

Accelerating intelligent decision making with a free trial of SAS Event Stream Processing (ESP) on SAS Cloud

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As the Internet of Things (IoT) takes hold, the volume and variety of fast-moving data are constantly increasing. The need to analyze this data as close as possible to the source and make intelligent decisions as fast as possible helped to promote the rise of IoT. Companies are collecting data from sensors and processing it on small edge devices as it flows into the larger system. With SAS Event Stream Processing (ESP), you can analyze this data as the streaming happens and act according with predefined logic. For example, the process could generate immediate alerts on abnormal conditions or just transmit the relevant information.

Have you been wanting to see what SAS Event Stream Processing (ESP) can do to improve your ability to make intelligent decisions that can enhance your business performance? If you're a data scientist, you can harness the power of streaming analytics and machine learning using the environment of your choice, so you can capture more precise insights at the edge and make real-time intelligent decisions in the cloud.

A [free 30-day trial](#) of the latest version of ESP is now available in the [SAS® Cloud](#). This trial environment allows you to interact with an ESP server using Python commands from a Jupyter notebook. You can create your own processes from scratch or use one of the seven pre-populated examples that highlight the use of the ESP Python interface. This means no downloads, no installation, no configuration....just sign up and start experiencing SAS® Event Stream Processing for free on the SAS® Cloud.

ESPPy

ESP trial environment allows you to execute Python commands that interact with our ESP server. This uses an ESP module called ESPPy with APIs that instruct the ESP server to execute a specific task, such as defining a streaming project loading it onto the ESP server, publishing data to the model, or using the output from one of the steps of the project to populate a dashboard. You can either review existing demo examples or create your own using the Python language and a library of APIs without having to install the software on your premises. You can also upload your own data for testing and experimenting. For the trial environment, we recommend datasets that are not too big given current environment storage constraints.

SAS ESP Studio and SAS Streamviewer

ESP trial environment also provides you the opportunity to use our graphical user interfaces to make the interaction with the ESP server easier to setup in a non-programmatic way. SAS ESP Studio is a developer interface to create, edit, and test a streaming model using a graphical representation of the steps the data being streamed goes through. SAS Streamviewer provides a way to create dashboards to visualize graphically the data in any step of the streaming flow.

Getting started with the Trial environment

Each ESP trial is considered a separate environment that is generated when you request it. After requesting the trial, you will receive an email with instructions of how to connect to it and become the administrator of this environment. You can then invite additional users to share this environment. Sharing allows your colleagues to use notebook and data files saved in common folders.

ESP Trial on SAS Cloud

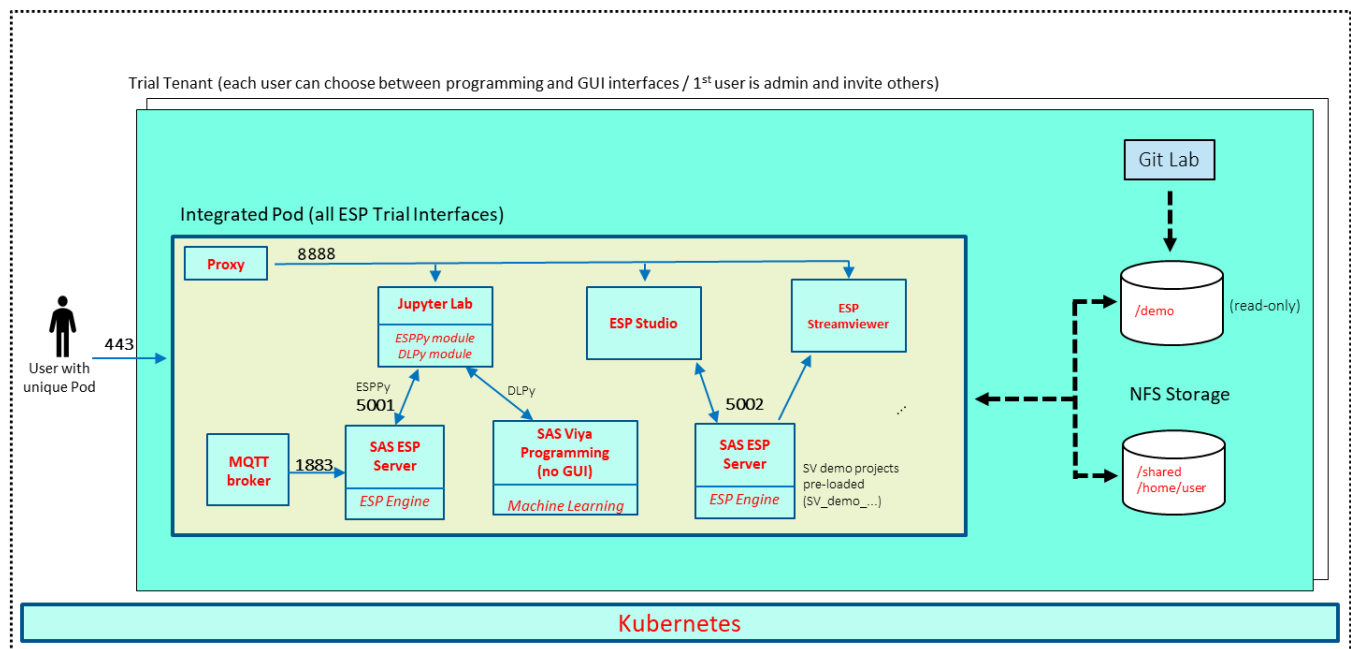
SAS Cloud uses a Kubernetes-based architecture and each trial request becomes an independent tenant of the Cloud. Each tenant may have one or more pods, one for each user. Each pod is a separate environment that contains a set of containers with software available in the trial already installed and configured.

The containers in the pod provide the needed components for the trial environment:

- ESP Server - to process the execution of the streaming project
- Jupyter Labs - to provides the actual user interface and Python programming environment
- MQTT broker – used by an example to show how to stream data using a messaging protocol
- Proxy – to redirect port numbers in order to provide secure access using only port 443
- SAS Viya Programming – contains our Viya Programming environment for Machine Learning model generation

Each pod has access to several file storage folders. These folders contain read-only files with the demo examples (/demo), shared files for collaboration among users of the same tenant (/shared), and private files for each user (/my_code and /my_data).

This diagram shows the high-level architecture of a tenant of the ESP trial environment.



As shown in the diagram, the environment has several containers in each pod communicating with each other using predefined ports, and all communication to the external world is done through the standard port 443 to ensure that there are no conflicts with firewalls on the user side -- providing a secure environment.

Get Started

Get your free trial environment today. Go to Microsoft Azure Marketplace, search for 'SAS ESP Trial' and click to request it.