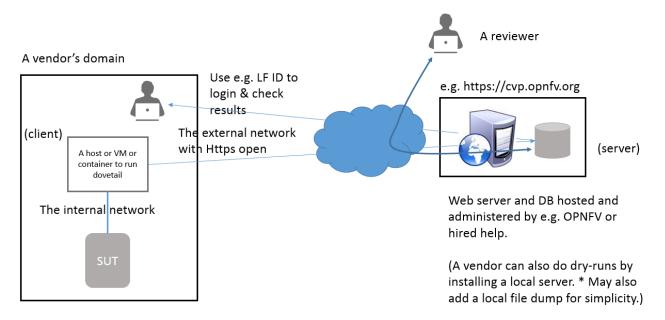
OVP 2018.01 (Danube) Release

Process

- 1. Brainstorming section (see way below) will be reviewed and removed once this page is updated. A summary of the plan will then be presented to C&C for sync up, and to TSC, Board for review and approval.
- 2. Propose new features or tasks by creating JIRA tickets with fixVersion "Dovetail Danube". For test suite related tasks (as opposed to software code related), also add "Testarea" or "Testcase" label as appropriate. Future JIRA tickets not intended for Danube cycle should use fixVersion "Future Release".
- 3. Review in weekly meetings, revise JIRA tickets as needed.
- 4. Identify priority, due date, and assignee.
- 5. Describe the main specifications in a rst file in order to have a further technical discussion on Gerrit.

Overview Illustration

Dovetail user facing view



System Under Test (SUT)

The SUT are products from vendors (not OPNFV release artifacts themselves). Development tooling, such as CI/CD, is not part of the SUT. The vendors can bring up the SUT to a pre-Dovetail-test state in any way they choose. Dovetail will provide documentation to help do so.

The SUT consists of NFVI software, VIM software, and necessary hardware in one System Under Test. The hardware should follow Pharos guidelines. Vendors can use their own hardware, or third party or white box hardware to be tested as a whole. And if the combined whole passes the test suite, the CVP label applies to the software.

In the Danube cycle, Dovetail does not plan to test hardware-only systems.

Test Suite

Dovetail Danube scope is a subset of functionalities contained in the OPNFV Danube release. The C&C Committee has further reduced the scope for Danube cycle to be NFVI+VIM on functions and interfaces OVP document. And for example, performance testing is currently out of scope in Danube.

All test cases in the Dovetail test suite must meet Dovetail Test Case Requirements.

Proposals for inclusion of test areas can be made by completing this worksheet Dovetail Test Area / Test Case Worksheet and the associated analysis work. These proposals will then be reviewed in Dovetail project weekly, following the scope OVP document and Dovetail Test Case Requirements.

The work of constructing the Dovetail test suite is tracked in JIRA ticket: https://jira.opnfv.org/browse/DOVETAIL-345.

The resulting test suite will be defined by compliance_set.yml file, and maintained in wiki for reader's convenience: Dovetail Test Areas and Test Cases. (Warning: the current wiki page Is not yet review and inaccurate.)

Working with Upstream

Openstack Refstack/Defcore https://refstack.openstack.org/#/guidelines (version 2016.8) has been integrated into the Dovetail test suite. Collaborative working relationship is being developed with Openstack Interoperability Working Group on a continuous basis. In future, we may collaborate to develop NFV extensions to refstack, for instance.

Test cases in the refstack guidelines of the version corresponding to the Openstack verion integrated in OPNFV (for Danube it is Newton) are integrated into Dovetail as is (currently it is version 2016.8). While it is possible that, under enexpected circumstances, some test cases may be found unsuitable for execution in OPNFV environment and may have to be skipped, we do not see such cases today and expect them to be rare exceptions. Should such exceptions occur, they would need to be reviewed by Dovetail for particular reasons, documented clearly and agreed to.

We may consider working with other upstream communities in Euphrates in a similar fashion.

Long Term Road Map

Desired features for Dovetail, if not possible or not accepted in Danube, should be road-mapped using Jira enhancement tickets. Features targeted for E release should start immediately in order to influence E release planning that is ongoing in the community.

EUAG and other user inputs should be incorporated into the road map using the same Jira backlog/to-do ticket mechanism. Such request tickets should be written a JIRA story with sufficient detail for the reader/developers to understand clearly.

Dovetail's E cycle planning will be based on these Jira backlog/to-do tickets. Please use fixVersion "Future Release" instead of "Dovetail Danube".

Deliverables and JIRA Tasks (fixVersion "Dovetail Danube"):

- 1. A stand-alone Dovetail client software, to be delivered to and used by testers/vendors as
 - a. Dorker container
 - b. Git clone python source Tracked by JIRA tickets: tbd
- 2. A User Guide for the client software. Tracked by JIRA ticket: DOVETAIL-73.
- 3. Backend DB and web server software, and web UI software, for administrators and for reviewers and others to access test results. This item is TBD pending on what falls under LF and what falls under Dovetail.
 - a. All backend server software and instructions for someone to create and administer the server
 - b. Web UI for test result viewers (tbd)
 Tracked by JIRA tickets: tbd
- Test strategy document: http://ircbot.wl.linuxfoundation.org/meetings/opnfv-meeting/2017/opnfv-meeting.2017-03-17-13.00.log.html / http://artifacts.opnfv.org/dovetail/review/30811/testing_user_teststrategy/index.html. Tracked by JIRA tickets:



- 5. Finalized Dovetail test suite:
 - a. test requirements wiki
 - b. test area/test case list wiki
 - c. compliance_set.yml;
 - Test suite Document.

Tracked by JIRA tickets: DOVETAIL-345.

6. QA: testing Dovetail client and server for meeting feature and quality requirements. Tracked by JIRA tickets;



- Bug fixes.
- 8. Beta testing
- 9. Release.

To be updated. It is not accurate nor complete at this time.

Kanban board for the overall Dovetail Danube release: https://jira.opnfv.org/secure/RapidBoard.jspa?rapidView=149&selectedIssue=DOVETAIL-345&quickFilter=371

Kanban board for tasks related test suite (Testarea & Tesecase): https://jira.opnfv.org/secure/RapidBoard.jspa?rapidView=147&quickFilter=357

Project Milestones and Due Dates

Proposed rough timeline:

- Project planning complete March 10. TSC review on March 2428. Submit to TSC and Board for review/feedback. Test strategy doc by end of April.
 Launch announcement in OPNFV Summit (12-15 June). Vendor participation. Tutorial & training.
 Danube release: end of June (~Danube + 3 mon).
 Launch the CVP program: ~July.

Milestones	<u>Feb</u> 2017	March 2017	April 2017	<u>May</u> 2017	June 2017	<u>July</u> <u>2017</u>
NOTE: Milestones below do NOT mean project tasks	Preparation					
are sequential.						
Most will be in progress in parallel.						
(M1)		March 3&10 - completed in				
High level plan of Dovetail completed & reviewed by TSC /Board,		Dovetail March 6 - review with C&C March 14 - TSC review March 20 - Final C&C, to				
-C&C addendum completed, reviewed, ready for decision-		Board				
(M2)		March 24				
Plan in Jira with epics defined & owners assigned.						
Expected completion dates committed.						
(M3)		March 31				
Dovetail tool software available for Alpha testing by volunteers						
in Pharos and/or vendor and/or third party tester labs.						
(Note: this can be using Colorado without dependency with						
Danube or finalized test plan.)						
(M4)			April 3-6			
CVP review/approval			(ONS)			
(M5)			April 24-28			
Test strategy details reviewed, finalized and documented.			(PlugFest			
Test tool migrated to Danube, all design decisions finalized,			/HackFest)			
Tool software completed in a CI for validation. (2 installers)						
Server side workfow draft system ready for test						
Demo/review in PlugFest.						
All open decision points (except test case review) closed /finalized.						
(M6)				May 26		
Test areas and Test cases list (i.e. the CVP test suite) finalized.						
Dovetail software linked with the right test suite and frozen.						
Draft user docs completed.						
Bug fixes only from this point on.						
C&C addendum completed, reviewed, ready for decision.						

(M7) Beta ready. Test suite/software/doc beta ready.		June 12-16 (OPNFV Summit)	
LF/C&C/workflow and tools in place.			
The test suite and tool presentation/demo in OPNFV Summit.			
CVP announcement.			
Tutorials.			
(M8)		June 30	
User trial by vendors and test labs completed.			
Feedbacks/bugs collected. Final bug JIRA tickets.			
(M9)			July 14
Final release of all deliverable			
(M10)			end of July
CVP launch			

Proposed JIRA Tasks (fixVersion "Dovetail Danube") for deliverables:

To be updated on March 10. It is not accurate nor complete at this time.

Release "Dovetail Danube": https://jira.opnfv.org/projects/DOVETAIL/versions/11001

Kanban board for the overall Dovetail Danube release: https://jira.opnfv.org/secure/RapidBoard.jspa?rapidView=149&selectedIssue=DOVETAIL-345&quickFilter=371

Kanban board for tasks related test suite (Testarea & Tesecase): https://jira.opnfv.org/secure/RapidBoard.jspa?rapidView=147&quickFilter=357

Brainstorming

This is a wiki for discussions on Dovetail Danube plan. All inputs must be completed by March 9. We will review on weekly calls on March 10. This text will be removed when done in reviewing.

Background:

The OPNFV board approved the CVP governance document in Dec 2016 with an intent to launching a CVP program and had additional discussions on CVP in the Feb 2017 meeting. They asked the technical community to come back with a plan based on Danube for approval with intended launch mid-this year. The time urgency is part of the Board's ask.

This wiki is a high-level plan, not agreements on all details, but what we need to agree to the core questions to have a clear actionable plan in high level. When completed, the content of this wiki will then be summarized to present to the TSC for technical review and the Board for approval.

DRAFT Plan: Please add comments/edits below

- 1. Timeline:
 - a. Project planning complete March 10. <u>TSC review on March 21.</u> Submit to TSC and Board for review/feedback. Test strategy doc by end of April.
 - b. Launch announcement in OPNFV Summit (12-15 June). Vendor participation. Tutorial & training.
 - c. Danube release: end of June (~Danube + 3 mon). Launch the CVP program: ~July.
 - d. Draft milestones timetable: see below "Project Milestones and Due Dates"

 Action: review and agree on Milestone table below
- 2. General strategic approach to "Danube Qualification Testing" for CVP:
 - a. Scope: Danube qualification testing will qualify compliance to OPNFV Danube release and will test OPNFV as a software platform, i.e. a well-defined set of components with associated interfaces, behaviors and features.
 - Danube qualification testing will include interface compliance testing, capability compliance testing, feature compliance testing of the OPNEV platform.
 - The OPNFV Danube platform is defined as the sum of all the scenarios participating in OPNFV Danube release. Note that simple interface compliance testing is not seen as sufficient for Danube platform qualification.
 - b. OPNFV brand value through Danube Qualification Testing: Danube qualification testing is to ensure that all values provided by the OPNFV Danube release are covered. The Danube qualification testing is to set a "high bar" for passing qualification tests, to ensure OPNFV Danube is understood as high-value.

c. Controlled process: The Danube qualification testing needs to ensure that test results are objective, repeatable, well-documented and cannot be modified or cheated on. Testing and test results documentation needs to be carried out by an entity independent from the party providing the system under test.

[Wenjing]: Refer to bullet b for scope, and refer to value or high level approach discussions in C&C committee. Here we focus on project planning of dovetail given those guidances.

Action: None. See OVP document

- 3. The SUT for Danube cycle CVP is:
 - a. Products from vendors (not OPNFV release artifacts themselves). Development tooling, such as CI/CD, is not part of the SUT. The vendors can bring up the SUT to a pre-Dovetail-test state in any way they choose (and Dovetail will provide documentation to help do so)
 - b. The SUT can consist of hardware, NFVI software, and VIM software in one System Under Test. Or, a software only vendor can use third party or white box hardware to be tested as a whole and if the combined whole passes the test suite, the CVP label applies to the software. The Danube cycle does not plan to test hardware-only systems.
 - c. To conduct the test (self test or third party test), the tester needs to compose the System Under Test (hardware, NFVI, and VIM) and-bring it to the pre-Dovetail test state. The tester then conducts the Dovetail tests using its automation tool which will report the result-directly to a database managed by OPNFV. (see bullet #4)

Action: agree on SUT

- 4. Test strategy document blueprint of what to test, how to test
 - a. links to Bryan's etherpads: https://etherpad.opnfv.org/p/dovetail principles, https://etherpa
 - b. publish by end of April
 - i. Defines scope of what should be tested, and what is out of scope
 - ii. Refers to how tests are executed, what types of tests are executed
 - iii. Defines the test environment, and prerequisites for SUT being tested
 - iv. Specifies tools to be used for the test process
 - v. https://en.wikipedia.org/wiki/Test_strategy <- :D
 - vi. How (and why) to create one: http://www.guru99.com/how-to-create-test-strategy-document.html

[Wenjing]: in order to finalize a plan by March 10, we need the main outline of the strategy document (and the main issues) agreed to by March 10 also. Not all details, but main ones that can impact the credibility of the plan.

Action 1: Summarize the brainstorm information and update criteria in wiki: https://wiki.opnfv.org/display/dovetail/Dovetail+Test+Case+Requirements. Publish it. Open call for review.

Action 2: User facing documentation

- 5. Scope and precise details of the Danube test suite are to be determined by the following process:
 - a. Dovetail scope is a subset of functionalities contained in the OPNFV reference platform(s). When we say Danube based, it further narrows down to the functionalities found in Danube release cycle. In other words, this sets the upper bound.
 - b. C&C has further reduced the scope for Danube cycle to be NFVI+VIM, and performance testing is currently out of scope.

 i. Plug-in C&C addendum on Danube scope. 2/27?
 - c. A set of criteria is to be met by the test cases to be included in the Devetail test suite. A draft of this set of criteria is in the wiki: https://wiki.opnfv.org/display/dovetail/Devetail+Test+Case+Requirements.- A draft superset of all possible tests is currently maintained in the wiki: https://wiki.opnfv.org/display/dovetail/Dovetail+Test+Areas+and+Test+Cases. However, we are taking a fresh look again with a new work /review process, tracked by Jira, to determine how to organize the test suite, what test areas and what test cases for each test area should be included in Danube CVP. The Jira ticket is https://jira.opnfv.org/browse/DOVETAIL-345. Once this work is concluded, the wiki's will be refreshed to reflect its outcome. Proposal for DOVETAIL-345:
 - i. Openstack defcore /refstack integrated in functest
 - ii. SDN controllers as integrated via Neutron plugins including nosdn, odl, onos, ocl. Test cases driven via Neutron interface. (covers os-nosdn-*-ha, os-odl*-*-ha, os-onos-*-ha and os-ocl-*-ha)
 - iii. Nfv network basic validation: vPing, vRouter, ...
 - iv. Nfv use case: vIMS as integrated in functest
 - v. HA: as in HA project
 - vi. IPv6: as in IPv6 project
 - vii. others: we can call for proposal, once criteria published
 - d. This process is open to all in the community and consensus based. Participation is on Jira (and aided by etherpads as needed) and dovetail calls publicized in the tech-discuss mailing list. In specific cases where consensus can't be reached by this process, requirement /scope issues go to C&C committee/Board, and technical issues go to TSC for determination.
 - Action: General agreement on starting point, supporting data needed, and extended review sessions for DOVETAIL-345 until resolved (do we need more than the weekly call time?)

/* next week march 17, we will continue on 6, 7, 8 */

- 6. Dovetail will deliver all toolings, documentations and the test suite based on Danube, with the end of June as the final release date. Deliverables include:
 - a. standalone test automation tooling
 - b. an official test suite for CVP (as the result of 2d process), an extended test suite for feedback or experimental review (ie useful/desirable for other benefits but not accepted by the 2d process)
 - c. documentation that includes detailed guides on how to prepare and conduct the Dovetail test, pass criteria, report/review process. Documentation that includes a summary description of test areas and test cases with links to online details.
 - d. the above test tooling and test suites and docs must be validated using OPNFV and product references. (ci process, open test/review process, vendor beta process)
 - e. hosting the dovetail test result database, and any additional work needed to enable CVP administrative process (eg UI). test the hosting.
 - f. need to make quick design decisions on: (i) test result in databases (vs. in files) (ii) use refstack directly is feasible in Danube (vs. later in E). (already in progress)

Action: agreement on the list and put into JIRA

- 7. Working with upstream
 - a. We are currently evaluating to work with OpenStack Interop WG/Defcore by using refstack tooling for OpenStack testing needs within dovetail. Jose/Howard had a meeting during Atlanta PTG on this topic and OpenStack community seems to be very supportive. Working with upstream helps streamline work and leverage expertise. The current outstanding action item is to have the quick evaluation to help us determine (i) if this is the right direction (ii) if yes, can we deliver this in time for Danube cycle? If time does not permit us doing so in Danube cycle, we will roadmap it to E.

- b. Longer term plan for other upstream projects should follow the roadmap process below. Action: pursue Openstack for Euphrates(?)
- Long term planning of roadmap
 a. Desired features for dovetail, if not possible/accepted in Danube, should be road mapped using Jira enhancement tickets. Features targeted for E release should start immediately in order to influence E release planning that is ongoing in the community.
 - b. EUAG and other user inputs should be incorporated into the roadmap using the same Jira backlog/to-do ticket mechanism. (Write a story for each request)
 - c. Dovetail's E cycle planning will be based on these Jira backlog/to-do tickets. Use fixVersion "Future Release" instead of "Dovetail Danube".

Action: all inputs should be entered in JIRA for dovetail consideration

Previous Dovetail Danube planning etherpad:

https://etherpad.opnfv.org/p/Dovetail_Danube_Planning