IRONdb + Grafana

GrafanaCon 2018





About me

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Open source developer since 2000

Twitter => @phredmoyer, @irondb





IRONdb is

Replacement for you existing TSDB

- No change to your ingestion pipeline
- No change to your visualizations

Takes care of Scale, Reliability, ease of Operations





IRONdb is

Customers like AppNexus 300M+ metrics

Data replicated X times (recommended 3)

Clusters Two-sided (multi-datacenter)

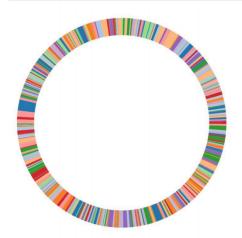




IRONdb is Distributed

Topology: 8cd488b6758e2a910ee7782990e5c5b0471acd1081817474a8f65e4da6705ace

Copies: 3



	ID	Weight	Address	Coverage
	164ea20e-98ca-48f7-8adb- 36c3e1e5c1fa	51	10.20.30.21:8112	12.14%
	07f0186f-1089-4477-994b- c54e73cdae5a	51	10.20.30.22:8112	10.72%
×	4fe342bf-9f0a-4e86-8075- a4b9b8c3e780	51	10.20.30.23:8112	10.20%
	fd42da14-e9bc-465e-96f6- 96ee8d07a474	51	10.20.30.24:8112	12.12%
	afe96500-b76d-4f21-84ab- 69db2d15a0de	51	10.20.30.25:8112	9.91%
×	0122f946-3756-478b-9749- 0bc553ed82af	51	10.20.30.26:8112	8.04%
	14a1b71d-f4b7-4e33-aa2f- 5b1a70790402	51	10.20.30.27:8112	9.04%
	615e1c89-23aa-4e2e-8b80- effefcead161	51	10.20.30.28:8112	10.32%
	7bce9e11-82c4-4ed3-aaf2- bd335f19b235	51	10.20.30.29:8112	9.48%
	7a244e61-a534-4d2c-a36c- 0f90e3d8f024	51	10.20.30.30:8112	8.04%

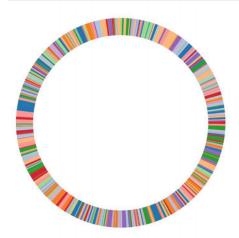




IRONdb is Replicated

Topology: 8cd488b6758e2a910ee7782990e5c5b0471acd1081817474a8f65e4da6705ace

Copies: 3



	ID	Weight	Address	Coverage
	164ea20e-98ca-48f7-8adb- 36c3e1e5c1fa	51	10.20.30.21:8112	12.14%
	07f0186f-1089-4477-994b- c54e73cdae5a	51	10.20.30.22:8112	10.72%
×	4fe342bf-9f0a-4e86-8075- a4b9b8c3e780	51	10.20.30.23:8112	10.20%
	fd42da14-e9bc-465e-96f6- 96ee8d07a474	51	10.20.30.24:8112	12.12%
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	14a1b71d-f4b7-4e33-aa2f- 5b1a70790402	51	10.20.30.27:8112	9.04%
	615e1c89-23aa-4e2e-8b80- effefcead161	51	10.20.30.28:8112	10.32%
	7bce9e11-82c4-4ed3-aaf2- bd335f19b235	51	10.20.30.29:8112	9.48%
	7a244e61-a534-4d2c-a36c- 0f90e3d8f024	51	10.20.30.30:8112	8.04%

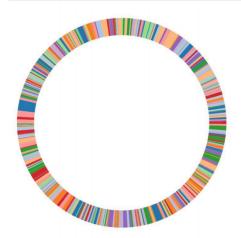




IRONdb is Reliable

Topology: 8cd488b6758e2a910ee7782990e5c5b0471acd1081817474a8f65e4da6705ace

Copies: 3

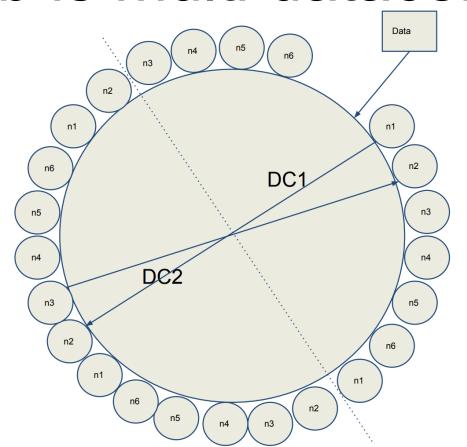


	ID	Weight	Address	Coverage
	164ea20e-98ca-48f7-8adb- 36c3e1e5c1fa	51	10.20.30.21:8112	12.14%
	07f0186f-1089-4477-994b- c54e73cdae5a	51	10.20.30.22:8112	10.72%
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	fd42da14-e9bc-465e-96f6- 96ee8d07a474	51	10.20.30.24:8112	12.12%
	afe96500-b76d-4f21-84ab- 69db2d15a0de	51	10.20.30.25:8112	9.91%
×	0122f946-3756-478b-9749- 0bc553ed82af	51	10.20.30.26:8112	8.04%
	14a1b71d-f4b7-4e33-aa2f- 5b1a70790402	51	10.20.30.27:8112	9.04%
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	7bce9e11-82c4-4ed3-aaf2- bd335f19b235	51	10.20.30.29:8112	9.48%
	7a244e61-a534-4d2c-a36c- 0f90e3d8f024	51	10.20.30.30:8112	8.04%





IRONdb is multi datacenter







Grafana Data Source

CIRCONUS-IRONDB-DATASOURCE



IRONdb

https://api.circonus.com/





Grafana Data Source

Native histogram support using heatmaps

Only TSDB data source to store histograms

CAQL Brings Data Science to Everyone

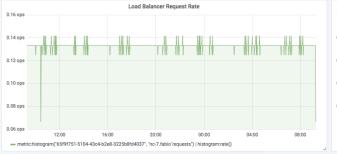
Years of data retention

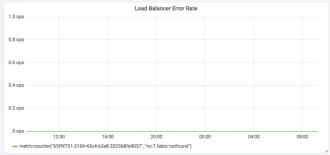


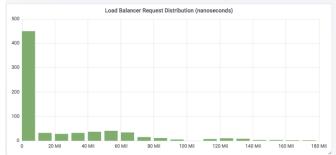


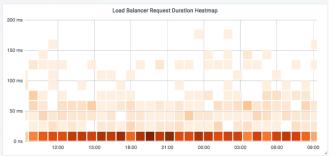
IRONdb RED (open source)







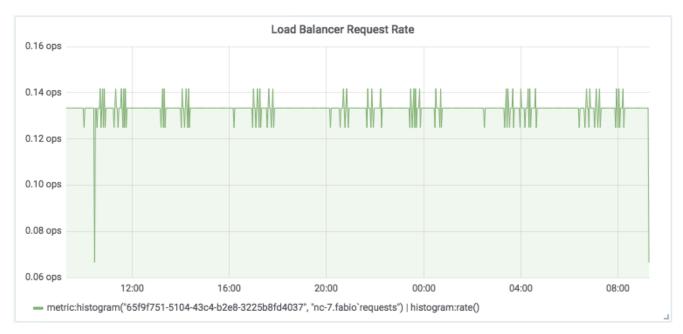








Rate







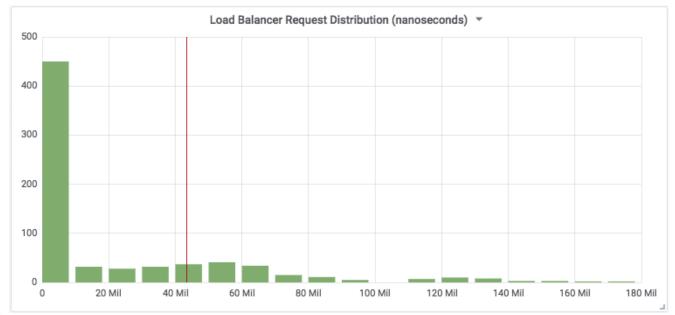
Errors







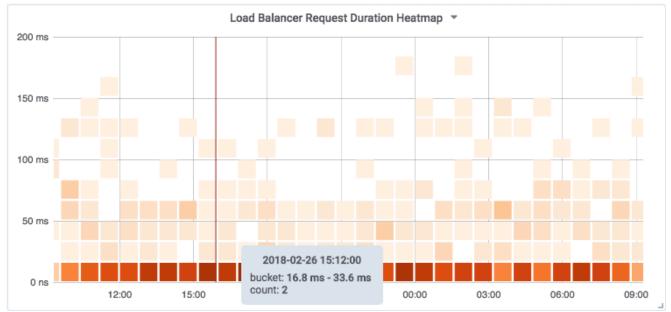
Duration (histogram)







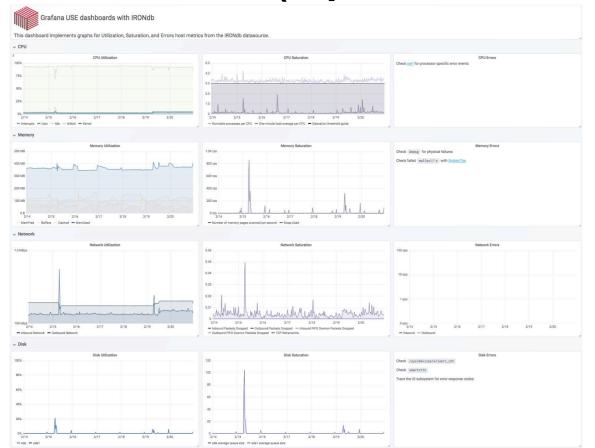
Duration (heatmap)







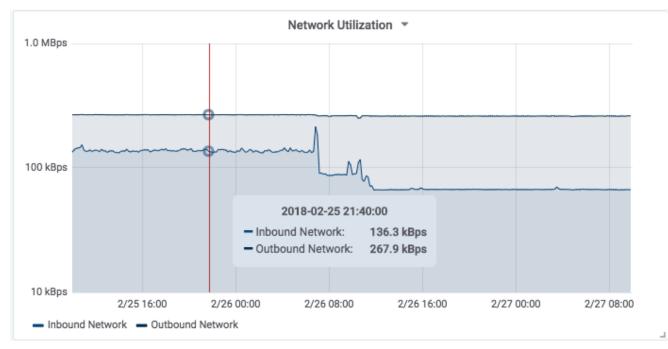
IRONdb USE (open source)







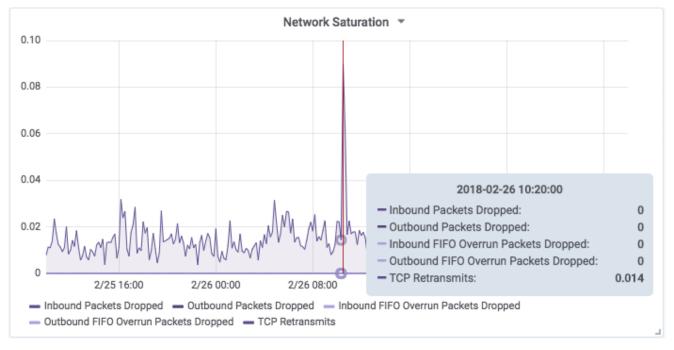
Utilization







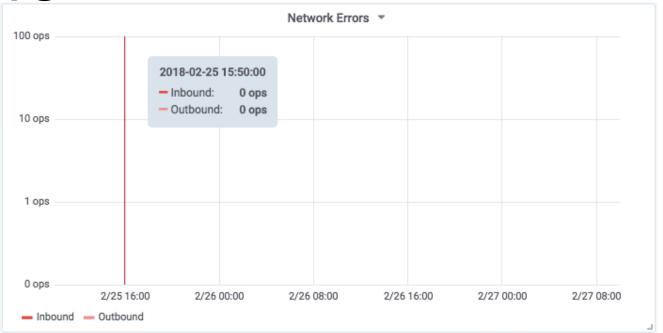
Saturation







Errors







IRONdb up and coming

Prometheus storage compatibility

Metrics 2.0 stream tags





Unlock the power of Grafana

Sign up for early access to the IRONdb Data Source at our booth

Preview accounts with free metrics for GrafanaCon attendees



