**Early Adopter Software**

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**Quick Start**

**Orientation**

This software supports analytical data preparation, variable transformations, exploratory analysis, analytical modeling, integrated model comparison, and scoring. Here are the main components:

<table>
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<th>Component</th>
<th>Description</th>
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<tr>
<td>SAS Studio</td>
<td>The integrated programming environment.</td>
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<tr>
<td>SAS Cloud Analytic Services (CAS)</td>
<td>The analytic engine. CAS uses high-performance, multi-threaded analytic code to rapidly process requests against data of any size.</td>
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</table>
Note: All early adopter deployments also include common CAS-based analytic procedures and supporting SAS functionality. CAS-based procedures run against data that is in CAS. For example, before you can use CAS to work with a SAS data set, you must load that data set into CAS. The following instructions demonstrate basic mechanics.

**Demonstration: Load Personal Data**

1. Sign in to SAS Studio.
   b. Enter the credentials for your operating system account.
2. Start a CAS session.
   a. In the navigation pane, open the Snippets section.
   b. Select Snippets ⇒ Cloud Analytic Services.
   c. Right-click New Session and select Open. The snippet opens in the code editor.
   d. In the toolbar, click to run the New Session code.
3. Load a table.
   a. In the navigation pane, right-click Load data to Caslib and select Open.
   b. In the code editor, edit the SAS data set section so that it looks like this:

   ```sas
   PROC CASUTIL;
   LOAD DATA=sashelp.cars OUTCASLIB="CASUSER"
   CASOUT="demoTable" PROMOTE;
   RUN;
   
   TIP
   
   CASUSER is your personal caslib. It is available across your sessions, but it is always and intrinsically private to you. You cannot enable other users to access it.
   
   c. Select the preceding code. In the toolbar, click to run only the four lines of selected code.
4. Verify that you can access the loaded data.
   a. In the navigation pane, right-click Generate SAS librefs for Caslibs and select Open.
   b. In the toolbar, click to run the code.
   c. In the navigation pane, open the Libraries section.
   d. Select My Libraries ⇒ CASUSER.
   e. Double-click demoTable to open it.
Demonstration: Provide Shared Data

1. Sign in to SAS Studio and start a CAS session, if you have not already done so.

2. Create a container for shared CAS data.
   a. In the navigation pane, open the Snippets section.
   b. Select Snippets ⇒ Cloud Analytic Services.
   c. Right-click New Caslib for Path and select Open.
   d. In the code editor, edit the snippet so that it looks like this:

   CASLIB demoCas PATH="/filePath/" TYPE=path GLOBAL;

   Note: Enter a path that is relative to and accessible from your CAS server. You can reference an empty directory.
   e. Click ✪ to run the code.

   Note: If an error indicates that you do not have permission to create global caslibs, see “Initial Setup Tasks” in SAS Viya Administration: Getting Started. Initially, only administrators can create global caslibs. An administrator can enable non-administrators to create global caslibs.

3. Give all users Read access to the new caslib.
   a. In the banner, click ☐, and select CAS Administration.
   b. In the sign-in window, enter your operating system credentials.
   c. Beneath the SAS Cloud Analytic Services banner, select the Configuration tab.
   d. On the Configuration tab, select Access Controls.
   e. In the Caslibs list, select demoCas.
   f. In the upper right, click Edit.
   g. In the Edit Access Controls window, adjust settings as follows:
      - In the Read Info row for Authenticated Users, select the Grant radio button.

         Authenticated Users ✗ ☐ ☐ Read Info ✗

      - Click Add Row. In the new row at the end of the page, select Authenticated Users, the Grant radio button, and the Select activity.

         Authenticated Users ✗ ☐ ☐ Select ✗

   h. Click OK to save your changes.
   i. Under Access Controls, review the results of your changes.
   j. At the right edge of the banner, click your user name, and select Sign Out.

4. Load data to the new caslib.
   a. In the navigation pane in SAS Studio, right-click the snippet Load data to Caslib and select Open.
   b. In the code editor, edit the SAS data set section so that it looks like this:
PROC CASUTIL;
   LOAD DATA=sashelp.cars OUTCASLIB="demoCas"
   CASOUT="demoTable" PROMOTE;
RUN;

Select the preceding code. In the toolbar, click to run only the four lines of selected code.

5 Verify that other users can see the data. For example, ask them to complete these steps:
   a Sign in to SAS Studio, start a CAS session, and run the Generate SAS librrefs for Caslibs snippet.
   b In the navigation pane, open the Libraries section.
   c Select My Libraries ➔ demoCas.
   d Double-click demoTable to open it.

Tip: Automatically Connect and Generate Librefs
For convenience, you can configure SAS Studio to perform the following tasks each time you sign in:
   ■ Start a CAS session.
   ■ Generate SAS librrefs for existing caslibs that have names that are no more than eight characters long.

Complete the following steps:
1 In the SAS Studio banner, click , and select Edit Autoexec File.
2 On the Autoexec.sas tab of the Edit Autoexec File window, paste the following code:
   ```sas
   cas casauto;
   caslib _all_ assign;
   ```
3 Run the code.
4 Save the code.

Documentation: References by Task

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<td>“Migrating Data to UTF-8” in SAS Viya National Language Support (NLS): Reference Guide</td>
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<td>Access your data</td>
<td>“Accessing Data” in SAS Cloud Analytic Services: Accessing and Manipulating Data</td>
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<td>“Common Tasks for Accessing and Manipulating Data” in SAS Cloud Analytic Services: Accessing and Manipulating Data</td>
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<td>Manipulate your data</td>
<td>“DATA Step Basics” in SAS Cloud Analytic Services: Accessing and Manipulating Data</td>
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<td>Prepare, Model, Assess</td>
<td>“MDSUMMARY” in <em>SAS Cloud Analytic Services: Language Reference</em></td>
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<td>“Graphing Your CAS Output” in <em>SAS Cloud Analytic Services: Graphing Your Output</em></td>
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