OBSERVABILITY PIPELINE CONTROL

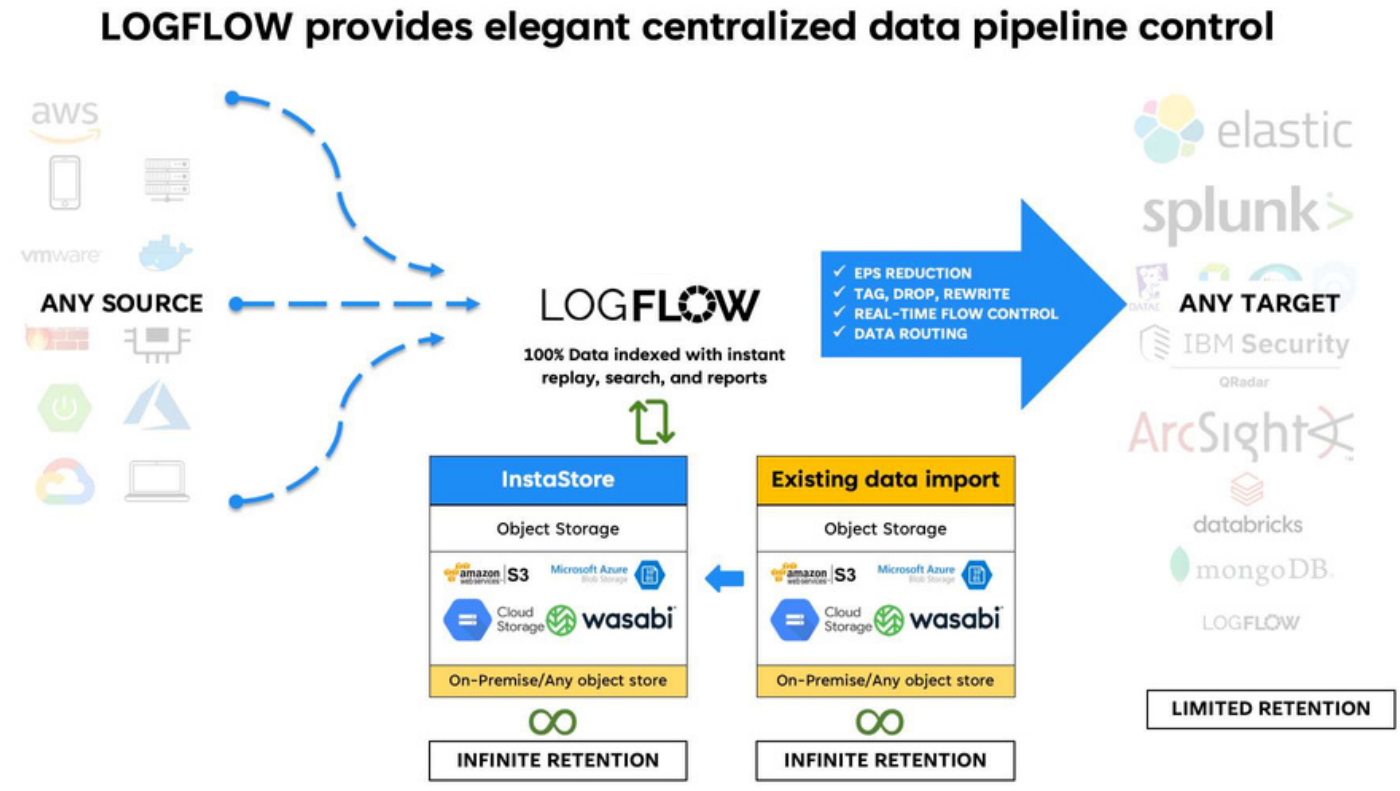
Key Elements for Control Over Your Observability Data Pipeline

How businesses can benefit from effectively managing observability data

Data Quality, Relevance and Volume Filter

Observability data is valuable. However, those who understand the content of observability data know that neither all data streams nor all portions of event data are relevant or useful. The cost of running observability and SIEM solutions like Splunk, Datadog, QRadar, etc., is directly influenced by the volume of data ingested. These costs primarily comprise the cost of licensing and infrastructure required to support the processing and storage of data volumes. The higher the volume, the more expensive it is to run these solutions. With Apica's LogFlow, you can analyze the quality of data flowing through data pipelines into these systems while exercising complete control over the data's quality, relevance, and volume. With LogFlow as a sidecar to your existing observability system, organizations can instantly reduce their TCO of these systems by up to 95%.

Reduce TCO by up to 95%.



Data Routing

Organizations often need to stream the same data to two or more different systems for different purposes. For example, your organization may need to ingest the same data stream into a SIEM system, a log analysis system, and a homegrown compliance system. Traditionally, organizations accomplish these scenarios by installing three separate collectors at each data source. However, doing so leads to duplication of data streams, over-utilization or clogging of network bandwidth at the endpoints, and multiplication of costs through licensing and infrastructure needed to support the large volume of duplicated data at each target.

Apica's LogFlow acts as a data router redirecting the right data streams to the right data targets without the need for multiple collectors, thereby eliminating clogged networks and ballooning licensing costs from running multiple systems.

Send relevant data to the right location every time.

Data Shaping

Engineers often encounter the need to modify observability data generated by their applications, services, or infrastructure to analyze better and understand the performance of their systems and services. Until now, data modification involved re-engineering source code and the behavior of systems. Re-engineering often comes at the cost of slowed development cycles, reboots, and introducing new risks and vulnerabilities into primary systems.

You can now eliminate these costs and risks with observability pipeline control enabled by LogFlow. You can now optimize and transform observability data, be it adding or trimming information, on the fly without touching source systems by intercepting the data stream in-flight and applying the desired transformations.

Enable better decision making on the fly.

Data Retention

While all observability data is not always valuable, you should still retain the data for as long as possible. You cannot always anticipate when you need it for correlation, historical analysis, bug or threat forensics, or even compliance. Object storage in any location, either the cloud or on-premise, is an excellent choice for storing data for long periods due to its low cost and reliability. A fundamental capability of an observability pipeline control system is to route original data streams with all of their original content to enable long-term storage and on-demand compliance, analysis, and correlations.

LogFlow's unique capability allows organizations to retain 100% of data for long durations and ensure all data across any period is instantly available for any purpose, without the usual long delays associated with data retrieval from object storage systems. Enable 100% compliance in real-time.

Data Search and Recovery

Observability pipeline control must also enable real-time search and recovery of 100% data, regardless of its age. Pipeline control shouldn't just cover the direction, content of data, and target of data but also the speed of access. LogFlow's unique tech allows for the storage of 100% of data on any object storage and the search and recovery of any data in real-time. Yes, real-time search and retrieval of data from object storage are now possible. Object Storage with LogFlow is not cold or archive storage anymore - it becomes your primary and hot storage. You can now avoid costly compute and fast disks and reallocate those budgets to other core and strategic initiatives.

Be insight-ready in real-time, all the time for all of your data.

Data Virtualization and Replay - Time Machine!

DevOps and SecOps teams need the capability to query and replay data at will, regardless of whether the data is new or historical. The ability to replay historical data in real-time helps them process and visualize it to better understand the performance of their systems over time, identify new vulnerabilities or performance bottlenecks, and make improvements.

Observability pipeline systems should enable XOps teams to select portions of data from specific periods and replay the data to a processing engine of their choice. LogFlow allows time travel and data streams to be replayed and virtualized with single-click actions. It's a critical capability that enables Day 2 teams to deliver always-on and zero-trust systems.

Time-travel!

The Advantages of Observability Pipeline Control

Cost Control and Reduction

Rather than fixed expenses, your overall costs are reduced. EPS reduction directly translates to a reduction in vendor licensing costs and infrastructure spending.

Operations Agility, Faster Resolution of Incidents

With systems focused on critical data that is needed for the root cause, the time to run queries drastically comes down. This speeds up the identification of root causes of incidents and helps with operations agility.

Add Velocity to Your Digital Projects

Observability data flows are used in multiple scenarios in an organization: IT operations troubleshooting, performance monitoring, governance, compliance, and security. The ability to reuse data on demand and route the data to best-of-breed systems brings velocity to projects and unlocks the true value of your data.

Renewed Focus on Core Business

You may not be in the business of information technology, and becoming an expert in that area should not be an inevitable cost for you to bear. Focus on your core business, and do what you do best, leaving the mundane IT needs of your company to platforms like Apica's LogFlow.

Risk Reduction, Compliance, and Security

Internet security, laws pertaining to accessing information, and information storage, are just a few issues that arise in the tech world. Regulations are barely keeping pace with how quickly technology evolves, and as a result, are always changing. Keep your data compliant and secure from breaches and violations with better control over data access and use.

Digital Transformation Trends

A study by Gartner, IDC highlights the following two stats:

30% of organizations are planning on new distributed system architecture projects.

- IT operations troubleshooting and performance monitoring are top use cases for rolling out new projects.
- Business Analytics, Policy Compliance, Regulatory Compliance, and Security are top issues once projects are in production.
- Multiple-use scenarios demand data re-usability and portability on demand and put an increasing need to have control over data pipelines.

> 50% of those surveyed report challenges with data pipeline control

- Cost of storage is the top issue that organizations face.
- Customization, integration difficulties, and lack of ability to maintain complex in-house systems are key impediments in most projects.

Technology adoption will rapidly increase at both the core and at the edge, pushing exponential growth in data. Businesses will need to tame the multiplying challenge of data growth, data sprawl, data unlocking, and data complexity. Implementing a data pipeline control strategy will be key to unlocking the full value of their data.

Conclusion

One cannot expect to solve problems of today and tomorrow with solutions from yesterday. Consumers' demands and expectations are rising rapidly. Speed and precision are seeing new normals every day. Without investing in modern technologies and processes, companies simply cannot expect to keep pace with the rising demands of the digital economy.

Digital systems rely heavily on observability technologies for continuous improvement and performance to ensure customer satisfaction and retention. Observability fundamentally relies on machine data that is generated by various systems. The observability data pipelines today are being managed using the most archaic processes. However, they are at the heart of the speed of innovation and customer satisfaction. Apica's LogFlow is the next stage in the evolution of observability data pipeline management.