

TELEMETRY PIPELINES & DATA TRANSFORMATION: THE KEY TO BETTER OBSERVABILITY

Observability data can be complex and difficult to analyze. [Telemetry pipelines](#) offer a powerful and cost-efficient way to combine, analyze, and enrich your data, making it easier to spot patterns and gain valuable insights. However, you need to be able to transform your data to get actionable insights, better visibility, and make informed decisions to optimize system performance and user experience.

Here's what you need to know to get started with data transformation and take your observability to the next level.

WHAT IS DATA TRANSFORMATION?

Data transformation is the process of converting data from one format to another. Common transformations include reducing, aggregating, enriching, compacting, flattening, deduplicating, dropping, encrypting, sampling, and parsing.

COMMON USE CASES

- + REDUCING DATA VOLUME TO CONTROL COSTS
- + SUMMARIZING DATA TO MAKE SENSE OF LARGE VOLUMES OF DATA FROM DISPAR-
itous sources
- + PROTECTING SENSITIVE DATA CONTAINING PERSONAL INFORMATION

TECHNIQUES

- REDUCE**
Combine multiple events over time into one based on a set of criteria.
- AGGREGATION**
Merge multiple data sources into one.
- ENRICHMENT**
Add contextual information to make it easier to interpret.
- COMPACTING FIELDS**
Merge two or more fields within a data set together.
- FLATTENING**
Take data that currently exists as a single field and break it into separate fields.
- DEDUPLICATION**
Remove redundant information from a data set.
- DROPPING**
Remove certain types of information from a data set.
- FIELD ENCRYPTION**
Encrypt specific fields within a data set.
- SAMPLING**
Extract only a certain portion of data from a larger data set.
- PARSING**
Convert data from one format to another.

BEST PRACTICES

- + Automate data transformation
- + Transform within your pipeline
- + Establish data governance rules
- + Don't compromise quality
- + Assess data transformation costs

WANT TO LEARN MORE ABOUT TRANSFORMING YOUR DATA WITH TELEMETRY PIPELINES?

[Check out this blog](#) for a deeper dive into data transformation and how it can help your business gain deeper insights, reduced costs, and improved overall efficiency.