K8s Network & Resource Management

<u>Additional Meeting</u>

Time: Tuesday 9-10am ET on Tuesdays which alternate with the main group meeting

~~Zoom:~~ ~~https://zoom.us/j/2392609689?pwd=K1R4ZEQyWWJVSGV3V1pmVThLMlhqQT09~~

Zoom: https://us02web.zoom.us/j/88973596231?pwd=UHZtUEtNSVBSYnRLL3A3cHMzdmlvZz09
Passcode: 733316

Main meeting document:
https://docs.google.com/document/d/1sJQMHbxZdeYJPgAWK1aSt6yzZ4K_8es7woVIrwinVwI/edit#heading=h.a169lfuz7mbq

Calendar: https://calendar.google.com/calendar/u/0/embed?src=k8smeet@gmail.com
America/New_York is default displayed timezone, check bottom left to see, but to see in other timezones (For example in PT):
https://calendar.google.com/calendar/u/0/embed?src=k8smeet@gmail.com&ctz=America/Los_Angeles

Note: This document is deprecated. Please use the Main meeting document

https://docs.google.com/document/d/1sJQMHbxZdeYJPgAWK1aSt6yzZ4K_8es7woVIrwinVwI/edit#heading=h.a169lfuz7mbq

July 12, 2022

Attendees: Adrian Chiris(Nvidia), Balazs Nemeth (Red Hat), Ivan Kolodiazhnyi (NVIDIA), Freddy Rolland (NVIDIA), Eoghan Lawless (Intel), Niamh Hennigan (Intel),

Agenda:
- [adrianc] should we move to a single document for the two meeting series we have ?
  - <mark>Decision: yes it would simplify things and avoid confusion</mark>
  - Topics discusses are a mix of technical and regular business in both starting next meeting we will just use the main doc.
  - AR: adrianc will mark this doc as deprecated
- [adrianc] PRs close to merge (already got 1 LGTM)

- ○ NRI - add health check endpoint
  - ■ https://github.com/k8snetworkplumbingwg/network-resources-injector/pull/125
- ○ SRIOV-CNI - add coveralls
  - ■ https://github.com/k8snetworkplumbingwg/sriov-cni/pull/205
- ○ Sriov-cni - use golangci lint
  - ■ https://github.com/k8snetworkplumbingwg/sriov-cni/pull/210
- [adrianc] Update on SF support in sriov network device plugin
- [eoghanlawless] multus-cni logging extraction to standalone project, cni-log
  - ○ [adrianc] +1 on cni-log
- [Balazs] sriov network device plugin probe()
  - ○ https://github.com/k8snetworkplumbingwg/sriov-network-device-plugin/pull/436
  - ○ [adrianc] We might not be able to solve all cases but its certainly a good UX to have device plugin pick up new devices / remove non-existent devices. This feature can be opted in with limitations which later on can be handled.
    - ■ Need to make sure that device index reported to kubelet will not change as it keeps track on those.

June 28, 2022

Attendees: Adrian Chiris(Nvidia), Eoghan Russell (Intel), Emily Metadjer (Intel), Eoghan Lawless (Intel), Ivan Kolodiazhnyi (NVIDIA), Balazs Nemeth (Red hat), Niamh Hennigan (Intel)

Agenda:
- [frolland] SRIOV-NO PR "Skip config if policy not applied yet"
  https://github.com/k8snetworkplumbingwg/sriov-network-operator/pull/287
  - ○ With this change the SyncStatus will not be updated until a first policy is applied
  - ○ Tests are failing because they expect to get to "Succeeded" on initialization phase. See: https://github.com/k8snetworkplumbingwg/sriov-network-operator/blob/master/test/util/cluster/cluster.go#L200
- [rthakur-est] Health check for NRI webhook server
  https://github.com/k8snetworkplumbingwg/network-resources-injector/pull/125
  This change adds optional support for health checking of NRI webhook server for "insecure" mode.

- [eoghan1232] SRIOV Network Operator V1.2.0 Release
  - ○ https://github.com/k8snetworkplumbingwg/sriov-network-operator/issues/324
  - ○ Merge these before release:
    - ■ https://github.com/k8snetworkplumbingwg/sriov-network-operator/pull/287
    - ■ https://github.com/k8snetworkplumbingwg/sriov-network-operator/pull/323
  - ○ Commits since last release:
    - ■ https://github.com/k8snetworkplumbingwg/ib-sriov-cni/compare/v1.0.2...master

- - Adrianc: this one imo can be a v1.0.3 release as it just updates deploy example to use ghcr instead of vendor path
    - https://github.com/k8snetworkplumbingwg/sriov-network-device-plugin/compare/v3.5.0...master
    - https://github.com/k8snetworkplumbingwg/sriov-cni/compare/v2.6.2...master
    -

June 14, 2022

Attendees: Adrian Chiris(Nvidia), Sebastian Scheinkman (Red Hat), Ivan Kolodiazhnyi (NVIDIA), Eoghan Lawless (Intel),

Agenda:

- [adrianc] Call for reviews:
  - https://github.com/k8snetworkplumbingwg/sriov-cni/pull/205
    - Add coveralls to project
    - Just need rebase and another LGTM
  - https://github.com/k8snetworkplumbingwg/sriov-network-operator/pull/287
    - Sebastian, can we merge this one ?
      - Sebastian will do some testing internally
  - https://github.com/k8snetworkplumbingwg/sriov-network-operator/pull/312
    - Removing go plugins
  - https://github.com/k8snetworkplumbingwg/sriov-network-operator/pull/309
    - External control plane support
  - https://github.com/k8snetworkplumbingwg/sriov-network-operator/pull/281
    - Add coveralls to project
    - Pending merge of PR312
  - https://github.com/k8snetworkplumbingwg/sriov-network-operator/pull/320
    - Add Contributing doc - Trivial
- [SchSeba] working on the k8s 1.24 bump for the sriov operator
- ConnectX6 Lx support:
  - https://github.com/k8snetworkplumbingwg/sriov-network-operator/issues/317
  - Mstflint in centos8 stream is too old, need to have mstflint ver 4.20
  - Adrianc to check internally how this can be pushed to distro
  - Sebastian will do the same on his end
  - Meanwhile its possible to build from sources

May 31, 2022

Attendees: Eoghan Lawless (Intel), Ivan Kolodiazhnyi (NVIDIA), Eoghan Russell (Intel), Sebastian Scheinkman (Red Hat), Andrea Panattoni (Red Hat), Freddy Rolland (NVIDIA), Adrian Chiris(NVIDIA)

Agenda:

- [eoghanru]
  - https://github.com/k8snetworkplumbingwg/sriov-network-metrics-exporter/pull/10
    - Reviews welcome
    - Can we merge?
  - Currently there are not many maintainers for this projects
    - Est and intel ATM are involved
    - RH are also interested in this project
  - Sebastian will take a look
- [SebaSch]
  - Bump golang to 1.18
    - Sriov operator - https://github.com/k8snetworkplumbingwg/sriov-network-operator/pull/310
    - I will open the other ones later this week
  - Bump to k8s 1.24 by Zenghui
    - https://github.com/k8snetworkplumbingwg/sriov-network-operator/pull/309
- [eoghanru] **This came from the Slack**
  - We are looking to add liveness probes to sriov network device plugin. We found two solutions that can do health probe over grpc -
  - https://github.com/grpc-ecosystem/grpc-health-probe
  - https://kubernetes.io/docs/tasks/configure-pod-container/configure-liveness-readiness-startup-probes/#define-a-grpc-liveness-probe
  - But since sriov device plugin runs grpc server over unix socket, the above two can't be used since they require a valid service port for probing.
  - Is there any alternative way to do grpc health checks over unix socket or any other mechanism to do health check for sriov device plugin?
  - Adrianc: inputs
    - Its not clear what is the use-case
    - Sriov network config daemon would restart if the grpc connection is terminated
    - Liveness probe in k8s (if we implement) will do the same
    - Maybe invite the interested party to join one of the meetings

May 17, 2022

Attendees: Andrea Panattoni (Red Hat), Ivan Kolodiazhnyi (NVIDIA), Freddy Rolland (NVIDIA), Eoghan Russell (Intel), Adrian Chiris (Nvidia), Niamh Hennigan (Intel),

Agenda:
- [rnthakur] new release for SR-IOV network device plugin

- - Current diff:
    https://github.com/k8snetworkplumbingwg/sriov-network-device-plugin/compare/v3.4.0...master
  - Last release was on Nov 2021, makes sense to do a release
    - A.I - Adrianc will create an issue to releaseu
- [Andrea] Please wait a feedback from schseba before merging
  - https://github.com/k8snetworkplumbingwg/sriov-network-operator/pull/287
- [Andrea] sriov-network-device-plugin/pull/426 fixes CI due to merging pull/421 (Coveralls)
  - A.I - Andrea.P will open an issue to deal with the underlying cause (fetching go binaries using go get in makefile)
  - A.I - Adrian.C will review the PR
- [Kevin.K] inquiry about vfio token and secure boot
  - Unfortunately folks here didnt have info, Keving will try to reach out on slack
    - Perhaps Sebastian knows
    - Or other folks from Intel ?

May 3, 2022

Attendees: Ivan Kolodiazhnyi (NVIDIA), Andrea Panattoni (Red Hat), Sebastian Scheinkman (Red Hat), Eoghan Russell (Intel), Adrian Chiris (Nvidia), Balazs Nemeth (Red Hat)

Agenda:
- [Seba] Sriov device plugin token support:
  - 📄 SR-IOV Device Plugin Token support
  - An option to add additional environment variables when allocating devices
  - Inputs are welcome
  - Do we really need per PCI device environment variable ?
    - Currently its not clear
    - We need take into consideration this might change when agreeing on the API.
  - Should we limit the names of the environment variables?
    - Yes, we can use the same validation as resource name
  - Sebastian to open an issue in sriov network device plugin
  - An Old(er) issue around this topic
    - https://github.com/k8snetworkplumbingwg/sriov-network-device-plugin/issues/303
- PRs close to merge: (ask for review)
  - https://github.com/k8snetworkplumbingwg/sriov-network-device-plugin/pull/416
  - https://github.com/k8snetworkplumbingwg/network-resources-injector/pull/121
    - It already got 2 lgtms - so can be merged
  - https://github.com/k8snetworkplumbingwg/sriov-cni/pull/205
    - Once merged we should enable coveralls to report on results to PRs
  -

April 19, 2022

Attendees: Ivan Kolodiazhnyi (NVIDIA), Eoghan Russell (Intel), Adrian Chiris (Nvidia), Andrea Panattoni (Red Hat), Emilien Macchi (Red Hat), Sebastian Scheinkman (Red Hat), Kevin Clarke (Intel)

Agenda:

- [apanatto] Feedback on simplifying config-daemon plugin structure ([#90](#)) ([change summary](#))
  - Will simplify the system
  - There are a couple of +1 on this change
  - We did not use the plugin mechanism for externally provided plugins until today
  - Andrea(zeeke in GH) will work on it.
- [eoghanru] Open PR's :
  - https://github.com/k8snetworkplumbingwg/sriov-cni/pull/196
    - Ready to Merge?
    - README specify how to run the tests
    - Adrianc to get some bandwidth to review this week
  - NRI PR: https://github.com/k8snetworkplumbingwg/network-resources-injector/pull/121
    - Ready to merge?
    - README specify how to run the tests
    - Adrianc to get some bandwidth to review this wee
  - NPWG Robot account access ?
    - Adrian, can you provide?
    - Needed for intel - CI/CD (run E2E tests against Intel H/W)
      - Adrian to generate access token for Eoghan
- [Seba] ready to merge?
  - https://github.com/k8snetworkplumbingwg/sriov-network-operator/pull/262
- [adrianc] i would like to propose Ivan.K as maintainer to SRIOV Network Operator and device plugin
  - +1 from Sebastian and Eoghan
  - No objections from the rest :)
  - Adrian to propose in the next npwg meet ing
                    - [rthakur] PR review - https://github.com/k8snetworkplumbingwg/sriov-network-device-plugin/pull/416
- [Ivan] Support Generic SR-IOV configuration via systemd
  - https://github.com/k8snetworkplumbingwg/sriov-network-operator/issues/81
  - Previous discussion was on Feb 8, 2022
  - Need to make sure no glibc issues
  - Need to be careful with edge cases e.g vendor plugin failed
  - Next steps is to have some poc code and design doc present to the community for review

- 802.1Qaz - Generically enhanced transmission handling (Kevin)
  - Does Nvidia NICs support this ? how
  - Some intel NICs support it, configuration via lldptool need to happen before VF configuration.
  - Is this capability queryable ?
  - Kevin to create an issue for this in Sriov network operator
  - Preparing a design doc would help folks understand this more

April 05, 2022

Attendees: Emilien Macchi (Red Hat), Freddy Rolland (Nvidia), Eoghan Russell (Intel),
Agenda:
- [sebastien,emilien] SR-IOV network operator: [Improve the virtual plugin](#)
  - need reviews please
- [eoghanru] SRIOV CNI PR :
  - https://github.com/k8snetworkplumbingwg/sriov-cni/pull/196
    - Ready to Merge?
  - NRI PR:
    https://github.com/k8snetworkplumbingwg/network-resources-injector/pull/121
    - Reviews welcome again.

March 22, 2022

Attendees: Adrian Chiris (Nvidia), Niamh Hennigan (Intel), Eoghan Russell (Intel), Freddy Rolland (Nvidia), Ivan Kolodiazhnyi (NVIDIA), Eoghan Lawless (Intel), Vivek Thrivikraman (EST)
Agenda:
- [adrianc] working on update to dockerfile base images to clean up security vulnerabilities
  - https://github.com/k8snetworkplumbingwg/sriov-network-device-plugin/pull/414
    - https://github.com/k8snetworkplumbingwg/sriov-network-device-plugin/issues/407
- No other topics

March 8, 2022

Attendees: Adrian Chiris(NVIDIA), Vivek Thrivikraman (EST), Freddy Rolland(NVIDIA), Niamh Hennigan (Intel),
Agenda:
- [Hpeaj]Update on PR and Patches
  - https://github.com/k8snetworkplumbingwg/sriov-network-operator/pull/255
    Patches
    - https://github.com/k8snetworkplumbingwg/sriov-network-operator/pull/261
    - https://github.com/k8snetworkplumbingwg/sriov-network-operator/pull/260
    - https://github.com/k8snetworkplumbingwg/sriov-network-operator/pull/259

Previous reference https://github.com/k8snetworkplumbingwg/sriov-network-operator/issues/234

I used the website to update the PR I am new how to don it via CLI

Need your help with the next steps to getting the card supported

Feb 22,2022

Attendees: ⬭Emilien Macchi⬮ , Ivan Kolodiazhny (NVIDIA),Sebastian Scheinkman (Red Hat), Niamh Hennigan (Intel), Eoghan Russell (Intel), Freddy Rolland (NVIDIA), Billy McFall (Red Hat)
Agenda:
- [Hpeaj]add new supported nic for Sriov
  - https://github.com/k8snetworkplumbingwg/sriov-network-operator/issues/234
  - HPE want to add support for marvell FastLinkQ
  - Is there a process on how to certify new hardware ?
    - We dont have anything official
    - But we do have option to run vendor CI
      - Can trigger our E2E tests
      - Can trigger other vendor specific tests
  - It is preferable to have a vendor CI to validate
    - Is this a must ? today no.
  - Proposed steps to add-in new hardware
    - For initial support (what is needed to add to supported list of devices):
      - Open issue to request support
      - Add in what tests were ran to ensure sriov-network-operator works as expected on the specified hardware
      - Submit PR to update supported nic id config map + readme
        - Add contact information in case we encounter issues for that hardware
    - Add Vendor CI to run against PRs with the relevant hardware
      - To ensure we dont break sriov-network-operator on that specific hardware
      - Without it, we cannot commit to "not break" functionality on the specific hardware.
    - AR: [adrianc] create PR to document this.
- [Seba] sriov-device-plugin add PF to the pools
  - Two different approached
  - https://github.com/k8snetworkplumbingwg/sriov-network-device-plugin/pull/409
  - https://github.com/k8snetworkplumbingwg/sriov-network-device-plugin/pull/408
  - Create a new PR to skip PFs with the pfname or rootPF is configured in the selector
- [eoghanru] Review SRIOV CNI PR
  - https://github.com/k8snetworkplumbingwg/sriov-cni/pull/196
    - Needs review
  - Review NRI PR
    - https://github.com/k8snetworkplumbingwg/network-resources-injector/pull/121

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Feb 8, 2022

Attendees: Adrian Chiris(Nvidia), Ivan Kolodiazhny (NVIDIA), Eoghan Russell (Intel), Emilien Macchi (Red Hat), Eoghan Lawless (Intel), Sebastian Scheinkman (Red Hat), Balazs Nemeth (Red Hat),Niamh Hennigan (Intel),

Agenda:
- Update: Release a new version of accelerated bridge cni
  - V0.2.0 released !
- Network Operator PR 233
  - https://github.com/k8snetworkplumbingwg/sriov-network-operator/pull/233
  - There still some work needed, Sebastian will update
- [Sebastian] Support new field for vfio-pci token in sriov-device-plugin
  - Kernel: https://lwn.net/Articles/812250/
  - DPDK: https://doc.dpdk.org/guides/linux_gsg/linux_drivers.html
  - https://github.com/smart-edge-open/openshift-operator/blob/main/spec/openshift-sriov-fec-operator.md
- [adrianc] sriov-network-operator move generic sriov configuration to systemd service similar to switchdev configuration today
  - Would be beneficial to simplify things as well as reduce the amounts of reboots/drains required
  - 1st step would be to just move the generic plugin logic
  - May need to Have config knob in sriov-config-daemon to decide if to configure via systemd or via daemon as today. For transition period
  - Will be go binary which reuses current logic
    - Copied to the host like CNI at first phase
    - May be compatibility issues (glibc)
      - Need to build with an "old-enough" system
    - As a second phase we can containerize it and run container in systemd
      - Would Need to support multiple container runtimes ?
        - Container runtime auto-detection ? k8s node object already has this information
      - Container runtime would either need to be connected to the same image registry as kubernetes or we can copy the container image to host, then load it in systemd before invoking it

Jan 25, 2022

Attendees: Emilien Macchi (Red Hat), Eoghan Lawless (Intel), Sebastian Scheinkman (Red Hat), Adrian Chiris (Nvidia), Eoghan Russell (Intel), Ivan Kolodiazhnyi(NVIDIA), Niamh Hennigan (Intel), Vivek Thrivikraman (EST)

Agenda:
- [adrianc] Release a new version of accelerated bridge cni

- - - https://github.com/k8snetworkplumbingwg/accelerated-bridge-cni/issues/39
      - Inputs welcome if you want to add in additional content
      - No open issues
      - Ok with Proceeding with Release. Adrianc will do it during next week
  - [adrianc] Sriov-network-operator PRs
    - https://github.com/k8snetworkplumbingwg/sriov-network-operator/pull/232
      - Reviews welcome
    - https://github.com/k8snetworkplumbingwg/sriov-network-operator/pull/233
      - W/A for intel nics
  - Bond-cni
    - Support MTU configuration
      - https://github.com/k8snetworkplumbingwg/bond-cni/pull/25
      - Reviews are welcome
      - UT contributions are welcome :)
      - Github Actions for linter/build/image is also welcome
        - Eoghan.R will create issues in the project for start.

Jan 11, 2022
Attendees: Adrian Chiris (NVIDIA), Sebastian Scheinkman (RedHat), Eoghan Lawless (Intel), Emilien Macchi (Red Hat), Eoghan Russell (Intel), Niamh Hennigan (Intel),

- New Attendee : Emilien Macchi , focusing on Openshift/K8s on top of Openstack
  - Welcome ! :)
  - Will focus on how we can enable the webhook when deploying on OpenStack (currently has to disable it to work fine)

No other topics, meeting adjourned early

Dec 14, 2021
Attendees: Adrian Chiris (NVIDIA), Eoghan Russell (Intel), Niamh Hennigan (Intel), Eoghan Lawless (Intel), Sebastian Scheinkman (Red Hat),Vivek Thrivikraman (EST), Billy McFall (Red Hat), Ivan Kolodiazhny (NVIDIA)

- [Adrianc] Sriov network operator v1.1.0 has been released
  - Still need to update release page with container images
  - Helm Chart update is next
- Next meeting on the 28th will be cancelled due to holidays. (expecting low attendance, we will start fresh in the new year!)
- [Sebastian] https://github.com/k8snetworkplumbingwg/sriov-network-operator/pull/213
  - Ready for another round of review
  - Run MCP regardless of drain, set drain in sriovOperatorConfig based on the number of nodes in the cluster.
- [Sebastian] Any update of devlink port support

- Kernel infra Part of upstream kernel - need to be backported to the distro (RHEL or others)
- Currently Mellanox NIC implemented for ETH devices, but not Infiniband
  - Adrianc requested to implement this functionality for Mellanox infiniband driver
- Some Intel NIC dont support devlink/devlink port ATM
- It should be a best effort mechanism
- [Adrianc] Configure SR-IOV via system service in sriov network operator (generic plugin functionality)
  - No objections on the approach if we can reduce the number of reboots to the system, container restarts etc
  - Vendor plugins - Mellanox plugin configures firmware when sriov is changed
    - Do we want to move that to system service as well?
      - Might be an issue with CoreOS unless the code is statically compiled, then it can be copied
      - Probably want to keep it as is and perhaps reduce the number of configurations it performs as in each change it requires a reboot
  - Lets have a POC code so we can further discuss

Nov 30, 2021

Attendees: Adrian Chiris (NVIDIA), Ivan Kolodiazhnyi (NVIDIA), Eoghan Russell (Intel), Adrián Moreno (Red Hat), Niamh Hennigan(Intel),

- [AdrianM] Where should vdpa code go?
  - https://github.com/ovn-org/ovn-kubernetes/pull/2664
  - Govdpa
  - Mellanox/sriovnet
  - Adrianc: sriovnet - will check internally on plans to move to npwg
    Re govdpa - to me it seems like a good candidate to move to npwg
- [adrianc] sriov-network-device-plugin has been released, next in line is sriov-network-operator.
- [eoghanru] https://github.com/k8snetworkplumbingwg/sriov-network-operator/pull/163
- [E2E Tests on NRI]
  https://github.com/k8snetworkplumbingwg/network-resources-injector/pull/121
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Nov 16, 2021

Attendees: Ivan Kolodiazhny (NVIDIA) , Adrian Chiris (NVIDIA), Sebastian Scheinkman (Red Hat), Eoghan Lawless (Intel), Niamh Hennigan(Intel),Eoghan Russell (Intel),

- [Billy] I won't be able to attend due to conflict, but noticed multiple SIG Network Meetings on the k8smeet@gmail.com calendar. Anyone know anything about this?#

- - [Kevin C] That was me Billy who added them... .. I still had my own tracking issues of all the various network related meetings.. I can remove them .. as a default if we want to keep this cleaner (Kevin C has removed the other entries as of 30/11.. Its now a plainer cal.).
    - [Billy] I would like it to be Network Plumbing Working Group based meetings, but would like to hear what others think.
- [Ivan] Do we want to move https://github.com/k8snetworkplumbingwg/reference-deployment to multus repo?
  - [adrianc] Should be raised in npwg thursday meeting.
- [adrianc] SNO release
- [adrianc] Nvidia CI in SR-IOV network operator - PR 163 looking good, we can also see the CI being triggered :).
  - Additional pair of eyes for review appreciated
- [sebastian] Should we include fix for Sriov network device plugin issue 392 ?
  - [Adrianc] if we can get a fix soon we might, however as this has been a day zero issue, i dont think its a blocker
- [Eoghan.R] bond-cni move to NPWG update: almost there
- [adrianc] Support acquiring DDP profile using devlink PR#387 - update from Eoghan.R that patryk will resume work on it as netlink support for fetching device parameters was merged

Nov 02, 2021

Adrianc: Apologies, missed the meeting (arrived 1 hour late :() due to daylight saving time. US shifts on Nov 7th. So we should be synced for the next meeting.

Oct 19, 2021

Attendees: Eoghan Lawless (Intel), Eoghan Russell (Intel), Ivan Kolodiazhnyi (Nvidia), Niamh Hennigan(Intel), Adrian Chiris(Nvidia), Billy McFall (Red Hat), Michał Guzieniuk (Intel), Vivek Thrivikraman(EST)

- [Adrianc] review ARs from previous meeting
  - bond-cni move to NPWG - Eoghan.R to provide more info
    - Update: [almost] green-light on move , need to get some feedback from customers currently using it. Will hopefully have final status on thursday's meeting.
  - NRI issue #111 , PR needs review
    - Merged.
- [Vivek] (Network-Resource-Injector topics)
  - NRI pod restart not handled
    - When NRI pod get restart, it cannot properly come back up

- - - Sort of a chicken and egg here since it acts as a webhook for pods, when it restart the pod will be re-created but there would be no backed replying to the webhook setup for pod creation.
    - - Vivek will open an issue and work on a fix
      - - Fix is to ignore the nri webhook for the pod or kube-system namespace in general.
  - NRI stability and maturity
    - Used in Openshift (used in production) as part of SR-IOV support in Openshift.
    - Not used by NVIDIA ATM
    - Input from intel - its under active development, part of intel's recommendation on how to use SR-IOV in K8s deployments
      - Eoghan Russel will check internally to see if they can find out more info.
        - Update: Being used internally as part of sriov-network-operator.
  - Supporting high availability in NRI
    - This makes sense in adding if needed for some production environments
      - Need to change how NRI deployed to achieve that i.e via deployment
    - Helm Chart to facilitate updates and easy deployment
      - Npwg helm charts are hosted here:
        - https://github.com/k8snetworkplumbingwg/helm-charts
    - A.I Adrianc open issues on the above to track. [Done]
- [Eoghan] https://github.com/k8snetworkplumbingwg/sriov-network-device-plugin/issues/390

- https://github.com/k8snetworkplumbingwg/sriov-network-device-plugin/pull/384

- Sriov-network-operator release - we want to first release dependent components
  - Inputs are welcome so we can finalize the content on each subcomponent sub-release
  - https://github.com/k8snetworkplumbingwg/sriov-network-operator/issues/189
  - Sriov-network-device-plugin
    - https://github.com/k8snetworkplumbingwg/sriov-network-device-plugin/issues/385
  - Sriov-cni
    - https://github.com/k8snetworkplumbingwg/network-resources-injector/issues/116
  - Network-resource-injector
    - https://github.com/k8snetworkplumbingwg/network-resources-injector/issues/116
  - Ib-sriov-cni
    - https://github.com/k8snetworkplumbingwg/ib-sriov-cni/issues/61

Oct 5, 2021

Attendees: Adrian Chiris(Nvidia), Eoghan Russell (Intel), Michal Guzieniuk (Intel),Niamh Hennigan(Intel), Ivan Kolodiazhnyi (Nvidia), Eoghan Lawless (Intel), Billy McFall (Red Hat)

- [Adrianc] Review ARs from previous meeting
    - SR-IOV Network Operator fix - #173 merged !
    - bond-cni move to NPWG - Eoghan.R to provide more info
        - No updates for today (Eoghan R had to drop)
    - NRI issue #111 , PR needs review :
        - Code reviewed by adrianc Looks good.
        - Would be great if we can confirm its working in a k8s deployment as expected
- [Michal.G] Resource-mgmt-utils
    - Common test functionality - inputs on project layout for the test code
    - https://github.com/k8snetworkplumbingwg/resource-mgmt-utils/issues/1
        - [adrianc] proposes to use just a single folder and package for k8s object utility functionality
        - This can be a parallel effort with moving non test related functionality

Sep 21, 2021

Attendees: Zenghui Shi (Red Hat), Billy McFall (Red Hat), Ivan Kolodiazhnyi (Nvidia), Eoghan Russell (Intel), Michal Guzieniuk (Intel) Kevin Clarke (Intel),Niamh Hennigan(Intel),Vivek Thrivikraman (EST)

- [Ivan] SR-IOV Network Operator fix:
    - https://github.com/k8snetworkplumbingwg/sriov-network-operator/pull/173
- [Zenghui] bond-cni move to NPWG?
    - [AR] Eoghan R to find out more information.
- [Vivek] NRI issue #111 , PR needs review :
  https://github.com/k8snetworkplumbingwg/network-resources-injector/pull/114
-

Sep 7, 2021
Attendees:

Note:

[adrianc] will be on PTO during September. Zenghui will do his best to attend meetings and moderate.
[Zenghui] Canceled this meeting due to conflict

Aug 24, 2021

Attendees: Adrian Chiris(Nvidia), Eoghan Russell (Intel), Vivek Thrivikraman (EST), Billy McFall (Red Hat) ,Niamh Hennigan(Intel), Eoghan Lawless (Intel), Kevin Clarke (Intel),

- [adrianc] Review AI/AR from last meeting
  - A.I - adrianc to check if we can add to npwg google group, if not add to npwg agenda.
- NRI issue #111 CertificateRequestV1Beta removed in 1.22, alternatives ?
  - https://github.com/k8snetworkplumbingwg/network-resources-injector/issues/111
  - Today, you can either provide your own certificates (which are managed externally) or use CertificateRequestV1Beta API
    - The latter is removed as of 1.22
  - Option 1: Update CertificateRequest API to V1 and use kubelet-signing signer
    - It is a abit odd as its intended to create certificates for kubelet enbdpoints.
  - Option -2: Update CertificateRequest API to V1 using a custom signer
    - which one ?
    - certmanager support is experimental
    - ATM we dont have a use-case to use a custom signer
      - If there will be we are open to adding support for it
  - Option-3 - generate self signed certificate and use it
    - **Seems like a reasonable option going forward,**
    - Will it work with older k8s version: yes it will
    - Will probably need to remove deprecated CSR code
  - Switch to admission v1 #96
    - https://github.com/k8snetworkplumbingwg/network-resources-injector/pull/96
-

Aug 10, 2021

Attendees: Eoghan Lawless (Intel), Adrian Chiris(Nvidia), Billy McFall (Red Hat), Vivek Thrivikraman (EST), Eoghan Russell (Intel) Kevin Clarke (intel),, Ravindra Thakur(EST), Ivan Kolodiazhnyi (NVIDIA)

- [adrianc] Review AI/AR from last meeting
  - AR Ivan.K - check if there are CI test we can introduce.
    - `docker scan` requires login to dockerhub
    - Use https://github.com/quay/clair?

- - - Trigger as Cron job ? or every PR ?
          - Probably Cron job is enough
        - A.I [adrianc] readup on clair, create issues in projects to add this check
      - AR adrianc - sriov-network-operator create issue to test helm via github action
        - Issue #168 created
  - Having a google calendar for meetings
    - Can we create something in npwg google group and have people refer to it and have the meetings easily added to calendar ?
      - ATM its sort of "roll your own" invite
    - A.I - adrianc to check if we can add to npwg google group, if not add to npwg agenda.
  - [adrianc] Resource-mgmt-utils - project created, next steps should be tracked in this issue
  - https://github.com/k8snetworkplumbingwg/network-resources-injector/issues/111
    - Certificates v1beta1 no longer being supported in k8s 1.22 release. This will affect NRI.
    - Admission was recently updated from v1beta1 to v1, certificates should be done next?
    - Which versions of K8s are we supporting ?
      - Update README of projects will be needed
      - Are we testing it ?
        - Partially (e.g mellanox-ci)
    - v1 introduced (and v1beta Deprecated) in k8s 1.19
    - Change should be reflected in project README, stating k8s v1.19 or newer should be used.
  - [adrianc] issue #366 add -amd64 tag for x86 images to latest/tag
    - Forum is OK with adding this tag and have it consistent with other arch.
  - [adrianc] issue #367 add stable tag
    - General agreement to move forward with this
    - Should we do the same for other projects ?
      - yes
    - Should be documented as well
      - Perhaps also document the various containers we are building
    - Document release process ? we should.
      - ATM pretty simple but should be documented.
  - [Adrianc] fix remaining lint issues #371
    - Lets get this reviews so CI will be green
    - Already merged ! Thanks Martin!

July 27, 2021
Attendees: Adrian Chiris(NVIDIA), Eoghan Russell (Intel), Yury Kulazhenkov(NVIDIA), Ivan Kolodiazhnyi (NVIDIA); Kevin.Clarke@INTEL.com

- Review AI/AR from last meeting
  - Zenghui: SR-IOV utils package under npwg, next steps - consult with doug and create project
    - New project created: https://github.com/k8snetworkplumbingwg/resource-mgmt-utils
- [adrianc] issue 368 - set deps to specific version
  - Security issues may be an issue - CVEs discovered in pinned packages
    - AR Ivan.K - check if there are CI test we can introduce.
  - No specific recommendation by the forum
- [adrianc] Resource-mgmt-utils next steps:
  - No inputs on this topic from participants
- Open floor
  - Issues with helm chart and sriov network operator
    - Currently helm chart with latest sno image does not work
      - PR submitted to fix by ivan https://github.com/k8snetworkplumbingwg/sriov-network-operator/pull/167
    - https://github.com/k8snetworkplumbingwg/sriov-network-operator/issues/147 - maybe it's a related issue
    - Long term we would like to have a CI for it
    - There is a kind action - we may be able to test with GA
      - https://github.com/helm/kind-action
    - There is also a helm testing action
      - https://github.com/helm/chart-testing-action
    - AR: adrianc to create issue on it.
  -

July 13, 2021

Attendees:

Michael OReilly(Intel) - email:michael.oreilly@intel.com, Ivan Kolodiazhnyi (Nvidia), Zenghui Shi (Red Hat), Adrian Chiris (Nvidia), Patryk Strusiewicz-Surmacki (Intel)

Agenda:

- [adrianc] Sriov-network-device-plugin issue 276 next steps ?
  - Support reflecting new **system** state to kubelet and save the dp explicit restart ?
  - Support reflecting new **config** state to kubelet and save the dp explicit restart ?
    - Kubelet allows us to query allocated resources via: https://kubernetes.io/docs/concepts/extend-kubernetes/compute-storage-net/device-plugins/#monitoring-device-plugin-resources
      - Used today by multus
      - Using this is API is feasible and allows calculation of correct number of device for resources which would allow us to handle reflecting the new system state.

- - Sriovdp kubectl plugin
  - What about health check monitoring ? AR: open an issue for healthchecks
  - use-cases:
    - SR-IOV resources are deleted, no workloads on node
    - SR-IOV resources are deleted, with workloads on node
    - SR-IOV resources are added
    - Configmap update
      - Requires additional discussions, there are caveats with changing configMap when workloads that consume sriov device plugin resources scheduled on the node.
  - Agreed that supporting change to system state and change to config map are two different topics that can be addressed in different PRs.
- [Ivan] publish InfiniBand SR-IOV CNI image to GCR
  - https://github.com/k8snetworkplumbingwg/ib-sriov-cni/issues/59
    - ATM no images are built for the project (no GA for it)
    - Proposal to create github action to build images on merges to master, tag/branch creation.
- [zshi] SR-IOV utils package under npwg, next steps?
  - https://github.com/k8snetworkplumbingwg/sriov-cni/issues/187
  - Is backward compatibility an issue ? how do we handle that ?
    - We would like to eventually allow other users to use this
    - How much of the code is actually reusable ?
    - Need to make sure we put only functions that we have confidence their API is stable
    - Would like to Mark a function as stable or not, different folders for stable / unstable per functionality seems an OK approach.
  - First steps: Can start by first decide on a name and create repo and add some basic common functions
    - Sriov-utils ?
    - Resource-mgmt-utils ?
    - Common-utils ?
      - May be too broad
    - Share proposed names with NPWG
      - AR: zenghui to raise internally to doug and see if he can propose to npwg meeting.
- [patryk] SR-IOV Network Operator - add support for DDPProfiles selector
  - The ask is to support ddpProfile selector by sriov-network-operator
    - Previously rejected as sriov-network-operator did not build sriovdp with ddptool as it was not upstream tool for openshift
    - Now that there is a path forward with devlink to query ddp profile via devlink, it is acceptable to add support for it.

June 29, 2021

Attendees: Ivan Kolodiazhnyi (Nvidia), Zenghui Shi (Red Hat), Michael O'Reilly(Intel), Eoghan Russell (Intel), Yury Kulazhenkov (Nvidia)

Agenda:

- [Adrianc] Accelerated bridge CNI - Kernel work (targeted for 5.14)
    - https://patchwork.kernel.org/project/netdevbpf/patch/20210610025814.274607-1-saeed@kernel.org/
    - Maybe Support can be extended for Intel NICs that support switchdev
        - Ask to check internally in Intel if there are plans to support it
- VF LAG, can it be supported by other vendors ?
    - Ask to check internally in Intel if there are plans to support it
    - AR[Michael] - check internally and update group.
- [adrianc] Maintainers for the group's related projects from Intel
    - Michael will apply for maintainer status in NPWG bi-weekly meeting
- [Zenghui] What's the status of upstream CI?
    - [adrianc] still WIP within NVIDIA - will do internal sync and provide update on it

June 15, 2021

Attendees: Martin Kennelly (Intel), Patryk Strusiewicz-Surmacki (Intel), Adrian Chiris(Nvidia), Billy McFall (Red Hat), Eoghan Russell (Intel), Zenghui Shi (Red Hat), Ivan Kolodiazhnyi (Nvidia)
Agenda:

- Reschedule Monday's meeting - moved forward by half and hour. Martin will update invite
    - Required to allow more people to attend
    - No objection on the new time proposal
- SRIOV CNI - New release
    - Resolved - release published
- Accelerated bridge CNI, do we have a proposal?
    - [ac] Already in accepted NPWG. There is a google doc.
        - https://github.com/k8snetworkplumbingwg/accelerated-bridge-cni
        - https://docs.google.com/document/d/1wn5HqckPs3SjQNHubMbo7X0YN2_yTnxK18jL7DTifGk/edit#heading=h.jblz8nq9oszd
    - [ac] waiting on kernel patches to be upstreamed
    - [z] individual driver update?
    - [ac] yes
    - [ac] will we discuss it here?
    - [z] yes
    - Consensus to use this forum to discuss this topic
    - https://www.kernel.org/doc/Documentation/networking/switchdev.txt

- - [ac] certain callbacks needed
    - [z] what other feature do we want to this this cni?
    - [ac] vlan trunking, maybe support for bonding, vf lag
    - [ac] once kernel patches are posted, share them, maybe we can have intel hardware supporting it as well.
    - [mk] AR: look to see if Intel have vf lag and report back
-

June 1, 2021

Attendees: Martin Kennelly (Intel),Patryk Strusiewicz-Surmacki (Intel), Ivan Koldiazhnyi(Nvidia), Adrian Chiris (Nvidia)

Agenda:

- NRI Issue User Defined Injections - injects only one property
  - Propose to fix it.
  - Extended problem description
- DP: Allow to be exported as a lib
  - AC: may hinder refactoring flexibility
  - MK: Does not believe there is critical mass for exporting this. Suggest to pull with hash or copypaste.
  - IK: moving out of DP maybe option - make life easier for maintainers
  - AC: expose some internal packages or push out libs into separate repo
  - Bm: leave it as it for now and reconsider if there is additional ask
  - AC: +1
- https://github.com/k8snetworkplumbingwg/sriov-network-device-plugin/pull/350
  - Ac: currently reviewing.
  - AC: Alternative perhaps to use a VFIndex selector ?
    - Concern that introducing regex support may produce unwanted results
    - Usecase is not clear, are the nodes heterogeneous or homogenous, can udev rules be used for predictable device names ?
- SRIOV CNI - New release https://github.com/k8snetworkplumbingwg/sriov-cni/issues/183
  - AC: get inputs from Zenghui
  - Discuss on mondays main meeting to get Zenghuis input
-

May 18, 2021

Attendees: Zenghui Shi (Red Hat), Adrian Chiris(Nvidia), Patryk Strusiewicz-Surmacki (Intel)

Agenda:

- [AC] SR-IOV Network operator skip MLNX hardware on kernel lockdown
- https://github.com/k8snetworkplumbingwg/sriov-network-operator/pull/103

- ○ Reviewed, general question if its possible to support the use-case if the desired node state (spec) results in a no-op for the NIC.
  - ■ It is possible to do it to enable preconfigured Mellanox NIC with sriov-network-operator in network lockdown. As an addon, need to take into account operator webhook as it currently does not block creating a policy with a higher number of VFs than what is currently supported in the system. (this would need to be blocked in kernel lockdown)

May 04, 2021
Attendees: Adrian Chiris (Nvidia)
Agenda:
- ● [AC] SR-IOV Network operator skip MLNX hardware on kernel lockdown
  - ○ https://github.com/k8snetworkplumbingwg/sriov-network-operator/pull/103
  - ○ Reviewed, general question if its possible to support the use-case if the desired node state (spec) results in a no-op for the NIC.
- ● [AC] Low attendance (just Me) so discussions will defer to the next meeting.

Apr 20, 2021
Attendees: Martin Kennelly (Intel), Zenghui Shi (Red Hat), Adrian Chiris(Nvidia), Billy McFall (Red Hat)
Agenda:
- ● Change meeting tools?
  - ○ Zoom meeting (currently used) is a single user account, cannot make others as host for screen sharing etc.
  - ○ Should we consider moving to other tools?
  - ○ [z] currently using single user account and cannot share presentation privileges.
  - ○ [mk] AR: see if we can setup an account that can share meeting privileges.
    - ■ Update: asking why we cannot enable screensharing on current account. Its possible with free account.
  - ○ [z] could try google meeting or teams
  - ○ [bm] would like if it was fedora friendly

- ● [abdallahyas] discussion about CI workflow
  - ○ Risks with using self hosted machines
    - ■ [abdallah] ensure workflows have a mechanism to limit who can execute
  - ○ Should we proceed with having both jenkins and github workflow
    - ■ Both fine
  - ○ Are triggers going to be used
  - ○ [mk] AR: test if workflows can only be triggered by a list in a repository.
  - ○ [z] we shouldn't limit the tools we use. Should use what we are familiar with. We should be using the same installation tools for deploying k8 - either using KinD or kubeadm or others. This is shareable between all.
  - ○ [abdallah] should all vendors using the KinD scripts in the repo?
  - ○

- GARP support in SRIOV CNI
  - Previous PR only worked for IPV4 not IPV6. Needed to change PR to support IPV6.
  - Patch: https://github.com/k8snetworkplumbingwg/sriov-cni/pull/179
  - old mac is used on i40e driver, mlnx nic fine.
  - E800 mac address is not changed. Old mac persists. Tested with RHEL 8.3.
  - [mk] AR: Try to replicate and escalate if need be.

- Feature gate for SRIOV DP
  - Patryk Requesting reviews
-

Apr 06, 2021

Attendees: Martin Kennelly (Intel), Patryk Strusiewicz-Surmacki (Intel), Adrian Chiris(Nvidia),
Agenda:
- [patryk] - SRIOV DP feature gate:
  - Requesting feedback and what features could be managed by this feature gate?
  - Issue: https://github.com/k8snetworkplumbingwg/sriov-network-device-plugin/issues/321
  - [ac] similar mode to k8.
  - No objection to adding this feature
  - [ac] candidate for this feature may be preferred allocation
  - [patryk] following k8 model. Wondering what features can be used for testing the PR.
  - [ac] by default, all existing features maybe enabled. Needs to think about a first feature for testing.
  - [ac] do you want to submit design and present it or a PR?
  - [patryk] id like to submit PR and design.
- [sriov cni - issue] Add configuration for device flags
  - https://github.com/k8snetworkplumbingwg/sriov-cni/issues/175
  - https://man7.org/linux/man-pages/man7/netdevice.7.html
  - Question about whether there is a pf/vf dependency when setting features
- [NRI - issue] How can we better handle feature control switches in NRI?
  - https://github.com/k8snetworkplumbingwg/network-resources-injector/issues/61
  - [ac] separate package for this? Init would implement logic for init vars.
  - [ac] fine either way with bundling config map update / order of precedence work in one PR.
- [SRIOV - DP - DDP tool inclusion options when considering devlink]
  - [ac] maybe use different dockerfile for ddptool with and without.
  - [mk] AR: can we config the existing dockerfile to toggle inclusion of ddptool or not?
- [ivan] SRIOV Operator: do you want to add helm charts to helm repository?

- - https://github.com/k8snetworkplumbingwg/sriov-network-operator/issues/56
    - [ac] do we know of any alternatives or do we go with the github pages option?
    - Ac will update the issues page for this looking for further feedback.
    - [mk] im ok for adding this.
  - [Adrianc] Abdallah's presentation for vendor CI: https://docs.google.com/presentation/d/1FKAEpbuTkvY636tqr8OYznMHBTWpHTo9mt9zr0N3msc/edit#slide=id.p1
    - Deferred to monday meeting due to low attendance
  -

Mar 23, 2021

Attendees: Abdallah. Y, Zenghui Shi, Ivan
Agenda:
- [Abdallah.Y - Nvidia] Presentation - Proposed Vendor E2E CI workflow
  - https://docs.google.com/presentation/d/1FKAEpbuTkvY636tqr8OYznMHBTWpHTo9mt9zr0N3msc/edit#slide=id.p1
  - Postponed to next meeting

Mar 09, 2021

Attendees: Martin Kennelly (Intel), Adrian Chiris(Nvidia), Zenghui Shi (Red Hat), Billy McFall (Red Hat)
Agenda:
- [martin] SRIOV CNI: vlan trunking implementation for Intel / NVidia
  - https://github.com/k8snetworkplumbingwg/sriov-cni/pull/166
  - What's the community strategy?
  - [a] actual implementation maybe done with SO and code OOT. If there are other features down the road that are vendor specific, should we have it in or outside the project?
  - [z] for a single CNI, it maybe complicated to have plugin arch. It should not contain any intermediate state. Flat arch.
  - [a] for switchdev its out of scope for SRIOV CNI. For legacy mode, vlan trunking is already there. Need OOT driver for both vendors to enable vlan trunking. Not upstreamed.
  - [a] we will never get support for legacy vlan trunking from upstream kernel.
  - [mk] interface should be added but not enable by default
  - [z] not against adding this, but only if arch isn't changed dramatically, or sacrificing existing features arch.
  - [ac] we are for working upstream, if we go for vendor specific stuff, there is no end to it. Ok for supporting api for it. I don't like seeing vendor specific code in the project itself.
  - [ac] plugin code maintained OOT. What does everyone else think of that?
  - [ac] SO can be mounted to known location that SRIOV CNI can consume.
  - [z] once we have this plugin model, do we want to extend this to other projects?

- ○ [ac] NFD (node feature discovery) allow external users to provide logic with hooks. Daemon searches for them in a fixed path and then invokes them.
  - ○ [bm] if we have this in an internal library, would they go build this external binary and place it in known location?
  - ○ [z] will need dummy plugin for testing purposes.
  - ○ Decision: implementation of interface only in sriov cni. Vlan trunking code OOT. Plugin arch.
- ● [z] do we want to add back in vendor dir?
  - ○ It would make building the repos without having to pull down the deps
  - ○ [z] when i tried to backport patches, we do not have connectivity, and cannot pull patches,
  - ○ [z] some projects have vendor folder and some do not
  - ○ [ac] no objections to add in vendor folder
  - ○ Decision: fine to add back in vendor folder
- ● [ac] update on SRIOV Operator: 1.0.0 release.
  - ○ Added image push func. Problem with permissions or token not valid for org. Workflow currently fails.
  - ○ [ac] are we using github workflows or still in travis? Are we ok with moving to github image registry? Bottom line yes. Wait for Operator PR to be merged.
  - ○ [mk] +1 moving away from travis and moving image creation to container registry
  - ○ [z] +1
  - ○ [z] must change manifests to point to new registry
- ●

Feb 23, 2021

Attendees: Martin Kennelly (Intel), Adrian Chiris(Nvidia), Zenghui Shi (Red Hat), Billy McFall (Red Hat)

- ● Agenda
  - ○ [martin] I propose 2 streams of e2e testing for repositories
    - ■ E2e tests which require no special HW
    - ■ E2e tests which require special HW
    - ■ [z] do we do this by project or feature?
    - ■ [ac] do we want to run it on every PR? Or label?
    - ■ [z] and who should be able to add a label?
    - ■ Maintainer can add labels
    - ■ [ac] ACL control for kicking off test runs
    - ■ [z] if we are using label, should maintainer be able to know if a PR does not require HW based testing?
    - ■ [ac] we can implement conditional e2e tests if the CIs become overloaded but first lets leave this up to the maintainer
      - ● HW backed CI can always be triggered by maintainer for start. If it becomes too crowded this can be opted out by maintainer.
    - ■ [z] should we run CI when we merge the PR?

- ■ [z] should we have a flag for running either in virtualized env (github actions vm) or on HW?
- ■ [ac] we may need 2 e2e tests - one for real HW and one without real HW.
- ■ [z] then you need a way to filter these test cases - hardware flag for example. Can possibly filter on test description.
  - ● URL of sample:
- ○ Issue of netns of newly created vfs defaulting to default netns
  - ■ [ac] can our starting point be if the VFs have been enumerated? Another optional, have an agent monitoring test HW and moving it to the correct NS.
  - ■ [z] may need to rework test cases. Exploring second option above - have a backend process monitoring the VFs, then we move this to the test ns. Maybe issue with timing - maybe sync needed between backend process and test cases.
  - ■ [z] maybe not easy to debug issues with 'monitoring' agent. I40e had an issue before with becoming ready, used sleep.
  - ■ [ac] we may need small changes to support e2e tests but it shouldn't block us - not sure if needed ofc - benefits outweigh minor changes
  - ■ [z] the issue will not affect all tests - e.g we do not create a new Operator policy.
  - ■ [ac] problematic tests maybe opt out? Start with what works - then add more test cases to HW setup.
  - ■ [z] I agree. We need to find a way to run these tests on our HW.
- ○ Z: Network Device Operator: Can we manage the smart NIC interface, whether it has a core or fpga? Need generic interface to provision interfaces.
  - ■ For provisioning it maybe bitstream, if smartNIC, it maybe OS.
  - ■ [ac] There is sec issues to consider
  - ■ [bm] use cases where you may trust host and not trust host
  - ■ [z] you may have OOB interface or you have to use the host as a jumphost in order to provision device
  - ■

Feb 09, 2021
Attendees:
- ● Agenda
  - ○ (Zenghui) Network Device Operator
    - ■ https://docs.google.com/document/d/1OnPJeKsxnwWJyEZNpPCq-GokavbEJHJ4eAIsf-z_Tng/edit#
  - ○ [martin] SRIOV Network Operator: Extend NIC selector or custom DP config map?
    - ■ Needs further discussion between everyone
    - ■ Zenghui ok with optional selector
    - ■ AR Martin: Open issue to discuss this

Jan 26, 2021

Attendees: Martin Kennnelly (Intel), Adrian Chiris(Nvidia), Zenghui Shi (Red Hat),

- Agenda
  - SR-IOV CI?
    - Currently NVidia CI tests basic functionality
    - Zenghui: Add e2e test code to its respective repos
    - Zenghui: SRIOV Operator has e2e and conformance tests for Openshift
    - AC: CI needs to be short in duration. Label for e2e tests to ensure it is only triggered before merging for example.
    - Zenghui: Agree - gate patches before merging
    - AC: Need ACL for labels. Need to investigate this.
    - MK: Any security concerns? ++for labels ACL
    - Zenghui next 2 steps:
      - How we want to install k8 env on BM - e.g k8 in docker. May not be suitable for testing because device needs to be inserted into docker container.
      - Try to then run tests in SRIOV Operator
    - AC: Restarting of nodes is problematic
    - Zenghui: reboot sometimes needed for kernel args - but we can create docker env with kernel args already configured
    - Zenghui: Need to decide if tests can be run on one node or multiple nodes.
    - AC: Start with something simple first.
    - Z: kind (k8 in docker) to try and run tests on Single Node cluster
    - AC: unit tests, build image, then e2e
    - Z: How do we attach device to docker container?
    - AC: CI would be in charge of spinning up docker image / VM and attach devices and executes tests.
    - Z: single server, deploy k8 with kind, then attach device, then we can run e2e tests from a project. Deploying SRIOV Operator would discover devices. Check if actual state of node is reflected in SRIOV Operator.
    - Z: Currently e2e test can detect if policy is applied
    - Martin: Open issue to track this discussion in SRIOV Network Operator

  - (Zenghui) Network Device Operator
    - https://docs.google.com/document/d/1OnPJeKsxnwWJyEZNpPCq-Gokav bEJHJ4eAIsf-z_Tng/edit#
  - (adrianc) SR-IOV Network Operator Upstream K8s CI ?
    - https://github.com/k8snetworkplumbingwg/sriov-network-operator/tree/master/test
    - See first topic of this meeting.

Jan 12, 2021

Attendees: Martin Kennelly (intel), Federico (RedHat), Peng Liu (RedHat), Zenghui Shi (RedHat)

- Agenda
  - (martink) SR-IOV Operator plugin interface
    - URL: https://github.com/openshift/sriov-network-operator/tree/master/pkg/plugins
    - Discussed options but we will need to talk about this again when more stakeholders are available.
    - Allow user to define configMap for device plugin, which can include selectors that may not be supported by Operator API
    - Have a generic field in Operator policy API for passing vendor specific configuration to vendor plugin, packages or tools that are specific to vendor can be included in vendor plugin.
  - (Zenghui) Network Device Operator (Not discussed)
    - https://docs.google.com/document/d/1OnPJeKsxnwWJyEZNpPCq-GokavbEJHJ4eAIsf-z_Tng/edit#