

draft-lindblad-
tlm-philatelist

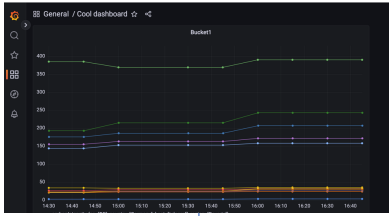
Telemetry collection framework suitable for existing equipment

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Core Principles

- Describe the Collected Data using YANG
- Time Series Database (TSDB) Storage
- Work with Existing Equipment (including non-YANG systems)
- Allow new Systems to be helpful (implement poweff.yang)
- Telemetry collection Roles: Providers, Collectors, Aggregators, Processors
- Add YANG and Metadata where missing, and keep the Metadata with the Data
- Transparency: Solid YANG to Time Series Database (TSDB) Mapping



Philatelist, Telemetry Framework

AGGREGATOR role (controller)

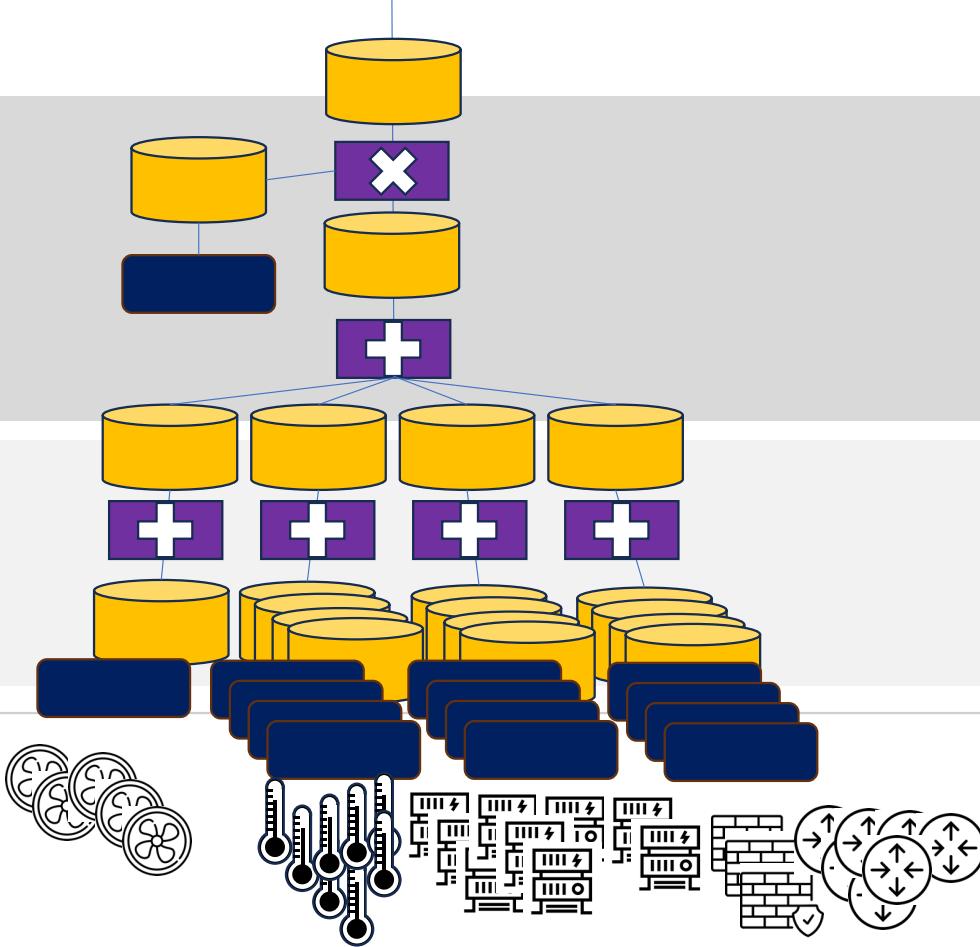
- Transform and aggregate data flows
- Deliver TSDB buckets with traceable, vendor agnostic, well defined data

COLLECTOR role (controller)

- Collect from all kinds of sources
- Add YANG + Metadata as needed

PROVIDER role (device)

- Devices may not be aware
- Scattered Sensors already abundant



Philatelist *working with* Poweff

Work with what you have today

Device Sensor & Control list

- Point to existing sensors
- Provide missing metadata
- Group related sensors into named "dashboards"
- List may be provided off-box

Future, Standard Dashboards

1. Report total device power
2. [1] + power per subsystem
3. [2] + power control per subsystem
4. [3] + power per "service" i.e. delivered value
5. [4] + power control per service

Philatelist *working with* Time Series Databases

Original YANG Instance-Identifier:

`/interfaces/interface[name='eth0']/statistics/in-unicast-pkts`

- Metric: `interfaces_interface_statistics_in_unicast_pkts`
- Value: 5432100
- Labels:
 - `host = router-01`
 - `interfaces_interface_name = eth0`

What Next

Proposed GREEN WG tasks:

- Need to Agree on What and How to Measure
- Need to Agree on What and How to Aggregate
- Let's bring in the target audience, i.e. folks from SBTi, GHGP, etc.

Proposed GREEN WG adoption:

- draft-lindblad-tlm-philatelist
- draft-opsawg-poweff
- draft-kll-yang-label-tsdb-00