What Is the Publishing Framework?

The Publishing Framework feature of SAS Integration Technologies provides a complete and robust publishing environment for enterprise-wide information delivery. The Publishing Framework consists of SAS CALL routines, application programming interfaces (APIs), and graphical user interfaces that enable both users and applications to publish SAS files (including data sets, catalogs, and database views), other digital content, and system-generated events to a variety of destinations including the following:

- e-mail addresses
- message queues
- publication channels and subscribers
- WebDAV-compliant servers
- archive locations

The Publishing Framework also provides tools that enable both users and applications to receive and process published information. For example, users can receive packages with content, such as charts and graphs, that is ready for viewing. SAS programs can receive packages with SAS data sets that might in turn trigger additional analyses on that data.

The functions of the Publishing Framework include channel definition, subscription management, package publishing, package retrieval, package viewing, and event publishing.

Channel Definition and Subscription Management

The Publishing Framework enables you to define SAS publication channels, which are conduits for publishing particular categories of information. You can set up a channel for a particular topic, organizational group, user audience, or any other category. Once publication channels have been defined, authorized users can subscribe to them and automatically receive information whenever it is published to those channels.
For more information about defining channels and managing subscriptions, refer to the help for the Publishing Framework plug-in for SAS Management Console.

The SAS Information Delivery Portal also enables users to manage their subscriptions. The portal enables users to select channels to subscribe to, specify the desired delivery transport (such as an e-mail address or message queue), and specify filters that indicate which information is to be included or excluded.

### Package Publishing

The Publishing Framework enables you to create packages that contain one or more information entities, including SAS data sets, SAS catalogs, SAS databases, and almost any other type of digital content. You can also define viewers that make the information entities easier to display.

After creating a package, you can publish the package and its associated viewers to one or more channels. This causes the information to be delivered to each user who has subscribed to those channels, if the package and its contents meet the subscriber’s filtering criteria. In addition to channels, you can publish packages directly to one or more e-mail addresses, message queues, WebDAV-compliant servers, and archive locations.

To create and publish packages, you can use any of the following methods:

- Use the publish CALL routines to create packages and publish them from within a SAS program.
- Use the Java APIs that are provided with SAS Integration Technologies to create packages and publish them from within a third-party application.

You can also use SAS Enterprise Guide or SAS Information Delivery Portal to create and publish packages via the Publishing Framework.

### Package Retrieval and Viewing

The Publishing Framework provides the SAS Package Retriever, which is a graphical user interface to enable users to extract and save information from packages that have been published through the Publishing Framework. The SAS Package Reader user interface enables users to display the contents of packages. Users can also view published information from the SAS Information Delivery Portal.

In addition, you can use CALL routines to extract and process published information from within SAS programs. APIs are provided to enable third-party programs to extract and process published information.

### Event Publishing

SAS Integration Technologies includes the Publish Event Interface. This interface consists of CALL routines that enable you to write SAS programs, including stored processes, that create and publish events. Events can be generated and published explicitly, or they can be generated implicitly as part of the publication of a package. Implicit event generation occurs when packages are published to a channel that has event subscribers defined.
Events are published as XML documents. They can be published to HTTP servers, message queues, or to publication channels and their associated subscribers. You can develop custom applications that receive and process events that are generated by the Publishing Framework.