NEWRELIC

Link: [API Keys < New Relic](https://one.newrelic.com/admin-portal/api-keys/home?account=7291193&state=1fb9cb6f-2be6-f786-0aad-07e692e6925f)

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Q. What is New Relic?

* **New Relic** is an **Application Performance Monitoring (APM)** and **observability platform**.  
  It helps you **monitor, analyze, and troubleshoot** applications and infrastructure in real-time.
* A tool to **watch how your app and systems are working** — it shows if your app is **slow, has errors, or is down**, and where the problem is.

Q. Why newrelic is used?

* See if your app is **slow or has errors**
* Find **where** the problem is (code, server, or database)
* Get **alerts** when something goes wrong
* Keep everything (app, server, logs) in **one dashboard**

So simply — **it helps developers and teams make sure their apps run fast, work well, and don’t break.**

**Used -** Monitoring applications, infrastructure, logs, and business performance.

Q. What is path point in newrelic?

**Pathpoint** in New Relic shows the **steps a user takes in your app** — like a map of the user’s journey — and tells you **how each step is performing**.

* For example, if your app is an online shopping site, Pathpoint can show:  
  🛒 Home → Search → Add to Cart → Payment → Order Success
* Each step (stage) shows live data — how many users reach it, how long it takes, and where errors happen.

Q. Why pathpoint is used?

* It helps teams **see how technical issues affect the business.**
* If the “Payment” step is slow, Pathpoint will highlight it in red.
* This tells you that “users are stuck while paying,” so you can fix that part quickly.
* **It connects app performance with business impact** (like drop in orders or revenue).

Q. How newrelic is diff from Dynatrace, splunk and Grafana?

* Newrelic: All in 1 tool to monitor app, server, logs, and user flow. Checking app performance + user experience
* Dynatrace: A smart monitoring tool that uses AI to find issues automatically. Best for For large systems where you want automatic problem detection. Example: If one microservice in a bank’s system crashes, Dynatrace’s AI will find it and tell you the root cause.
* Splunk: Mainly used to collect and search logs from many sources. Best for For analyzing logs and checking security issues. Example: If your website fails, Splunk can search through all logs to find the exact error message or hacker activity.
* Grafana: A dashboard tool to display metrics and graphs from other tools. Example: Grafana can show CPU usage or app traffic from Prometheus or New Relic in colorful charts.
* **New Relic & Dynatrace** → watch your **apps and systems**.

Q. Is traces and pathpoint are similar?

**Traces**

* Automatic.. User clicks “Pay Now.”  
  Trace shows:  
  Frontend → Order Service → Payment Service → Database
* Show the **technical path** of a single request inside your app.
* Help developers see **which service or API is slow**.
* It’s more **backend-focused**.
* **Example:**  
  When a user clicks “Pay Now,” the trace shows:  
  frontend → order-service → payment-service → database  
  You can see exactly **where the delay happens**.

**Pathpoint:**

* **A Pathpoint shows the manual steps a user takes in your app (like going from one page to another).**
* Shows the **user’s full journey** in the app — like a business flow.
* Helps you see **which step users struggle with** and how it affects your **business goals**.
* It’s more **user and business-focused**.
* **Example:**  
  User flow:  
  Home → Search → Add to Cart → Payment → Success  
  If the *Payment* step turns red, Pathpoint shows that many users can’t complete checkout.
*  **Traces = “Where did this request go?”**
*  **Pathpoint = “Where did the user go?”**

28/10/25

TASK:

Merin: I created a new key and added it in the otelconfig file, now data is coming to newrelic.Please start working on the pathpoint

Q. where u can see the services on tha application?

* APM and Services on left side -> U can see the services
* If u click on a particular service u can see the **response time, Apdex score, Throughput, errors.**

Q. How to set up path pointing?

* Apps on left side -> search path pointing -> click -> No flows yet u can see.
* Screenshot:

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* Create a new flow:

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* Create:

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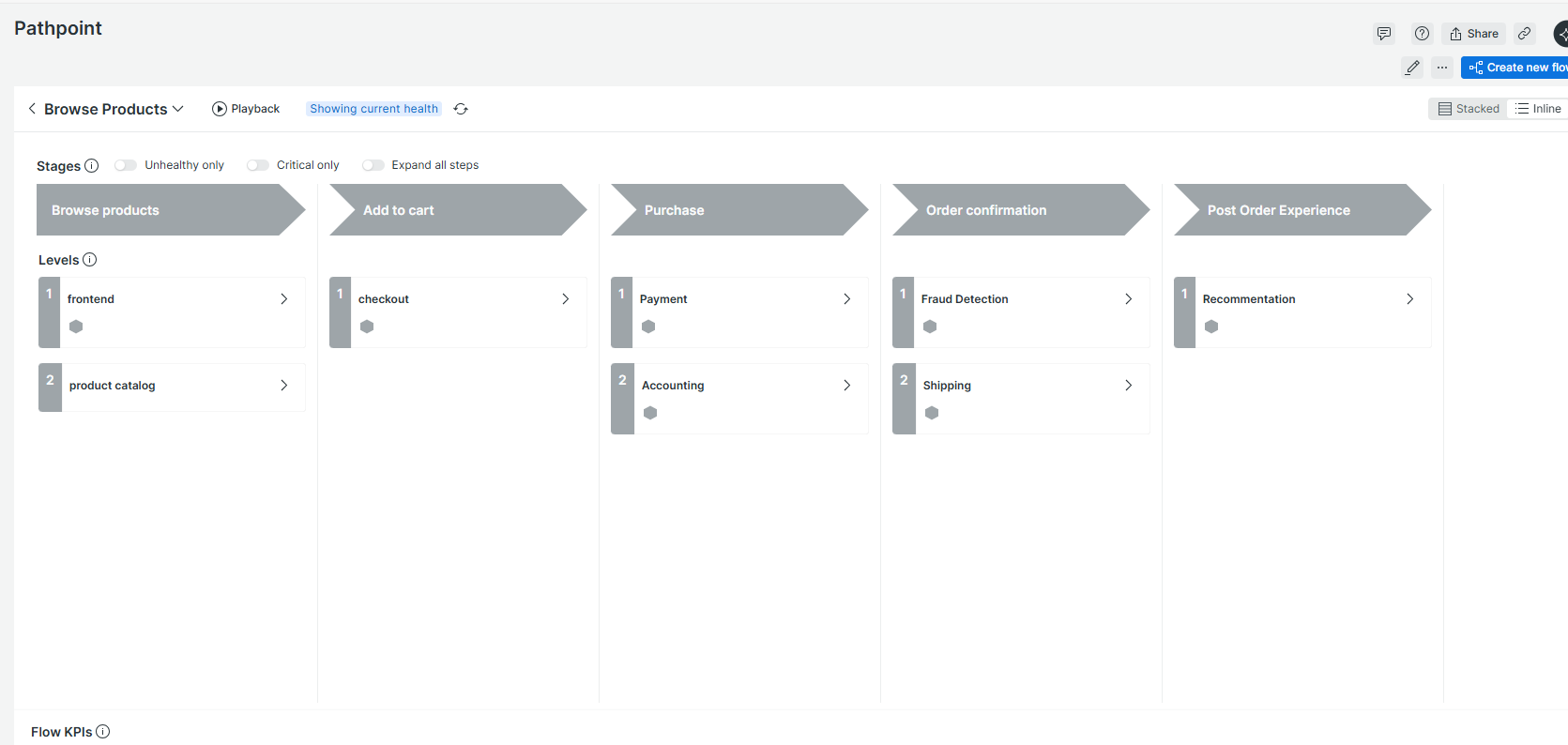
* Added level and added step and gave name as frontend and added signal:

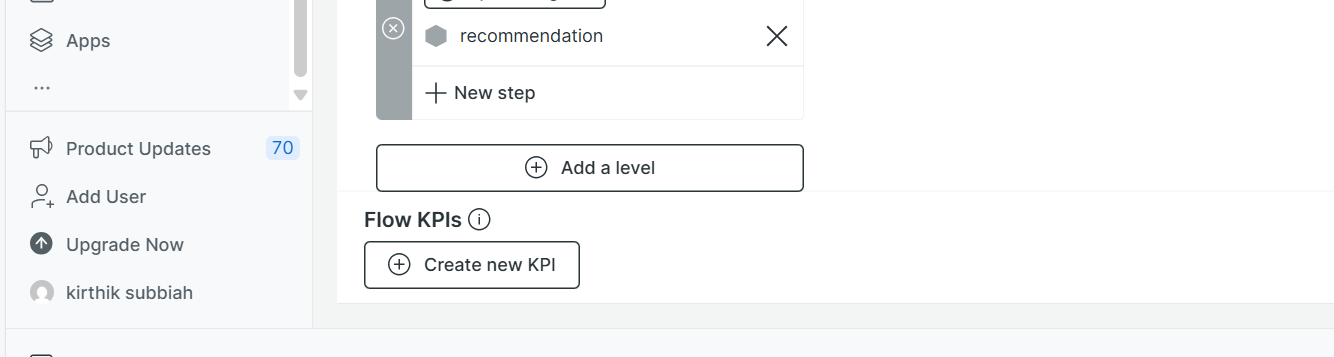
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* Added level 2 -> step add -> product catalog -> add signal -> select the service product catalog and save itA screenshot of a computer

  AI-generated content may be incorrect.
* Do same for payment, Shipping, Recommendation  
  A screenshot of a computer

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* Now you’re halfway done setting up your **Pathpoint user journey**.
* Let’s make it **actually show useful insights** like success rate, latency, and errors
* I created a different pathpoint:  
  
* To add stage:  
  A screenshot of a computer

  AI-generated content may be incorrect.
* Add **Flow KPIs: Scroll to the bottom of your Pathpoint page — you’ll see “Flow KPIs” → click ➕ Create new KPI**
* Create new kpi:  
  **KPI name:** Total requests  
  FROM Span

SELECT count(\*) AS 'Total Requests'

SINCE 7 days ago

* **KPI name:** Throughput(App-level)  
  FROM Span

SELECT rate(count(\*), 1 minute) AS 'Requests per minute'

SINCE 5 minutes ago

* **KPI name:** Error Rate(App level)  
  FROM Span

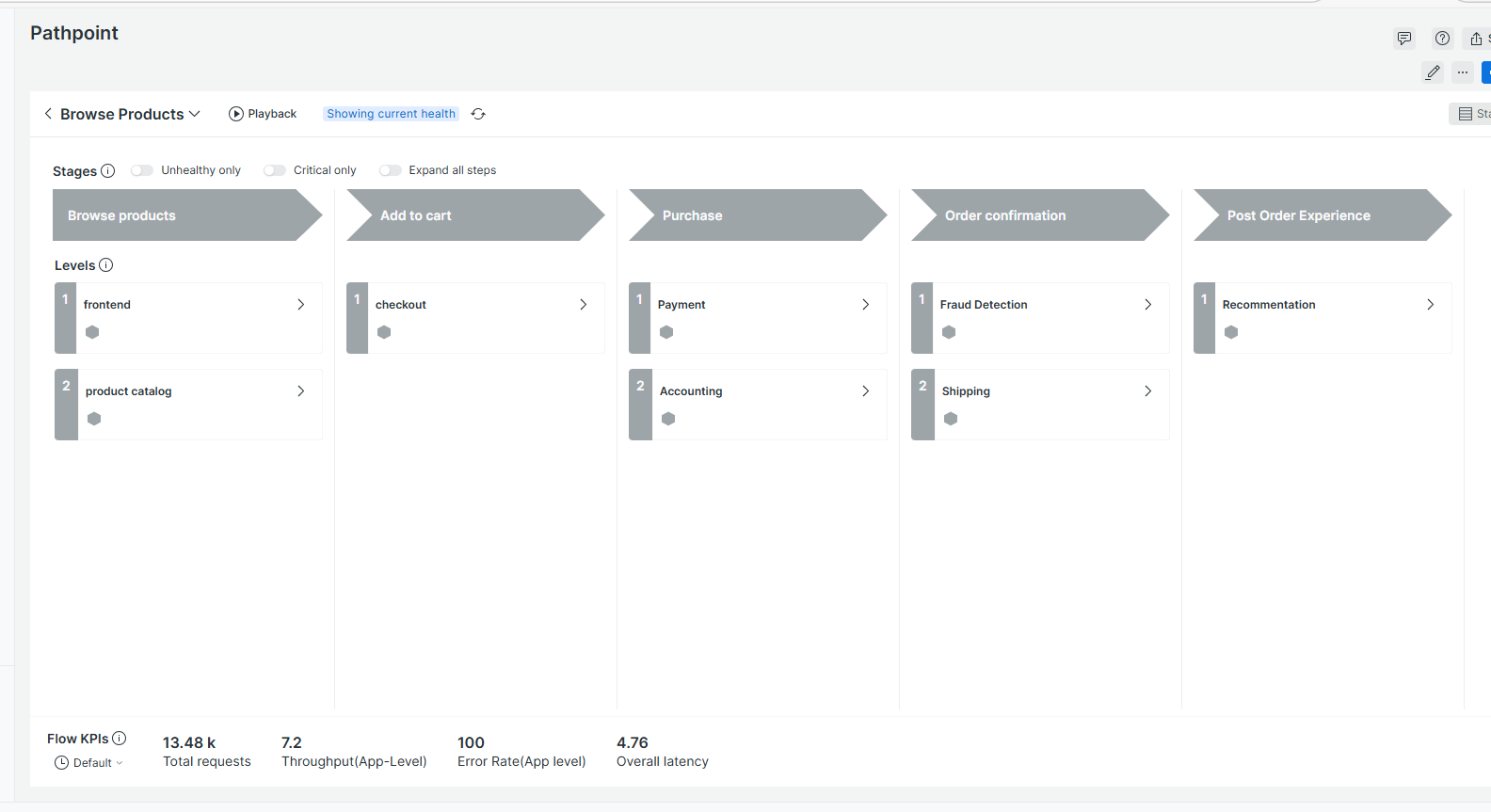
SELECT percentage(count(\*), WHERE status.code != 1) AS 'Error Rate (%)'

SINCE 5 minutes ago

* **KPI name:** Overall latency  
  FROM Span

SELECT average(duration.ms) AS 'Overall Latency (ms)'

SINCE 5 minutes ago

* Screenshot:  
  

Q. How to Give colour to ur pathpoint?

* Click playback:  
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Q. How to see the signals that u used also in bottom?

Click on stacked.

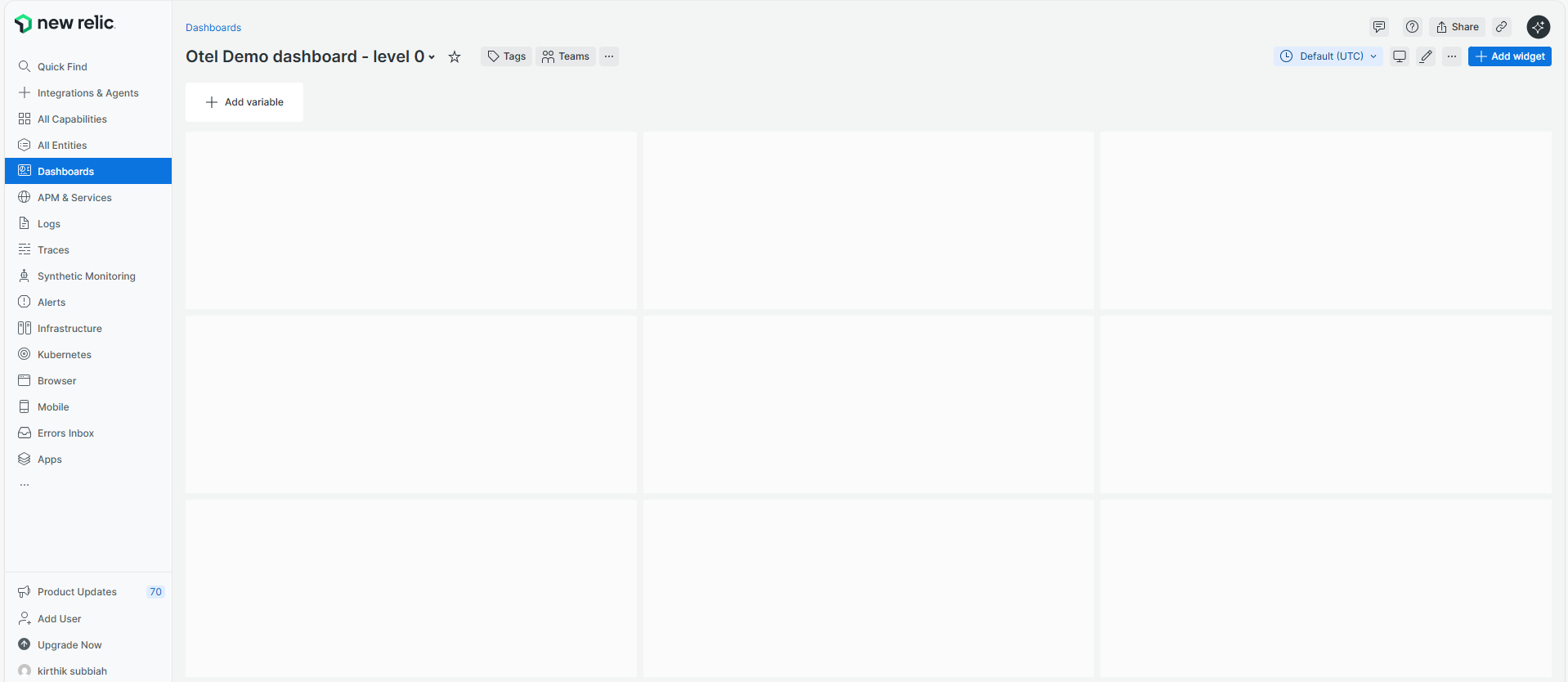
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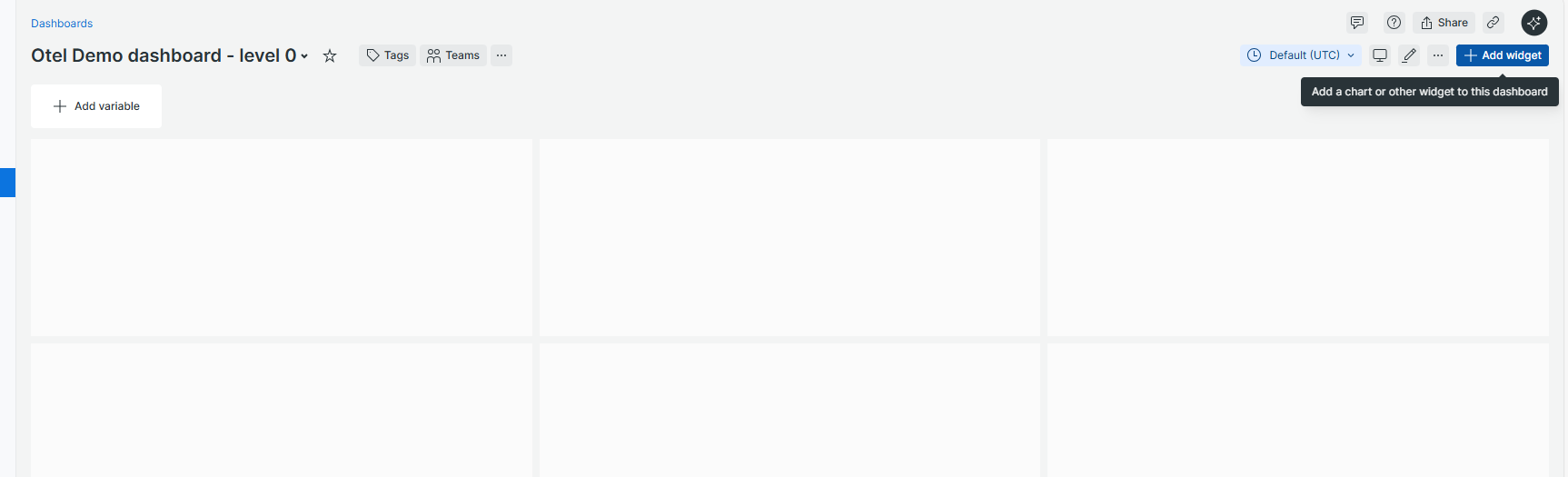
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Q. How to create dashboard in newrelic?



Q. How to add panels in ur dashboard?



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Type ur querry here.

A screenshot of a computer

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Q. How to check what data types your app is sending?

* SHOW EVENT TYPES (Type this querry)  
  A screenshot of a computer

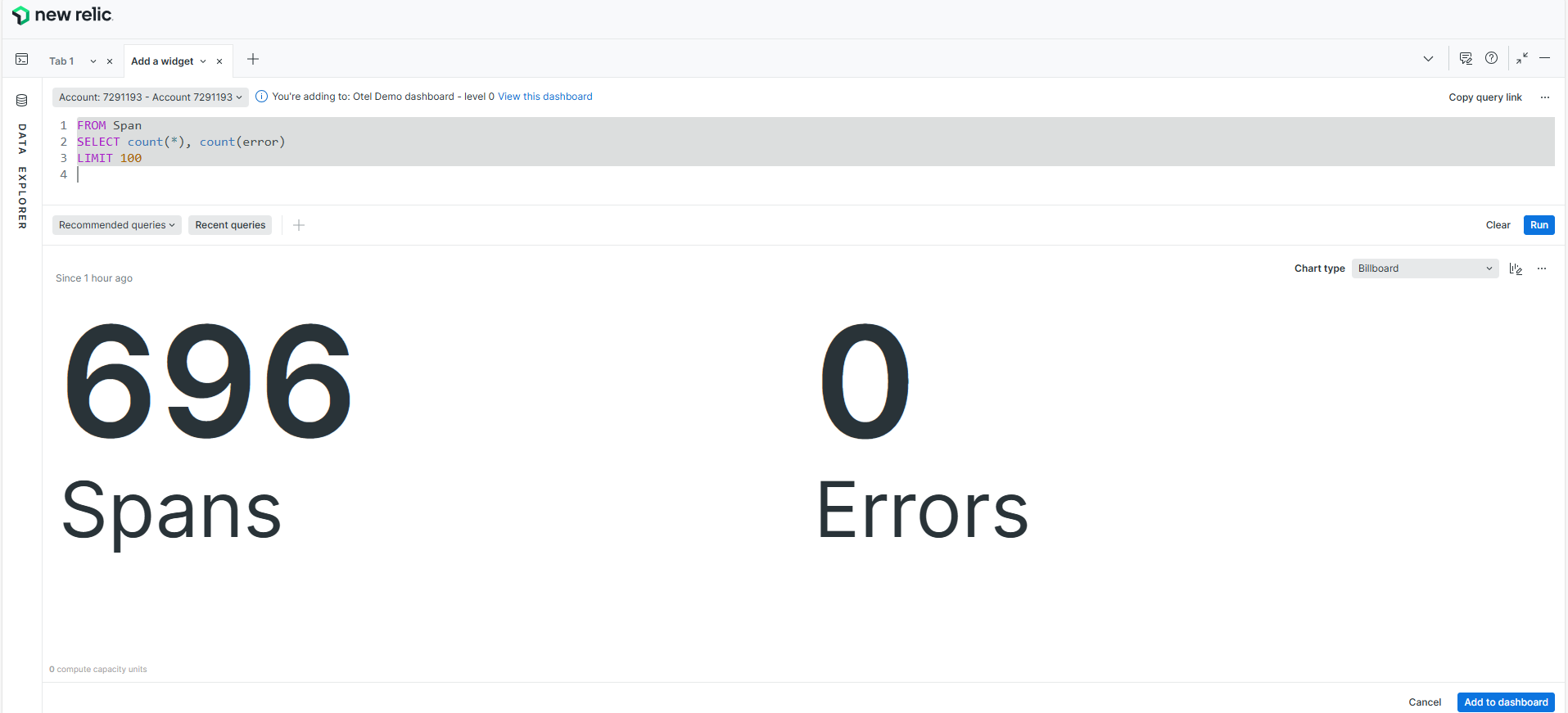
  AI-generated content may be incorrect.
* U are sending only **Span**, **Metric**, and **Log** data , No transaction data.

Q. How to check how much span and errors?

* FROM Span

SELECT count(\*), count(error)

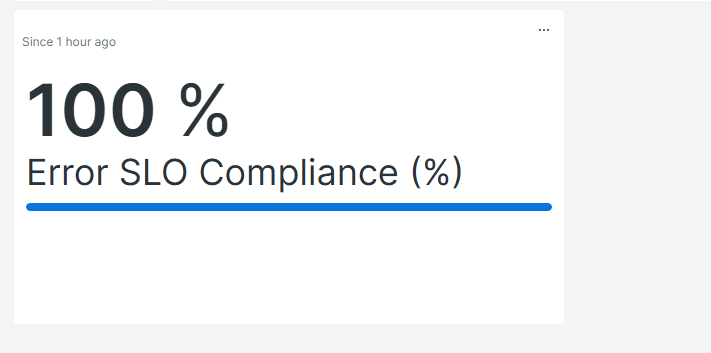
LIMIT 100



Q. Creating Panels:

1. Error Slo Compliance(%):

* FROM Span

SELECT 100 - percentage(count(\*), WHERE error = true) AS 'Error SLO Compliance (%)'  


* If there are **0 errors**, this becomes 0%.
* Then you subtract from 100 → 100 - 0 = 100%.
* So your application is Compliant with the error SLO — no errors detected in the selected time window.”

2. Application error rate:

FROM Span

SELECT percentage(count(\*), WHERE error = true) AS 'Error Rate (%)'

3. latency slo compliance:

FROM Span

SELECT 100 - percentage(count(\*), WHERE duration.ms > 400) AS 'Latency SLO Compliance (%)'

4. 95th percentile response time for app:

FROM Span

SELECT percentile(duration.ms, 95) AS 'Response Time (ms) - 95th Percentile'

5. SLO set and threshold set:

Add widget -> Text images -> paste this below content separately:

* ### SLOs set:

- \*\*Error rate:\*\* critical < \*\*99.9 %\*\*, warning < \*\*99.95 %\*\*

- \*\*Latency:\*\* critical < \*\*90 %\*\*, warning < \*\*95 %\*\*

* ### Thresholds set:

- \*\*Error rate:\*\* warning \*\*0.05 %\*\*, critical \*\*0.1 %\*\*

- \*\*Latency:\*\* warning \*\*400 ms\*\*, critical \*\*500 ms\*\*

6. Table with service name, error %, req/s, Resp Time (ms) (95%).

* FROM Span

SELECT

percentage(count(\*), WHERE error = true) AS 'Error (%)',

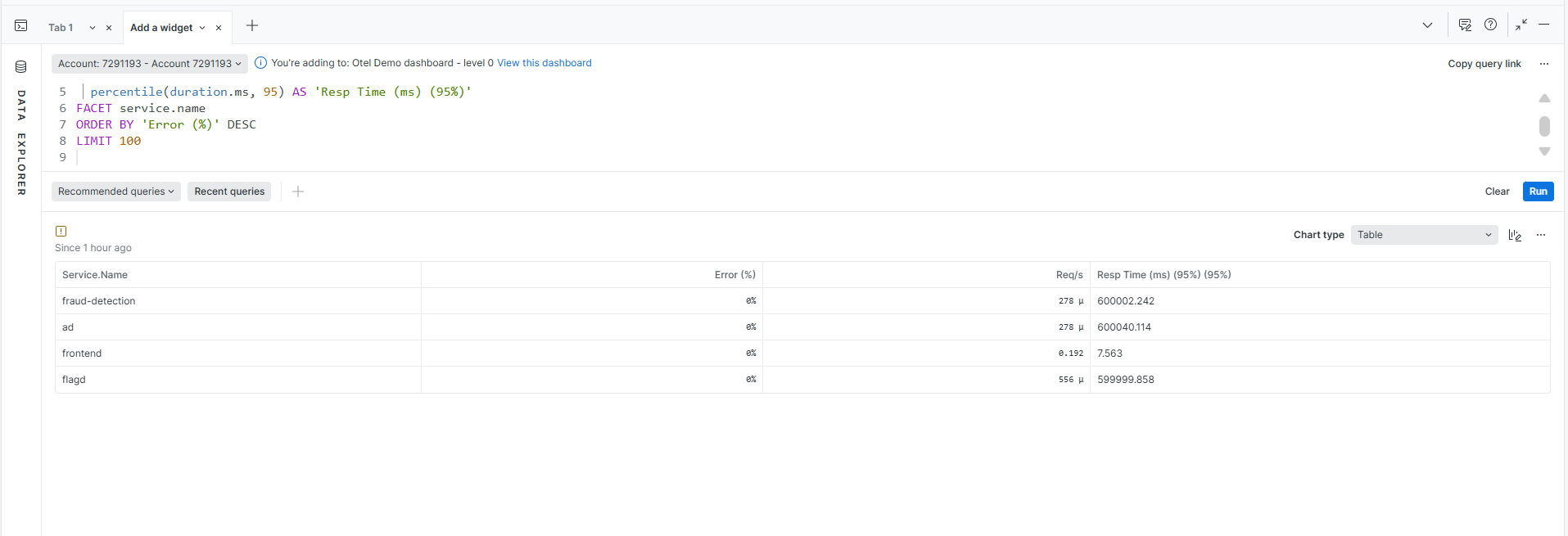
rate(count(\*), 1 second) AS 'Req/s',

percentile(duration.ms, 95) AS 'Resp Time (ms)'

FACET service.name

ORDER BY 'Error (%)' DESC

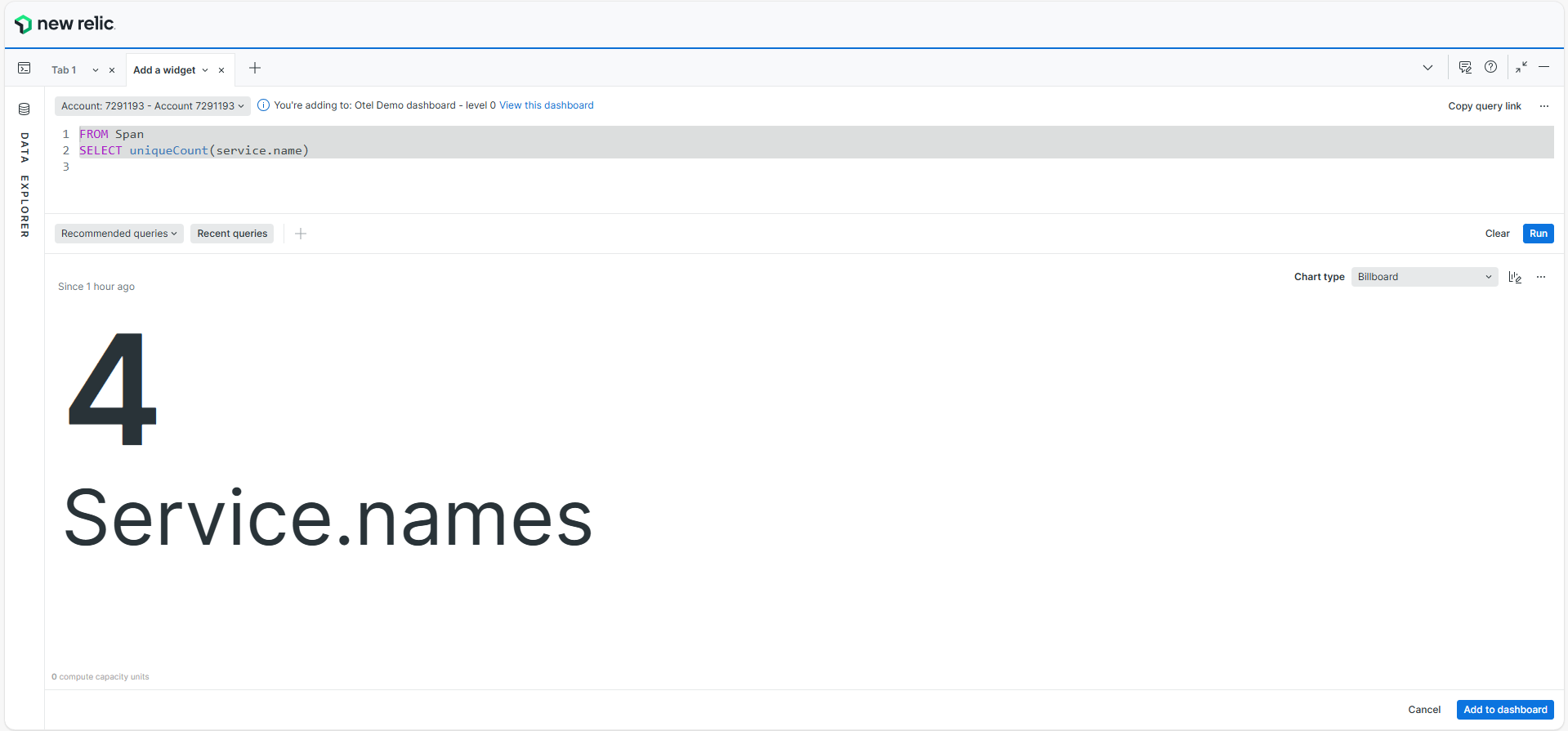
LIMIT 100



* Only these services are active now.. That’s y only 4 services have shown.
* So I checked the unique service names using a querry:

FROM Span

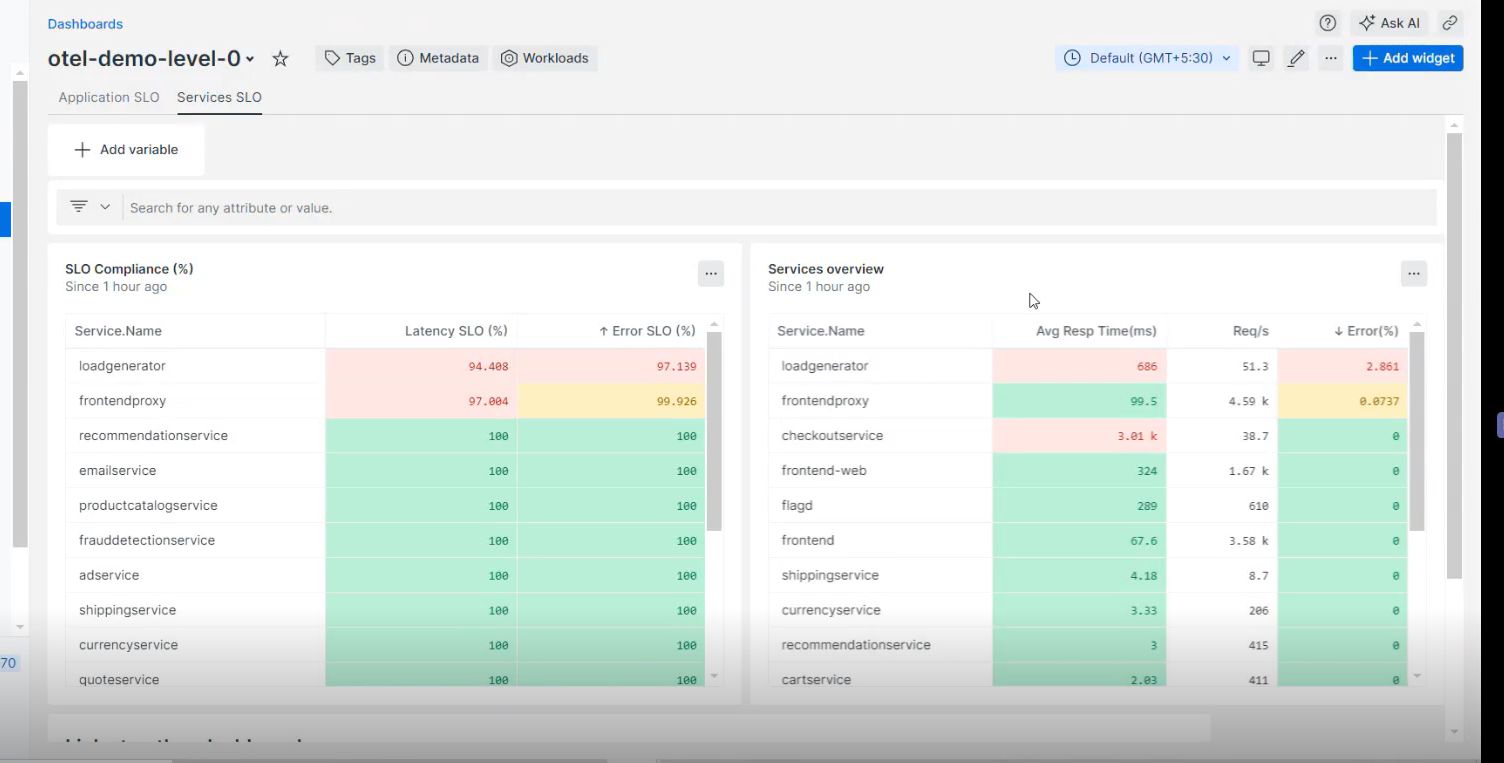
SELECT uniqueCount(service.name)



Q. For renaming the page:

Edit -> rename page : rename it  
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Q. Aim to create a similar page like this on level 0:  


Steps:

1. Panel 1: Service SLO Compliance Table

FROM Span

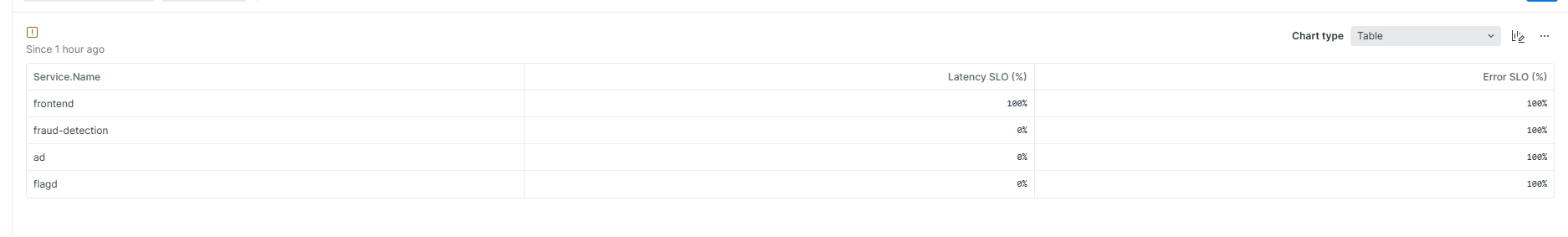
SELECT

(100 - percentage(count(\*), WHERE duration.ms > 1000)) AS 'Latency SLO (%)',

(100 - percentage(count(\*), WHERE http.status\_code >= 400)) AS 'Error SLO (%)'

FACET service.name

ORDER BY 'Latency SLO (%)' ASC

LIMIT 100  
  


2. Panel 2: Services Overview  
  
FROM Span

SELECT

average(duration.ms) AS 'Avg Resp Time (ms)',

rate(count(\*), 1 second) AS 'Req/s',

percentage(count(\*), WHERE error = true) AS 'Error (%)'

FACET service.name

ORDER BY 'Error (%)' DESC

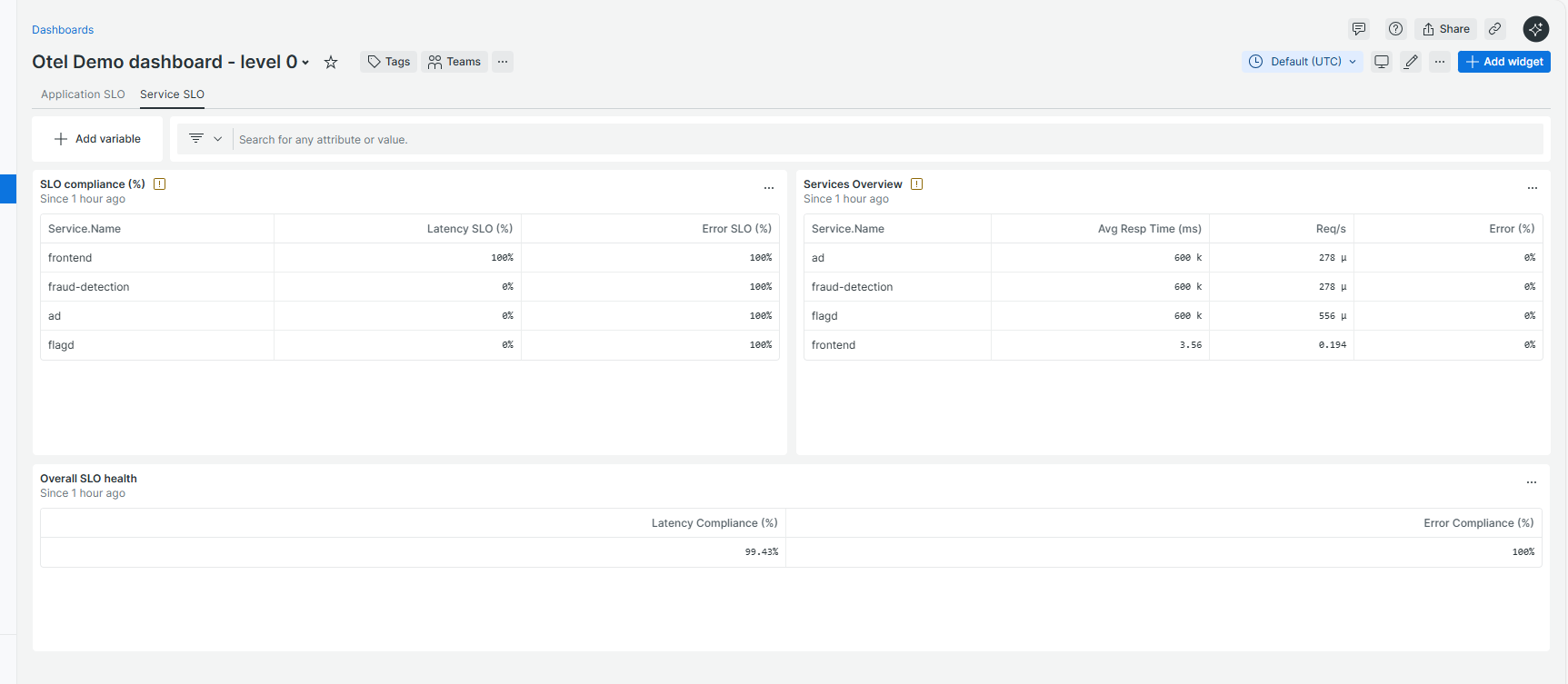
1. Panel 3 : Overall SLO health:  
     
   FROM Span

SELECT

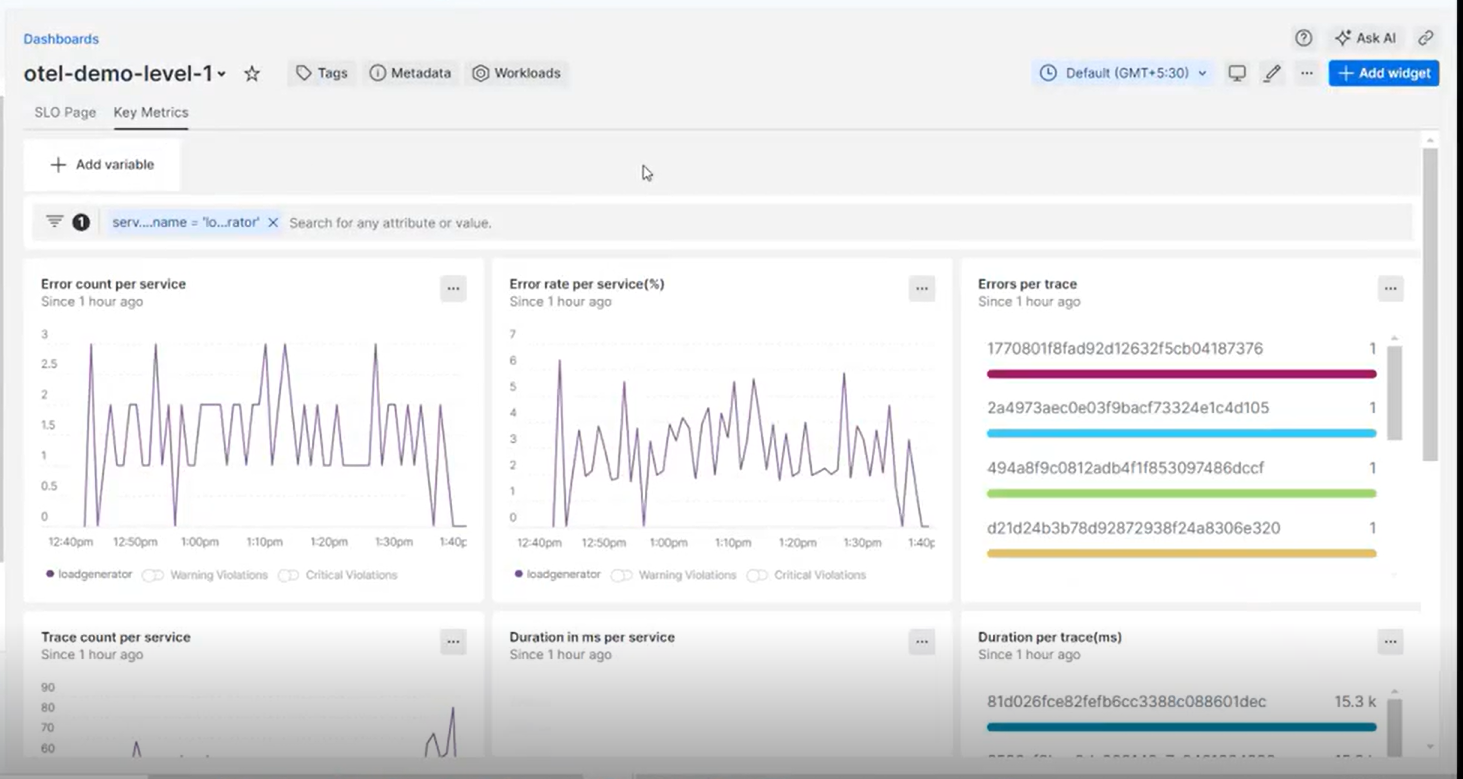
percentage(count(\*), WHERE duration.ms < 500) AS 'Latency Compliance (%)',

100 - percentage(count(\*), WHERE error = true) AS 'Error Compliance (%)'

Q. Screenshots of level 0 created now:  
A screenshot of a computer

AI-generated content may be incorrect.  


Q. Aim to create a level 1 dashboard in newrelic similar to below screenshot:  

I need to create a level 1 dashboard with these panels and level 1 dashboard should pick up the service I am clicking from level 0 and show the details of that particular service.  
  
required things:

1. Create a markdown to show the service name(it should pick up the service name I am clicking on level 0)
2. So u should create a variable .. instead of service name .. so u can access the service details without hardcoding.
3. Create 2 pages :
   1. SLO page
   2. Key metrics
4. Panels required in SLO page:
   1. Error SLO target 99.95%
   2. Error SLI compliance overtime(%)
   3. Latency SLO target 95%
   4. Latency SLI compliance overtime(%)
5. Panels required in key metrics page:
   1. Error count per service
   2. Error rate per service
   3. Error per trace
   4. Trace count per service
   5. Duration in ms per service
   6. Duration per trace(ms)

Steps:

1. Create a variable:
   1. First change the time range to last 6 months.
   2. Use querry:

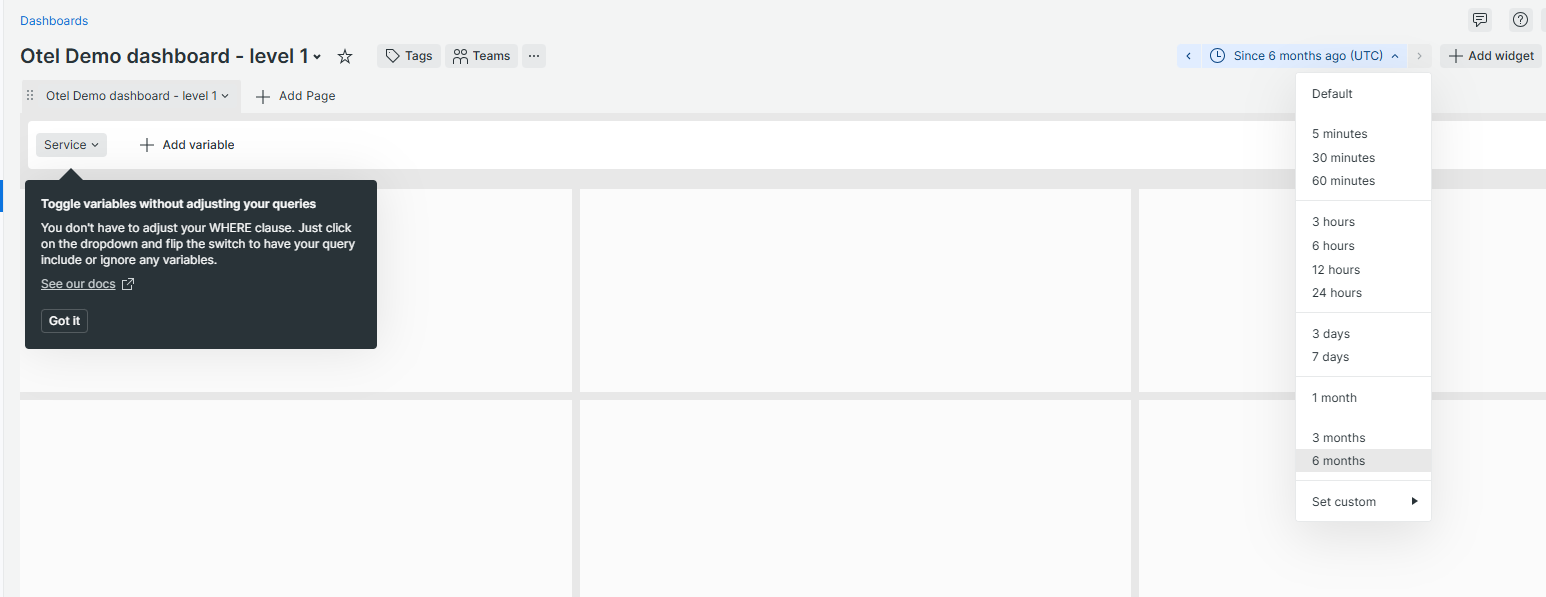
FROM Span

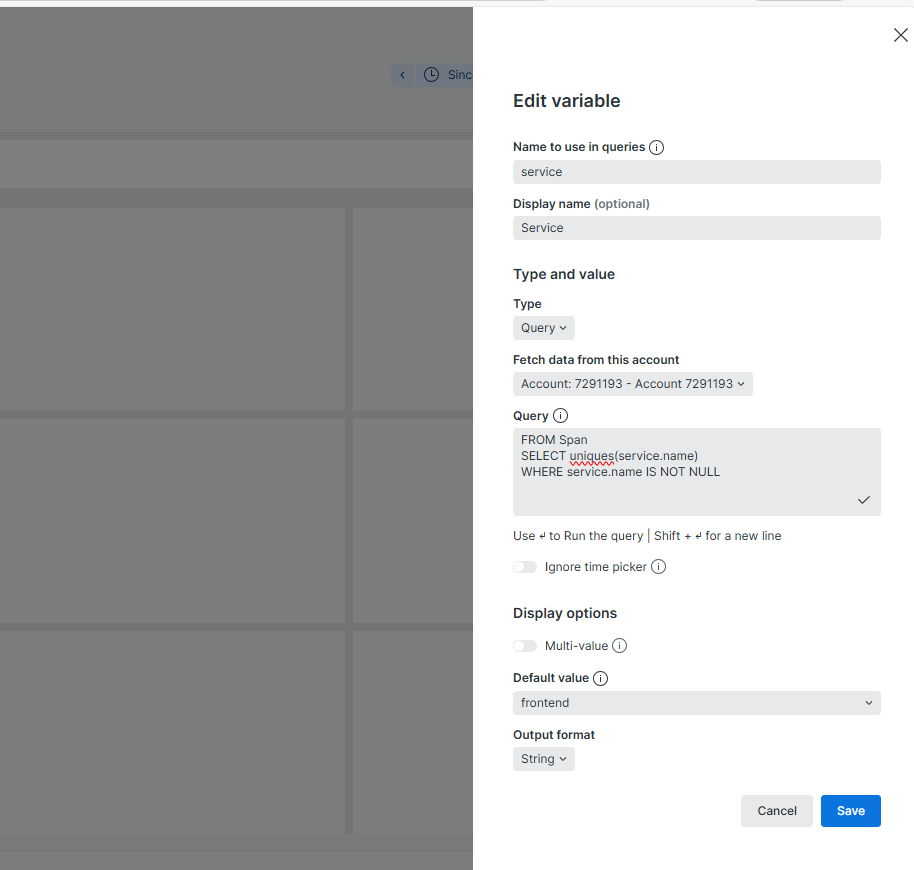
SELECT uniques(service.name)

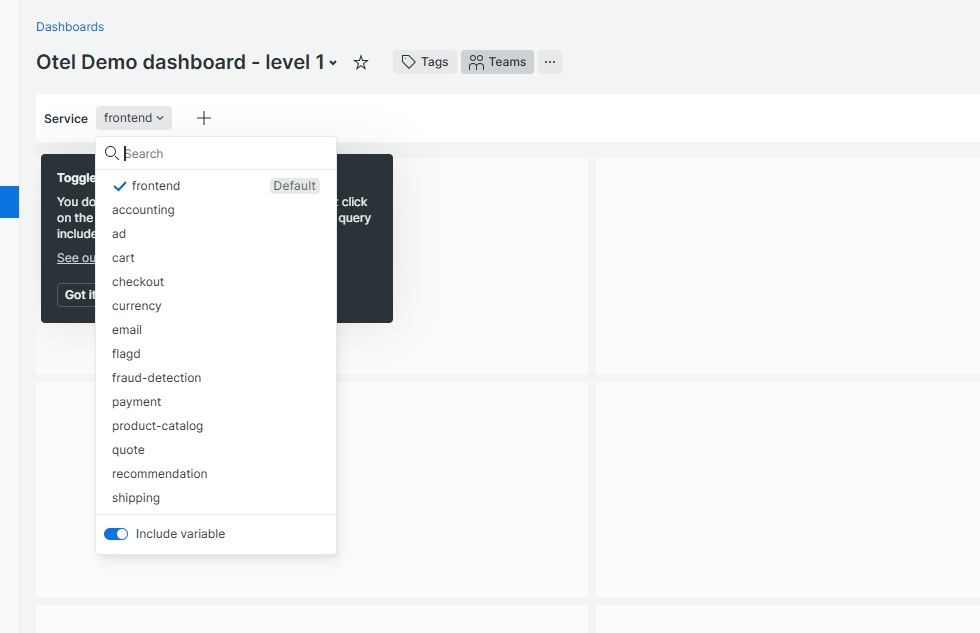
WHERE service.name IS NOT NULL

* 1. Turn off the use time picker (because the data was missing -> only 4 services were showing.. when I turned off I can see many services)

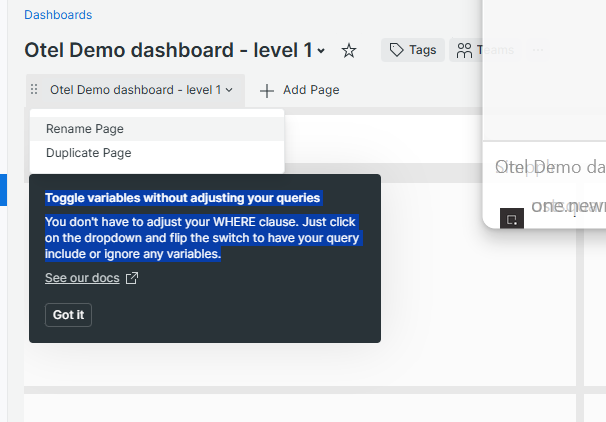
Screenshots:







1. Rename the page:



A screenshot of a computer screen

AI-generated content may be incorrect.

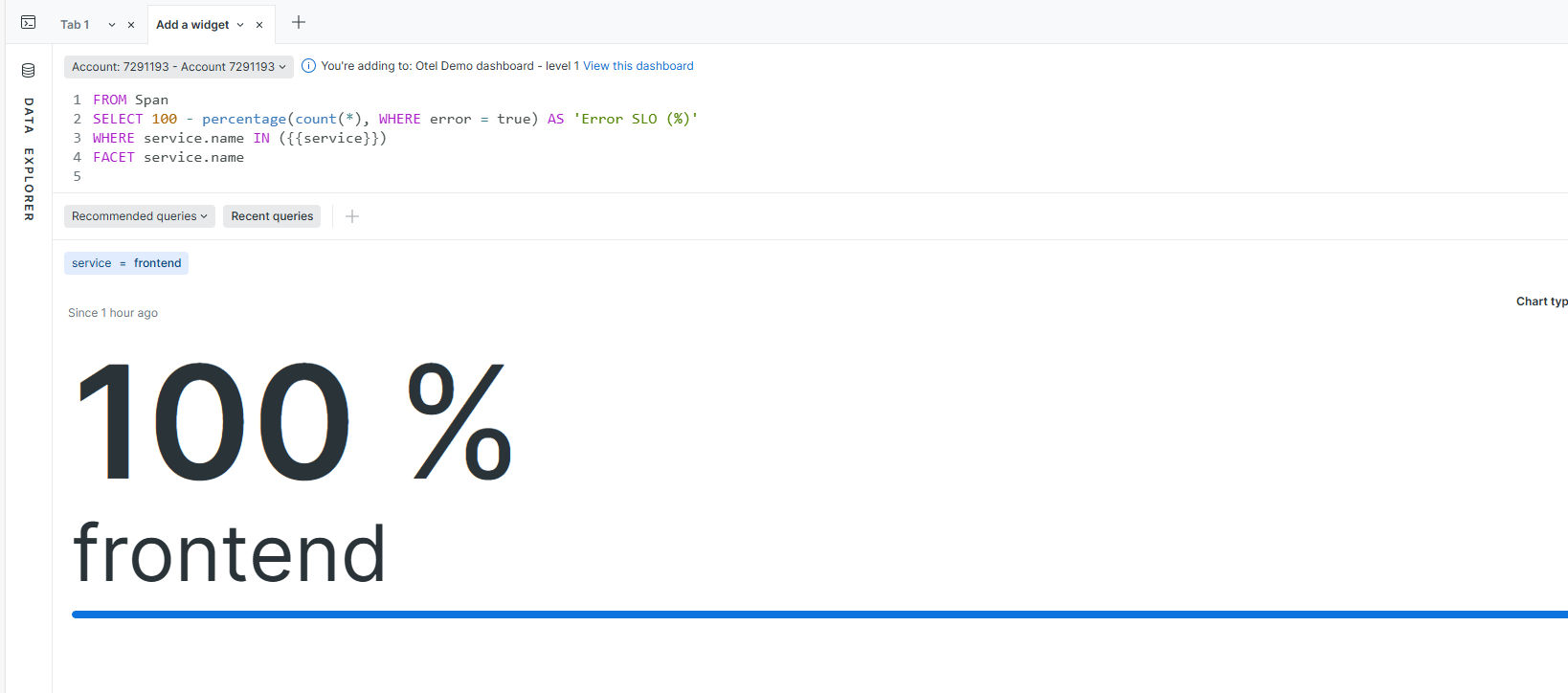
1. How to include variables I have created in querries:
   1. Documentation: [Template variables: dynamically filter dashboards | New Relic Documentation](https://docs.newrelic.com/docs/query-your-data/explore-query-data/dashboards/dashboard-template-variables/#include-variable)
2. Panels creation using variable:
   1. Error SLO %  
        
      FROM Span

SELECT percentage(count(\*), WHERE error = true) AS 'Error SLO (%)'

WHERE service.name IN ({{service}})   
FACET service.name

* FACET service.name : This will show the service name also.

Screenshot:



I got 0% after running the same querry idk y?  
FROM Span

SELECT trace.id, name, http.status\_code, duration.ms, service.name

WHERE service.name IN ({{service}})

LIMIT 100

**Correct querry:**FROM Span

SELECT percentage(count(\*), WHERE http.status\_code >= 500) AS 'Error SLO (%)'

WHERE service.name IN ({{service}})  
FACET service.name

* 1. “Success Rate / Error SLI compliance overtime”

FROM Span

SELECT

100 \* filter(count(\*), WHERE error IS NULL OR error = false) / count(\*) AS 'Success Rate (%)'

WHERE service.name IN ({{service}})

TIMESERIES AUTO

FACET service.name

* 1. Latency SLO:

FROM Span

SELECT percentage(count(\*), WHERE duration.ms <= 500) AS 'Latency SLO (%)'

WHERE service.name IN ({{service}})

* 1. Latency SLI compliance over time:

FROM Span

SELECT 100 \* filter(count(\*), WHERE duration.ms <= 500) / count(\*) AS 'Latency SLI (%)'

WHERE service.name IN ({{service}})

TIMESERIES AUTO

1. Key metrics page:
   1. Error count per service(Line)

SELECT count(\*) AS 'Error Count'

WHERE http.status\_code >= 500 AND service.name IN ({{service}})

FACET service.name

TIMESERIES AUTO

* 1. Error rate per service: Line

FROM Span

SELECT

100 \* filter(count(\*), WHERE http.status\_code >= 500) / count(\*) AS 'Error Rate (%)'

WHERE service.name IN ({{service}})

FROM Span

SELECT

100 \* filter(count(\*), WHERE http.status\_code >= 500) / count(\*) AS 'Error Rate (%)'

WHERE service.name IN ({{service}})

TIMESERIES AUTO

* 1. Error per trace: Bar

FROM Span

SELECT

filter(count(\*), WHERE http.status\_code >= 500) AS 'Error Spans',

count(\*) AS 'Total Spans',

100 \* filter(count(\*), WHERE http.status\_code >= 500) / count(\*) AS 'Error Rate (%)'

WHERE service.name IN ({{service}})

FACET trace.id

LIMIT 100

* 1. Trace count per service:

FROM Span

SELECT uniqueCount(trace.id) AS 'Trace Count'

WHERE service.name IN ({{service}})

FACET service.name

* 1. Duration in ms Per Service (using variable):

FROM Span

SELECT average(duration.ms) AS 'Avg Duration (ms)'

WHERE service.name IN ({{service}})

* 1. Duration Per Trace (ms) (using variable):

FROM Span

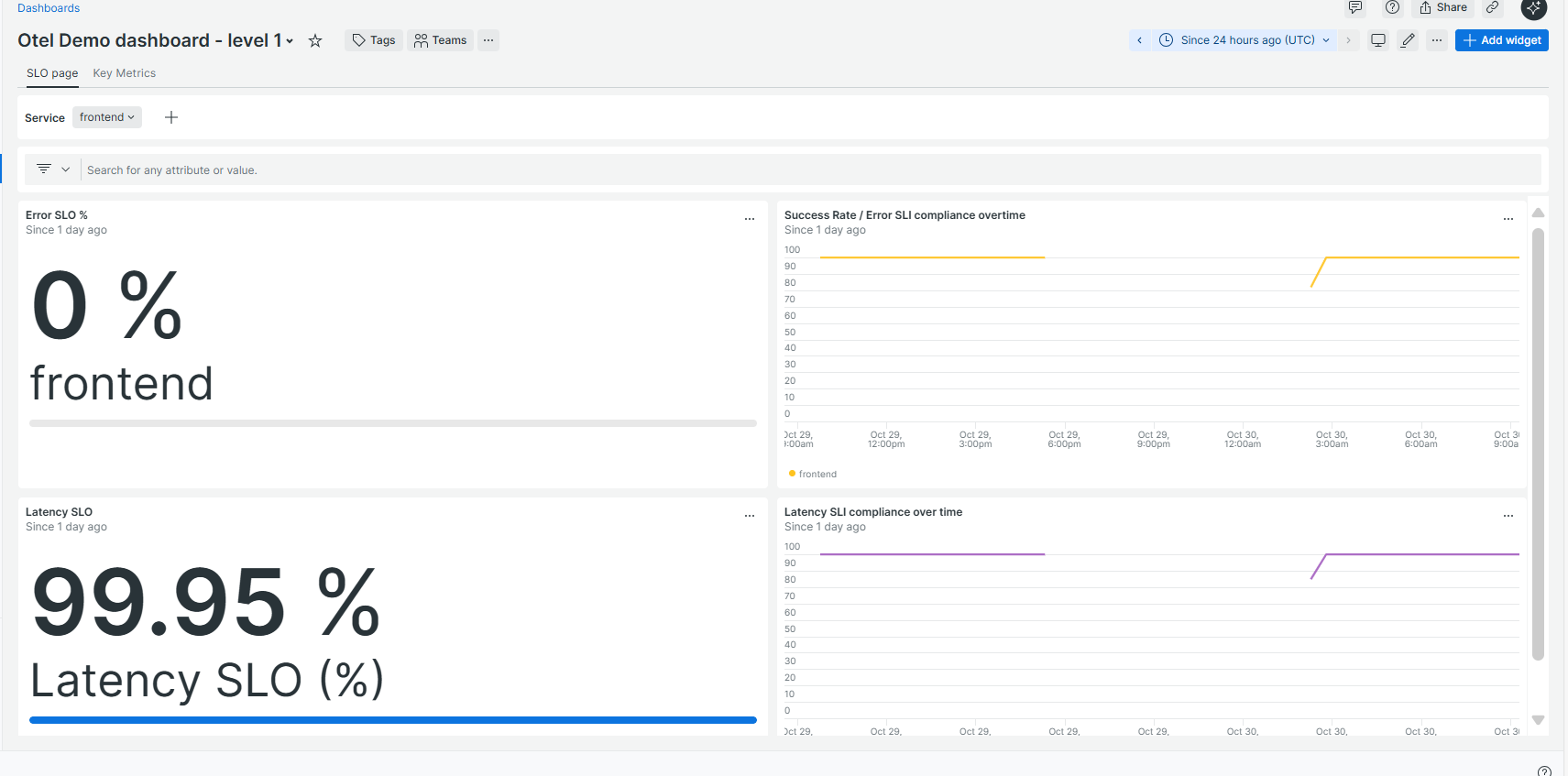
SELECT average(duration.ms) AS 'Avg Duration (ms)'

WHERE service.name IN ({{service}})

FACET trace.id

LIMIT 100

SCREENSHOTS OF LEVEL 1:



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Markdown:

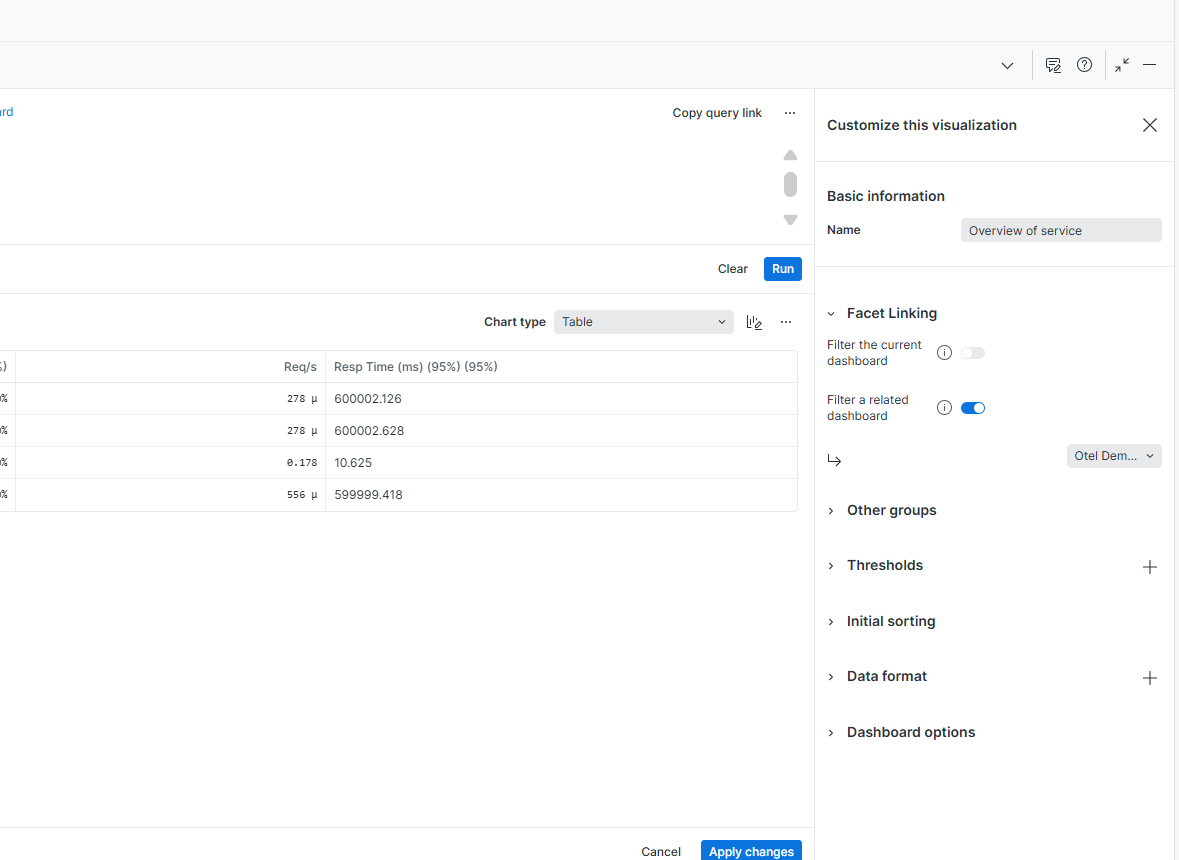
A screenshot of a computer

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Q. Aim: Implement drill down feature on level 0..when I click the service name on the panel it should show the details of that service in level 1..

Steps:

1. Edit the panel where u want to do drilldown
2. Select **Facet Linking**
3. Filter a related dashboard
4. Select the level 1 dashboard



Q. ISSUE:

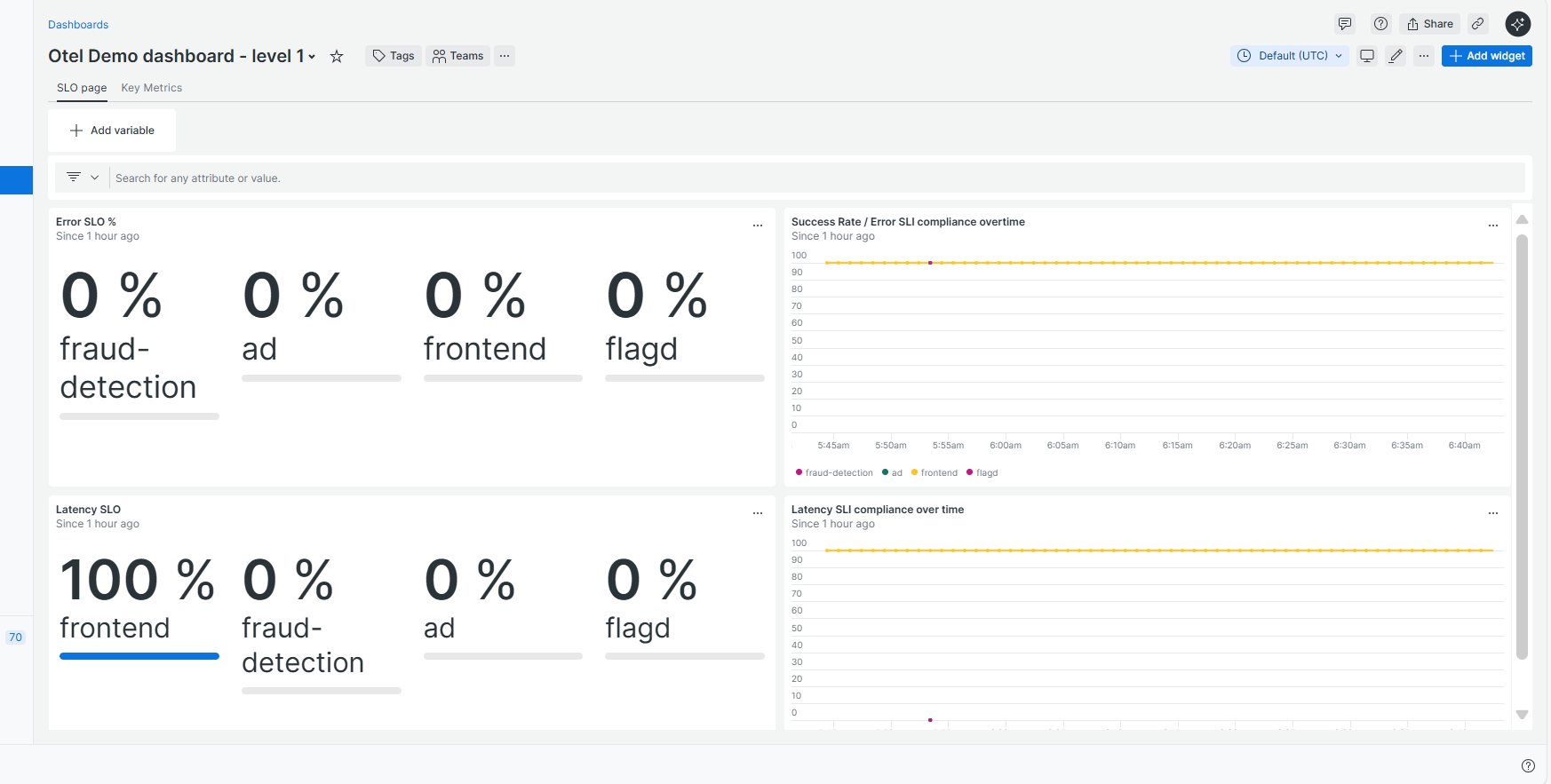
Now it is redirecting from level 0 panel to level 1 panel but it shows no value. Filter bar changes to that particular service name I select from level 0 but no value and also the service name drop down still showing default I set. Also when I edit some panel in level 1 shows service.name=default value I set… Also the time range is not picking the same from level 0 to level 1.

Solution:

* Delete the variable
* Also delete the querry from this in all panels:
  + WHERE service.name IN ({{service}})

Now the dashboard looks like this:

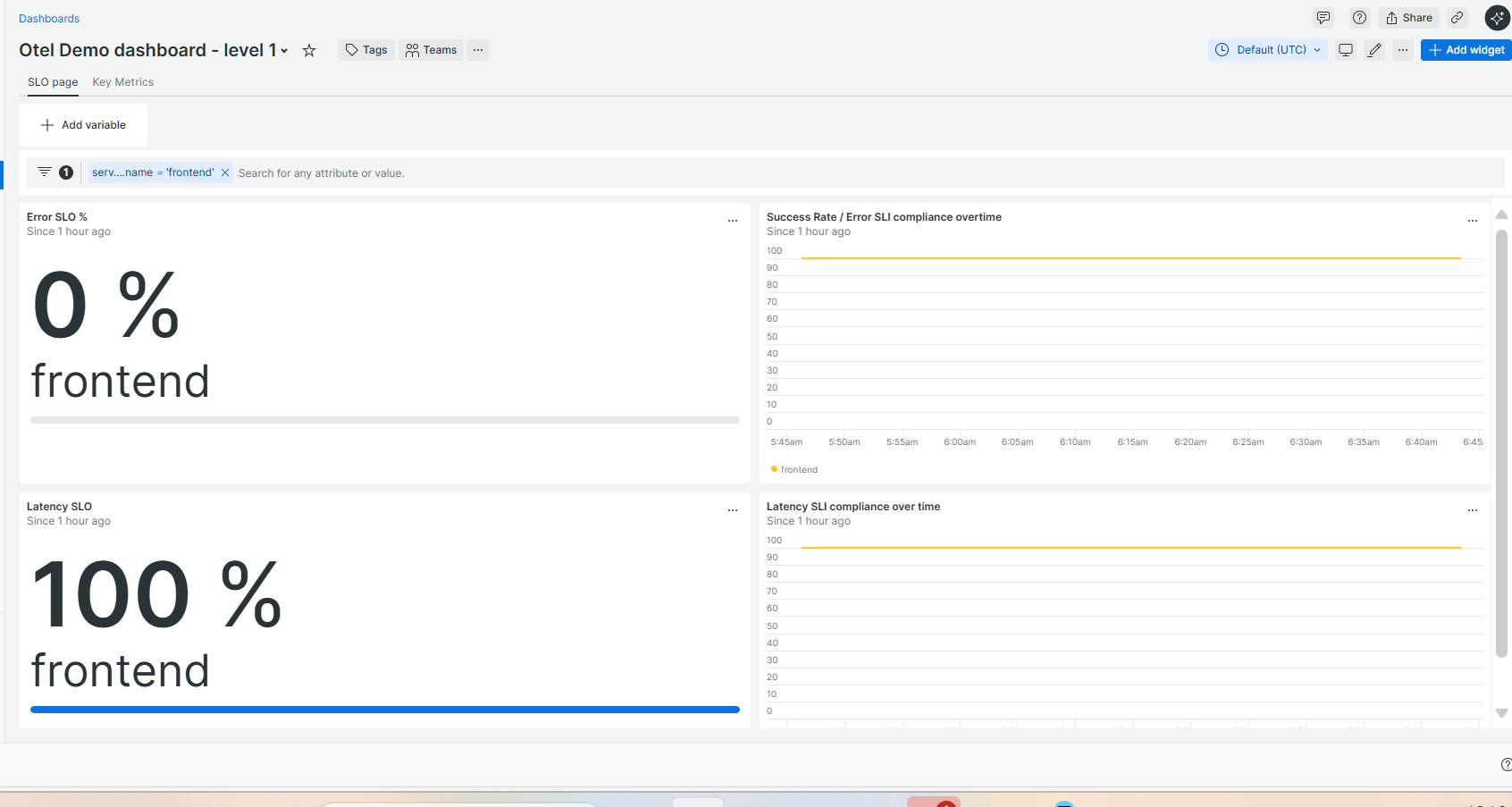
Level 1:



A screenshot of a computer

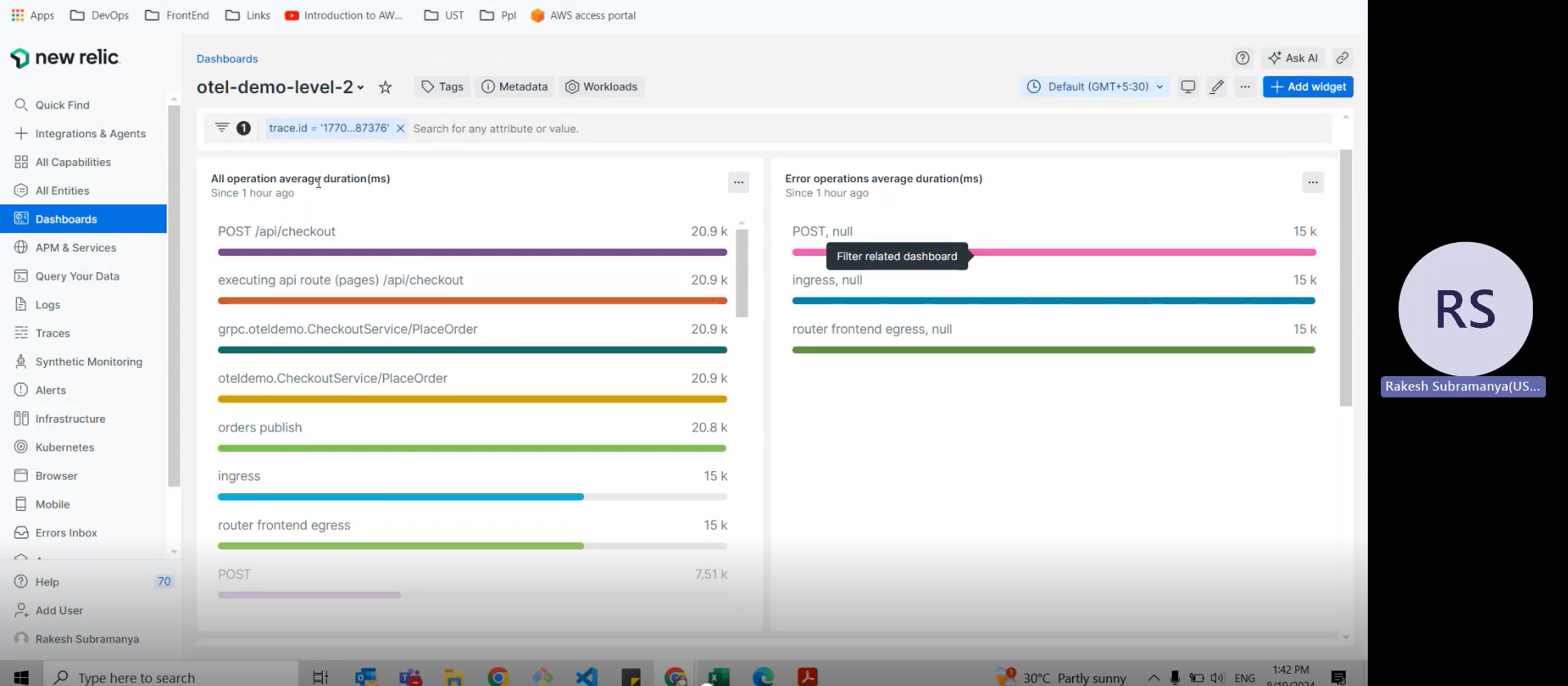
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* When I select a particular service on level 0 the level 1 looks like this:



A screenshot of a computer

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Q. Aim to create a level 2 dashboard similar to this:  


When I click on level 1 error per trace panel:

* When I click on each trace id it shows the details on level 2
* Panels required:
  + All operation average duration(ms)
  + Error operation average duration(ms)

1. Panel 1: All operation average duration(ms)

FROM Span

SELECT average(duration.ms)

FACET name

1. Panel 2: **Error Operation Average Duration (ms)** → Not possible because error spans lack both duration.ms and name
2. Panel 3: Error Rate by Trace ID

FROM Span

SELECT

filter(count(\*), WHERE http.status\_code >= 400) AS 'Error Spans',

count(\*) AS 'Total Spans',

100 \* filter(count(\*), WHERE http.status\_code >= 400) / count(\*) AS 'Error Rate (%)'

FACET trace.id

1. Panel 4: Operation Duration Percentiles

FROM Span

SELECT percentile(duration.ms, 50, 95, 99)

FACET name

1. Panel 5: HTTP Method Breakdown

FROM Span

SELECT count(\*)

FACET http.method

1. Panel 6: Trace Duration Summary

FROM Span

SELECT max(duration.ms), min(duration.ms), average(duration.ms)

1. Panel 7: Log for selected trace

FROM Log

SELECT count(\*)

FACET timestamp, message

Screenshots:

A screenshot of a computer

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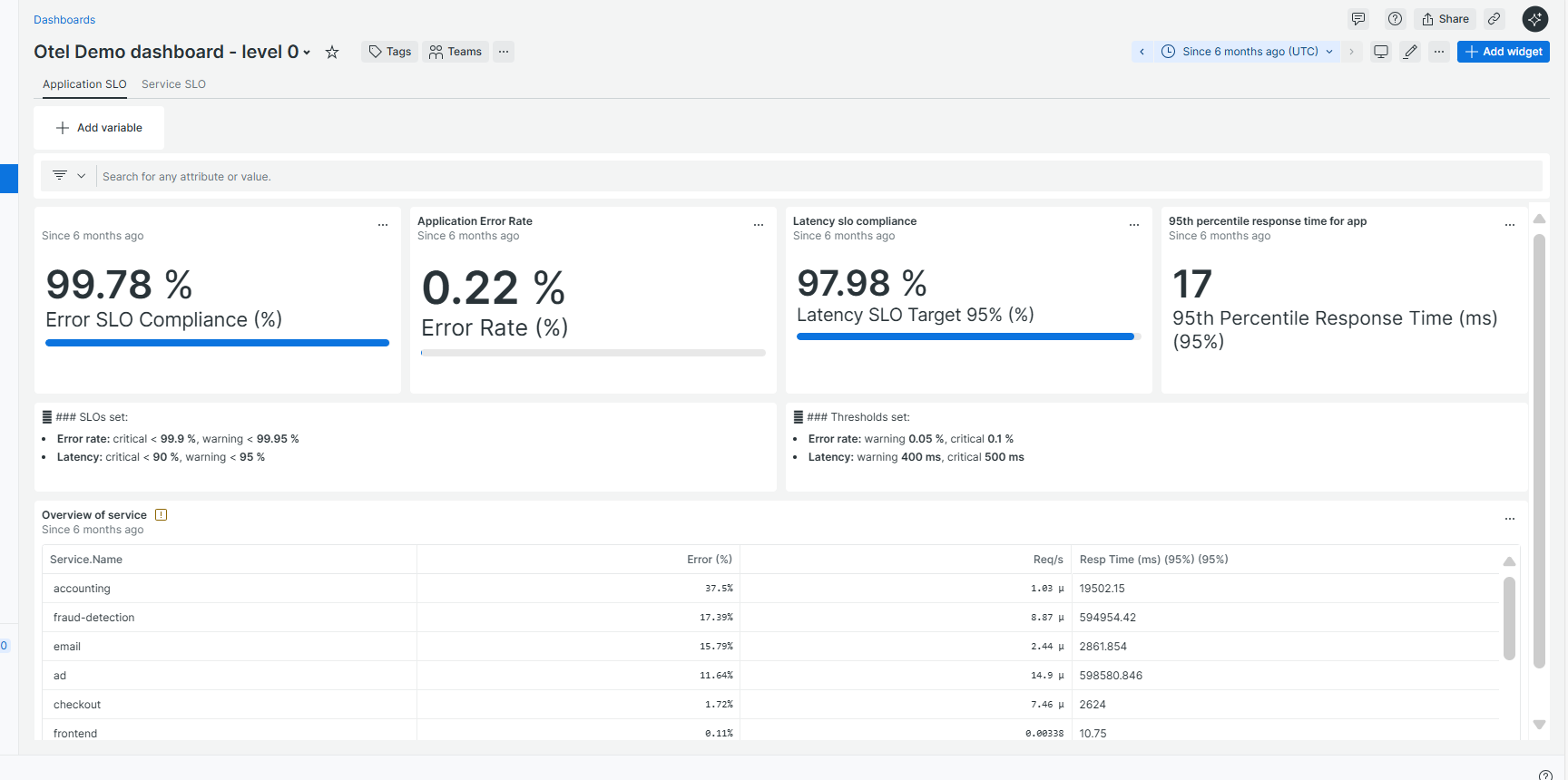
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* Also link level 1 with level 2 on error by trace panel.

Screenshots:

Level 0:



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When I click on drill down panel:

Frontend:

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Level 1:

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A screenshot of a computer

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Click the drill down panel:

Trace id:

A screenshot of a computer

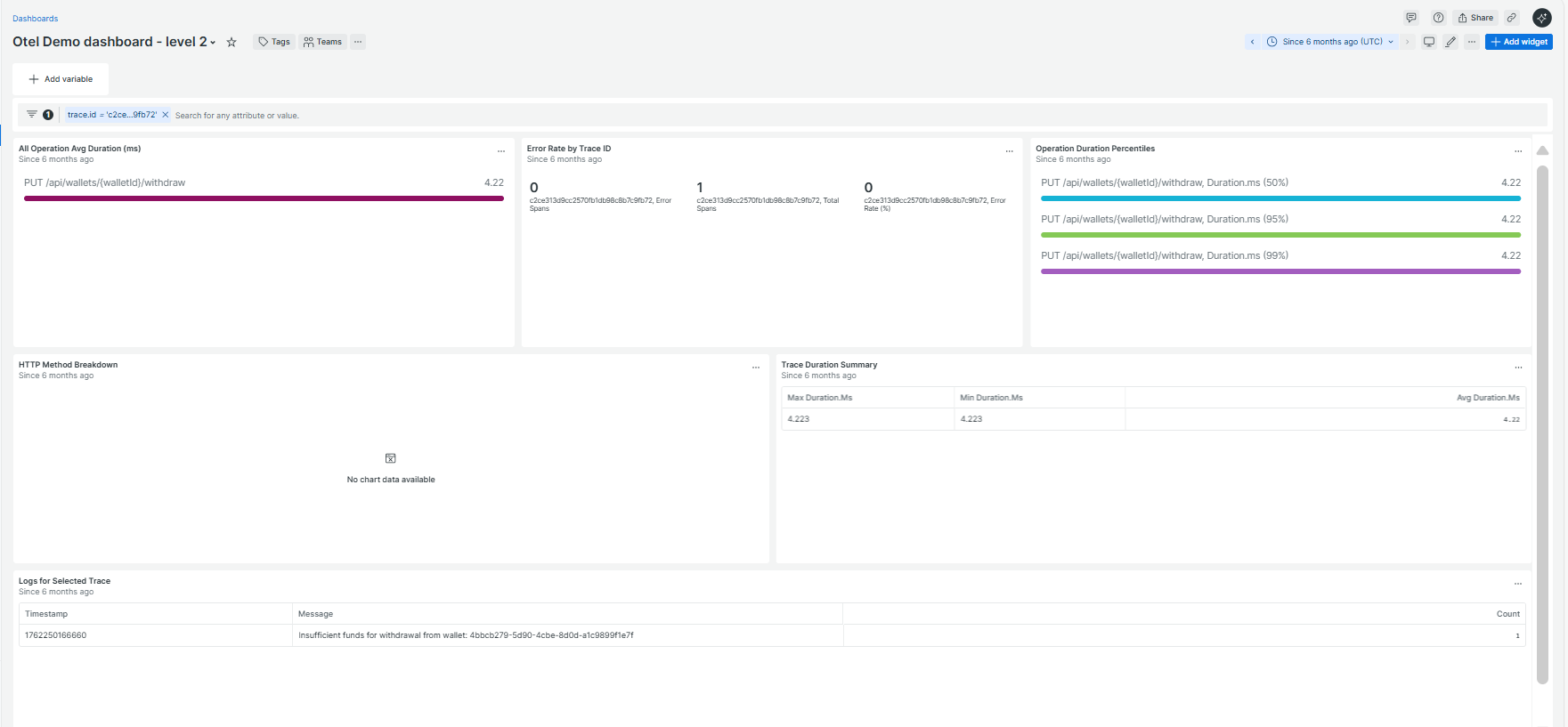
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Level 2:

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Cryptowallet service level 2(logs can see)



Only this service have logs.