



DMN DECISIONS EXECUTION SCENARIOS

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Publication Date: July 12th, 2019

Version: 1.3

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Introduction

The Trisotech DMN Modeler contains all the features required to analyze, develop and test decision models. A very common path when working with DMN decisions is to deploy these decisions as decision services in an execution environment to invoke them from external business logic.

Trisotech offers two different scenarios to move from modeling to execution of decision services:

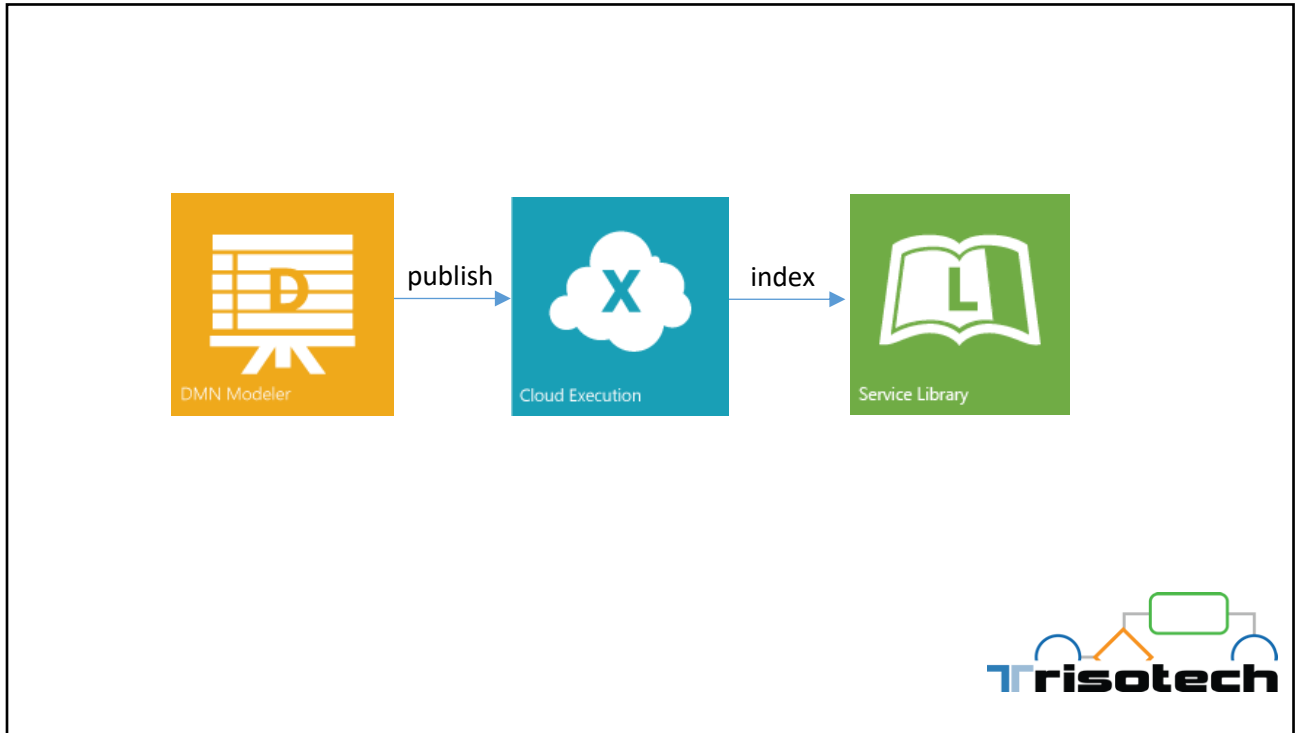
- Trisotech DMN Automation: a turnkey cloud-based automation solution.
- DMN XML interchange: an open solution based on standards to execute decisions.

This document further explains how to achieve these scenarios as well as their capabilities and constraints.



Scenario 1: Trisotech Automation

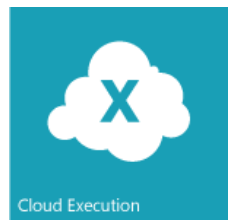
This scenario does not require any technical setup and is offered through an additional subscription to the Trisotech DMN Automation solution.



In this scenario, you can publish directly from the DMN Modeler to the automation platform Cloud Execution. The Service Library can then be used to browse the deployed decision models.

The Trisotech DMN Automation is a very flexible environment that offers:

- A REST API to invoke decisions using XML, JSON and our smart XML binding that lets you use your own XML documents as input
- An automatically generated web form to invoke and test decisions
- A REST API to test decisions following the DMN TCK format
- Configurable audit trail of decision execution
- The ability to invoke multiple versions of a decision by version number or to always invoke the latest
- Multiple deployment environments (development, test, production, ...) secured by an Access Control List (ACL) to control user rights to the environments
- Scalable environments that can adjust to various levels of load
- A debugging environment to troubleshoot system integration and decision execution
- Open API documentation of the decision invocation endpoint



Decisions deployed in the Trisotech DMN Automation solution are automatically indexed by the Service Library. The Service Library offers:

- Complete live documentation of the deployed decisions
- Search, filter and sorting of your published decisions
- Promotion of decisions between environments
- Technical documentation to invoke the decisions through REST
- User interface for the execution of defined test cases for decisions
- Comparison of execution environments
- Lifecycle management of the decisions

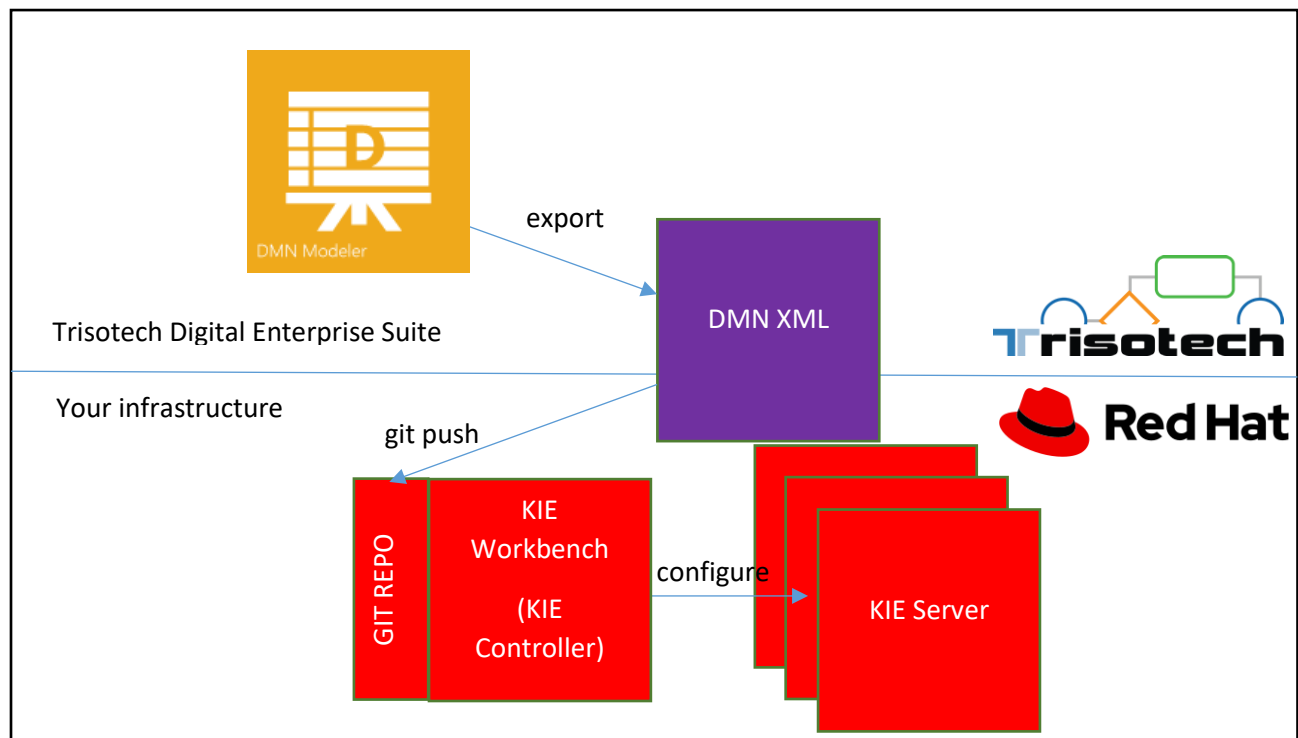


Scenario 2: DMN XML Interchange

This scenario works through a DMN XML transport. Using this scenario, you can deploy to any execution environment supporting the DMN XML format.

For this scenario, you will need to export your DMN model to XML from the DMN Modeler and then import that XML file in the third-party execution environment.

As an example, if we use Red Hat KIE Workbench as a target execution environment:



Using standard KIE Workbench integration, DMN Models produced from the Trisotech DMN Modeler are transported using DMN XML and pushed in the GIT Repository of the KIE Workbench.

To achieve this scenario, first create a project in the KIE Workbench and clone the GIT repository associated with that project. In the DMN Modeler from Trisotech, export your Decision as a DMN 1.2 XML file and save it to the cloned GIT repository structure. Commit and push your changes to the KIE Workbench. After that, you can follow the normal build pipeline of the KIE Workbench.

This scenario can also be achieved using other DMN Execution vendors if they support the DMN XML standard. A good source for engines support of DMN can be found through the DMN Technology Compatibility Kit (DMN TCK) at: <https://dmn-tck.github.io/tck/>.



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The intention of this technical paper is to inform on the various execution possibilities of DMN models and should not be considered professional advice. This document presents a selected set of scenarios and Trisotech does not provide any guarantee that these scenarios will still exist in the future. The information is provided as-is, without guarantee nor legal binding. While we make every effort to ensure that all information in this technical paper is accurate and up to date, Trisotech should not be held liable for errors and omissions. You should always consult your Customer Success contact for contextualized advice on the best scenario that best applies to your reality and fulfill your constraints.

