


# SRE Investigation: Correlated Process Metrics for High IO Wait Alerts

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# Monitor Details

## Monitor

- 🔗 [MT/MC Production - High IO wait on k8s worker node](#)

## Query

- `avg(last_30m):avg:system.cpu.iowait{env:*prod*} by {dbt_instance,host,env} > 25`
- Critical: Avg iowait in the last 30 minutes > 25%
  - Consider removing host from alert scope to reduce separate noise.
- No Warning threshold.

## Alert Events

- [#dev-infra-alerts discussion thread](#)
- `source:alert @monitor_notifications:*dev-infra-alerts* status:error @monitor_id:60714933`
  - Top Multi-Host Alert Events:** `past 1mo, count by dbt_instance, top 10, cutoff_min 4, rollup every 1h`

## 1 hr Scopes of Interest

- `dbt_instance:prod-us-c2`
- 5/13 @ 15:00 - 5 alerts
- 5/13 @ 14:00 - 8 alerts
  - 🔗 [Monitor Status](#): 8 separate hosts in scope
  - Impacted alert time range: May 13, 2:53 pm – May 13, 3:25 pm
    - Means that avg iowaits started as early as 30 minutes prior: 2:23pm
  - 5/13 @ 2:53 PM: simultaneous hosts alerted. Process window will be within 30 minutes prior
    - `host:i-01986e7bee90235fd,i-0466c9c2aaeeab28b,i-047d8572c4c652cf6,i-047d8572c4c652cf6,i-08e04e6e09e1d55a3,i-0ecfe517efc14a6d1,i-0bef875283ff49024`
    - Top impacting processes by RSS Memory %: `May 13, 12:30 pm – May 13, 3:30 pm`
- 5/8 @ 11:00 - 6 alerts
- 5/7 @ 10:00 - 4 alerts
- 4/22 @ 12:00 - 6 alerts

## Processes

- Most Recent Start of Impact** May 13, 2:23 pm – May 13, 2:53 pm

## Process Metrics

- `dbt_instance:prod-us-c2 $host` by User CPU %, Top 10

## Process Details

- 🔗 [Related Processes](#)

## RSS Memory goes bananas for this process!

- `python3 /venv/dbt-latest/bin/dbt --log-format json --debug docs generate --target default --profile user --profiles-dir /tmp/jobs/70437465593551/.dbt --project-dir /tmp/jobs/70437465593551/target`
- Tags: `host:i-0ecfe517efc14a6d1 user:uid:999 pid:4038772 container_name:run kube_node:ip-10-128-42-243.ec2.internal kube_deployment:orc-dispatch-x3-1`
- 🔗 [dbt\\_instance:prod-us-c2 container\\_name:run pid:649944](#)
- 🔗 [dbt\\_instance:prod-us-c2 container\\_name:run kube\\_deployment:orc-dispatch-x3-1](#)

- matches hosts and same details: `user:uid:999`
- Top by RSS Memory Descending: `python3 /venv/dbt-latest/bin/dbt --log-format json --debug build -s source_status:fresher+,tag:hourly --exclude resource_type:test config.materialized:view --target prod --profile user --profiles-dir /tmp/jobs/70437465593513/.dbt --project-dir /tmp/jobs/70437465593513/target/bi_base`
- Top by % User CPU `python3 /venv/dbt-latest/bin/dbt --log-format json --debug seed -s state:modified --full-refresh --target prod --profile user --profiles-dir /tmp/jobs/70437465593980/.dbt --project-dir /tmp/jobs/70437465593980/target/bi_base`
- 

## Alert Events

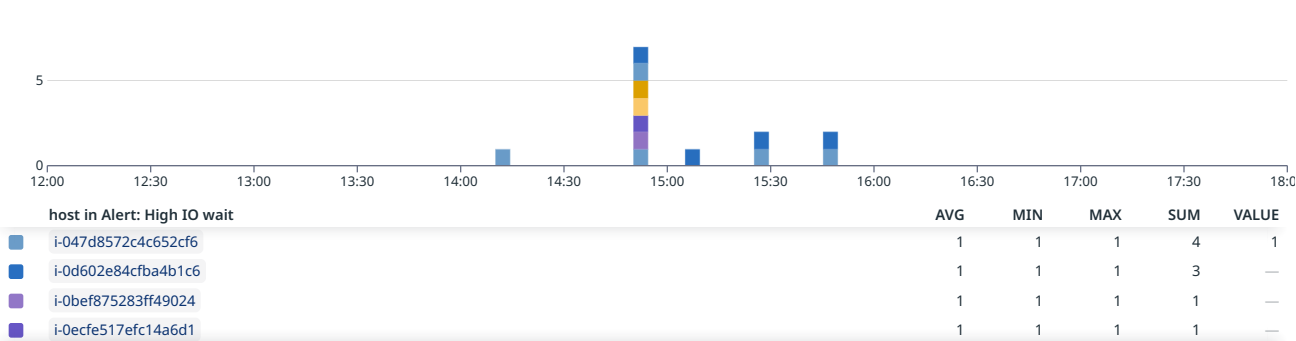
### Top High IO Wait Multi-Alert Events by dbt\_instance

1mo Past 1 Month



### High IO Wait Alert Events by host for prod-us-c2: 5/13/25

6h 12:00 pm - 6:00 pm



## ► Memory Limits

# Process Metrics

Top 10 User CPU % processes in dbt\_instance:prod-us-c2 for High IO Wait alerting hosts

Invalid Timeframe

Process query must end within last 36h

[Set Global Time to Past 1 Week](#)

Top 10 User RSS Memory % processes in dbt\_instance:prod-us-c2 for High IO Wait alerting hosts

3h


 12:30 pm - 3:30 pm

Invalid Timeframe

Process query must end within last 36h

[Edit Local Time](#)

Top 10 Process sample deets: process:git index-pack --stdin --fix-thin --keep=fetch-pack 148 on orc-dispatch-x3-1-9c88b9f6-jf9p2 --check-self-contained-and-c...

- pid:251465
-  [process view for time window](#): confirmed.

host:i-0ecfe517efc14a6d1,pid:4090473,process:python3 /venv/dbt-latest/bin/dbt --log-format json --debug test --select rpt\_clinical\_encounter\_los rpt\_clinical\_nrt\_los...

## git index-pack 148 on orc-dispatch-x3-1-9c88b9f6-jf9p2



Started 23 hours ago Tue, May 13, 5:10:05 pm Exited about 24 hours ago Tue, May 13, 5:10:00 pm  
- Exited \_before\_ it started

python3 /venv/dbt-latest/bin/dbt  
--log-format json  
--debug build  
--target default  
--profile user  
--profiles-dir /tmp/jobs/70437465592665/.dbt  
--project-dir /tmp/jobs/70437465592665/target/dbt\_snowflake\_transformations



## Containers

-  [Container metrics](#)

## Logs

Non-info log patterns by Service for impacted hosts in alert time window

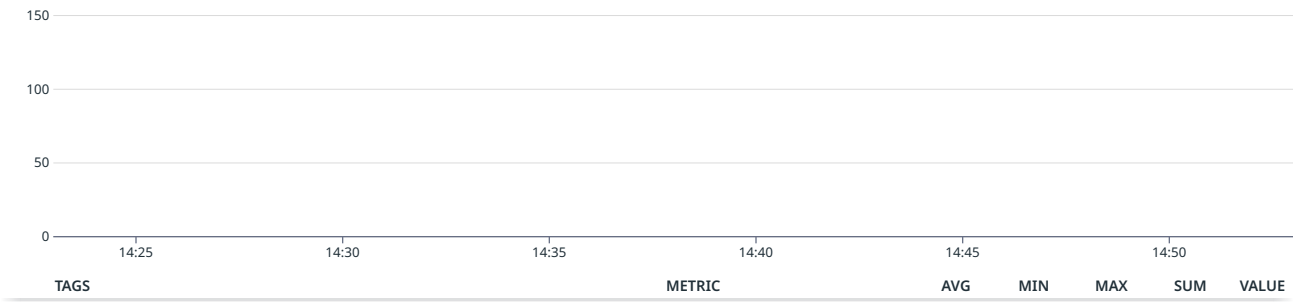
30m 2:23 pm - 2:53 pm

COUNT	~VOLUME	SERVICE	MESSAGE	
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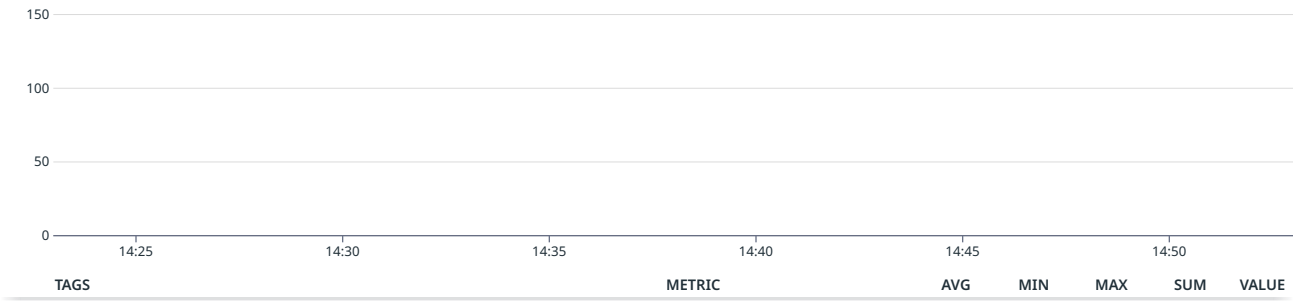
No matching results found

\$host -status:info service:orc-dispatch status:warn "step failure after prior success project\_hash\_status v2" , \$host -status:info servi



Top Warning and Error Log Patterns by message for alerting time window

30m 2:23 pm - 2:53 pm



Top Warning and Error Log Patterns by message for alerting time window


30m 2:23 pm - 2:53 pm

↑

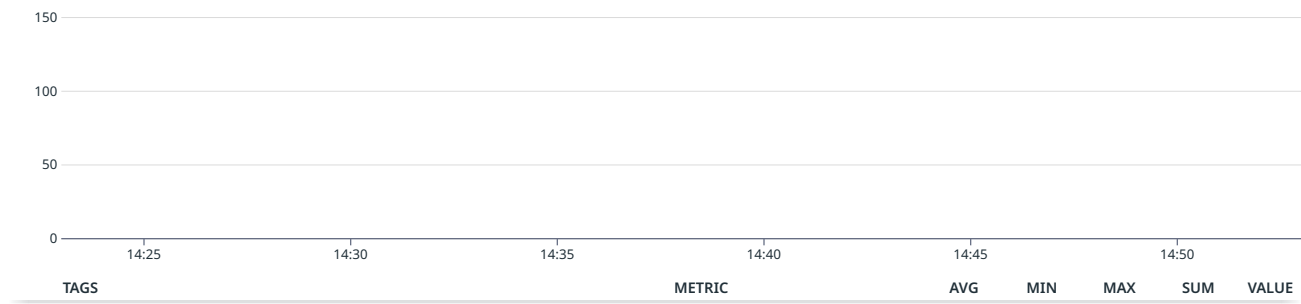
DATE

HOST

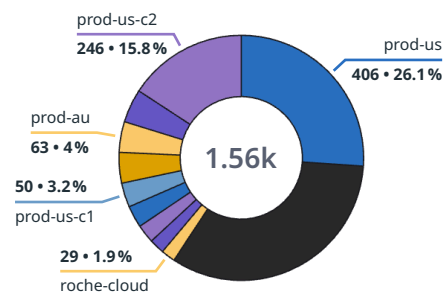
SERVICE



No matching results found



service:containerd status:error "Failed to handle backOff event" dbt\_env:prod 2d Past 2 Days



DBT_INSTANCE	COUNT	SHARE
prod-us	406	26.08 %
prod-us-c2	246	15.80 %
siemens-d2go	69	4.43 %
prod-emea	63	4.05 %
prod-au	63	4.05 %
prod-us-c1	50	3.21 %
medtronic-cloud	45	2.89 %
prod-us-c3	38	2.44 %
ally-cloud	31	1.99 %
roche-cloud	29	1.86 %

service:orc-dispatch "no agent or invalid configuration file found" dbt\_env:prod 30m 2:23 pm - 2:53 pm

No Data

Consistent Run for prod-us-cprocess:python3 /venv/dbt-latest/bin/dbt --log-format json --debug build --select state:modified+ --target default --profile use...

INFO

May 14, 2025 at 5:28:16.432 pm (30 days ago)

View Full Details

MESSAGE

[2025-05-14 21:28:15.710863] INFO: codex: EnvironmentConsumerHandler: Process run completed event: run {

fields {

id: "70437465615303"

status: 10

started\_at: 1747257988

finished\_at: 1747258095

dbt\_version: "latest"

status\_message: "None"

git\_branch: "master"

git\_sha: "9232bc330feca502665eb81246b837802cd2cfe7"

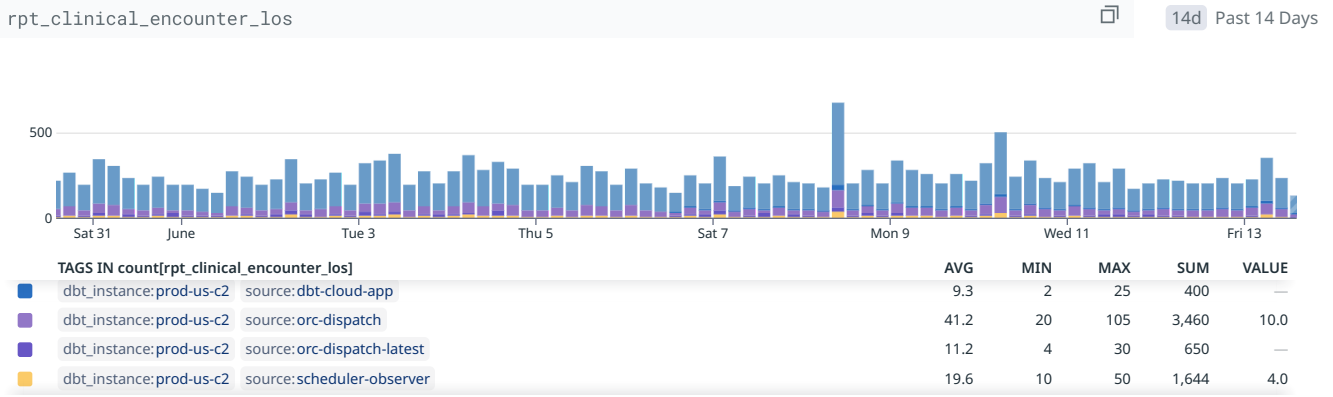
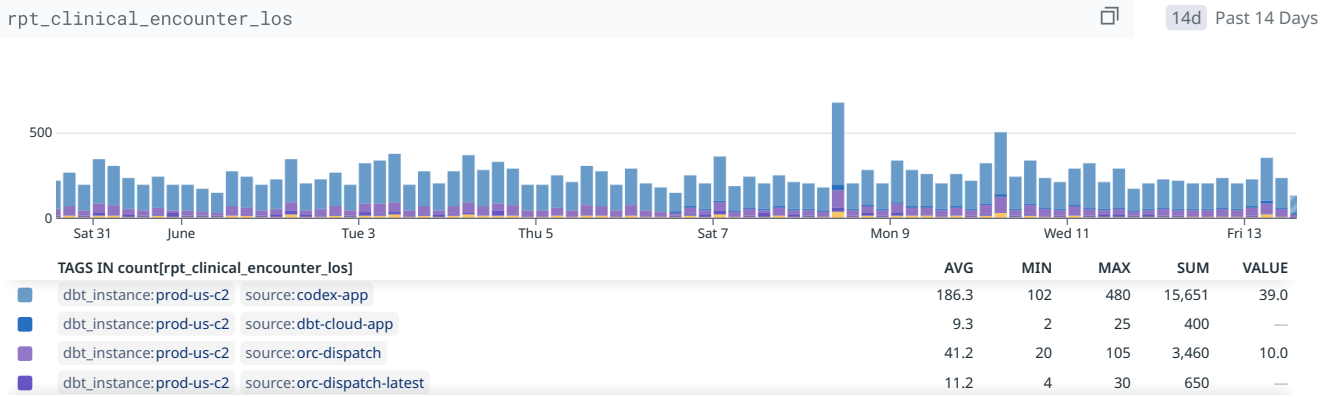
artifact\_s3\_path: "prod-us-c2/runs/70437465615303/artifacts/target"

dbt\_cloud\_run\_reason: "Triggered via Apache Airflow by task \'DBT\_CLOUD\_RUN\_etl\_dbt\_testcases\' in the ETL\_DBT\_testcases DAG."

latest\_manifest\_path: "s3://com.dbt.us1.c2.artifacts/prod-us-c2/runs/70437465615303/artifacts/target\_4/manifest.json"

publication\_path: "s3://com.dbt.us1.c2.artifacts/prod-us-c2/runs/70437465615303/artifacts/target\_4/publication\_data"

Show More

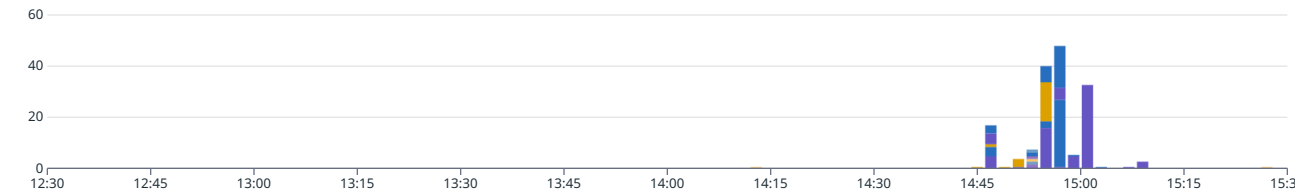




# Events

## Error and Warning Events by Service and impacted host

3h 12:30 pm - 3:30 pm



TAGS IN		count	dbt_instance:prod-us-c2 -status:(ok OR info) host:(i-01986e7bee90235fd OR i-0466c9c2aabeeab28b OR ...	AVG	MIN	MAX	SUM	VALUE
	host:i-0bef875283ff49024	source:alert		1.00	1	1	1	—
	host:i-0bef875283ff49024	source:kubernetes		5.60	1	16	28	—
	host:i-0ecfe517efc14a6d1	source:alert		1.00	1	1	1	—
	host:i-0ecfe517efc14a6d1	source:kubernetes		11.75	4	33	47	—