

Prometheus Agent vs. OpenTelemetry Collector

A look at scrape & forward use cases

Daniel Mohr
Engineering Manager, Observability

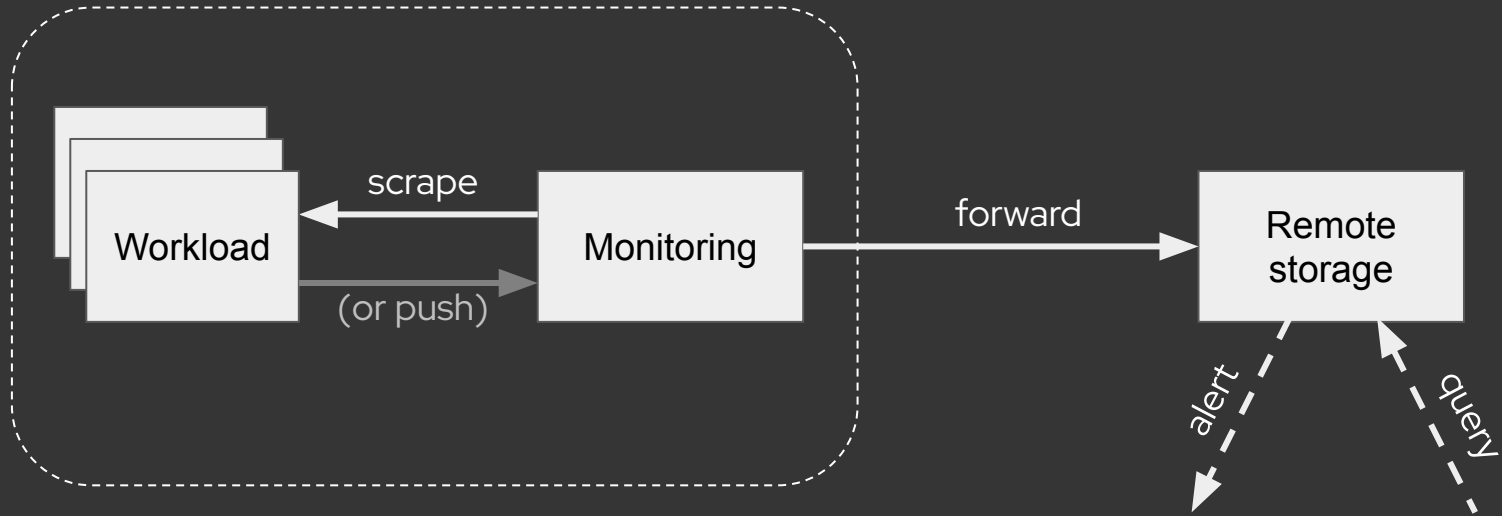
PromCon EU 2023

Scrape & Forward

Small footprint deployments, like workloads running on edge devices, require a different monitoring architecture:

- ▶ Strict resource limits (CPU, memory, network)
- ▶ No local persistent storage
- ▶ No local querying and alerting
- ▶ No inbound network connections (no pull possible)

Architecture



Setup

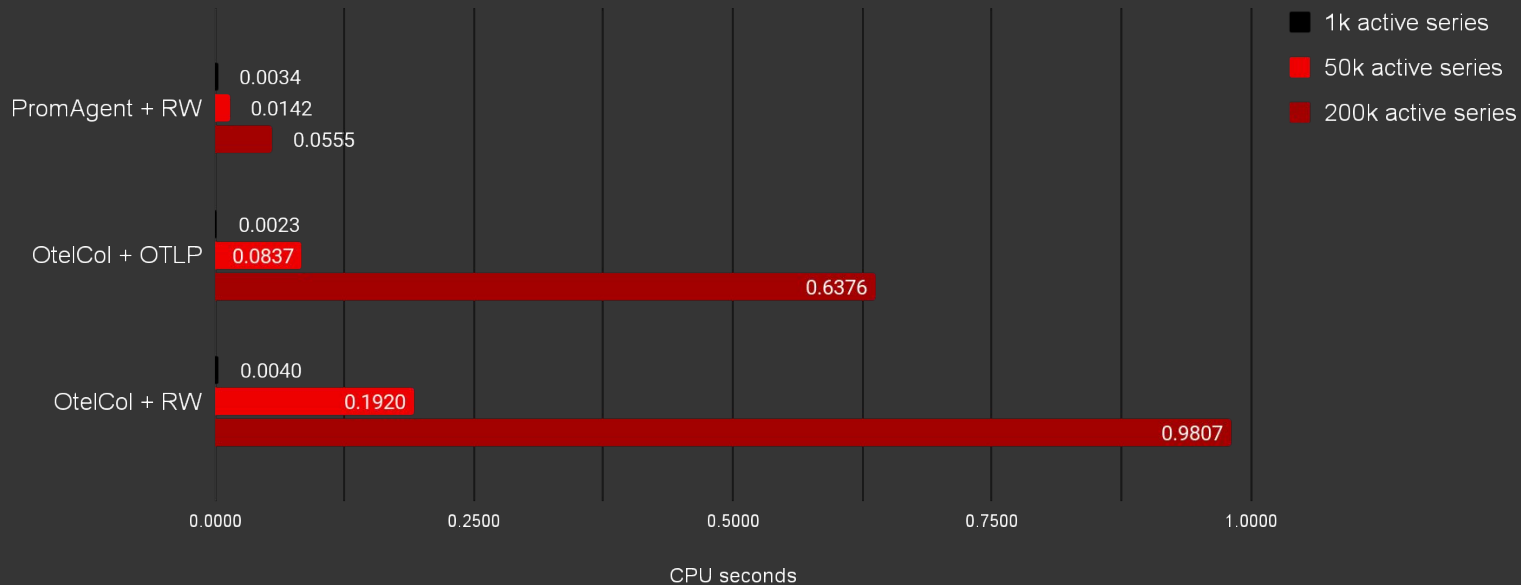
- ▶ github.com/prometheus-community/avalanche as metrics producer
- ▶ **Prometheus** as remote storage
- ▶ Three scenarios
 1. **Prometheus Agent + remote write**
 2. **OTel collector + OTLP**
 3. **OTel collector + remote write**



[github.com/danielmOhr/
edge-metrics-measurements](https://github.com/danielmOhr/edge-metrics-measurements)

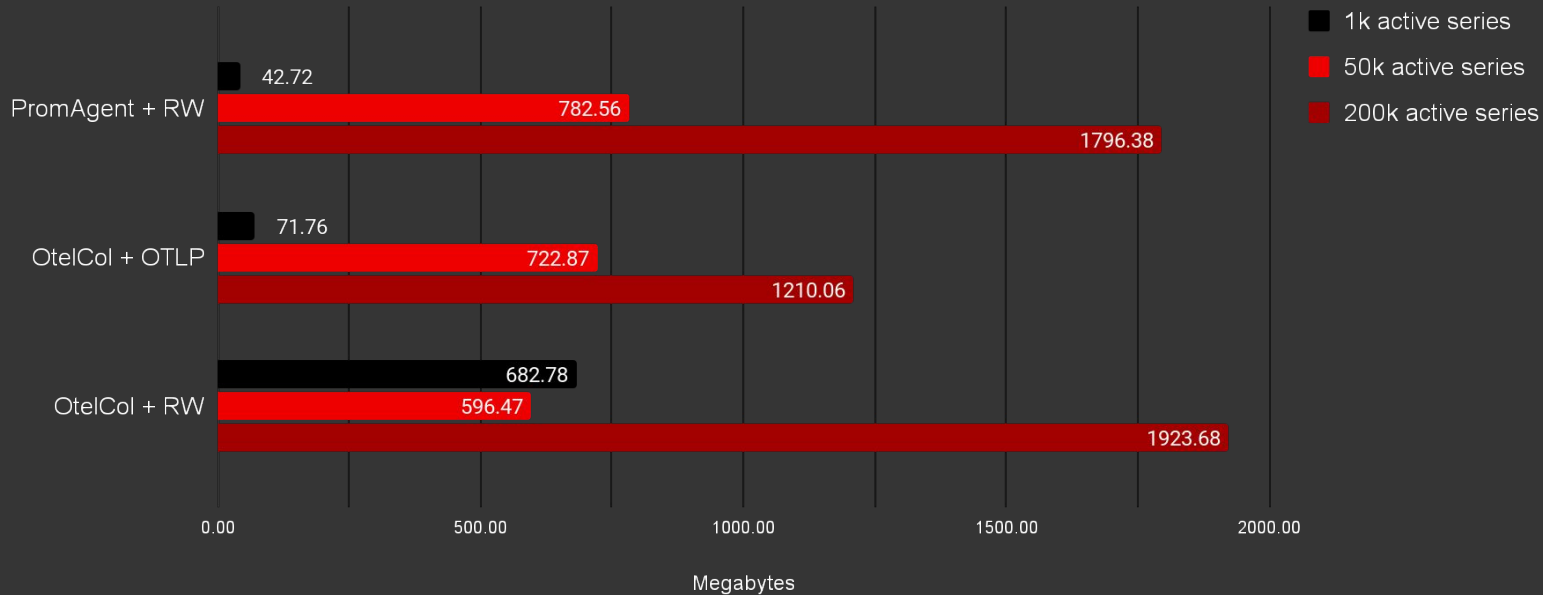
CPU

Average over 5 min



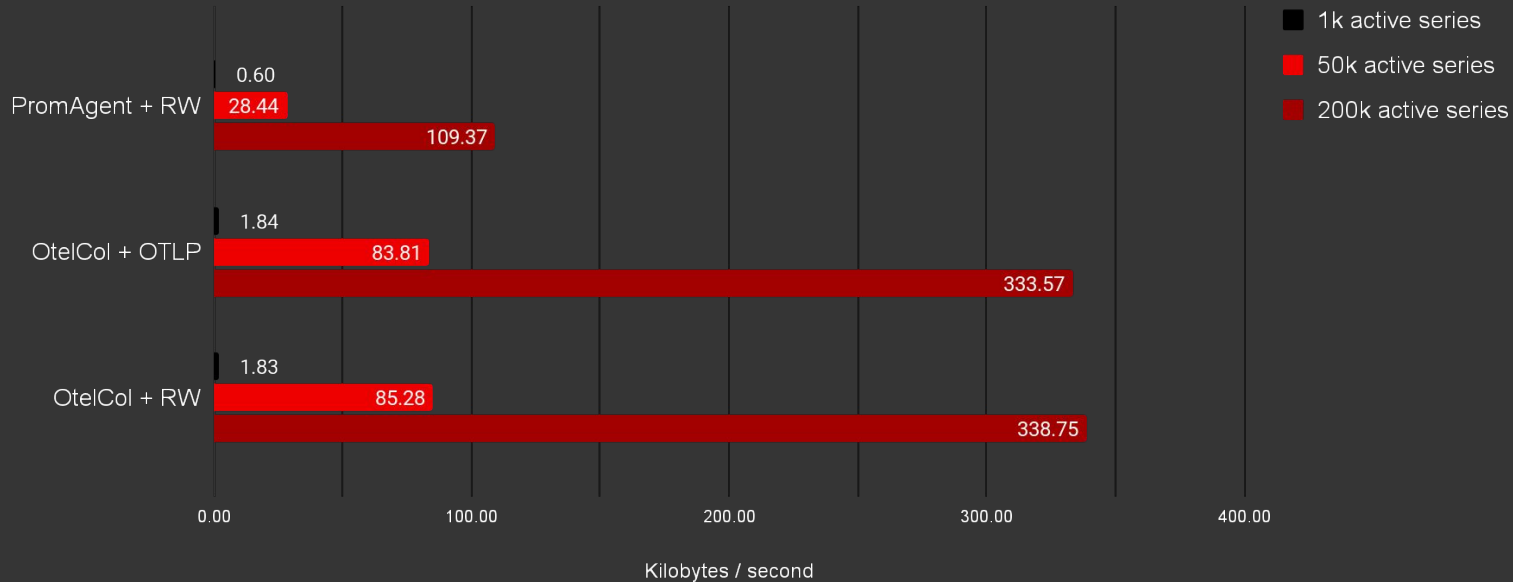
Memory

Average over 5 min



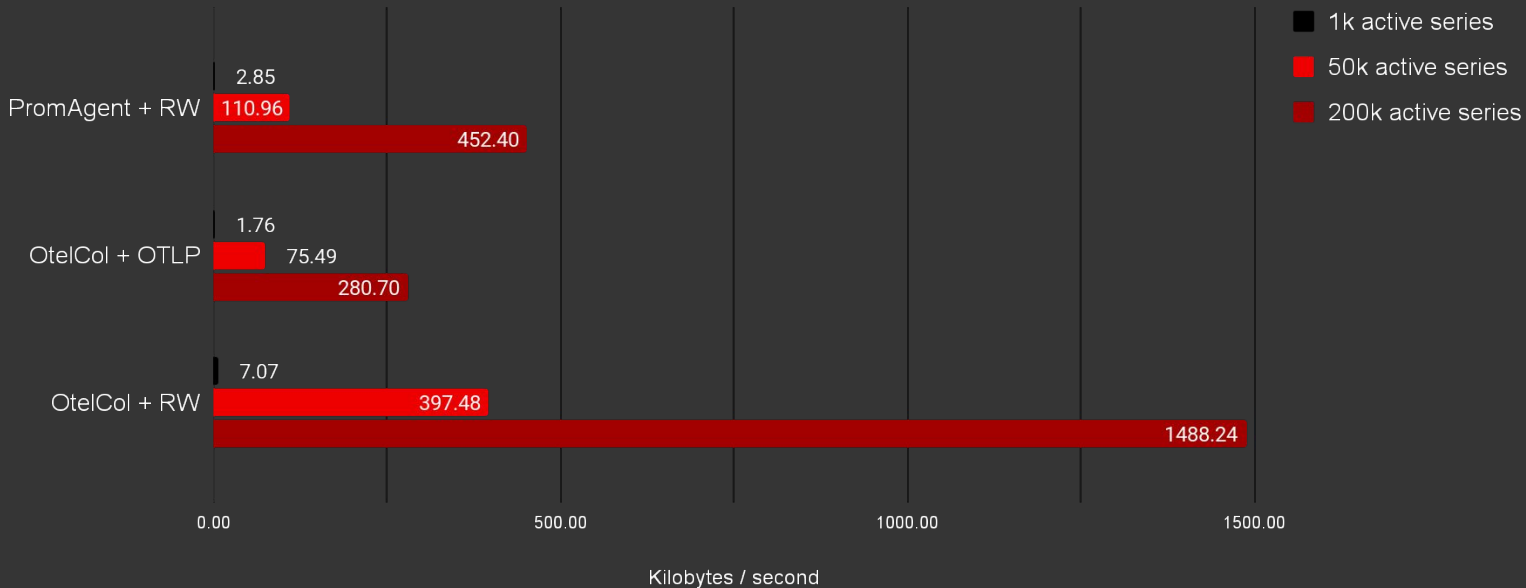
Net receive

Average over 5 min



Net transmit

Average over 5 min



Thank you!

GitHub: danielmOhr

LinkedIn: daniel-mohr-890a9b72

Twitter: dmOhr



linkedin.com/company/red-hat



youtube.com/user/RedHatVideos



facebook.com/redhatinc



twitter.com/RedHat



Red Hat