



Monitoring dashboards for shared resources

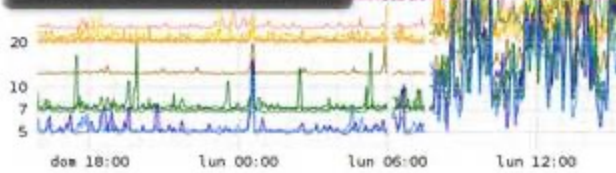
Niall Wilson
Irish Centre for High-End Computing

The What and Why

- **Observability** as well as Alerting
- Usage Reporting
- Capacity Planning
- Operational Continuity
- Troubleshooting



RRDtool logging & graphing



The Old Days

- MRTG, RRDTool, Cacti, Ganglia, ...
- Fixed size databases primarily for timeseries
- Limited and clunky



(Nodes colored by 1-minute load) | Legend

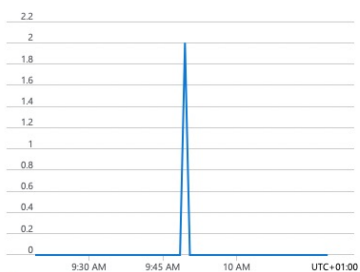
Show data for last **1 hour** 6 hours 12 hours 1 day 7 days 30 days

Sum Total Requests



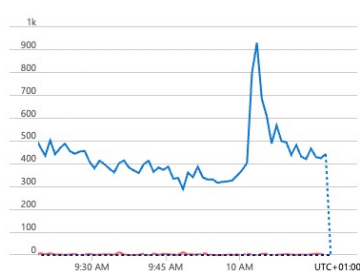
Total Requests (Sum)
metwdb-prod-ag
25.46k

Sum Failed Requests



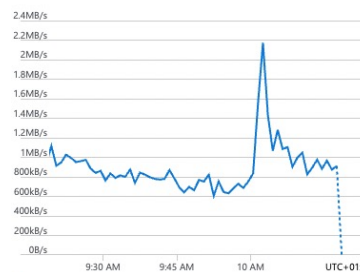
Failed Requests (Sum)
metwdb-prod-ag
2

Sum Response Status by HttpStatus



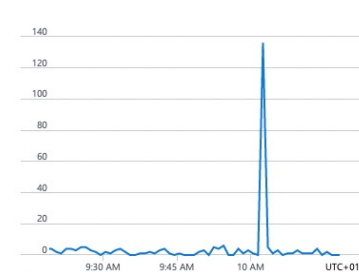
2xx metwdb-prod-ag **25.31k**
4xx metwdb-prod-ag **172**
5xx metwdb-prod-ag **2**

Sum Throughput



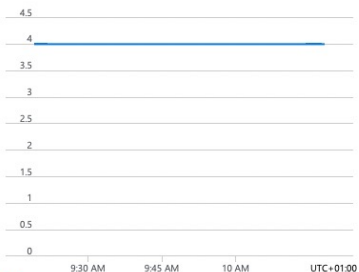
Throughput (Sum)
metwdb-prod-ag
52.97 MB/s

Sum CurrentConnections



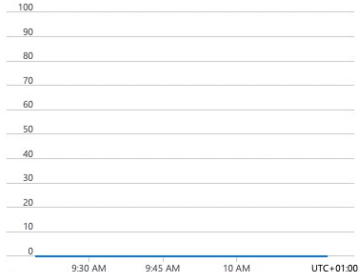
Current Connections (Sum)
metwdb-prod-ag
247

Avg Healthy Host Count By BackendPool HttpSettings

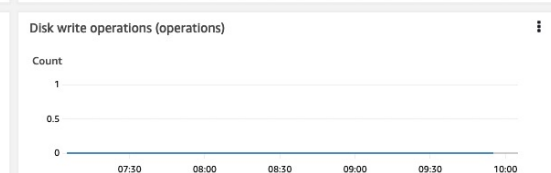
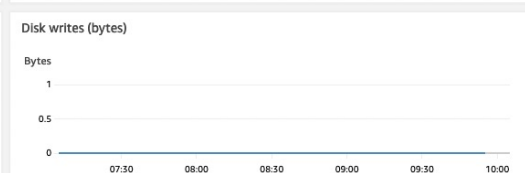
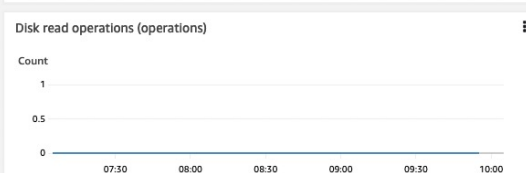
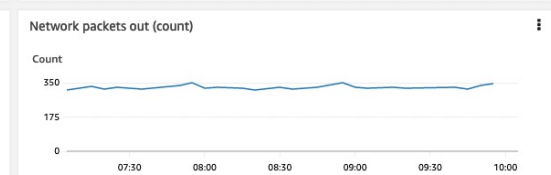
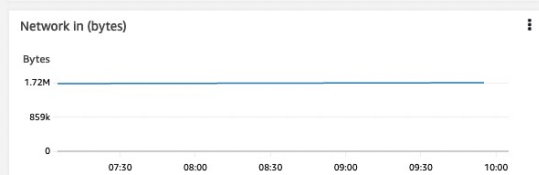
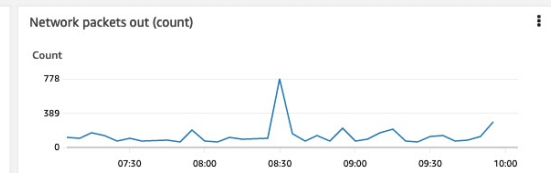
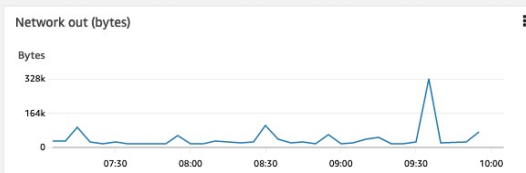
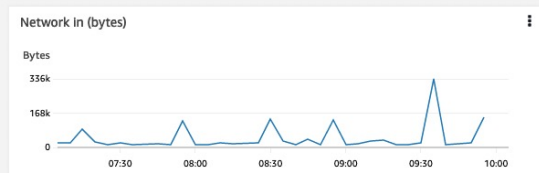
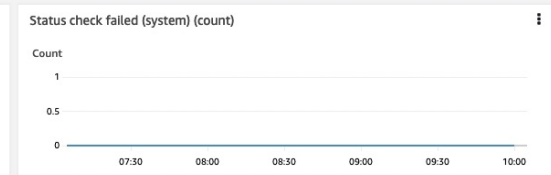
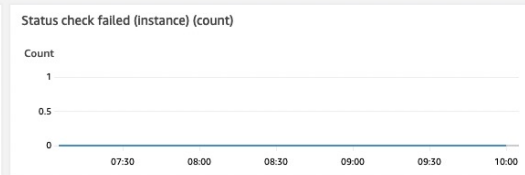
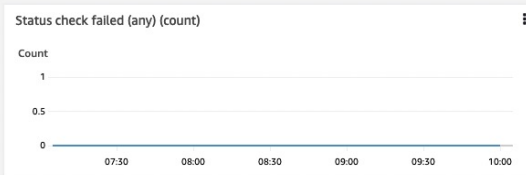
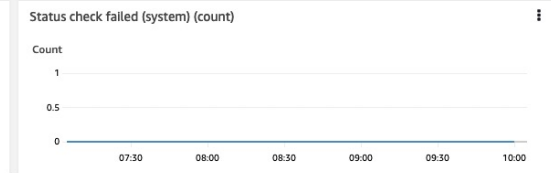
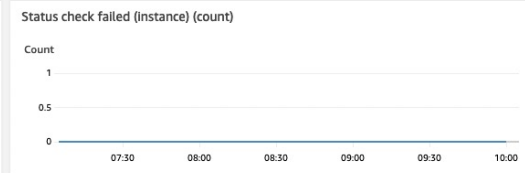
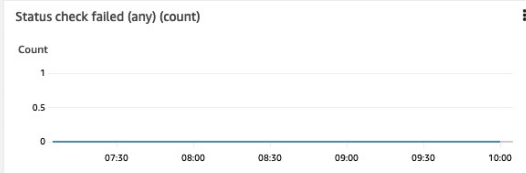


appgatewaybackendpool appgatewaybackendhttpsettings
metwdb-prod-ag
4

Avg Unhealthy Host Count By BackendPool HttpSettings



appgatewaybackendpool appgatewaybackendhttpsettings
metwdb-prod-ag
0

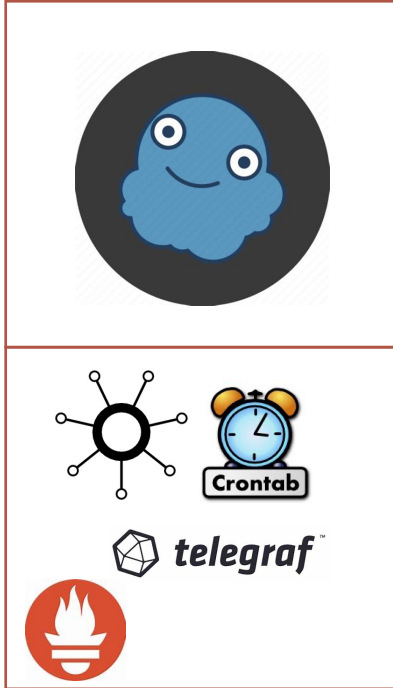


Required Features

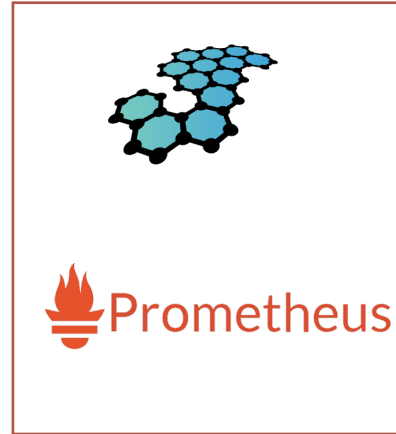
- Flexible (what and how data is presented)
- Low barrier to ingesting data
- Interactive
- Span networks
- Looks good



Thing to be Monitored



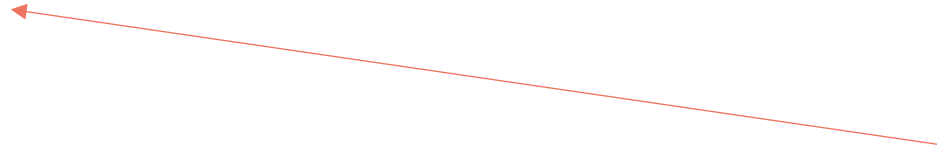
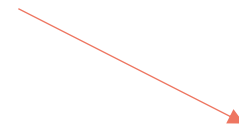
Metric cache / Proxy



Metric Store



Metric Dashboard



... and now for the ill-advised live demo