

Maximizing Observability with Dynatrace Log Management

Karl Svensson

Karl.svensson@dynatrace.com



Me, Karl Svensson

- **Delivery Architect for Dynatrace professional services**
- **Based in Espoo(Helsinki Area) in Finland**
- **Grew up in Malmö, Sweden**
- **Master of science in computer science from Lund Technical University**
- **Developed & architected bank software for 10 years at Crosskey Banking Solutions**
- **6 years at Digia as Integration Architect & Cloud Architect**
- **1 year as Cloud Architect at Bradleys Oy**
- **1 AWS certification(Associate Architect), 2 GCP (Professional Architect), 4 Splunk (Splunk Architect), 2 Dynatrace (Professional)**
- **Full professional proficiency in Swedish, Finnish, English & German**



Dubai HOTs



AMAR NATH SARASWAT • 1st

Digital Transformation Architect - AiOps, Observability, Automation, ...
1w • Edited •

Thanks to the Dynatrace team for organizing the incredible training session!

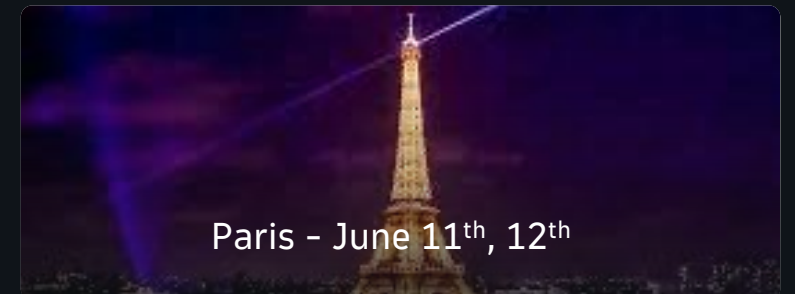
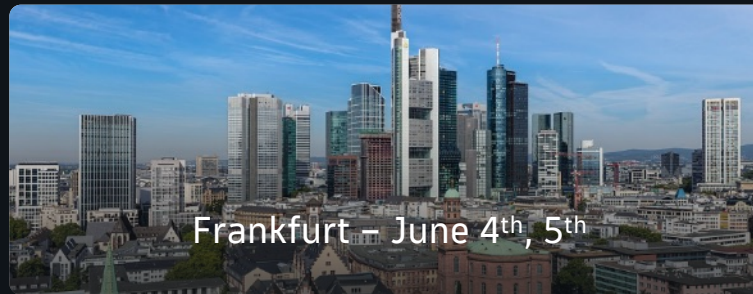
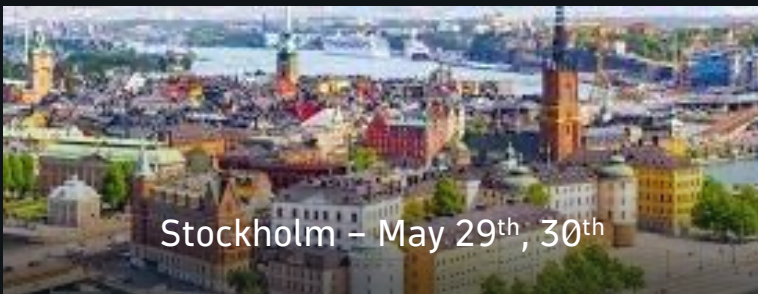
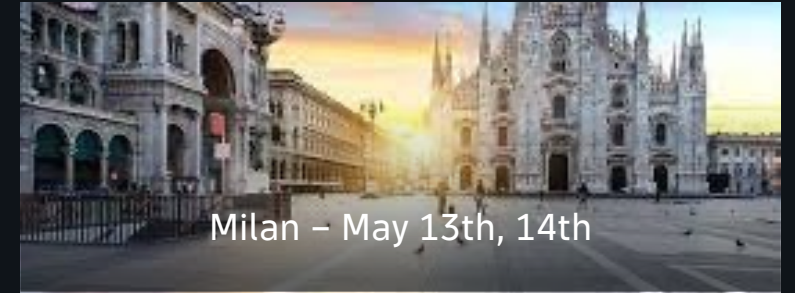
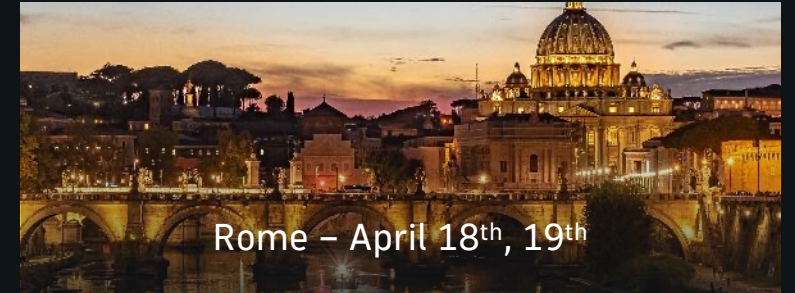
🚀 Your dedication to empowering professionals with cutting-edge monitoring and observability tools is truly commendable. The insights gained are invaluable and will undoubtedly elevate our knowledge to new heights.

Moreover, it was enjoyable to connect with [Yuan Sun \(孙远\)](#) [Karl Svensson](#) [Danilo Vukotic](#) [Anton Freyberg](#) [Hani Hannoun](#) [Paul Hashem](#)

Looking forward to continued collaboration and success together! [#Dynatrace](#) [#Gratitude](#) [#ContinuousImprovement](#) 🌟

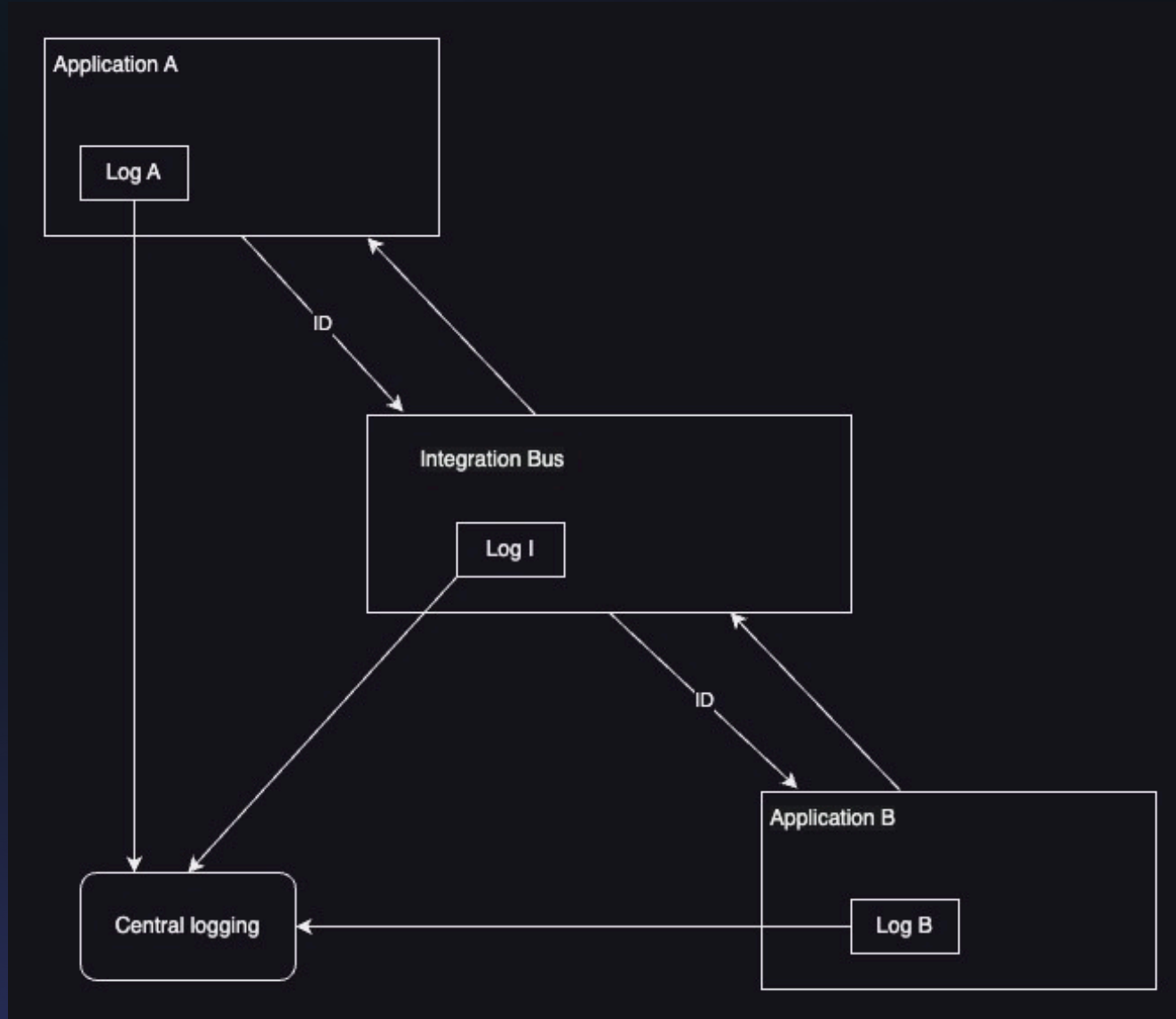


EMEA HoT Labs



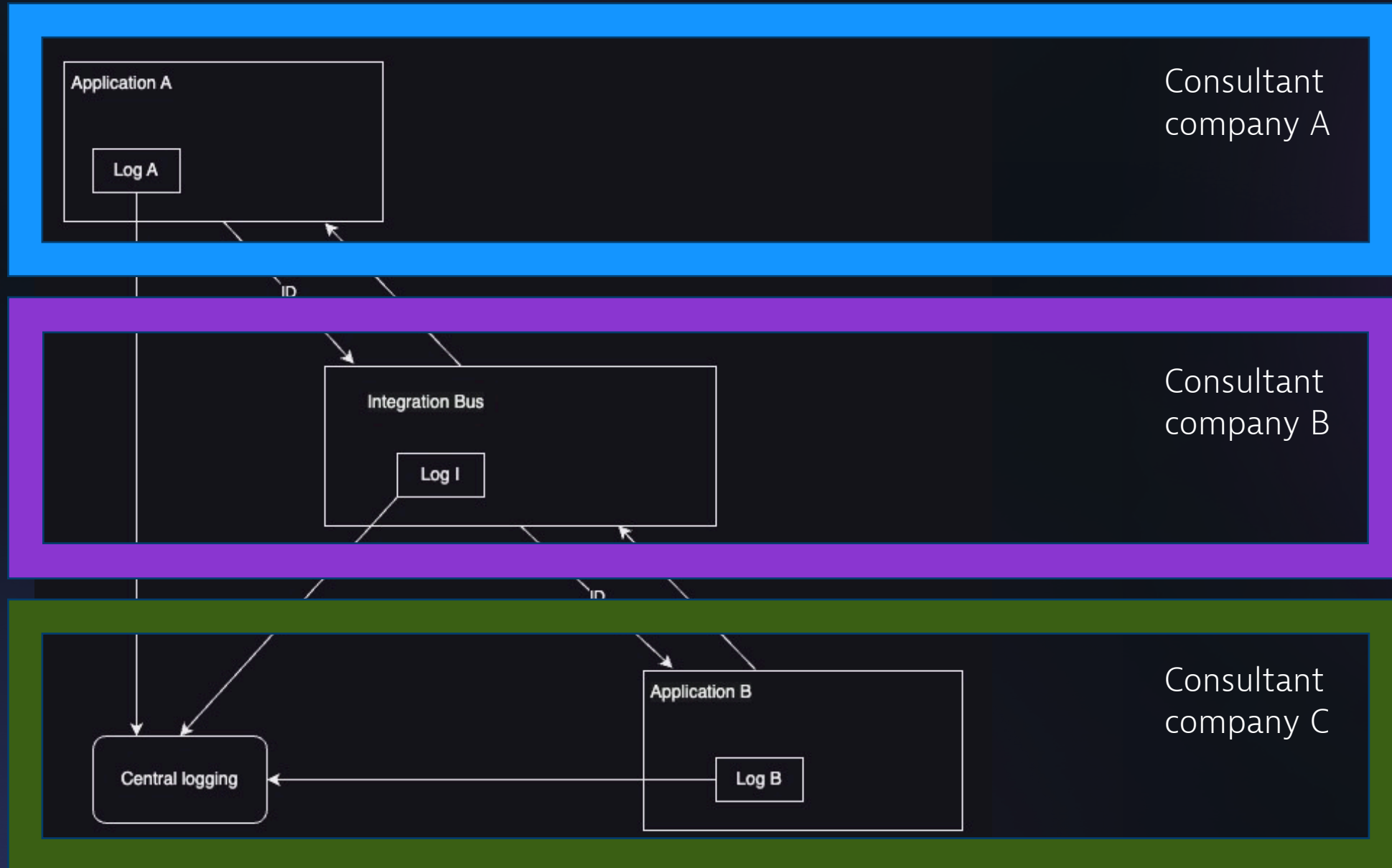
<https://www.dynatrace.com/services-support/ace-services/global-hot-labs/>

Logs: the way I used to do it

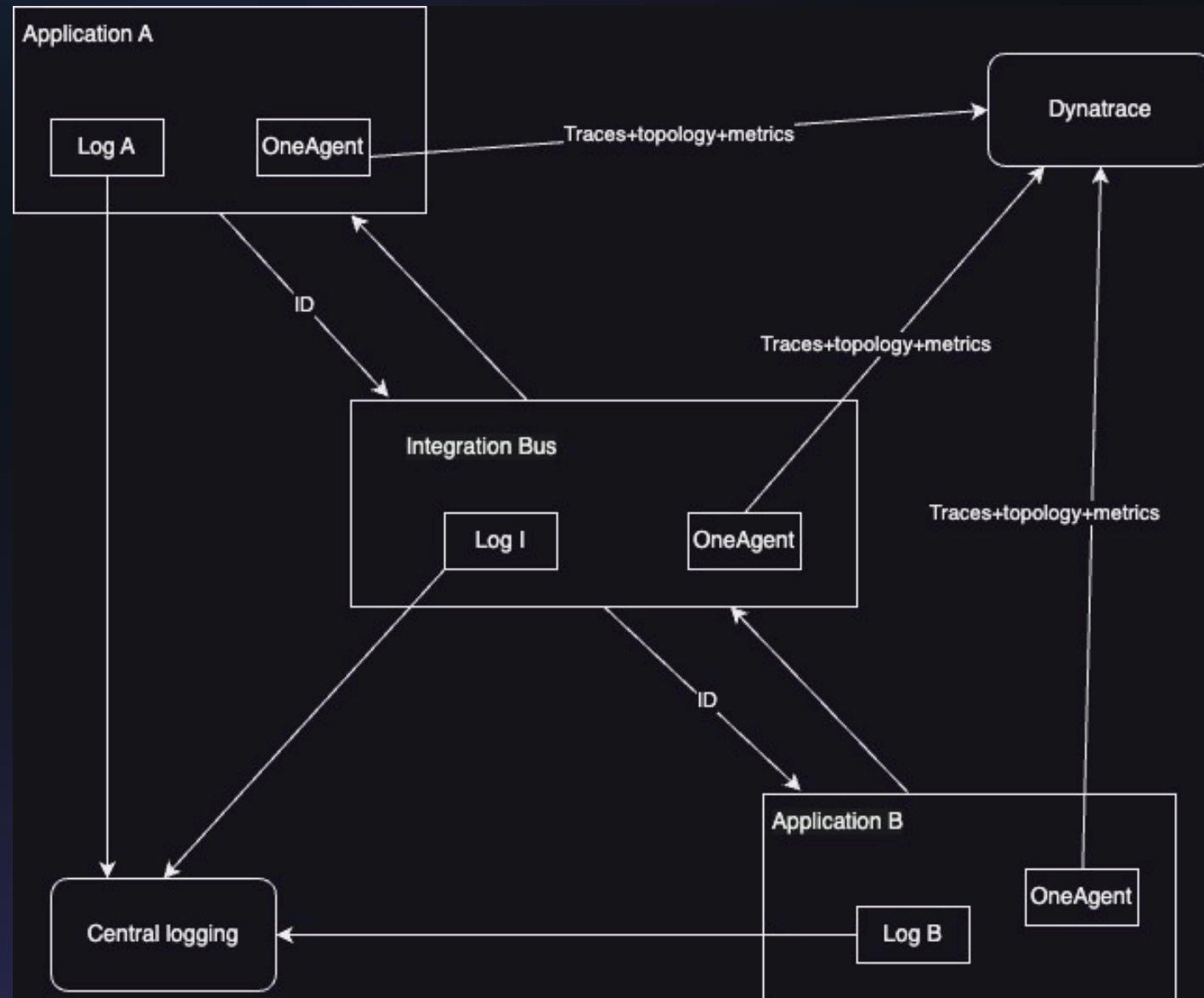


Query:
...id...

Logs: Challenge

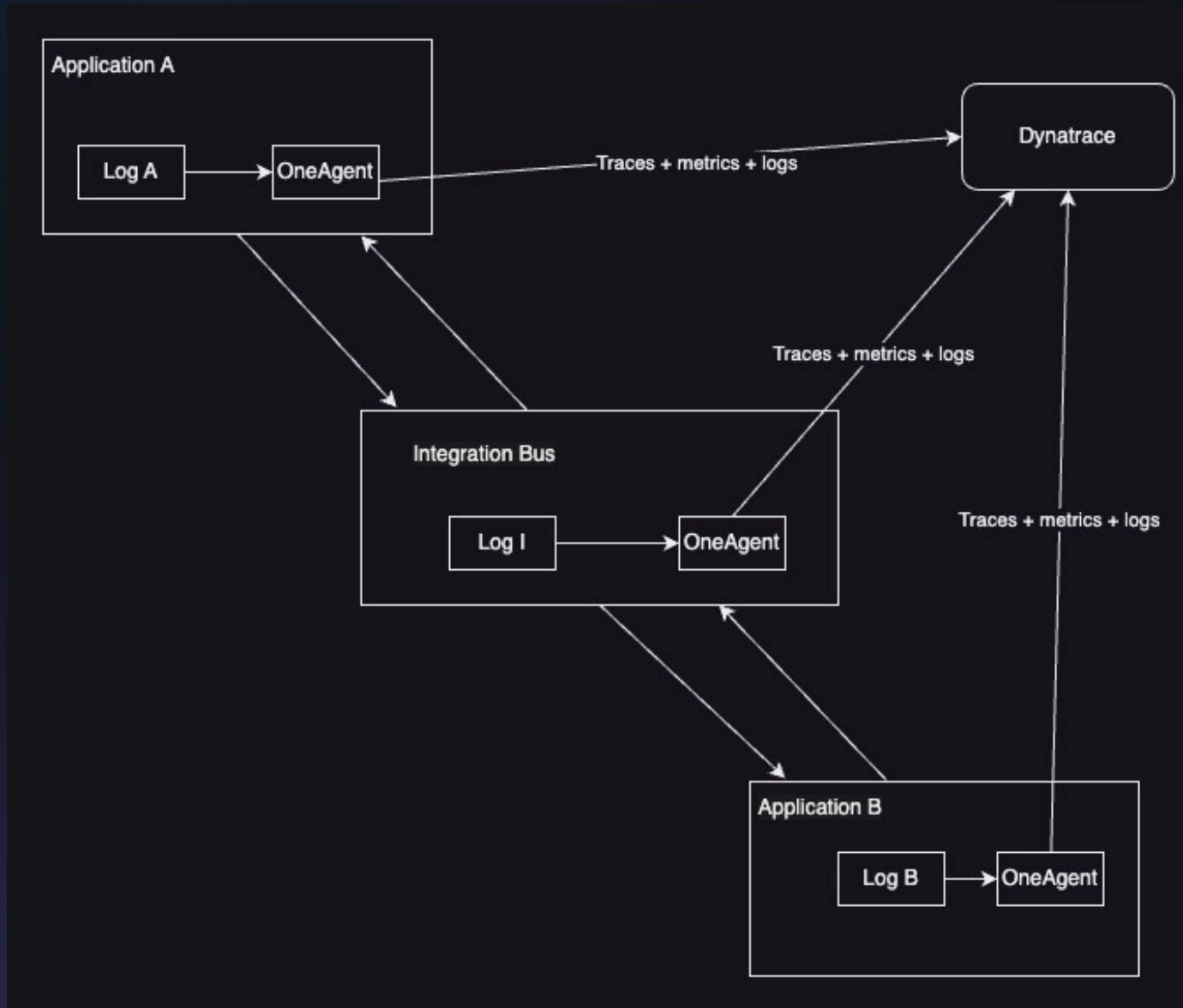


Add APM with Dynatrace



Trace example

Traces, metrics & logs with one tool and one query language



Trace + logs example

Splunk -> Grail migration project for very large EU customer

- Current ingest: ~500 TB / 24h
- Hundreds of dashboards, alerts and inputs
- Lots of people to train. About 500 people attended some of the trainings

SPL basic structure

Query starts with implicit search command

Implicit AND

index="integrations" ProductName=b2b b2bText="Received request"

| stats count by Region

Pipe
separates
commands

command

Command
parameter

DQL basic structure

Query starts with fetch (logs) command



fetch logs

```
| filter dt.system.bucket == "Integrations" and ProductName=="b2b" and  
b2b_Ltext=="Received request"
```

```
| summarize count(), by:Region
```

== for
comparison



Pipe
separates
commands

command



Command
parameters



Complex logs DQL example 1

```
fetch logs, from:now()-1d
```

```
| filter dt.entity.host == "HOSTNAME"
```

```
| fieldsadd F1 = trim(F1)
```

```
| filter (F1=="Received request from Partner" or F1=="Message sent to Partner" or F1=="Received error response from Integration System")
```

```
| fieldsadd KCM_Status=if((b2b_Type=="Request" and root=="AddOrder"),"Request",else:if((b2b_Type=="Response" and root=="OrderPending"),"OrderPending",else:if(((b2b_Type=="Response" and root=="OrderRejected") or F1=="Received error response from Integration System"),"OrderRejected",else:if((root=="OrderStatusUpdate" and CompletionCode=="510"),"OrderAcknowledged",else:null)))) | filter (F1=="Received request from Partner" or F1=="Message sent to Trading Partner" or F1=="Received error response from Integration System") and category=="L3B"
```

```
| fieldsadd Request=if(KCM_Status="Request",_time,NULL)
```

```
| fieldsadd OrderAcknowledged=if(KCM_Status="OrderAcknowledged",_time,NULL)
```

```
| fieldsadd Today=unixSecondsFromTimestamp(now())
```

```
| summarize CompletionCode1=takelast(CompletionCode), Today=takelast(Today), _time=takelast(unixSecondsFromTimestamp(timestamp)), LineStatus1=takelast(LineStatus), RequestDt=takelast(Request), OrderAcknowledged=takelast(OrderAcknowledged), by:BuyersID
```

```
| fieldsadd Diff = Today-RequestDt
```

```
| fieldsadd Diff=round(toDouble(Diff)/86400)
```

```
| filter CompletionCode1==510 and LineStatus1=="Acknowledged" and Diff>0
```


Logs DQL live example

Problems / things that needed solving

- User training in DQL syntax and SPL to DQL translation needed
- Quite much work was needed to translate queries and build new dashboards with corresponding functionality as in Splunk
- Users were not used to DT logs license model, query costs needed controlling and policing. Buckets helped.

Demo of Cloud tags dashboard



Simply smarter clouds