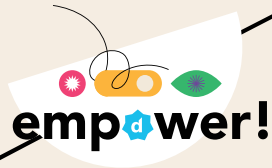


Welc**d**me



ll Building
a LCA → with DOM

[YOUR TRAINER THIS SESSION]

Principal
DevOps
Engineer



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Ghysbrecht

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Agenda



Fundamentals track

1. Status system introduction
2. Deploying the model
 1. Quick look at the code
3. Hands-on: Build the LCA from scratch



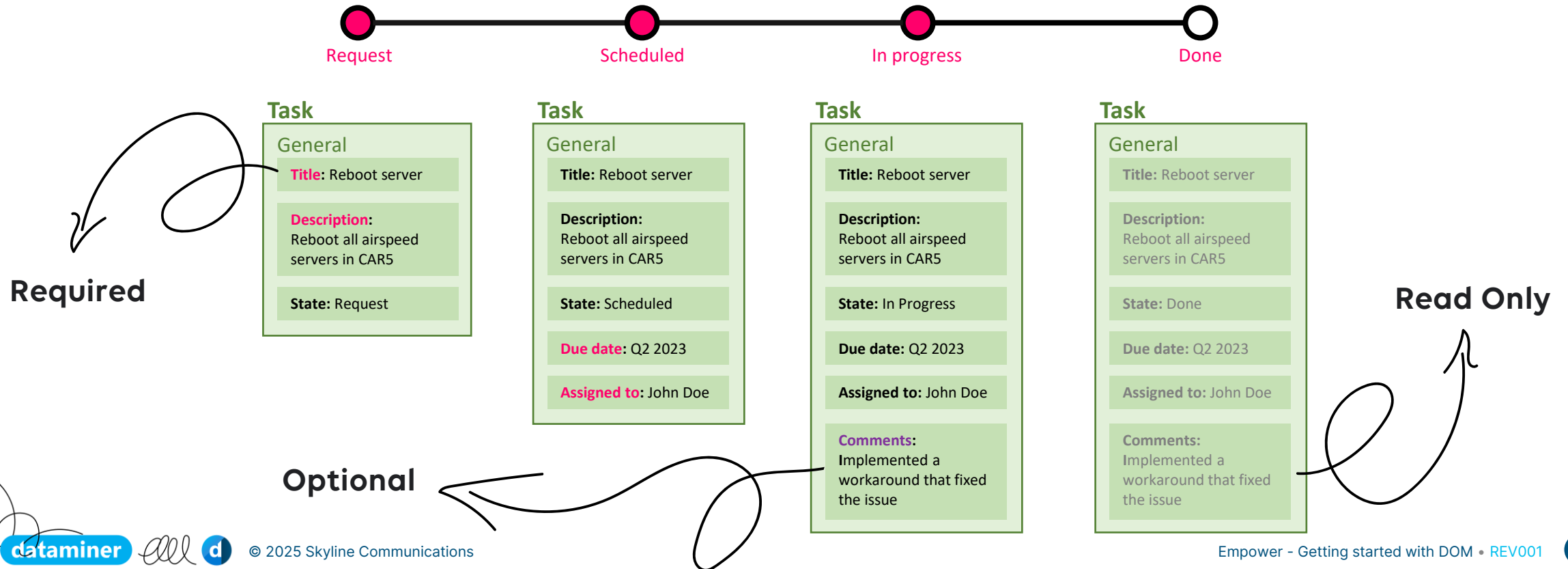
Status system introduction

Make you DOM model state aware

Status system

Statuses

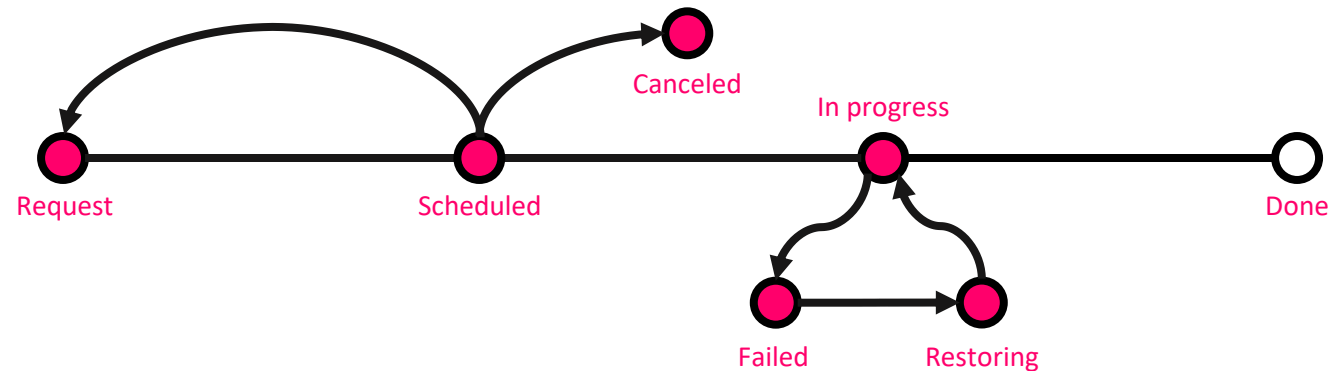
- Allows you to assign a **state** to a DOM instance, **transition** between these states and put **conditions** on whether fields should be **required**, **read-only**, **hidden etc.** for each state.



Status system

Transitions

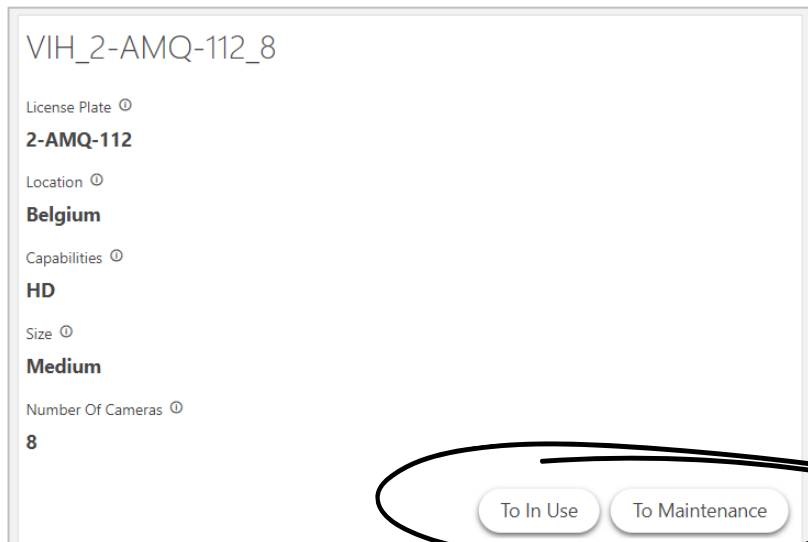
- Allows you to assign a **state** to a DOM instance, **transition** between these states and put **conditions** on whether fields should be **required**, **read-only**, **hidden etc.** for each state.



Status system

Buttons and actions

- **Buttons** can be configured on the Behavior Definition, so they show up on the DOM form.
- Every button is linked to one **DOM action**, currently always a **DataMiner automation script**.
- Often used to facilitate the transitions.



VIH_2-AMQ-112_8

License Plate ⓘ
2-AMQ-112

Location ⓘ
Belgium

Capabilities ⓘ
HD

Size ⓘ
Medium

Number Of Cameras ⓘ
8

To In Use To Maintenance

```
public class Script
{
    [AutomationEntryPoint(AutomationEntryPointType.Types.OnDomAction)]
    0 references | 0 changes | 0 authors, 0 changes
    public void OnDomActionMethod(IEngine engine, ExecuteScriptDomActionContext context)
    {
        var domInstanceId = context.ContextId as DomInstanceId;
        if (domInstanceId == null)
        {
            engine.ExitFail("The action was not triggered in the context of a DOM instance.");
            return;
        }

        var helper = new DomHelper(engine.SendSLNetMessages, domInstanceId.ModuleId);
        helper.DomInstances.DoStatusTransition(domInstanceId, "a_to_b");
    }
}
```

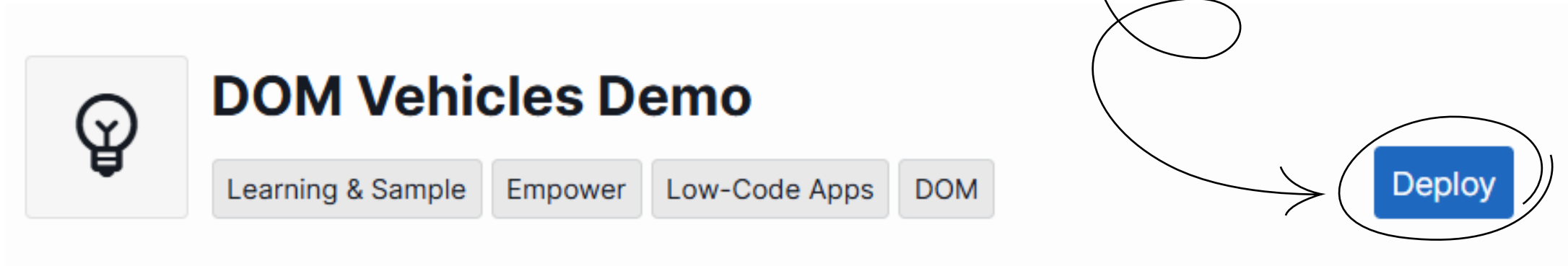

Deploying the model

Make you DOM model state aware

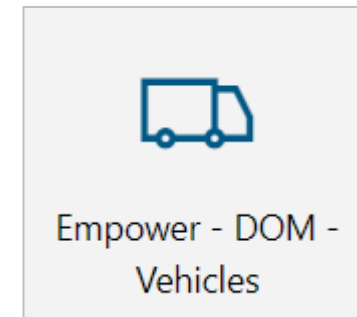
DOM Module Setup

Deploy the catalog package

1. Go to **catalog.dataminer.services**
2. Search for “**DOM Vehicles Demo**”
3. Deploy this package to your DaaS



4. Check if the example Low Code App is deployed



Reference app

   © 2025 Skyline Communications

DOM Module Setup

Deploy package code

40 references | 0 changes | 0 authors, 0 changes

```
public class VehicleDomModelConstants
{
```

3 references | 0 changes | 0 authors, 0 changes

```
public static string ModuleId { get; } = "empower_vehicle_demo";
```

2 references | 0 changes | 0 authors, 0 changes

```
public static DomDefinitionId DomDefinitionId { get; } = new DomDefinitionId(Guid.Parse("eb7c180f-bb6b-4816-a450-dbcd2eed144"));
```

11 references | 0 changes | 0 authors, 0 changes

```
public static SectionDefinitionID SectionDefinitionId { get; } = new SectionDefinitionID(Guid.Parse("a451c946-2bf4-46c0-b6f0-9bef5f064bd5"));
```

```
/// <summary>
```

```
/// Describes the license plate of the vehicle.
```

```
/// Type: String value
```

```
/// </summary>
```

7 references | 0 changes | 0 authors, 0 changes

```
public static FieldDescriptorID LicensePlateFieldDescriptorId { get; } = new FieldDescriptorID(Guid.Parse("23e7a506-d63a-4851-af2d-7e42d326f322"));
```

```
/// <summary>
```

```
/// Describes the location of the vehicle.
```

```
/// Type: Single value int enum
```

```
/// </summary>
```

6 references | 0 changes | 0 authors, 0 changes

```
public static FieldDescriptorID LocationDescriptorId { get; } = new FieldDescriptorID(Guid.Parse("f4e34c3a-3ce2-4caf-9fa7-d4e3af8fae70"));
```

2 references | 0 changes | 0 authors, 0 changes

```
public static string[] Locations { get; } = { "Australia", "USA", "UK", "Belgium", "Finland" };
```



Hands-on

Build the LCA from scratch

Hands-on

Main page basics

- Create a **new LCA** (name, icon,...)
- Add a **table component**
- Add a **query filter component**
- Create a new **GQL query** to retrieve our **vehicle DOM instances**
- **Feed** the GQL query to the query filter and the query filter output to the table

- Add a 'ADD VEHICLE' **button** to the header (leave empty for now)
- Add a 'REFRESH' **button** to the header
 - Let it **trigger** the 'Fetch the data' **component action** on the table

Hands-on

'Create DOM instance' panel

- Create a **new panel** 'Add vehicle'
- Add the **form component** to the panel
 - Feed the 'Vehicle' DOM definition
- Add a 'SAVE' header bar **button** and link actions:
 - Execute component action > Form, Save current changes
 - Close a panel > This panel
 - Execute component action > Table, Fetch the data
- Add a 'DISCARD' header bar **button** and link action:
 - Close a panel > This panel
- On the main page, add the 'Open panel' **action** to the 'ADD VEHICLE' button

Hands-on

'View/edit/delete DOM instance' panel

- Create a **new panel** 'Edit vehicle'
- Add the **form component** to the panel
 - Feed the 'Selected rows > Object manager instances' from the table component
- Add a 'SAVE' header bar **button** and link actions:
 - Execute component action > Form, Save current changes
 - Close a panel > This panel
 - Execute component action > Table, Fetch the data
- Add a 'DELETE' header bar **button** and link action:
 - Execute component action > Form, Delete instance
 - Close a panel > This panel
 - Execute component action > Table, Fetch the data
- Add an empty header bar **button** with 'X' icon and 'Close a panel' action

Hands-on

'View/edit DOM instance' panel

- Edit the table settings > actions
 - Configure the 'On double click' **action** with the 'Open a panel' option

Hands-on

Spice things up

- Add **conditional coloring** on the 'State' column
- Add **conditional coloring** on the 'Number Of Cameras' column

State

- New
- Available
- Maintenance
- In Use

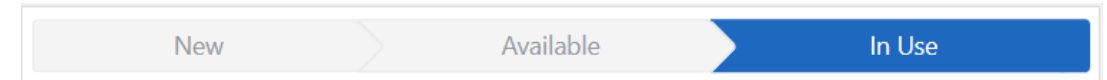


Number Of Cameras



- > 0 and ≤ 10
- ≥ 11 and ≤ 20
- ≥ 21 and ≤ 30
- ≥ 31 and ≤ 40
- ≥ 40 and **no upper bound**

- Add **stepper component** to the view/edit panel
- Create a **table template** with an **icon** to edit the vehicle



2-TMA-654



- Extend the **table template** to display the **license plate** like a real one
- Add **counters** that display the amount of vehicles

2-TMA-654

2-AMQ-112

Vehicles in use

3

Vehicles available

3

[ASK AWAY]



Questions?