

# The journey to unified observability



## OpenTelemetry

Bringing standards and interoperability to observability

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### Monitoring vs Observability

#### Monitoring

Siloed Approach

**Tool Based** 

Metric Driven

Reactive

No Data Standards

#### Observability

Cross-Architectural

Solution Based

**Business Outcome Driven** 

Proactive

**Defined Data Standards** 



## GG

# Observability is a measure of how your IT Environment is influencing the Business"



## Why OpenTelemetry?

- Flexible & Lightweight Architecture
- Future-Proof
- Vendor agnostic
- Can use any observability backend (even multiple ones)
- One-time instrumentation





### What is OpenTelemetry?

- A single, vendor-agnostic instrumentation library <u>per language</u> with support for both automatic and manual instrumentation.
- A single vendor-neutral <u>collector</u> binary that can be deployed in a variety of ways.
- An end-to-end implementation to generate, emit, collect, process and export telemetry data.
- Full control of your data with the ability to send data to multiple destinations in parallel through configuration.
- Open-standard semantic conventions to ensure vendor-agnostic data collection
- The ability to support multiple <u>context propagation</u> formats in parallel to assist with migrating as standards evolve.
- A path forward no matter where you are on your observability journey.

## Signals

In OpenTelemetry, a <u>signal</u> refers to a category of telemetry:









Traces



Profiles

Monitor (Detect)

Metrics
"What is Happening?"

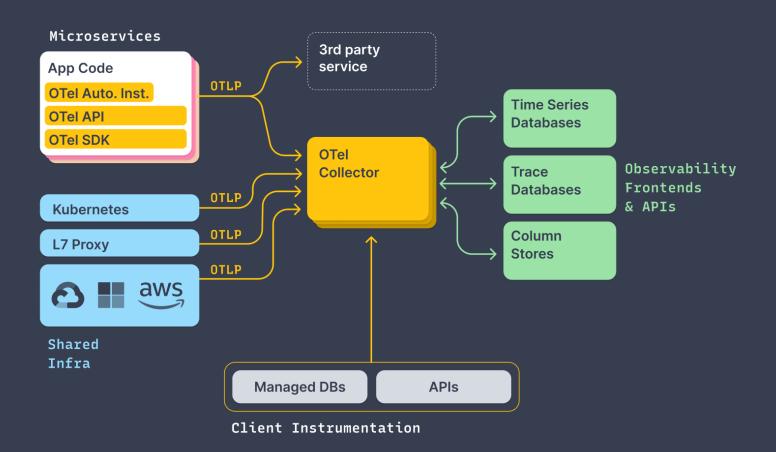
Explore (Troubleshoot)

Traces & Events "Where is it Happening?"

Discover (Root Cause)

Logs "Why is it Happening?"





# Cisco and Splunk - Full Stack Observability



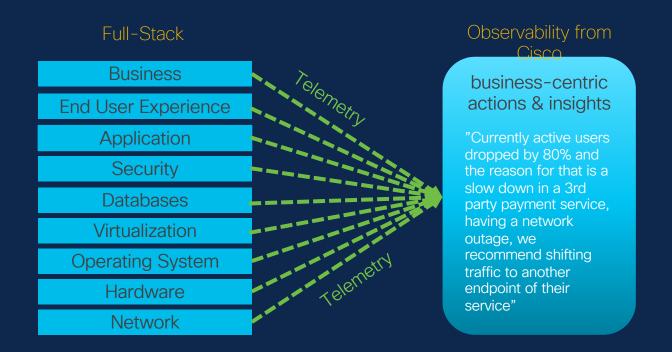
## GG

"It's the combination of visibility, insights, and an ability to take actions based on business priorities that makes full-stack observability a potent reality."

Full Stack Observability: IDC White Paper



## Full-Stack Observability: The vision in one picture





## Why do customers embrace OpenTelemetry?

OTel is a technology that helps them solve problems

Solve THEIR customers' problems

Less Ops & More Dev

Frictionless Telemetry

OpenTelemetry

Focus on what drives their business

Minimize their effort on operations

Cloud vendors promise: "ootb telemetry"

The Standard for frictionless telemetry

Move faster than their competitors

Maximize their speed of development

Less effort, more value

Not about "no vendor lock-in"

It's about freedom of data!



#### The FSO Journey

Everybody agrees: OpenTelemetry is the future

But, also ...

... everybody agrees: This is a multi year journey!

We (as vendor)

are with

you (as end-user)

on that journey together.





We want that! Let's leap forward now!



## Our contributions to OpenTelemetry



## Why Cisco embraces OpenTelemetry?



It is what we always do

Help our customers to solve their customers problem

Business-centric Actions & Insights



Feature Velocity For Engineering

Focus on Insight & Action,

Celebrate that Visibility is a Commodity



**Thought Leadership** 

Customer trust what we know what we talk about

Required for Success in the "End-User Buying Era"



Community Involvement

Influence standard to meet our needs

Customers bring the right telemetry



## Cisco + Splunk + OpenTelemetry = 🔓 🙂 🤓 🤒











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ca. 240,000 contributions

Splunk is #1 in contributions and pull requests. Adding Cisco numbers to Splunk, we have 240,000 contributions and 15,000 pull requests



#### 180+ contributors

More than 180 individuals have contributed small & big to the project:

- 50+ community members
- 10+ approvers
- 10+ maintainers



## Internal community

There is a vital Cisco-wide OpenTelemetry community with

- 500+ members in the Webex Space
- 21 Tech Talks

## cisco Connect Let's go