



## 03 - Test Execution - Workflow

### Test Driven Development I - Intro – Exercise

Track: Test Driven Development I - Intro  
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During this hands-on session of the Test Driven Development I - Intro tutorial we will explore TestScript Execution within the Touchstone Project environment. This exercise examines a series of basic FHIR operations (read, search, create, update and delete). All operations are performed in a single TestScript illustrating a workflow sequence of event. The following generic steps performed in sequence will be used to execute the TestScript:

1. **Create and execute a Test Setup**  
*Related online document: Touchstone User Guide, Section 'Executing Tests/Creating Test Setup'.*
2. **Examine the Test Execution interface**  
*Related online document: Touchstone User Guide, Section 'Executing Tests/ Test Executions'.*
3. **Examine the TestScript Execution interface**  
*Related online document: Touchstone User Guide, Section 'Executing Tests/Test Execution Results'.*

*\*TestScripts for this exercise are in the **FHIRSandbox/AEGIS/FHIR3-0-1-DevDays18/TDD-1-Intro/03-Workflow** Test Definitions*

*\*Please refer to the Touchstone User Guide section or the previous exercise **Touchstone Execution - Basic Operations** for help with the generic steps.*

### TestScript Description

#### Workflow

Test the basic FHIR operations against a Patient resource type. The operations are ordered according to a basic workflow pattern of create, update, read, search and delete.

#### Features

- ❖ Uses the setup element prior to all tests; *examine the setup and note the use of the conditional delete operation; why is this only operation needed?*
- ❖ Uses fixtures; *examine the fixtures and note the static contents*
- ❖ Uses multiple profiles; *asserts invoke the FHIR Validation Engine using profiles*
- ❖ Uses multiple variables; *examine the variable definitions and their use throughout the various asserts*
- ❖ Examine the various asserts; *some operations only have one or two, others have many; based on the FHIR specification, what other possible asserts might be needed?*

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

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#### Please note:

- The exercises can be made in the hands-on area, where each track has its own table, indicated with a track sign. The track lead will be present for guidance and review.
- Exercises will only be discussed or reviewed during the HL7 FHIR DevDays 18 in Boston
- Any questions or remarks after the conference can be addressed in the FHIR chat on Zulip:  
<https://chat.fhir.org>