PARTNER BRIEF

Data Integration Without Compromise with the AWS Ecosystem

StreamSets delivers enterprise-proven capabilities for modern data integration as organizations migrate to the AWS cloud for cost effective, scalable on-demand processing and storage.

Traditional data pipelines break when the unexpected happens, holding up business reporting and analytics initiatives while teams isolate, refactor, and redeploy traditional data pipelines.

StreamSets enables continuous data with centralized management and monitoring for all your data, whether you're in the cloud, on-premises, or in hybrid environments. StreamSets orchestrates pipelines for moving data into AWS: Whether data is going into the storage, processing, or consumption layers, StreamSets captures the metadata while maintaining an audit trail. By capturing data that is ingested into AWS, StreamSets enables organizations across a variety of use cases that include enterprise analytics, customer 360, fraud detection, drug research & discovery, and many others.

StreamSets is proud to be an AWS Data & Analytics Competency holder and Advanced Technology Partner. That means StreamSets has proven technology and customer success with AWS by providing native integration with AWS Aurora, Amazon Redshift, Amazon Kinesis, Amazon S3, Amazon EMR, and Amazon Serverless EMR. StreamSets’ smart data pipelines detect and handle schema and data changes to prevent data loss and corruption in your data landscape and reporting environment.

The Advanced Technology Partner ranking demonstrates StreamSets’ ability to solve real-world use cases and challenges in enterprise data management. StreamSets is the only data integration platform that brings enterprise-proven capabilities to modern hybrid and multi-cloud data architectures.

Accelerate AWS Use Cases

Migrate from On-prem to AWS

Simplify your migration to AWS and keep your environments in sync using StreamSets’ pre-built connectivity to 100s of data sources, powerful data transformation, change data capture (CDC), and an operations console to view all data movement. This enables you to cleanly perform your migration without disrupting your overall business operations.

Operational/Advanced Analytics & Reporting with AWS

StreamSets helps companies do more with AWS: financial regulatory reporting and ESG, enhance customer experiences, generate greater marketing and advertising ROI, fuel machine learning, operational/advanced analytics, and drive overall long-term business growth.
StreamSets provides a single, easy-to-use platform to integrate unstructured, semi-structured, and multi-structured data to Amazon Redshift, Amazon Kinesis, and Amazon S3 using both synchronous and asynchronous ingestion methods.

**Extend to Databricks and Snowflake**
Leverage Databricks and Delta Lake or setup a data warehouse and data marts with Snowflake. StreamSets manages the data into Amazon S3 where users can load into Amazon Redshift, Amazon EMR, and more to perform analytics, ETL, and data science. Connect those services to platforms hosted on AWS.

Reference Architecture:
Integrating Data from a PostgreSQL Database to AWS S3 and Redshift

**Overview**
StreamSets Platform's Data Collector engine allows you to separate your data from your administrative process. The engines can be deployed in your AWS VPC and moves the data from the initial source into a staging area (which can be S3, Kinesis, Snowflake, or Databricks) before helping you to transform your raw data into conformed data! Utilizing destinations like RedShift, S3, RDS, Snowflake, or Databricks, StreamSets can help prepare your data for your analytical workflow.

While the data sits between the staging and conformed stages, StreamSets Transformer engine is used for further cleansing and curation through EMR or Databricks, or utilize native SQL in Snowflake. Redshift supports high availability and high volume analytical workloads. The transformed data then becomes available for analytics and data science using tools such as Amazon Quicksight and Sagemaker.
StreamSets Control Hub can be deployed across any hybrid/multi-cloud environment while utilizing Amazon EC2 or Fargate for compute, allowing you to administer your environment in any manner that you desire.

**Benefits**

**Detect and Respond to Data Drift:**
Traditional data pipelines break when the unexpected happens, and they are hard to move to new data processing and cloud platforms without complex refactoring. Only StreamSets Platform features smart data pipelines with built-in data drift detection and handling, in a hybrid cloud architecture, so that your operations run smoothly despite constant change.

**Design-Deploy-Operate Continuously:**
In a continuous data world, operations are everything. StreamSets runs natively in AWS so you can design, deploy, and operate your pipelines all in the cloud. StreamSets monitors data in flight to detect changes and predicts downstream issues to ensure continuous data delivery without errors or data loss as part of your modern data integration solution.

**Go Fast and Be Confident:**
When your business moves fast on a traditional architecture, things break. But when you take your time, you fall behind. StreamSets Platform on AWS gives you end-to-end transparency across your data infrastructure, so you can detect emergent patterns and designs.

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**About StreamSets**

StreamSets, a Software AG company, eliminates data integration friction in complex hybrid and multi-cloud environments to keep pace with need-it-now business data demands. Our platform lets data teams unlock data—without ceding control—to enable a data-driven enterprise. Resilient and repeatable pipelines deliver analytics-ready data that improve real-time decision-making and reduce the costs and risks associated with data flow across an organization. That’s why the largest companies in the world trust StreamSets to power millions of data pipelines for modern analytics, smart applications, and hybrid integration.

**To learn more**, visit [www.streamsets.com](http://www.streamsets.com) and follow us on [LinkedIn](https://www.linkedin.com).