

# **SAS<sup>®</sup> Visual Analytics 7.1 for SAS<sup>®</sup> Cloud Quick-Start Guide**



The correct bibliographic citation for this manual is as follows: SAS Institute Inc. 2014. *SAS® Visual Analytics 7.1 for SAS® Cloud: Quick-Start Guide*. Cary, NC: SAS Institute Inc.

**SAS® Visual Analytics 7.1 for SAS® Cloud: Quick-Start Guide**

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November 2014

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## Set Up the SAS® Visual Analytics Environment in the SAS® Cloud

After the SAS environment has been prepared, the Account Administrator receives an e-mail message from SAS titled **Welcome to the SAS Cloud! Your account is ready**. This e-mail message includes instructions for obtaining a SAS Profile and then using your SAS profile credentials to access the SAS Cloud.

**Note:** The e-mail address that you use for your SAS Profile Account must match the e-mail address where you received the Welcome e-mail message.

## Log On to SAS App Central

1. Navigate to the following URL to arrive at the **My SAS Profile Screen** ([Figure 1](#)):

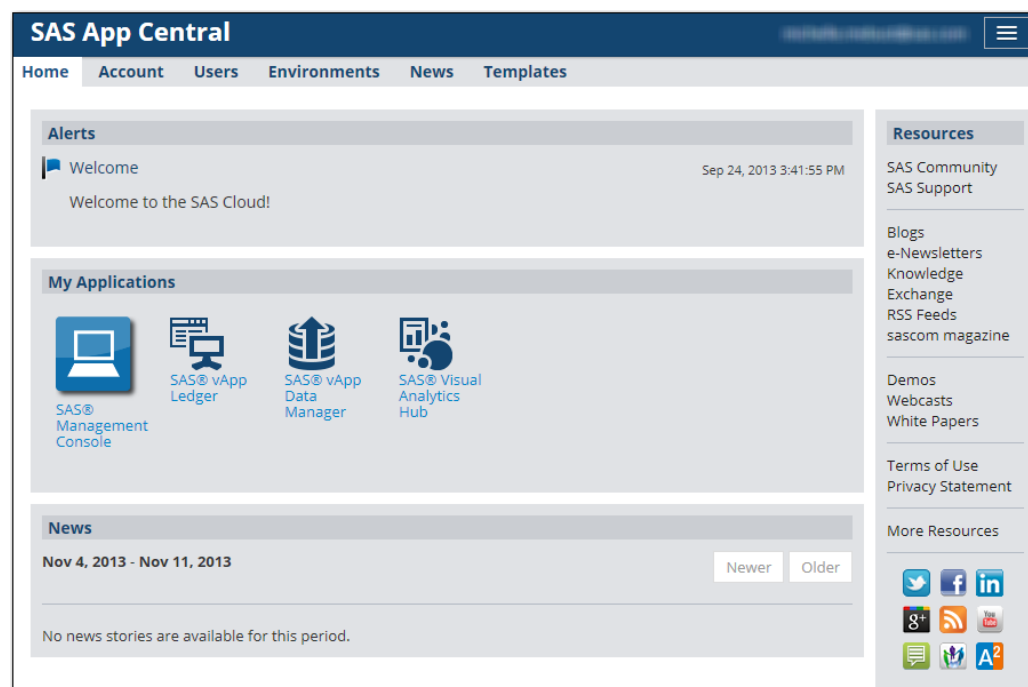
<http://cloud.sas.com>

2. Enter your SAS Profile Credentials and select **Login**.

**Note:** To log on, you need to use your SAS Profile for [www.sas.com](http://www.sas.com). If you do not have a SAS Profile, you must create one before logging on for the first time.

You arrive on the **SAS App Central** home page ([Figure 2](#)). From this page, you can manage the SAS Visual Analytics environment by adding users and specifying their access rights. You can also access the SAS Visual Analytics environment.

**Figure 1: Logon**

**Figure 2: SAS App Central**

## SAS App Central

The SAS App Central application does not refresh automatically. You must press the **F5** key to refresh.

## Administration Setup Tasks

### Create Users for Your Account

You may need to add users so that they can also access the SAS Visual Analytics environment. Adding users is performed from **SAS App Central**.

**Note:** SAS App Central should still be running under a different tab within your web browser.

1. Log on to the SAS Cloud as the account administrator.
2. In **SAS App Central**, select the **Users** tab.
3. Click **Add Users** to display the **Add Users** dialog box ([Figure 3](#)).
4. In **User 1**, enter the e-mail address of a user account.
5. **(Optional)** Repeat the preceding step for additional users.
6. **(Optional)** Select **Send invitations** to send e-mail invitations to the entered e-mail address(es).
7. Click **Add**. The **Create Users** window closes.

New users receive e-mail notifications after their accounts are created. The e-mail message has the subject line **Welcome to the SAS Cloud**. This e-mail message includes instructions for accessing SAS App Central. From SAS App Central, users who are given access to the SAS Visual Analytics environment can log on using the [Log On to SAS App Central](#) instructions above.

For additional details on adding users, refer to Chapter 3 “Managing Users” in the *SAS Cloud: Account Administrator’s Guide*.

**Figure 3: Add Users**

## Managing Users and Giving Users Access to SAS Visual Analytics

You are also able to assign each user specific access roles and determine which users are able to access the SAS Visual Analytics environment. The number of users able to access the environment is determined by the service level for which you are licensed.

1. Log on to the SAS Cloud as the account administrator.
2. In **SAS App Central**, select the **Users** tab.
3. In the **Users** screen, click the **E-Mail** address of the user you wish to modify ([Figure 4](#)).
4. From the **Users** screen, click **Edit** (to the right of **Roles**), as shown in [Figure 5](#).
5. In the **Edit Roles** screen, select the roles you wish to grant to the user ([Figure 6](#)):
  - a. **Data administrator** – Data administrators have the ability to load data into the SAS Visual Analytics environment using the **SAS® vApp Data Manager** application.
  - b. **SAS administrator** – SAS administrators have the ability to access administrative applications, such as SAS Management Console and SAS vApp Ledger.
  - c. **SAS user** – Ability to access SAS applications as a regular user.
  - d. **Account administrator** – Account administrators have the ability to maintain the customer's account, including adding users, providing users access to applications, and assigning users to roles. The Account administrator is also able to manage environments.
6. Click **OK**.
7. Upon returning to the **Users** screen, click **Edit** (to the right of **Environments**), as shown in [Figure 5](#).
8. In the **Edit Environment** screen, select the environment(s) to which you providing the user with access.
  - a. Check the appropriate environment, typically **vanlytscw-s** ([Figure 7](#)).
  - b. Select **OK**.

For additional details on adding users, refer to Chapter 3 “Managing Users” in the *SAS Cloud: Account Administrator’s Guide*.

Figure 4: Users

SAS® App Central

mary.wilson@example.com

HomeAccountUsersEnvironmentsNewsTemplates

Users

Manage the users for your account.

Add Users

<input type="checkbox"/> E-mail	Date Added (GMT)	Date Invited (GMT)	Date Joined (GMT)	Status ↑
<input type="checkbox"/> mary.wilson@example.com	Sep 11, 2014 8:22:57 PM		Sep 11, 2014 8:37:13 PM	Active
<input type="checkbox"/> william.smith@example.com	Sep 11, 2014 8:41:15 PM	Sep 11, 2014 8:41:16 PM		Onboarding
<input type="checkbox"/> mary.jones@example.com	Sep 11, 2014 8:41:48 PM	Sep 11, 2014 8:41:48 PM		Onboarding
<input type="checkbox"/> john.bain@example.com	Sep 11, 2014 8:41:48 PM	Sep 11, 2014 8:41:48 PM		Onboarding

Previous

1

Next

Figure 5: Account Roles

SAS® App Central

william.smith@example.com

HomeAccountUsersEnvironmentsNewsTemplates

william.smith@example.com

[Back to Users](#)

Suspend

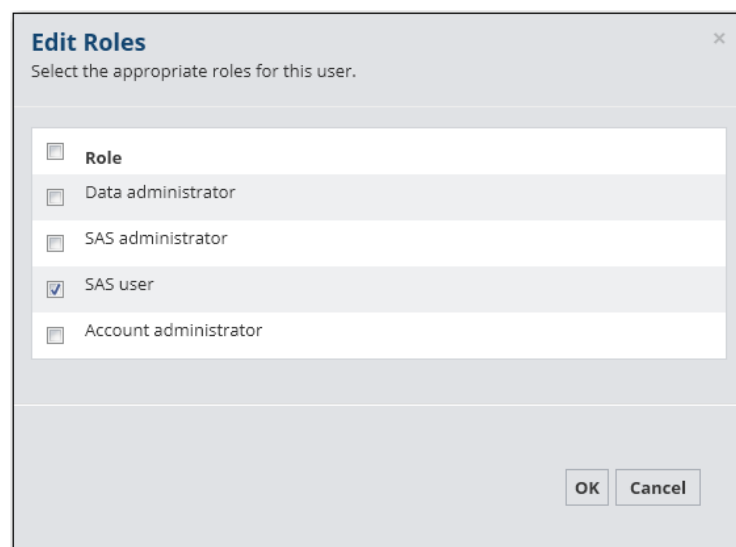
Roles (Edit)

This user has been assigned to 1 of 4 available roles.

- SAS user

Environments (Edit)

This user has been added to 0 of 1 available environments.

**Figure 6: Edit Account Roles****Figure 7: Assign Roles and Applications**

## Preparing and Loading Data

To load data, launch the **SAS Visual Analytics Hub**. On the **SAS Visual Analytics** home page, select the **Create Data Query** icon. From the **Prepare Data** screen, use the menu to select **File > Import Data**.

The following options are available from the **Import Data** dialog box ([Figure 8](#)):

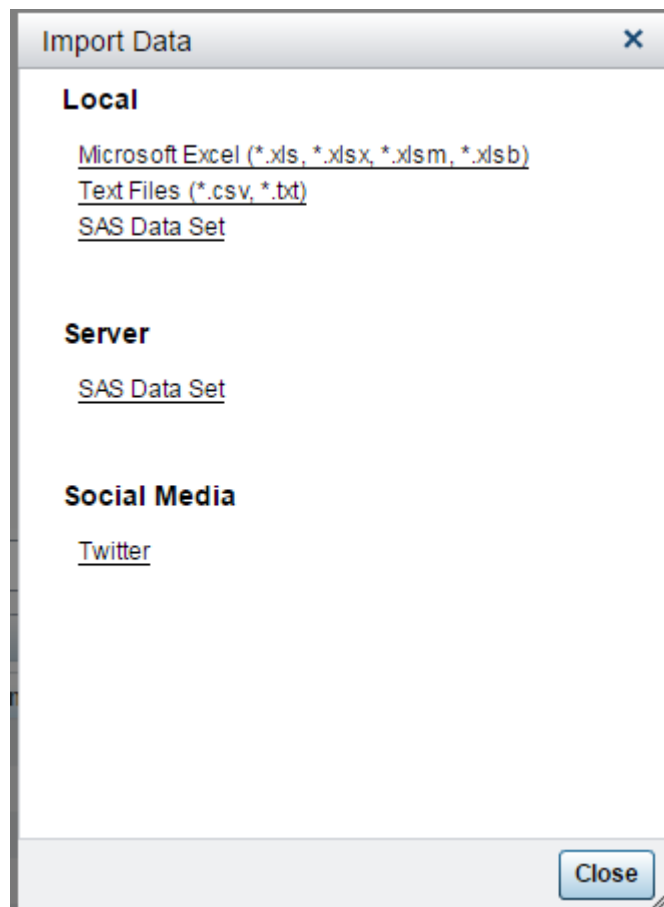
- **Local:** Enables you to upload data from your own computer. It can be used to load into the SAS® LASR™ Analytic Server smaller files in XLS, CSV, or SAS data set format.
- **Server:** Enables you to load larger SAS data sets that are moved to Cloud Storage via the **SAS vApp Data Manager** application.
- **Social Media:** Enables you to import data from Twitter. This feature is not covered within this document.

This Quick-Start guide focuses on aspects of data loading unique to customers who are accessing the SAS Visual Analytics environment using the SAS Cloud.



For general information about loading data for use in SAS Visual Analytics, refer to the [SAS® Visual Analytics 7.1 User's Guide](#).

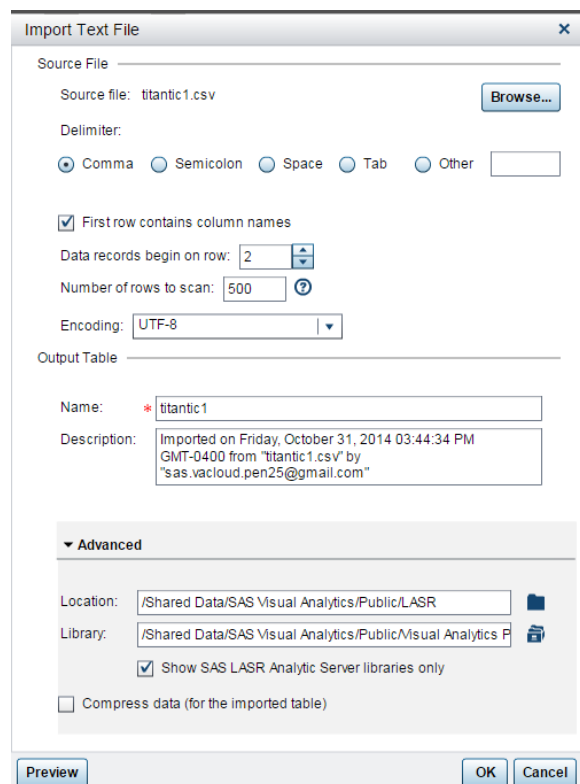
Figure 8: Import Data



## Local

For general information about loading the data that is used in SAS Visual Analytics, refer to the **Importing Local Data Files** section of the [SAS® Visual Analytics 7.1 User's Guide](#). Where you place the data determines whether it is accessible by other users within your account, or visible only to the user who uploaded the data. This setting is configurable via the advanced options within the **Import Text File** dialog box ([Figure 9](#)). By default, data is written to the **My Folder** location. For data to be available to other users, you must specify a location within the **Shared Data** folder ([Figure 10](#)).

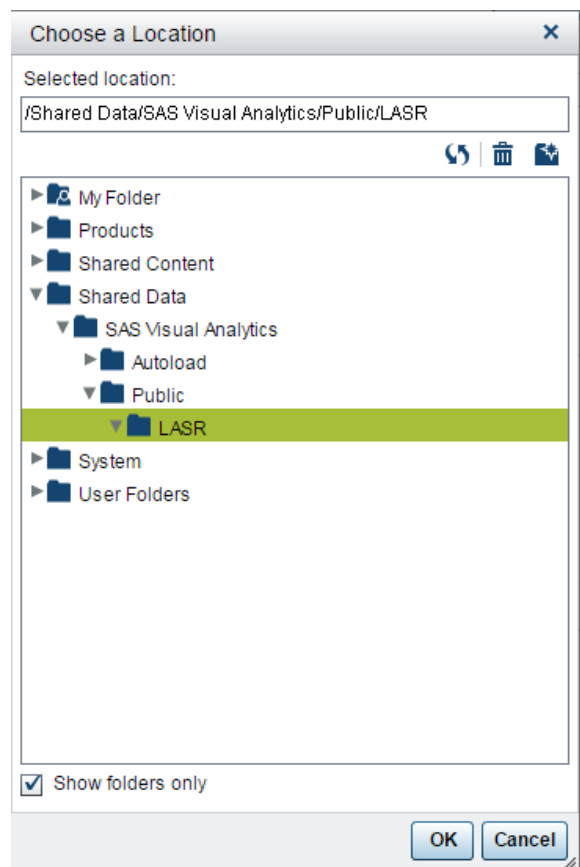
**Note:** Data loaded via the **Local** option is written directly into the in-memory SAS LASR Analytic Server. A data set copy of the source data is also saved. If the SAS LASR Analytic Server is stopped and restarted, the reload-on-start feature automatically reloads the data set copy into the server's memory.

**Figure 9: Import: Advanced Options**

The "Import Text File" dialog box is shown with the following settings:

- Source File:** Source file:
- Delimiter:** ☒ Comma ☐ Semicolon ☐ Space ☐ Tab ☐ Other
- ☒ First row contains column names
- Data records begin on row:**
- Number of rows to scan:**
- Encoding:**
- Output Table:**
  - Name:**  (with a red asterisk icon)
  - Description:**
- Advanced:**
  - Location:**
  - Library:**
  - ☒ Show SAS LASR Analytic Server libraries only
  - ☐ Compress data (for the imported table)

Buttons at the bottom:

**Figure 10: Shared Data Location**

The "Choose a Location" dialog box shows the following structure:

- Selected location:**
- Folder Hierarchy:**
  - My Folder
  - Products
  - Shared Content
  - Shared Data
    - SAS Visual Analytics
      - Autoload
      - Public
      - LASR** (highlighted)
  - System
  - User Folders

Buttons at the bottom: ☒ Show folders only

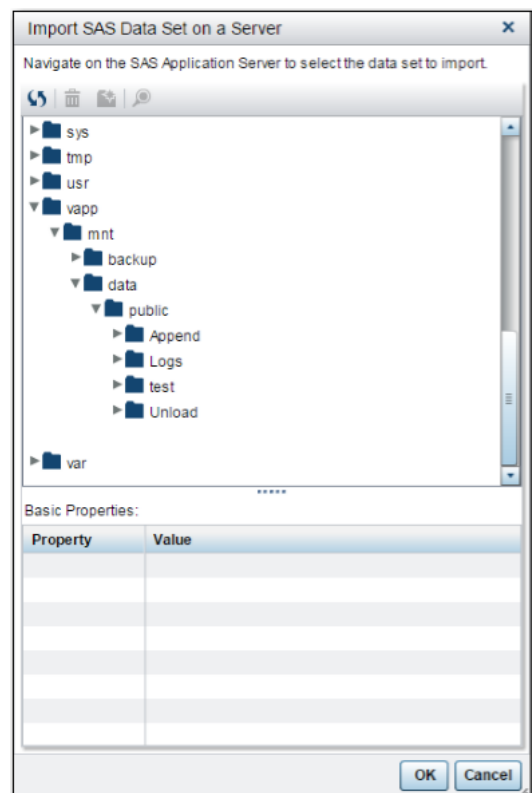
## Server

For general information about loading data in SAS Visual Analytics, refer to the **Importing Data from Servers** section of the [SAS® Visual Analytics 7.1 User's Guide](#).

When working with server data in the SAS Cloud environment, the process begins with the file transfer (using the **SAS vApp Data Manager** application) of the SAS data set to the account's SAS Cloud storage. SAS data sets uploaded to the folders can then be loaded into the SAS LASR Analytic server using the **Server** option. **Note:** If the SAS data set is loaded into the **public (auto loaded)** folder, the data set is automatically uploaded to the SAS LASR Analytic Server.


**Note:** Files loaded into SAS Cloud are accessible within the vapp/mnt/data folder ([Figure 11](#)).

**Figure 11: Location of Server Data**





## Uploading Data Files to the SAS Cloud Using the SAS vApp Data Manager

**Note:** The SAS vApp Data Manager is written in HTML5. For the best experience, SAS recommends using Google Chrome, Mozilla Firefox, or Microsoft Internet Explorer 10 or higher.

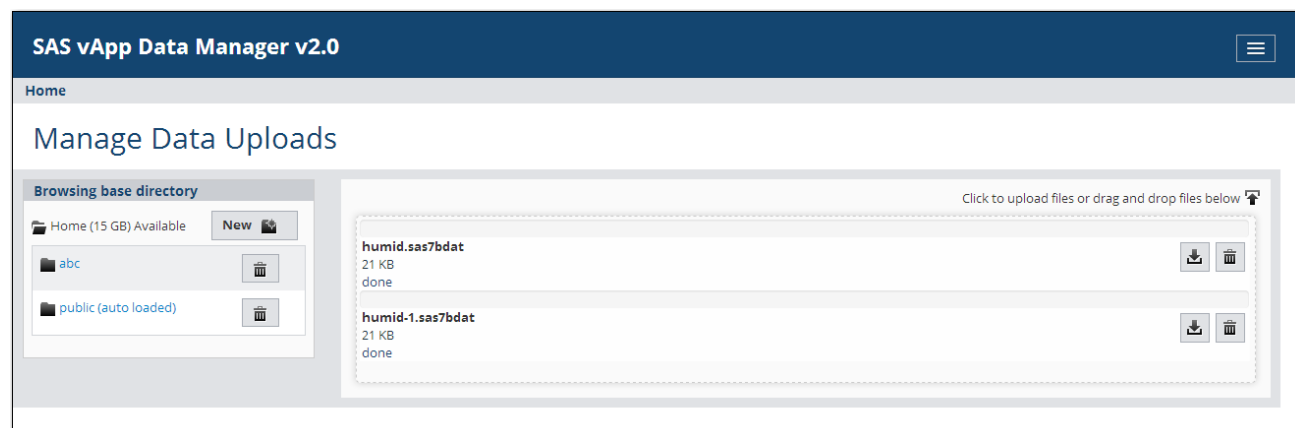
1. In the **My Applications** section of the SAS App Central home page ([Figure 2](#)), select the **SAS vApp Data Manager** icon.
2. In the left pane, navigate to the directory to which you want to upload data ([Figure 12](#)).
3. Select the Upload icon  at the top of the right pane.
4. In the Windows File Manager, navigate to the file that you want to upload
5. Select **Open**. The file is uploaded to the directory. Its filename and size are displayed in the right pane.

The data is now available to applications in the selected SAS environment. You can take the following actions to manage files that you have uploaded:

- Select the Download icon  to download a file to your computer.
- Select the Delete icon  to delete a file or directory.

**Note:** Customers in North America can use SFTP to upload data. Refer to the [SAS® Cloud: Account Administrator's Guide](#) for details.

**Figure 12: Manage Data Uploads**



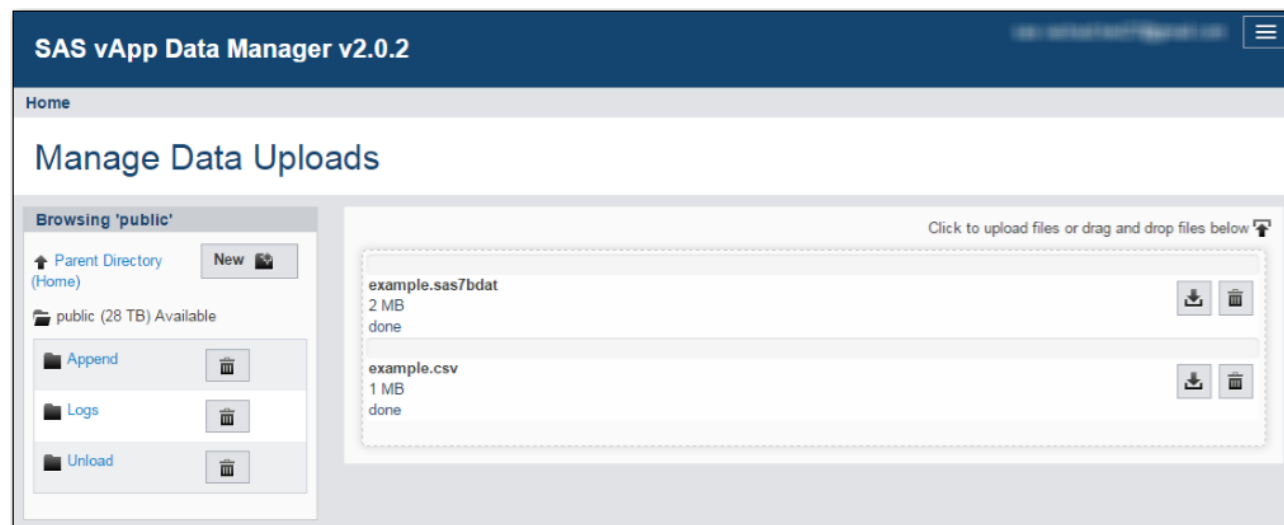
## Data Auto Load

Automatic data loads in SAS Visual Analytics are available only when files are uploaded to the **public (auto loaded)** folder via the SAS vApp Data Manager or SFTP (SFTP is available for US hosted customers only). With SAS Visual Analytics 7.1, autoloading now supports files in CSV, XLS, or SAS data set formats. Depending upon file size, a data file should be available from the SAS LASR Analytic server within 15 minutes of its placement in the **public** folder.

Another benefit of the Auto Load feature is that data files are automatically reloaded if the SAS LASR Analytic server is restarted.

**Note:** if an XLS or CSV file is loaded into the **public (auto loaded)** folder, a system process creates a SAS data set version of the XLS or CSV file in the **public (auto loaded)** folder ([Figure 13](#)).

Figure 13: SAS Data Set from CSV File



## Data Loading Tips

From within the SAS Visual Analytics application, authorized users can load data via the **Local** and **Server** options.

- **Server** enables you to load data from your SAS Cloud storage area. This is the preferred option for loading SAS data sets that are greater than 2 GB. **Note:** This option supports SAS data sets only.
- **Local** is a quick option that is useful for loading smaller data sets. **Note:** Data loaded using this mechanism is not written to your Cloud Storage and will need to be reloaded if the SAS LASR Analytic server is restarted. This option supports the loading of data files in XLS, CSV, and SAS data set file formats. When working with this option, note the following:
  - Installing a 64 bit web browser enables you to load larger data files (up to 2 GB). A 2 GB file can contain up to approximately 1 million records of data, with 12-15 columns.
  - To simplify the reload process, SAS recommends that you store the source data files in a single location on your local drive.

While any valid SAS data set, encoded in either *wlatin1* or *latin1*, should readily load into the SAS LASR Analytic server, XLS and CSV formatted files need to be prepared as follows:

- The upload file must have a valid SAS file name.
- During the data loading process, if you select the first row to provide the column names, the first row / line of the file must contain valid SAS column names.
- Special characters that are not supported by the standard character set must be removed from the file prior to upload. Examples of unsupported special characters include ©, ™, and ®.
- Use supported encoding: *wlatin1* or *latin1*.
- For CSV files:
  - All columns / data items must be separated by a comma.
  - If two commas are used consecutively, a blank data item is assumed.
  - Commas can be included within a field, if the field is enclosed within double quotes.

The rules for valid SAS column names and file names are:

- Names can be up to 32 characters in length.
- The first character must begin with an English letter or an underscore. Subsequent characters can be English letters, numeric digits, or underscores.
- A name cannot contain blanks.
- A name cannot contain any special characters other than the underscore.

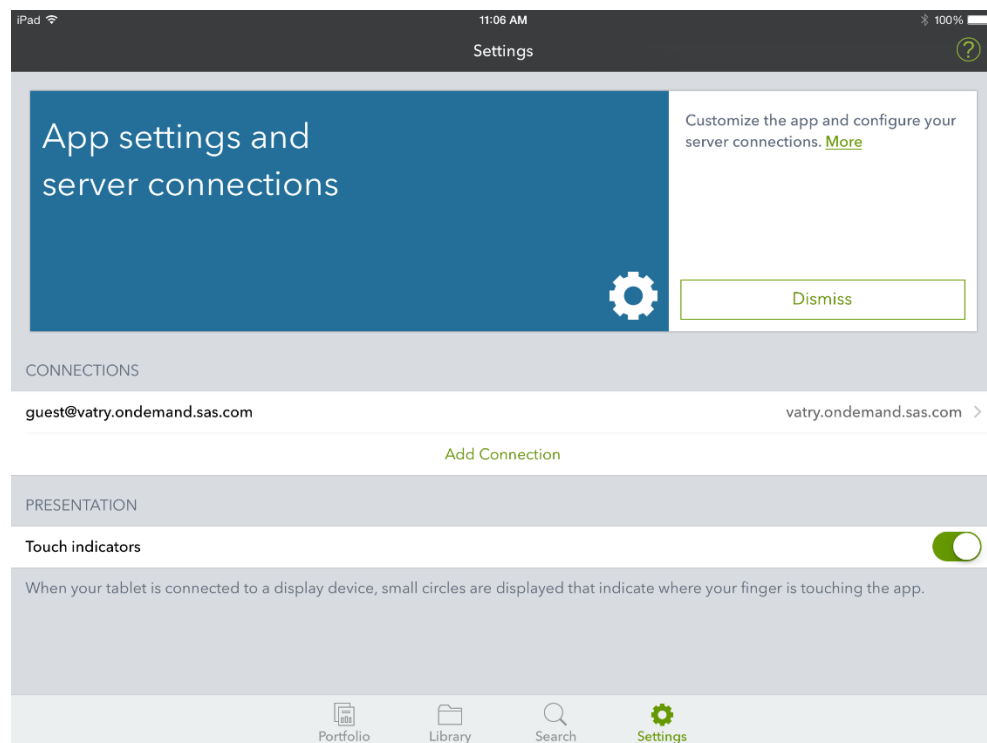
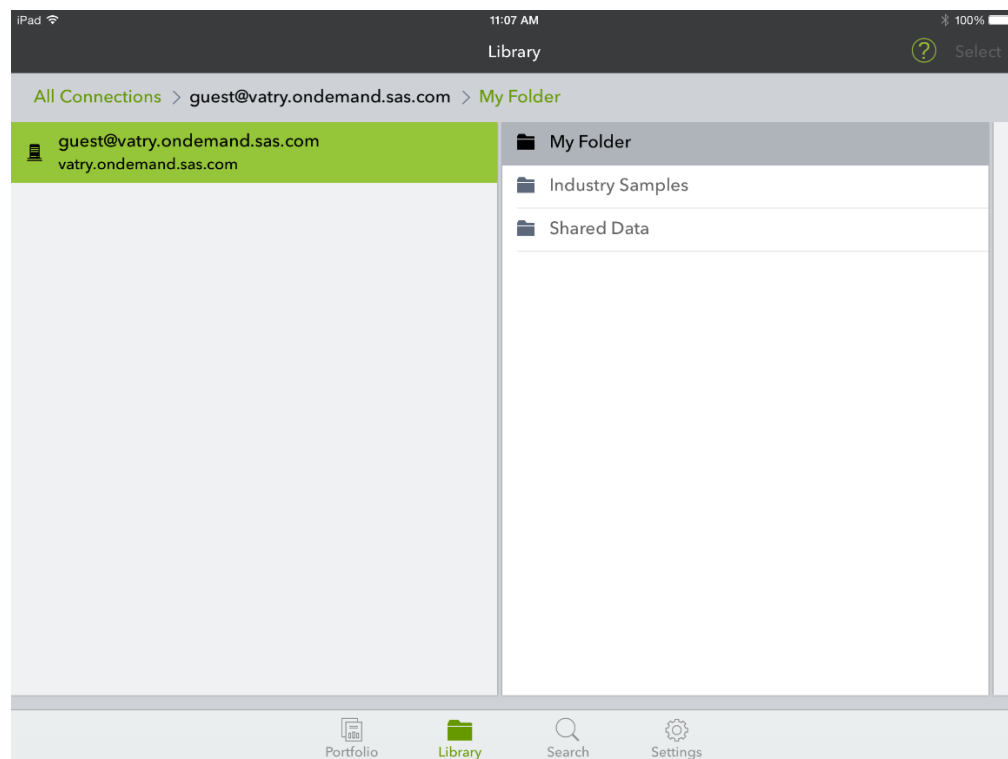
## Accessing SAS Visual Analytics Reports from a Mobile Device

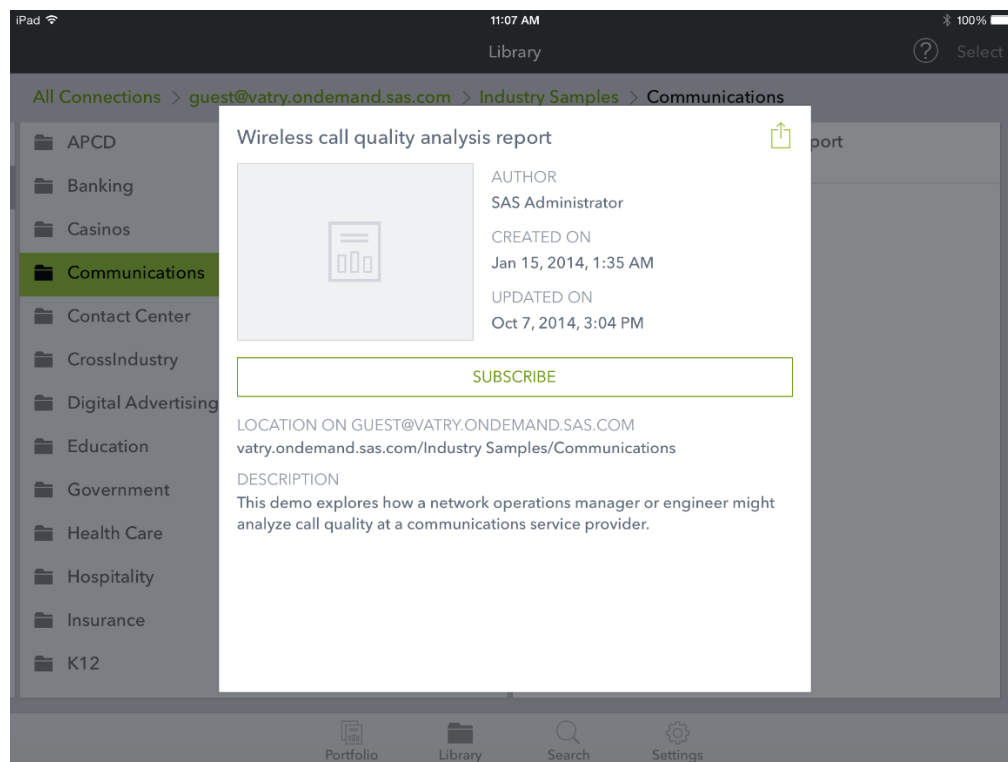
Reports that you create within SAS Visual Analytics can be accessed from tablet computers, such as the iOS-based Apple iPad or the Android-based Samsung Galaxy tablet, using the SAS Mobile BI product. SAS Mobile BI is available for download at no additional cost. Refer to the [SAS Visual Analytics](#) support page for iTunes and Google Play links for downloading the application.

### Installing and Configuring SAS® Mobile BI for the Apple iPad

The following steps are required to obtain, install, and configure the SAS Mobile BI client to access your cloud-based SAS Visual Analytics reports.

- From your iPad, navigate to the Apple App Store.
- After you are in the App Store, perform a search for **SAS Mobile BI**.
- Follow the prompts to complete the download and installation process.
- From your iPad main screen, launch **SAS Mobile BI**.
- From the **Portfolio** screen, select **Settings** (from the tabs at the bottom).
- Select **Add Connection** ([Figure 14](#)) and define the connectivity information specific to your implementation of SAS Visual Analytics in the SAS Cloud.
  - **Server:** Enter the URL for your cloud-based implementation of SAS Visual Analytics. The URL should be in the format of `xxxx.xxx.xxx.xxx:443`, where **443** is the secure port assignment. Refer to [Identifying URLs for Mobile BI](#) for guidance.
  - **User ID:** Enter the SAS Profile User ID that you use to access SAS Visual Analytics.
  - **Password:** Enter the SAS Profile password that you use to access SAS Visual Analytics.
  - **(Optional) Description:** Enter a description of your choice.
- Click **Next**, upon which the SAS Mobile BI app verifies that your connection information is correct. If successful, you will receive a **Success** message. **Note:** If the connection fails, contact your site administrator or SAS Technical Support for further assistance (see the [Help](#) section below).
- Now that your connection is configured, you can access the reports available from SAS Visual Analytics by selecting **Library** (from the bottom tabs) and choosing the connection you defined above.
- A list of folders that are available to your account appears. From here, you can navigate to the folder where the reports were saved. Often, the reports you created are saved to **My Folder** ([Figure 15](#)).
- From the folder containing your reports, select the report of interest, and click **Subscribe** ([Figure 16](#)).
- Navigate to **Portfolio**, where you see the report to which you just subscribed. Depending on your connection speed and report size, you may observe the report with a status of **Loading**.
- After the report loads, select the report to view it. **Note:** This is a report viewer only. You are not able to load additional data, modify a report, or create a new report from the SAS Mobile BI client.

**Figure 14: Adding a Connection from the Settings Tab****Figure 15: My Folder**

**Figure 16: Subscribing to a Report**

## Installing and Configuring SAS Mobile BI for Android-Based Tablets

The following steps are required to obtain, install, and configure the SAS Mobile BI client to access your cloud-based SAS Visual Analytics reports:

- From your Android tablet, navigate to the Play Store.
- After you are in the Play Store, perform a search for **SAS Mobile BI**.
- Follow the prompts to complete the download and installation process.
- From your app drawer, launch **SAS Mobile BI**.
- From the **Portfolio** screen, touch **Portfolio** in the top left corner to bring out the main menu.
- Select **Library** from the menu, and then touch the green **+** symbol at the bottom ([Figure 17](#)).
- Define the connectivity information specific to your implementation of SAS Visual Analytics in the SAS Cloud:
  - **Server:** Enter the URL for your cloud-based implementation of SAS Visual Analytics. The URL should be in the format of `xxxx.xxx.xxx:443`, where 443 is the secure port assignment. Refer to [Identifying URLs for Mobile BI](#) for guidance.
  - **User ID:** Enter the SAS Profile User ID that you use to access SAS Visual Analytics.
  - **Password:** Enter the SAS Profile password that you use to access SAS Visual Analytics.
  - **(Optional) Description:** Enter a description of your choice.
- Click **Next**, upon which the SAS Mobile BI app verifies that your connection information is correct. If successful, you will receive a **Success** message. **Note:** If the connection fails, contact your site administrator or SAS Technical Support for further assistance (see the [Help](#) section below).



- Now that your connection is configured, you can access the reports available from SAS Visual Analytics by selecting **Library** from the main menu and choosing the connection you defined above.
- A list of folders that are available to your account appears. From here, you can navigate to the folder where the reports were saved. Often, the reports you created are saved to **My Folder** (Figure 18).
- From the folder containing your reports, select the report of interest, and click **Subscribe** (Figure 19). Navigate to **Portfolio** from the main menu, where you see the report to which you just subscribed. Depending on your connection speed and report size, you may observe the report with a status of **Loading**.
- After the report loads, select the report to view it. **Note:** This is a report viewer only. You are not able to load additional data, modify a report, or create a new report from the SAS Mobile BI client.

Figure 17: Adding a Connection from Library

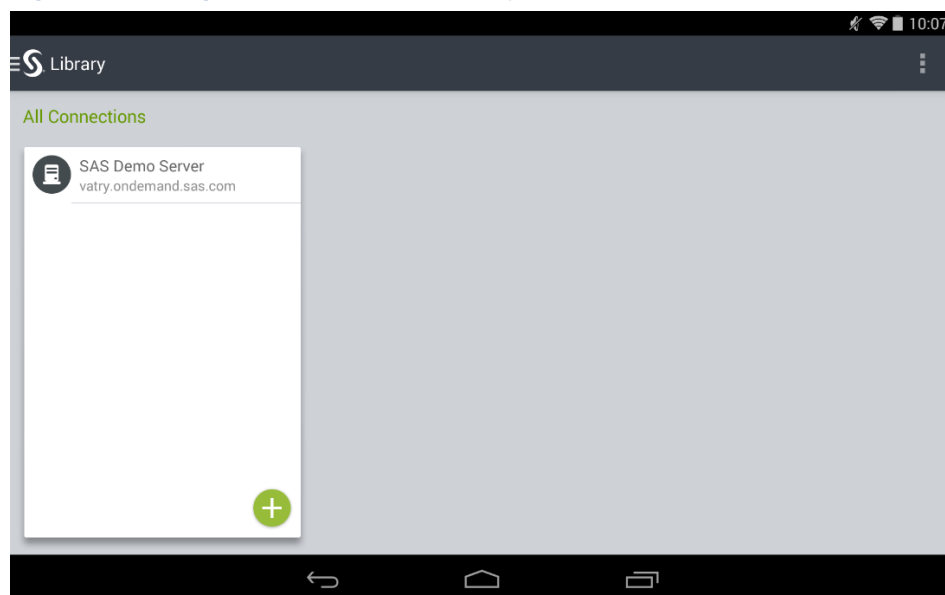
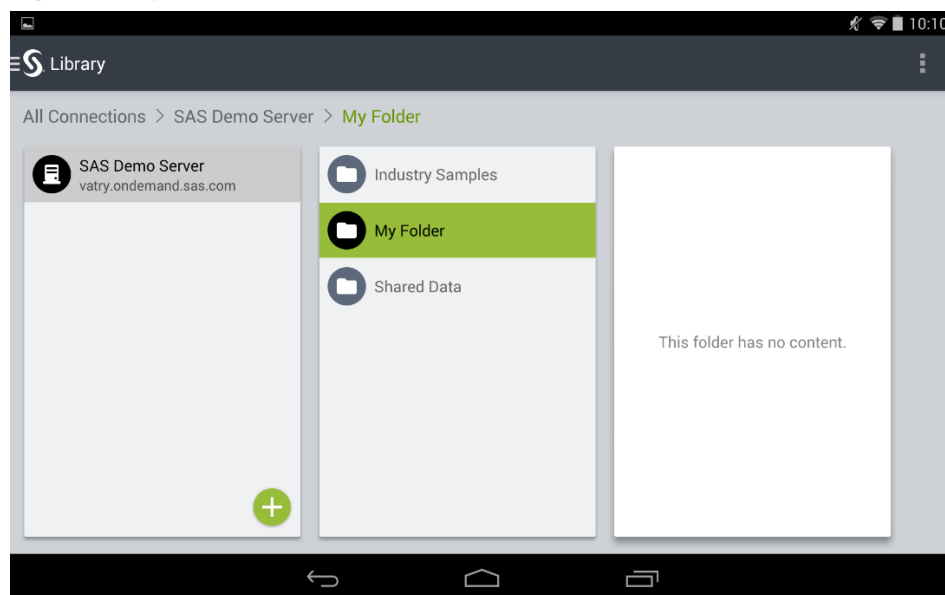
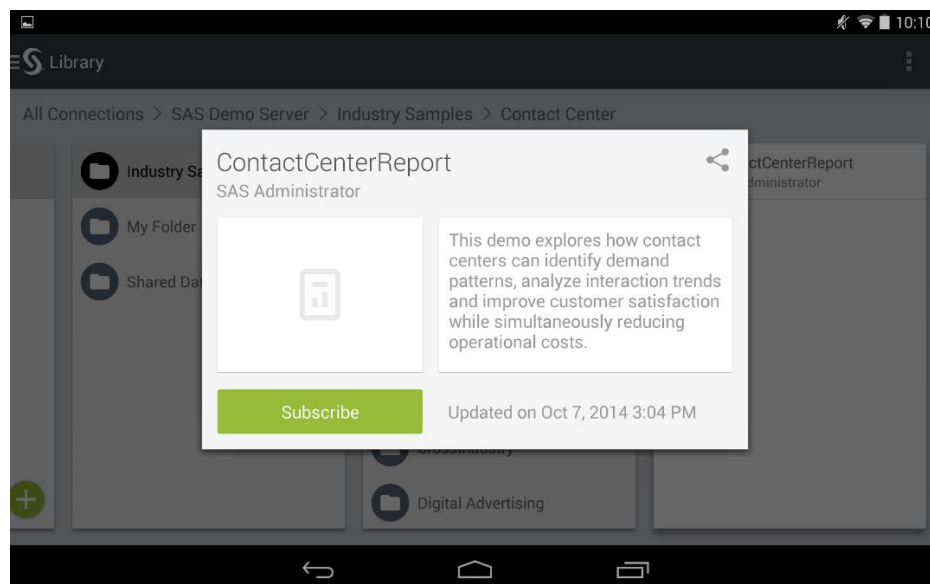


Figure 18: My Folder



**Figure 19: Subscribing to a Report**

## SAS Mobile BI Notes

When you first launch SAS Mobile BI, note that several sample reports are already configured for you. These example reports are **not** based on your specific data.

Visit the [SAS Mobile BI website](#) for more information.

## References and Help

### References

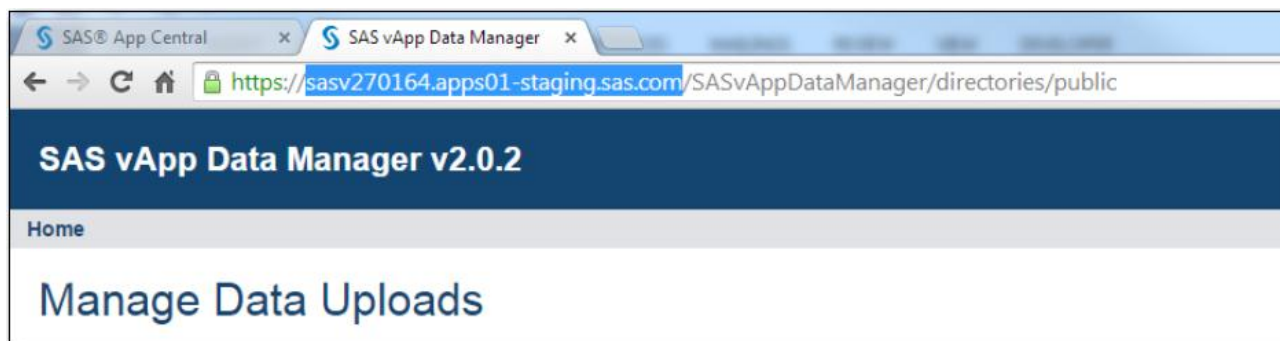
The SAS Customer Support web site contains helpful information for the following:

- [SAS Cloud](#)
- [SAS Visual Analytics](#). Select the various tabs for details:
  - Overview
  - Getting Started
  - Documentation
  - Training
  - Samples and Tips
  - Conversations

### Identifying URLs for Mobile BI

To determine the URL (xxx.xxx.xxx.xxx) to enter when configuring a Mobile BI client, refer to the URL that is assigned to your cloud-based Visual Analytics environment:

1. Launch SAS App Central (cloud.sas.com).
2. From SAS App Central, click on the **SAS vApp Data Manager** icon.
3. From SAS vApp Data Manager, copy the URL value that is displayed in the browser ([Figure 20](#)).

**Figure 20: Copy URL**

## Training

You can access an extensive collection of more than 100 free SAS Visual Analytics *How Do I?* videos from the [online SAS Visual Analytics Video Library](#). These videos deliver just-in-time training on more than 100 common tasks. Each video provides between three and ten minutes of instruction, which help you experience the benefits of Visual Analytics and better understand the software's capabilities.

To access the library, visit the [course page](#) and click **Start**.

For individuals who need more in-depth training, SAS Education offers traditional instructor-led learning to support Visual Analytics, including:

- A one-day [Getting Started course](#), offered online via SAS' Live Web classroom.
- A four-day comprehensive [Fast-track course](#).

For more information you may contact our training department at [training@sas.com](mailto:training@sas.com).

## Help

For help, contact [SAS Technical Support](#) using the information on the linked page. Customers in Europe should select the **Contact your local SAS Office** link. Customers in North America can call 919-677-8008.

## Express Services

As part of your agreement, SAS will assist you in the preparation and loading of up to three (3) data sets (up to 5 GB each) as part of the base package. Contact [SAS Technical Support](#) for details.