

Build advanced AI applications with Confluent on AWS

Leverage high-quality data streams to accelerate app development

Organizations need to access all their enterprise data in real time to effectively operationalize AI models. While many organizations today have enough data, the challenge lies in accessing real-time data and using it to drive business value. To effectively implement generative AI, large language models (LLMs) need to be equipped with up-to-date, contextualized, and reliable data to provide timely and accurate responses.

Data streaming is an important step to unlocking the potential of generative AI to gain insights, streamline operations, and elevate customer experiences.

Confluent's cloud-native, complete data streaming platform on Amazon Web Services (AWS) eliminates data silos and connects all your systems and individual applications while ensuring secure data is easily accessible. With Confluent Cloud and Amazon Bedrock, you can leverage enriched real-time data streams to quickly develop and scale AI-enabled applications.

Confluent Cloud overview

Confluent Cloud is a scalable, streaming data service based on Apache Kafka®, delivered as a fully managed service. Confluent provides elastic, resilient, and performant event-streaming capabilities, allowing you to maximize the value of your data.

With Confluent, you can build a contextualized knowledge base for your generative AI applications. You can seamlessly connect to data sources across any environment, clean and enrich data streams, and deliver usable inputs to vector databases in real time.

Confluent's fully managed Apache Flink® service enables simple, serverless stream processing to easily build high-quality, reusable data streams that fuel advanced AI applications.

In collaboration with:



Generative AI on AWS

Start generating innovation with these performant, cost-effective, and easy-to-use tools purpose-built for generative AI.



**Amazon
Bedrock**

The easiest way to build and scale generative AI applications with foundation models.



**Amazon
SageMaker**

Build, train, and deploy machine learning models at scale.

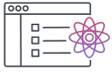


**Amazon
SageMaker
JumpStart**

Deploy prebuilt machine learning solutions in just a few clicks.

[Learn more >](#)

Key benefits



Empower your teams with a knowledge repository

Consolidate your operational and analytical data into a unified, real-time source of truth, enhancing model accuracy across your applications using Confluent's architecture.



Transform data into actionable insights

Enrich data in real time and quickly update vector databases, turning data into insights that drive generative AI applications with Confluent's native stream processing.



Accelerate innovation with seamless scaling

Eliminate bottlenecks and simplify access to the latest data, streamlining testing and fostering AI innovation with Confluent's decoupled architecture.



Build trust with governed and secure AI data

Ensure transparency and security in your AI deployment by tracking data origins and flows, with robust lineage and traceability using Confluent's data management tools.

AWS and Confluent

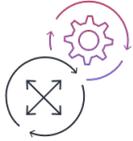
Use real-time data streaming to keep your generative AI applications updated. Confluent Cloud orchestrates the seamless flow of information across components, ensuring your client interactions are current and relevant. With Confluent Cloud and Amazon Bedrock, you can gain an elastic, microservices-driven architecture that dynamically scales to meet changing workloads, providing both reliability and flexibility for your AI-driven operations.

Confluent's connectors also enable you to seamlessly integrate data from various sources. You can use Amazon Bedrock's models to index your infrastructure documents into any vector database. As you gather more information from unstructured documents, you can index them in real time to enhance the quality of interactions between humans and AI assistants.

About Confluent

Confluent is pioneering a fundamentally new category of data infrastructure focused on data in motion. The company's cloud-native offering is the foundational platform for data in motion—designed to be the intelligent connective tissue enabling real-time data from multiple sources to constantly stream across the organization. With Confluent, customers can meet the new business imperative of delivering rich, digital customer experiences and real-time business operations. Confluent's mission is to help every organization harness data in motion so they can compete and thrive in the modern world.

Outcomes



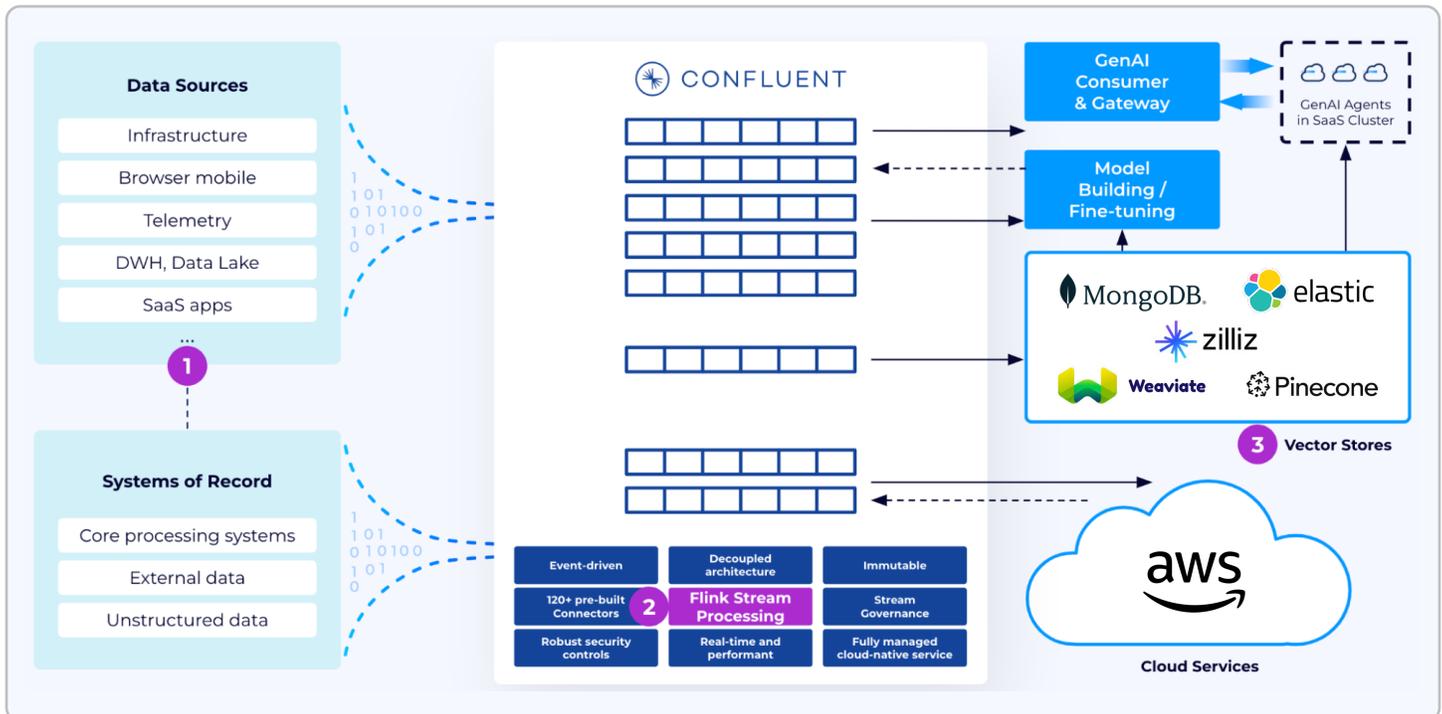
Confluent's delivers 10x the performance of Apache Kafka, empowering businesses to unlock the full potential of their data.



Confluent eliminates the complexities of managing Apache Kafka, helping reduce TCO by up to 60 percent and accelerate application development times by 75 percent.



Confluent enables businesses to seamlessly integrate and process vast amounts of data from multiple sources, minimizing data silos and enhancing operational efficiency. These new efficiencies have led to a reported ROI of 5x or more from data-streaming investments, according to 41 percent of IT leaders.¹



Try Confluent for free in AWS Marketplace.

See how to [build advanced applications with AI and data streaming.](#)

1: [2024 Data Streaming Report, Confluent, 2024](#)