

Unlocking new APM power



ZABBIX powers up APM with built-in OpenTelemetry support

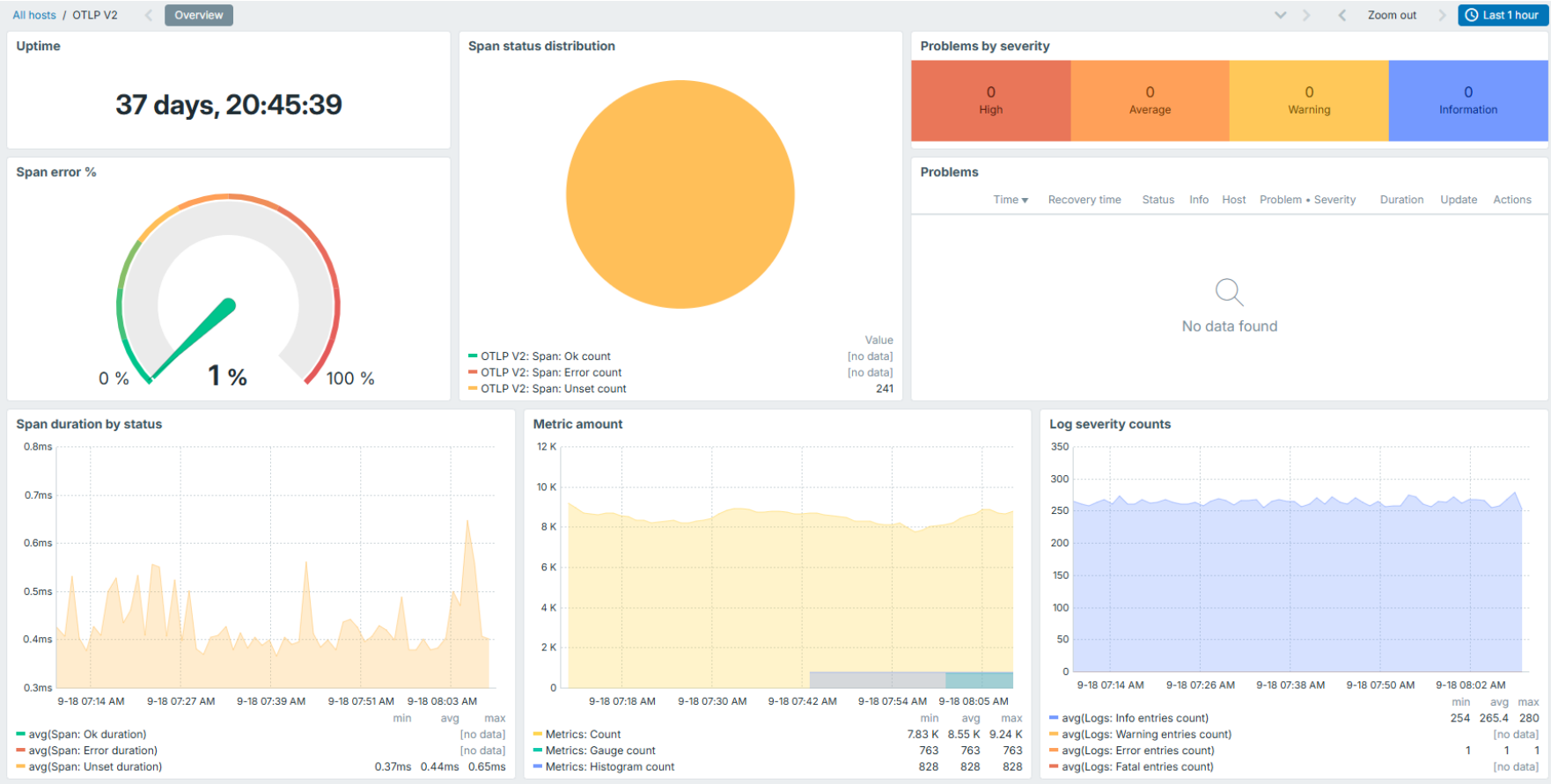
APM: Application Performance Monitoring

Latency	How long does it take to service and respond to a request?
Traffic	How many requests are being made?
Errors	What is the rate of failed requests?
Saturation	Does your infrastructure reach its maximum capacity limits?

```
...  
"spans": [  
  {  
    "traceID": "761a17eab8dbe21f631eb260f07e0a2e",  
    "spanID": "66feebccd42f5fa2",  
    "operationName": "flagd.evaluation.v2.Service/EventStream",  
    "references": [],  
    "startTime": 1789038701631340,  
    "duration": 600001019,  
    "tags": [  
      {  
        "key": "otel.scope.name",  
        "type": "string",  
        "value": "io.opentelemetry.grpc-1.6"  
      }  
    ]  
  }  
]  
...
```

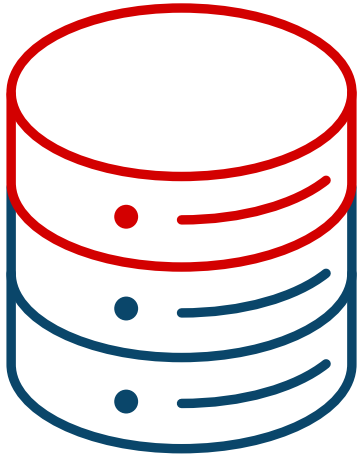
OpenTelemetry JSON data example

I want to
1



I want to
2,3,4

Problem started at 09:54:38 on 2026.09.04
 Problem name: High latency for test_service_14
 Host: Payment domain
 Severity: Warning
 Operational data: Pod name: pod_2 on DC: east_5
 Original problem ID: 1204



Raw OpenTelemetry



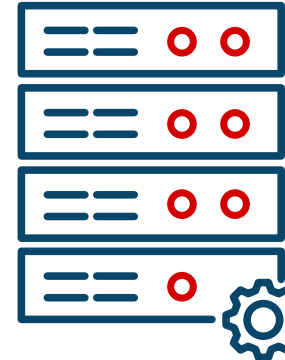
MIN TTL



History

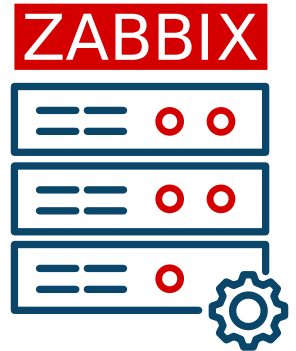


MAX TTL



OpenTelemetry
+ Clickhouse

+



I want to
5

ZABBIX

<<

>

Instance name

Dashboards

Monitoring

APM

Traces

Metrics

Logs

Services

Inventory

Reports

Data collection

Alerts

Users

Administration

Support

Integrations

Help

User settings

Sign out

Traces

Filter

Trace ID

Span ID

Service name

Operation name

Scope name

Min duration

Max duration

Status

☐ Ok

☐ Error

☐ Unset

Attributes

And/Or

Or

operation

Contains

backup.service.request

service

Contains

HTTP get

Add

Apply

Reset

Service name	Operation name	Start time	Attributes	Duration
Beta Stream 12	Payment Gateway Service	2025-04-09 01:58:00 PM	ab: redisDB	34.34ms
Zeta Connect 8	SELECT operation	2025-04-09 02:12:00 PM	target: randomTagA	24h

Displaying 2 of 2 found

Trace ID: 73d3b80845746

Logs

Metrics

0ms

99.5ms

199.0ms

298.5ms

398.0ms

497.5ms

597.0ms

696.5ms

796.0ms

895.5ms

995.0ms

Span tree

^ Zeta Connect: /api/orders

http.server.request

25

398.0ms

Support operation

validation.request.check

470.0ms

^ Order service /get orders

order.service.getOrders

3

490.0ms

^ SELECT operation

http.response.serialize

2

700.0ms

SELECT operation

backup.service.request

278.0ms

Pre.confirmation

validation.request

250.0ms

Final validation

validation.request.check

440.0ms

Span details

Basic information

Span ID: 8873650788389038

Operation: backup.service.request

Service name: HTTP GET

Duration: 1.0m

Start time: 0ms

Related links: Logs Metrics

Span attributes

Span ID: 8873650788389038

Operation: backup.service.request

Duration: 1.0m

Start time: 0ms

Service name: HTTP GET

Start time: 1m

Resource attributes

Span ID: 8873650788389038

Operation: backup.service.request

Duration: 1.0m

Service name: HTTP GET

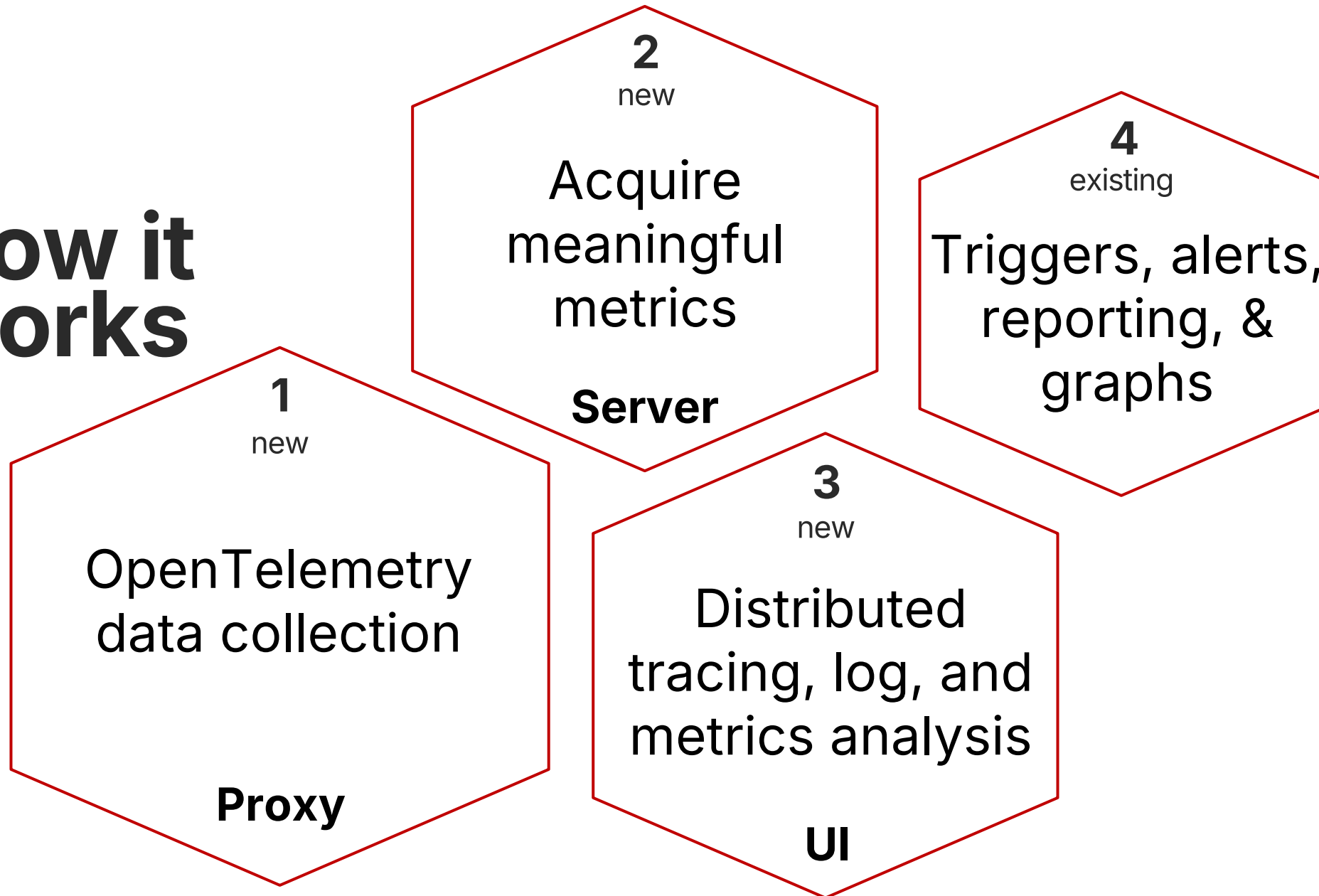
Start time: 0ms

Start time: HTTP GET

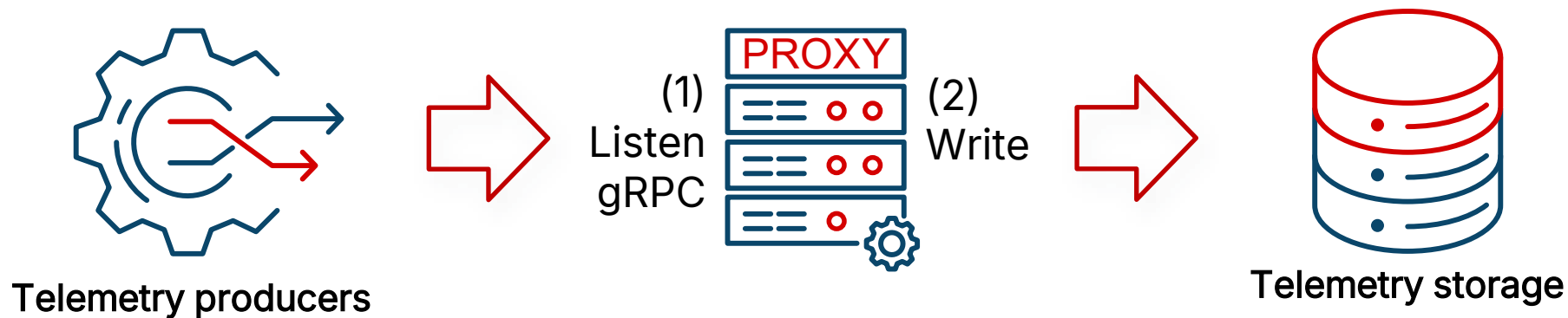
Events

Zabbix 8.0.0beta1. © 2001–2026©, Zabbix SIA

How it works



Data collection (1)

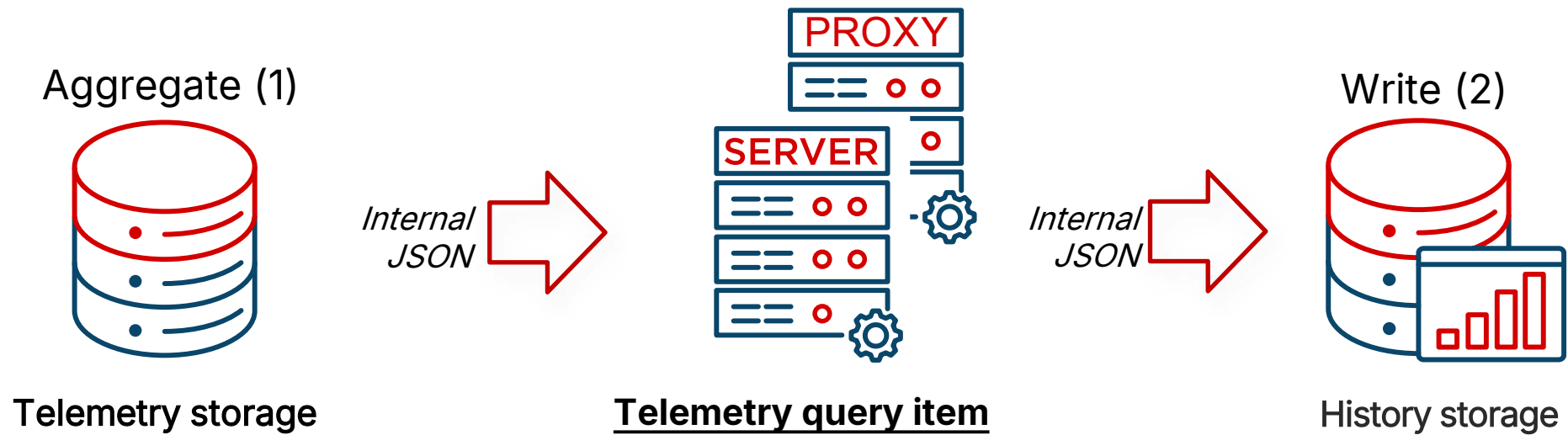


```
"spans": [  
  {  
    "traceID": "761a17eab8dbe21f631eb260f07e0a2e",  
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      {  
        "key": "otel.scope.name",  
        "type": "string",  
        "value": "io.opentelemetry.grpc-1.6"  
      }  
    ]  
  }  
]
```

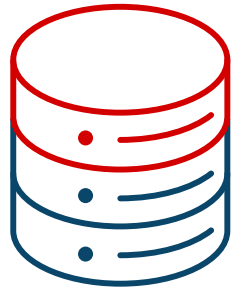


```
▼ zabbixproxydb  
  ▼ Tables  
    > otel_logs  
    > otel_metrics_exponential_histogram  
    > otel_metrics_gauge  
    > otel_metrics_histogram  
    > otel_metrics_sum  
    > otel_metrics_summary  
    > otel_traces
```

Acquire meaningful metrics (2)



Distributed tracing, log and metrics analysis (3)



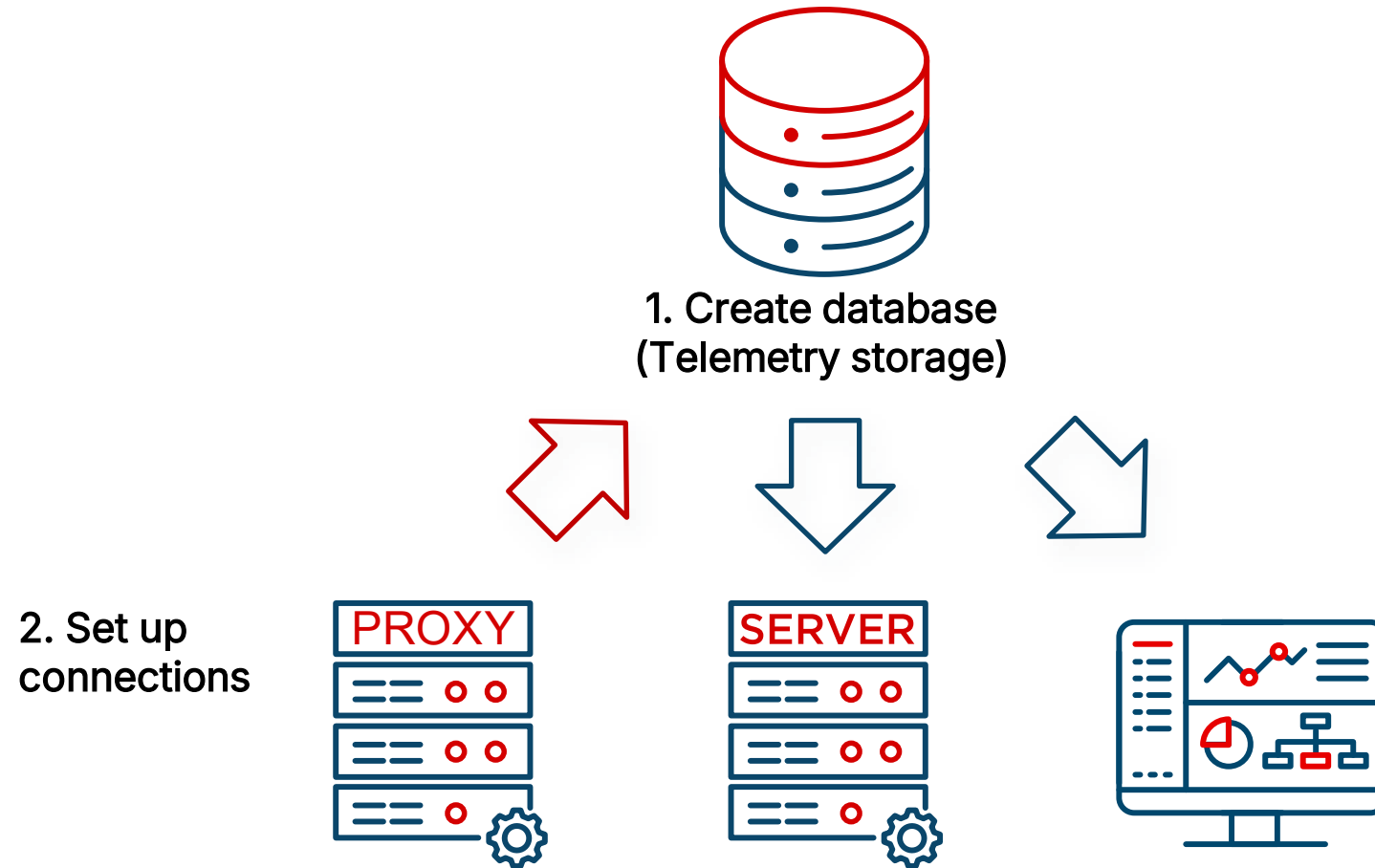
Telemetry storage



UI. New section APM

Configuration

Set up Telemetry storage & connection



Proxy configuration

```
## Option: StartAPMCollectors  
StartAPMCollectors=1
```

```
### Option: APMListenIP  
APMListenIP=0.0.0.0
```

```
### Option: APMListenPort  
APMListenPort=4317
```

```
### Option: APMTLSCAFile  
APMTLSCAFile=***
```

```
### Option: APMTLSCertFile  
APMTLSCertFile=***
```

```
### Option: APMTLSKeyFile  
APMTLSKeyFile=***
```

```
### Option: TelemetryProvider  
TelemetryProvider=clickhouse;url=http://localhost:8123,db=zdb,vault_path=dbs
```

Proxy configuration

New proxy

[?](#) [×](#)

[Proxy](#) [Encryption](#) [APM](#) [Timeouts](#)

Input

Data collection enabled [?](#) ☒

* Max messages per second Unlimited Custom

Process

Add resource attributes

Name	Value	Type	
dc	north	Traces	Remove
dc	north	Metrics	Remove
dc	north	Logs	Remove
Add			

[Add](#)[Cancel](#)

Telemetry query item configuration

New item ? ×

Item Tags Preprocessing

* Name

Type

* Key

Type of information

Category

Name	Action
ServiceName	Remove
Add	

* Aggregated columns

Function	Alias	Actions
percentile(Duration, 99)	p99	Edit Remove
Add		

Conditions

Label	Name	Actions
A	ResourceAttributes pod exists	Edit Remove
Add		

Single value history ☐

* History

Populates host inventory field

Description

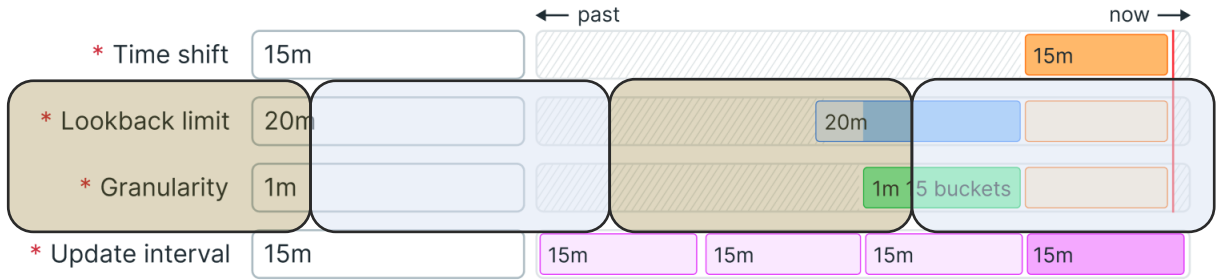
Enabled ☒

Single value history ☒

```
[ {
  "id": 1,
  "timestamp": 1752671089,
  "columns": {
    "ServiceName": "paymentAPI",
    "p99": 16030074
  }
},
...
{
  "id": 484,
  "timestamp": 1752671100,
  "columns": {
    "ServiceName": "checkout",
    "p99": 8422778
  }
} ]
```

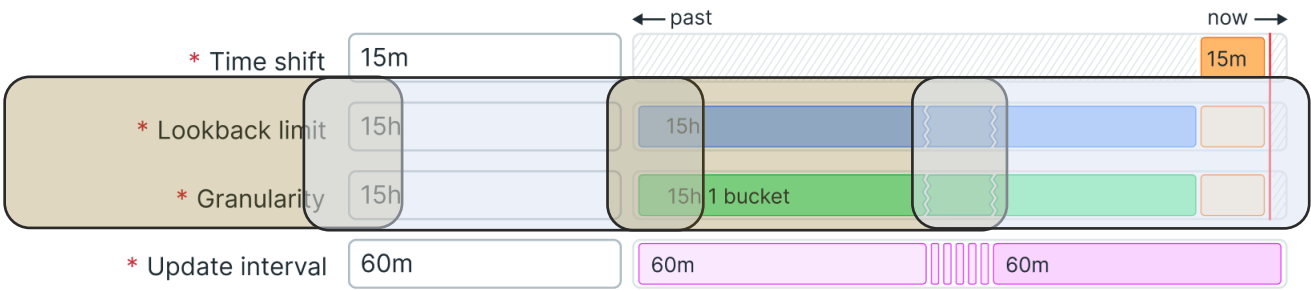
Telemetry query item

Tumbling aggregation



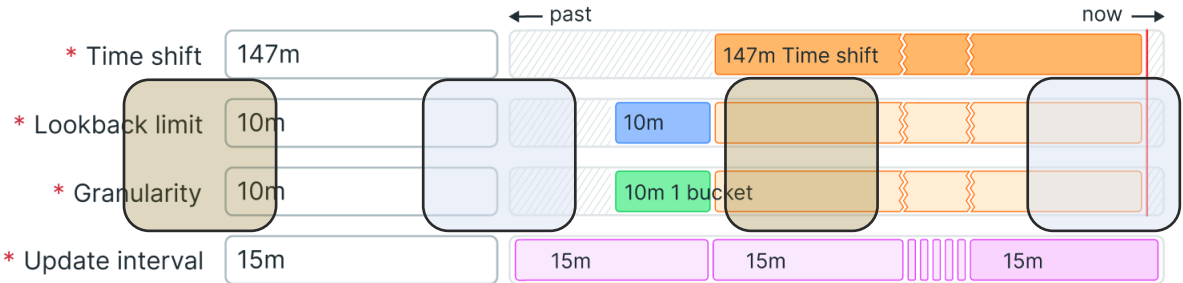
Tumbling aggregation

Hopping aggregation



Hopping aggregation

Hopping aggregation with gaps



Hopping aggregation with gaps

New *jsonpath()* * functions

Event name	High latency for {{ITEM.VALUE}}.jsonpath(\$.columns.servicename, NA)}
Operational data	Pod name: {{ITEM.VALUE}}.jsonpath(\$.columns.attributes.podname, NA)} on DC: {{ITEM.VALUE}}.jsonpath(\$.columns.attributes.dc, NA)}
* Expression	<pre>count(jsonpath(/PD/aaajson, 5m, "\$..[? (@.attributes.dc=='east_0' && @.duration > 25600000 && @.attributes.podname=~'^pod_')])") > 0</pre>



Problem started at 09:54:38 on 2026.09.04

Problem name: High latency for test_service_14

Host: Payment domain

Severity: Warning

Operational data: Pod name: pod_2 on DC: east_5

Original problem ID: 1204

* Use text type of information for triggers
Not yet available on UI

APM domain

A host- an entity in Zabbix that represents your monitoring target

Hosts

☐	Name ▲
☐ ...	ID verification endpoint
☐ ...	My business domain telemetry
☐ ...	NGINX Plus #7
☐ ...	North DC apps
☐ ...	Payment system

Items

All hosts / My business domain telemetry Enabled	
☐	Name ▲
☐ ...	Active connection count
☐ ...	Balance check response time p99
☐ ...	Domain memory max utilization
☐ ...	ID check max response time (Subprocess)
☐ ...	North DC apps error rate

Key takeaway

Zabbix is now all in one OpenTelemetry backend.

It's a must-try!

Thank you!

Q & A