Data Optimization Without Compromise
Control Observability Data Without Sacrificing Visibility
Observability data is growing quickly. The average organization runs 184 microservices, each generating log data.

Keeping observability data in check is one of the most effective steps software organizations can take to control data growth. Given the amount of observability data will grow as teams continue to move to cloud-first architectures, finding ways to control data is essential for maintaining visibility.

This guide is designed to help DevOps leaders identify effective strategies for gaining control of their data. It’s possible to manage observability without sacrificing visibility. Leveraging the right tools and practices, you can analyze more of your log data without experiencing overages or expanding your observability license.
In response to data growth, enterprises are seeking log management solutions capable of scaling with them. There are two main types of platforms: enterprise and open-source.

Both models use a centralize-then-analyze approach. Teams will still have to route massive volumes of data. While these options have their benefits, they can make it difficult to manage costs.

Enterprise solutions can hit volume caps early which can mean going over budget or sacrificing data – neither of which are ideal.

Open source solutions are more complex to manage due to their manual nature. Teams not only spend more on compute costs, but also have to spend more time and effort managing the system.
### Enterprise Solutions

**PROS**  
- Provides scalability and high-performance capabilities  
- Requires minimal setup and works out of the box  

**CONS**  
- Pricing model is expensive and can lead to overages  
- Platform can be complex and usually requires training  

### Open Source Solutions

**PROS**  
- Only pay for compute, storage and networking costs  
- Can process data before ingest  

**CONS**  
- More manual and may sacrifice performance  
- Requires ongoing maintenance
Pitfalls of Controlling Observability Costs

Strategies that may seem helpful can be counterproductive.

DATA SAMPLING
+ Analyzes a subset of log data by selecting only some data for analysis to manage costs.
+ Assumes if the data sampled is random, it will reliably represent the majority of data.

SELF-SELECTED DATA INDEXING
+ Allows teams to choose which data to ingest and which to ignore.
+ Data selected aims to include data that matters most, instead of taking your chances on data selected at random.

TIERED PRICING
+ Pay less for data that you monitor and search infrequently.
+ Allows application of the most intensive observability operations to your most important data, then retains that data using easily accessible storage tiers.

TRADE-OFFS
- Can miss important data – even if data is selected at random.
- Difficult to know which data will be most valuable.
- Data in lower tiers is not analyzed in-depth or easy to access.
- Teams need to decide which data to manage.
- If important data is not indexed, visibility in crucial areas could be limited.
Fortunately, a better approach to observability management is possible. Instead of selecting data at random, or trying to decide manually which data to index, you can analyze all of your data as it’s created, where it’s created – meaning the microservice, node, API, or other component that produces the data.

Based on this initial analysis, you’re left with optimized data – condensed into patterns and insights – to view and observe in your preferred ingest location. By analyzing data at the source in real time across all your data sources, you don’t miss anything – even if it’s only temporarily important.
ANALYZE DATA AT THE SOURCE

With this technique – which is the core of Edge Delta – teams can populate dashboards in their observability tooling with analytics derived from the data source. This way, you get better visibility into more of your data, even if you’re not indexing raw logs.

Analyzing data up front reduces the amount of data you need to index, giving power to reevaluate observability spend and cut costs where needed.

UNCOVER WHAT YOU NEED

Upfront analysis helps contain costs and gives an understanding of what is useful within data. Edge Delta surfaces meaningful data to make indexing decisions easy.

Easily recognize what data provides value so you don’t pay for irrelevant data or drop what you need.
Conclusion

In today’s world, businesses are flooded with observability data as application environments grow. Instead of trying to index and ingest all of your data or choosing to drop data to regain control, take advantage of Edge Delta's unique approach to data optimization.

Edge Delta helps you gain:

- **TRUE REAL-TIME ANALYTICS**
- **MORE CONTROL OVER WHAT YOU INDEX**
- **BETTER INSIGHT INTO YOUR LOG DATA**

By beginning real-time data analysis at the source and condensing large volumes of log data into helpful patterns and insights, you get the best of both worlds – more visibility and fewer trade-offs. Unlock the possibility to analyze all your data without compromises.

Learn more by booking a demo at [EdgeDelta.com](http://EdgeDelta.com).