CloudFront Real-time Monitoring Architecture

Serverless method for processing Amazon CloudFront real-time logs and converting them into time-series metrics



This reference architecture provides a method for analyzing **CloudFront** realtime logs and generating custom metrics for live monitoring.

- Amazon CloudFront real-time logs are published to Amazon Kinesis Data Streams within seconds of a request. Sampling is recommended to reduce costs.
- 2 AWS Lambda continuously processes batches of log records in real-time, converts them to JSON format, and generates time-series measures and dimensions.
- 3 The Lambda function sends timeseries records to Amazon Timestream using the AWS SDK. The Lambda function can be customized to generate additional metrics or enrich data records.

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Operators analyze metrics such as download performance and response types to detect issues in real-time. This can be done by directly querying the database, or by integrating **Timestream** with monitoring and dashboarding tools such as <u>Grafana</u> and **Amazon QuickSight**.

AWS Reference Architecture