SAS® Cloud: Account Administrator's Guide

SAS® Documentation
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SAS® Cloud: Account Administrator's Guide

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Accessibility

For information about the accessibility of this product, see Accessibility Features of SAS App Central.

Chapter 1

Overview of SAS App Central and Administration Tasks

Introducing the SAS Cloud

The SAS Cloud is a private cloud hosted by SAS Solutions OnDemand that provides ready access to and easy management of SAS software. Customers can use applications in the SAS Cloud without investing the time and resources that are required to support their own SAS installation.

Within the SAS Cloud, your organization is licensed to use one or more dedicated SAS environments. A SAS environment is a complete, self-contained, fully functioning deployment of SAS applications. Environments in the SAS Cloud are deployed using virtualization technology, which makes the environments easy to create and manage. A typical environment includes the following:

- data storage that can be populated with your organization's data
- virtualized software, servers, and services that perform various types of processing
- virtualized client applications through which users can access SAS functionality
- administrative interfaces for uploading data, organizing SAS content, and managing permissions

Getting Started with Administration Tasks

As an account administrator for your organization, you are responsible for several quick and easy administrative tasks. Here is a suggested sequence of tasks to get you started:

1. Sign on- to the SAS Cloud by following the instructions in your invitation email.
2. Explore SAS App Central, which appears in your browser after you sign on.

For details, see "Your First Look at SAS App Central" on page 2 and "Navigating the SAS Cloud and SAS App Central" on page 4.

3. Try out your SAS applications. Access them on the Home page of SAS App Central, under the **My Applications** section. The applications that you can access depend on which roles you are assigned to.
4. Add users to your SAS Cloud account. You specify users' email addresses, assign users to administrative roles, and specify the SAS environments that each user is allowed to access. For details, see Chapter 3, "Managing Users," on page 9.

   When you first add users to your account, they have the status of Onboarding. Each new user receives an invitation email with logon instructions. The user's status changes to Active after that user logs on for the first time.
5. Upload data to the SAS Cloud. The data is stored in a secured location that is associated with a particular SAS environment within your SAS Cloud account.
6. Administer your SAS applications. You might need to set up user groups, assign application roles to users, create folders to manage SAS content, and assign user permissions to content.

   Additional administration tasks might be required, depending on which SAS applications you have licensed. For details, see the relevant SAS documentation.

Ongoing Administration Tasks

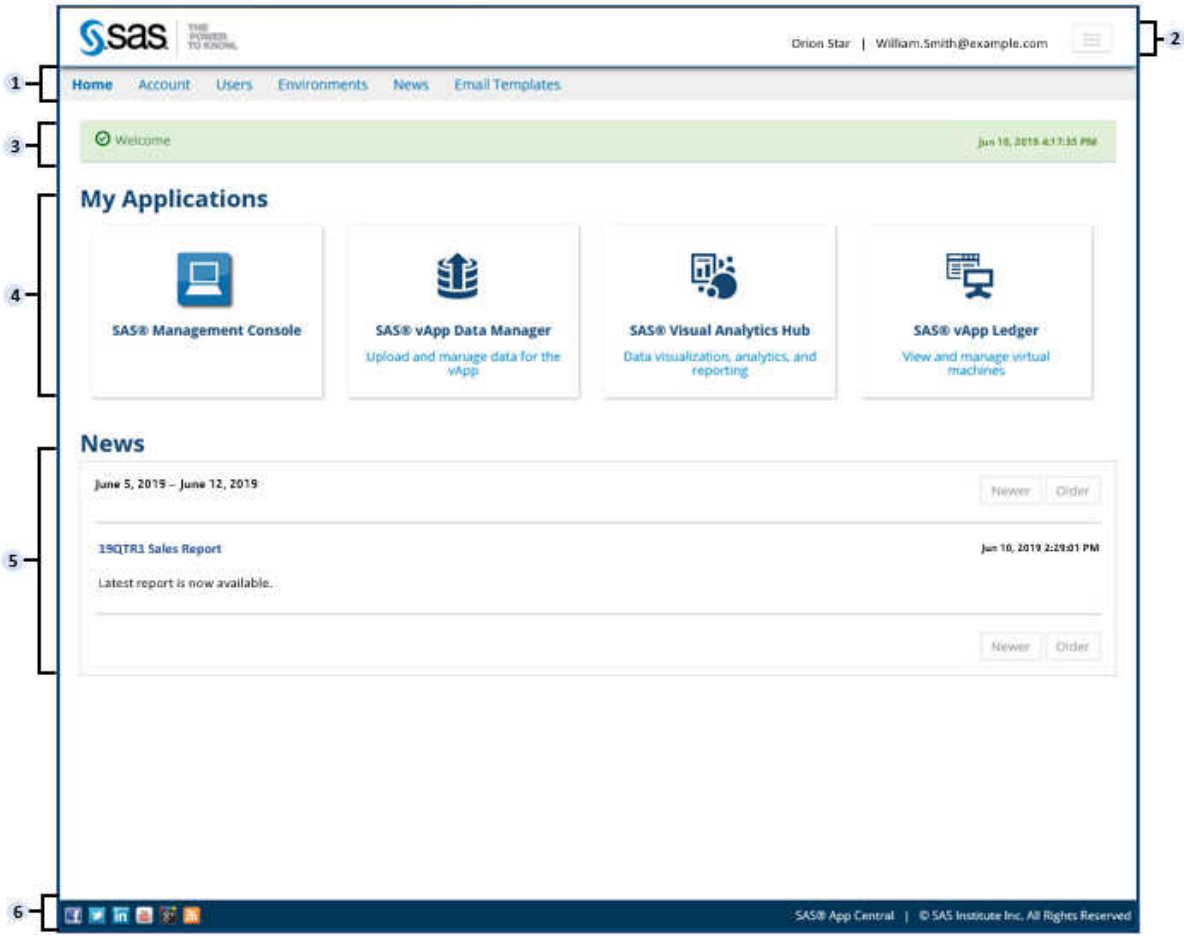
After you have added users and assigned them to environments, you are responsible for the following ongoing administration tasks:

- Monitor user activity and application usage. See Chapter 2, "Viewing Account Information," on page 5.
- Add and remove users as needed, and assign users to roles and to new SAS environments. See Chapter 3, "Managing Users," on page 9.
- Communicate with users through emails and news items. See the following topics:
  - Chapter 5, "Managing News," on page 21
  - "Email Users" on page 12
  - Chapter 6, "Managing Email Templates," on page 23
- Report issues to SAS Technical Support for resolution as needed. For details, access the **SAS Support** link on the SAS App Central Home page.

Other ongoing administration tasks might be required, depending on which SAS applications you have licensed. For details, see the relevant SAS documentation.

Your First Look at SAS App Central

After you log on to the SAS Cloud, the SAS App Central application appears in your browser, as shown in the following example:



The Home page is displayed to all users, regardless of their assigned roles. Here are features of the Home page:

1 Tabs enable you to access different areas of functionality within SAS App Central. Account administrators can see the **Home**, **Account**, **Users**, **Environments**, **News**, and **Email Templates** tabs.

   Other users can see only the **Home** tab.

2 The title banner includes the account name to the left of the user name, and the icon that opens the main menu.

3 The application banner displays a heading and a message from your SAS provider administrator. Click the heading to display the message.

4 The **My Applications** section contains icons for each accessible SAS application, based on your assigned roles. If you can access multiple environments, then a separate application group appears for each environment.

   To open an application, click its icon. If the application is web-based, it opens in a new tab in your browser. Desktop applications are downloaded to your local machine.

5 **News** items are created by your organization's account administrators specifically for your users. Use the **News** tab to create, edit, and delete news items. News can be published for any purpose. You can announce new applications, provide usage tips, or publish news for your organization.

6 The application footer includes several links to help you connect with other SAS users.

Navigating the SAS Cloud and SAS App Central

Here are some general instructions for navigating the SAS Cloud and SAS App Central:

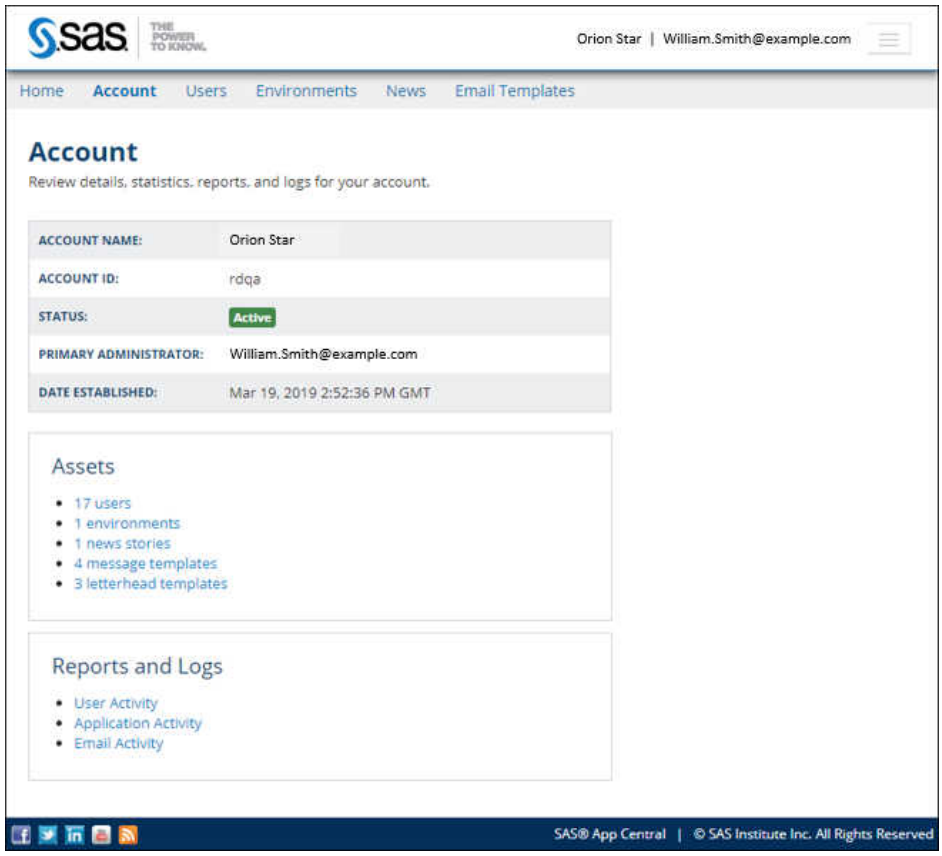
- When you log on to the SAS Cloud, if you are a member of more than one account, select an account from the My Account window. To access another account, sign off and sign on.
- To refresh a page with the most up-to-date information, press the F5 key.
- To start an application, go to the **My Applications** section of the SAS App Central Home page, and click the application's icon. If the application is web-based, it opens in a new tab in your browser. Desktop applications are downloaded to your local machine.
- To log off from a web application, close the browser window in which the application appears. To log off from a desktop application, select **File** ⇨ **Exit** in the application's menu bar.
- To use the **Users**, **Environment**, **News**, and **Email Templates** tabs, do the following:
  - To sort a list of items based on the values in a column, click the appropriate column heading. You can sort on only one column at a time. Sorting is not enabled for all columns.
  - To display additional items, click a page number or click **Next**.
  - To view or edit details about an item, click the item's name. To return to the list from a detail page, click **Back to *list-name*** in the upper right corner of the page.
  - To delete one or more items, select the check box to the left of each item that you want to delete. Then click  .
- To log off from SAS App Central, click the **Menu** icon ( ) in the upper right corner, and then select **Sign Out**.

Chapter 2

Viewing Account Information

Overview of Account Information

A variety of statistics, reports, and logs are available that enable you to monitor usage of your SAS Cloud account and of the applications in your SAS environments. Information is available in both summary and detailed formats. To access this information, open the **Account** tab in SAS App Central:



The top of the tab displays basic information about your account. This information is maintained by SAS.

Assets

The **Assets** section on the **Account** tab displays the following information about your organization's account:

- the current number of users. Click this item to go to the **Users** tab.
- the current number of pending or active environments. Click this item to go to the **Environments** tab.
- the number of news stories that are displayed on the Home page of SAS App Central. Click this item to go to the **News** tab.
- the number of email message templates and email letterhead templates that are available in SAS App Central. Click either of these items to go to the **Email Templates** tab.

Reports and Logs

Using and Viewing Reports and Logs

Use the **Reports and Logs** section of the **Account** tab to obtain summary and detail information about activity in your SAS Cloud account. To view a report or log, click its name.

Here are some general instructions for viewing reports and logs:

- To sort the data based on the values in a column, click the appropriate column heading. You can sort on only one column at a time. Sorting is not enabled for all columns.
- To display additional pages, click a page number or click **Next** at the bottom of the report.
- To download the report information to a comma-separated values (CSV) file on your computer, click .
- To return to the Account page, click **Back to Account** in the upper right corner of the page.

The reports are described in the following topics.

User Activity Report

The User Activity report lists the actions of the users in your SAS Cloud account. Actions are listed by date, time, and email address. The actions that appear in the report include:

- sign on to applications (successful and unsuccessful)
- sign off from applications
- create or update environments
- add or delete users
- create or update email templates

Application Activity Report

The Application Activity report provides details about the usage of the applications in your SAS environments. The report records the date, time, application, and the user's email address A row is added to the report each time a user attempts to access an application from SAS App Central.

Email Activity Report

The Email Activity report provides details about emails that have been sent from SAS App Central. These emails include ad hoc messages as well as invitation messages.

For each email, the log shows the date and time, the sender's email address, the time, the recipients, and the subject.

Chapter 3

Managing Users

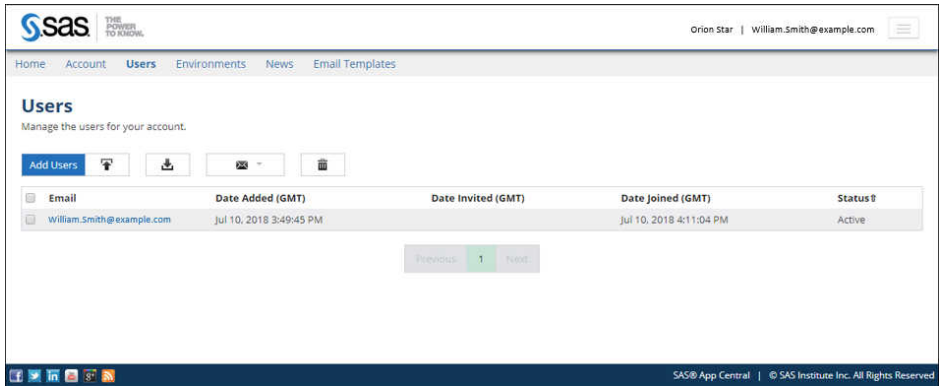
About Managing Users

As an account administrator, you are responsible for managing users' access to your SAS Cloud account. The user management tasks include the following:

- add users to your organization's account
- send invitation emails to new users
- send other emails to users
- download a comma-separated values (CSV) file of user information
- assign users to roles
- give users access to SAS environments

- suspend and reactivate users
- delete users from your account

You perform all of these tasks on the **Users** tab in SAS App Central:



When you first add users to your account, their status is Onboarding. Each new user receives an invitation email with logon instructions. The user's status changes to Active after the user logs on for the first time.

Adding Users

You can enter user information manually, or you can upload a file containing a list of users.

Add Users Manually

To add users manually:

1. On the **Users** tab, click **Add Users**.
2. In the Add Users window, enter email addresses for up to five users.
3. Select the **Send invitations** check box if you want invitation emails to be sent immediately to these users.

   TIP If you choose not to send the emails now, you can send them later. See "Invite New Users" on page 11.

4. Click **Add**.
5. Repeat steps 2 through 4 until you have added all of your users.
6. If you want to designate any of the new users as account administrators, data administrators, or SAS administrators, see "Managing Users' SAS App Central Roles" on page 13.

Upload User Data

To upload a CSV file that contains the users' email addresses:

1. Create a file that contains an email address for each user. If the file contains data other than email addresses, uses commas to separate the data elements. Here is an example:

```
Bain,John,John.Bain@example.com
Jones,Mary,Mary.Jones@example.com
Smith,William,William.Smith@example.com
Wilson,Mary,Mary.Wilson@example.com
```

2. On the **Users** tab, click .
3. In the Upload Users window, do the following:
   a. Click the displayed button (for example, **Browse** or **Choose File**) to navigate to the file that you created in step 1. Then click **Open**.
   b. Enter the column number that contains the email addresses. For example, in the file that is shown in step 1, the email addresses are in column 3.
   c. If the first row of the file contains header information and is to be ignored, select the **First row is a header** check box.
   d. Select the **Send invitations** check box if you want invitation emails to be sent immediately to the new users.

      TIP If you choose not to send the emails now, you can send them later. See "Invite New Users" on page 11.

   e. Click **Upload and Add**.
4. If you want to designate any of the new users as account administrators, data administrators, or SAS administrators, see "Managing Users' SAS App Central Roles" on page 13.

Invite New Users

When you add or upload user data to your account, you can select the **Send invitations** check box to immediately send invitation emails to the new users. The email welcomes the user to the SAS Cloud and provides instructions for logging on. The email uses the standard invitation template (TenantUser_EmailInvite.st) for your account's preferred locale.

You can choose to send invitations separately, after users have been added.

1. On the **Users** tab, click .
2. Select **Send Invitations**. The Send Invitations window appears.
3. (Optional) Select **Omit users who were previously invited**. By default, invitations are sent to all users with a status of Onboarding. This status means that the user has been added but has not yet joined (logged on). Some onboarding users might have already received invitations. Select this check box if you do not want the previously invited users to receive another invitation.
4. Click **Send**.

TIP On the **Email Templates** tab, you can preview the invitation emails and customize them for your account. See Chapter 6, "Managing Email Templates," on page 23.

Email Users

Besides invitation emails, you can send other emails to users from SAS App Central as needed. For example, you might want to email users when a new SAS application becomes available.

TIP To simplify emailing, you can create your own locale-specific email templates with predefined letterheads, formatting, variables, and text. See Chapter 6, "Managing Email Templates," on page 23.

To send an email (either free-form or based on a template):

1. On the **Users** tab, click and select **Send Email**.
2. If you want to use an email template, complete these steps:
   a. On the Send Email page, select a locale for the message.
   b. In the **Template** drop-down list, select the template that you want to use. The list includes all of the available templates for the selected locale.

      The template content is displayed on the subject line and in the message box.
3. To specify the recipients, click **Select** next to the **To** field.

   In the Email Recipients window, use the check boxes to specify which users are to receive the email. To send the email to all users, select the check box in the first row.

   Click **OK**.
4. Enter or edit the subject line.
5. Enter or edit the message text in both HTML and text formats, using the **Message type** radio buttons to toggle between the two formats. You can include the following variables in the message:

Variable Name	Description
$USER_NAME$	The email address of the user receiving the email.
$CLOUD_URL$	The URL that your organization uses to access the SAS Cloud.
$ACCOUNT_NAME$	The name of your SAS Cloud account.

6. Click **Send**.

Download User Data

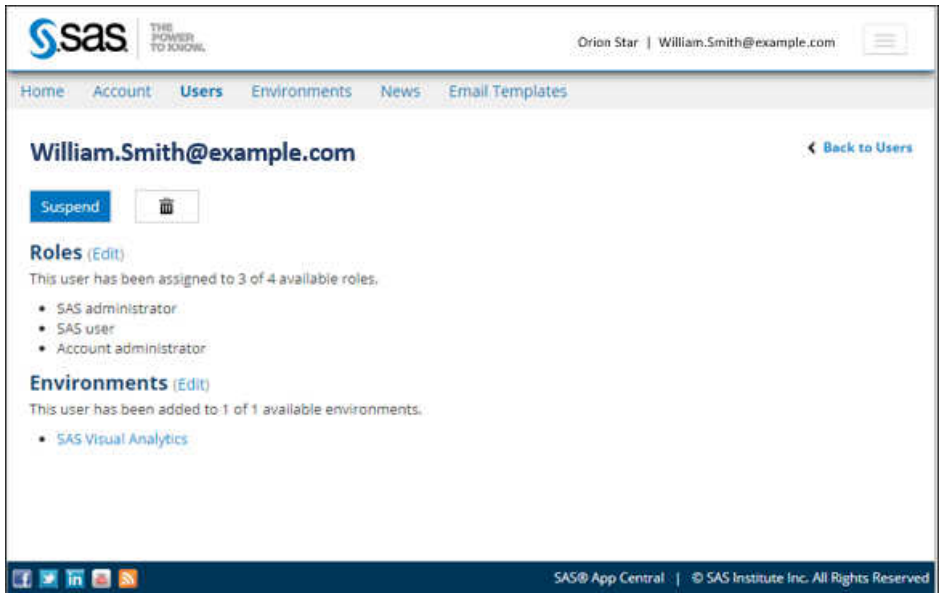
Click on the **Users** tab to download the information that is listed on the **Users** tab to a CSV file on your computer.

TIP You can also download reports such as user activity information. See "Using and Viewing Reports and Logs" on page 7.

View User Information

To view or update information for a particular user, click the user's email address in the list of users on the **Users** tab.

The user's information page appears:



You can perform the following tasks on this page:

- assign the user to one or more roles
- manage the user's access to SAS environments
- suspend or reactivate the user
- delete the user

Managing Users' SAS App Central Roles

About SAS App Central Roles

Roles determine what users can do in SAS App Central and in your organization's SAS environments.

The following table identifies which tasks each role can perform in SAS App Central. It also lists the groups that the users in these roles are automatically added to in their assigned environments. Based on their group memberships, users are assigned to specific application-level roles in the environment.

SAS App Central Role	Allowed Tasks in SAS App Central	Automatic Group Memberships in SAS Environments
SAS user	View the Home page From the Home page, access non-administrative SAS applications	SASUSERS group As applicable, other user groups for the applications in the environment
SAS administrator	View the Home page From the Home page, access applications in the SAS environment that are used for administration (such as SAS Management Console and SAS vApp Ledger)	SAS Administrators group
data administrator	View the Home page From the Home page, access SAS vApp Data Manager to upload, download, and manage your organization's data From the Home page, access other applications in the SAS environment that are used for data management	As applicable, data administration groups related to the applications in the environment
account administrator	View the Home page View account information Manage users and send emails to users Assign users to environments and roles Manage news Manage email templates	None

When you change a user's role assignments in SAS App Central, the user's corresponding group memberships are updated automatically in the environment.

Assign Users to SAS App Central Roles

By default, all users are assigned to the SAS user role in SAS App Central. To assign a user to an additional SAS App Central role (or to remove a user from a role):

1. On the **Users** tab, click the user's email address.
2. In the **Roles** section of the user's information page, click **Edit**.
3. In the Edit Roles window, select or clear the appropriate check boxes to specify roles for the user. To assign the user to all roles, select the check box in the first row.
4. Click **OK**.

Note: Users must be given access to one or more SAS environments before they can perform all of the tasks associated with their roles.

Aligning SAS App Central Roles with Group Memberships in the SAS Environment

Occasionally, you might need to align a user's group memberships in SAS metadata so that they correspond to the user's role assignments in SAS App Central. For example, assume that you use SAS Management Console to add a user to a group. If that group

corresponds to a SAS App Central role. and if that role is not assigned to that user, then that user's memberships are out of alignment.

When memberships are out of alignment, an **Align Roles** button appears on the user's information page. Click the button, and the appropriate adjustments to SAS metadata are made automatically.

If the **Align Roles** button continues to appear after alignment, contact SAS Technical Support for assistance.

TIP Use SAS App Central rather than SAS Management Console to manage membership in all groups that correspond to SAS App Central roles. The SAS Administrators group is one such role. If you use SAS Management Console to manage memberships in these groups, your changes will be overridden when you click **Align Roles**.

Managing Users' Access to SAS Environments

About Assigning Users to Environments

You can assign users to environments on either the **Users** tab or the **Environments** tab. After you assign user to an environment, the appropriate applications are added to the **My Applications** section of the user's home page in SAS App Central. The applications that appear depend on users' roles. For example:

- Only data administrators have access to SAS vApp Data Manager.
- Only SAS administrators have access to administrative applications such as SAS Management Console and SAS vApp Ledger.

If any of the applications require a metadata identity, the user's ID is automatically added to SAS metadata. Within SAS metadata, users are automatically added to the appropriate groups and are given the appropriate permissions based on their role assignments in SAS App Central.

Note: The number of users that you can add to an environment depends on the service level for which your organization is licensed.

Assign a User to One or More SAS Environments

To give a user access to one or more SAS environments:

1. On the **Users** tab, click the user's email address.
2. In the **Environments** section of the user's information page, click **Edit**.
3. In the Edit Environments window, select or clear the appropriate check boxes to specify environments for the user. To assign the user to all environments, select the check box in the first row. Then click **OK**.

Assign Multiple Users to an Environment

Instead of assigning users to environments individually, you can use the **Environments** tab to assign multiple users to a particular environment.

To assign multiple users:

1. On the **Environments** tab, click the environment name.
2. In the **Users** section of the environment detail page, click **Edit**.
3. In the Edit Users window, select or clear the appropriate check boxes to specify which users can access the environment. (To give access to all users, select the check box in the first row.) Then click **OK**.

   When you remove access for a user, the user's SAS metadata identity is deleted from the environment if applicable. The user's personal folder in SAS metadata is retained so that administrators can access it. If the user is re-added while the previous folder still exists, a new personal folder is created with `(1)` appended to the user name.

Suspend or Activate a User

To suspend a user's access to your account:

1. On the **Users** tab, click the user's email address.
2. Click **Suspend** at the top of the user's information page.

   Note: If the user has a metadata identity, the identity remains in metadata when the user is suspended.

To reactivate the user, click **Activate**.

Delete Users

To delete a user from your account:

1. On the **Users** tab, click the check box to the left of the user's email address.
2. Click .
3. In the Confirm window, click **Yes**.

   The user is deleted from SAS App Central and is also deleted from SAS metadata if the user has a metadata identity. The user's personal folder in SAS metadata is retained so that administrators can access it. If the user is re-added while the previous folder still exists, a new personal folder is created with `(1)` appended to the user name.

TIP You can also delete a user by clicking on the user's information page.

Chapter 4

Managing Environments

About Environments

A SAS environment is a complete, self-contained, fully functioning deployment of SAS applications. Environments in the SAS Cloud are deployed by using virtualization technology. This technology makes environments easy to create and manage.

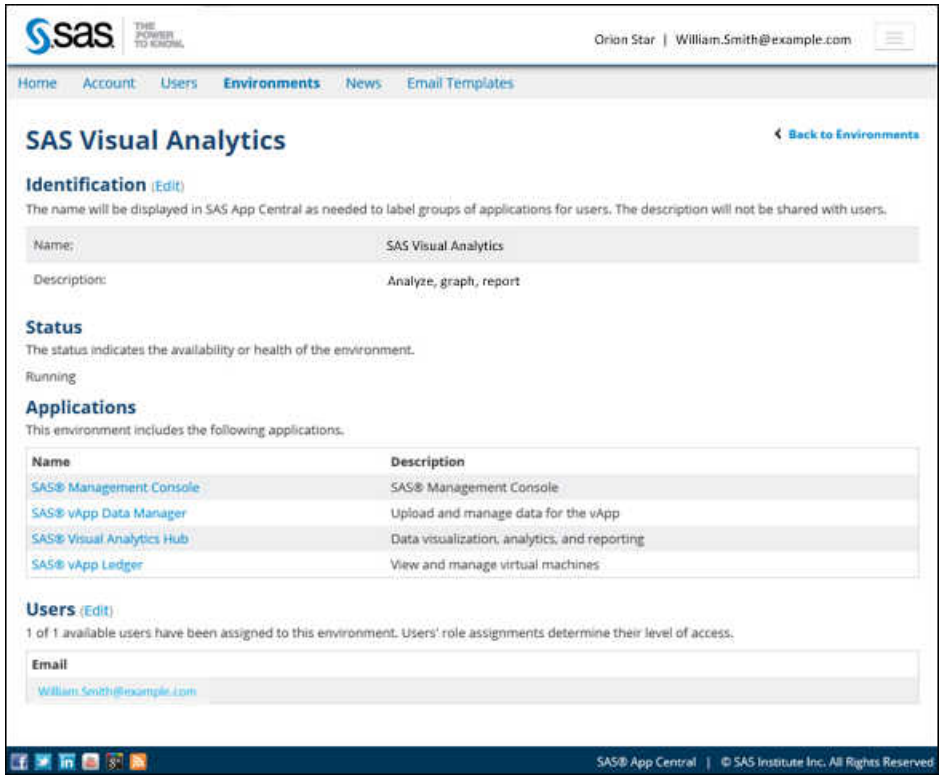
A typical environment includes the following:

- data storage that can be populated with your organization's data
- virtualized software, servers, and services that perform various types of processing
- virtualized client applications through which users can access SAS functionality
- the following administrative interfaces:
  - SAS Management Console (for tasks such as assigning application roles, granting permissions, and organizing content)
  - SAS vApp Ledger, which provides a virtual machine-level view of applications that are packaged as vApps (for example, SAS Visual Analytics)
  - SAS vApp Data Manager, which enables you to upload data to a secured location for applications that are packaged as vApps (for example, SAS Visual Analytics)

SAS provides a ready-to-use environment for each SAS product that you have licensed. To manage the environment, you need to specify which of your organization's users are authorized to access the environment. You can also edit the environment's name and add a description.

View Environment Information

To see a list of your organization's environments, click the **Environments** tab in SAS App Central. To view detailed information about an environment, click the environment name. A page similar to the following is displayed:



This page displays current status of the environment, the SAS applications that the environment includes, and the users who can access the environment.

Edit Environment Identification Information

1. Click **Edit** in the **Identification** section.
2. In the Edit Environment Identification window, you can do the following:
   - Edit the environment name. The name must be unique. If your account has more than one environment, the name is used in the **Applications** section of the **Home** tab to group applications.
   - Enter a description. The description is not shared with users.
3. Click **OK**.

Assign Users to an Environment

1. In the **Users** section on the Environment page, click **Edit** to edit the list of users who have access to the environment.
2. In the Edit Users dialog box, use the check boxes to specify which users can access the environment. (To give access to all users, select the check box in the first row.) Then click **OK**.

For more information about users' access to environments, see "Managing Users' Access to SAS Environments" on page 15.

Chapter 5

Managing News

About News Stories

News stories appear on the Home page of SAS App Central for all of the users in your organization's account. As account administrator, you can create news stories for any purpose. For example, you can use news to announce newly licensed SAS products, to provide tips for using the SAS Cloud, or to publish news that is unrelated to SAS.

Create a News Story

To create a news story:

1. On the **News** tab in SAS App Central, click **Create News Story**.
2. On the Create News Story page, enter a title for the story. Then enter the story in the **Body** section. You can use HTML tags for basic text formatting.
3. Click **Preview** to verify that the story appears as expected.
4. Click **Create**.

   The story appears on the home page for all of your account's users.

Edit a News Story

To edit a news story, click its title in the list of stories on the **News** tab. On the Update News Story page, make your changes and click **Save**.

Delete a News Story

News stories are displayed indefinitely until you delete them. To delete a news story:

1. On the **News** tab, select the check box to the left of the story's title.
2. Click .
3. In the Confirm window, click **Yes**.

Chapter 6

Managing Email Templates

About Email Templates

Email templates contain predefined formatting, merge variables, and text. These templates simplify the process of creating emails to send to users from SAS App Central. Templates are locale-specific. You can create two types of templates:

message templates
: contain formatting, merge variables, and text for the message body. SAS App Central provides one standard message template called TenantUser_EmailInvite.st, which is used to invite new users to join the SAS Cloud.

letterhead templates
: contain formatting, merge variables, and text for the message header and footer. To use a letterhead template, you associate it with a message template. SAS App Central provides one standard letterhead template called Default_Letterhead.st, which is associated with the TenantUser_EmailInvite.st message template.

To manage templates, you can do the following in SAS App Central:

- create new templates for emails that you plan to send out frequently. For example, you can convert the standard templates to a different locale or create a new template for announcing the creation of a new SAS environment for your account.
- edit and preview existing templates. For example, you can customize the invitation message template by adding text that is specific to your organization or add your organization's name to the default letterhead template.

Create an Email Template

To create a new email template:

1. On the **Email Templates** tab, select **Message Templates** or **Letterhead Templates**, depending on which type of template you want to create.
2. You can use an existing template as the starting point for the new template. Simply select the locale of the template that you want to copy from the **Locale** list.
3. Click **Create Message Template** or **Create Letterhead Template**.
4. In the Create Message Template or Create Letterhead Template window, select an existing template from the **Template to copy** drop-down list.

   TIP The list includes only templates for the currently selected locale.

   TIP If you want to start with a blank template, select **None**.
5. Enter a name for the new template. The suffix .st is added if you do not include it.

   TIP If you specify a different locale, you can retain the current template name. If you create an invitation template for a different locale, be sure to retain the name TenantUser_EmailInvite.st.

   Note: Do not enter HTML tags in the **Name** or **Description** fields.
6. Select a locale for the new template.
7. Enter a description for the new template.
8. Click **Create**.

   The new template appears in the list on the Message Templates or Letterhead Templates page.
9. You can now edit and preview the new template.

Edit and Preview an Email Template

You can edit and preview the standard email templates or a new email template that you created.

1. On the **Email Templates** tab, select **Message Templates** or **Letterhead Templates**.
2. On the Message Templates or Letterhead Templates page, select the locale of the template that you want to edit or preview.
3. In the list of templates, click the name of the template that you want to edit or preview.

   The Edit page for the selected template is displayed.
4. Make the appropriate entries on the Edit page.
   - For message templates, you can do the following:
     - Edit the template description.
     - Edit the subject line. Be sure to use the locale that is associated with the template.
     - Select a letterhead template to be used with this message template. The drop-down box lists letterhead templates that have the same locale as the message template.
     - Edit the template body in both the HTML and text formats. SAS App Central sends emails as multipart messages that contain both formats. Recipients see

one of the two versions, depending on the rendering capabilities and user preference settings in the mail client.

Be sure to use the locale that is associated with the template.

You can include the following merge variables:

Merge Variable	Description
$USER_NAME$	The user name (email address) of the user receiving the email.
$CLOUD_URL$	The URL that your organization uses to access the SAS Cloud.
$ACCOUNT_NAME$	The name of your SAS Cloud account.

- For letterhead templates, you can do the following:
  - Edit the template description.
  - Edit the template body in both the HTML and text formats. Be sure to use the locale that is associated with the template.

    In letterhead templates, you must include the following merge variable:

Merge Variable	Description
$_SAS_TEMPLATE_BODY$	Placeholder for positioning the message template within the letterhead.

You can also use any of the merge variables that are valid in message templates.

5. Click **Preview** to verify that the message or letterhead appears as expected.
6. Click **Save** on the Edit page to save any changes that you made. The version number is automatically updated.

   TIP After saving the template, you might want to test it by sending an email to yourself to see how the variables resolve. See "Email Users" on page 12.
7. To return to the list of message templates or letterhead templates, click **Cancel**.

See Also

- "Invite New Users" on page 11
- "Email Users" on page 12

Delete an Email Template

To delete an email template:

1. On the **Email Templates** tab, select **Message Templates** or **Letterhead Templates**, depending on which type of template you want to delete.
2. On the Message Templates or Letterhead Templates page, select the locale of the template that you want to delete.
3. In the list of message templates or letterhead templates, select the check box to the left of the template's name.
4. Click .
5. In the Delete Selected Items window, click **Delete**.

Note: You cannot delete the standard templates that are provided with SAS App Central.