



04 - Test Execution - Validation

FHIR Testing and Certification – Exercise

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During this hands-on session of the FHIR Testing tutorial we will explore TestScript Execution within the Touchstone Project environment. This exercise examines the validateProfileId assert where the request and/or response payload is sent to and processed by the FHIR Validation Engine. Each TestScript illustrates the use of different TestScript elements and as well as the basic mechanics of executing tests within Touchstone.

TestScripts for this exercise are in the Touchstone Test Definitions folder **FHIRSandbox/AEGIS/FHIR3-0-1-DevDays18-11/FHIRTesting/04-Validation*

***For detailed test execution guidance please refer to the online Touchstone User Guide, Section 'Executing Tests': <https://touchstone.aegis.net/touchstone/userguide/html/executing-tests/index.html>*

TestScript Description

Valid Resource

Test FHIR read operation of a valid Patient resource instance.

- ❖ Illustrates a simple positive test case.
- ❖ Uses the FHIR Patient resource base profile; *asserts invoke the FHIR Validation Engine using profiles*

The focus of this test is to illustrate a success based on the FHIR Validation Engine. The profile assert is testing the HTTP response payload from the FHIR server system.

Invalid Resource

Test FHIR create operation using an invalid Patient resource instance. Touchstone will send an invalid Patient fixture to the system under test.

- ❖ Illustrates a simple negative test case.
- ❖ Uses the FHIR Patient resource base profile; *asserts invoke the FHIR Validation Engine using profiles*
- ❖ **Note: The validation assert is expected to fail so the warningOnly flag is true to allow review of the validation messages.**

The focus of this test is to illustrate a failure based on the FHIR Validation Engine. The profile assert is testing the HTTP request payload which is an intentionally invalid Patient resource instance sent by Touchstone acting as the FHIR client system.

- ❖ *Does the profile assert against the HTTP request payload make sense?*
- ❖ *Examine the TestScript asserts following the create operation; what additional asserts would be useful/needed to provide better test coverage?*
- ❖ *How could this TestScript be modified to represent a more real-world scenario?*

The detailed tutorial documents for these exercises can be found at:

<https://github.com/rettema/DevDays-Exercises/DevDays18-Amsterdam/FHIR Testing and Certification>

Have fun! And, remember to ask for help if you get stuck