

Baseline Assumptions

- Agreed StarlingX specs from PTG in nova and neutron are implemented
- Reviews in progress across all projects are completed

Nova Must Haves – Address w/ planned upstream features

- **Live migration patch w/ pinning(numa_topology) – this one is table stakes**
 - Live migration has not worked since numa topology was introduced in kilo
 - We have been carrying complicated patches to address this
 - Replace current patches with <https://review.openstack.org/#/c/552722/>
- Shared/Dedicated vcpus on same host
 - Replace with <https://review.openstack.org/#/c/555081/>
- Shared vcpu extension
 - Replace with <https://review.openstack.org/#/c/555081/>
- vTPM support (stx community spec)
 - Replace with spec <https://review.openstack.org/#/c/571111/>
- HPET support (stx community spec)
 - Replace with spec <https://review.openstack.org/#/c/607989/>

Nova Must Haves – Address w/ planned upstream features

- VCPU model (stx community spec)
 - Current StarlingX implementation rejected by Nova
 - Replace with new proposed spec for Stein
- Disk performance fixes (stx community spec)
 - Specless blueprint
 - <https://blueprints.launchpad.net/nova/+spec/io-semaphore-for-concurrent-disk-ops>
- Extra spec validation (stx community spec)
 - <https://blueprints.launchpad.net/nova/+spec/flavor-extra-spec-image-property-validation>

Nova Must Haves – Address w/ upstream features already available

- Replace SR-IOV/PT best effort scheduling policy with Queens feature
 - <https://review.openstack.org/#/c/555000/3..3/specs/queens/implemented/share-pci-between-numa-nodes.rst>
- Replace vswitch affinity with Rocky feature
 - <https://review.openstack.org/#/c/541290/18/specs/rocky/approved/numa-aware-vswitches.rst>
- DB purge
 - Already addressed upstream in Rocky
<https://blueprints.launchpad.net/nova/+spec/purge-db>

Nova Must Haves – Address via Refactoring within STX

- Service create extension
 - Refactor in the VIM
- Low latency compute per-cpu power management
 - Do outside of nova
- RPC timeout handling
 - Leverage upstream enhancements
- Storage aggregate
 - Eliminate auto flavor extra-spec setting
- KVM crash detection
 - Implement with an external monitor
- PCI interrupt affinity
 - Do outside of nova

Nova Must Haves – Address TBD

- Providernet filter
- Live migration windows guest support
 - This did not work in Pike, retest and open bug if still broken

Nova Must Have - Bugs

- 16 high priority bugs that need to be addressed
 - Mainly around live migration
 - TBC, list of issues

Neutron Must Haves – Address w/ planned upstream features

- Network Segment Range Management (stx community spec)
 - <https://review.openstack.org/#/c/599980>
- DNAT
 - Already available upstream

Neutron Must Haves – Address w/ planned upstream bug fixes/enhancements

- 13 items with the following already in review
 - Populate binding levels when concurrent ops fail
 - <https://review.openstack.org/#/c/606827/>
 - [RFE] Enable other subprojects to extend l2pop fdb information
 - <https://review.openstack.org/#/c/599319/>
 - Enable delete bound trunk for linux bridge agent
 - <https://review.openstack.org/#/c/605589/>
 - Prevent DHCP from processing stale RPC messages
 - <https://review.openstack.org/#/c/609463/>
- TBC, add other 9 items

Neutron Must Haves – Address via refactoring within STX

- Host State Management
- DHCP agent rescheduling / rebalancing
- L3 agent rescheduling / rebalancing
- Patching script rework

Horizon Must Haves - Address w/ new upstream features

- These are specs that would need to be created and worked through the horizon community
 - Configurable auto page refresh
 - Loading bars
 - Auth plugin extensions
 - Custom Confirmation Messages
 - CSRF AngularJS fixes
 - Custom 'fixedwithquery' filter/search

Horizon Must Haves - Address w/ refactoring within STX

- Move the following to stx-gui after moving to master
 - Port Forwarding tab
 - Controller services tab
- The following can be moved to stx-gui now
 - Branding extensions

Other Projects Must Haves

- Keystone/Ironic/Magnum/Ceilometer
 - Align w/ master
 - No/minimal loss of functionality vs. master
- Murano
 - Deprecate support in StarlingX
- Heat
 - Align w/ master
 - Most of the remaining patches are in support of other project extensions which are being deprecated
- Glance/Cinder
 - **Need a solution for glance cache-raw extension**
 - **May be an upstream option already, to be verified**
 - Outside of that no significant loss of functionality aligning w/ master