High IO Wait - Host Investigation i-047d8572c4c652cf6

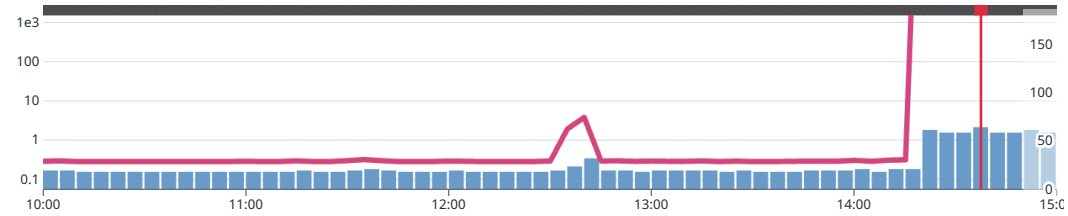
Eric Swanson

Recently queried metrics tagged with container_id

- Used in Dashboards or Monitors
- Not used

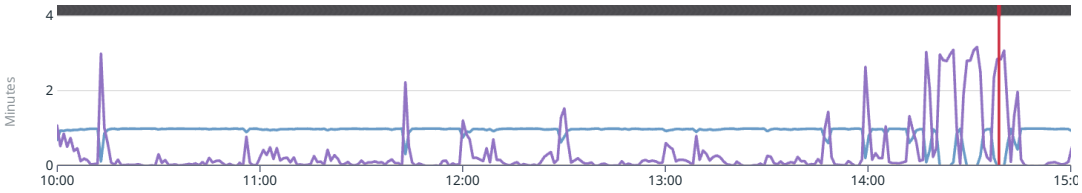
Account ID Correlation

Top Service Containers on host:i-047d8572c4c652cf6 by Open File Descriptor Count - with High IO Wait Event Overlay



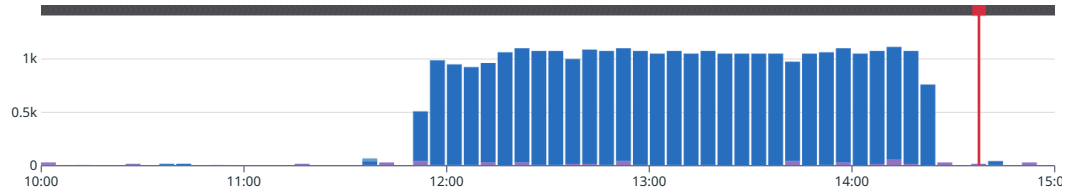
service	METRIC	AVG	MIN	MAX	SUM	VALUE
orc-cold-dispatcher	Container Max Packe...	0.38	0.17	2.13	22.97	0.19
orc-cold-dispatcher	Container Max (bytes...	71.3	29.87	491	4.28k	31.2

EBS: Average I/O time for host:i-047d8572c4c652cf6 volume-id:vol-0b4299fbc1b76c8f5



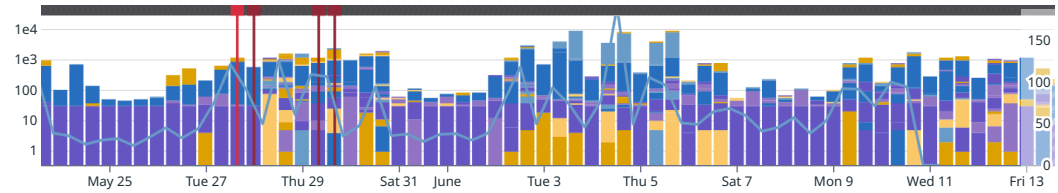
TAGS			METRIC	AVG	MIN	MAX	SUM	VALUE
attachment-device:/dev/sda1	volume-id:vol-0b429...	+2	aws.ebs.volume_idle...	54.8 s	158 ms	59.9 s	4.57 hr	59.7 s
attachment-device:/dev/sda1	volume-id:vol-0b429...	+2	aws.ebs.volume_tota...	22.6 s	136 ms	3.15 min	1.89 hr	1.1 s
attachment-device:/dev/sda1	volume-id:vol-0b429...	+2	aws.ebs.volume_tota...	12.06 ms	0 ms	525.52 ms	3.62 s	0 s

Metricflow Server Requests per Account: account_id:*



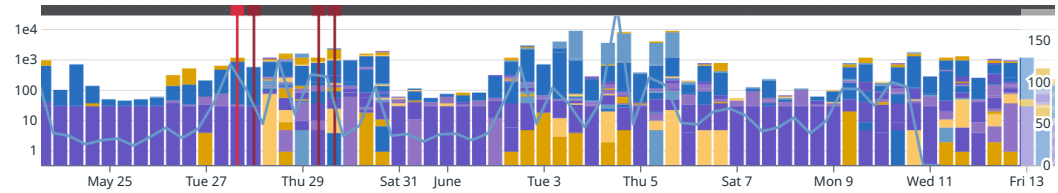
account_id in sum:metricflow_server.request.count{resource_name:*graphql* AND ...	AVG	MIN	MAX	SUM	VALUE
70437463654415	15.00	15	15	15	—
70437463654455	822.95	2	1,063	31,272	2.00
70437463654510	20.65	1	57	826	2.00
70437463654684	3.60	2	4	18	—

Correlated Metricflow Server Requests vs EBS Writes from account_id:* on dbt_instance:prod-us-c2 with High IO Wait Alert Events



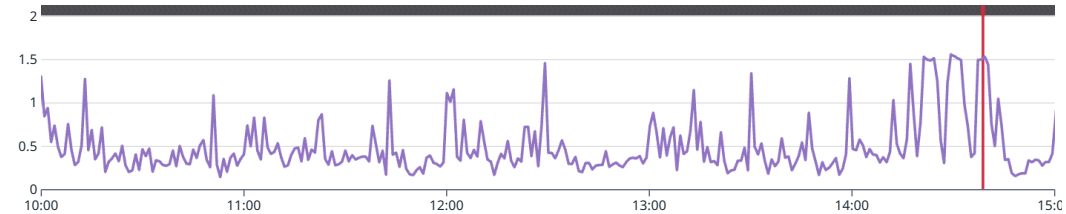
TAGS	METRIC	AVG	MIN	MAX	SUM	VALUE
account_id:2848	sum:metricflow_serv...	9.80	1.00	78.00	196.0	—
account_id:2895	sum:metricflow_serv...	5.00	5.00	5.00	5.0	—
account_id:4094	sum:metricflow_serv...	5.50	4.00	10.00	44.0	—
account_id:12143	sum:metricflow_serv...	5.00	5.00	5.00	15.0	—

Correlated Metricflow Server Requests vs EBS Writes from account_id:* on dbt_instance:prod-us-c2 with High IO Wait Alert Events



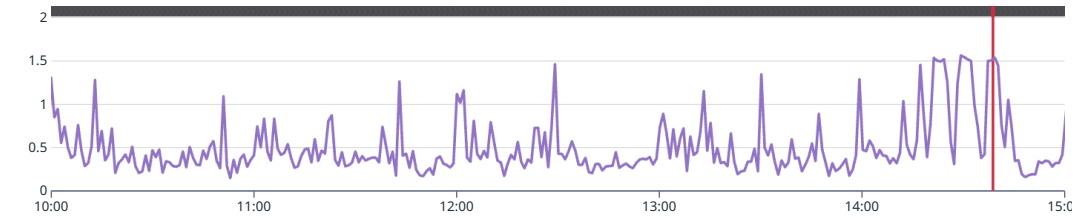
TAGS	METRIC	AVG	MIN	MAX	SUM	VALUE
account_id:2848	sum:metricflow_serv...	9.80	1.00	78.00	196.0	—
account_id:2895	sum:metricflow_serv...	5.00	5.00	5.00	5.0	—
account_id:4094	sum:metricflow_serv...	5.50	4.00	10.00	44.0	—
account_id:12143	sum:metricflow_serv...	5.00	5.00	5.00	15.0	—

Account 22484 (Rinsed)



TAGS	METRIC	AVG	MIN	MAX	SUM	VALUE
*	number of runs	0	0	0	0	0
*	avg:system.io.await{...	504 µs	156 µs	1.56 ms	151 ms	285 µs

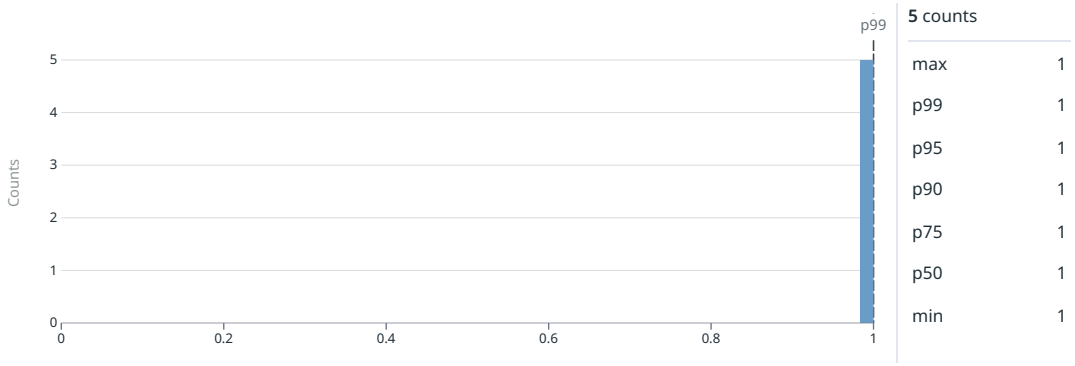
Account 2957 (Flock Freight)



TAGS	METRIC	AVG	MIN	MAX	SUM	VALUE
*	number of runs	0	0	0	0	0
*	avg:system.io.await{...	504 µs	156 µs	1.56 ms	151 ms	285 µs

All The Things

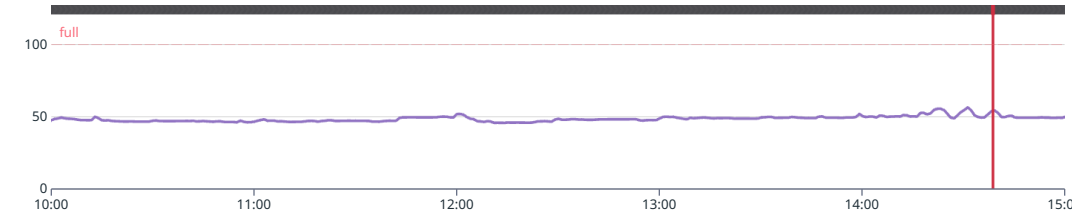
Distribution of High IO Wait Alert Events by Host



5 counts

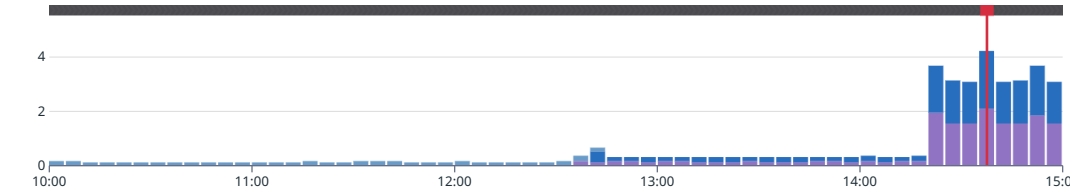
max	1
p99	1
p95	1
p90	1
p75	1
p50	1
min	1

Disk usage by device (%)



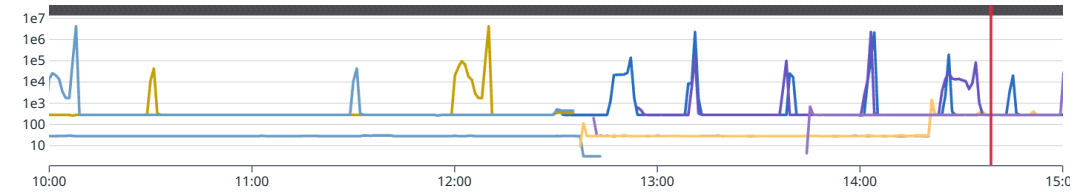
TAGS IN top(cutoff_min(max:system.disk.in_use{host:i-047d8572c4c652cf6,dbt_insta...	AVG	MIN	MAX	SUM	VALUE
device:/dev/root device_name:root	48.7	45.3	56.5	14.6k	46.4
device:overlay device_name:overlay	48.7	45.3	56.5	14.6k	46.4

Cold Container Packets Sent



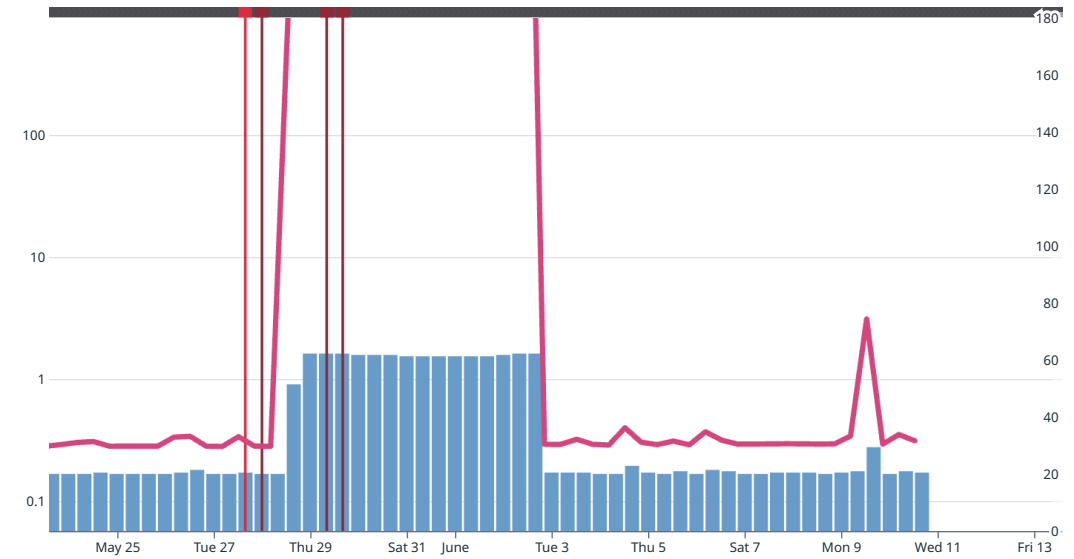
display_container_name in Cold Container Packets Sent	AVG	MIN	MAX	SUM	VALUE
orc-cold-dispatcher_orc-cold-dispatcher-594bbc9d64-lxdjj	0.17	0.15	0.20	5.6	0.19
orc-cold-dispatcher_orc-cold-dispatcher-5579bbf46b-bs7l9	0.61	0.17	2.07	17.0	—
orc-cold-dispatcher_orc-cold-dispatcher-5579bbf46b-dqnjh	0.60	0.17	2.13	17.5	—

Cold Container (Bytes) Sent



display_container_name	METRIC	AVG	MIN	MAX	SUM	VALUE
orc-cold-dispatcher_orc-cold-dispatcher-594bbc9d64-lxdjj	Cold Container Bytes...	29	3.4	32.16	4.8k	30
orc-cold-dispatcher_orc-cold-dispatcher-5579bbf46b-bs7l9	Cold Container Bytes...	115	29.8	1.24k	16.0k	—
orc-cold-dispatcher_orc-cold-dispatcher-5579bbf46b-dqnjh	Cold Container Bytes...	114	10.3	1.53k	16.3k	—
run_orc-dispatch-x1-1-fdb58455d-nzgrf	Top non-Cold Contai...	33,651	272.7	2,232.30k	5,047.7k	—

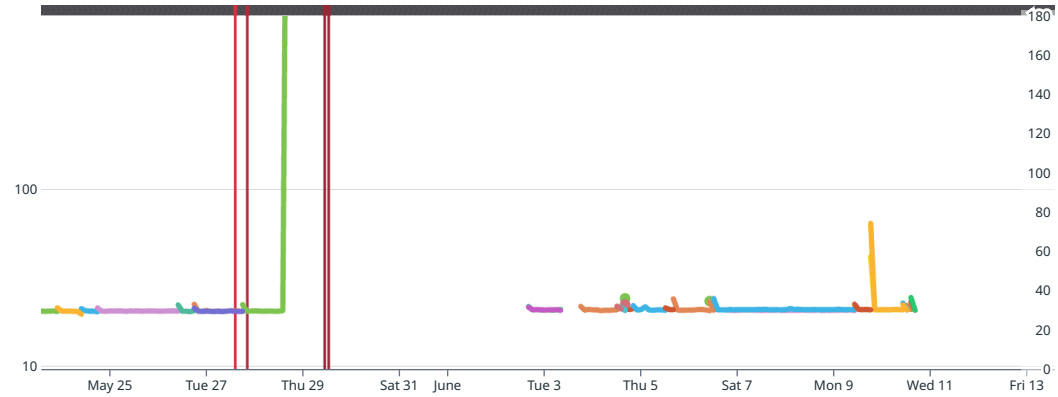
Top Service Containers on host:i-047d8572c4c652cf6 by Open File Descriptor Count - with High IO Wait Event Overlay 21d Past 21 Days



service	METRIC	AVG	MIN	MAX	SUM	VALUE
orc-cold-dispatcher	Container Max Packe...	0.59	0.17	1.7	31.98	1.6
orc-cold-dispatcher	Container Max (bytes...	109.8	30.18	305.4	5.93k	300.6

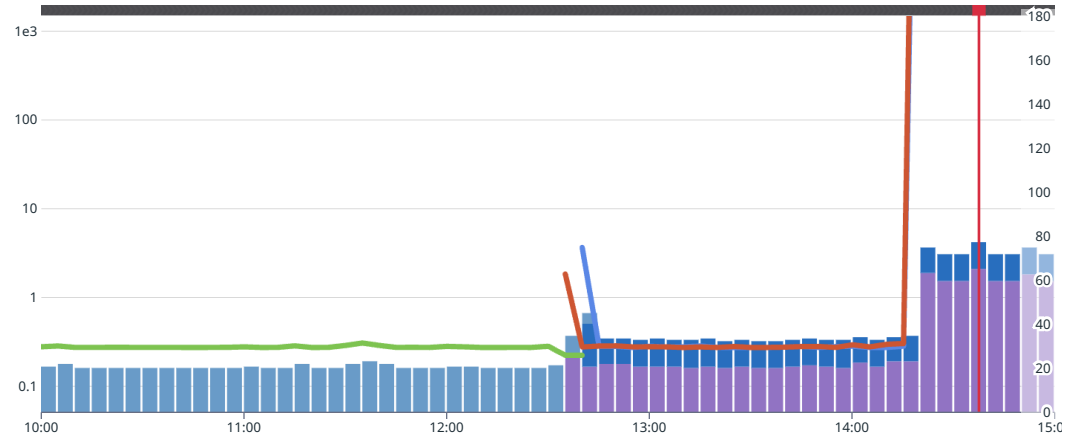
Top Service Containers on Most Alerting IO Wait Host by Open File Descriptor Count

21d Past 21 Days



TAGS IN Container Max (bytes) Sent	AVG	MIN	MAX	SUM	VALUE
container_id:1a2eaf14da65836b8e8db3eacc5663fc68ee989ad4516964630548e... +2	—	—	—	0	—
container_id:1c42870dc878d88563beccea9180212d63e07ec077386382b6da456... +2	31.1	30.7	32.6	279.6	—
container_id:2f05a59e74e4c1737fa3125d712245dcb96a199c4e91550311624c61... +2	31.4	30.4	36.5	313.8	—
container_id:3b622d1f2bbda872ee4e67f1c8fd74d00d6df07fcb0e9efe9ab7e2a16... +2	—	—	—	0	—
container_id:04fc9b19735dd7198c0ba999be23cacfbeee28b0eed08c037a3bdd4... +2	31.0	30.6	32.2	279.4	—
container_id:5cd156bc2846a7177a1d9706861ad3e1566ddfc63393aca47ce6926... +2	—	—	—	0	—
container_id:05f66699946cfbe54bf0a936b191d0e80a8496c24be6783e2bf4ae6a... +2	32.1	31.1	33.1	64.2	—
container_id:6dddc153fbbe57e93500bf935ce9712c5f6f8400a5d7eb72696fb73e... +2	30.5	29.9	31.6	152.4	—

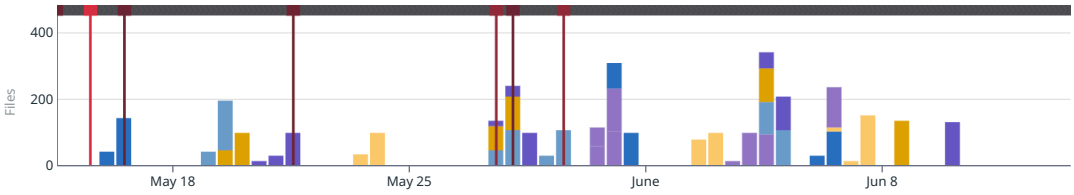
Top Service Containers on host:i-047d8572c4c652cf6 by Open File Descriptor Count - with High IO Wait Event Overlay



display_container_name	METRIC	AVG	MIN	MAX	SUM	VALUE
orc-cold-dispatcher_orc-cold-dispatcher-594bbc9d64-lxdjj	Container Max Packe...	0.17	0.15	0.20	5.6	0.19
orc-cold-dispatcher_orc-cold-dispatcher-5579bbf46b-bs7l9	Container Max Packe...	0.61	0.17	2.07	17.0	—
orc-cold-dispatcher_orc-cold-dispatcher-5579bbf46b-dqnjh	Container Max Packe...	0.60	0.17	2.13	17.5	—
orc-cold-dispatcher_orc-cold-dispatcher-594bbc9d64-lxdjj	Container Max (bytes...	29.90	26.35	31.90	986.8	31.24
orc-cold-dispatcher_orc-cold-dispatcher-5579bbf46b-bs7l9	Container Max (bytes...	114.53	29.86	432.95	3,206.8	—
orc-cold-dispatcher_orc-cold-dispatcher-5579bbf46b-dqnjh	Container Max (bytes...	113.57	29.86	490.68	3,293.6	—

Top Service Containers on host:i-047d8572c4c652cf6 by Open File Descriptor Count - with High IO Wait Event Overlay

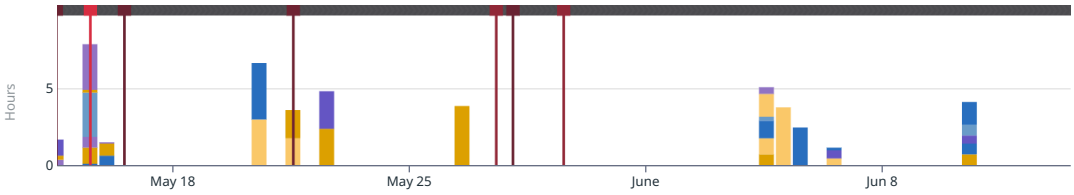
1mo Past 1 Mont



TAGS IN Top 25 Service Containers by Max Open Files			AVG	MIN	MAX	SUM	VALUE
display_container_name:run_orc-dispatch-x1-1-6b4bdbbc57-8ndjd	servic...	+1	97.3 files	44.9 files	150 files	195 files	—
display_container_name:run_orc-dispatch-x1-1-6b4bdbbc57-xr8nl	service:...	+1	95.3 files	45.3 files	145 files	191 files	—
display_container_name:run_orc-dispatch-x1-1-6bfb554855-g4m2r	servic...	+1	117.5 files	117.5 files	117 files	117 files	—
display_container_name:run_orc-dispatch-x1-1-6bfb554855-pbl2g	service...	+1	74.8 files	48.9 files	101 files	150 files	—

Orc Cold Dispatch Container Uptime on host:i-047d8572c4c652cf6 - with High IO Wait Event Overlay

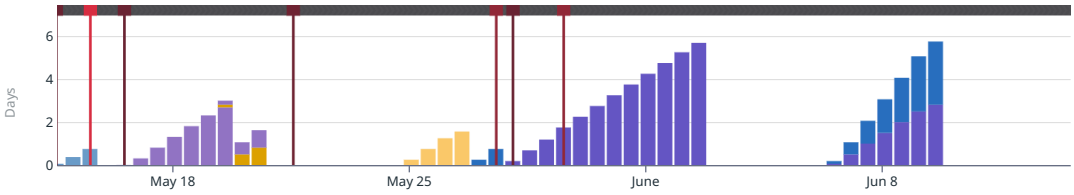
1mo Past 1 Month



TAGS IN Top 50 Shortest-lived Containers		AVG	MIN	MAX	SUM	VALUE
container_id:0f14a0827801f2a6ceaf36b0984bd32426bf104ef2833e64...	+1	4.23 s	4.23 s	4.23 s	4.23 s	—
container_id:0f14a0827801f2a6ceaf36b0984bd32426bf104ef2833e64...	+1	3.57 hr	3.57 hr	3.57 hr	3.57 hr	—
container_id:3b622d1f2bbda872ee4e67f1c8fd74d00d6df07fcb0e9efe...	+1	5.13 s	5.13 s	5.13 s	5.13 s	—
container_id:3b622d1f2bbda872ee4e67f1c8fd74d00d6df07fcb0e9efe...	+1	148.11 min	148.11 min	148.11 min	148.11 min	—

Orc Cold Dispatch Container Uptime on host:i-047d8572c4c652cf6 - with High IO Wait Event Overlay

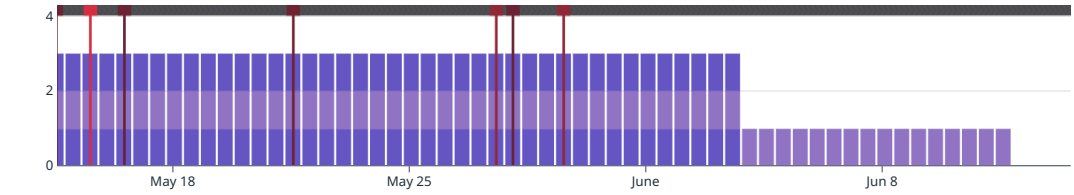
1mo Past 1 Month



TAGS IN Top 10 Longest-lived Containers		AVG	MIN	MAX	SUM	VALUE
container_id:00ad58e9fb3768aedc14280dd43dae2550377c6f763620526db6...	+1	15.1 hr	142.9 min	19.3 hr	1.26 days	—
container_id:7c5cfed991d23430089fb0c71501f7cd3ab173bc349708b722f434...	+1	8.7 hr	23.7 min	18.8 hr	1.08 days	—
container_id:8c06a8a6cecc6033e757cdbe7ccf4f5b1a762d7cb49500009c69a4...	+1	12.4 hr	3.42 hr	20.4 hr	1.55 days	—
container_id:51f427ad36c7208391e39924de533aba498056603d949c153a98...	+1	66.8 hr	14.1 min	5.7 days	36.18 days	—

k8s Probe Failures on host:i-047d8572c4c652cf6 - with High IO Wait Event Overlay

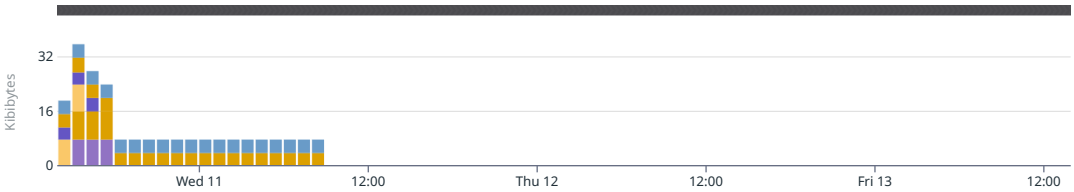
1mo Past 1 Month



TAGS		METRIC	AVG	MIN	MAX	SUM	VALUE
container_id:6cc91d876427b9df9f9680396439b4d002...	+1	Liveness Failure by C...	—	—	—	0	—
container_id:01041797c385ad563a922b845a35c0f800...	+1	Liveness Failure by C...	—	—	—	0	—
container_id:ac2db8c6f12c639d00040295b73dc92fda...	+1	Liveness Failure by C...	—	—	—	0	—
container_id:b9651b38d318a4d94419ddc9a04de327c...	+1	Liveness Failure by C...	1	1	1	40	—

Container Bytes Used on host:i-047d8572c4c652cf6 - with High IO Wait Event Overlay

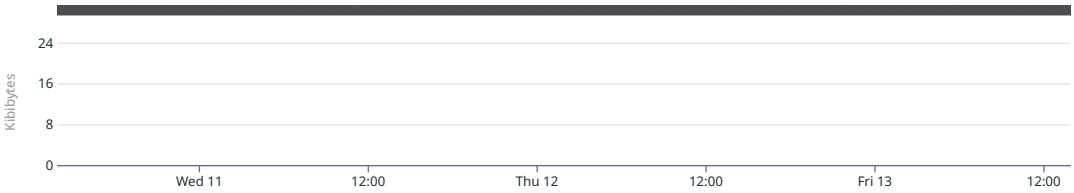
3d Past 3 Days



TAGS	METRIC	AVG	MIN	MAX	SUM	VALUE
container_id:12e62518ca84a228f8efc5842c71ac29a3c... +4	top run containers by...	4.00 KiB	4.00 KiB	4 KiB	76.0 KiB	4.00 KiB
container_id:41c1289fbf27cdafdf33452bac1ab88dc87... +4	top run containers by...	—	—	—	0 KiB	—
container_id:820a8998a084be30df0539d1566ced638... +4	top run containers by...	—	—	—	0 KiB	—
container_id:a59b3708d1b2ef20fdb7a73536cc1e02fa... +4	top run containers by...	—	—	—	0 KiB	—

Init Container Bytes Used on host:i-047d8572c4c652cf6 - with High IO Wait Event Overlay

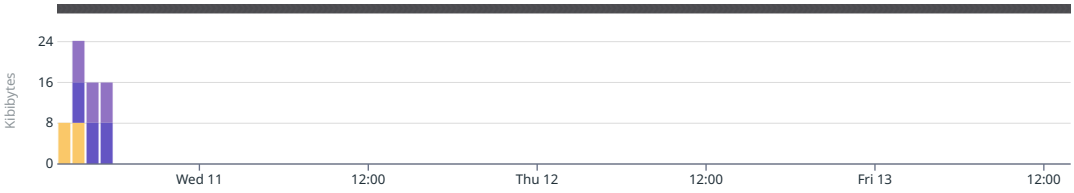
3d Past 3 Days



display_container_name in top run containers by bytes used	AVG	MIN	MAX	SUM	VALUE
init-sysctl_orc-dispatch-x1-1-5c67bf9bd-h7bw8	—	—	—	0 B	4,096.00 B
init-sysctl_orc-dispatch-x1-1-5c67bf9bd-sgzwg	—	—	—	0 B	4,096.00 B
init-sysctl_orc-dispatch-x2-1-67875f6cb-5kzhd	—	—	—	0 B	4,096.00 B
init-sysctl_orc-dispatch-x2-1-67875f6cb-tc9vh	—	—	—	0 B	4,096.00 B

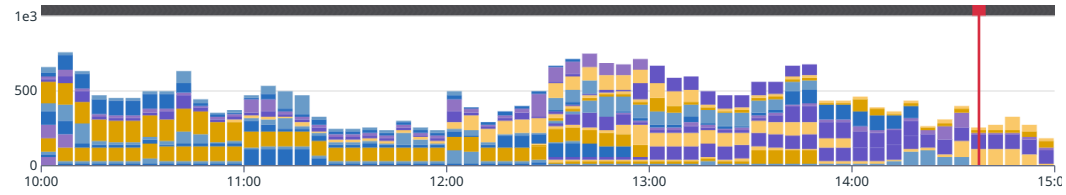
Orc Cold Dispatcher Container Bytes Used on host:i-047d8572c4c652cf6 - with High IO Wait Event Overlay

3d Past 3 Days



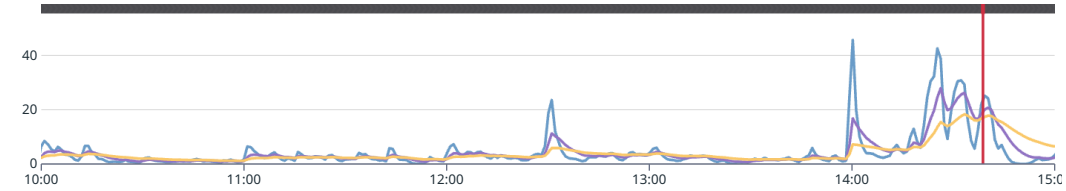
display_container_name in top run containers by bytes used	AVG	MIN	MAX	SUM	VALUE
orc-cold-dispatcher_orc-cold-dispatcher-7c46cdc767-88kkl	—	—	—	0 KiB	—
orc-cold-dispatcher_orc-cold-dispatcher-7c46cdc767-mjk2g	—	—	—	0 KiB	—
orc-cold-dispatcher_orc-cold-dispatcher-7d9cb578f5-fpmbz	8 KiB	8 KiB	8 KiB	24 KiB	—
orc-cold-dispatcher_orc-cold-dispatcher-7d9cb578f5-mps6v	8 KiB	8 KiB	8 KiB	24 KiB	—

Top 25 Max Service Containers on host:i-047d8572c4c652cf6 by Open File Pid Count - with High IO Wait Event Overlay



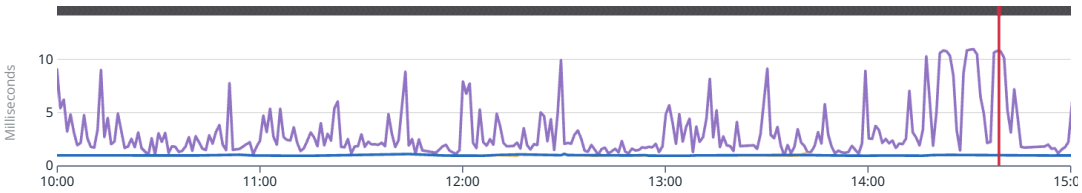
TAGS IN Top 25 Max Open Files by Service and Container	AVG	MIN	MAX	SUM	VALUE
display_container_name:run_orc-dispatch-x1-1-6675f5dff7-4kp6t service:orc-dispatch	31.2	16.0	129.4	780	16.0
display_container_name:run_orc-dispatch-x1-1-6675f5dff7-7dx2h service:orc-... +1	37.6	12.0	99.1	1,202	16.0
display_container_name:run_orc-dispatch-x1-1-6675f5dff7-9mbhz service:orc-... +1	38.2	15.8	150.3	1,376	—
display_container_name:run_orc-dispatch-x1-1-6675f5dff7-b5zxc service:orc-dispatch	26.8	12.0	92.8	857	—

Load Averages 1-5-15



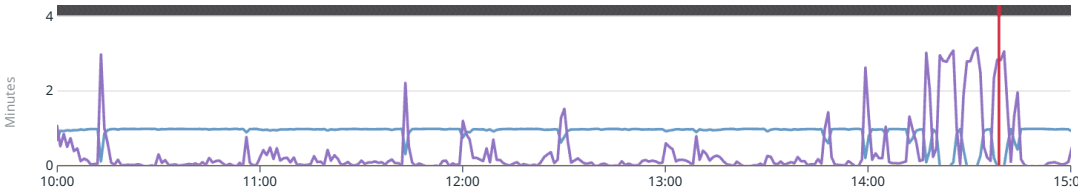
TAGS	METRIC	AVG	MIN	MAX	SUM	VALUE
*	max:system.load.1{h...	4.58	0.13	45.5	1.37k	1.99
*	max:system.load.5{h...	4.56	0.91	27.9	1.37k	2.85
*	max:system.load.15{...	4.32	1.30	18.3	1.30k	2.75

Disk latency (by device)



device in top(cutoff_min(max:system.io.await{host:i-047d8572c4c652cf6,dbt_instan...	AVG	MIN	MAX	SUM	VALUE
nvme0n1	3.20 ms	1.01 ms	10.91 ms	893.4 ms	1.52 ms
nvme0n1p1	3.20 ms	1.01 ms	10.91 ms	893.5 ms	1.52 ms
nvme1n1	1.04 ms	1.00 ms	1.20 ms	36.3 ms	—
nvme1n1p1	1.04 ms	1.00 ms	1.16 ms	31.1 ms	—

EBS: Average I/O time for host:i-047d8572c4c652cf6 volume-id:vol-0b4299fbc1b76c8f5



TAGS			METRIC	AVG	MIN	MAX	SUM	VALUE
attachment-device:/dev/sda1	volume-id:vol-0b429...	+2	aws.ebs.volume_idle...	54.8 s	158 ms	59.9 s	4.57 hr	59.7 s
attachment-device:/dev/sda1	volume-id:vol-0b429...	+2	aws.ebs.volume_tota...	22.6 s	136 ms	3.15 min	1.89 hr	1.1 s
attachment-device:/dev/sda1	volume-id:vol-0b429...	+2	aws.ebs.volume_tota...	12.06 ms	0 ms	525.52 ms	3.62 s	0 s