A cost-efficient and reliable Pipelining Solution with Apica and Elastic

QUICK SUMMARY

Elastic provides querying, correlation, and security data for observability in enterprises of all sizes. Businesses need a cost-efficient pipeline solution to uphold longer retention of complicated data. Combining Apica with Elastic, enterprises can ensure excellent data management at scale whilst optimizing costs and resources.

THE CHALLENGE

Managing the overwhelming volume of telemetry data, controlling storage costs, and ensuring seamless scalability are major concerns. Integration complexities with various data sources, maintaining real-time data processing, and preserving data quality add to the difficulty. Additionally, configuring and maintaining the Elastic Stack for optimal performance, ensuring stringent security and compliance, monitoring performance, and efficiently allocating resources are critical tasks.

Major Challenges

- **Data Quality and Fidelity:** Maintaining the quality and accuracy of telemetry data in the pipeline is essential. Data can be corrupted, lost, or delayed at processing.
- **Data Overload:** Managing the vast volumes of telemetry data generated can overwhelm systems, making it challenging to extract actionable-

KEY BENEFITS

- **Significantly reduce costs by storing data in economical object storage and versatile data lake.**

- **Channel data to the Elastic Stack from your current data sources and agent.**

- **Large-scale Data migrations across multiple different tools.**

- **Reduce data noise before sending it to Elastic to better manage costs.**

- **Seamless migration of your data from older versions of Elastic.**

insights without performance degradation.

- **Cost Management:** Storing hi-fi telemetry data in the long term is costly.
- **Scalability:** Ensuring seamless scalability to handle increasing data volumes and expanding operations without performance issues requires careful planning and resources.
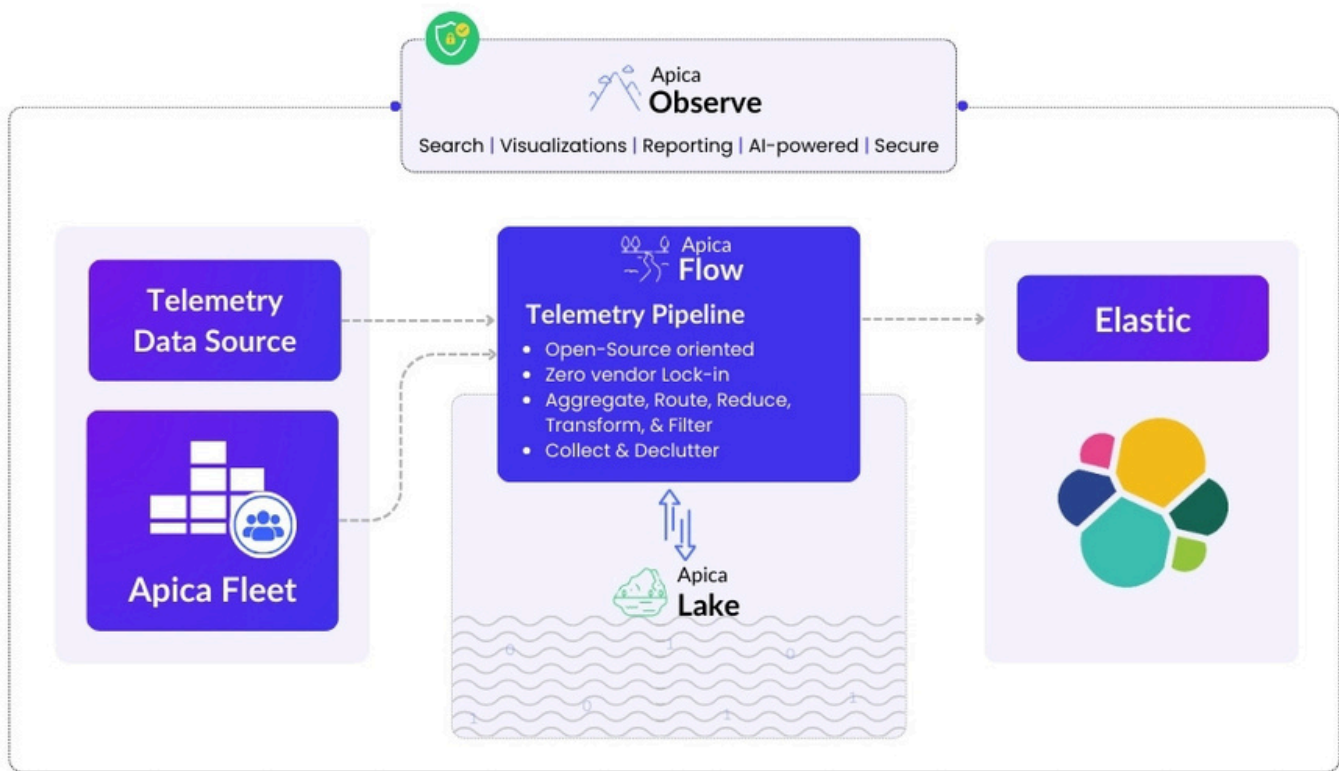
KEY FEATURES

Utilize Existing Data Source

Seamlessly integrate your current data sources and agents to direct telemetry data into the Elastic Stack.

Simplified Data Migration

Apica provides a centralized platform for receiving and routing. This ensures smooth and secure migration of data workloads to update Elastic offerings. Thus, Apica helps maintain data integrity during transitions from older Elastic versions or from competitor solutions.

Flexible Data Routing

Route data from any Elastic source to the most apt elastic destinations. Use Apica's economical object storage for durable retention. Additionally, manage data at scale in any format to match the schema requirements of different tools.

Cost Management Through Data Optimization

Reduce ingested log volume significantly with Apica and Elastic. Apica allows Elastic users to eliminate data noise including redundant fields, null values, and low-value data elements. This will enable you to control costs and enhance system performance seamlessly.

ARCHITECTURE

- Run on any Kubernetes environment, on-premise, or on the public cloud.
- Built with a microservices architecture, and cloud-native principles.
- Scales from a laptop to 100's of nodes.
- 200+ data integrations via standardized protocols, push agents, pull integrations, and custom data collectors.
- Deployment options:
  - Available as a SaaS or self-hosted option.
  - OVA is available for virtualized infrastructure for small-scale deployments.
- Patented InstaStore technology for streaming data into any object storage for long-term retention and reverse ETL.
- Support for push data:
  - Open source agents such as OpenTelemetry, Fluentbit, Fluentd, Logstash, Filebeats, Vector
  - Syslog compatible push clients, Syslog-ng, and Rsyslog
  - Syslog RFC support for RFC3164, RFC5424, RFC5425, RFC 6587.
- Support for pulling data via built-in plugins such as Oracle Integration Pub/Sub, Kafka, and S3 compatible storage, among others.
- Ability to launch custom push/pull data integrations by launching user-created docker microservices in the telemetry pipeline.
- Live tailing of data for telemetry streams.
- Powerful rule engine for building the precise pipeline that meets your data needs.

PRODUCT FEATURES

- Telemetry pipeline that can aggregate, route, reduce, transform, and filter logs, metrics, and traces from any source.
- Built-in UI for administration, visualizations, and reporting.
- Integrated data lake for long-term retention, and reverse ETL workflows.
- Built-in management for telemetry collection agents.
- REST API's, CLI for automation.

SECURITY AND COMPLIANCE

- SSO via SAML and LDAP.
- Support for HTTPS and TLS connections.
- Zero-trust architecture for agent management means no host passwords are needed.
- Role-based access control for telemetry data access and management.
- SOC2 Type2 and ISO27001 compliant.

DATA TYPES

- Logs, Metrics and Traces
- Agents
- Configurations
- Managers
- Packages
- Rules
- External Alerts

WORKING WITH DATA

- Support for multiple data types such as logs, metrics, and traces.
- Automatic handling of various time formats and normalization to UTC
- Consumer-grade UI for working with streaming telemetry data
- Visualize data flows, visually build pipelines, add rules for data transformations
- Troubleshoot pipelines using preview capabilities for data transformations
- Use built-in fleet management capability to manage agents collecting the data and optimize data velocity, ensuring consistency in data collection across fleets of data collectors.
- Work with Javascript V8 code engine to build powerful rules for data transformations using Code rules.
- Work with a rich set of rule types for data transformation:
  - Filter: Regex
  - Extract: Regex and Code
  - Tag: Regex
  - Stream: Regex
  - Rewrite: Regex and Code
  - Code (V8 Javascript)
  - Clone

OPEN-SOURCE SUPPORT

- Built-in support for OpenTelemetry collector, Fluent-bit, Telegraf, and other open-source agents.
- Extensible and compatible with a wide range of observability platforms, due to support for open-source protocols and technologies.

OPENTELEMETRY SUPPORT

- Ingest data from OpenTelemetry collector, compatible with OpenTracing for legacy compatibility.
- Both core and contrib OpenTelemetry collector distributions are supported.
- Support for custom collector builds.
- Open Agent Management Protocol (OpAMP) is a core technology for fleet management capabilities.

BOTTOMLINE

Apica boosts Elastic monitoring with a cost-efficient, reliable pipelining solution. As data volumes grow, enterprises struggle with noisy, low-value data in Elasticsearch. It ensures real-time processing, enhances security and compliance, and simplifies data migration. All in all, combining Apica's capabilities with Elasticsearch lets businesses manage telemetry data efficiently and cost-effectively, turning data sprawl into valuable insights while maintaining compliance and performance.

Contact us *today to schedule a demo. Or reach out to* **sales@apica.io**