



# SAS<sup>®</sup> Viya<sup>™</sup> 3.2 Administration: Using the Command-Line Interface

## Command-Line Interfaces: How To

The purpose of command-line interfaces is to interact directly with SAS Viya, primarily for administrative functions.

### Step 1: Download the Interface

Use the `curl` or `wget` command to download the interface. Save the downloaded file in a directory that you will remember. If you previously downloaded the file, check to see whether an updated version is available.

For example, to download the executable file for the `sas-transfer` command-line interface to your local machine, choose from the one of the following URLs (depending on the operating system of your local machine).

- `SAS-Viya-URL/transfer/cli/linux/sas-transfer`
- `SAS-Viya-URL/transfer/cli/osx/sas-transfer`
- `SAS-Viya-URL/transfer/cli/windows/sas-transfer.exe`

In `SAS-Viya-URL`, specify the communications protocol and host name of the SAS Viya environment's web server (for example, `http://host.example.com`).

**Note:** Ensure that the file has Execute permissions.

### Step 2: Create One or More Profiles

A personal profile defines the service endpoint (URL) for your SAS Viya environment. Use [profile init on page 3](#) to create or update a personal profile. You can create a default profile, which is invoked automatically when you issue commands. If you have multiple SAS Viya environments, you can create separate, differently name profiles for each environment.

- 1 Open a command window on your local machine, and navigate to the directory where the command-line executable is installed.
- 2 Issue the `profile init` command. For syntax information, see [profile on page 3](#).

## 2

For example, you can use the following command to create a single default (unnamed) profile:

```
sas-admin profile init
```

**TIP** The profile that you create will work with any command-line interface, regardless of which interface you specify here. `sas-admin` is shown here just as an example.

If you are working with multiple SAS Viya environments (for example, if you are using the Transfer service to export content from a test system and import it to a production system), then you might want to create a differently named profile for each environment. For example, the following command creates a profile called `Prod`:

```
sas-admin --profile Prod profile init
```

**Note:** All commands and command options are case sensitive.

- 3 Respond to the prompts as described in [profile on page 3](#).
- 4 Repeat steps 2 and 3 for each named profile that you want to create.

### Step 3: Log On to SAS Viya

- 1 From a command window on your local machine, issue the `auth login` command. For syntax information, see [authenticate on page 5](#). For example:
  - Use a command like the following to log on to the SAS Viya environment that is specified in your default (unnamed) profile: `sas-admin auth login`

**TIP** You can use any command-line interface while the login is in effect, regardless of which interface you specify in these commands. `sas-admin` is shown here just as an example.

- Use this command to log on to a SAS Viya environment that is specified in the profile called `Prod`: `sas-admin --profile Prod auth login`
- 2 At the prompts, enter your user ID and password.

By default, your authentication remains active for 12 hours.

### Step 4: Log Off from SAS Viya

From a command window on your local machine, issue the `auth logout` command. For syntax information, see [authenticate on page 5](#). For example:

- Use a command like the following to log off from the SAS Viya environment that is specified in your default (unnamed) profile: `sas-admin auth logout`
- Use this command to log off from a SAS Viya environment that is specified in the profile called `Prod`: `sas-admin --profile Prod auth logout`

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## Command-Line Interface Reference

### Synopsis

The basic format of a command-line command is:

### *interface-name* Global Options command Options

In which *interface-name* is the name of the command-line interface, *Global Options* are options applicable to all interfaces, *command* is a specific command for that interface, and *Options* are options to the specific command. Note that interfaces can be used as commands to other interfaces.

**Note:** The sequence of the syntax is mandatory: interface, global options, commands, and any command options.

## Global Options

The following options are available in all SAS Viya command-line interfaces.

### profile

Use the profile command to initialize, update, list, or display personal profiles. A personal profile defines the service endpoint (URL) for your SAS Viya environment. You can create a default profile, which is invoked automatically when you issue commands. If you have multiple SAS Viya environments, you can create separate, differently name profiles for each environment. To invoke a named profile with a command, use the `--profile` option with the command.

#### Syntax

```
interface-name <--profile profile-name> profile
  init | <--profile profile-name> show | list
```

#### Syntax Description

##### ***interface-name***

specifies the name of a SAS Viya command-line interface that has been downloaded to your local machine.

**Requirement** Required.

**Note** Profiles that you create apply to any SAS Viya command-line interface. The profile command works the same regardless of which interface is specified here.

**Example** sas-transfer

##### **profile**

initializes, updates, lists, or displays personal profiles.

**Alias** prof

**Requirement** Required

##### **--profile *profile-name***

specifies the name of the profile that you are initializing, updating, or displaying.

**Valid in** profile init, profile show

**Alias** -p

**Default** If --profile is not specified, a profile named Default is initialized, updated, or displayed.

**Requirement** Not required.

##### **init**

initializes or updates the profile that is specified in --profile (or your default profile, if none is specified).

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**Requirement** You must specify `init`, `list`, or `show`.

### **list**

lists your personal profiles.

**Requirement** You must specify `init`, `list`, or `show`.

### **show**

displays the contents of the profile that is specified in `--profile` (or in your default profile, if none is specified).

**Requirement** You must specify `init`, `list`, or `show`.

## **Examples**

The following command creates a default profile:

```
sas-transfer profile init
```

The following command creates a profile called `Prod`:

```
sas-transfer --profile Prod profile init
```

The following command displays a list of your profiles:

```
sas-transfer profile list
```

The following command displays the contents of a profile called `Prod`:

```
sas-transfer --profile Prod profile show
```

## **Prompts**

Respond to the following prompts after you issue the `profile init` command:

<b>Prompt</b>	<b>Response</b>
Service Endpoint	Specify the URL for the SAS Viya environment. Use the following format: <i>communications-protocol://web-server-host-name:web-server-port</i> For example: <code>http://host.example.com:7980</code> <b>Note:</b> You must provide a fully qualified host name. Do not specify <code>localhost</code> .
Output type	Specify the format for command output ( <code>text</code> , <code>json</code> , or <code>fulljson</code> ).

**Note:** There is no way to delete profiles. To update a profile simply reissue the `profile init` command with new values.

## **Details**

Profiles are stored in a file called `config.json` in the following location on your local machine:

- On Windows: `C:\Users\user-name\.sas\config.json`
- On Linux, OS/X, or UNIX: `user-home-directory/.sas/config.json`

## authenticate

Use the `authenticate` command to log on to or off of a SAS Viya environment. By default, your credentials remain active for 12 hours. They are applied to any SAS Viya command that you issue during that period.

### Syntax

```
interface-name <--profile profile-name> authenticate
  login <-u user-id> <-p password> | <--profile profile-name> logout
```

### Syntax Description

#### *interface-name*

specifies the name of a SAS Viya command-line interface that has been downloaded to your local machine.

**Requirement** Required.

**Note** Logins are not specific to a command-line interface. You can use any interface while the login is in effect.

**Example** `sas-transfer`

#### **authenticate**

logs the designated user on to or off of a SAS Viya environment.

**Alias** `authn, auth`

**Restriction** You must specify either `login` or `logout` as sub-commands.

**Requirement** Required.

#### **login**

a sub-command of `authenticate`

Submits credentials to log on to the SAS Viya environment that is specified in `--profile` (or in your default profile, if none is specified).

**Requirement** You must specify `login` or `logout`.

#### **logout**

a sub-command of `authenticate`

Logs off of the SAS Viya environment that is specified in `--profile` (or in your default profile, if none is specified).

**Requirement** You must specify `login` or `logout`.

#### **--profile *profile-name***

specifies the profile for the SAS Viya environment to which you are logging on or off.

**Alias** `-p`

**Default** If `--profile` is not specified, your default profile is used, if one exists.

**Requirement** Not required.

#### **-u *user-name***

specifies your user name.

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**Default** If you omit the `-u` option, you are prompted for a user ID after you issue the command.

**Requirement** Not required.

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### **-p password**

specifies the password associated with the user ID.

**Default** If you omit the `-p` option, you are prompted for a password after you issue the command.

**Requirement** Not required.

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### Example

The following command logs on to the SAS Viya environment that is specified in your default profile:

```
sas-transfer auth login
```

The following command logs on to the SAS Viya environment that is specified in the profile named Prod:

```
sas-transfer --profile prod auth login
```

### Prompts

If you omit the `-u` or `-p` option, you are prompted for the user ID and password after you issue the command.

## Common Options

The following options can be used with all commands in any SAS Viya command-line interface.

### **--help**

displays usage information for the command.

Alias `-h`

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### **--output JSON | TEXT | FULLJSON**

specifies the format that is to be used for displaying command output.

**Default** If `--output` is not specified, the command uses the output setting from the specified profile (or from your default profile, if no named profile is specified).

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### **--profile profile-name**

specifies the profile that contains the service endpoint (URL) for the SAS Viya environment where you want the command to be executed.

Alias `-p`

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**Default** If `--profile` is omitted, the command uses your default profile (if one exists).

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**See** To create a profile, see [profile on page 3](#).

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### **--quiet**

limits the displayed output to data only.

Alias `-q`

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### **--sas-endpoint endpoint-URL**

specifies a URL, which overrides the service endpoint specified in a profile. Use the following format:

```
communications-protocol://web-server-host-name:web-server-port
```

**Default** If `--sas-endpoint` is not specified, the command uses the URL from the specified profile (or from the default profile, if no named profile is specified).

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**Note** You must provide a fully qualified host name. Do not specify localhost.

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**Example** `--sas-endpoint http://host.example.com:7980`

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**-verbose**

specifies that detailed processing information is to be displayed with the command output.

**-version**

displays the version number of the specified command-line interface.

**Alias** `-v`

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