Decision Hierarchy

The *Decision Hierarchy* pattern demonstrates how to use InformationRequirement, which represents the dependency of a Decision on information from the results of other Decisions.
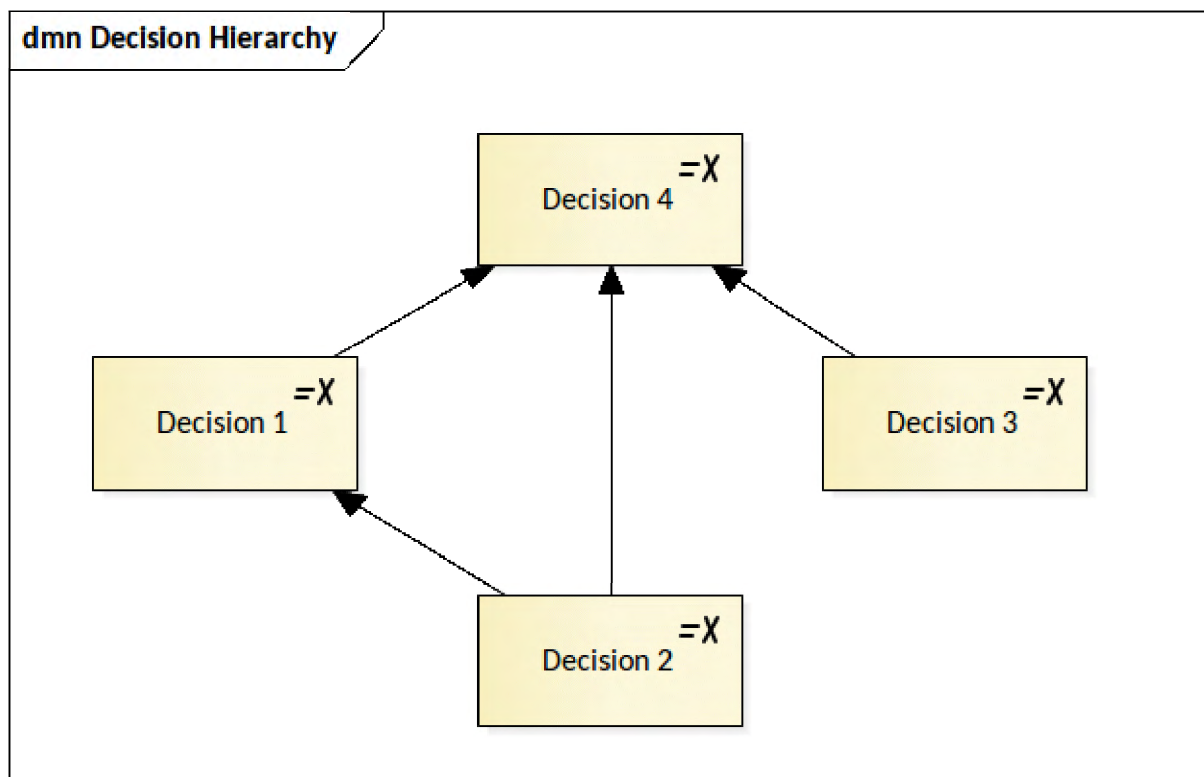

Figure 1. Decision Hierarchy.

Execution Order

In order to get the higher level decision's result, all the lower level decisions connecting directly or indirectly to the higher decision, must be evaluated first. In this example, the possible execution orders are:

- *Decision2, Decision1, Decision3, Decision4*
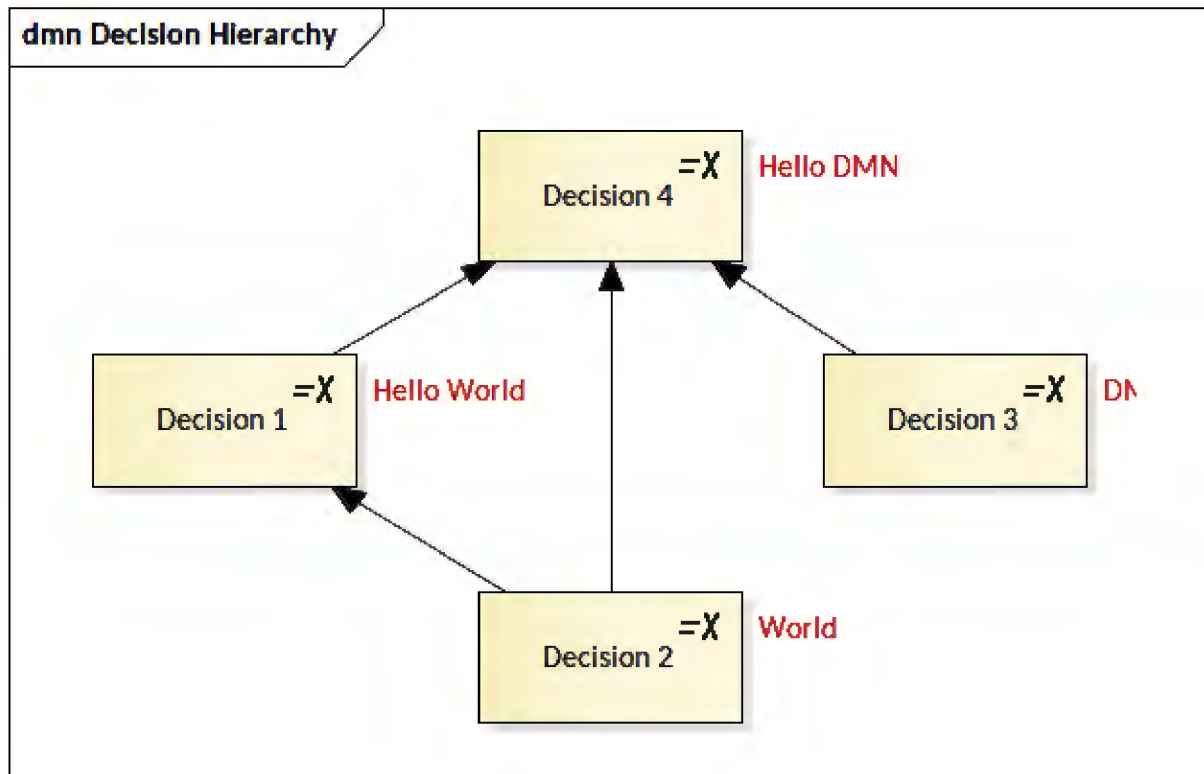- *Decision3, Decision2, Decision1, Decision4*

Simulation

Create a *DMNSimConfiguration* element on the diagram, and double-click on it to open it in the *DMN Simulation* window. Set *Decision4* as the Target Decision; the execution plan will be automatically generated:
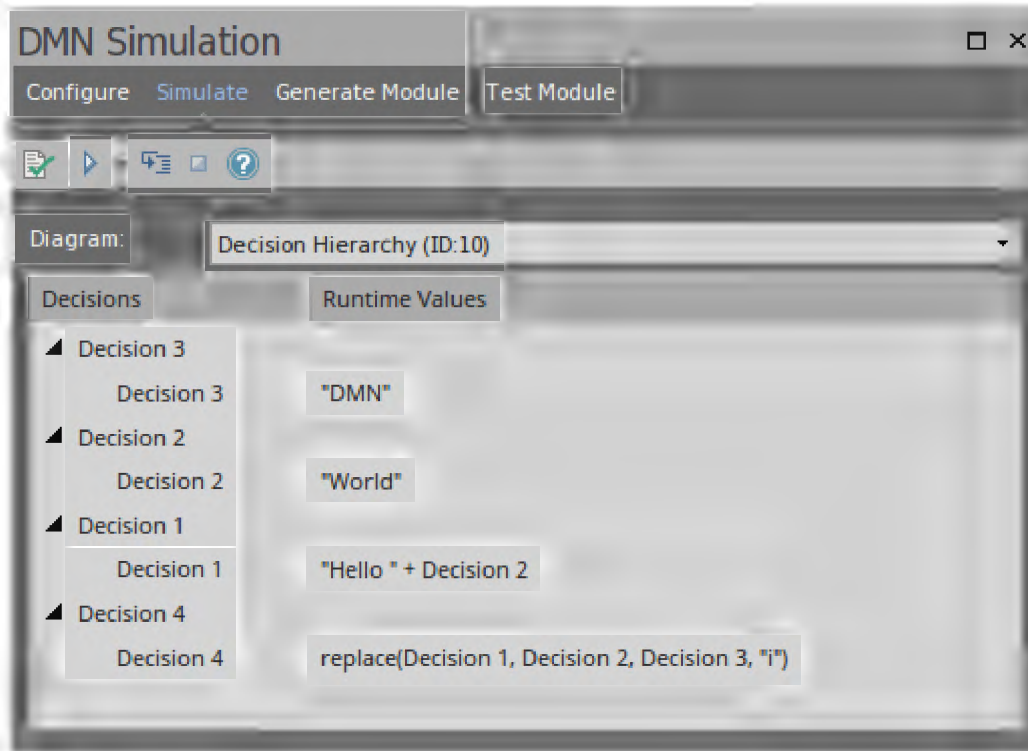
Validate and Run; the simulation result will be shown both on the diagram and in the Simulation window.

The runtime result for each decision is shown on the diagram:

dmn Decision Hierarchy

Decision 4 =X Hello DMN

Decision 1 =X Hello World

Decision 3 =X DN

Decision 2 =X World

The runtime simulation result is shown on the Simulation window.

DMN Simulation

Configure   Simulate   Generate Module   Test Module

Diagram: Decision Hierarchy (ID:10)

Decisions	Runtime Values
◢ Decision 3	DMN
Decision 3	"DMN"
◢ Decision 2	World
Decision 2	"World"
◢ Decision 1	Hello World
Decision 1	"Hello " + Decision 2
◢ Decision 4	Hello DMN
Decision 4	replace(Decision 1, Decision 2, Decision 3, "i")

You can use Step Run to execute one decision at a time to see how a final decision is made. With this feature, you can 'debug' the DMN Model.