How was VNF Function Test Automation implemented in VNF SDK ?

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China   Mobile

Agenda

- Why need VNF Function Test Automation?

- What did VNF Function Test do in VNF SDK?

- VNF Function Test Automation implementation in VNF SDK
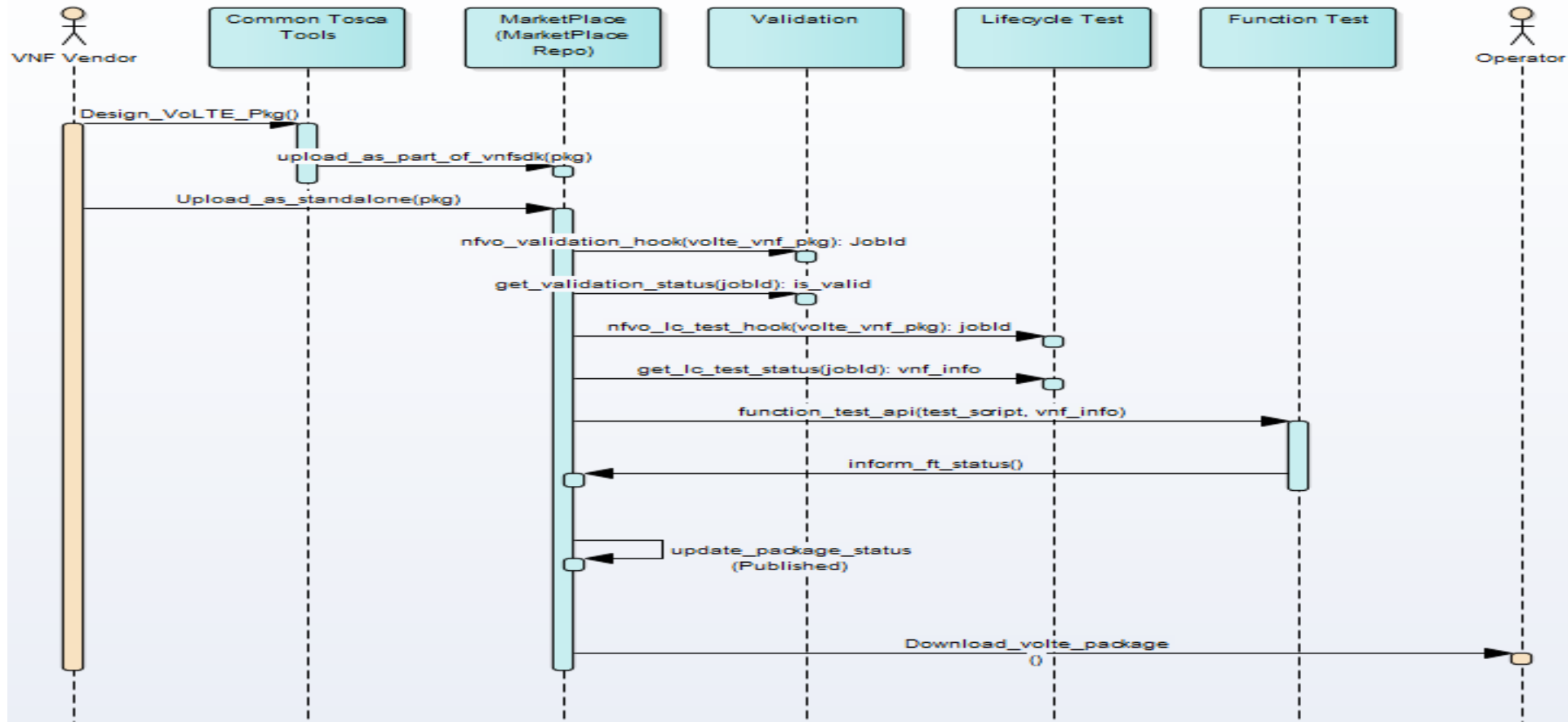
Why need VNF function test Automation?

- VNFs need to be verified before deployed to platform.

- VNF function verification are time consumed work.

- VNF function test run the VNF test scripts while VNF onboarding and collect test results automatically.

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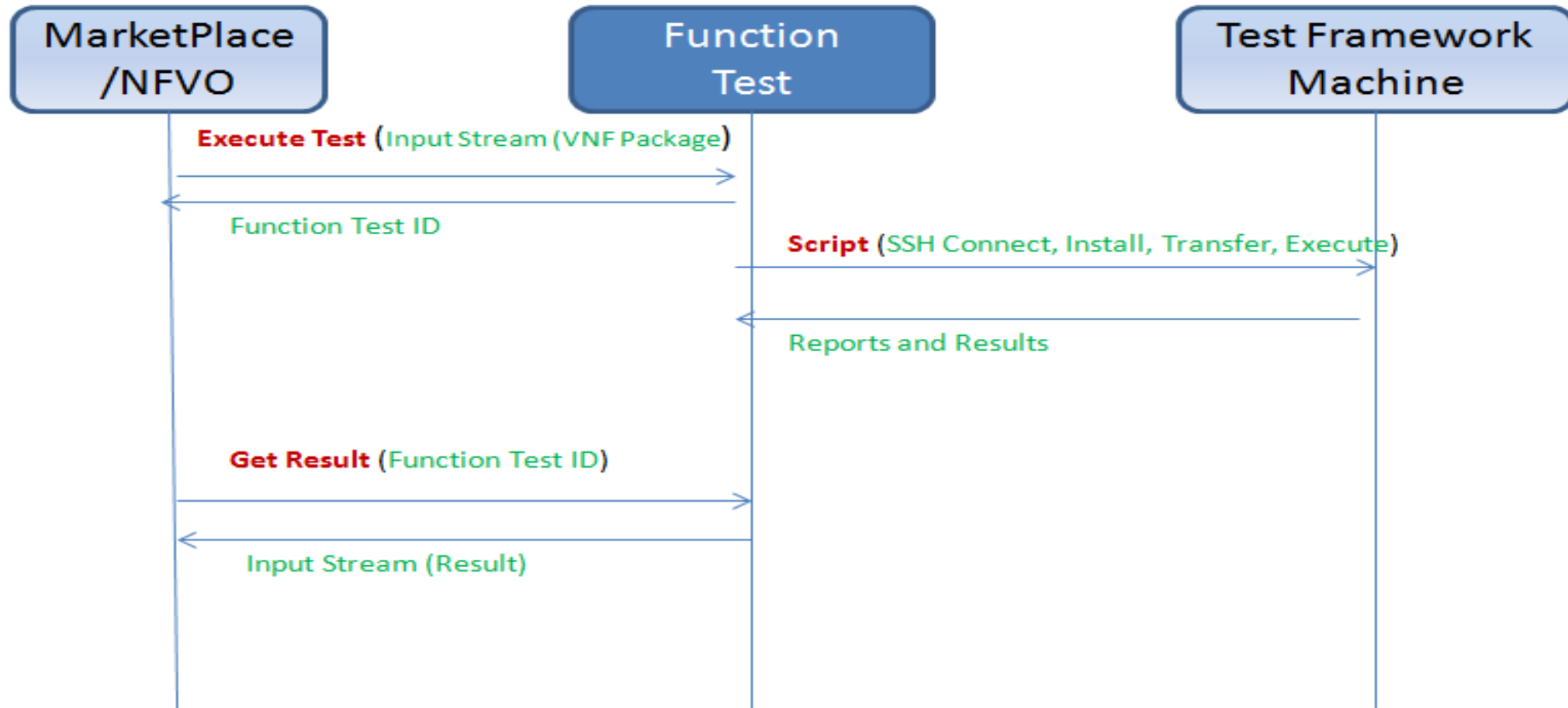
What did VNF Function Test do?

Develop framework to:

- Integrate with different test frameworks (e.g. Robot)

- Run VNF's function test scripts

- Generate test result with different format (html, xml…)

- Collect and display test result
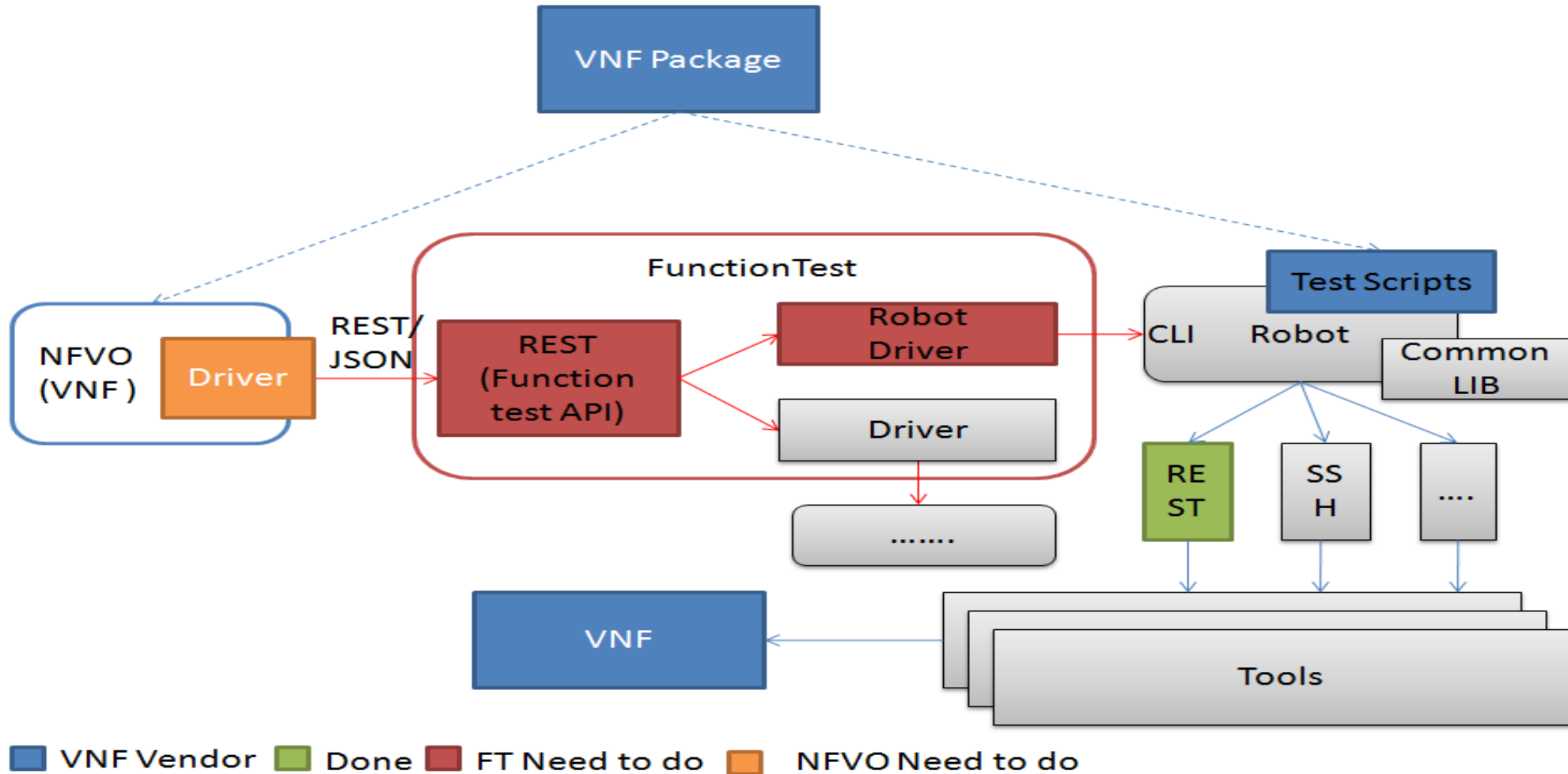
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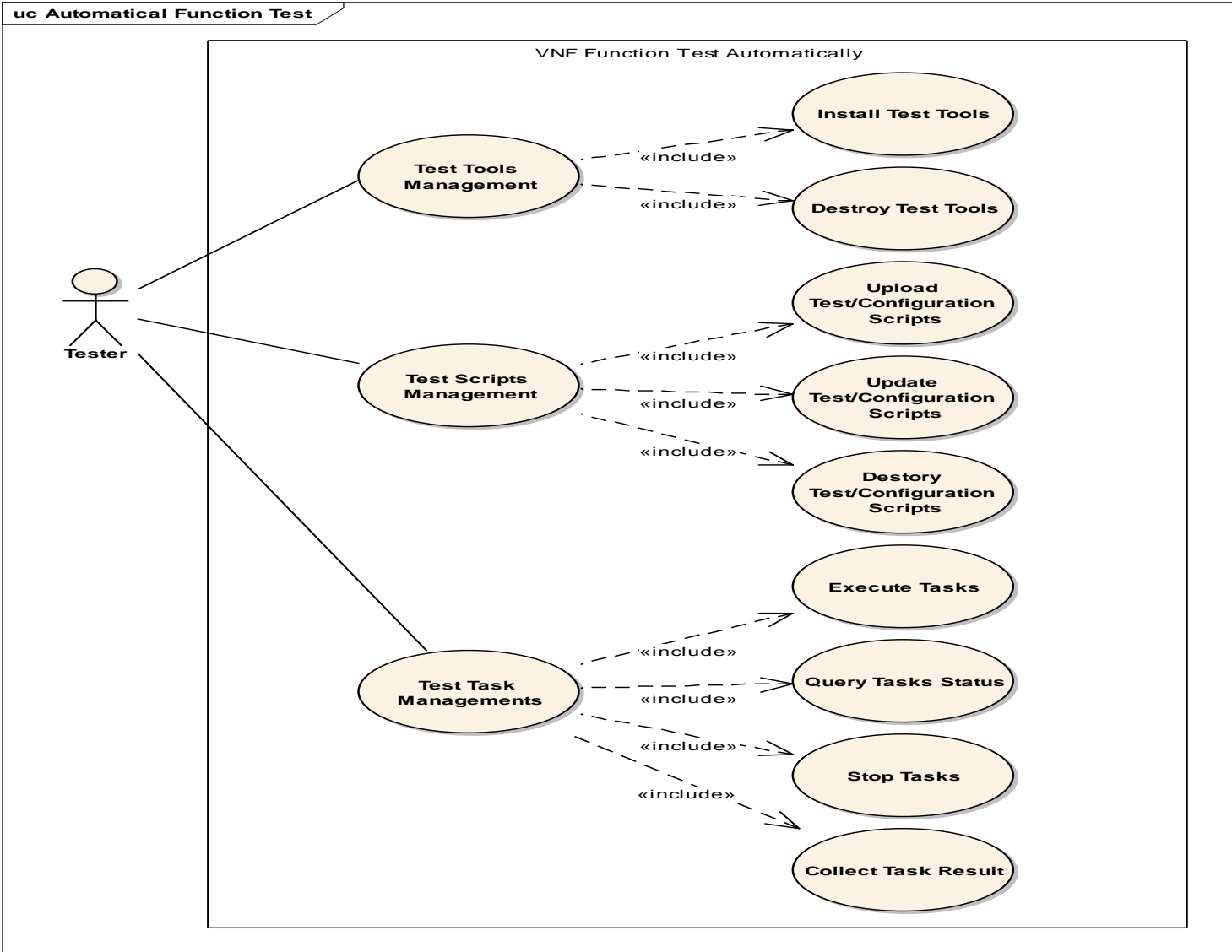
VNF Function Test in VNF SDK

VNF Function Test Initial Design Flow
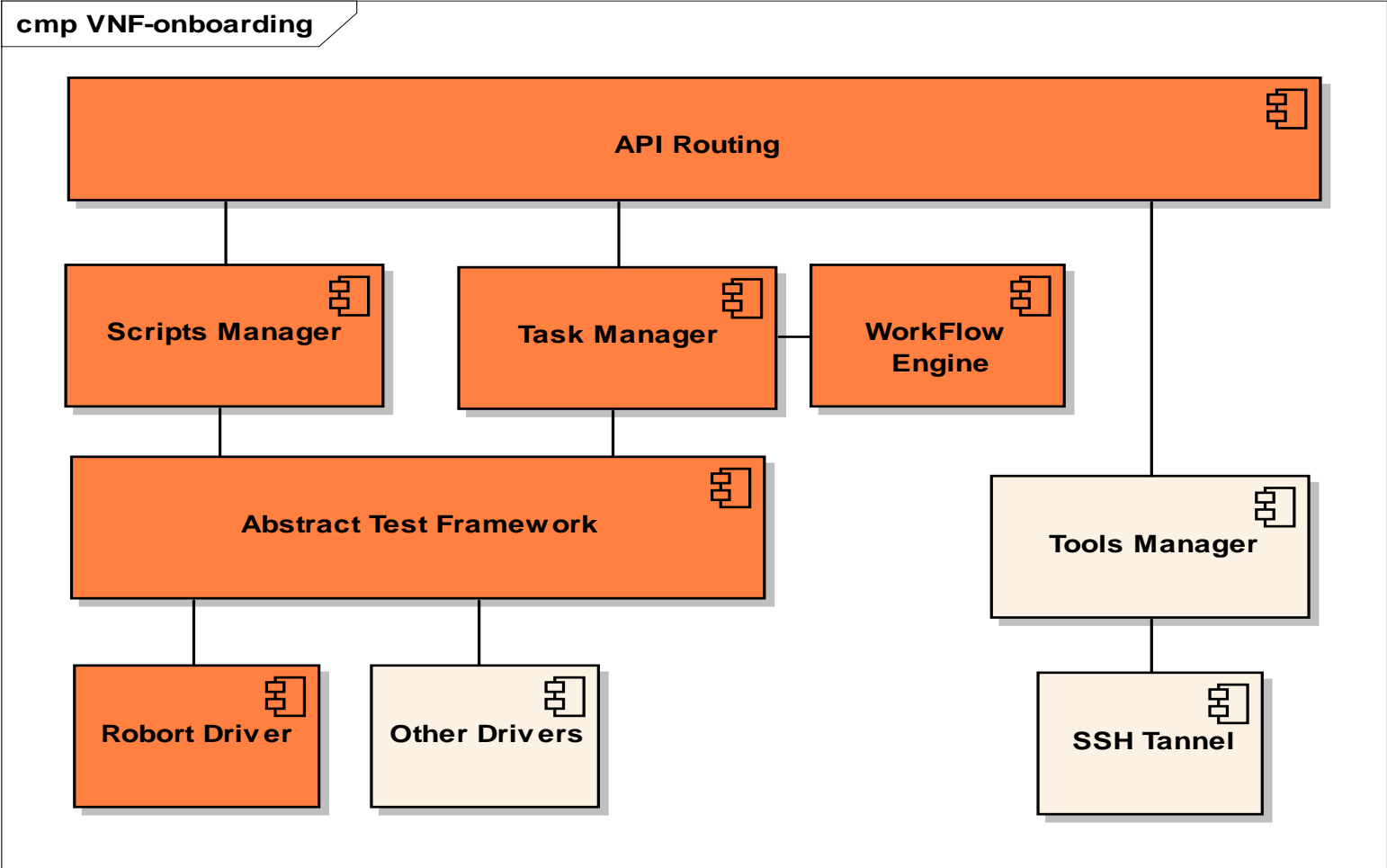
VNF Function Test Abstract Design

VNF Function Test Use Cases

VNF Function Test Internal Architecture

Why Robot: Automation Framework Comparison

Test Framework	Serenity/Abot	Robot Framework	RedwoodHQ	Twister
Type	Behavior development driven	Keyword/Acceptance test case driven	UI based action/keyword driven	Automation for telecom products
Ecosystem Support	Medium	Large	Less/New	Very Less
Extensible	Medium	Easy	Yes	Yes
Language independent	Yes	Yes	Java/Python/Groovy/C#	Perl/Tcl/Shell
Support Acceptance Test cases	Yes	Yes	Yes	Yes
Easy to Use	OK	OK	Very Easy (UI based)	Very Hard
Primary Purpose	Agile testing	Generic acceptance testing	Web automation	Telecom testing

Problems :

1. Refine it to ONAP.

   - API definition

   - VNF guidelines/requirements for function test

   - more VNFs function test

2. Relationship with VVP?

   - clarify the scope of VVP and VNF SDK