



SAS[®] Viya[™] 3.2 Administration: General Servers and Services

General Servers and Services: Overview

Servers

SAS Viya contains these servers:

- SAS Cloud Analytic Services
- SAS Workspace Server and Object Spawner
- SAS/CONNECT Server and Spawner
- embedded web application server
- SAS Configuration Server
- SAS Infrastructure Data Server
- SAS Message Broker
- Apache HTTP Server

Note: A [programming-only deployment](#) does not use the configuration server, the data server, and the message broker.

Services

SAS Viya contains several services often referred to as *microservices*. A microservice is a small service that runs in its own process and communicates with a lightweight mechanism (HTTP).

Some of the services in SAS Viya are: Authorization, Backup, CAS Management, and so on. Use SAS Environment Manager to see the complete list of SAS Viya services. For more information, follow the first three steps in [“Edit Configuration Instances” in SAS Viya Administration: Configuration Properties](#).

Note: A [programming-only deployment](#) does not use most SAS Viya services.

General Servers and Services: Operate

All Servers and Services

SAS Viya uses the operating system's default init system or `systemd` command to launch a script that can stop, start, and check the status of all SAS Viya servers and services. This script, `sas-viya-all-services`, resides in `/etc/init.d`.

Note: To run `sas-viya-all-services`, you must be signed in with `sudo` privileges to the machine where the servers and services reside.

Note: For multi-machine deployments, run `sas-viya-all-services` on every SAS Viya machine. Start or restart all servers and services *first* on the machine that hosts SAS Configuration Server, which is based on Consul. Stop all servers and services *last* on the machine that hosts the configuration server.

To operate all SAS Viya servers and services, run the following command:

```
sas-viya-all-services status | stop | start
```

Note: `sas-viya-all-services` does not control [Apache HTTP Server](#).

Note: When checking status, it is normal for certain servers and services to not display host, port, and PID information. The reason for this is that these servers and services are not registered with the SAS Configuration Server, including the configuration server itself.

For your convenience, here are a few examples:

- checking status of all servers and services using a direct call:

```
sudo /etc/init.d/sas-viya-all-services status
```

- stopping all servers and services using the Red Hat Linux version 6 init system command:

```
sudo service sas-viya-all-services stop
```

- starting all servers and services using the Red Hat Linux version 7 `systemd` command:

```
sudo systemctl start sas-viya-all-services
```

TIP When stopping the entire SAS Viya environment, be sure to run `sas-viya-all-services` on every SAS Viya machine. Running `sas-viya-all-services` ensures that the servers and services are stopped in the correct order.

A Particular Server or Service

SAS Viya uses the operating system's default init system or `systemd` command to launch scripts that can stop, start, restart, and check the status of servers and services. These scripts reside in `/etc/init.d`.

Note: To run these scripts, you must be signed in with `sudo` privileges to the machine where these servers or services reside.

To operate a particular SAS Viya server or service, run the following command:

```
sas-viya-server-or-service-default status | stop | start | restart
```

TIP To see the complete list of SAS Viya server and service scripts, run the following command: `ls /etc/init.d/sas-viya-*`. To operate Apache HTTP Server, see [“Operate” in SAS Viya Administration: Apache HTTP Server](#).

For your convenience, here are a few examples:

- checking status of SAS Logon Manager using a direct call:

```
sudo /etc/init.d/sas-viya-saslogon-default status
```

- stopping the Comments service using the Red Hat Linux version 6 init system command:

```
sudo service sas-viya-comments-default stop
```

- starting SAS Configuration Server using the Red Hat Linux version 7 systemd command:

```
sudo systemctl start sas-viya-consul-default
```

- restarting Cross Domain Proxy service using a direct call:

```
sudo /etc/init.d/sas-viya-crossdomainproxy-default restart
```

General Servers and Services: Set Locale

To set the locale for SAS/CONNECT Server, modify `connectserver_usermods.sh`. If you want to set locale for the connect server, and *all* SAS instances, then modify `sasv9_local.cfg`.

Note: SAS Workspace Server automatically uses the locale that matches the locale sent by the client.

- 1 Log on to the machine on which SAS Foundation resides as the SAS install user or with sudo privileges.

TIP The SAS Foundation machine is the machine on which the SAS Workspace Server or the SAS/CONNECT Server resides.

- 2 Using a text editor, open one of the following files:

- For SAS/CONNECT Server:

```
/opt/sas/viya/config/etc/connectserver/default/connectserver_usermods.sh
```

- For the SAS/CONNECT Server and all SAS instances:

```
/opt/sas/viya/home/SASFoundation/sasv9_local.cfg
```

- 3 Enter a line that contains the following and then save the file:

```
locale=five-character-POSIX-locale-code
```

For valid POSIX locale codes, see [“LOCALE= Values for PAPERSIZE and DFLANG Options” in SAS Viya National Language Support: Reference Guide](#).

Here is an example:

```
locale=fr_CA
```

Your changes take effect the next time the server or servers are launched.

LOCALE usage notes:

- By default, the SAS LOCALE option is set to the locale of the operating system.
- You can override the LOCALE option setting for your session by setting the LOCALE option on the command line.

- You can change the LOCALE option during your SAS session by setting the LOCALE option in the OPTIONS statement.

General Servers and Services: Troubleshooting

SAS Viya services do not start.

Explanation:

One cause might be that certain SAS Configuration Server (Consul) files are corrupted.

Resolution:

- 1 Stop all services.
- 2 Delete all files in `/opt/sas/viya/config/data/consul/checks/`.
- 3 Restart all services.