

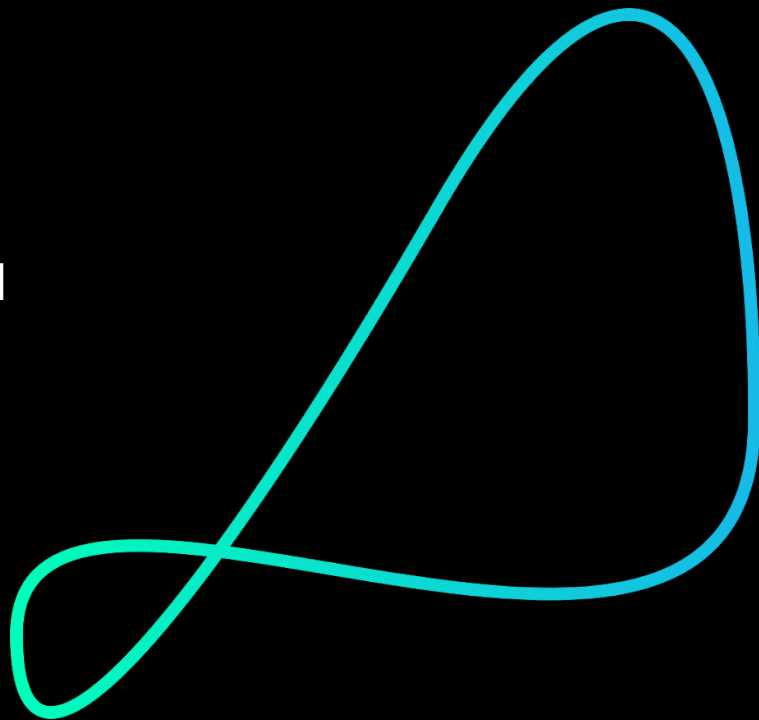


Improving Observability

using automated, OpenCensus-based application monitoring solutions.

... a talk about dogs and cats.

Alexander Wert






on's one hour of downtime
ay have cost it up to \$100
les

Who are these dogs?

Monitoring? Observability?

Monitoring  **Observability**

?

devopsification

Application



Cindy Sridharan
@csridharan

Performance Management

Follow

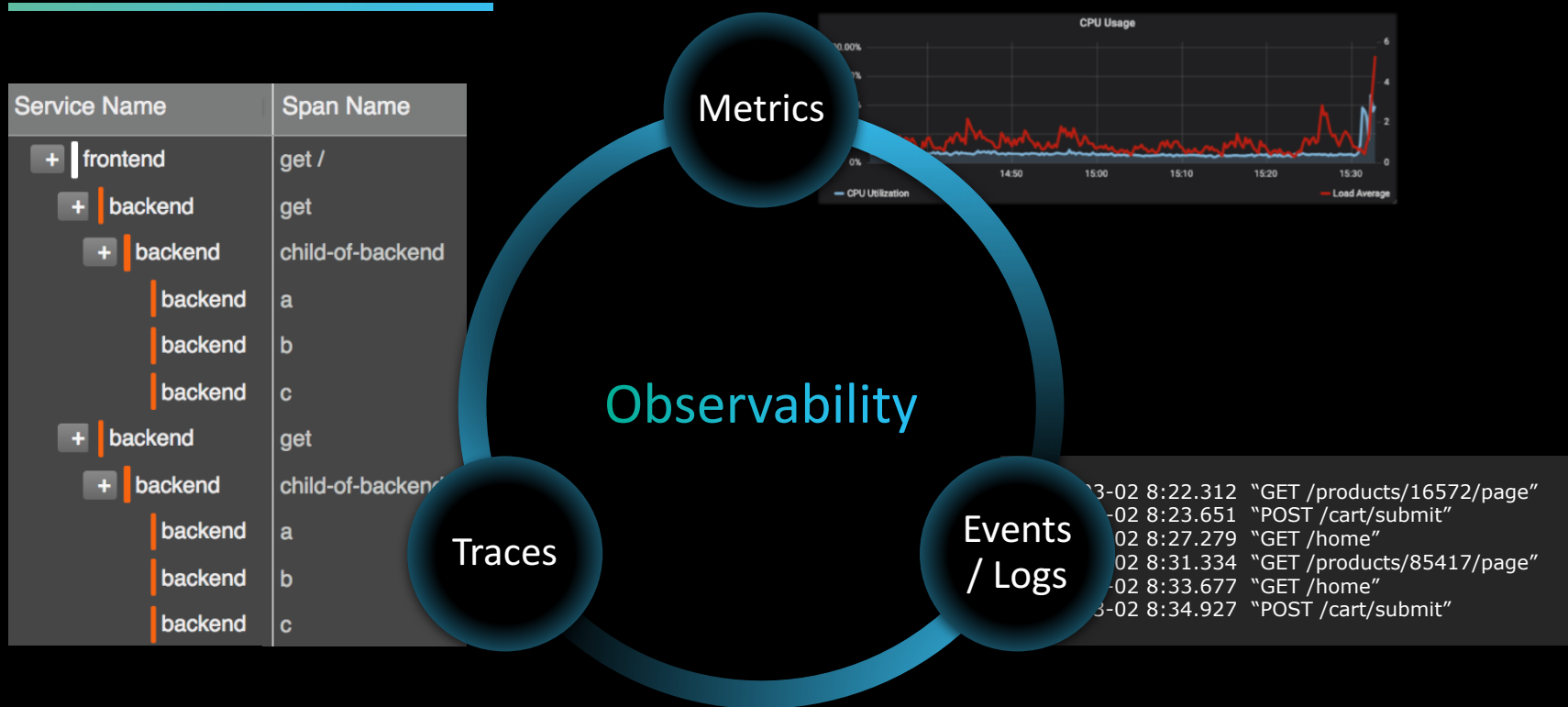
OH - "Observability - because devs don't like to do "monitoring" we need to package it in new nomenclature to make it palatable and trendy."

**User Experience
Monitoring**

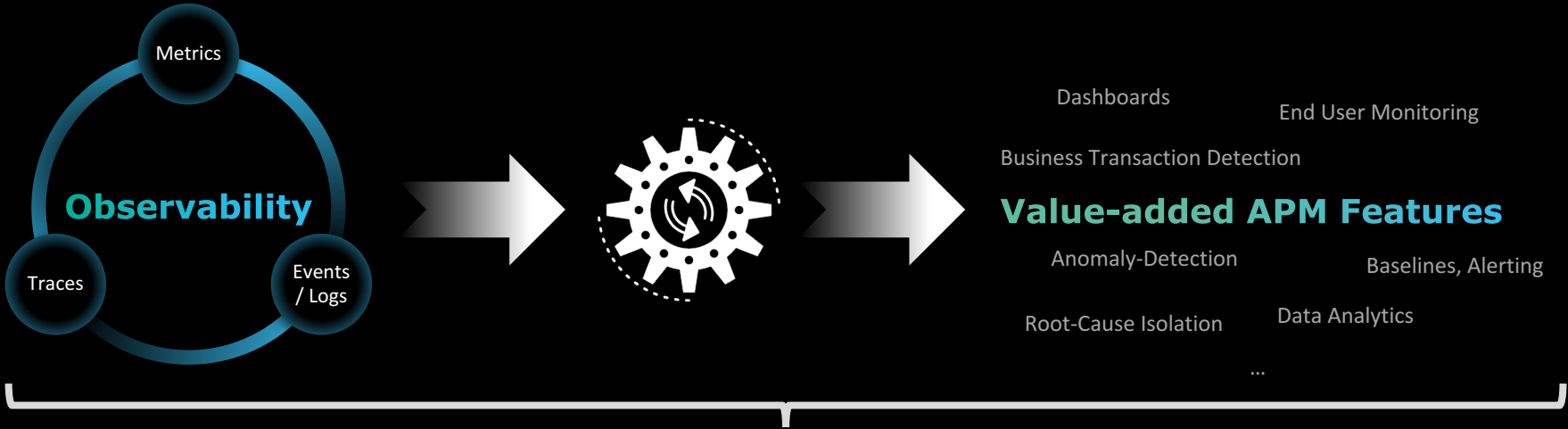
**Digital Experience
Management**

...

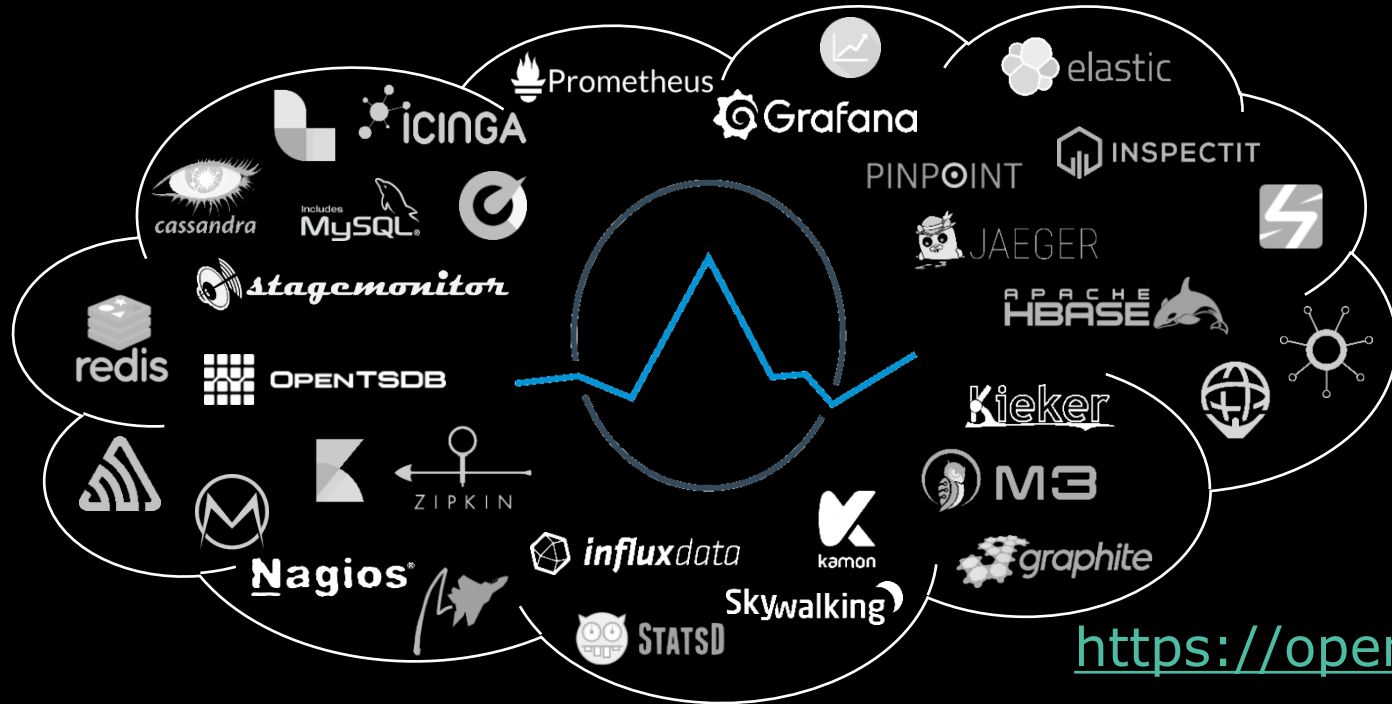
How we understand Observability ...



... and Application Performance Management



The Open Source Ecosystem for APM



<https://openapm.io>

The Benefits of Open Source Tools APM ...



There are a lot of them



Used at high scale in production

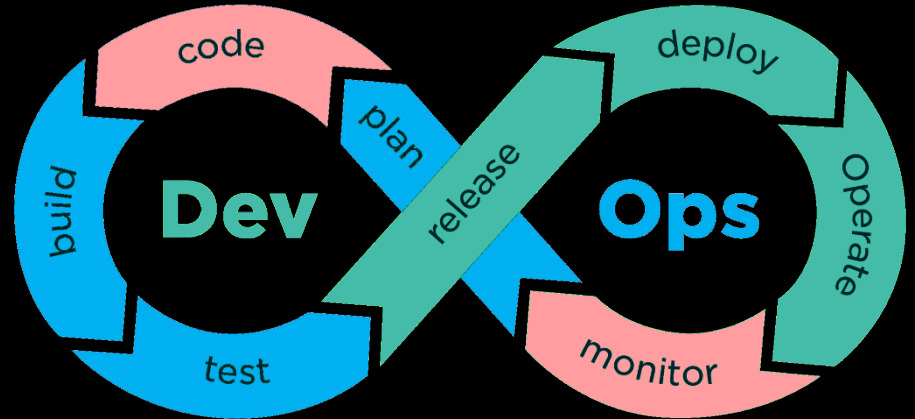


Specialized, narrow scope



Open, extensible, composable

Where many observability tools came from ...

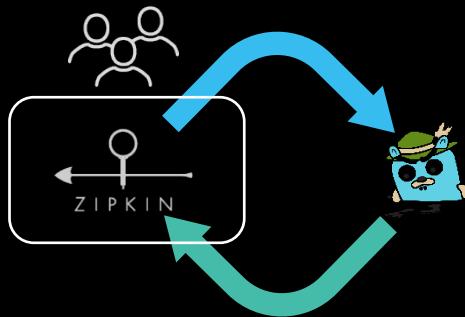


End-to-end responsibility

- Responsible for code & monitoring
→ Monitoring as code (same as logging)
- Freedom of choosing the tools a team works with

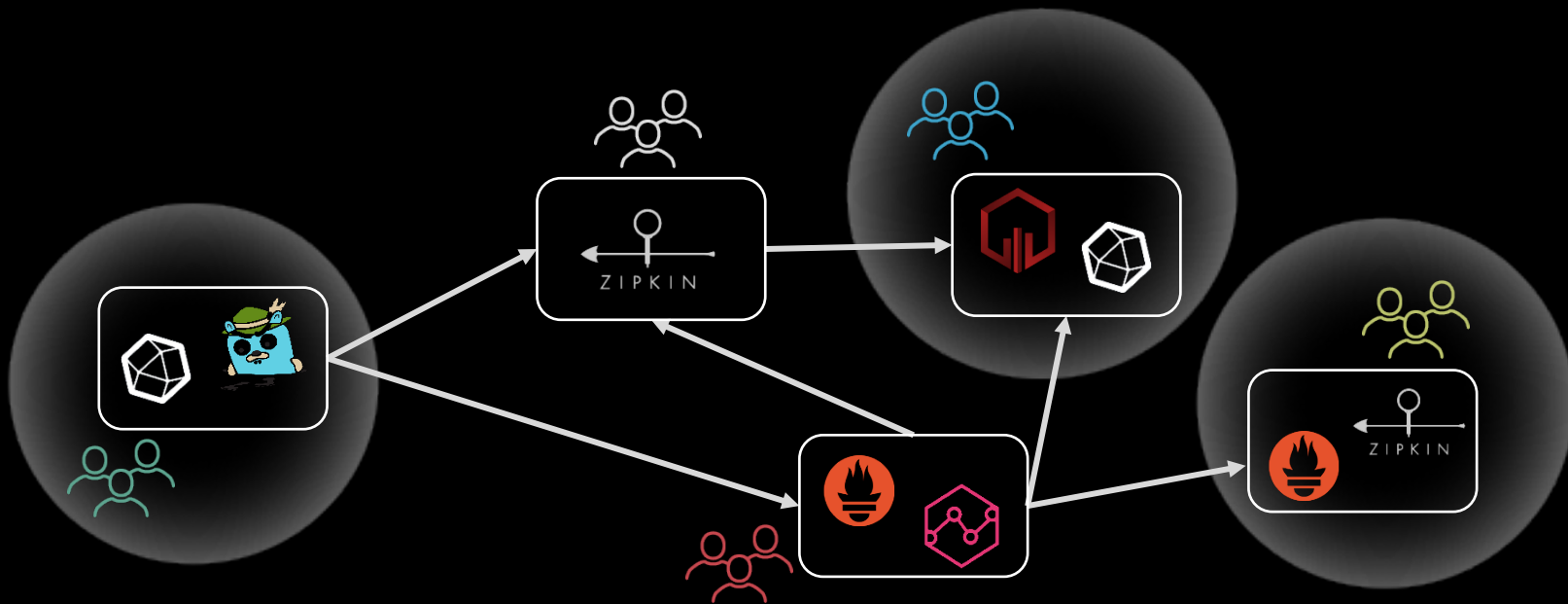
BUT, What about ...

... hardcoded dependencies to specific monitoring tools?



BUT, What about ...

... a holistic, overarching monitoring view?



BUT, What about ...

... the effort for maintaining monitoring code?

```
public void processRequest(HttpServletRequest request){
    TagContextBuilder tagCtxBuilder = Tracing.getTracer().emptyBuilder();
    tagCtxBuilder.put("service", TagValue.create("my crazy service"));

    TagContextImpl remoteTagContext = GET TAG CONTEXT FROM HTTP HEADERS

    if(remoteTagContext != null){
        TagValue origService = remoteTagContext.getTags().get("service");
        TagValue bt = remoteTagContext.getTags().get("bt");
        tagCtxBuilder.put("orig_service", origService);
        tagCtxBuilder.put("bt", bt);
    }

    Scope scope = tagCtxBuilder.buildScoped();

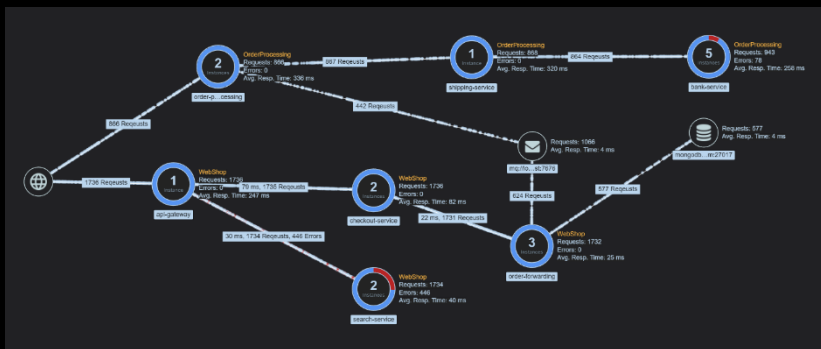
    HERE COMES THE ACTUAL APPLICATION LOGIC . . .
}
```

BUT, What ...

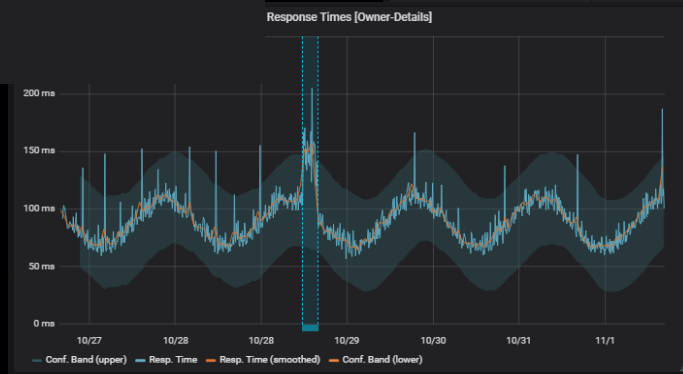
... if the context is not „perfect“ DevOps?

BUT, What about ...

... typical APM features?

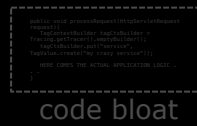
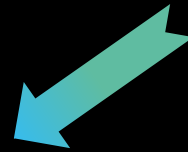
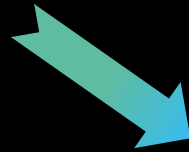
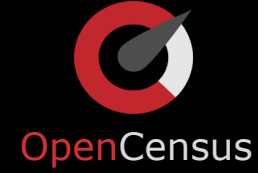


Time	application	bt	Rate	Resp. Time	
2018-11-02 11:40:00	PetClinic	Owner-Details	30.00	5.93 s	Drill Down
2018-11-02 11:40:00	PetClinic	All Owners	30.00	6.87 s	Drill Down
2018-11-02 11:39:00	PetClinic	Owner-Details	30.00	5.93 s	Drill Down
2018-11-02 11:39:00	PetClinic	All Owners	30.00	6.99 s	Drill Down
2018-11-02 11:38:00	PetClinic	Owner-Details	30.00	5.81 s	Drill Down
2018-11-02 11:38:00	PetClinic	All Owners	30.00	7.70 s	Drill Down
		Owner-Details	30.00	5.92 s	Drill Down
		All Owners	30.00	6.82 s	Drill Down
		Owner-Details	30.00	5.51 s	Drill Down
		All Owners	30.00	7.05 s	Drill Down



The Answers ...

1. Use Open Standards



The Answers ...

2. Simplify & Automate Data Gathering

- Data Gathering through flexible configuration
- Bytecode instrumentation
- Out-of-the-box data (with zero configuration)
- Distributed tracing + context-sensitive metrics
- Integrability with other tools



inspectIT
— OCELOT



exchangeability



holistic view



code bloat



black box

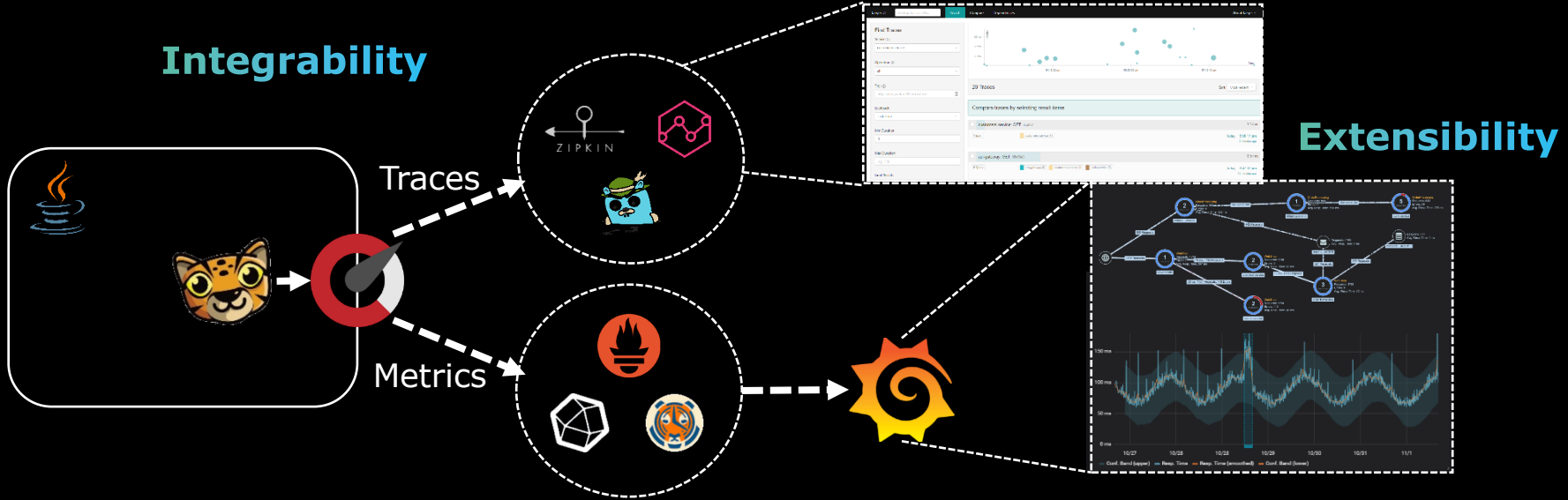


APM features

The Answers ...

3. Use the benefits of OpenAPM solutions

Integrability



exchangeability

holistic view

```
public void processRequest(HttpServletRequest request) {
    request();
    try {
        ZipkinBuilder zipkinBuilder =
            Tracing.getTracer().zipkinBuilder();
        zipkinBuilder.addReporter(zipkin);
        zipkinBuilder.create("my crazy service");
        // here opens the actual, very complex logic ...
    }
}
```

code bloat

black box

APM features

DEMO TIME





OpenAPM



<https://openapm.io>



@openapmio



info@openapm.io



<https://github.com/openapm>



inspectIT
OCELOT



<https://inspectit.rocks>



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