What Is SAS Event Stream Manager?

SAS Event Stream Manager is a web-based client that enables you to manage your SAS Event Stream Processing environment.

You can use SAS Event Stream Manager to perform the following tasks:

- deploy SAS Event Stream Processing projects into production environments and test environments
- monitor the status of your deployments
- administer your deployments and manage change
- monitor your SAS Event Stream Processing metering servers

You can use SAS Event Stream Processing Studio to create the projects that you deploy to ESP servers using SAS Event Stream Manager.

For more information, see "Overview of Using SAS Event Stream Manager to Deploy Projects" on page 1.

Overview of Using SAS Event Stream Manager to Deploy Projects

One of the main tasks that you can perform in SAS Event Stream Manager is to deploy SAS Event Stream Processing projects to SAS Event Stream Processing environments. This topic explains at a high level how this works.
1 A deployment is created.

2 A project that is created and published in SAS Event Stream Processing Studio is visible in SAS Event Stream Manager for use in a deployment.

3 An ESP server is added to the deployment.

Any ESP server that exists in the SAS Event Stream Processing environment can be added. After an ESP server is added to a deployment, the ESP server is referenced from the deployment. If a project is deployed to a Kubernetes cluster, an ESP server is created on demand and automatically added to the relevant deployment.

When a project is deployed in SAS Event Stream Manager, a job is created. A job is a set of tasks executed by SAS Event Stream Manager. SAS Event Stream Manager enables you to monitor the status of jobs, deployments, and ESP servers.

A project can be deployed in two ways: using a job template or dynamically in the SAS Event Stream Manager user interface.

- A job template enables you to specify options for tasks such as loading and starting projects. For example, you can stop projects on ESP servers that match a specified filter, or pass variables to projects in order to perform placeholder replacement. A job template is created by using a text editor provided within SAS Event Stream Manager.

- Controls in the SAS Event Stream Manager user interface provide a quick way to load and start projects. However, you cannot take advantage of all the options available in job templates.

For more information, see *SAS Event Stream Manager: Using SAS Event Stream Manager*. 
For a step-by-step example of how to use SAS Event Stream Manager to deploy a project using a job template, see “Overview of the Stock Trade Example” in SAS Event Stream Manager: Examples.

Production Assets

You can mark certain assets as production assets to prevent assets meant for testing from accidentally being used for production (that is, being used in a live environment). The following assets can be marked as production assets:

- Deployments
- Projects
- Job templates

You can mark these assets as production assets when you create them. You can change the production status to a different status later. For example, you can change a production deployment to a non-production deployment, or you can change a non-production deployment to a production deployment.

You can deploy a non-production job template only against a non-production deployment. In such a situation, SAS Event Stream Manager permits you to select either a production project or a non-production project to deploy. This choice enables you to test your current production projects or to test non-production projects to assess whether they are suitable for being marked as production projects in the future.

You can deploy a production job template against a production deployment or against a non-production deployment:

- If you deploy a production job template against a production deployment, SAS Event Stream Manager permits you to select only a production project to deploy.
- If you deploy a production job template against a non-production deployment, SAS Event Stream Manager permits you to select either a production project or a non-production project to deploy.

The following diagram illustrates this information:
Examples

SAS Event Stream Manager examples are available at the SAS Event Stream Processing product support page.

These examples include the Stock Trade example, which is a step-by-step example of how to use SAS Event Stream Manager to deploy a project using a job template. Code example files are provided for this example. For more information, see “Overview of the Stock Trade Example” in SAS Event Stream Manager: Examples.