



SAS[®] Viya[™] 3.1

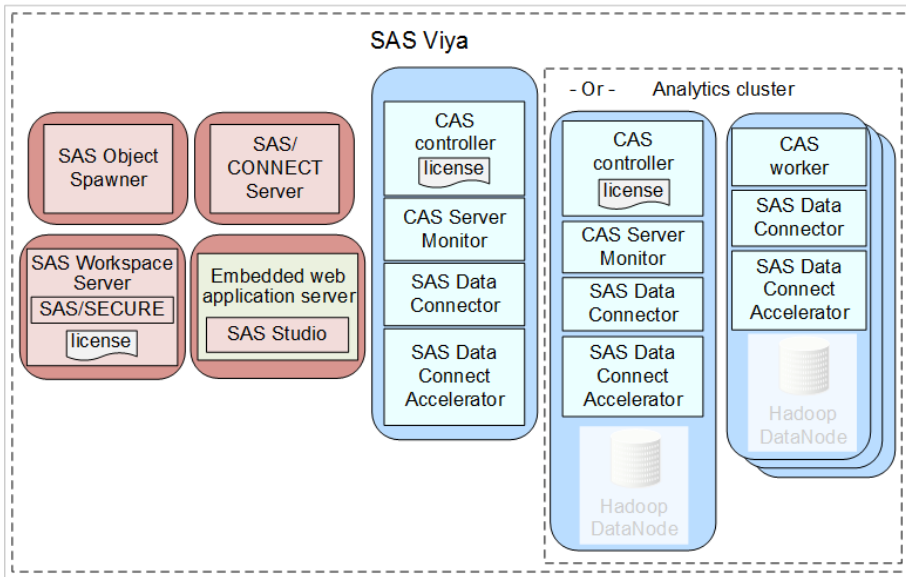
Administration: Licensing

Licensing: Overview

SAS Viya uses a single licensing file. Both SAS Cloud Analytic Services (CAS) and SAS Foundation use the same license.

During installation, a license is applied to both the CAS in-memory compute engine and the SAS Foundation compute engine. You apply a new license to enable new products or to extend expiration dates on existing products.

The following diagram identifies where the license file resides in SAS Viya:



For more information, see [How To on page 2](#).

Licensing: How To

View SAS Foundation License Information

- 1 Open a web browser and sign in to SAS Studio with administrator privileges.

Here is an example:

```
http://mysasserver.example.com:38080
```

- 2 In the **Code** tab, enter the following command:

```
proc setinit; run;
```

- 3 Click .

You should see output similar to the following:

```

56      proc setinit;
57
58
59      OPTIONS NONOTES NOSTIMER NOSOURCE NOSYNTAXCHECK;
Original site validation data
Current version: V.03.00M0P040416
Site name:      'smp statistics, ml, data connectors pkg chg 3.30'.
Site number:    70068118.
Expiration:     11NOV2016.
Grace Period:   45 days (ending 26DEC2016).
Warning Period: 56 days (ending 20FEB2017).
System birthday: 24MAR2016.
Operating System:  LIN X64 .
Product expiration dates:
---Base SAS Software          11NOV2016
---SAS/CONNECT                11NOV2016
.
.
.

```

View SAS Cloud Analytic Services License Information

Note: If your site does not have SAS Studio, to see license information, run the following cURL command on your CAS controller machine as a user with SASAdministrators membership: `curl -n -X PUT http://cas-controller-host-name:http-port/cas/actions/serverStatus`. Here is an example: `curl -n -X PUT http://my-cas-controller.example.com:8777/cas/actions/serverStatus`. The cURL command expects the user to be defined in `~/netrc`. For more information, consult the cURL man page at <http://man.cx/curl>.

- 1 Open a web browser and sign in to SAS Studio with administrator privileges.

Here is an example:

`http://mysasserver.example.com:38080`

- 2 Before you can access the monitor, you must have an active CAS server session.

If you already have a CAS server session, skip to [Step 3](#). Otherwise, perform the following steps:

- a In the **Code** tab, start a CAS Server session by entering the following:

```
cas my_session;
```

- b Click .

You should see output similar to the following:

```

56      cas my_session;
NOTE: The session MY_SESSION connected successfully to Cloud Analytic Services 10.120.9.159 using port 5570.
The UUID is
      5120eb8f-ca06-8c44-9f93-2dd2e557b1cb. The user is myacct and the active caslib is CASUSER(myacct).
NOTE: The SAS option SESSREF was updated with the value MY_SESSION.
NOTE: The SAS macro _SESSREF_ was updated with the value MY_SESSION.
NOTE: The session is using 0 workers.

```

- 3 In the **Code** tab, enter the following:

```
cas my_session listabout;
```

- 4 Click .

4

You should see output similar to the following:

```
56      cas my_session listabout;
      Section: About
      CAS = Cloud Analytic Services
      Version = 3.00
      VersionLong = V.03.00M0P04042016
      Copyright = Copyright © 2014-2016 SAS Institute Inc. All Rights Reserved.
      Section: System
      Hostname = rdcesx15177
      OS Name = Linux
      OS Family = LIN X64
      OS Release = 2.6.32-573.7.1.el6.x86_64
      OS Version = #1 SMP Thu Sep 10 13:42:16 EDT 2015
      Model Number = x86_64
      Documentation = http://casjml01.unx.sas.com:8080/job/Actions_ref_doc/ws/casaref/index.html
      Section: license
      site = smp statistics, ml, data connectors pkg chg 3.30
      siteNum = 70068118
      expires = 11NOV2016:00:00:00
      gracePeriod = 45
      warningPeriod = 56
      maxCPUs = 9999
NOTE: Request to LISTABOUT completed for session MY_SESSION.
.
.
.
```

5 In the **Code** tab, end your CAS Server session by entering the following:

```
cas my_session terminate;
```

6 Click .

Locate My License File

Your license file resides in the same directory where you have saved and uncompressed the .tgz file, sent to you by SAS.

The license file is named: SASViyaVrelease-number_order-number_Linux_x86-64.txt.

Here is an example: SASViyaV0300_09JNF2_Linux_x86-64.txt.

TIP If your site uses Ansible, the machine on which the license file resides is most likely your Ansible controller.

Apply New Licenses Using Ansible

You apply a new SAS license when your current license has expired, or when you are adding new SAS products to your deployment. If your deployment was performed using Ansible, you can use Ansible to apply a new license. Ansible applies your new license to the CAS controller and also to SAS Foundation.

Note: To add a new license without using Ansible, see [Apply New Licenses Manually without Using Ansible on page 5](#).

1 Move the current license file into a backup location.

For information about where to locate your current license file and how to identify it, see [Locate My License File on page 4](#).

2 Copy the new license file into your Ansible playbook directory.

3 Modify your Ansible playbook to point to the new license file.

Open `soe.yml`, locate `sasenv_license`, and replace the current license filename with your new license filename.

Here is an example:

```
sasenv_license: "{{ playbook_dir }}/SASViyaV0300_9BLWC8_Linux_x86-64.txt"
```

4 Run the following Ansible command appropriate for your site:

a Single-machine deployment:

```
ansible-playbook -i host_local apply-license.yml
```

b Multi-machine deployment:

```
ansible-playbook -i hosts apply-license.yml
```

CAS sessions created after you apply the new license automatically update with license information from the new license.

5 Verify that your SAS Foundation license has been renewed by following the steps in [View SAS Foundation License Information on page 2](#).

6 Verify that your SAS Cloud Analytic Services license has been renewed by following the steps in [View SAS Cloud Analytic Services License Information on page 3](#).

Apply New Licenses Manually without Using Ansible

You apply a new SAS license when your current license is about to expire, or when you are adding new SAS products to your deployment. You must apply your license to the CAS controller and also to SAS Foundation.

Note: To add a new license using Ansible, see [Apply New Licenses Using Ansible on page 4](#).

1 Log on as the SAS Installer user to the machine where SAS Foundation is deployed.

2 Move the current license file into a backup location.

For information about where to locate your current license file and how to identify it, see [Locate My License File on page 4](#).

3 We recommend that you perform the following steps in case your site decides to use Ansible in the future:

a Copy the new license file into your Ansible playbook directory.

b Modify your Ansible playbook to point to the new license file.

Open `soe.yml`, locate `sasenv_license`, and replace the current license filename with your new license filename.

Here is an example:

```
sasenv_license: "{{ playbook_dir }}/SASViyaV0300_9BLWC8_Linux_x86-64.txt"
```

4 Run the following command to apply the license to your SAS Foundation software:

```
sudo su -s "/bin/sh" -c
"/opt/sas/viya/home/SASFoundation/utilities/bin/apply_license
/path/SASViyaVrelease-number_order-number_Linux_x86-64.txt" sas
```

where *path* is the location where the new license file resides.

6

Here is an example:

```
sudo su -s "/bin/sh" -c
"/opt/sas/viya/home/SASFoundation/utilities/bin/apply_license
/opt/sas/installfiles/SASViyaV0300_09JNF2_Linux_x86-64.txt" sas
```

You receive a message that your license has been applied.

- 5 Verify that your SAS Foundation license has been renewed by following the steps in [View SAS Foundation License Information on page 2](#).
- 6 Log on as the SAS Installer user to your CAS controller machine.
- 7 Copy the new license file to your CAS controller machine.

Here is an example:

```
sudo cp /opt/sas/installfiles/SASViyaV0300_09JNF2_Linux_x86-64.txt
/opt/sas/viya/config/etc/cas/default/
```

- 8 Using a text editor, update `casconfig.lua` with the path and the name of the new license file.

Here is an example:

```
sudo vi /opt/sas/viya/config/etc/cas/default/casconfig.lua
env.CAS_LICENSE = config_loc .. '/SASViyaV0300_09JNF2_Linux_x86-64.txt'
```

- 9 Save and close the `casconfig.lua` file.

CAS sessions created after you apply the new license automatically update with information from the new license file.

- 10 Verify that your SAS Cloud Analytic Services license has been renewed by following the steps in [View SAS Cloud Analytic Services License Information on page 3](#).