An embedded Apache Tomcat web application server provides the execution environment for SAS Studio, a SAS web application.

Note: A visual-only deployment does not use Apache Tomcat.

See Also

- How To on page 1

**Embedded Web Application Server: How To**

**Operate**

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

Note: You must be signed in to the machine where SAS Studio resides with sudo privileges to run this script.

To operate SAS Studio, run:

```
sas-viya-sasstudio-default status | stop | start | restart
```
Note: There is a script with which you can manage and view the running state of all SAS Viya services. For more information, see “All Servers and Services” in SAS Viya Administration: General Servers and Services.

For your convenience, here are a few examples:

- checking status of SAS Studio using a direct call:
  ```
  sudo /etc/init.d/sas-viya-sasstudio-default status
  ```

- stopping SAS Studio using the Red Hat Linux version 6 init system command:
  ```
  sudo service sas-viya-sasstudio-default stop
  ```

- starting SAS Studio using the Red Hat Linux version 7 systemd command:
  ```
  sudo systemctl start sas-viya-sasstudio-default
  ```

- restarting SAS Studio using a direct call:
  ```
  sudo /etc/init.d/sas-viya-sasstudio-default restart
  ```

**Configure Mail**

To use the email functionality in SAS Studio, an SMTP server and the following information is required:

- **fully-qualified-SMTP-server-name**
  
  The fully qualified host name of the SMTP server for the outbound mail (for example, my_mail_server.example.com).

- **SMTP-server-port**
  
  The port for the SMTP server (for example, 25).

- **site-administrator-email-address**
  
  The user name that accesses the SMTP server. This user name is not necessarily the person who is sending the mail.

- **site-administrator-password**
  
  The password for the user name that accesses the SMTP server.

- **company-domain**
  
  The domain name for your site (for example, my_company.example.com).

To configure SAS Studio for SMTP email, follow these steps:

1. Log on to the machine on which the embedded web application server resides.
2. Using a text editor, open `/opt/sas/viya/config/etc/sasstudio/default/init_usermods.properties`.
3. Add the following lines, save, and close init_usermods.properties:
   ```
   webdms.SMTP.hostName=fully-qualified-SMTP-server-name
   webdms.SMTP.port=SMTP-server-port
   webdms.SMTP.user=site-administrator-email-address
   webdms.SMTP.password=site-administrator-password
   webdms.domain=company-domain
   ```
4. Restart the embedded web application server:
   ```
   sudo service sas-viya-sasstudio-default restart
   ```
When sending emails, the sender address is derived from the user name that logged on to SAS Studio and the value of the `webdms.domain` property in the `appserver_usermods.sh` file. For example, if the user name is test, the sender address is test@your-company.com.

**See Also**

- Concepts on page 3

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### Embedded Web Application Server: Concepts

An embedded Apache Tomcat web application server provides the execution environment for SAS Studio, a SAS web application.

**See Also**

- How To on page 1