A Brief History of Observability, and What to expect Next

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Like this image, we really didn't know what was going on

From Logs to Insights: A Shaky Start

Let’s increase verbosity

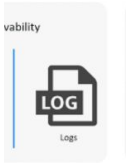
```
# User@Host: macko[macko] @ localhost []
# Thread_id: 4
# Query_time: 0.503016  Lock_time: 0.000048  Rows_sent: 56  Rows_examined: 1113
# QC_Hit: No  Full_scan: No  Full_join: No  Tmp_table: Yes  Disk_tmp_table: No
# Filesort: Yes  Disk_filesort: No  Merge_passes: 0
#   InnoDB_IO_r_ops: 19  InnoDB_IO_r_bytes: 311296  InnoDB_IO_r_wait: 0.382176
#   InnoDB_rec_lock_wait: 0.000000  InnoDB_queue_wait: 0.067538
#   InnoDB_pages_distinct: 20
SET timestamp=1193841780;
SELECT DISTINCT c from sbtest where id between 501895 and 502895 order by c
```

Too Many Tools, Too Little Clarity

MAATKIT

VividCortex

Let’s organise our sources



eG Innovations
The Three Pillars of Observability ...

Chronosphere
Three Pillars of Observability: Still ...

ResearchGate
The three pillars of observability ...

StrongDM
Three Pillars of Observability ...

Skedler
Three Pillars of

eG Innovations
The Three Pillars of ...

Medium
of Observability: Logs, Metrics ...

TechTarget
observability: Logs, metrics and traces ...

Grafana
Observability | Grafana Labs

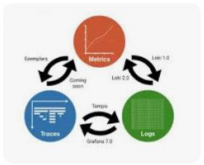
The New Stack
Beyond the 3 Pillars of Observability ...

y ...

Infinitive
Leveraging Datadog to Increase ...

YouTube
observability: Metrics, Logs ...

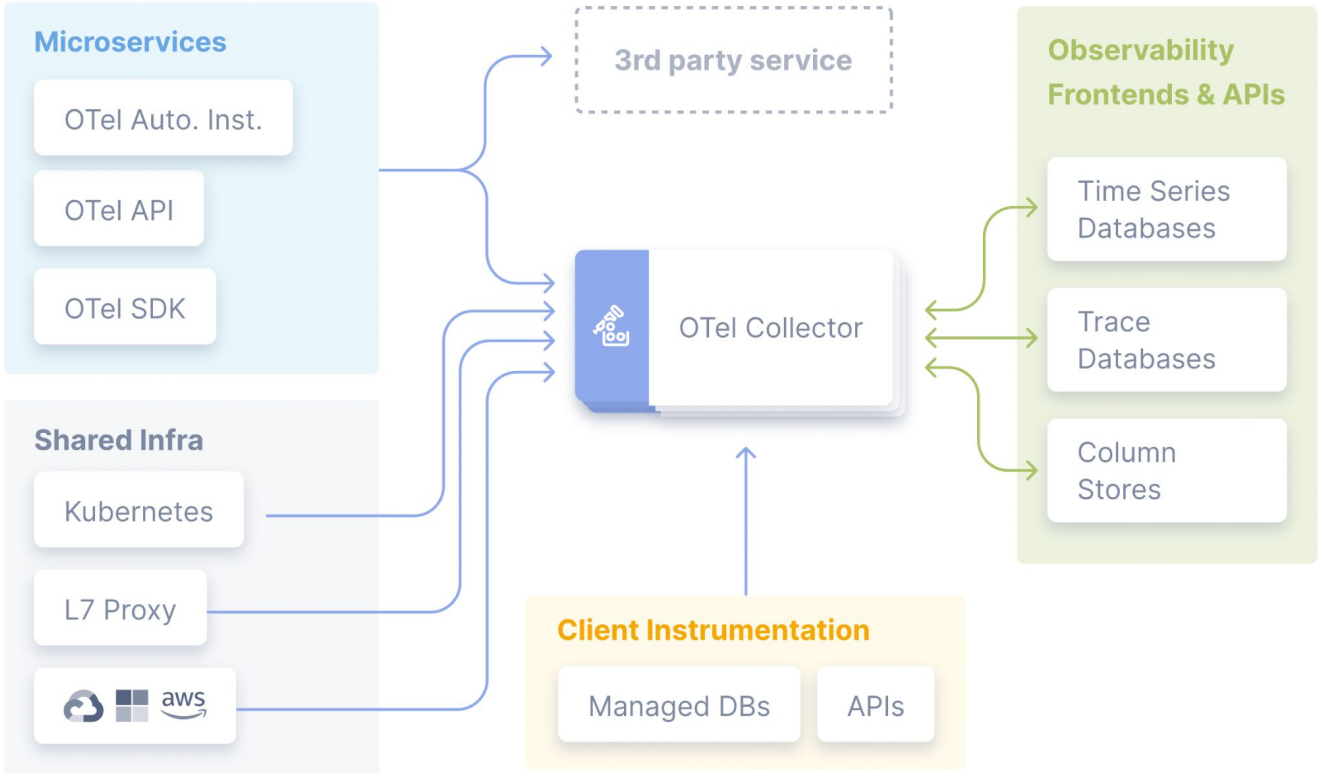
ResearchGate
Three pillars of observability ...



Cloud Native Now
The Future of Observability - C...

eG Innovation
The Three Pill

Let’s standardise



Expensive Doesn’t Always Mean Effective

The Cost-Satisfaction Paradox

74% of companies struggle to achieve true observability despite substantial financial commitments, while developers report spending over 57% of their time troubleshooting instead of innovating, leading to widespread burnout and job dissatisfaction

https://techxmedia.com/en/developers-distracted-by-firefighting-full-stack-observability-urged/
https://www.mezmo.com/newsroom/logdna-research-shows-74-of-companies-fail-to-achieve-true-observability

QRISK3: 10-Year Cardiovascular Risk Tool

- Purpose: Estimates 10-year risk of heart attack or stroke (UK adults)
- Inputs: Age, sex, cholesterol, blood pressure, smoking, diabetes, ethnicity, kidney disease, rheumatoid arthritis, mental illness, and more
- Strengths:
  - More comprehensive than older models
  - High accuracy (AUC 0.82–0.88)
  - Identifies high-risk patients for targeted prevention
- Use: Guides decisions on statins, lifestyle changes, and other interventions

Observability with Intelligence

Hybrid Observability is the New Normal

Observability Mindset Shift

Less Data, More Meaning: Seek insight, not just information.

Stop Overpaying: Expensive doesn't always mean effective results.

Prepare for Intelligence: Tools should anticipate, not just report.

/fortxun/caza-otel-ai-processor

Features

- Error Classification: Automatically categorize errors, identify affected systems, and suggest owners
- Smart Sampling: Reduce data volume while retaining important telemetry through content-aware sampling
- Entity Extraction: Identify services, dependencies, and operations from telemetry data

Benefits

- Reduce storage costs by 30-50% through intelligent sampling
- Improve incident response time with automatic error classification
- Enhance signal-to-noise ratio in telemetry data

Thanks!

https://www.linkedin.com/in/efortune/
https://github.com/fortxun/caza-otel-ai-processor