



TRILHA MICROSERVICES



Conhecendo formas de simplificar o monitoramento e logging de suas aplicações.

Monitorando sua aplicação de maneira assertiva.



THE
DEVELOPER'S
CONFERENCE



locaweb <pro>



Palestrante
Ingrid Rosselis
Dev Backend/DevOps
SmarttBot



Palestrante
Pâmela Carvalho
ADM de Redes
DCC UFMG/
PoP-MG RNP



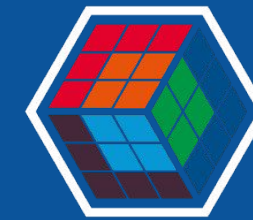
THE
DEVELOPER'S
CONFERENCE

01

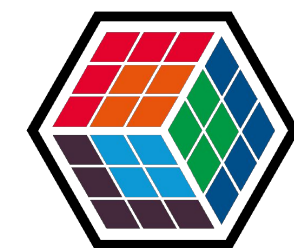
Por que que monitorar?

Em que o monitoramento pode agregar no seu negócio?

- Insight para pontos de melhorias.
- Identificação de possíveis gargalos.
- Garantir estabilidade das aplicações.
- Acompanhar informações estratégicas oriundas de várias fontes.



THE
DEVELOPER'S
CONFERENCE



THE
DEVELOPER'S
CONFERENCE

02

0 que monitorar?

Gráficos e visualizações que trazem significado para seu negócio

- Métricas relacionadas ao seu negócio.
- Tempo de resposta.
- Uso de recursos físicos.
- Quantidade de request por tempo.



THE
DEVELOPER'S
CONFERENCE



THE
DEVELOPER'S
CONFERENCE

03

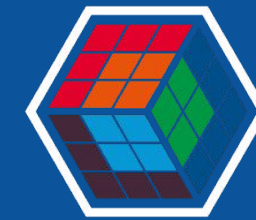
Como monitorar?

Monitorando com Grafana



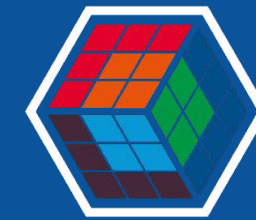
Por que usamos grafana nestes casos?

- Open Source.
- Boa documentação.
- Comunidade engajada.
- Estrutura leve e flexível.



THE
DEVELOPER'S
CONFERENCE

Monitorando com Grafana



THE
DEVELOPER'S
CONFERENCE

Vantagens:

- Interface intuitiva.
- Muitos templates de dashboards.
- Múltiplas streams de dados.
- Melhoramento contínuo.
- Arquitetura de plugins.
- Distributing Tracing com Jaeger.

Softwares Complementares



Prometheus

Um sistema de monitoramento de serviço de código aberto e banco de dados de séries temporais, desenvolvido pela SoundCloud.



InfluxDB

É um banco de dados de séries temporais de código aberto desenvolvido pela InfluxData.



THE
DEVELOPER'S
CONFERENCE

*Data Sources e Integrações:
softwares que podem ser
combinadas com o Grafana.*

***Graphite, Prometheus,
Elasticsearch, OpenTSDB e
InfluxDB***

Softwares Alternativos



DataDog

Datadog é um dos serviços para monitoramento em escala de nuvem. É usado por equipes de TI, operações e desenvolvimento que criam e operam aplicativos executados em infraestrutura de nuvem dinâmica ou híbrida.



Kibana

Kibana é um open source (Apache Licensed), análise baseada em navegador e painel de pesquisa para Elasticsearch. Kibana é muito fácil de configurar e começar a usar. Kibana se esforça para ser fácil de começar, ao mesmo tempo em que é flexível e poderoso, assim como o Elasticsearch.



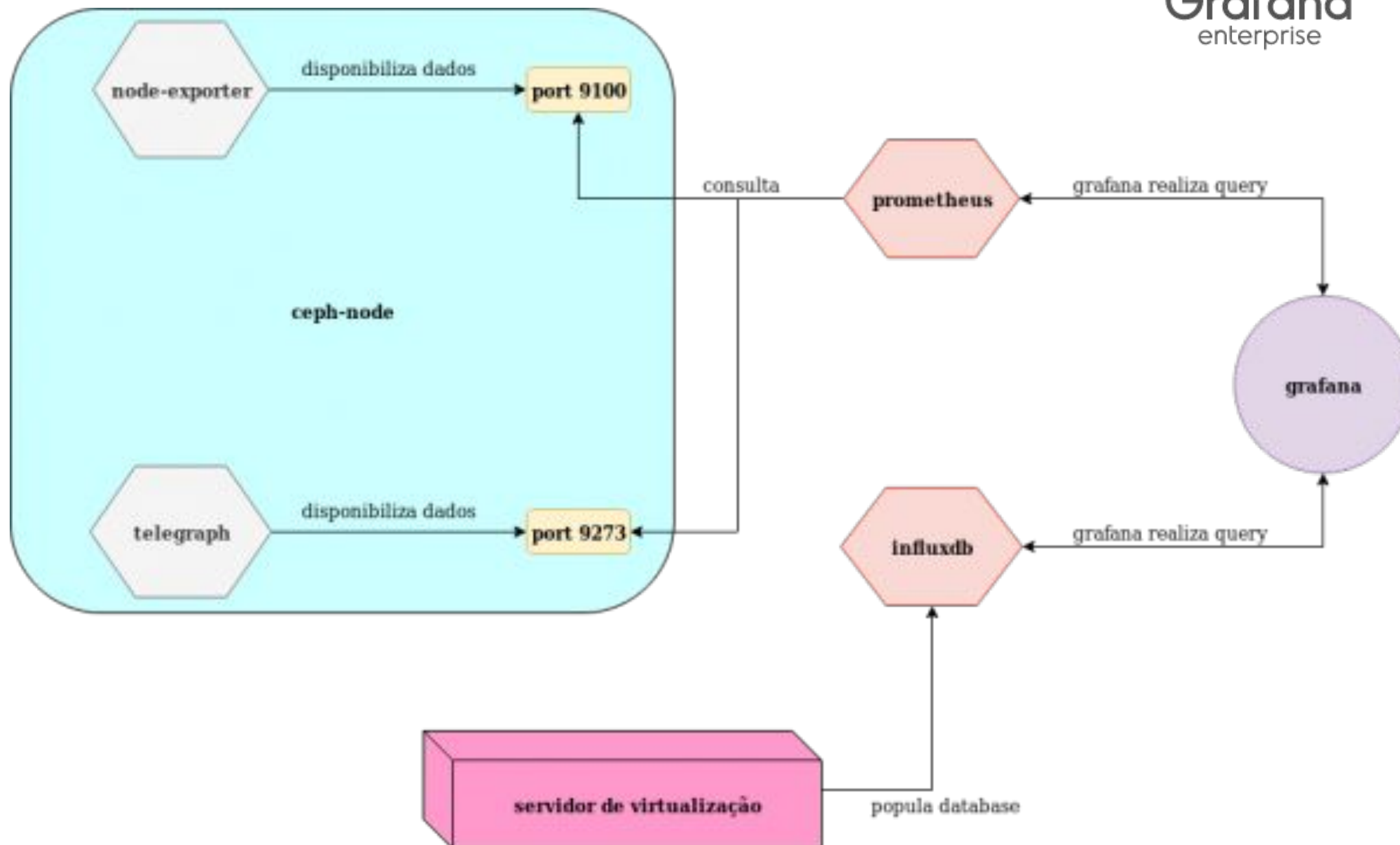
THE
DEVELOPER'S
CONFERENCE

*Plataformas alternativas ao
Grafana.*

Monitorando com Grafana



THE
DEVELOPER'S
CONFERENCE



04

Casos de Uso



THE
DEVELOPER'S
CONFERENCE

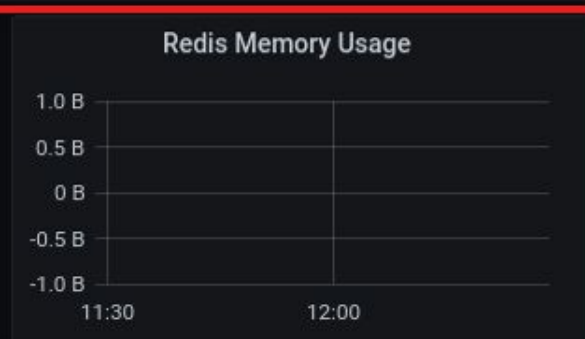
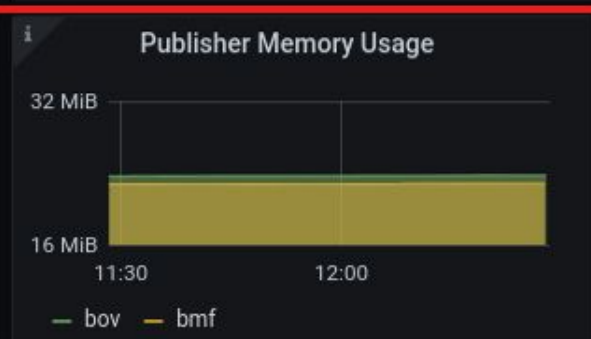
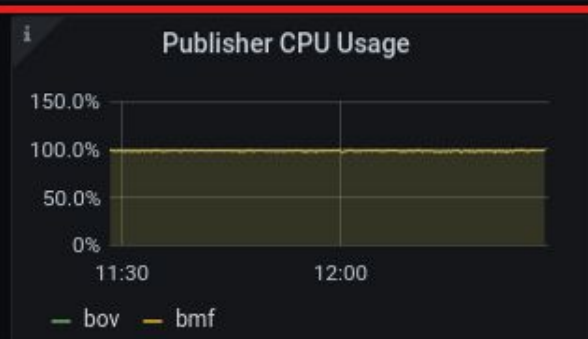
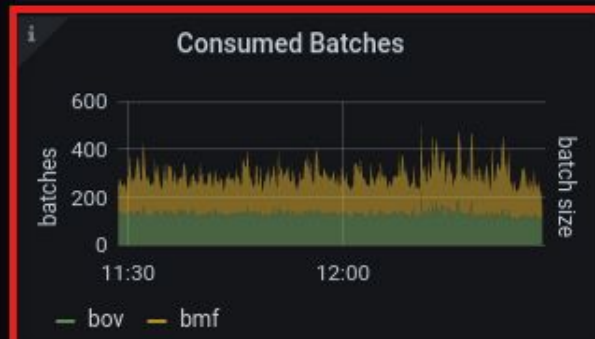
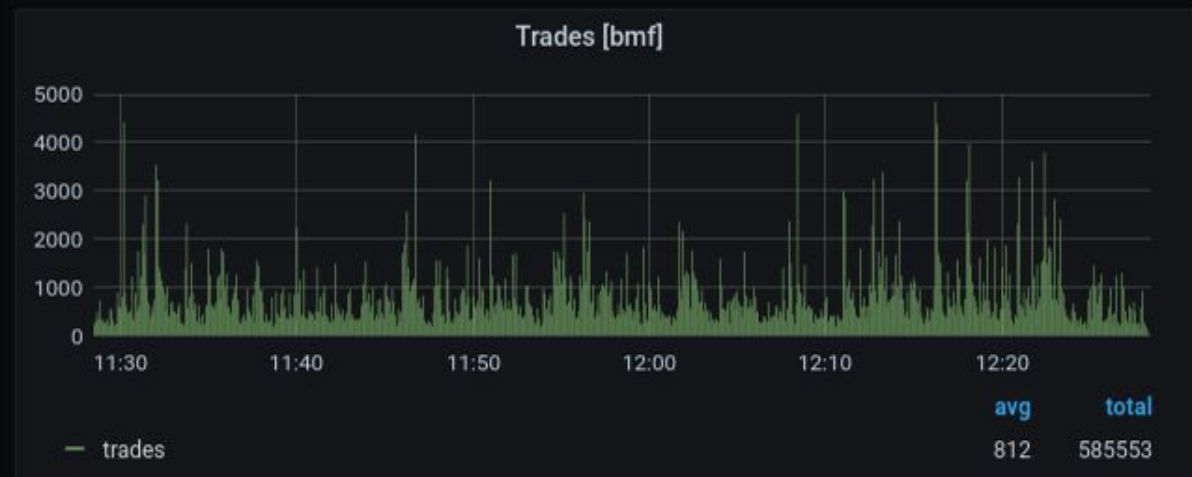
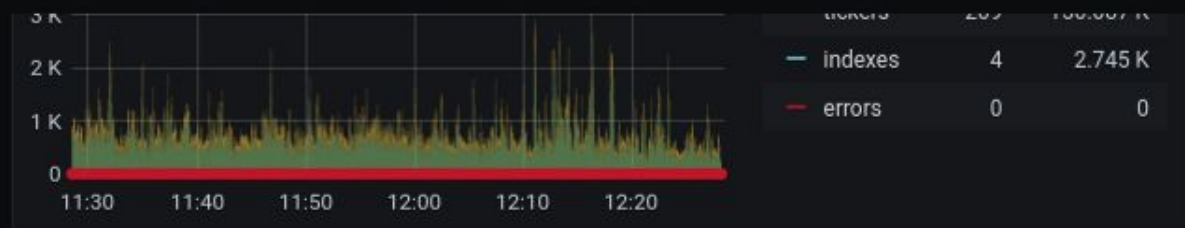
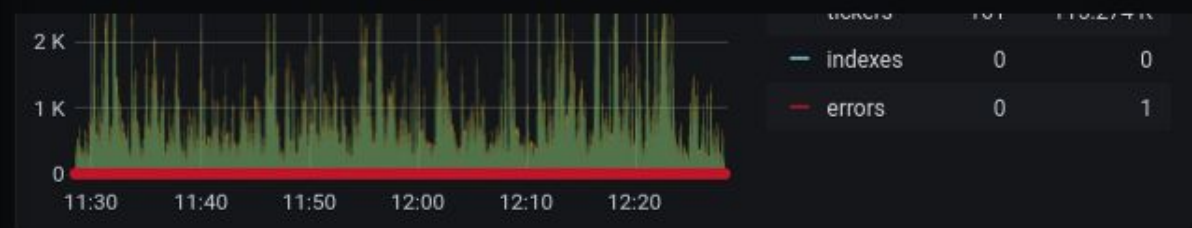
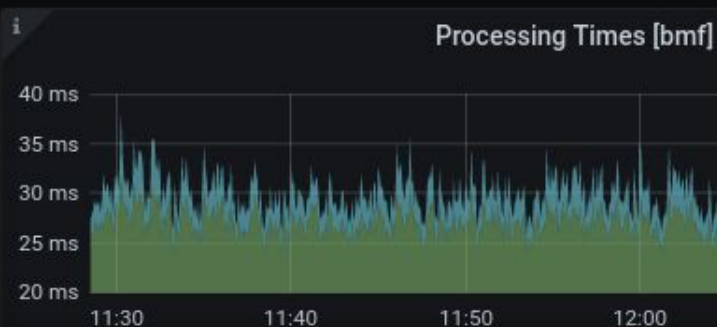
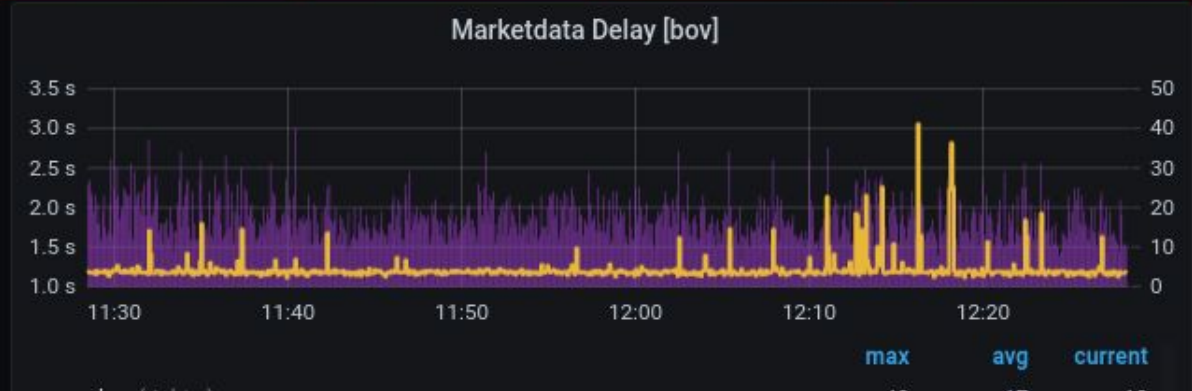
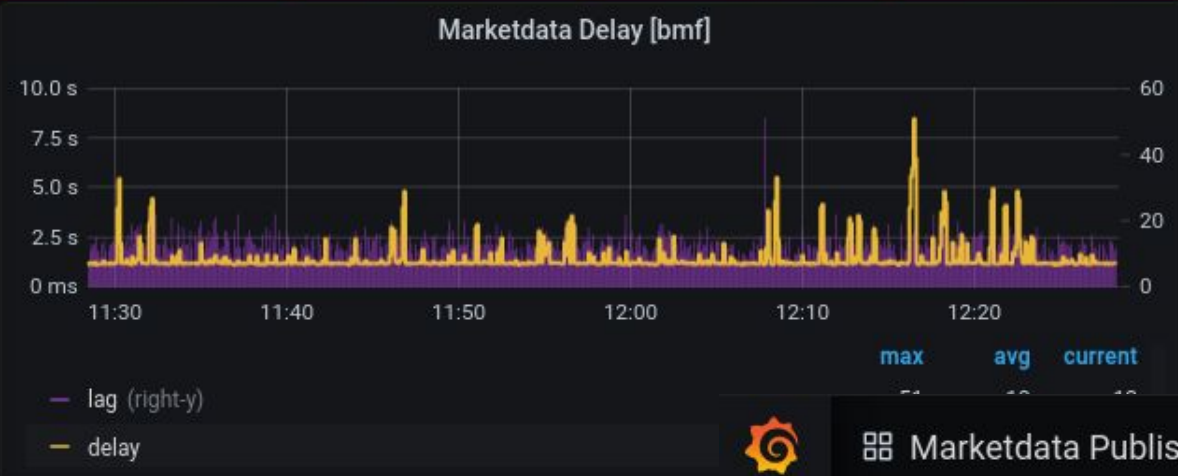
Smarttbot

Caso de Uso



environment staging Market All Show Publisher Restart Events

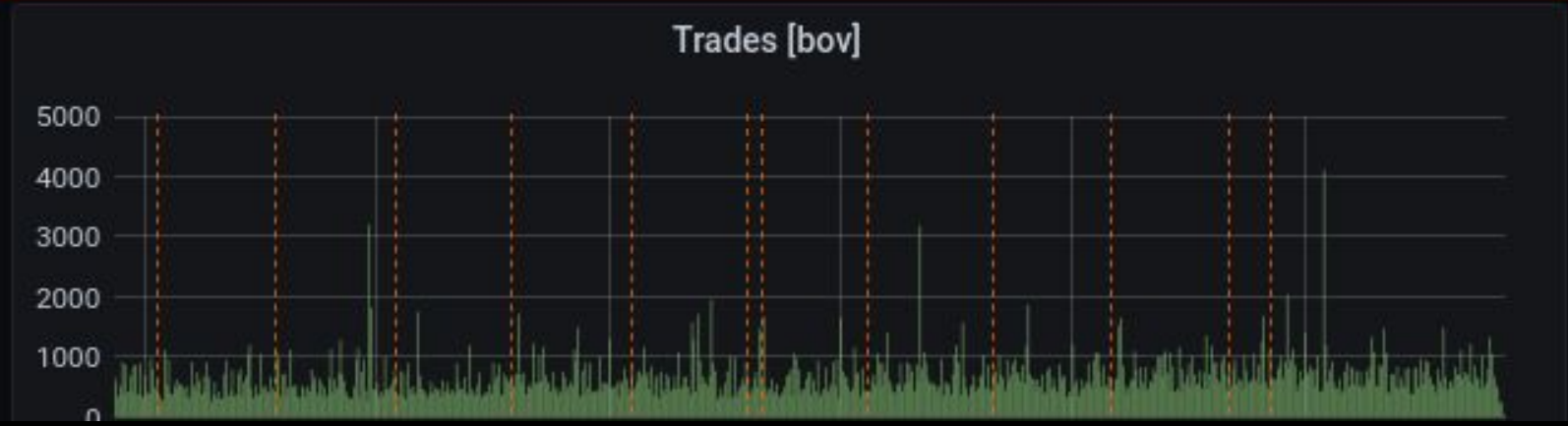
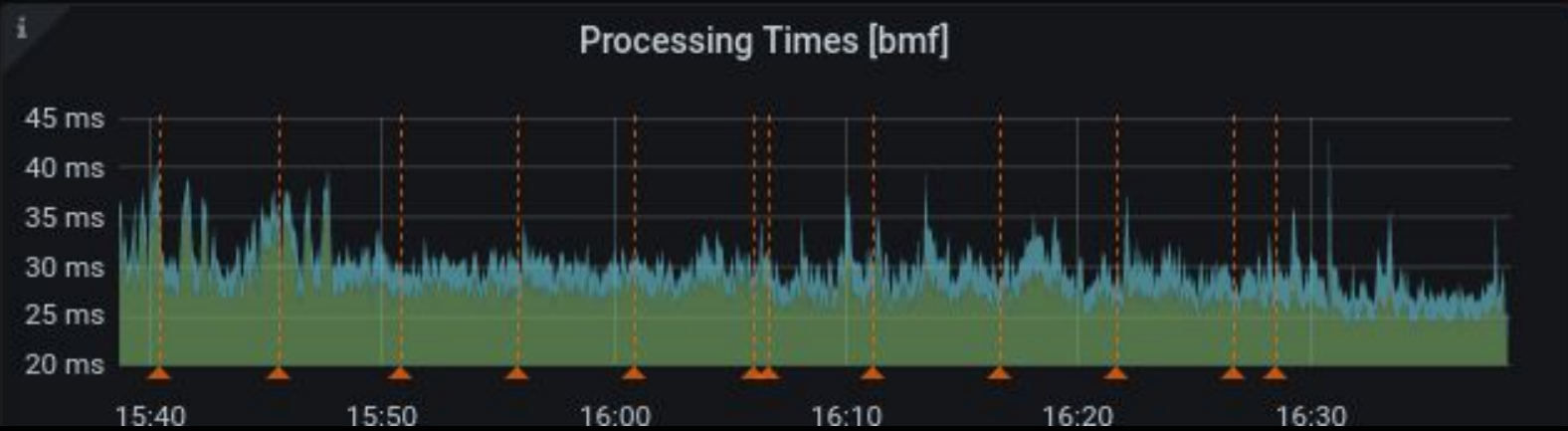
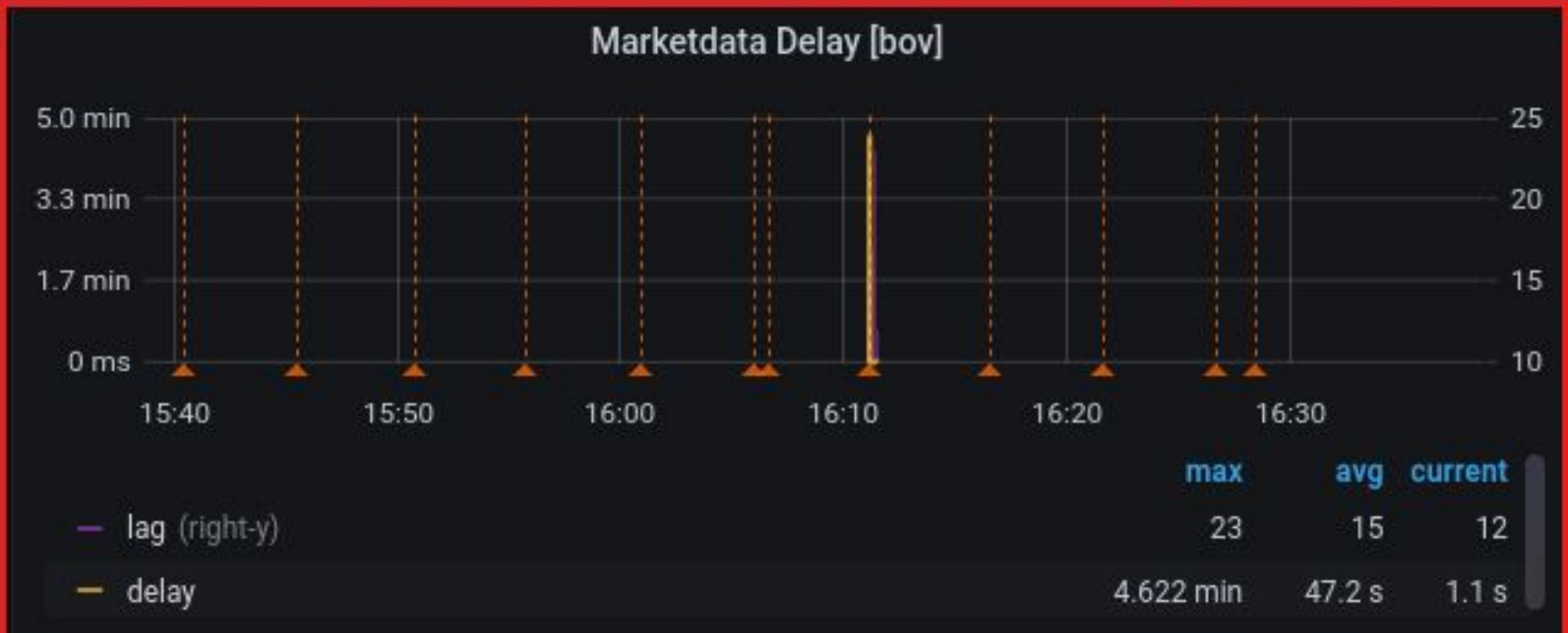
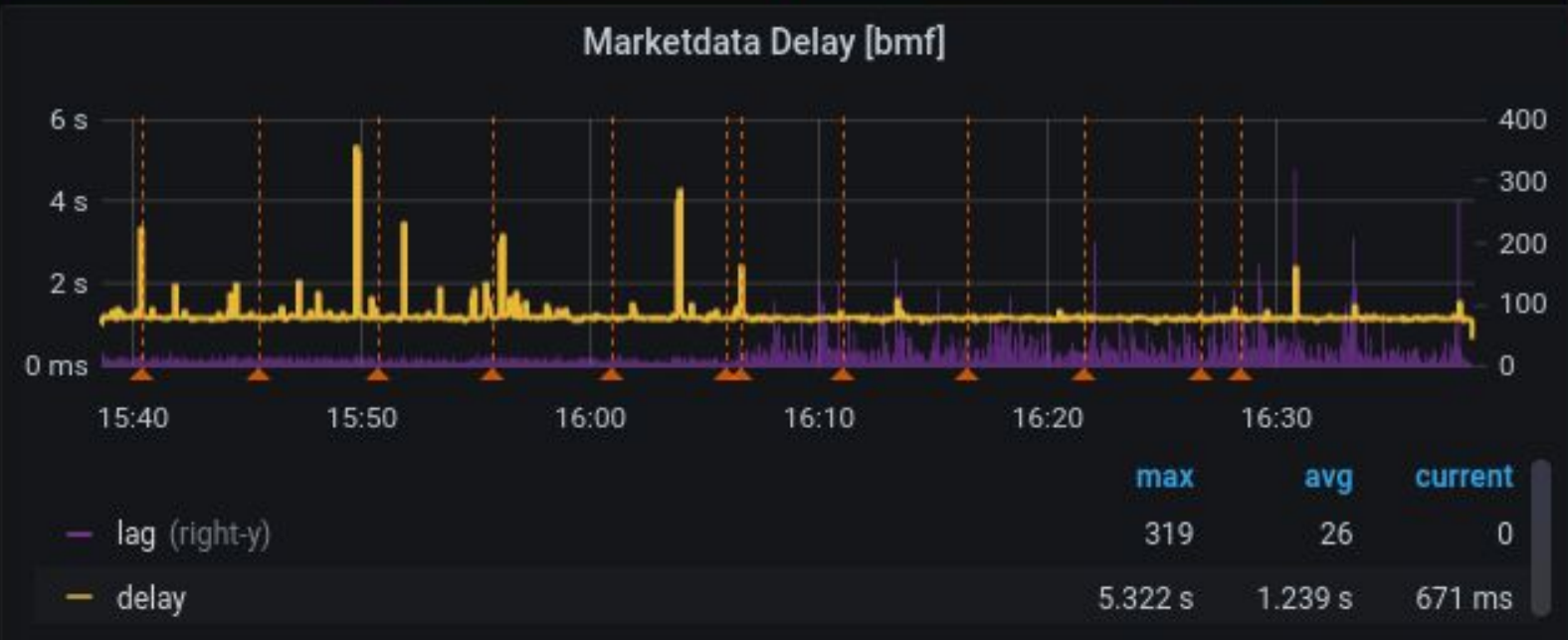
BMF Pipeline Ti...	BMF Batch Size...	BMF Delay	BMF Lag	BOV Pipeline Ti...	BOV Batch Size...	BOV Delay	BOV Lag
30 ms	9	851 ms	4	31 ms	9	693 ms	4





environment staging Market All Show Publisher Restart Events ☐

BMF Pipeline Ti...	BMF Batch Size...	BMF Delay	BMF Lag	BOV Pipeline Ti...	BOV Batch Size...	BOV Delay	BOV Lag
31 ms	9	710 ms	4	28 ms	8	2 s	3

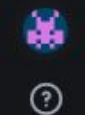
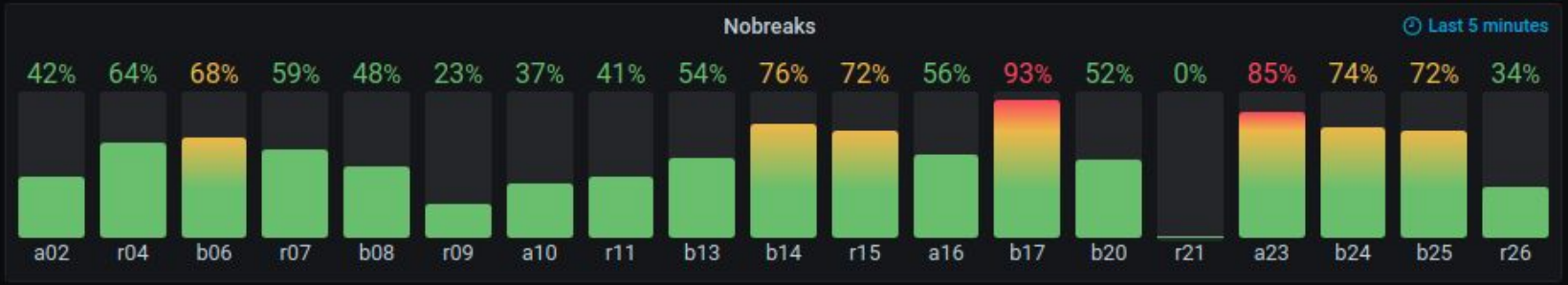
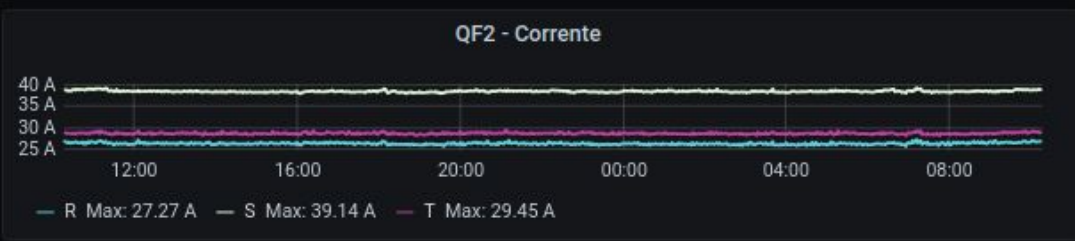
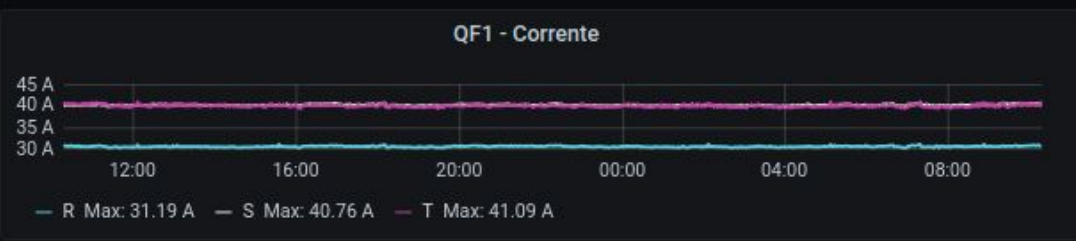
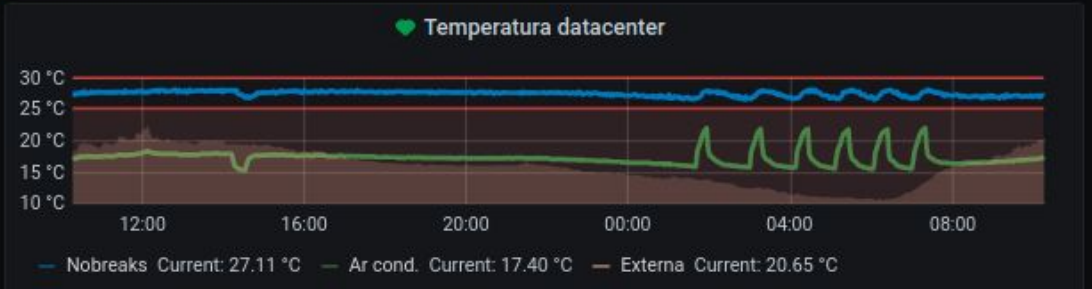
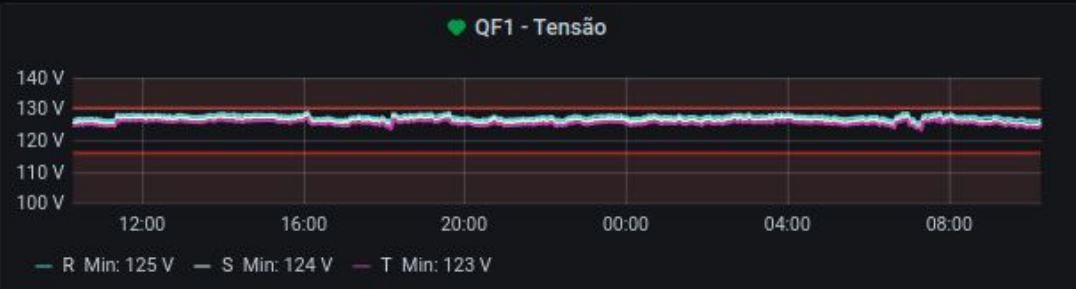
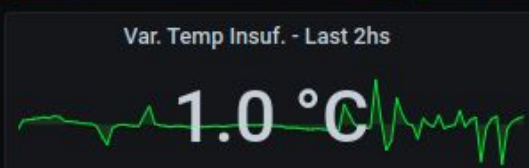
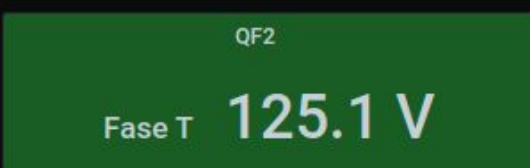
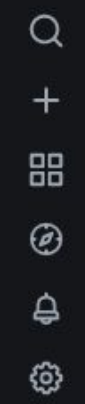


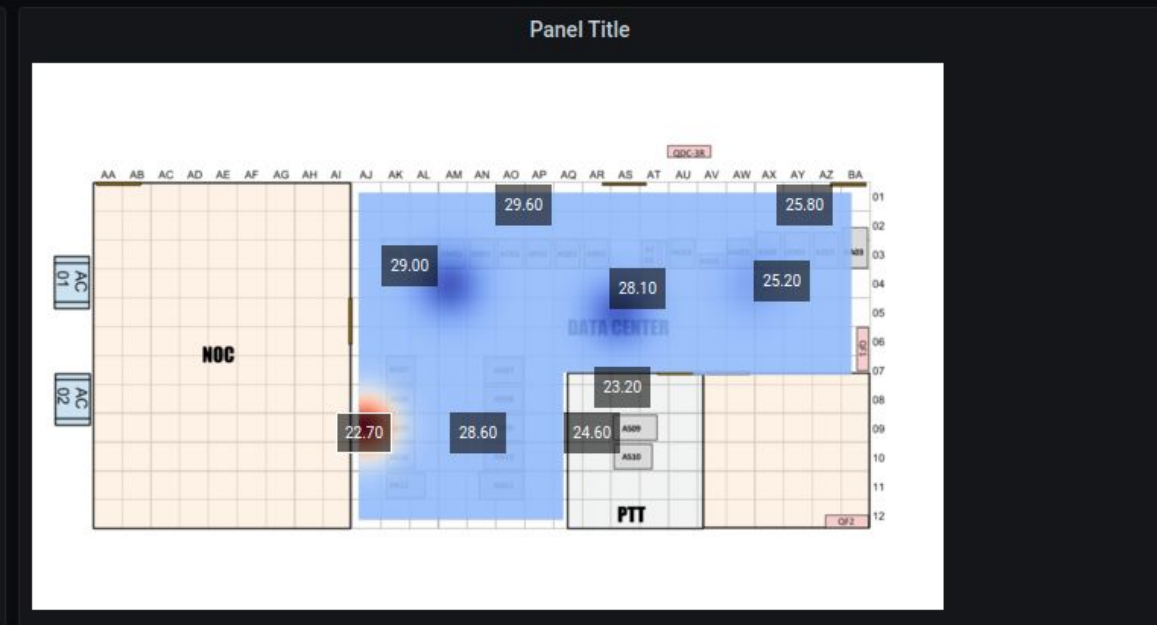


THE
DEVELOPER'S
CONFERENCE

DCC - UFMG
PoP-MG RNP

Caso de Uso



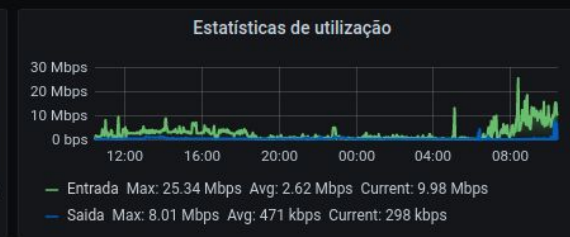


Qualidade da conexão

Ótima!

Latência

1.08 ms

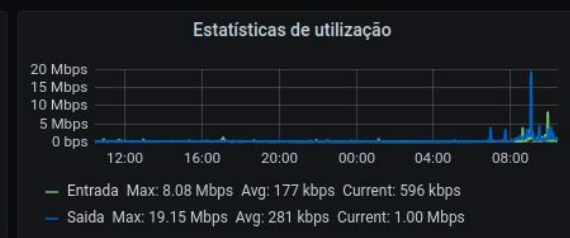


Qualidade da conexão

Ótima!

Latência

1.36 ms



Acesso ao Google.com

Ótimo!

5o andar

Ótima!



37 %H

36 %H

35 %H

34 %H

33 %H

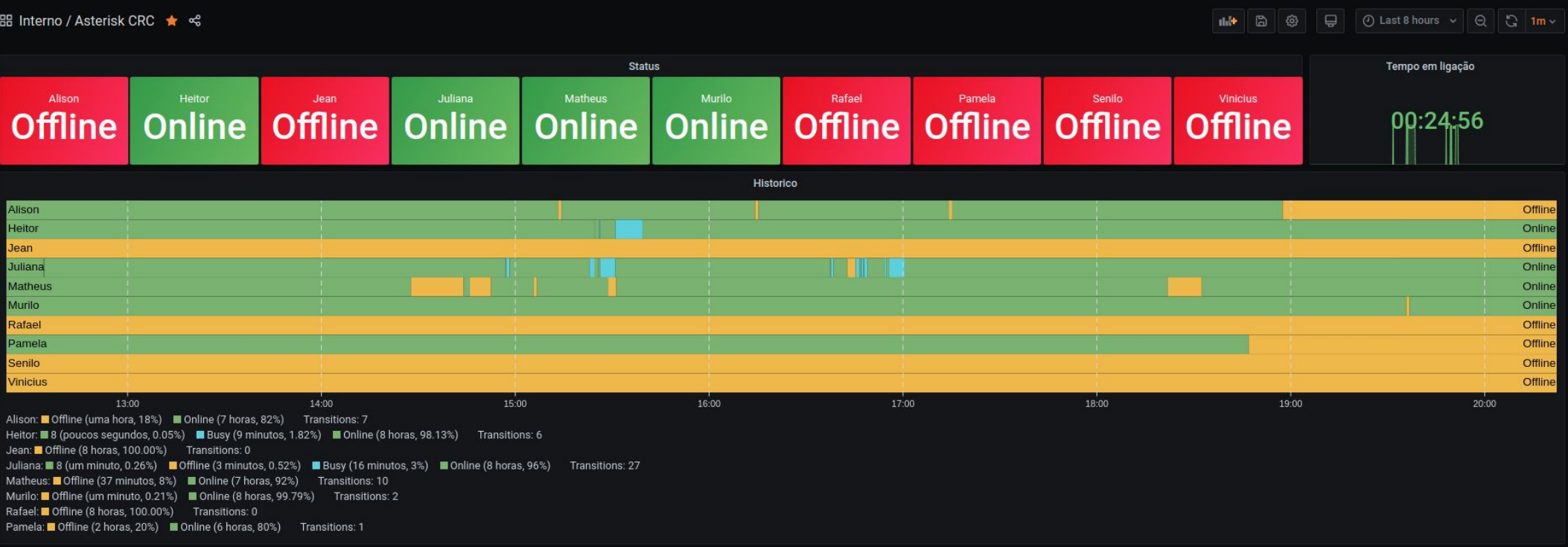
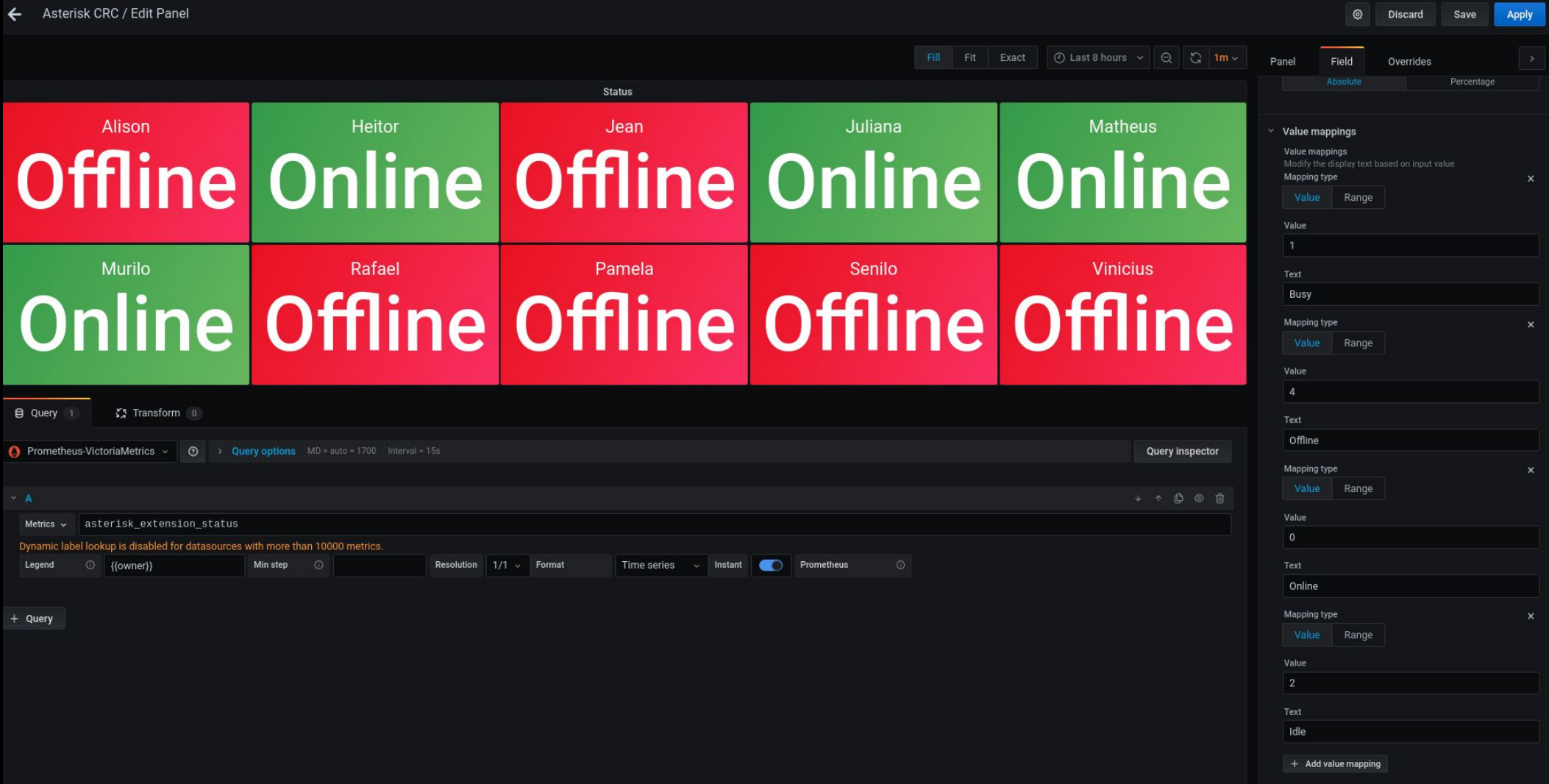
12:00 16:00 20:00 00:00 04:00 08:00

min max avg current

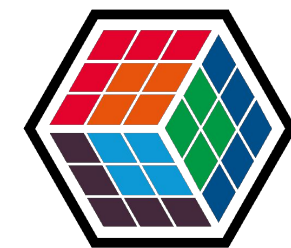
ak03 33.211 %H 36.579 %H 34.641 %H 34.842 %H

	min	max	avg	current
— ak03	33.211 %H	36.579 %H	34.641 %H	34.842 %H


```
# HELP python_gc_objects_collected_total Objects collected during gc
# TYPE python_gc_objects_collected_total counter
python_gc_objects_collected_total{generation="0"} 915.0
python_gc_objects_collected_total{generation="1"} 7.0
python_gc_objects_collected_total{generation="2"} 0.0
# HELP python_gc_objects_uncollectable_total Uncollectable object found during GC
# TYPE python_gc_objects_uncollectable_total counter
python_gc_objects_uncollectable_total{generation="0"} 0.0
python_gc_objects_uncollectable_total{generation="1"} 0.0
python_gc_objects_uncollectable_total{generation="2"} 0.0
# HELP python_gc_collections_total Number of times this generation was collected
# TYPE python_gc_collections_total counter
python_gc_collections_total{generation="0"} 120.0
python_gc_collections_total{generation="1"} 10.0
python_gc_collections_total{generation="2"} 0.0
# HELP python_info Python platform information
# TYPE python_info gauge
python_info{implementation="CPython",major="3",minor="8",patchlevel="2",version="3.8.2"} 1.0
# HELP process_virtual_memory_bytes Virtual memory size in bytes.
# TYPE process_virtual_memory_bytes gauge
process_virtual_memory_bytes 4.3053056e+07
# HELP process_resident_memory_bytes Resident memory size in bytes.
# TYPE process_resident_memory_bytes gauge
process_resident_memory_bytes 3.534848e+07
# HELP process_start_time_seconds Start time of the process since unix epoch in seconds.
# TYPE process_start_time_seconds gauge
process_start_time_seconds 1.59723930832e+09
# HELP process_cpu_seconds_total Total user and system CPU time spent in seconds.
# TYPE process_cpu_seconds_total counter
process_cpu_seconds_total 2601.75
# HELP process_open_fds Number of open file descriptors.
# TYPE process_open_fds gauge
process_open_fds 8.0
# HELP process_max_fds Maximum number of open file descriptors.
# TYPE process_max_fds gauge
process_max_fds 1.048576e+06
# HELP asterisk_extension_status Asterisk extension status
# TYPE asterisk_extension_status gauge
asterisk_extension_status{extension="2254",owner="Alison"} 4.0
asterisk_extension_status{extension="2434",owner="Heitor"} 0.0
asterisk_extension_status{extension="2532",owner="Jean"} 4.0
asterisk_extension_status{extension="2585",owner="Juliana"} 0.0
asterisk_extension_status{extension="2628",owner="Matheus"} 0.0
asterisk_extension_status{extension="2687",owner="Murilo"} 0.0
asterisk_extension_status{extension="2726",owner="Pamela"} 4.0
asterisk_extension_status{extension="2723",owner="Rafael"} 4.0
asterisk_extension_status{extension="2736",owner="Senilo"} 4.0
asterisk_extension_status{extension="2846",owner="Vinicius"} 4.0
```



Obrigada por assistir!



THE
DEVELOPER'S
CONFERENCE

Dúvidas?



girls-support-girls



innng



@pamcarvaalho_



linktr.ee/gsg.ufmg



ingridrosselis



pamelacarvalho