

OPI API Foundations

February 2024



Context

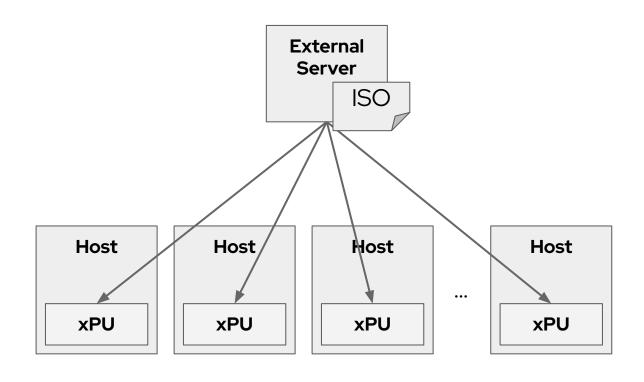
- OPI-API Contributions have thus far been focused on high-level use cases
- Our take-away from working with multiple vendors is:
 - The use-cases try to be self-contained
 - Yet too many details are left unresolved
 - Cannot reach any consensus using this approach
- Instead we need to focus on these foundational issues
 - Provisioning
 - Basic networking
 - Running workloads
- Hard to work on higher level APIs until these foundations are agreed



Provisioning

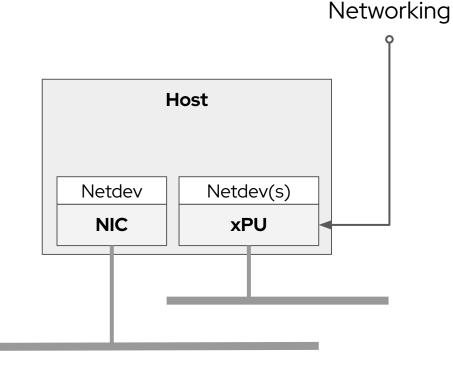
- We can't have a lab person go in and type things into consoles
- We need to use generic technologies
- We don't care about secure stuff just yet
- We have an iso, and it needs to be able to boot it
- It needs to be possible without an OS on the host

This intersects with the OPI Provisioning & Life Cycle workgroup



Use it as a basic networking device

- Assume the DPU isn't the only NIC in the host
 - since this is simpler for the DPU to handle
- Not using the DPU to its full potential yet
 - It's hard enough as it is without also trying to enable acceleration features
- Basic networking == basic underlay configuration



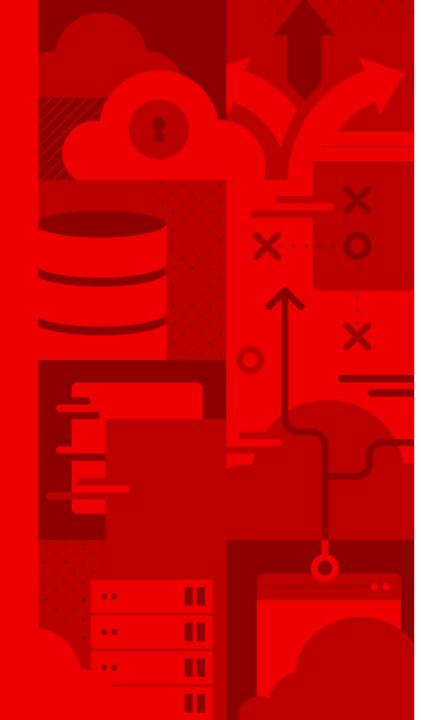


Configure Basic

Allow to run an opaque workload

- The CPU on the DPU is what makes the DPU something more than a NIC
- We need to be able to run something on the CPU (don't know or care what it is)
- It may be slow, but that's fine for now (acceleration comes later)
- Focus on orchestration, networking





Thank you

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