

OPEN TELEMETRY AND NEW RELIC IN AWS SERVERLESS

AWS Lambda Application



OpenTelemetry



New Relic

CHALLENGE:
INSTRUMENT MANAGED
SERVICES

IN A MANAGED
SERVICE, THE VENDOR
DECIDES WHAT THEY
ALLOW AND WHAT
NOT.

OPENTELEMETRY ON AWS OPTIONS

ADOT – AWS DISTRIBUTION OF OTEL

- OPTIMIZED FOR KEEPING TELEMETRY IN AWS
- LAMBDA LAYER
- LEGACY LAMBDA LAYER INCLUDED COLLECTOR
- ADOT COLLECTORS HAVE LIMITED CAPABILITIES
- X-RAY INTEGRATION IN API GATEWAY AND SQS
- INSTRUMENTATION EXPORTS TO AWS

OTEL NATIVE

- COMMUNITY LAMBDA LAYERS FOR AUTO INSTRUMENTATION AND COLLECTOR
- COLLECTOR LAYER BASED ON CONTRIB COLLECTOR
- VENDOR NEUTRAL DATA EXPORT

THE CONTRIB COLLECTOR

- COMMUNITY COMPONENTS:
- X-RAY RECEIVER – RECEIVE SPANS FROM X-RAY SDK
- CLOUDWATCH RECEIVER – RECEIVE EVENTS FROM CLOUDWATCH
- CLOUDWATCH METRICS RECEIVER – RECEIVE METRICS FROM CLOUDWATCH

CONTEXT PROPAGATION

Context Propagator	OpenTelemetry	AWS ADOT
W3C Trace Context	<input checked="" type="checkbox"/> Supported (default)	<input checked="" type="checkbox"/> Supported (default)
B3 Propagation	<input checked="" type="checkbox"/> Supported	<input checked="" type="checkbox"/> Supported
Jaeger Propagation	<input checked="" type="checkbox"/> Supported	<input checked="" type="checkbox"/> Supported
AWS X-Amzn-Trace-Id	<input type="checkbox"/> Not Supported	<input checked="" type="checkbox"/> Supported (AWS-specific)
Custom Propagators	<input checked="" type="checkbox"/> Supported	<input checked="" type="checkbox"/> Supported

THE NEW RELIC AWS INTEGRATION

- TRACES, LOGS AND METRICS FROM
- SQS
- LAMBDA
- API GATEWAY

SOURCES

- [HTTPS://AWS-OTEL.GITHUB.IO/DOCS/GETTING-STARTED/LAMBDA](https://aws-otel.github.io/docs/getting-started/lambda)
- [HTTPS://OPENTELEMETRY.IO/DOCS/PLATFORMS/FAAS/](https://opentelemetry.io/docs/platforms/faas/)
- [HTTPS://OPENTELEMETRY.IO/DOCS/SPECS/SEMCONV/NON-NORMATIVE/COMPATIBILITY/AWS/](https://opentelemetry.io/docs/specs/semconv/non-normative/compatibility/aws/)
- [HTTPS://OPENTELEMETRY.IO/DOCS/CONCEPTS/CONTEXT-PROPAGATION/](https://opentelemetry.io/docs/concepts/context-propagation/)