# SQream Integration with SAS Viya

SAS Viya is a cloud-enabled, in-memory analytics engine that provides quick, accurate, and reliable analytical insights, used by many companies to perform reliable and easy-togather analytics and machine learning tasks.

SAS Viya is an underlying foundation for a host of specialized solutions that take advantage of the SAS Platform's cloud-enabled extension, including analytics, statistics, and more.

# Optimizing SAS Viya for the SQream Platform

You can use SQream with SAS Viya to achieve the following:

- Data Processing
- Data Storage
- API

# **Data Processing**

The increasingly popular trend today is to use AI, ML, and BI structures to maximize insights. Training and testing a machine learning model to its full capacity requires data derived and aggregated from large datasets. Such aggregations typically take a long time when used with tools not designed for massive data processing.

Real-time BI applications analyze and create data at the same time to give users an interactive and up-to-date view of business operations, customer behavior, financial markets and other areas of interest. This information provides crucial insights into a company's current and historical performance.

In turn, this information can be applied and leveraged to make informed strategic decisions related to expected demands and customer behavior. The increasing business need to amass and aggregate massive data sets synergizes perfectly with SQream's ability to process big data in short durations. Our methodology cuts your aggregation time, especially hefty queries, to mere minutes.

# Data Storage

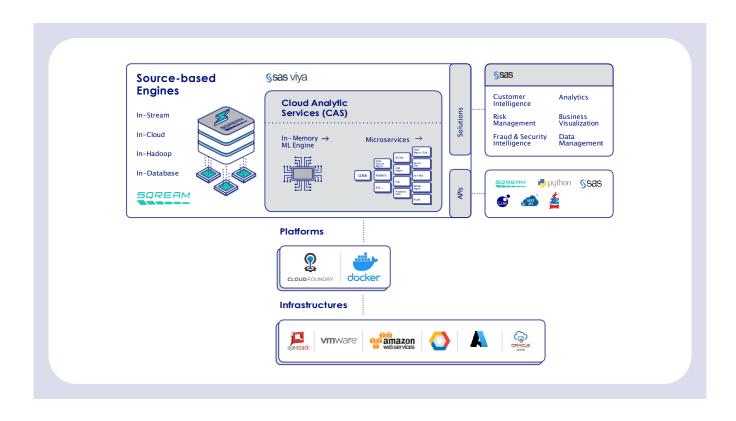
SQream's high speed ingestion and data hybrid support lets you easily combine and store data from your On-Prem and Cloud sources in a single, easy-to-use database.

## API

You can implement SQream's intuitive JDBC connector to perform any task that utilizes Java APIs.



The following figure describes SAS Viya's system architecture:



#### Support for Big Data Analytics

While the SAS Viya's Visual Machine Learning platform is considered a great tool for ML, SQream optimizes its ability to prepare data aggregated from large datasets, in particular large tables. Integrating with SQream lets users perform their initial data aggregations and data prep to efficiently train and test a machine learning model, as well as any other uses that require combing through large datasets.

#### **Cut The Middleman**

Other tools need to create a visual data layer or cube layer in order to deal with large amounts of data, but not SQream. SQream can work directly on the trusted data source itself, cutting the needs for constant updates of the mediating layer, to perform ad-hoc queries, drill-down queries and complex SQL joins regardless of source or scale.

## **Reducing Long Running Queries**

Although SAS Viya handles large queries, they tend to slow down other concurrently running system processes. SQream helps boost performance, letting SAS Viya focus on other vital operations and processes.

#### Worry-Free Scaling

SAS Viya full scalability is not always compatible with tools lacking scaling features. To facilitate easy scaling, SQream offers its services as a scalable partner to ensure that you remain fully scalable at all times, even when mixing and matching your tools.

#### **Data From Anywhere**

SQream has advanced hybrid capabilities, allowing it to combine data from multiple sources, be they on-prem or in the cloud, streamed in with a pipeline or batched. SQream can work with data in real-time, allowing you to easily use your on-prem data in conjunction with cloud tools.

