

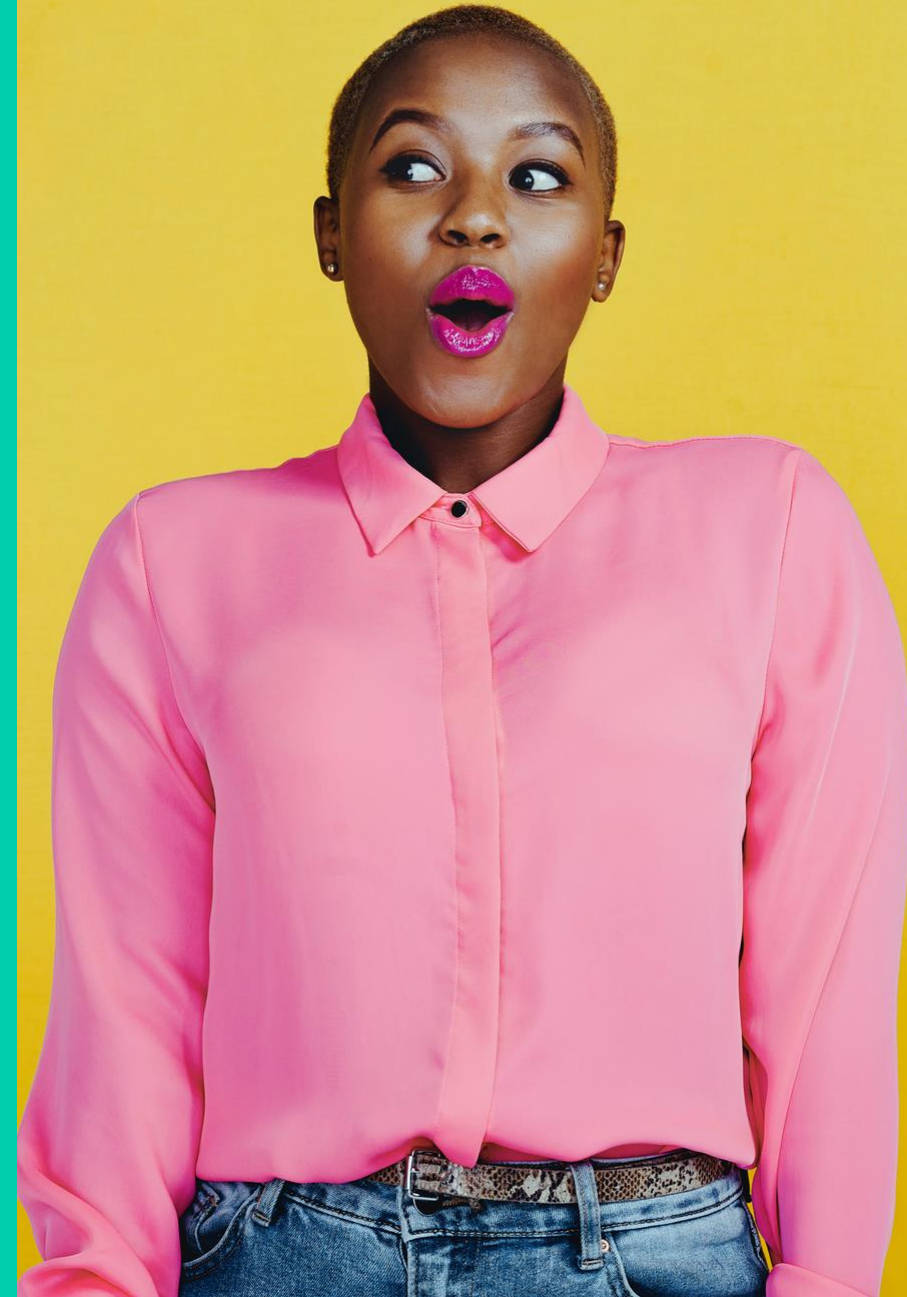


SAP Community Call for SAP Cloud ALM Experts

Customer Communications & Relations for ALM, SAP SE

September 04, 2024

Public



Agenda

Agenda for September 4, 2024

1 Welcome

2 **OpenTelemetry-based Raw Data APIs**

3 We ask, you answer | Menti poll

4 Additional Information

5 You ask, we answer | Q&A

Speakers



Tonja Kehrer



Cyril Machetti



Konstantin Werthmann

OpenTelemetry-based Raw Data APIs

Motivation

SAP Cloud ALM offers Raw Data APIs in addition to existing Analytics APIs because it corresponds to specific integration needs.

How is this different from Analytics APIs?

	Analytics APIs	Raw Data APIs
Domain	Monitoring	Observability
Use cases	<ul style="list-style-type: none">• Monitoring Dashboard• Analytics Application	<ul style="list-style-type: none">• Third party Observability Backend• External Non-SAP System
Access	On Demand / User Query	Scheduled Job / Pipeline
Signals	Metric	Metric, Log, Trace
Outbound support	Yes	Yes
Inbound support	No	Yes
Standard	SAP	OpenTelemetry (CNCF)

OpenTelemetry – Benefits

Created in 2019, **OpenTelemetry (OTeL)** defines a single set of **APIs** and **libraries** to simplify the collection and transfer of telemetry data.



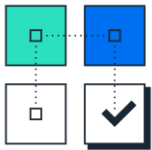
Open Standard:

- Unified standard for **creating** and **ingesting** telemetry data.



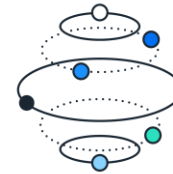
Consistency:

- Consistent **collection** mechanism and **format** for metrics, events, logging, and tracing.



Observability integration:

- Centralized and flexible observability solution to integrate different monitoring tools across cloud and applications.



Broad Support

- Capture relevant traces and metrics with specific integrations for popular frameworks and languages.



Ease of Use

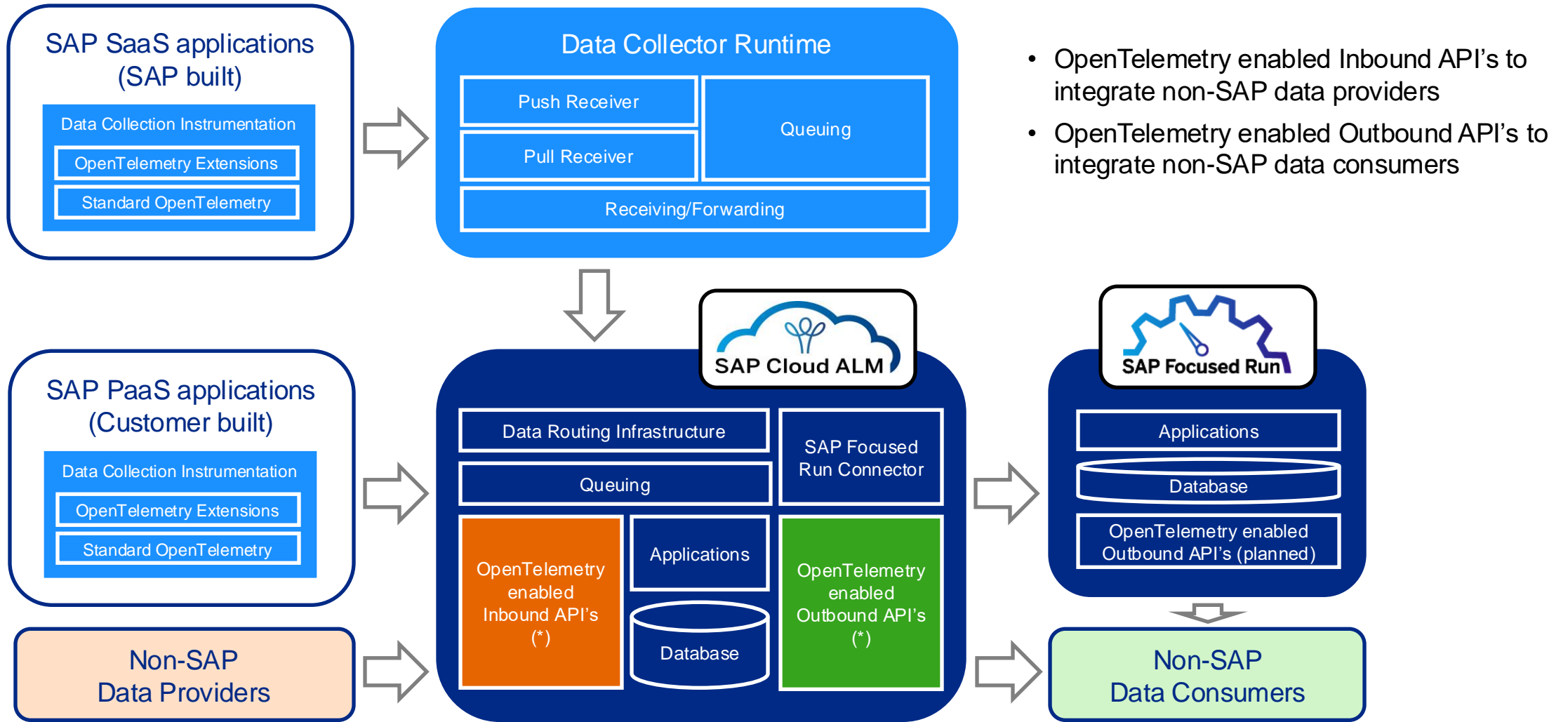
- Automatic instrumentation agents to collect without requiring any code changes.



Flexibility

- Send observability data to any backend with no specific vendor requirements.

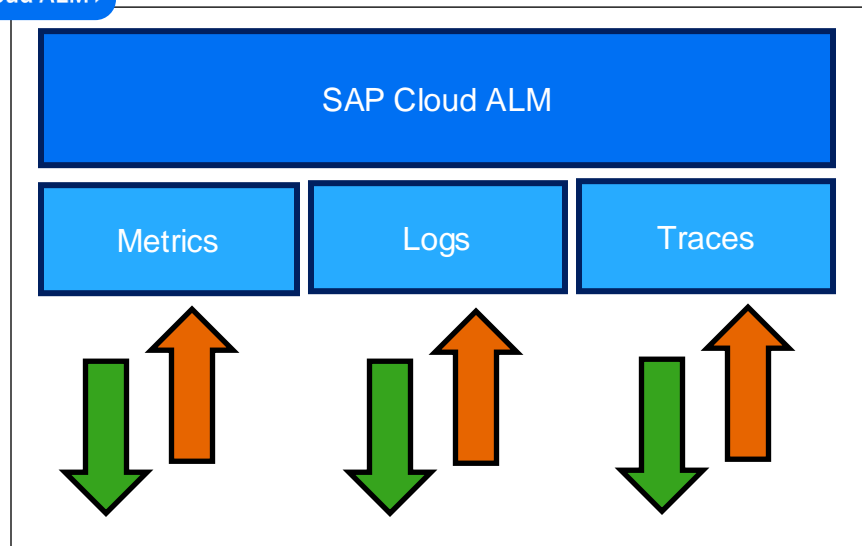
OpenTelemetry @ SAP – Customer Facing Observability



- OpenTelemetry enabled Inbound API's to integrate non-SAP data providers
- OpenTelemetry enabled Outbound API's to integrate non-SAP data consumers

(*) Availability see roadmap

SAP Cloud ALM Open Telemetry Support



/calm-metrics/metrics
GET / POST
json/binary, protobuf, Text

/calm-logs/logs
GET / POST
json/binary, protobuf

/calm-traces/traces
GET / POST
json/binary, protobuf

The SAP Cloud **ALM metrics/logs/traces API** is used:

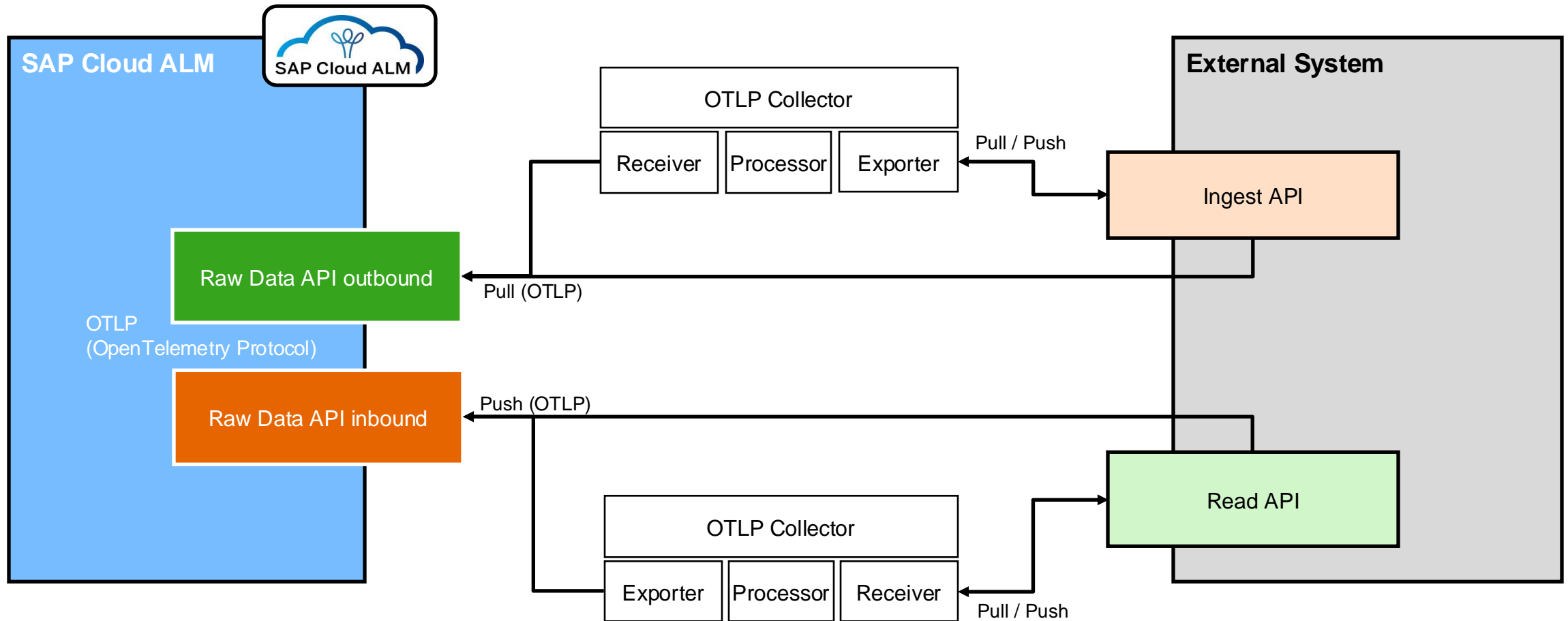
- to **ingest** new data in the different Monitoring scenarios of SAP Cloud ALM with the [Open Telemetry OTel](#) format.
- to **read** data managed by SAP Cloud ALM in OTel signals

Customer use-cases:

- Non-SAP systems observability.
- Integrate data from an open source, in-house tool or third-party tool.
- Leverage event processing and management capabilities of SAP Cloud ALM with new data source.
- Export SAP Cloud ALM data in the **OTel** format.

Data are sent or retrieved from SAP Cloud ALM via dedicated **HTTP API end-points** documented in the SAP API Business Accelerator Hub.

Integration Architecture



SAP Cloud ALM Raw Data API in SAP Business Accelerator Hub

Cloud ALM log records using OpenTelemetry format.

Overview API Reference Schema View API Consumption Try Out

GET /logs Environment: Sandbox

REQUEST Run

Parameters Headers Body Code Snippet

NAME	VALUE	DESCRIPTION
provider* string	exm.im	The data provider accessed through the logs api. Supported values: More ...
Hide optional parameters		
format string	protobuf-json	Expected output format of the logs api. You can select between protobuf-binary or protobuf-json format... More
version string	Enter a value..	Version of the data provider to use. By default the last available

FEEDBACK

Chat (Beta)

Hub Explore Resources Discover Integrations Partner with Us

Request URL

```
https://sandbox.api.sap.com/SAPCALM/calm-logs/v1/logs?format=protobuf-json&provider=exm.im&period=30M&limit=10&onLimit=TRUNCATE&serviceid=a863426f-9156-475b-9a89-723d9ea54b14
```

200

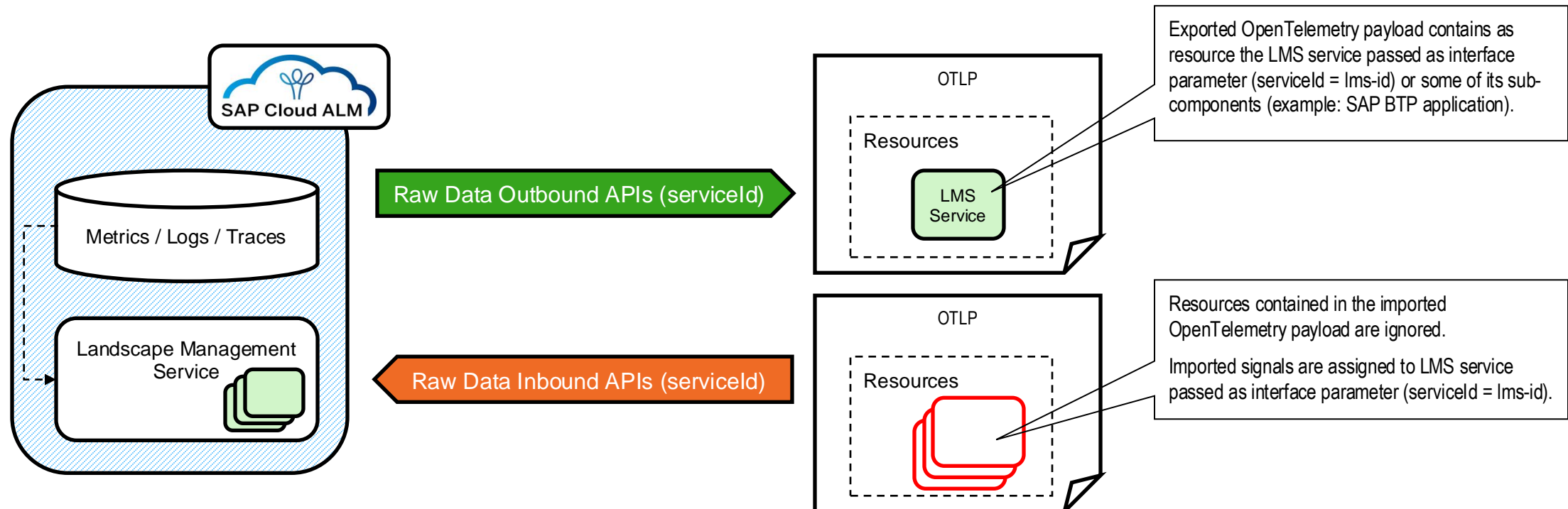
Response Body Response Headers

```
{
  "name": "default"
},
"logRecords": [
  {
    "timeUnixNano": "1724160793000000000",
    "severityNumber": "SEVERITY_NUMBER_ERROR",
    "severityText": "Error",
    "body": {
      "stringValue": " SAP_SYSTEM ( ) +\\CLASS=/SMFND/CL_INB_TRANS_PROCESSOR"
    },
    "attributes": [
      {
        "key": "exception.type",
        "value": {
          "stringValue": "SAP S/4HANA Cloud Asset Central Foundation Integration"
        }
      },
      {
        "key": "sap.exm.category",
        "value": {
          "stringValue": "SAP S/4HANA Cloud Asset Central Foundation Integration"
        }
      },
      {
        "key": "sap.exm.user",
        "value": {
          "stringValue": "SAP_SYSTEM"
        }
      }
    ]
  }
],
}
```

OpenTelemetry Resources and Landscape Management Service

The exported OTel Resource corresponds to a LMS service or one of its sub-components.

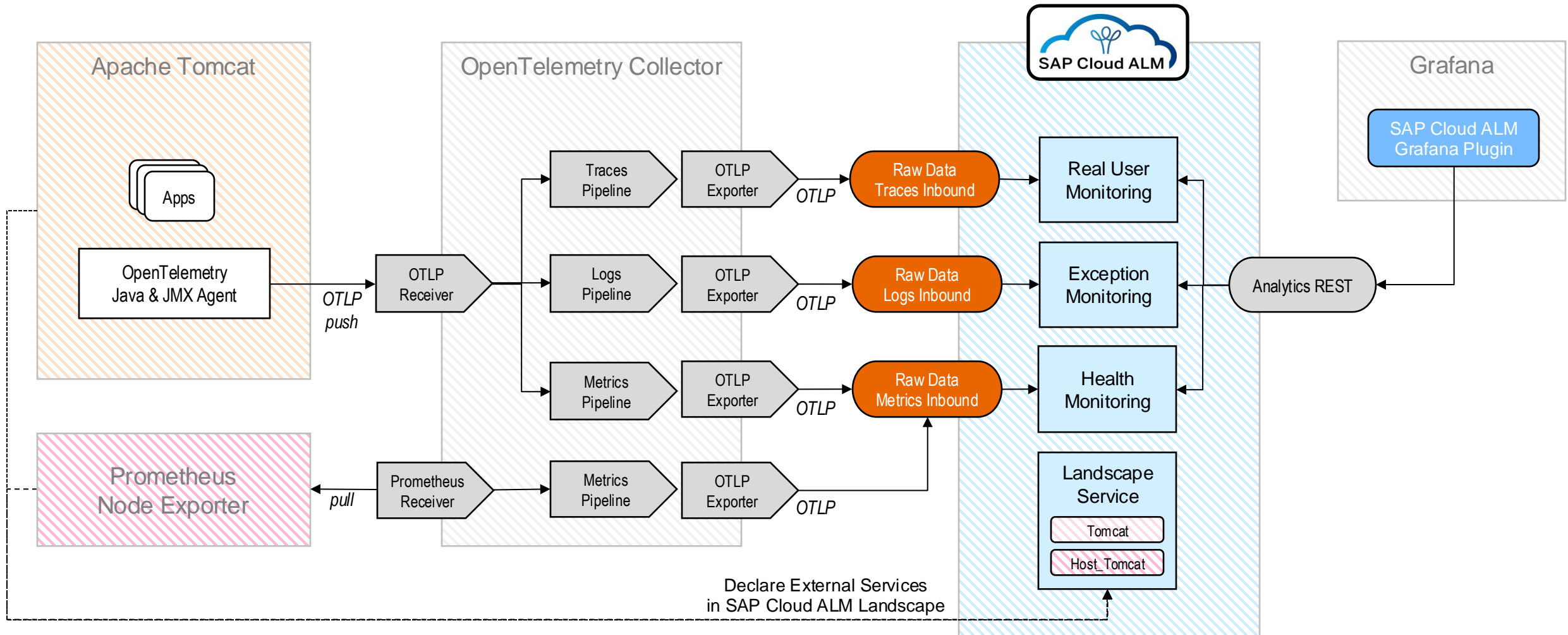
The imported OTel Resources are ignored, only the interface parameter serviceld is considered.



OpenTelemetry @ SAP - Planned Support for OpenTelemetry Signals

Use Case	Analytics	OTeL Metrics		OTeL Logs		OTeL Traces	
	Outbound	Outbound	Inbound	Outbound	Inbound	Outbound	Inbound
Business Process Monitoring	2023	N/A	N/A	N/A	2024	N/A	N/A
Integration Monitoring	2023	2023	N/A	2024	2024	N/A	N/A
Exception Monitoring	2023	2023	N/A	2023	2023	N/A	N/A
Real User Monitoring	2023	2023	N/A	N/A	N/A	2023	2024
Synthetic User Monitoring	2023	2023	N/A	N/A	N/A	N/A	2024
Job & Automation Monitoring	2023	2023	N/A	2024	2024	N/A	N/A
Configuration & Security Analysis	2023	N/A	N/A	N/A	N/A	N/A	N/A
Health Monitoring	2023	2023	2023	N/A	N/A	N/A	N/A
Status Events Analytics	2024	2023	N/A	2024	2024	N/A	N/A
Business Service Management	2024	2024	N/A	N/A	N/A	N/A	N/A
Intelligent Event Processing	2023	2024	N/A	N/A	N/A	N/A	N/A

Demo Landscape : Non-SAP systems observability

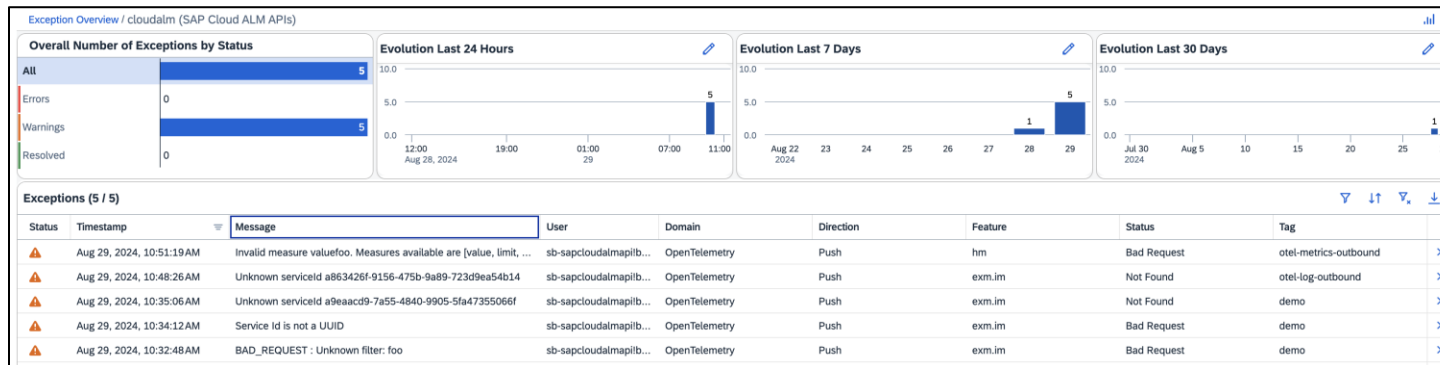
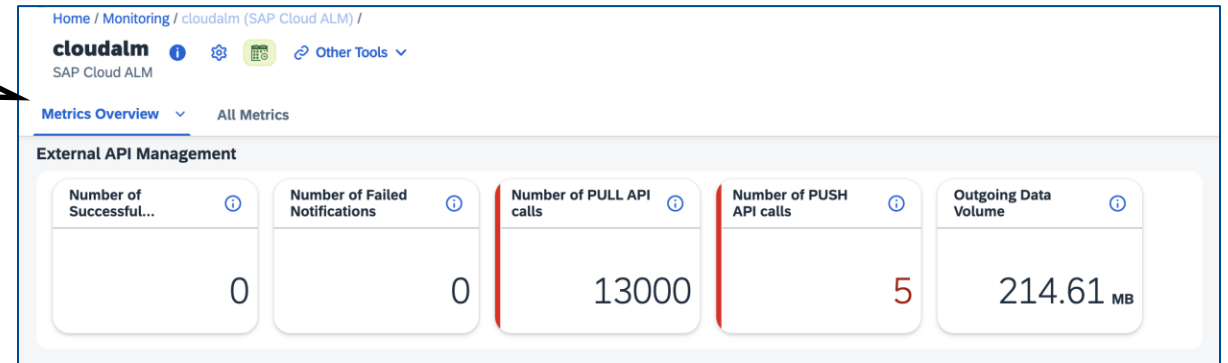


Raw Data APIs self-monitoring

Monitor SAP Cloud Raw Data API traffic with **SAP Cloud ALM Health Monitoring**

Control and reduce the exchanged data:

- Use compression or binary format
- Adjust your API queries and collection jobs



Monitor SAP Cloud Raw Data API errors with **SAP Cloud ALM Exception Monitoring**

Activate API monitoring with HTTP headers:

- **x-monitoring: true**
- **x-tag: <free text>**

Menti

We ask, you answer!

Please open www.menti.com

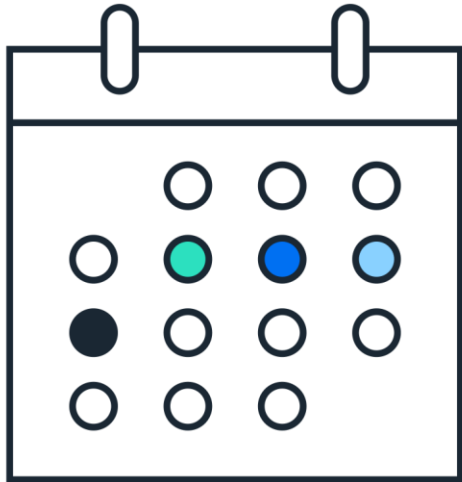
and use code **2807 0563**

<https://www.menti.com/alvchrni93fh>



Additional Information

Upcoming ALM Events



SEPTEMBER

24-27 [SAP ALM Summit EMEA](#)
Mannheim, Germany

OCTOBER

8-9 [SAP TechEd Virtual](#)
Virtual

23 [What's New In SAP Cloud
ALM for Implementation
Q3/2024](#)
Virtual

24 [What's New In SAP Cloud
ALM for Operations Q3/2024](#)
Virtual

SAVE THE DATE

Nov 12-14 ASUG Tech Connect 2024, West Palm Beach, United States ([more information](#))

Nov 19-20 SAUG Melbourne Conference 2024, Melbourne, Australia ([more information](#))

Dec 1-3 UKISUG Connect 2024, Birmingham, United Kingdom ([more information](#))

Apr 2025 DSAG-TechXchange in 2025, Wiesbaden, Germany ([more information](#))

[ALM Events Overview](#)

SAP ALM Summit EMEA

Ignite your ALM journey!

September 24-27, 2024 | Manufaktur Mannheim, Germany

Benefit from 4 packed days of sessions.

Learn from our ALM customers.

Leverage our partners' experience.

Discuss with ALM experts.

Make use of countless networking possibilities.



REGULAR TICKET

1.690 € + 19% VAT (Starts July 1, 2204)



Tricentis





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We will be back!

The next **SAP Community Call for SAP Cloud ALM Experts** will take place on:

October 2nd, 4pm CET | 10am EST

The focus topic of this call will be **Implementation**

Register and / or save the date via [SAP Community](#).

Q&A

Thank you.

Contact information:

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cloudalm@sap.com

