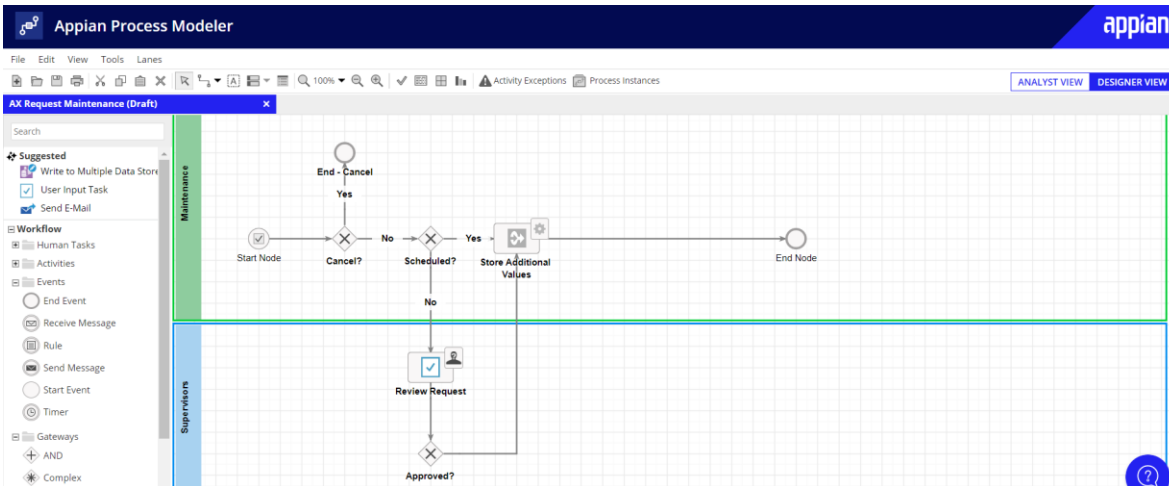
Conditions

	Condition	Result	Path Label	Order
✖	If <code>=pv!maintenance.maintenanceScheduled</code> is True	go to Store Additional Values	Yes	
	Else if no rules are TRUE	go to Review Request		

[NEW CONDITION](#)

[CANCEL](#)

[OK](#)



Configure the User Input Task

Configure Review Request



Gene

Expression Editor

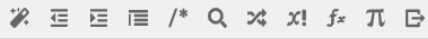


Nod

Eng

Fren

Aral



```
1 "Review Maintenance: " & pv!vehicle.vehicleYear & " " &  
2 pv!vehicle.vehicleMake & " " & pv!vehicle.vehicleModel|
```

pv!vehicle

Type: AX_Vehicle

CANCEL

SAVE AND CLOSE

CANCEL

OK

Configure Review Request



General Data Forms Scheduling **Assignment** Escalations Exceptions Other

Assignment

Override lane assignment for this node

This node will be assigned as a task to a person or a group of people

Assign to the following: "AX Supervisors";



[Set re-assignment privileges for assignees](#)

This node will run as an automated activity. It will not be assigned to anyone as a task

Options

When executing more than once, there should be one-to-one assignment of task instances to assignees

Notify task assignees of new task via email and mobile push notification if applicable

CANCEL

OK

Configure Review Request





General | **Data** | Forms | Scheduling | Assignment | Escalations | Exceptions | Other






Inputs | Outputs

Node Inputs Map the value(s) for the inputs of the node

 New Input  Delete Input

- approvalDecision** (Boolean)
-  **vehicle** (AX_Vehicle)
-  **maintenance** (AX_Maintenance)

Field Properties

Name	<input type="text" value="approvalDecision"/>
Type	<input type="text" value="Boolean"/> 
Multiple	<input type="checkbox"/>
Value	<input type="text"/>  
Required	<input type="checkbox"/>
Save into	<input type="text" value="approvalDecision"/>  

CANCEL

OK

Configure the Approved Gateway

Configure Approved?



Gene

Expression Editor



Flow

→

↔

Con



Else i

NEW

Order



1 pv!approvalDecision

pv!approvalDecision
Type: Boolean

CANCEL

SAVE AND CLOSE

CANCEL

OK

Configure Approved?



General **Decision**

Flows

- ➔ **Incoming Path(s):** 1 or more paths can enter an XOR gateway
- ➔ **Outgoing Paths:** 1 or more paths can exit an XOR gateway, but only ONE gets executed

Conditions

	Condition	Result	Path Label	Order
✖	If <input type="text" value="=pv!approvalDecision"/> is True	go to <input type="text" value="Store Additional Values"/>	<input type="text" value="Yes"/>	
	Else if no rules are TRUE	go to <input type="text" value="End - Reject"/>		

NEW CONDITION

CANCEL

OK

Appian Process Modeler

AX Request Maintenance v4.0

Workflow Diagram:

```
graph TD; Start((Start Node)) --> Cancel{Cancel?}; Cancel -- Yes --> EndCancel((End - Cancel)); Cancel -- No --> Scheduled{Scheduled?}; Scheduled -- No --> Review[Review Request]; Scheduled -- Yes --> Store[Store Additional Values]; Review --> Approved{Approved?}; Approved -- No --> EndReject((End - Reject)); Approved -- Yes --> Store; Store --> EndNode((End Node));
```

Automation Smart Services

Node: A user input task display name is not dynamic. Consider using an expression to define a unique display name per user input task. Having unique display names makes it easier for users to differentiate between their tasks in Tempo and task reports. Nodes: **Review Request.**

Process Model: The process model has been published.

Configure the Script Task

Configure Store Additional Values



Gene

Expression Editor



Input

Nod

- +
▼ Re
...Th
▼ Cu
...

1 today()

today
Returns the current day.
Returns: Date

CANCEL

SAVE AND CLOSE

CANCEL

OK

Configure Store Additional Values



Expression Editor

1 pp!initiator

pp!initiator
The user who started this process
Type: User

CANCEL SAVE AND CLOSE

CANCEL

OK

Configure Store Additional Values



Gene

Input

Nod

Expression Editor

✕

✂ ☰ ☷ 🔍 ✕ f* π ↵ ?

```
1 ""Scheduled""
```

Place cursor on function, rule, or constant to display help

CANCEL

SAVE AND CLOSE

CANCEL

OK

Configure Store Additional Values



Expression Editor

1 pv!vehicle.vehicleId

pv!vehicle
Type: AX_Vehicle

CANCEL
SAVE AND CLOSE

CANCEL
OK

Appian Process Modeler
appian

File Modify View
Process Details
MONITOR PROCESS VIEW
EDIT PROCESS VIEW

Process Details » AX Request Maintenance

Process History
Variables
Process Nodes
Current Tasks
Errors
Sub-Processes
Quick Tasks

Name	Type	Multiple	Value	Show [25] 100
approvalDecision	Boolean	No	True	Edit
cancel	Boolean	No	(No value)	Edit
maintenance	AX_Maintenance	No	[maintenanceRequestId=, vehicleId=, maintenanceRequestDate=8/11/2022, maintenanceScheduled=false, maintenancelssue=NA, maintenanceStatus=Scheduled, maintenanceStartDate=, maintenanceEstimatedCompleteDate=, maintenanceActualCompleteDate=, maintenanceDuration=, maintenanceCost=, maintenanceRequester=rojsanchez@indracompany.com, maintenanceMechanic=, maintenanceReviewStatus=, maintenanceReviewer=, maintenanceReviewDate=, maintenanceLastModifiedBy=, maintenanceLastModifiedDate=8/3/2022, maintenanceAttachment=]	
vehicle	AX_Vehicle	No	(No value)	

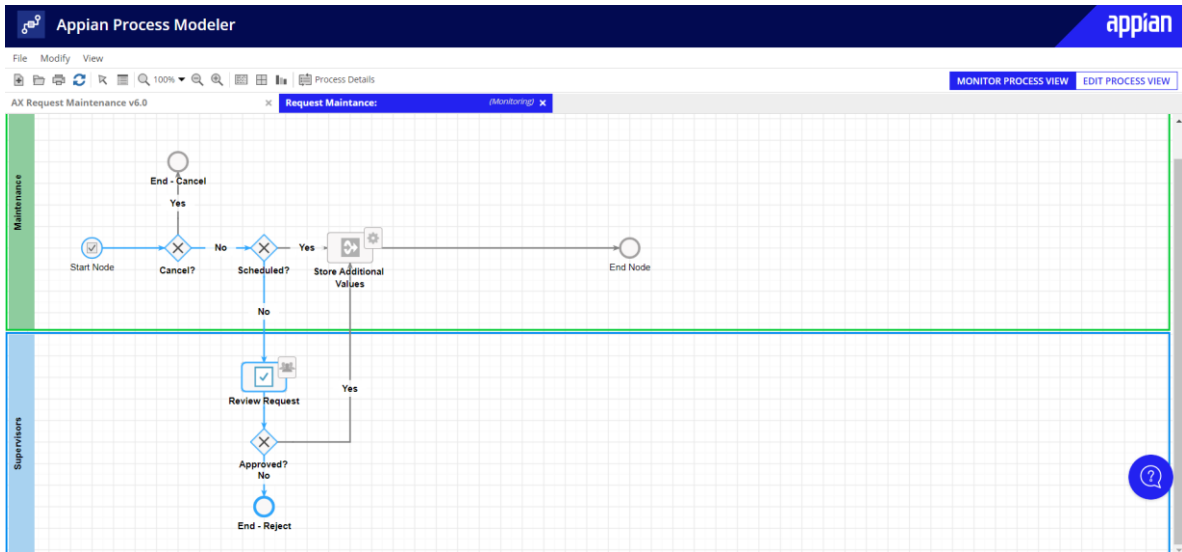
CLOSE

Approved?

No

End - Reject

?



Configure the Write to Maintenance Entity Service

Configure Write to Maintenance Entity



General | **Data** | Forms | Scheduling | Assignment | Escalations | Exceptions | Other

Inputs | Outputs

Node Inputs

+ New Input

Data Store Entity *

Choose an Entity



-- AS Data Store

- AS_Maintenance [Select](#)
- AS_Vehicle [Select](#)



Hover over an item to display its details.

Selected: "AS_Maintenance"

OK

CANCEL

CANCEL

OK

Configure Write to Maintenance Entity



General **Data** Forms Scheduling Assignment Escalations Exceptions Other

Inputs **Outputs**

Node Inputs Map the value(s) for the inputs of the node

New Input Delete Input

Data Store Entity * (Data Store Entity)

- maintenance** (AX_Maintenance)

Field Properties

Name

Type

Multiple

Value

Required

Save into

CANCEL

OK


Configure Write to Maintenance Entity




General Data Forms Scheduling **Assignment** Escalations Exceptions Other

Assignment

Override lane assignment for this node

 This node will be assigned as a task to a person or a group of people

 This node will run as an automated activity. It will not be assigned to anyone as a task

Run as whoever started the process

Run as whoever designed this process model

Options

When executing more than once, there should be one-to-one assignment of task instances to assignees

Notify task assignees of new task via email and mobile push notification if applicable

CANCEL

OK

Test the Process

Process Model Properties » AX Request Maintenance

Expression Editor

```
1 rule!AX_GetVehicleByID(1)
```

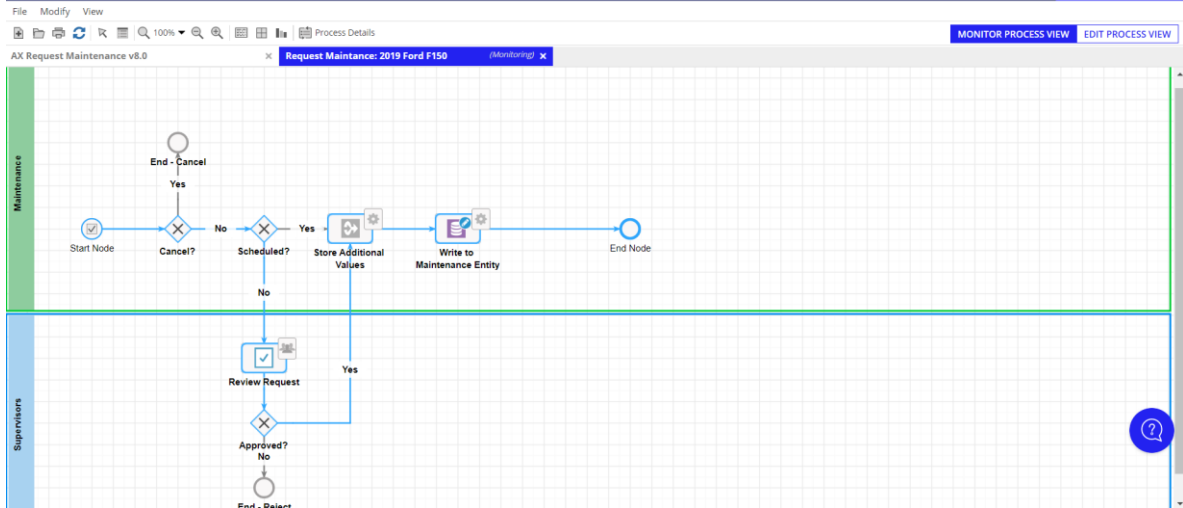
rule!AX_GetVehicleByID(vehicleId)
Return a vehicle by its unique ID number.
vehicleId (Number (Integer))

CANCEL

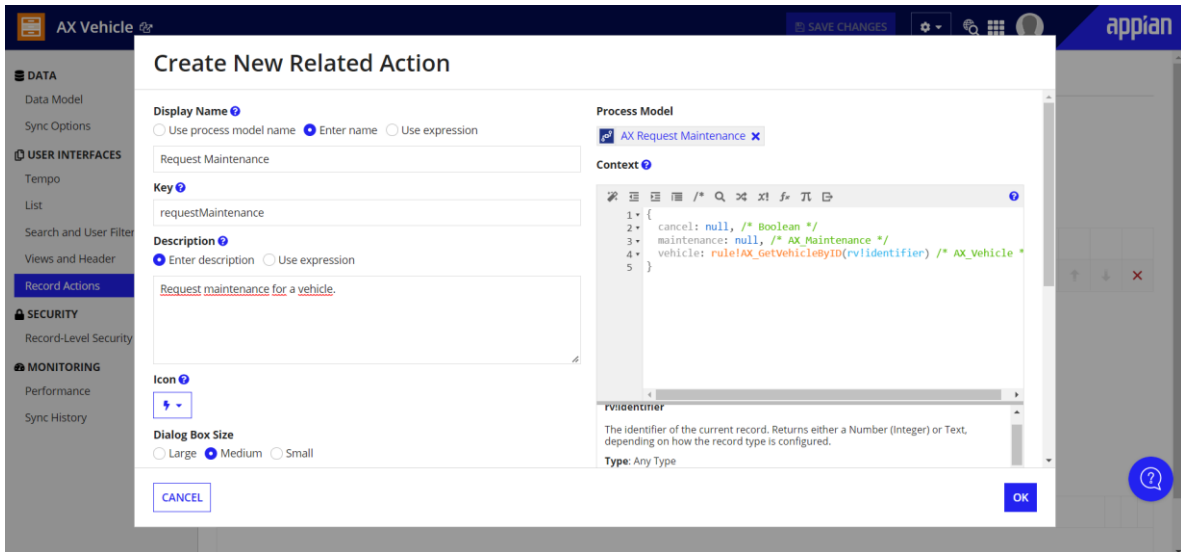
SAVE AND CLOSE

CANCEL

OK



Create a Related Action



Create New Related Action

Large Medium Small

The selected size will only apply to actions that are configured to open in a dialog box. Configure how related actions are opened in each record view or in the record action component.

depending on how the record type is configured.

Type: Any Type

Visibility

```

1  a!isUserMemberOfGroup(loggedInUser(),
2  cons!AX_MAINTENANCE_POINTER)

```

cons!AX_MAINTENANCE_POINTER

A pointer to the AX application maintenance group.

Returns: Group

CANCEL

OK

Edit View

View Name

Default ("Summary") Expression

Interface

```
1 rule!AX_VehicleSummary(rv!record)
```

Place cursor on function, rule, or constant to display help

Visibility

=true()

Related Action Shortcuts

Request Maintenance

Shortcuts to the selected actions are available from the view

Open Actions In

DIALOG BOX NEW TAB SAME TAB

Dialog box size is configured on each related action

CANCEL

OK

The screenshot shows a 'New Maintenance Request' dialog box with the following fields and options:

- Vehicle Details:**
 - Year: 2019
 - Make: Ford
 - Model: F150
 - VIN: 2F2DE48C8N4309374
 - Mileage: 500
- Maintenance Details:**
 - Request Date: (calendar icon)
 - Type of Maintenance: Scheduled Unscheduled
 - Issue:

Buttons: CANCEL, SUBMIT

Background page: '2019 Ford' record with 'Summary' button and 'Next Maintenance' date: August 10, 2020.