Streaming Analytics and Internet of Things

Use AI and streaming analytics to uncover insights at the edge and make real-time, intelligent decisions in the cloud.

Why customers use SAS®:

- Businesses are seeking more intelligent ways to decide when and how to act – and they want to apply these decisions where the data originates.
- Get real-time results with customizable alerts, notifications and updates so you can react immediately.
- SAS' streaming analytics capabilities are rated as the highest current offering in The Forrester Wave: Streaming Analytics Q2 2021.

Act upon what is important – as it happens – without having to store data first

With a growing number of connected devices and processes being digitally transformed, more and more data naturally occurs as an ongoing stream of events – a continuous feed of data from remote sensors and devices in the fast-growing Internet of Things (IoT).

Use SAS to continuously ingest and analyze streams of data and act on what is important – applying transformations, training and scoring AI models in addition to detecting patterns of interest – without the need to store any batch data first.

SAS® IoT on Azure has cross-functional applications across the organization

Ranging from predictive maintenance, network optimization, fraud detection and prevention, customer experience, patient care, flooding prevention and others.

PROVEN EDGE CAPABILITIES BUILT FOR SPEED

- Analyze huge volumes of data in motion (millions of events per second) with extremely low latency.
- Data is analyzed continually as it is received.
- No need for constant connectivity with the cloud.

Improve situational awareness as new events take place.

BRING DATA QUALITY AND ANALYTICS TO DATA IN MOTION

- Filter, normalize, categorize, aggregate, standardize and cleanse data streams.
- Apply advanced analytics including neural network models, regression, classification, text analytics, audio and video processing.

Create richer context for better, faster decisions.

USE MACHINE LEARNING TO GAIN INSIGHT AND TAKE ACTION

- Train and update models continuously in-stream.
- Use SAS and open source models
- Detect patterns of interest.
- Define derived output actions.

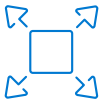
Stay agile and tackle issues as they arise.

SAS Streaming Analytics & IoT on Azure

SAS and Microsoft make it easier to stream from IoT devices across environments, enabling real-time decisions and analysis at the edge and in the cloud.

Make intelligent decisions in real time

- Detect anomalies to take advantage of opportunities from streaming and IoT data.
- Act fast by triggering flows from Microsoft Power Automate to quickly shut down non-performing machines on the plant floor or refill depleted inventory in retail stores.



Scale up and out without affecting performance

- Complement your analytics with cloud and edge using a variety of frameworks across SAS and Microsoft to improve speed, scale and agility of analytic workloads.
- Seamlessly handle surges in storage and compute requirements.
- Quicky add new sensors and models as new situations arise to make immediate impact.

Unified platform across SAS and Microsoft

- SAS® Viya® integrates with Azure Active Directory so there is no need to maintain separate user profiles, groups or authentication systems.
- SAS Event Stream Processing runs natively as one Azure IoT Edge Module and connects natively to Azure IoT Hub and Azure Event Hubs.

Apply governance across the entire analytics life cycle

- Work across business units to properly classify, label, profile and map lineage across your streaming and batch data estate.
- Easily manage, update and deploy models to your IoT devices via Azure IoT Hub, Azure IoT Edge, Azure Event Hubs and SAS Event Stream Processing.

> Localized flooding is something all communities experience, and ours is no exception. Using sensors, weather data, SAS IoT analytics and the Azure IoT platform, we expect to increase situational awareness of rising stream levels, predict where flooding might occur, and improve our emergency response through automation. Cary is also proud to be able to share this data with our neighboring communities to help them better serve their citizens.

Nicole Raimundo
Chief Information Officer, Town of Cary

Find out more about SAS IoT

Why SAS and Microsoft?

SAS and Microsoft have joined forces to define the future of AI and analytics in the cloud. With Microsoft Azure as the preferred provider for the SAS Cloud, we are working together to provide the best experience and value to our customers as they seek to run their mission-critical analytics workloads in the cloud. Through this strategic partnership, we will offer new market-ready solutions and services that integrate SAS Analytics and AI with Microsoft cloud solutions: Azure, Microsoft 365, Dynamics 365 and Power Platform. Now customers in every industry can unlock even more critical data insights on the path to digital transformation, meet business goals faster, and drive innovation cost-effectively.

Learn more at:
sas.com/microsoft