

# SafeNet Authentication Service Integration Guide

---

VMWare vCloud



THE  
DATA  
PROTECTION  
COMPANY

## Document Information

<b>Document Part Number</b>	007-012627-001, Rev A
<b>Release Date</b>	July 2014

## Trademarks

All intellectual property is protected by copyright. All trademarks and product names used or referred to are the copyright of their respective owners. No part of this document may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical, chemical, photocopy, recording, or otherwise, without the prior written permission of SafeNet, Inc.

## Disclaimer

SafeNet makes no representations or warranties with respect to the contents of this document and specifically disclaims any implied warranties of merchantability or fitness for any particular purpose. Furthermore, SafeNet reserves the right to revise this publication and to make changes from time to time in the content hereof without the obligation upon SafeNet to notify any person or organization of any such revisions or changes.

We have attempted to make these documents complete, accurate, and useful, but we cannot guarantee them to be perfect. When we discover errors or omissions, or they are brought to our attention, we endeavor to correct them in succeeding releases of the product.

SafeNet invites constructive comments on the contents of this document. These comments, together with your personal and/or company details, should be sent to the address or email below.

Contact Method	Contact Information
<b>Mail</b>	SafeNet, Inc. 4690 Millennium Drive Belcamp, Maryland 21017, USA
<b>Email</b>	<a href="mailto:TechPubs@safenet-inc.com">TechPubs@safenet-inc.com</a>

# Contents

Introduction.....	4
Third-Party Software Acknowledgement .....	4
Overview .....	4
Single Sign-On Data Flow .....	4
Identity Provider Configuration .....	5
Configuring VMware vCloud to Use SAS as an Identity Provider .....	5
Importing vCloud SAML Users .....	6
Configuring SAS to Use SAML-based User Federation .....	8
Enabling SAML User Authentication.....	8
Associating SAS Users with the SAML Service Provider .....	9
Running the Solution .....	10
Support Contacts.....	11

# Introduction

---

## Third-Party Software Acknowledgement

This document is intended to help users of SafeNet products when working with third-party software, such as VMware vCloud. Material from third-party software is being used solely for the purpose of making instructions clear. Screen images and content obtained from third-party software will be acknowledged as such.

## Overview

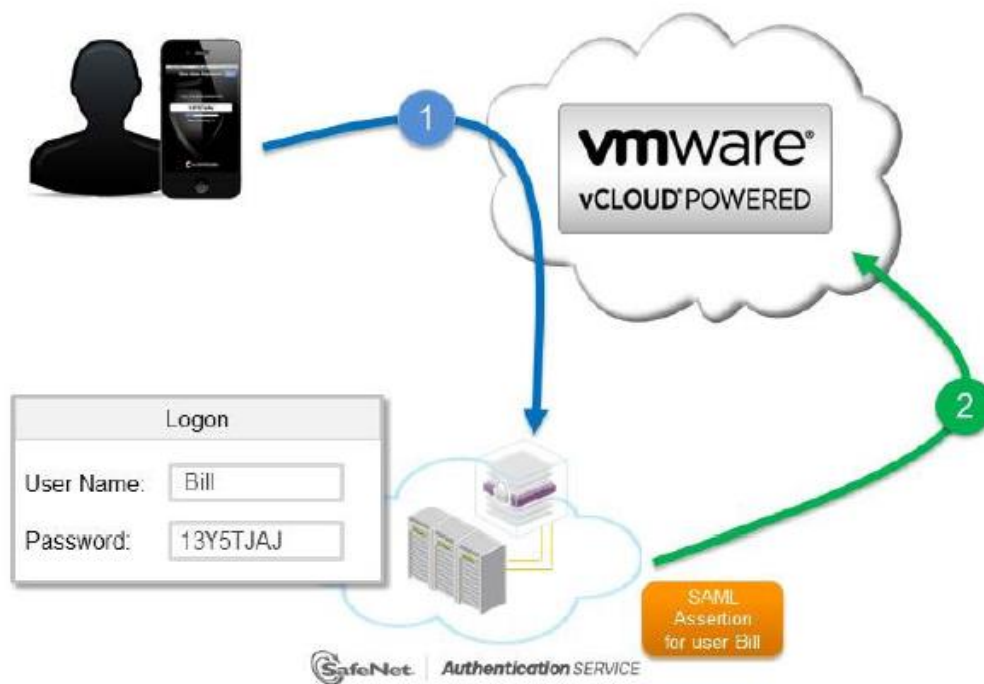
This document provides guidance for setting up and managing SafeNet Authentication Service (SAS) as an identity provider for VMware vCloud.

The document assumes that VMware vCloud is already configured and working with local users and static passwords prior to implementing SafeNet Authentication Service strong authentication.

## Single Sign-On Data Flow

---

### SafeNet Authentication Service Single Sign-On with VMware vCloud



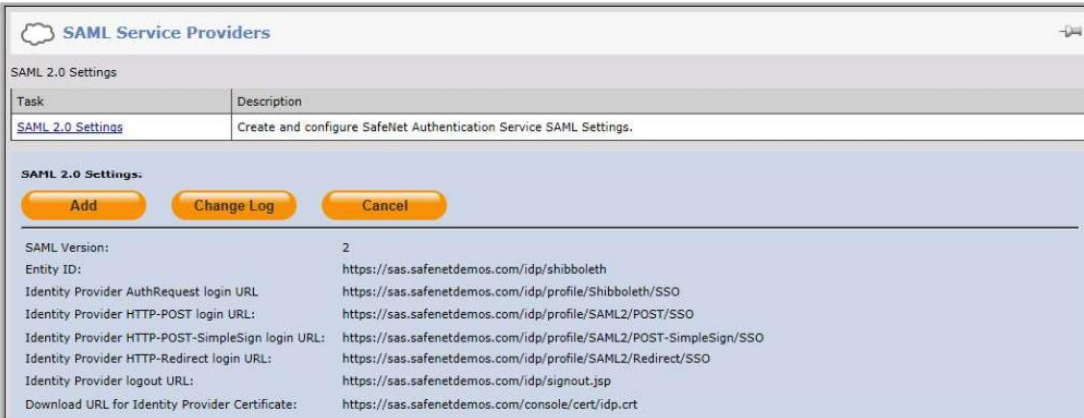
1. Bill, a user, wants to log in to VMware vCloud. Bill leverages the single sign-on capabilities embedded in the organization's SafeNet Authentication Service (SAS) solution. SAS collects Bill's credentials and evaluates Bill's credentials.
2. SAS returns a response to VMware vCloud to accept or to reject Bill's authentication.

# Identity Provider Configuration

The SAS Administrator Console settings are used to establish SAS as the identity provider for the VMware vCloud.

To configure SAS as an identity provider:

1. In the SAS Administrator Console, click **Virtual Server** and then click the **COMMS** tab.
2. Click **SAML Service Providers > SAML 2.0 Settings**. The **SAML 2.0 Settings** are displayed, as shown in the example below.

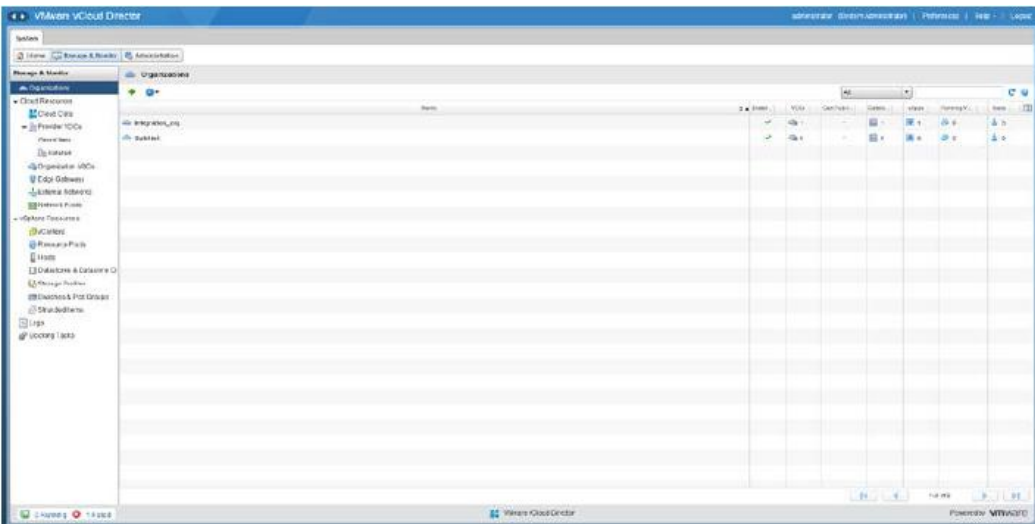


3. Download the SAS metadata file. To do so, copy the link in the **Entity ID** field and paste it into the browser's **Address bar**.

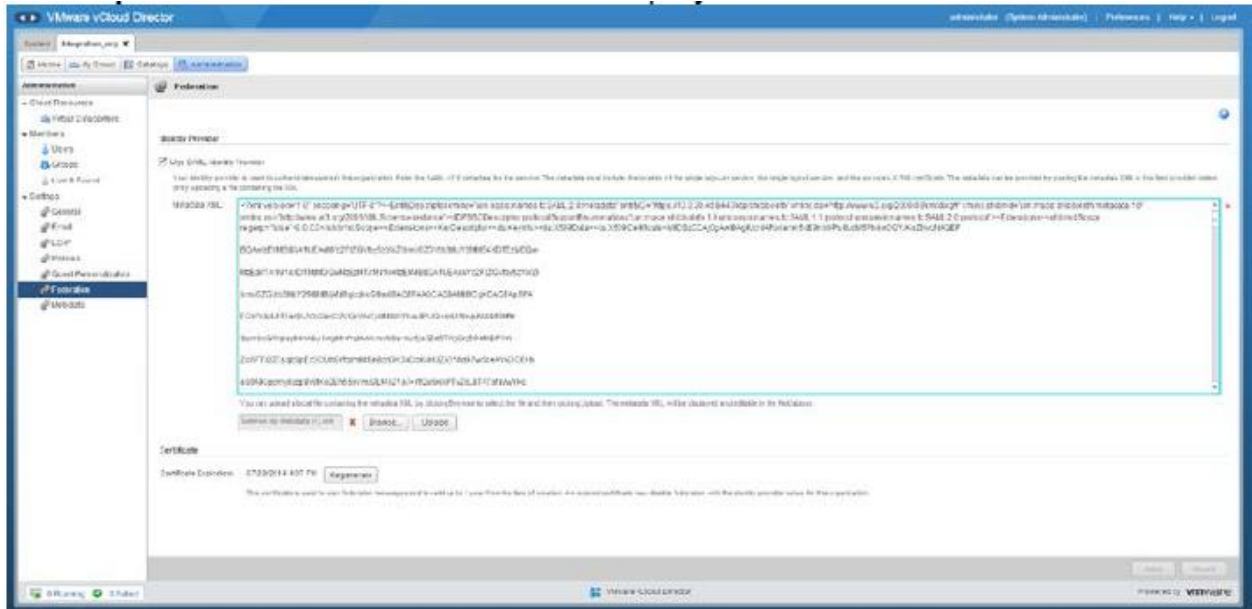
# Configuring VMware vCloud to Use SAS as an Identity Provider

To configure VMware vCloud to use SAS as an identity provider:

1. Log in to VMware vCloud.
2. On the toolbar, click **Manage & Monitor**.
3. On the **Organizations** window, under **Organizations**, click the organization for which to implement SSO authentication.



- On the toolbar of the new tab, select **Administration**.
- On the **Administration** window, in the left pane, click **Federation**.
- On the **Federation** window, click **Use SAML Identity Provider**.
- Click the **Browse** button and select the SAS metadata that was downloaded in “Identity Provider Configuration” on page 5.
- Click **Upload**. The selected metadata is displayed and editable in the **Metadata XML** field.



- Click **Apply**. SAS is now configured as an identity provider for VMware vCloud.

## Importing vCloud SAML Users

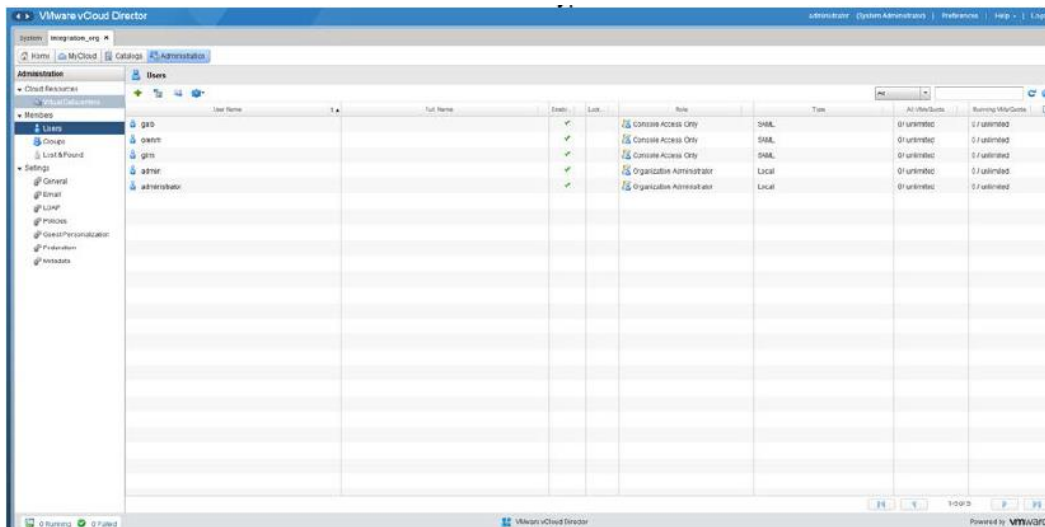
Users in vCloud should be configured as local users/LDAP users/SAML users. In order to authenticate a user using the SAML authentication, the user needs to be imported as a SAML user.

- Log in to VMware vCloud.
- On the toolbar, click **Manage & Monitor**.
- On the **Organizations** window, under **Organizations**, click the organization for which to implement SSO authentication.
- On the toolbar of the tab, select **Administration**.
- On the **Administration** window, in the left pane, click **Users**.
- On the **Users** window, in the right pane, click the **Import Users** icon on the toolbar.

7. On the **Import Users** window, select **SAML** from the **Source** list.



8. In the text box, on each line, enter each user ID from SAS that should authenticate using SAML authentication.
9. In the **Assign role** list, select the desired role for the users.
10. Click **OK**. The users are added to the vCloud **Users** list.



To add LDAP groups to authenticate using SAML, the vCloud API should be configured manually with the required settings. Refer to the following vCloud topic:

[http://pubs.vmware.com/vcd-51/index.jsp?topic=%2Fcom.vmware.vcloud.api.doc\\_51%2FGUID-7D18054F-1DEE-4BAB-880E-6B5503A28A83.html](http://pubs.vmware.com/vcd-51/index.jsp?topic=%2Fcom.vmware.vcloud.api.doc_51%2FGUID-7D18054F-1DEE-4BAB-880E-6B5503A28A83.html)

Additional reference: [vCloud API Programming Guide](#)

# Configuring SAS to Use SAML-based User Federation

Before configuring a VMware vCloud instance as a SAML service provider for SAS, ensure that the organization's user accounts have been created on the SAS virtual server. This can be done using one of the following methods:

- Automatically, by synchronizing with your Active Directory/LDAP server using the SAS LDAP Synchronization Agent.
- Manually, using the **Create User** shortcut.
- Manually, importing one or more user records using a flat file.

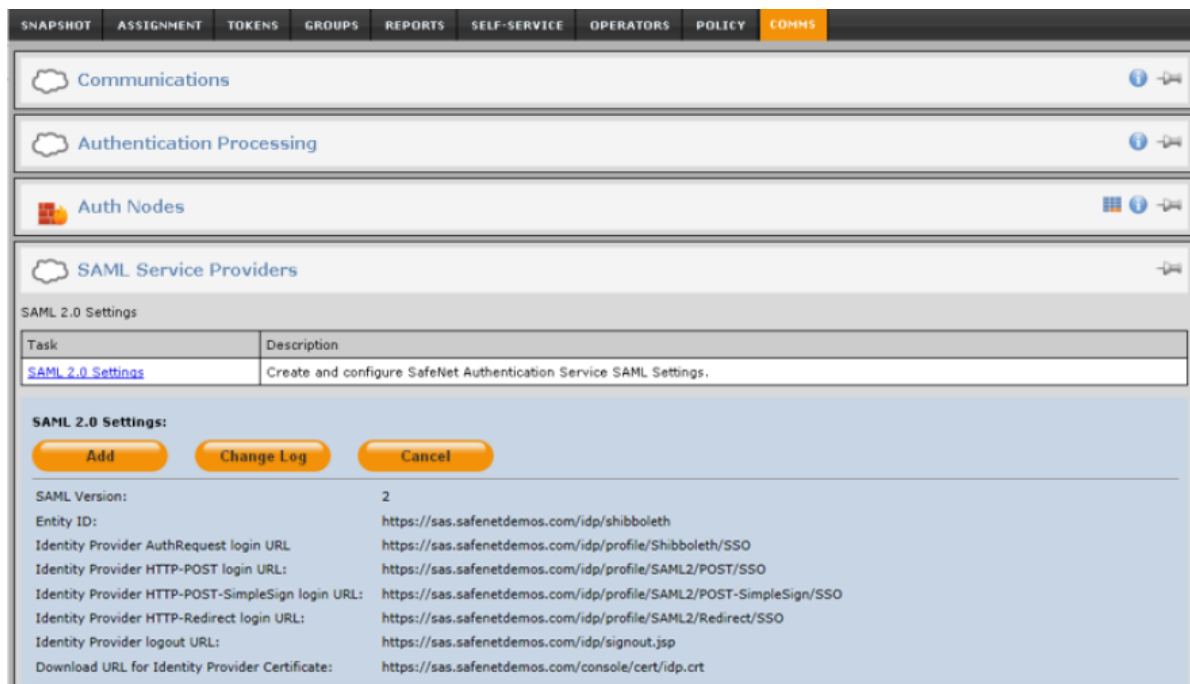
For further information on adding users to SAS, refer to SafeNet Authentication Service documentation at the following location: <http://www2.safenet-inc.com/sas/implementation-guides.html>

## Enabling SAML User Authentication

An organization's user accounts must be configured to authenticate to VMware vCloud using SafeNet Authentication Service.

**To enable SAML user authentication:**

1. On the SafeNet Authentication Service Administrator Console, click **Virtual Server** and then click the **COMMS** tab.
2. Click **SAML Service Providers** and then click **SAML 2.0 Settings**. The **SAML 2.0 Settings** are displayed, as shown in the example below.





3. Click **Add**. The **Add SAML 2.0 Settings** window is displayed.

4. In the **Friendly Name** field, enter a name for the VMware vCloud service provider (for example, **vCloud**).
5. In the **SAML 2.0 Metadata** field, click **Upload Existing Metadata File**. To upload an existing metadata file, perform the following steps:
  - a. Open a browser and go to **https://<vCloud\_URL>/cloud/org/<orgname>/saml/metadata/alias/vcd**, where **<orgname>** is the name of the organization sub-domain that was set in the vCloud configuration.
  - b. A metadata file will be downloaded automatically to the default browser download folder. If prompted, you can specify an alternate location.
  - c. On the **Add SAML 2.0 Setting** window, in the **SAML 2.0 Metadata** field, click **Choose File**.
  - d. Navigate to the file that was downloaded and click **Open**.
6. Click **Apply**. VMware vCloud is now added as a SAML service provider.

## Associating SAS Users with the SAML Service Provider

Users in the SAS users store must be associated with the appropriate SAML service provider.

This should be done using a pre-defined SAML provisioning rule that will automatically associate a group (or groups) of users to the specific SAML service provider. For more information on using SAML provisioning rules, see the *SAS Administration Guide*. SAS documentation can be found at the following location:

<http://www2.safenet-inc.com/sas/implementation-guides.html>

Note that this process is common for all SAML service providers. Readers that have already configured a different SAML service provider may need to repeat the process, making sure that the users are associated with multiple SAML service providers.

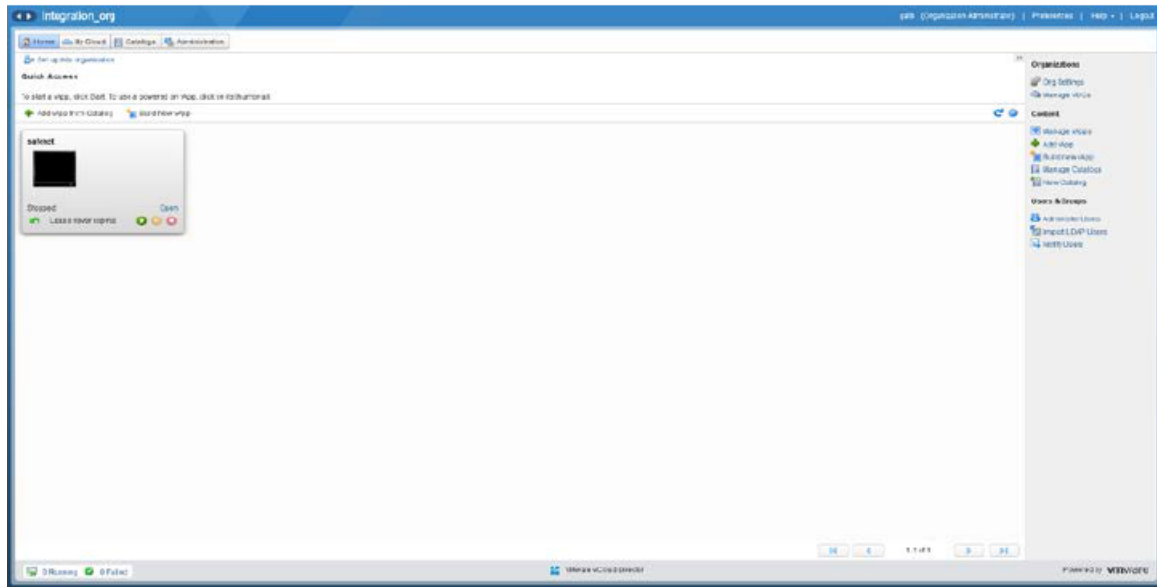
# Running the Solution

After VMware vCloud is configured to use SafeNet Authentication Service as its identity provider, and SafeNet Authentication Service is configured to use VMware vCloud as a SAML service provider, users can log in to VMware vCloud.

The vCloud server and the SAS server time, should be NTP synchronized, as a difference in time of more than two (2) seconds will cause a failure.

## To log in to VMware vCloud:

1. Browse to **https://<vcloud\_URL>/cloud/org/<orgname>/**, where **<orgname>** is the name of the organization sub-domain that was set in the vCloud configuration. You will be redirected to the SafeNet Authentication Service login page.
2. Enter your SafeNet Authentication Service credentials and then click **Login**. You will be logged in to your VMware vCloud account.



## Support Contacts

---

If you encounter a problem while installing, registering, or operating this product, please make sure that you have read the documentation. If you cannot resolve the issue, contact your supplier or SafeNet Customer Support. SafeNet Customer Support operates 24 hours a day, 7 days a week. Your level of access to this service is governed by the support plan arrangements made between SafeNet and your organization. Please consult this support plan for further information about your entitlements, including the hours when phone support is available to you.

Contact Method	Contact Information	
<b>Address</b>	SafeNet, Inc. 4690 Millennium Drive Belcamp, Maryland 21017 USA	
<b>Phone</b>	United States	1-800-545-6608
	International	1-410-931-7520
<b>Technical Support Customer Portal</b>	<a href="https://serviceportal.safenet-inc.com">https://serviceportal.safenet-inc.com</a> Existing customers with a Technical Support Customer Portal account can log in to manage incidents, get the latest software upgrades, and access the SafeNet Knowledge Base.	