SONiC
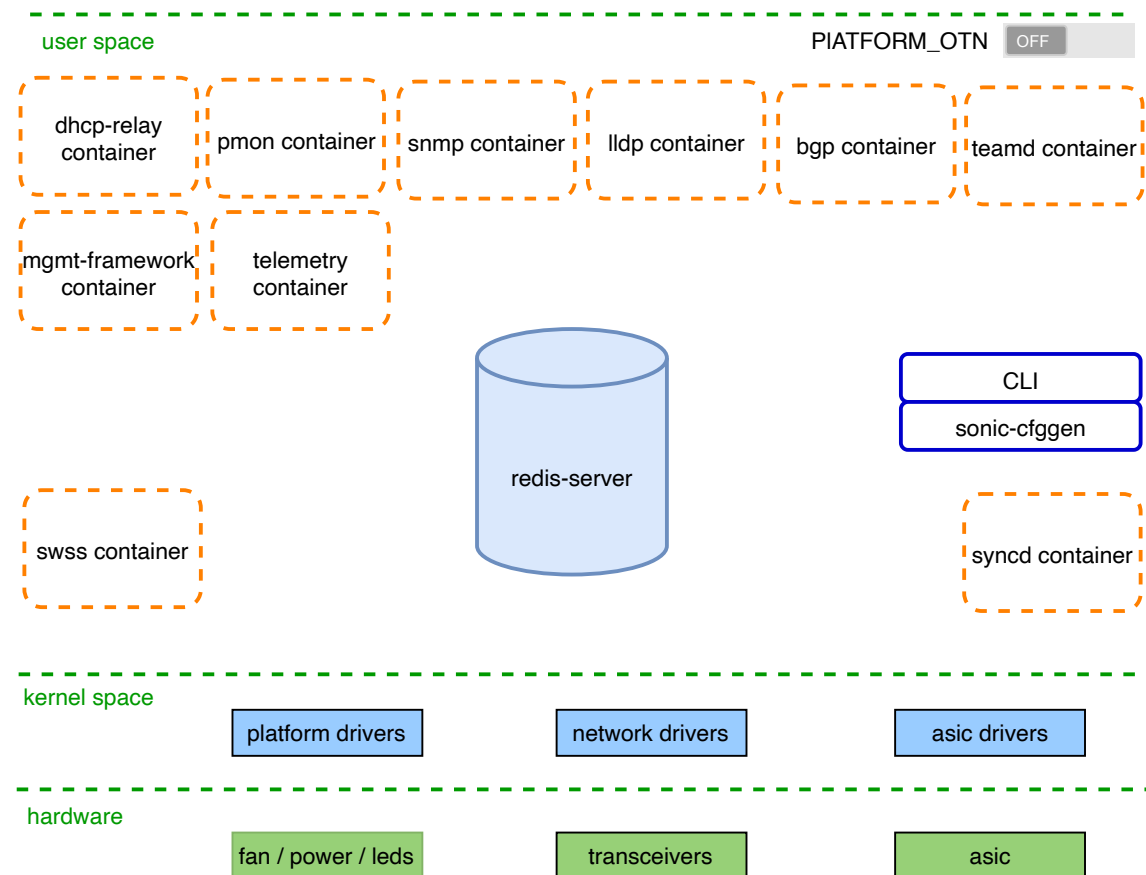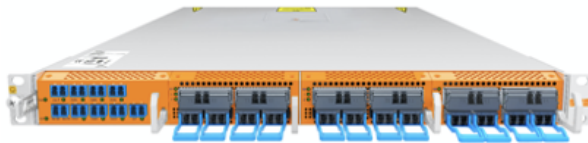
Switch/Router/...

Optical Transport Network

```
make configure PLATFORM=[ASIC_VENDOR] PLATFORM_ARCH=arm64

ASIC_VENDOR = [barefoot, broadcom, marvell, mellanox, ..., vs]

make target/sonic-ASIC_VENDOR.bin


make configure PLATFORM=[OTN_VENDOR] PLATFORM_ARCH=arm64

OTN_VENDOR = [ot-accelink, ot-molex, ot-infinera, ot-vs]

make target/sonic-OTN_VENDOR.bin
```
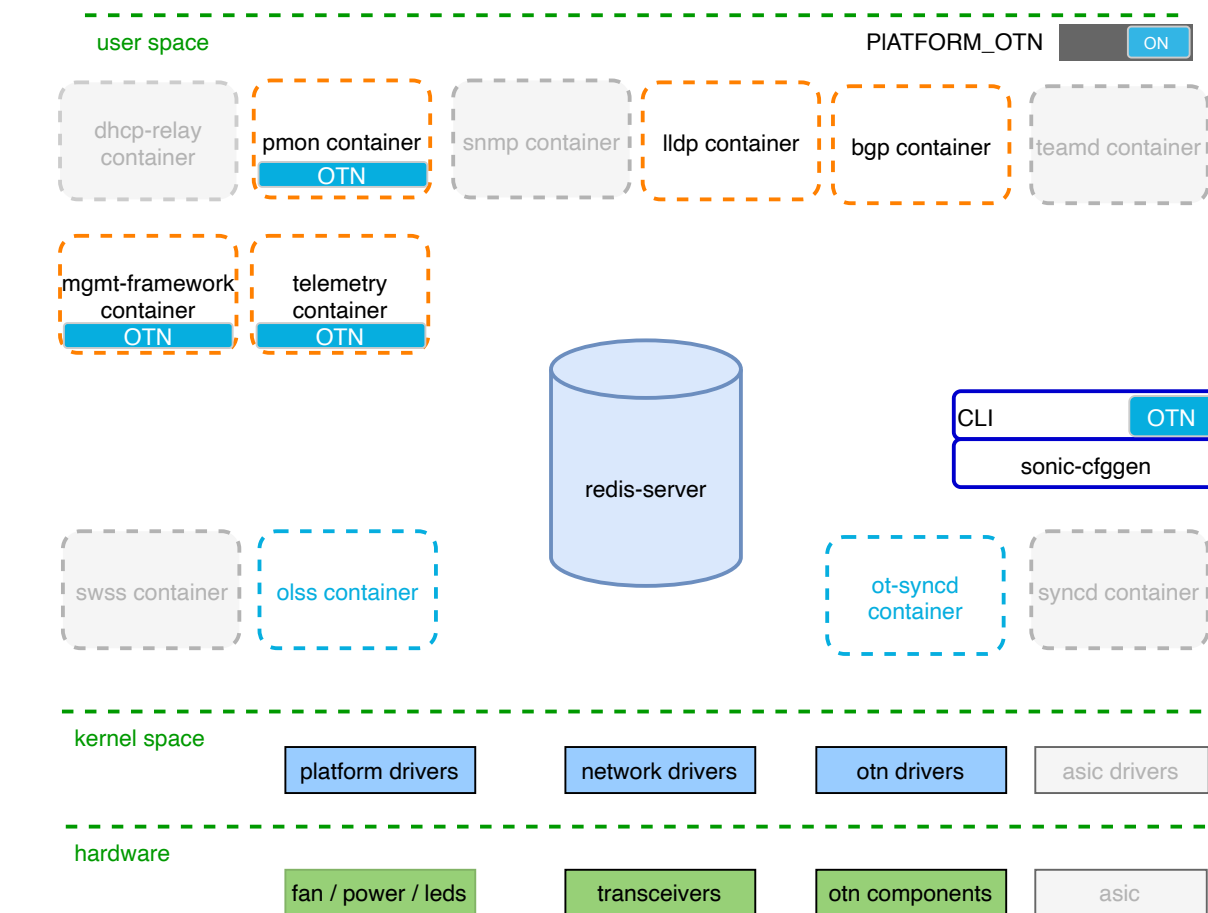
user space

PlATFORM_OTN OFF

| dhcp-relay container | pmon container | snmp container | lldp container | bgp container | teamd container |

| mgmt-framework container | telemetry container |

CLI

sonic-cfggen

redis-server

swss container

syncd container

```
make configure PLATFORM=[ASIC_VENDOR]

feature toggle    PlATFORM_OTN  OFF
```

- All OTN feature are disabled

- Original SONiC for Switch and Router

kernel space

| platform drivers | network drivers | asic drivers |

hardware

| fan / power / leds | transceivers | asic |

user space

PlATFORM_OTN ON

dhcp-relay container

pmon container
OTN

snmp container

lldp container

bgp container

teamd container

mgmt-framework container
OTN

telemetry container
OTN

redis-server

CLI OTN
sonic-cfggen

swss container

olss container

ot-syncd container

syncd container

kernel space

platform drivers | network drivers | otn drivers | asic drivers

hardware

fan / power / leds | transceivers | otn components | asic

```
make configure PLATFORM=[OTN_VENDOR]

feature toggle   PlATFORM_OTN   ON
```

- All OTN features and enhancement are enabled
- Some SONiC IP features are disabled

user space

PlATFORM_OTN ON

dhcp-relay container

snmp container

teamd container

redis-server

swss container

syncd container

kernel space

asic drivers

hardware
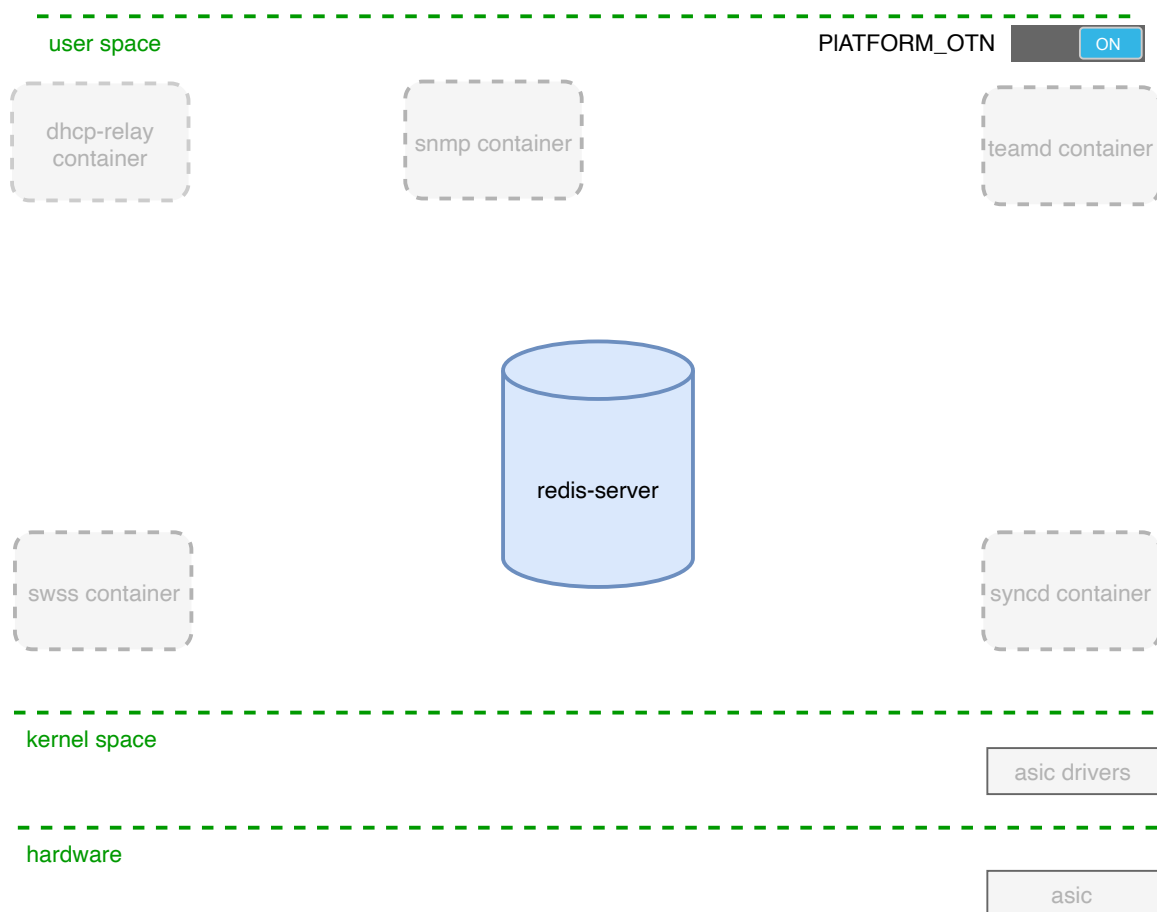
asic

```
feature toggle   PlATFORM_OTN   ON
```

Disabled Features:

- dhcp-relay container
- snmp containers
- teamd container
- swss container
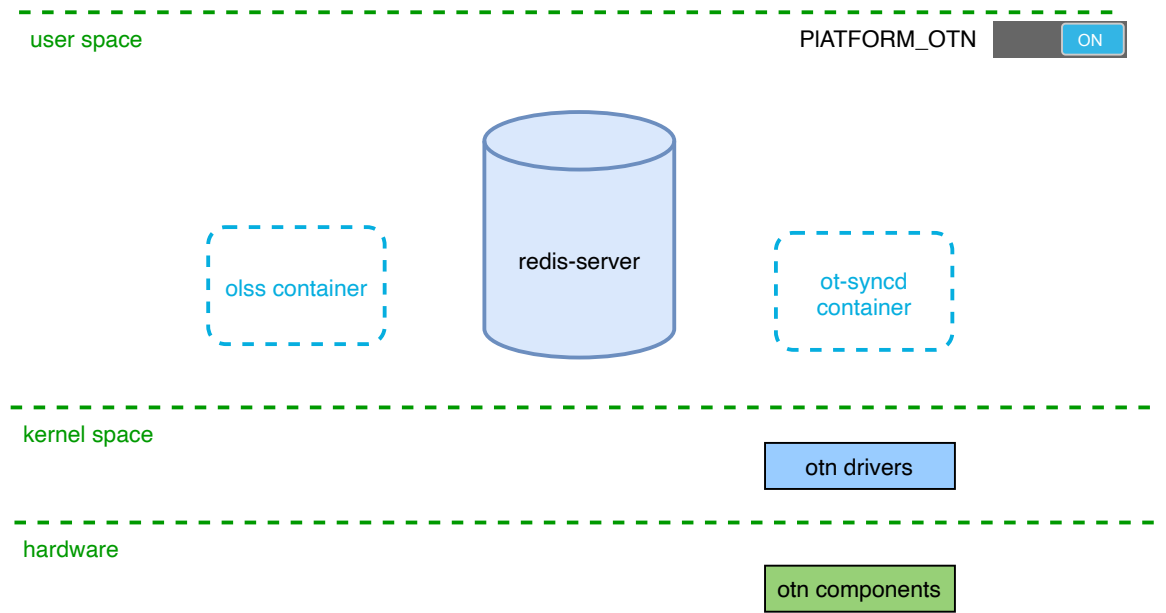- syncd container
- asic drivers

Top diagram

user space

PIATFORM_OTN [ON]

pmon container
OTN

lldp container

bgp container

mgmt-framework container
OTN

telemetry container
OTN

redis-server

CLI [OTN]
sonic-cfggen

kernel space

platform drivers   network drivers   otn drivers

hardware

fan / power / leds   transceivers   otn components

---
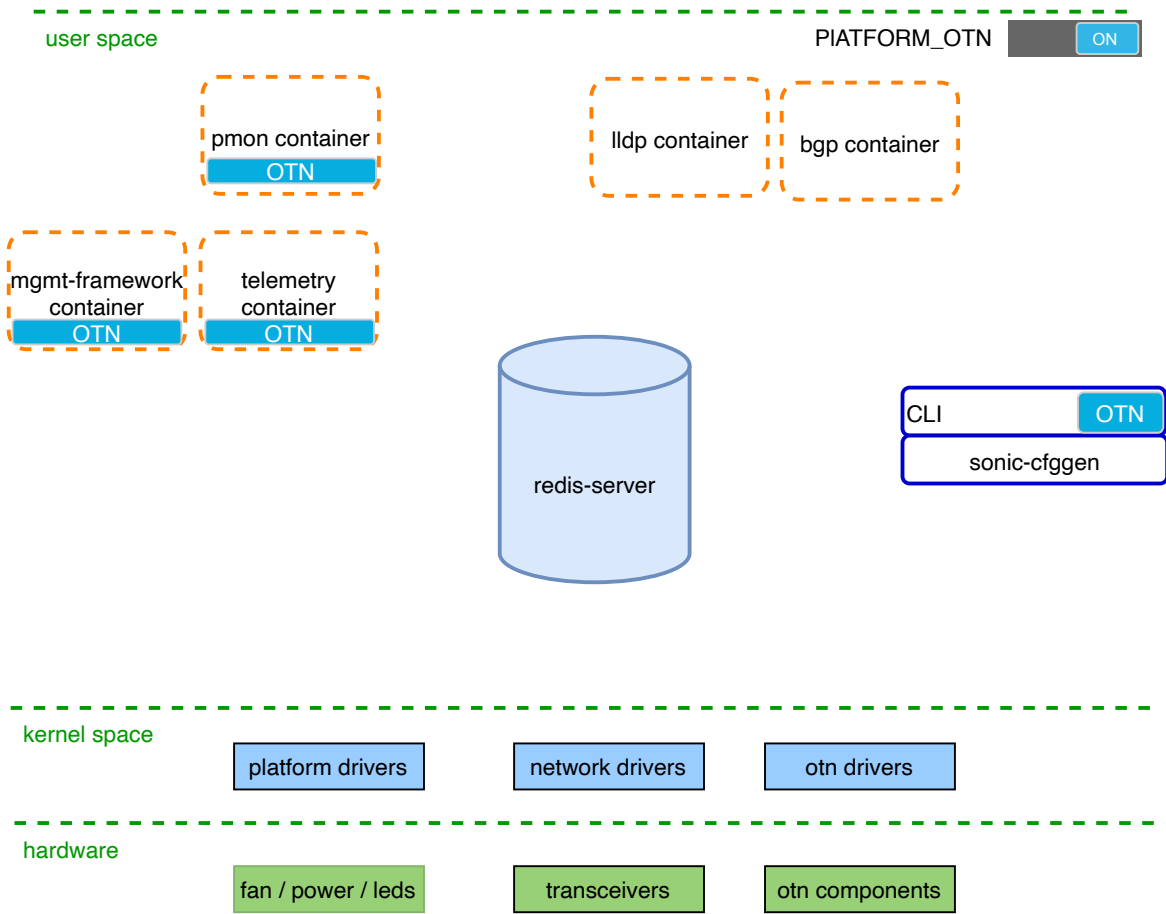
feature toggle   PIATFORM_OTN [ON]

Features with OTN plug-in enhancement:

- pmon containers
- mgmt-framework container
- telemetry container
- CLI python package

Kept SONiC features

- bgp container
- lldp container
- sonic-cgtgen tools
- ...

Bottom diagram

user space

PIATFORM_OTN [ON]

olss container

redis-server

ot-syncd container

kernel space

otn drivers

hardware

otn components

---

feature toggle   PIATFORM_OTN [ON]

New OTN services:

- olss (optical linecard state service) container
- ot-syncd (optical transport syncd) container