

# 2018-10-18

## Attendees

- Paul Carver
- Casey Cain
- Eyal Lavee
- Greg Elkinbard
- Henry Fowler
- Frik Botha
- Frikkie Scholtz
- Jan Gutter
- jjeiya
- Marc
- Pieter Jansen van Vuuren
- Randy Bias
- Simon Horman
- Marc Rapoport
- Joseph Gasparakis

## Agenda

- Continuation of discussion from this week's TSC discussion [TSC meeting minutes 10/16/2018](#)

## Minutes

- Joseph gave a recap of the TSC meeting discussion
- Henry reviewed Powerpoint diagram from earlier discussions (April/May meetings) -
- Discussion followed about licensing and customer support
- The discussion will continue on the TC call on Tuesday 10/23

## Additional Notes and References

- Henry's diagram: <https://wiki.tungsten.io/download/attachments/1409118/Offload%20Design%20Options.pptx?api=v2>
- Some general concerns/goals from Paul Carver
  - Testability
    - Clean interfaces that allow CI tests to validate most functionality independent of hardware.
    - Ease of determining whether the bug is in Tungsten Fabric or in a specific NIC.
    - In particular, it should be possible to stub/mock the hardware for functional testing. Actual hardware should only be necessary for benchmark testing.
  - Extensibility
    - Open Source contributors should be able to extend vRouter functionality without a dependence on NIC vendor to write vRouter specific code
    - It's expected that performance will vary between NICs, but vRouter functionality generally should not. I would not like to see wide disparity between which functions are offloaded to which NICs.
  - Standard VM interface – tenants should not be able to distinguish between different NICs except perhaps by performance benchmarks
- Some general concerns/goals from Randy Bias
  - Vendor independence
    - Just as in Linux more generally, hardware vendors should have some ability to differentiate on features, which may also mean that the drivers that expose that functionality should be able to be closed source; just as Nvidia drivers are closed on Linux, SmartNIC vendors should be able to have closed source functionality that is loaded dynamically at run time
  - Generic baseline or versioning that allows a SmartNIC vendor to be "certified" for Tungsten Fabric?