# Analyst Definition of Observability

Definition of *Observability* from APM Experts

Observability means you have access to all of the data you need (logs, events, metrics, traces, and dependency maps) for every single *"Unit of Work"* that your application and its underlying infrastructure perform that is of interest to the business.

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Three Tectonic Shifts

Deployment Frequency
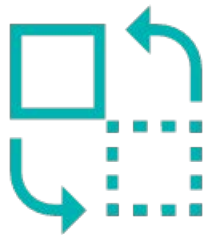
Constant Change

Organization

Move to DevOps

Technical Complexity

Endless Dependencies

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Deployment Frequency
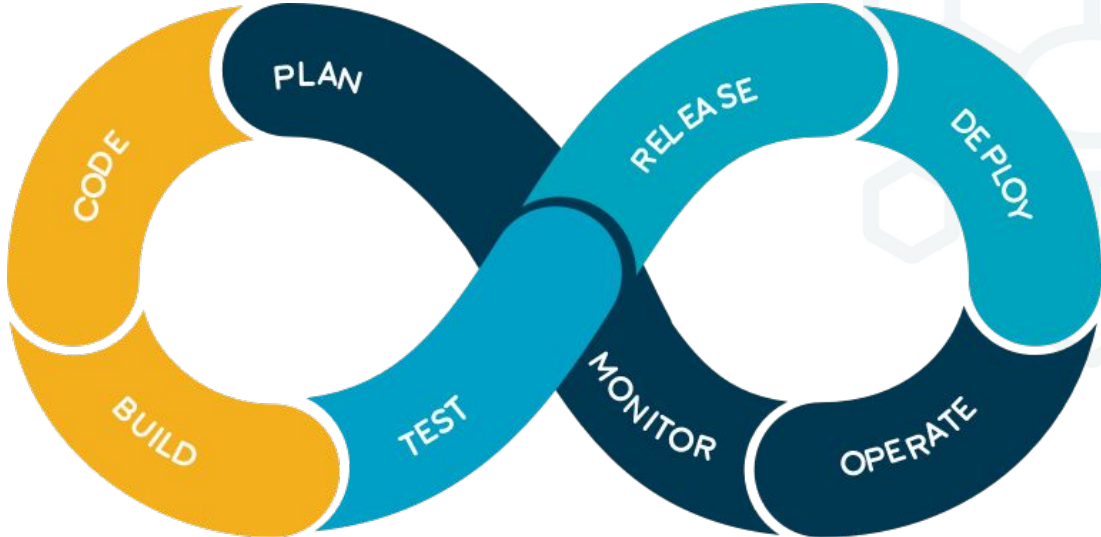
Organization

- Move to DevOps
  - No longer our meme
  - We're sharing each other's work - and problems!
- Developers are responsible for production
  - More tools!
- Tool sprawl and redundancy

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Technical Complexity

- DevOps -> Cloud Native Microservices

- Complexity increased and never ending dependencies

- More technologies
  - Developers: Yay!
  - Operations: ....

- "3am problem"
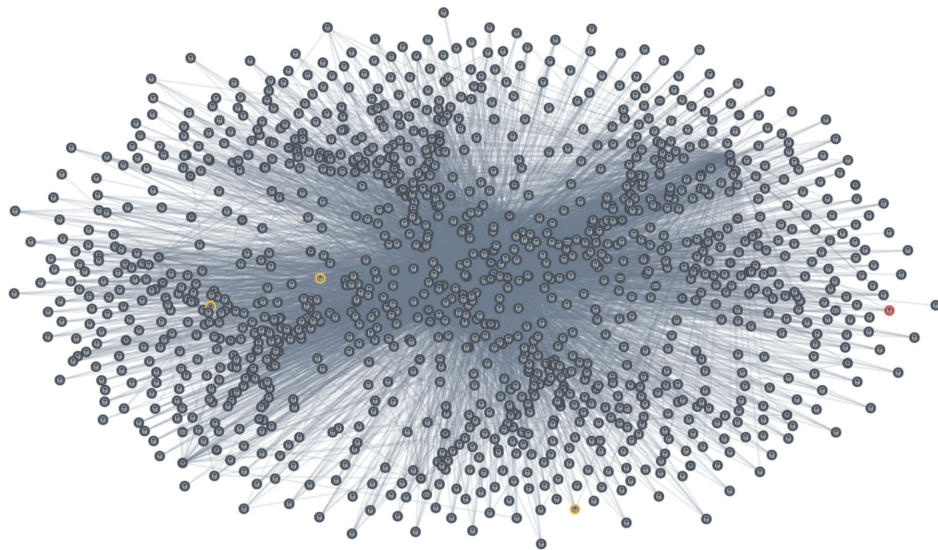
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Duct Time Time!!

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We Have Solutions to Solve Some of Those Issues...

Manual connections and configurations necessary

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Manual Steps Slow You Down!

Traditional monitoring **REQUIRES** your best engineers

- **Manually** writing data collectors

- **Manually** instrumenting code for tracing

- **Manually** configuring data collectors

- **Manually** building data collection to store metrics

- **Manually** discovering dependencies

- **Manually** deciding how to correlate data

- **Manually** building dashboards to visualize correlation

- **Manually** configuring alerting rules and thresholds

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How Can You Excel In This New Reality?

Automate discovery & configuration

Turn data into contextual info

Take action intelligently

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Enterprise Observability

Automate Discovery & Configuration

- Better things to do
  - Innovation
- The Observability Burden
  - Observability doesn't have to be like this
- Automation

Manual Steps Slow You Down!

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It's Not Just About The Data; But What You Do With It.

Data just for the sake of data - data without context - is useless

From a developer's perspective:

- "Observability is not just knowing a problem is happening, but knowing why it is happening - and knowing how I can go in and fix it."

- "If I'm going to be responsible for service performance, I must know that I'm getting the right data."

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Enable Intelligent Actions

- Move forward

- 3am problems turns into 5 minute solutions
  - Kudos on the sleep!

- Stop reacting and start acting
  - Suggestions and deep analysis based on curated knowledge
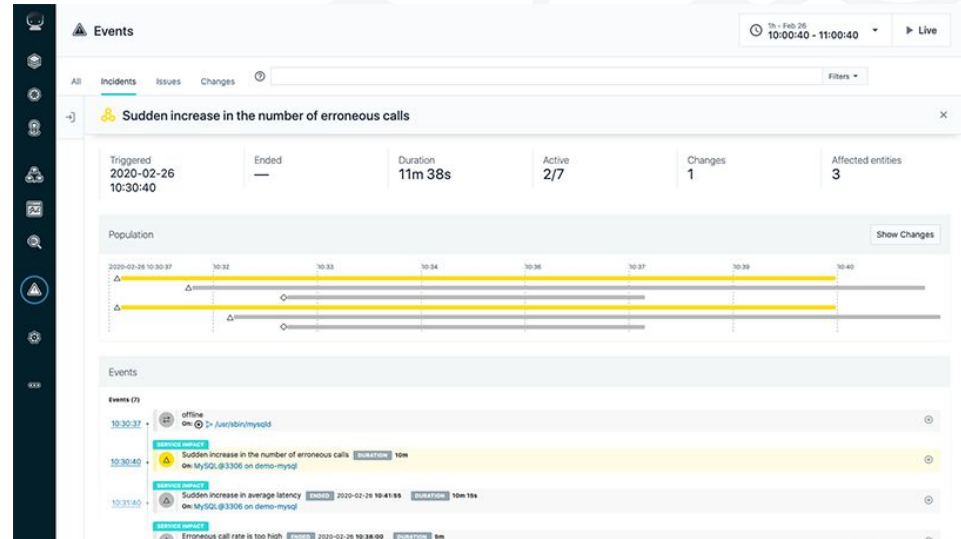
One Platform - All The Data - Full Context

Instana Enterprise Observability Platform

Sources

Cloud Providers (AWS, GCP, Azure,..)

Containers

Kubernetes (GKE, AKS, OpenShift, Rancher, Tanzu)

OS

200+ Technologies

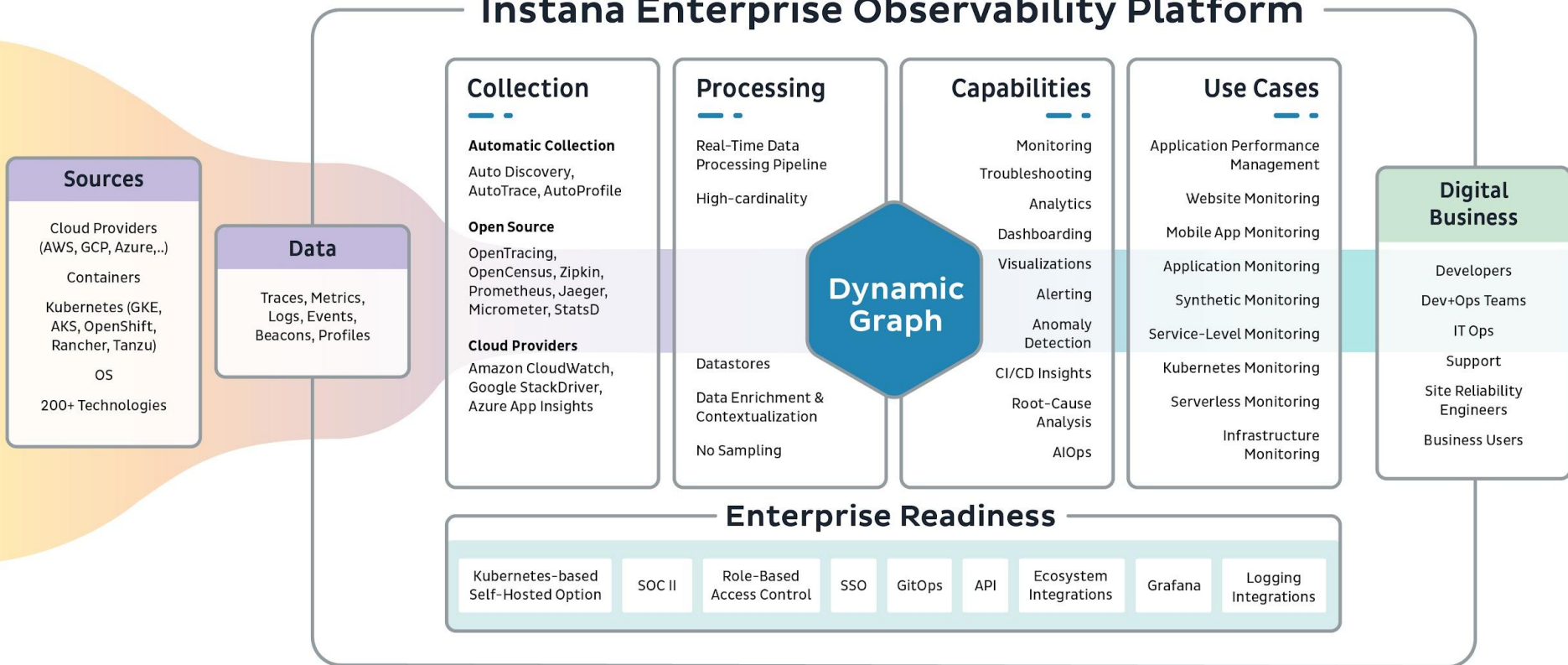### Data

Traces, Metrics, Logs, Events, Beacons, Profiles

Collection

Automatic Collection

Auto Discovery, AutoTrace, AutoProfile

Open Source

OpenTracing, OpenCensus, Zipkin, Prometheus, Jaeger, Micrometer, StatsD

Cloud Providers

Amazon CloudWatch, Google StackDriver, Azure App Insights

Processing

Real-Time Data Processing Pipeline

High-cardinality

Datastores

Data Enrichment & Contextualization

No Sampling

Dynamic Graph

Capabilities

Monitoring

Troubleshooting

Analytics

Dashboarding

Visualizations

Alerting

Anomaly Detection

CI/CD Insights

Root-Cause Analysis

AIOps

Use Cases

Application Performance Management

Website Monitoring

Mobile App Monitoring

Application Monitoring

Synthetic Monitoring

Service-Level Monitoring

Kubernetes Monitoring

Serverless Monitoring

Infrastructure Monitoring

Digital Business

Developers

Dev+Ops Teams

IT Ops

Support

Site Reliability Engineers

Business Users

Enterprise Readiness

Kubernetes-based Self-Hosted Option	SOC II	Role-Based Access Control	SSO	GitOps	API	Ecosystem Integrations	Grafana	Logging Integrations

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