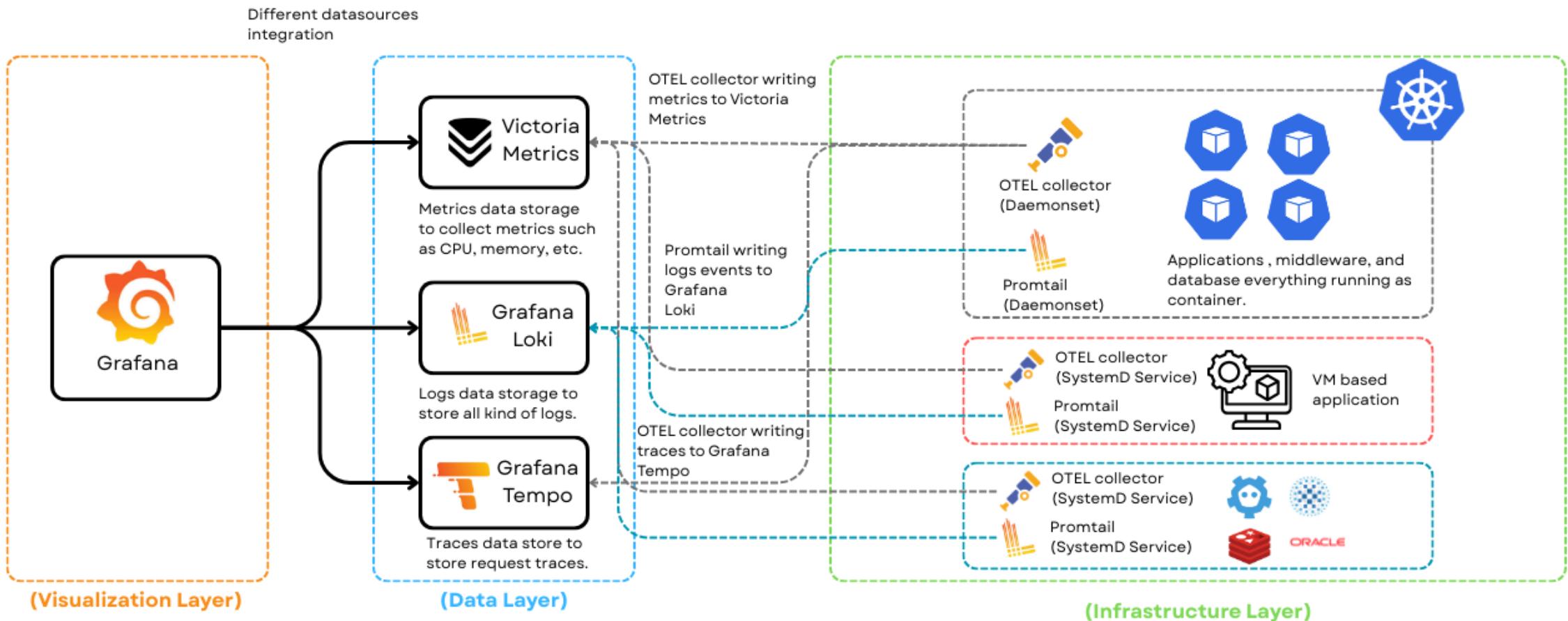
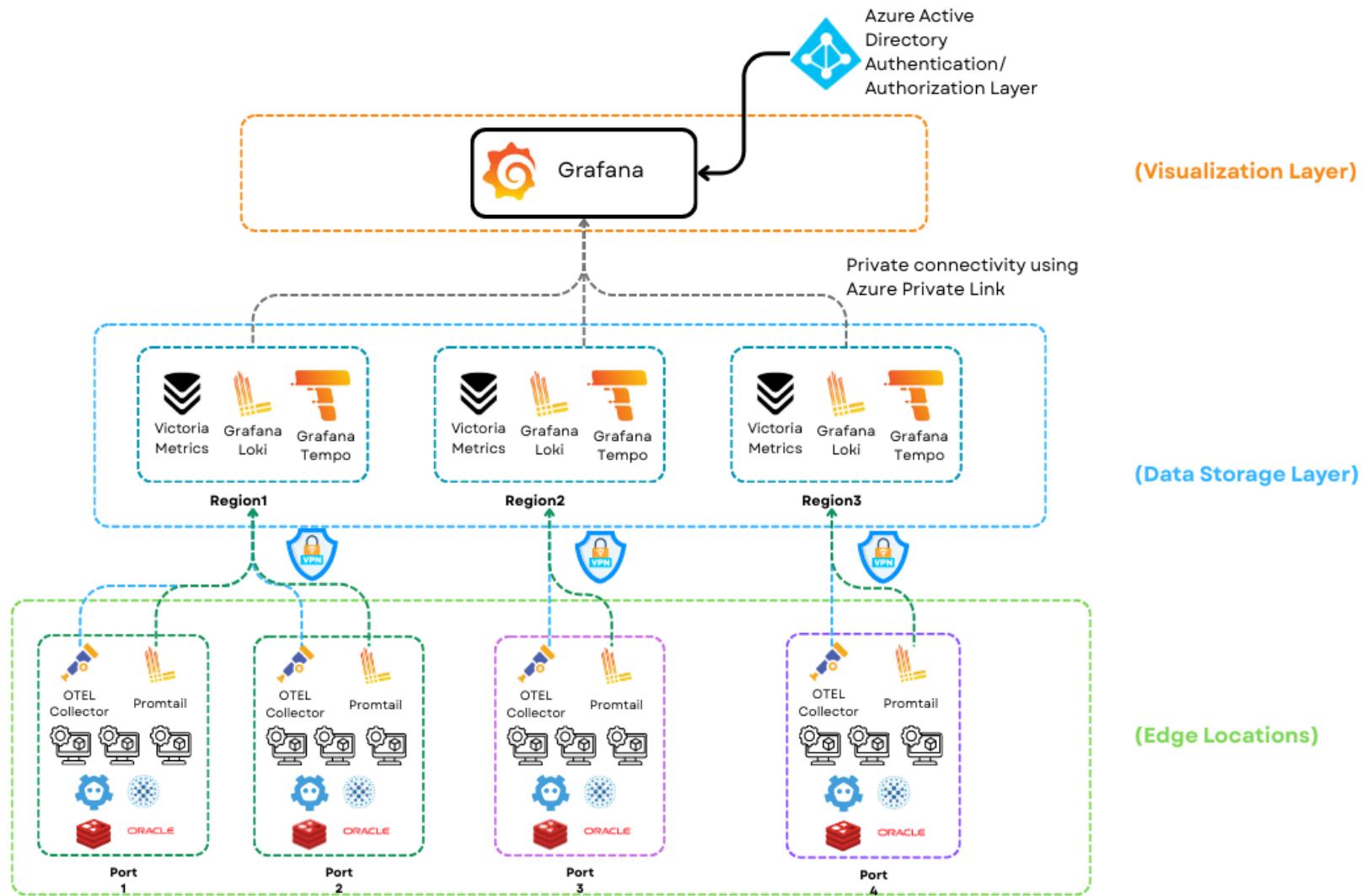


# DP World O11y Design

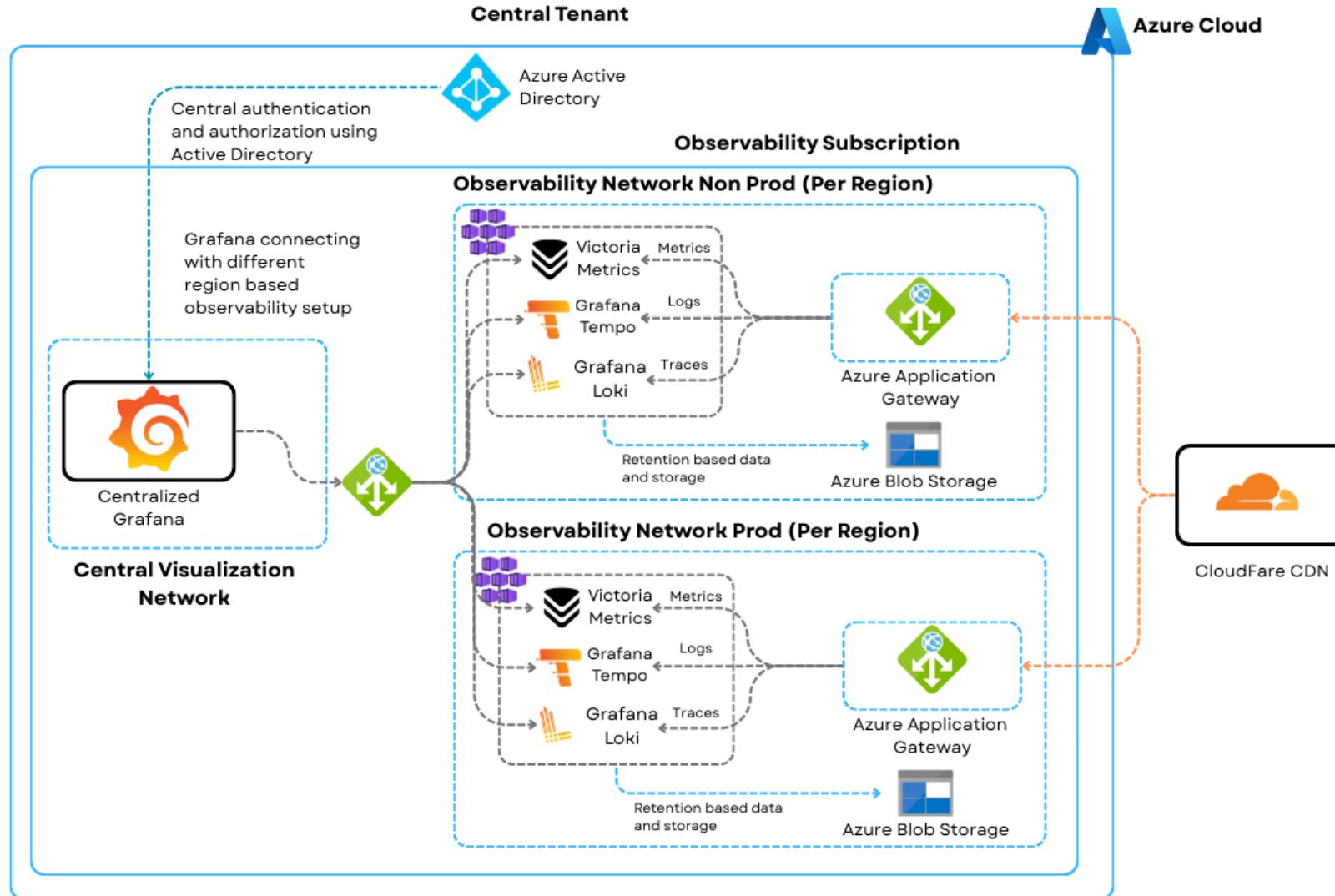
# O11y Block Diagram



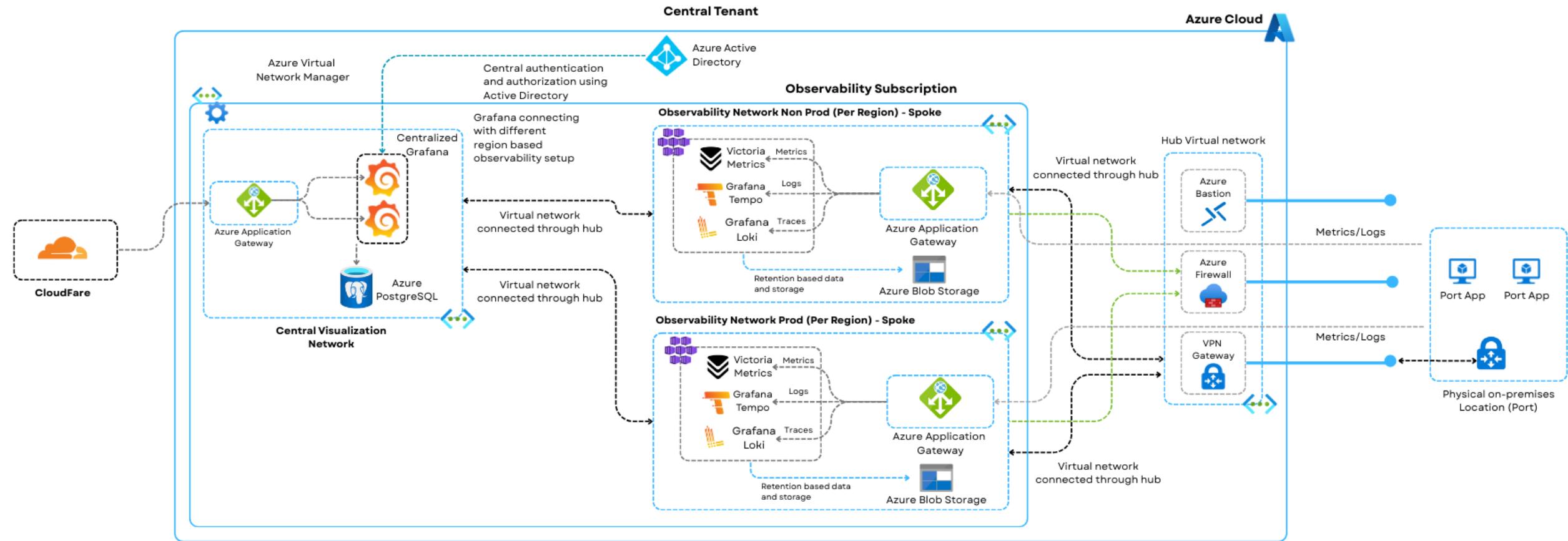
# DP World O11y Block Diagram



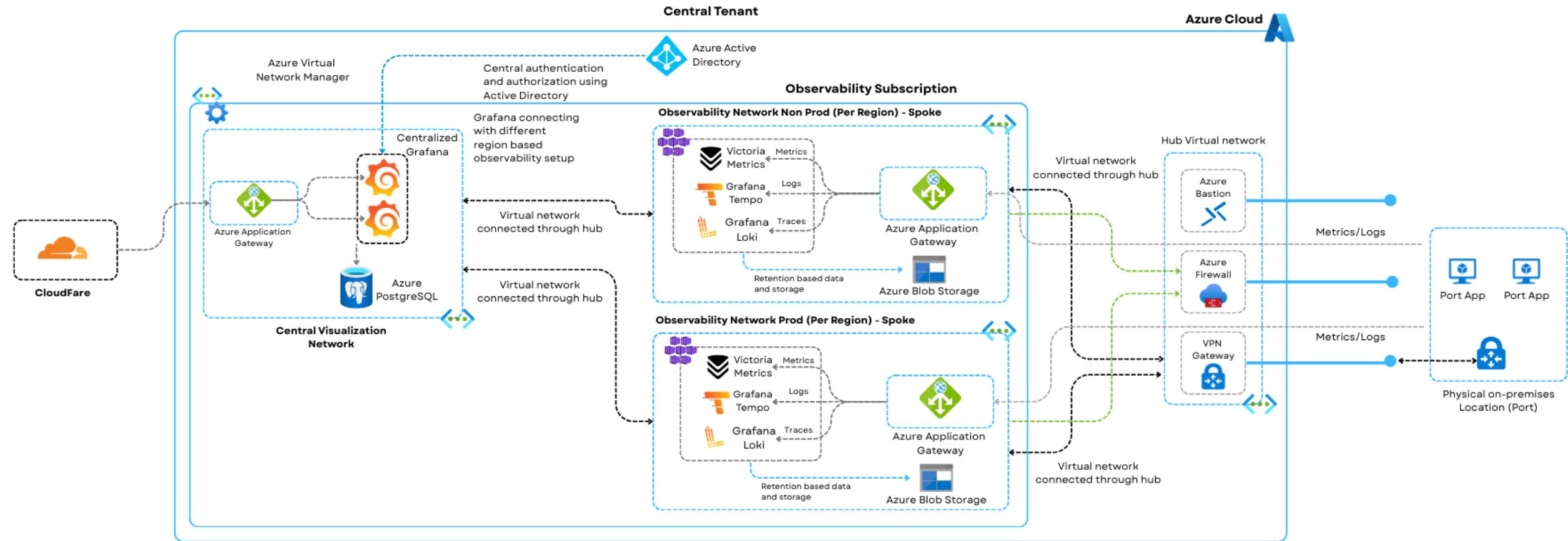
# O11y Azure Infra Diagram



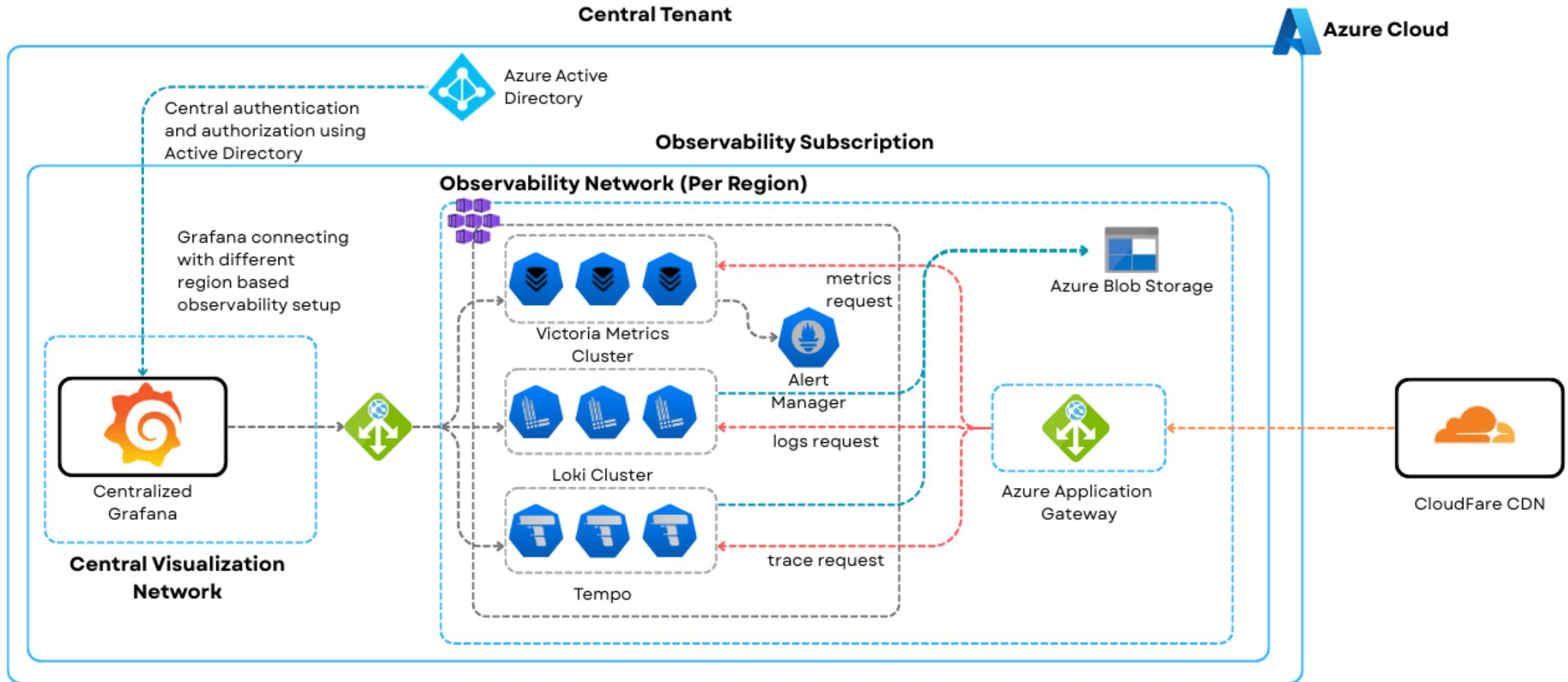
# O11y Azure Infra Diagram



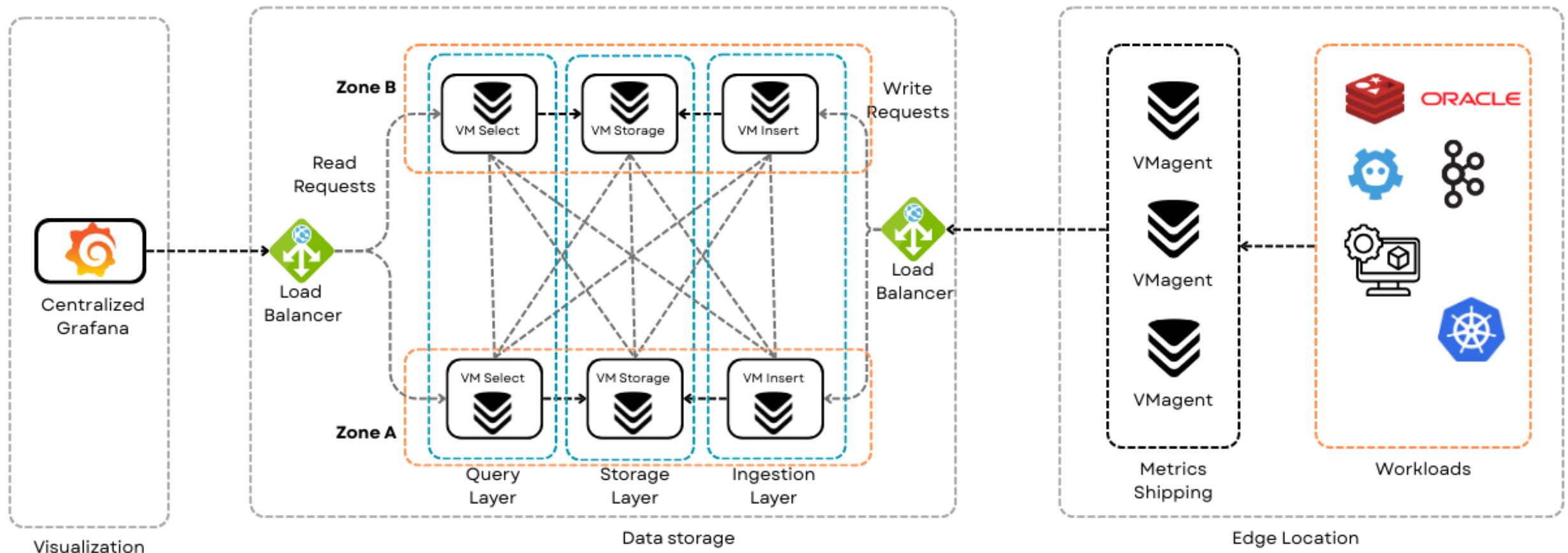
# O11y Azure Infra Diagram



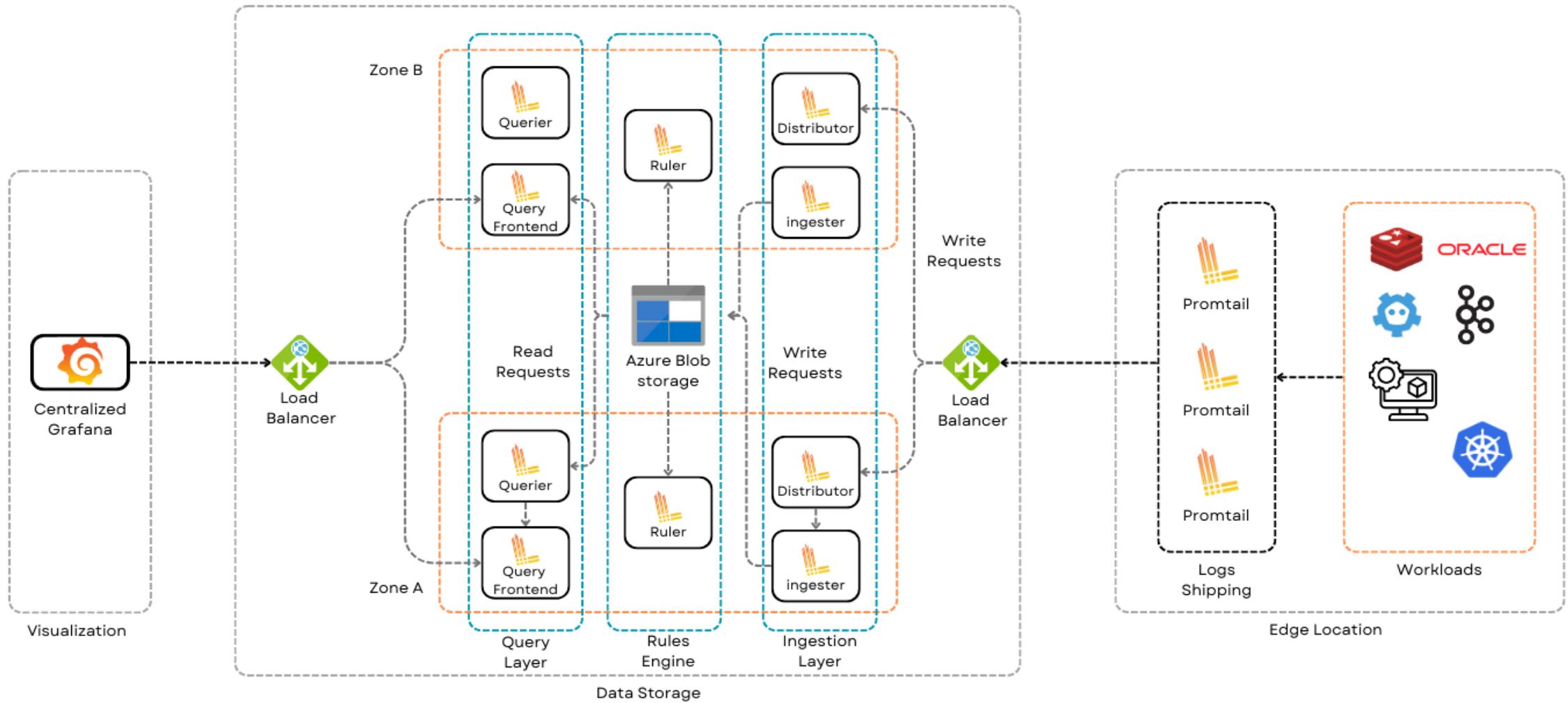
# O11y Azure Infra Diagram | Per Region



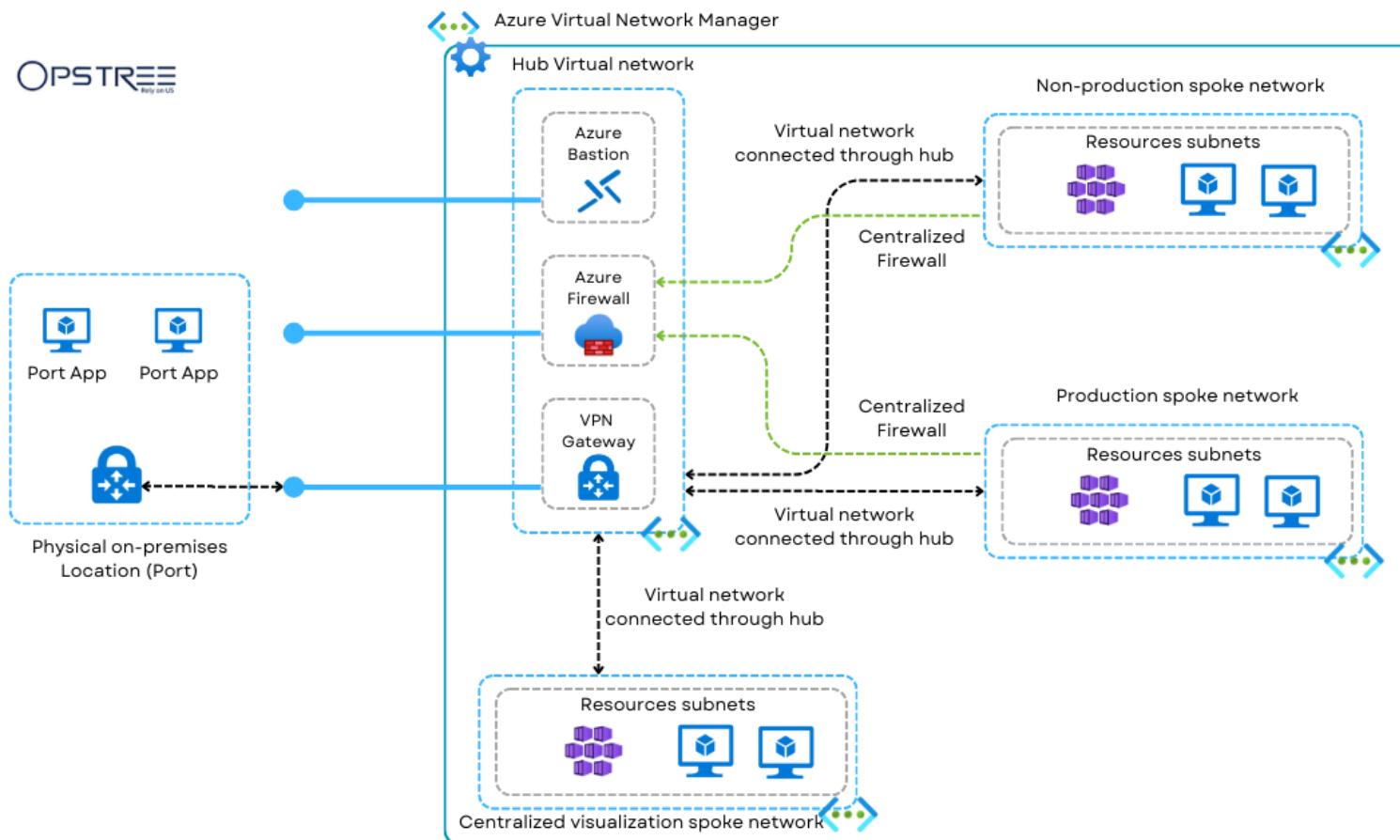
# Victoria Metrics HA Setup



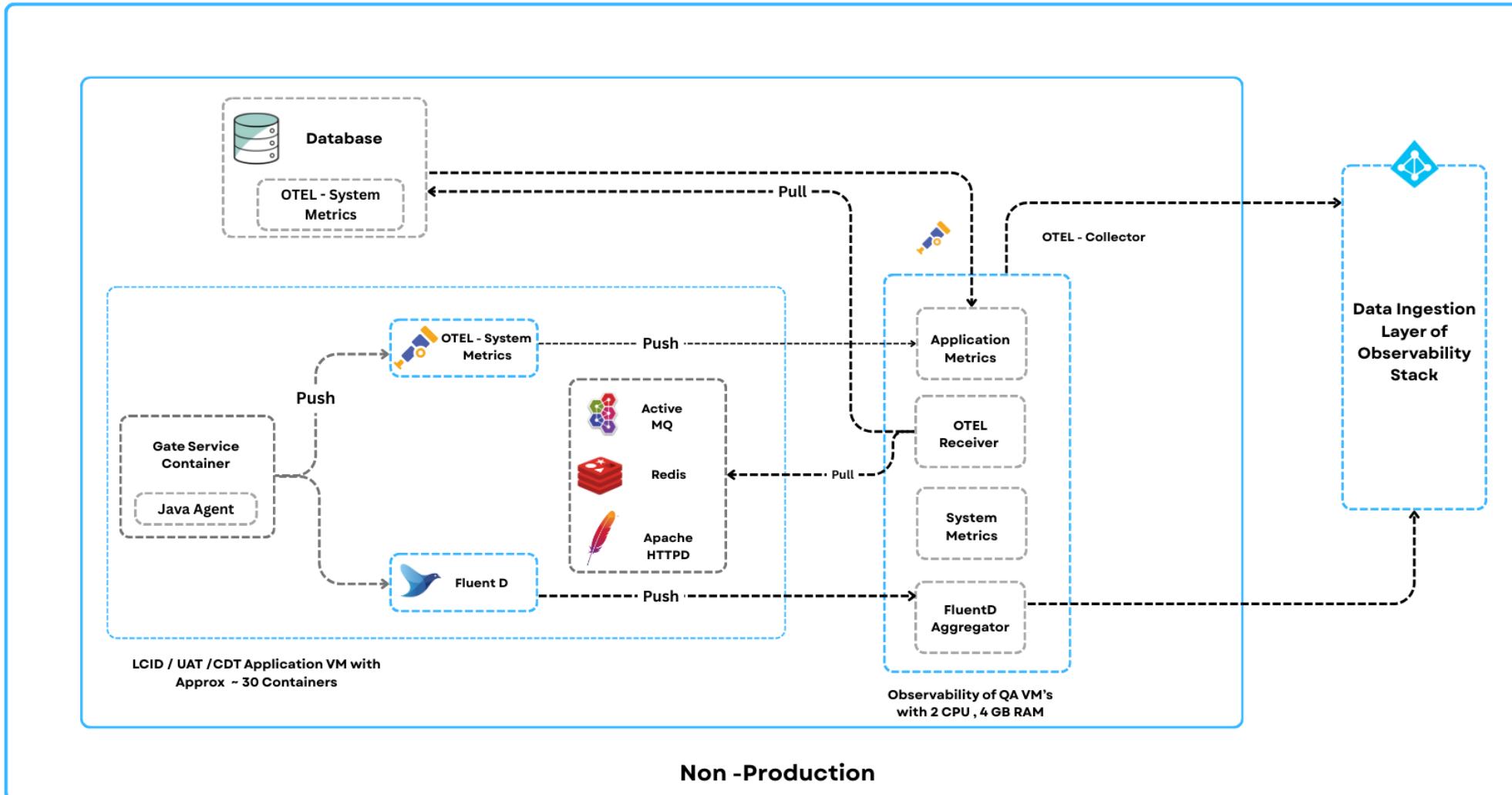
# Loki HA Setup



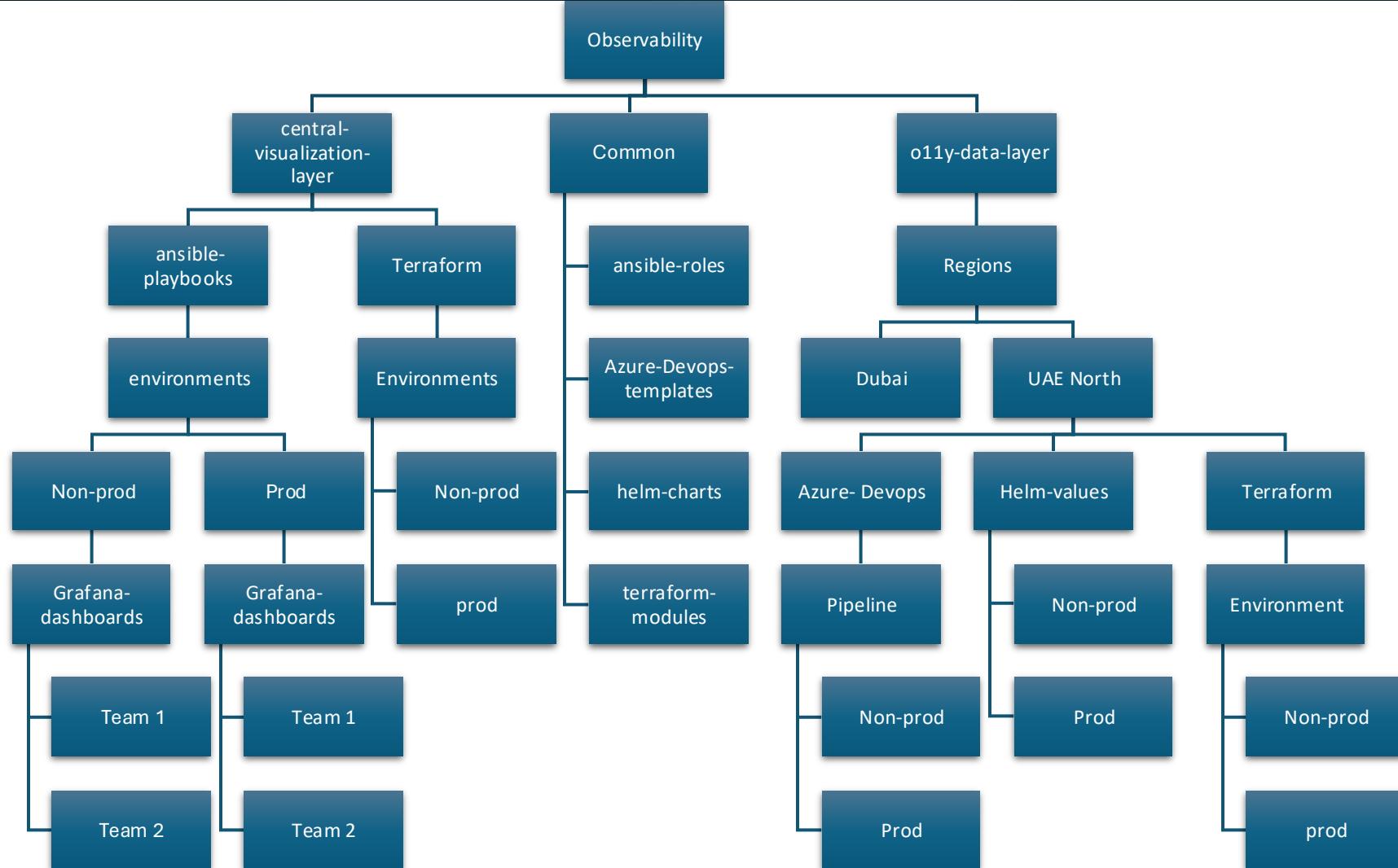
# Azure Hub and Spoke Model



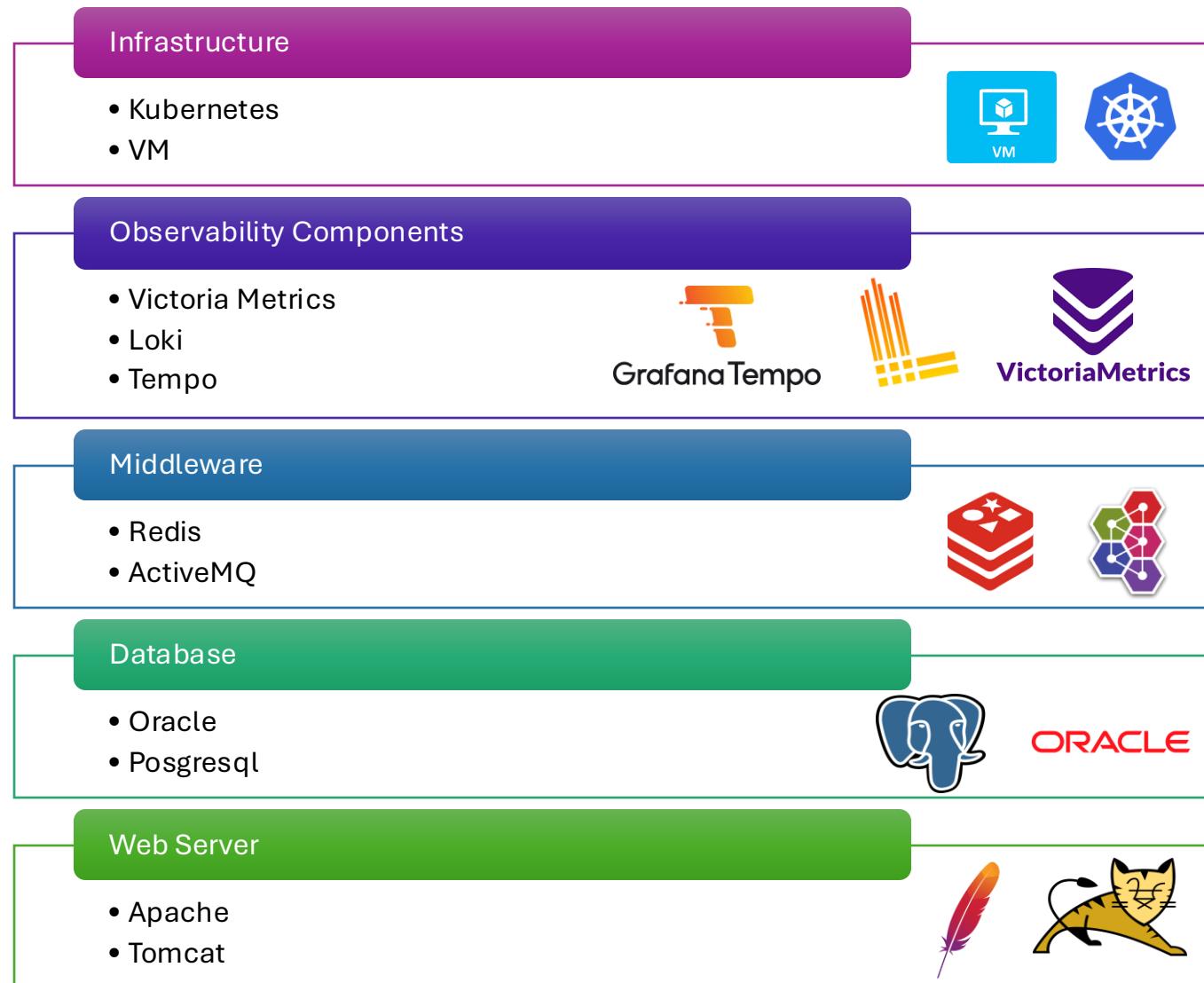
# Port High Level Design



# Folder Structure



# Observability Coverage



# **INFRASTRUCTURE DASHBOARD**

# VM Dashboard

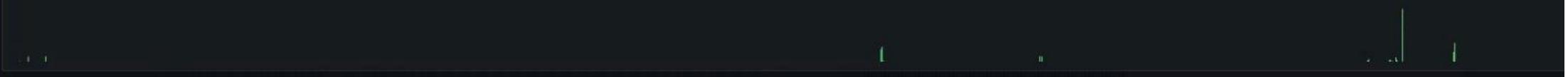


# K8's Dashboard



# Log Explorer Dashboard

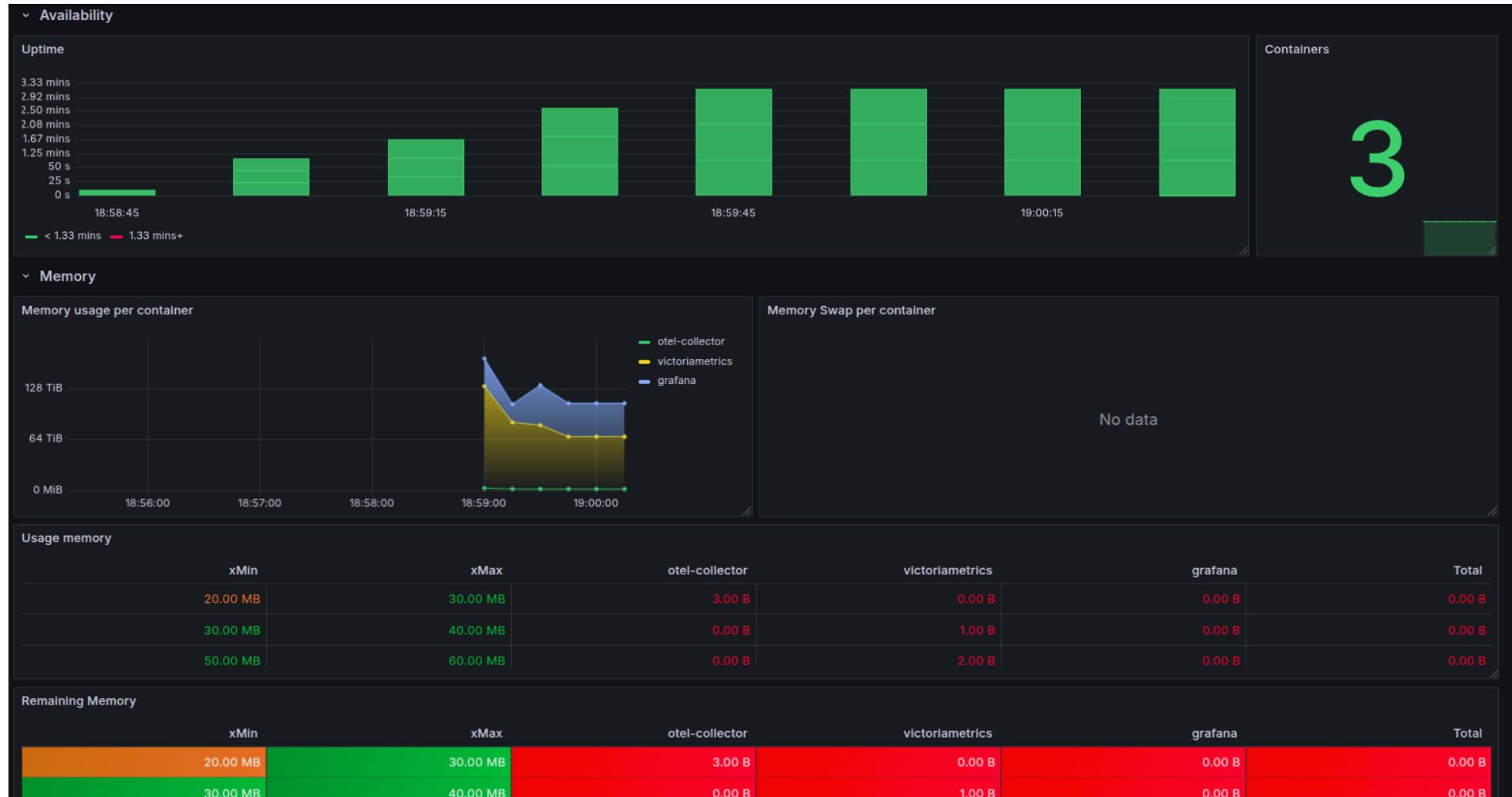
Timeline



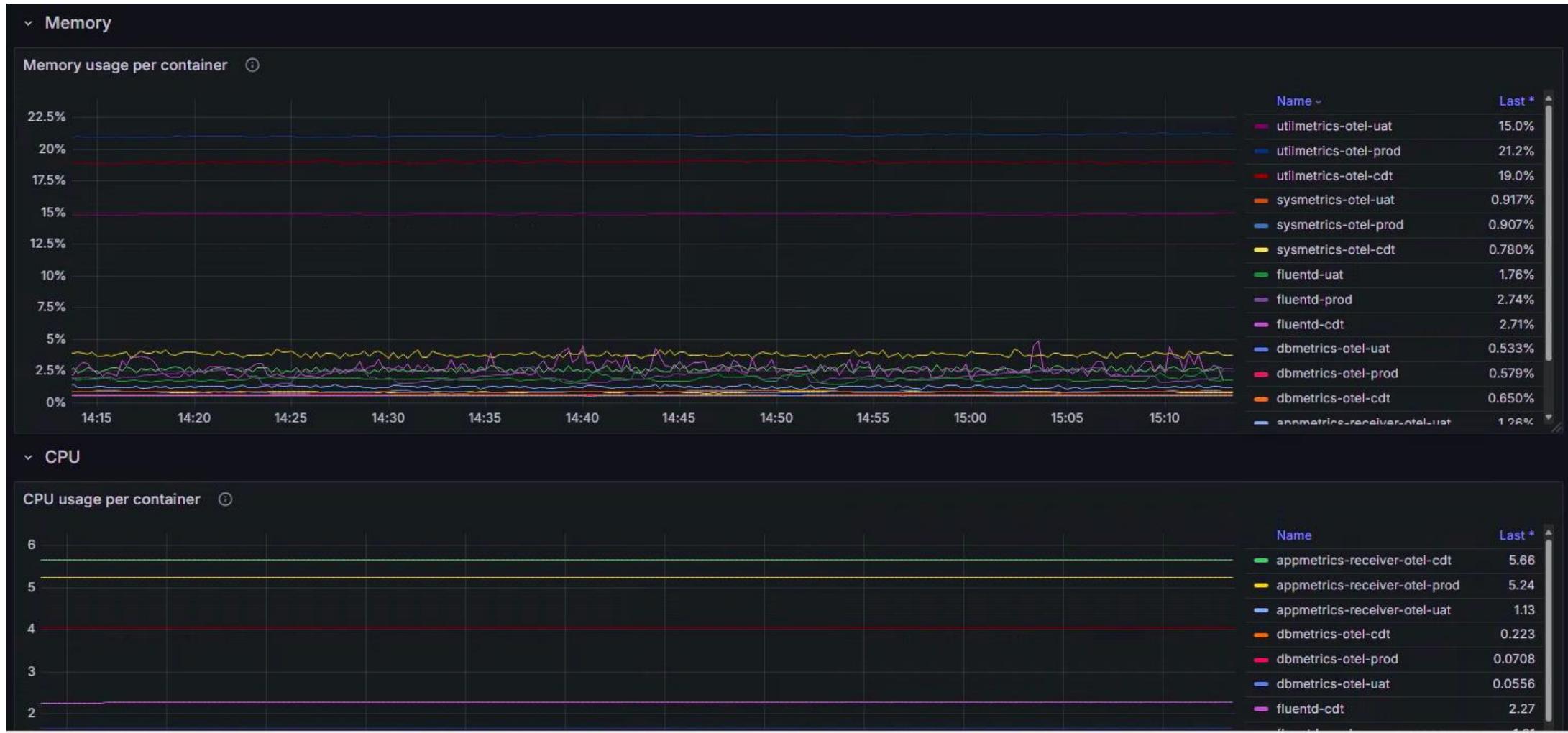
Logs

```
> 2025-04-29 17:45:17.988 callerClass=zodiac.zdc.gate.rep... {
    "utcTime": "2025-04-29T12:15:17.988062253Z",
    "localTime": "2025-04-29T20:15:17.988062253+08:00",
    "level": "INFO",
    "threadName": "http-nio-13506-exec-6",
    "trace_id": "c555eaf322893478e57be159bd7a8ca3",
    "trace_flags": "01",
    "span_id": "48445e79e8f511e6",
    "loggerName": "zodiac.zdc.gate.report.service.impl.GateReportTemplateServiceImpl",
    "callerClass": "zodiac.zdc.gate.report.service.impl.GateReportTemplateServiceImpl",
    "callerMethod": "prepareAttachmentForDownload",
    "callerFile": "GateReportTemplateServiceImpl.java",
    "callerLine": 177,
    "message": "File name 10000819383747422965b-b232-4ffc-a9aa-054283032353 , docName EIR_PUI_DEMO081_250429121503.pdf , docType EIR"
}
> 2025-04-29 17:45:17.820 callerClass=zodiac.zdc.gate.rep... {
    "utcTime": "2025-04-29T12:15:17.820443417Z",
    "localTime": "2025-04-29T20:15:17.820443417+08:00",
    "level": "INFO",
    "threadName": "http-nio-13506-exec-6",
    "trace_id": "c555eaf322893478e57be159bd7a8ca3",
    "trace_flags": "01",
    "span_id": "48445e79e8f511e6",
    "loggerName": "zodiac.zdc.gate.report.service.impl.GateReportTemplateServiceImpl",
    "callerClass": "zodiac.zdc.gate.report.service.impl.GateReportTemplateServiceImpl",
    "callerMethod": "prepareAttachmentForDownload",
    "callerFile": "GateReportTemplateServiceImpl.java",
```

# Docker Dashboard



# Podman Dashboard



# **APPLICATION DASHBOARD**

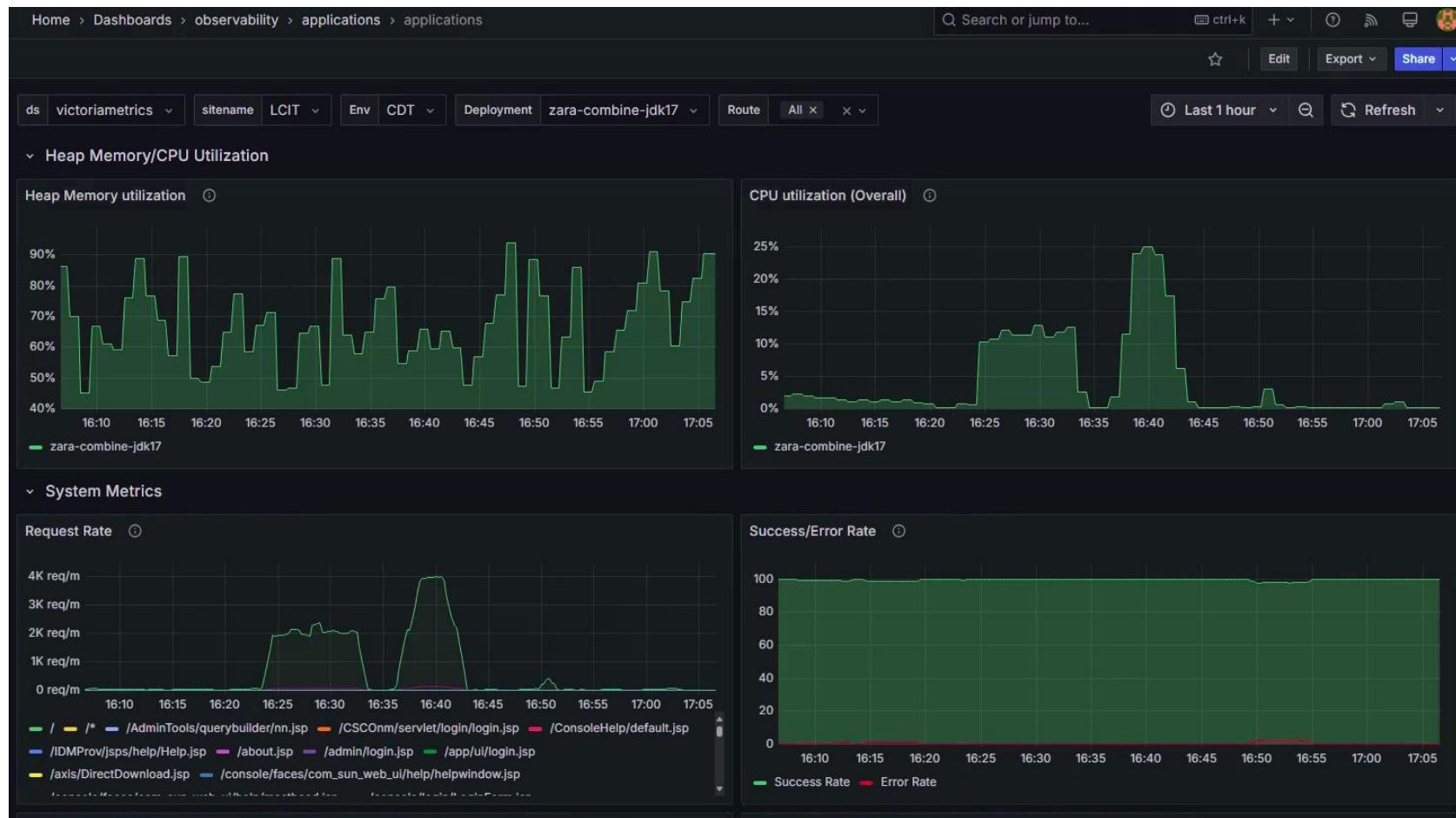
# Application Dashboard

datasource victriametrics ▾ sitename LCIT ▾ env CDT ▾ service All × × ▾ span\_name All × × ▾

Last 6 hours ▾ Refresh 5m ▾

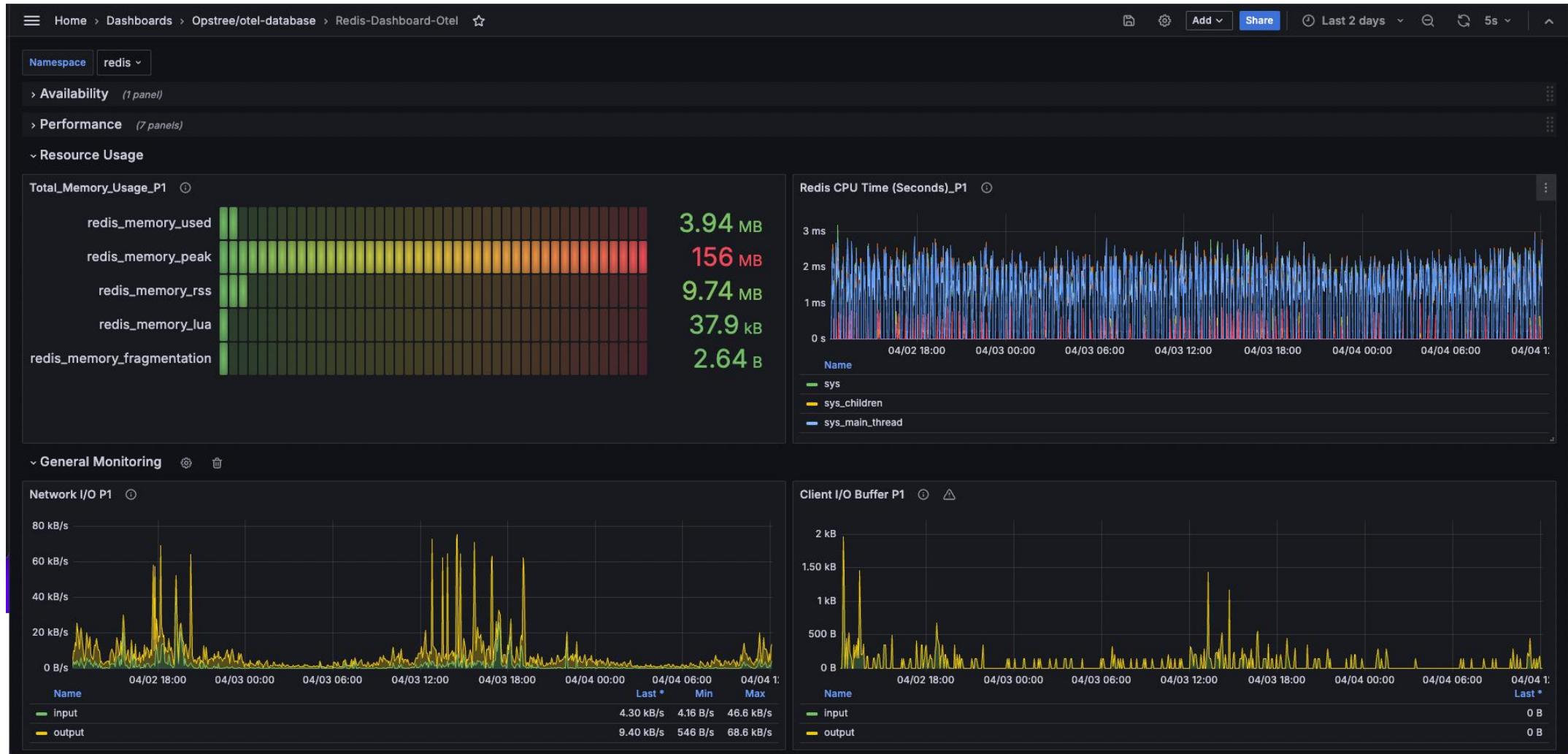
- > Service Level - Throughput and Latencies (3 panels)
- > span\_names Level - Throughput (1 panel)
- > span\_name Level - Latencies (3 panels)

# Application Dashboard

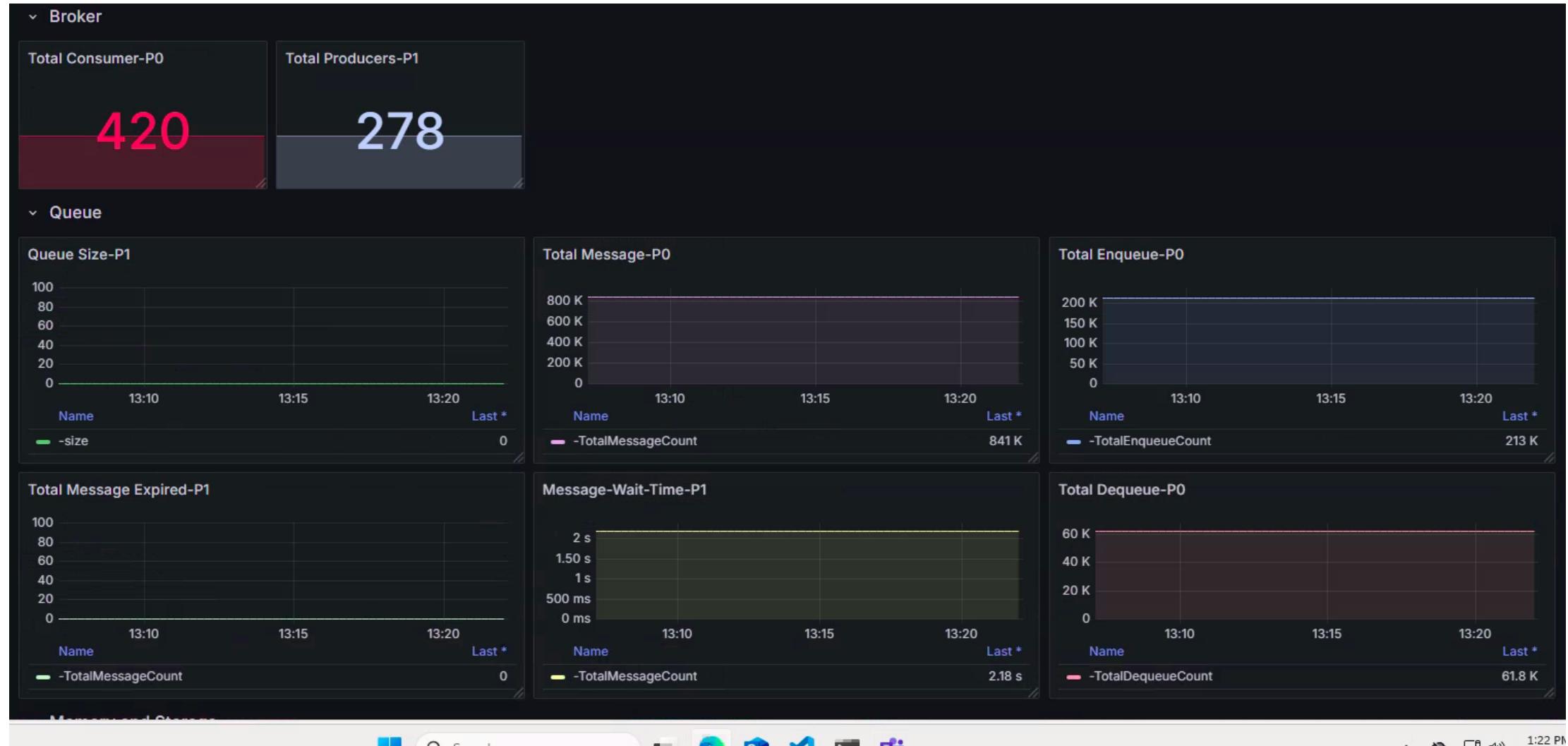


# **MIDDLEWARE DASHBOARD**

# Redis Dashboard

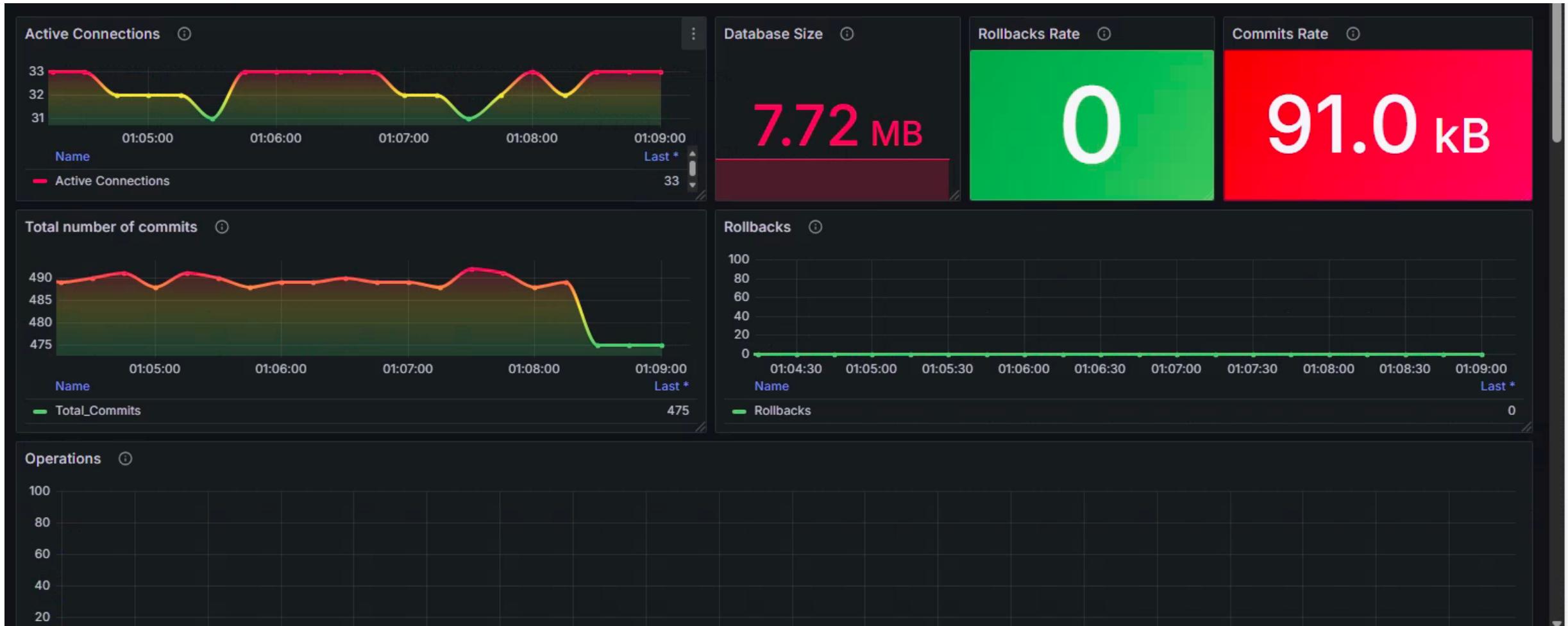


# Active MQ Dashboard



# **DATABASE DASHBOARD**

# PostgreSQL Dashboard

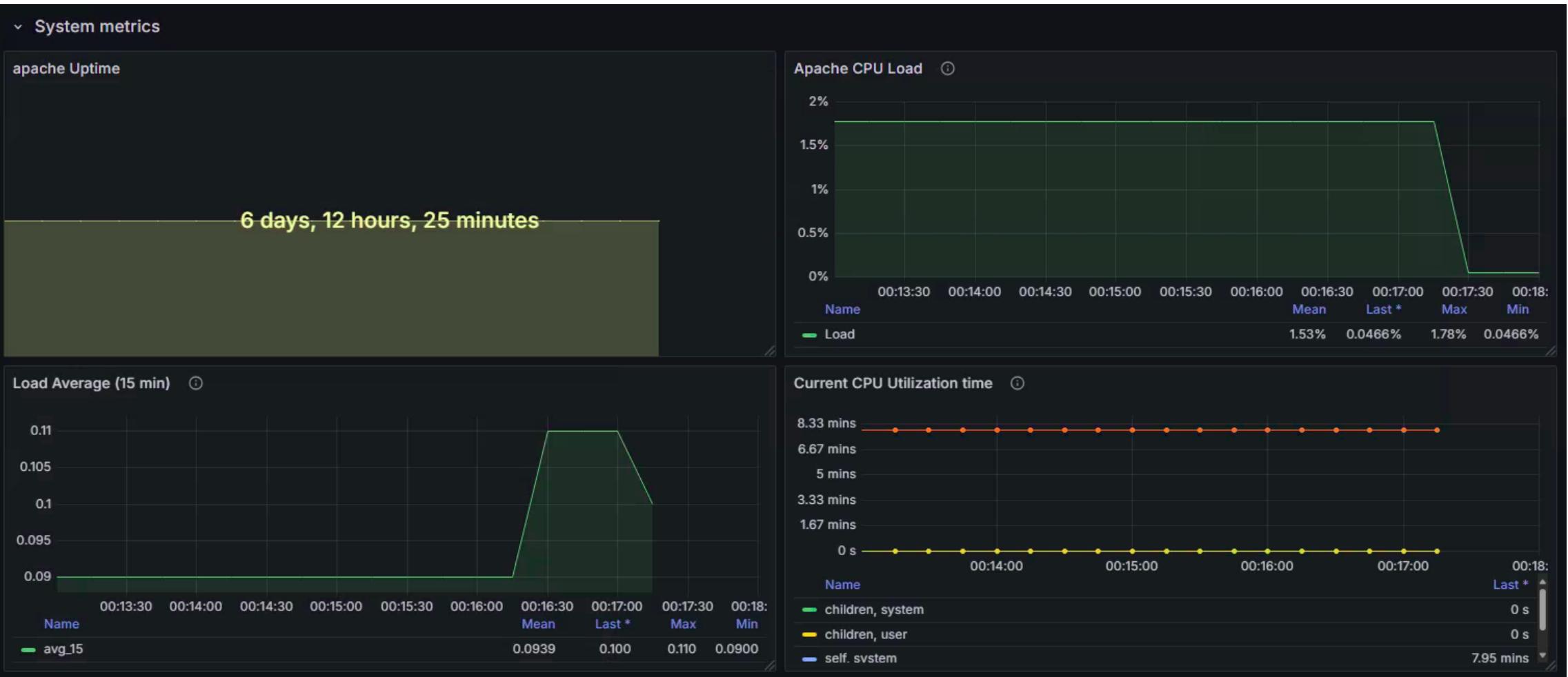


# Oracle DB Dashboard

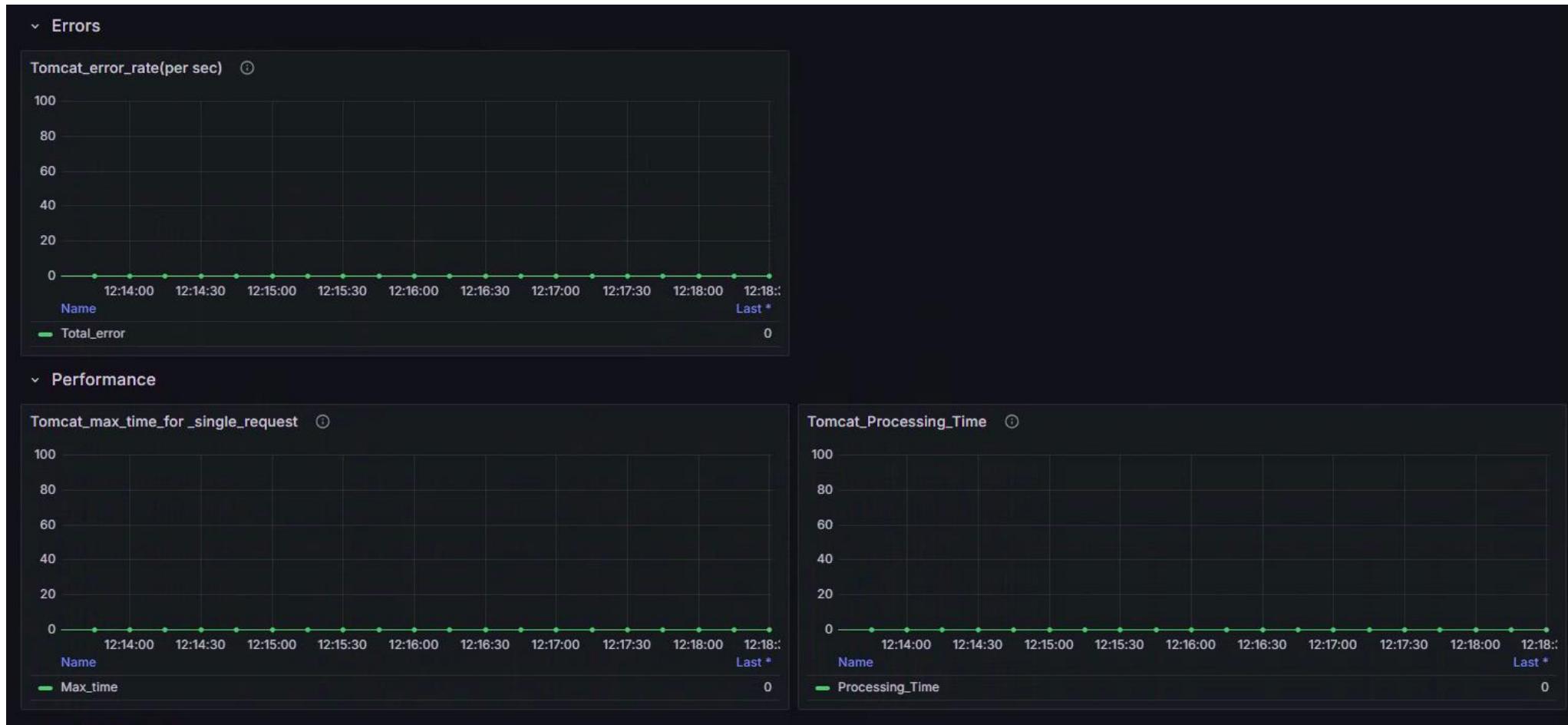


# **WEB SERVER DASHBOARD**

# Apache Dashboard



# Tomcat Dashboard



# **OBSERVABILITY TARGET DASHBOARD**

# Victoria Metrics Health Check Dashboard



# Loki Health Check Dashboard

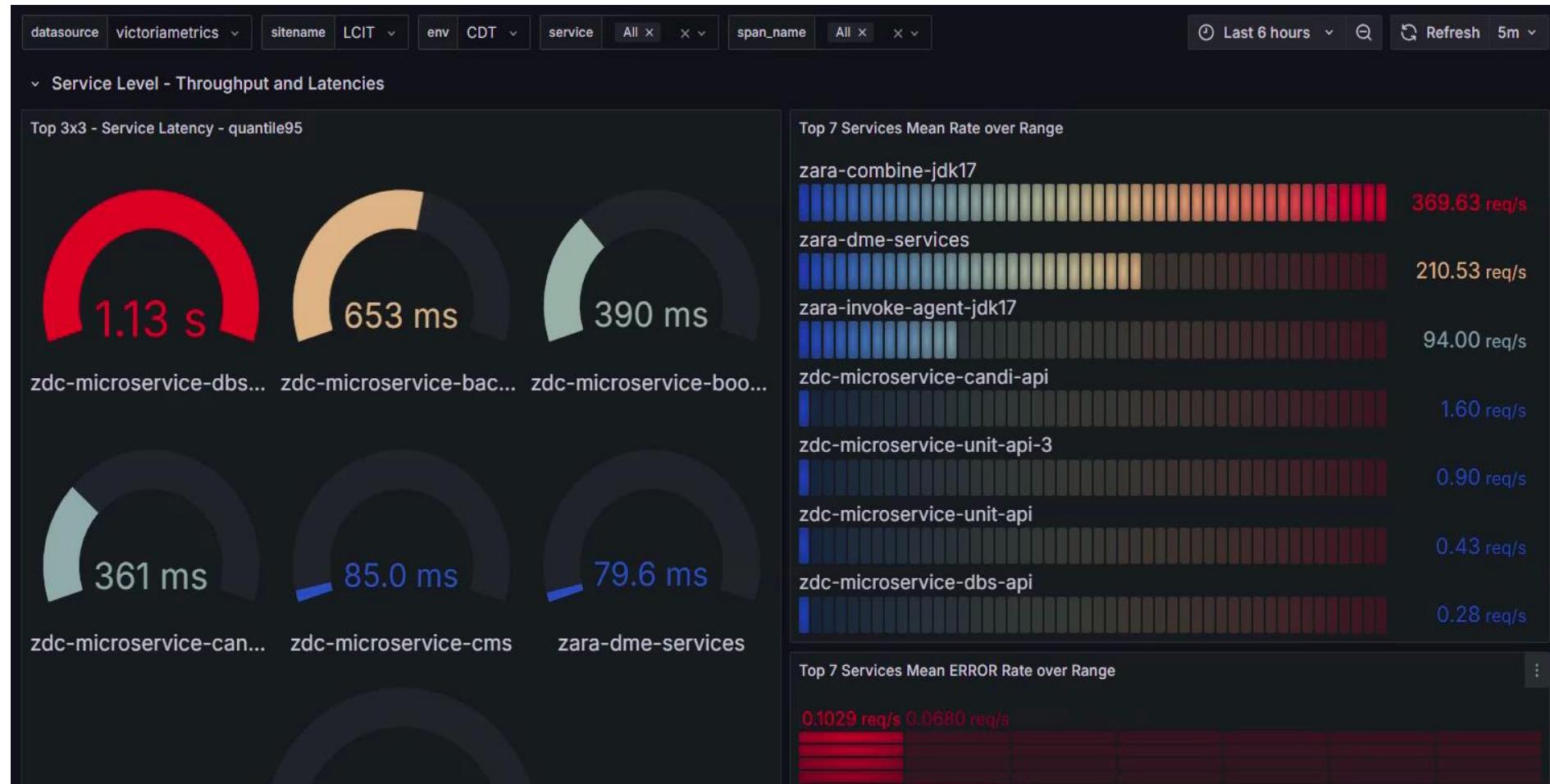


# 011y - Metrics

Categories	Metric	Priority	Description	Threshold
Resource Usage	Memory Usage	P0	High memory usage and low available memory on instance {{ \$labels.instance }}	Alert if > 80%
	Disc usage	P0	Disk space utilization on {{ \$labels.instance }} for mount point {{ \$labels.mountpoint }} is above 85% .	
	CPU Utilization	P0	CPU utilization on {{ \$labels.instance }} is above 85%	Alert if > 70-80%.
	Connected Clients	P0	Number of clients connected to Redis.	Alert if 0 or exceeds expected client count.
	Rejected Connections	P2	Number of rejected connections due to resource constraints.	Alert if > 0.
Redis Performance	Key Eviction Rate	P0	Number of keys evicted due to memory pressure.	Alert if rate spikes unexpectedly.
	Expired Keys	P1	Number of keys expired in the instance.	Alert if unexpectedly high.
	Command Execution Latency	P0	Average latency of command execution.	Alert if latency > 50ms.
	Cache Hit Rate	P1	Ratio of cache hits to total requests.	Alert if < 80-90%.
	Total Commands Processed	P3	Rate of commands processed by Redis.	Monitor trends; no immediate threshold.
	Blocking Operations		Number of blocked clients waiting for operations to	Alert if > 0 for an extended

# **RED DASHBOARD**

# RED Dashboard



# ADO Templates

Infra

Ansible Playbook

Packer

Helm

Ansible Role for Dashboard

# FLUENTD vs PROMTAIL

Features	Promtail	Fluent D
Primary Use-case	Tightly integrated with Loki.	General-purpose log shipper with wide support for various backends.
Real time logging	Yes, optimized for real-time log ingestion into Loki.	Yes, but need to integrate streaming system like Kafka.
Configuration Management	Simpler, since all configurations are maintained in YAML format.	High flexible configurations, it can be extended via Ruby but complex to manage.
Integrations	Only supports Loki.	Support multiple outputs like s3, elastic and we can add more outputs via plugins.
Performance	Optimized for real-time Loki ingestion. A very less memory footprint in <a href="#">compare to FluentD</a> .	Can handle complex log pipelines but may require more resources.
Logs Processing	<a href="#">Promtail</a> is limited to basic log relabeling and <a href="#">labeling</a> .	Extensive processing, filtering, parsing, and enriching capabilities like mutations on-fly.
Best Use-case	Best with Loki for simple log collection and viewing.	Best for complex, multi-source, multi-destination log pipelines.