Ping Identity™

PingFederate®

Syncplicity Provisioner v2.0.0

User Guide



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PingFederate Syncplicity Provisioner User Guide Version 2.0.0 March 2018

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Note that Ping Identity may not provide support for any sample configurations provided in this document. The variability inherent among security environments prevents full testing and support for all possible platform configurations. If you need special assistance or would like to inquire about implementation or support programs, please contact Ping Identity Global Client Services (http://support.pingidentity.com).



PingFederate - Syncplicity Provisioning: User Guide

The Syncplicity SaaS Provisioner is intended for use by a PingFederate customer who would like to to integrate outbound provisioning with Syncplicity as the service provider.

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 - Scenario 3: Reactivating a De-provisioned User Account
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Error [The role was not specified as "Administrator" or "User"] in Provisioner.log

Error [403] in Provisioner.log

Syncplicity Login Error

User's Name in Syncplicity changes after SSO login

7.0 Logging

1.0 Prerequisites

- 1. This document assumes you already have a PingFederate environment installed and functional (i.e. you already have at least one IDP Adapter configured for user login).
 - o PingFederate 9.x+
 - JDK version 8+
- 2. This document assumes you already determined the Data Store that contains the user accounts which you want to be Provisioned into the Syncplicity application.
- 3. If this is your first time using Outbound Provisioning with PingFederate: you need to create a new Database where PingFederate can store information about accounts it needs to provision/synchronize over to your Service Provider (see
 - https://documentation.pingidentity.com/pingfederate/pf80/index.shtml#concept configuringOutboundProvisioningSettings.html#concept configuringOutboundProvisioningSettings).
 - PingFederate has been tested using Hypersonic, Oracle, and MySQL databases as internal provisioning data stores. However, any relational database should work as well; adaptable setup scripts used for Hypersonic, Oracle, and MySQL are provided in the directory:
 - <pf install>/pingfederate/server/default/conf/provisioner/sql-scripts
- **4.** You will need to create an Administrator user account in that Provisioning Database so PingFederate can use that account to update the data.
- 5. If your PingFederate environment is running as a cluster, you will likely want failover capabilities for the

provisioning feature as well. This requires that all PingFederate nodes have connectivity to the Provisioning Database.

2.0 Installation of the Components

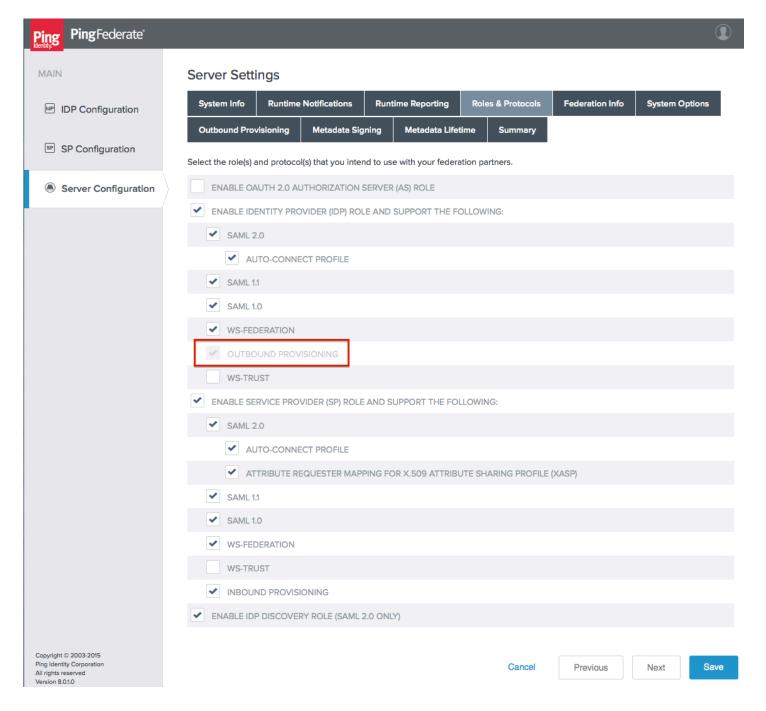
- 1. Download the pf-syncplicity-saas-provisioner-2.0.0.zip file onto your PingFederate server.
- 2. Extract the contents of the zip package to a location of your choice.
- **3.** Copy the following files into the *<pingfederate root>\pingfederate\server\default\deploy* directory o pf-syncplicity-saas-provisioner-2.0.0.jar
- **4.** Restart PingFederate.
- **5.** If you are running PingFederate in a cluster, you will have to repeat Steps 1-4 for each PingFederate server.

3.0 PingFederate Configuration

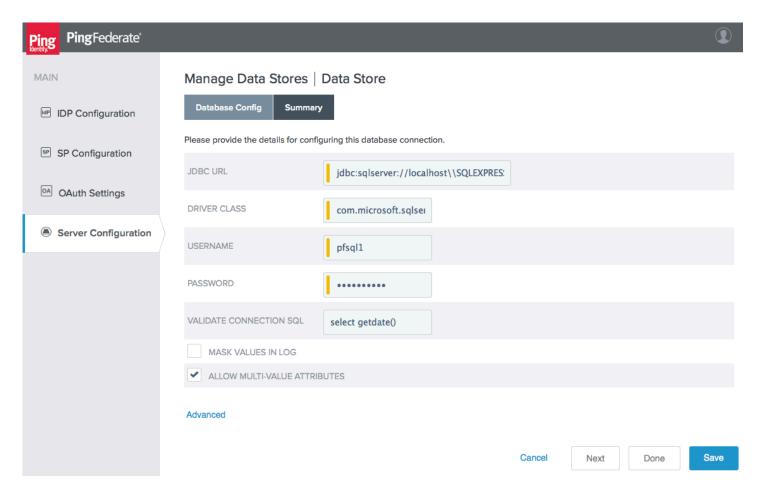
If you have never enabled Outbound Provisioning in this PingFederate environment, please complete the steps in section 3.1 and 3.2. Otherwise you may skip 3.1 and go directly to section 3.2.

3.1 Enable Outbound Provisioning

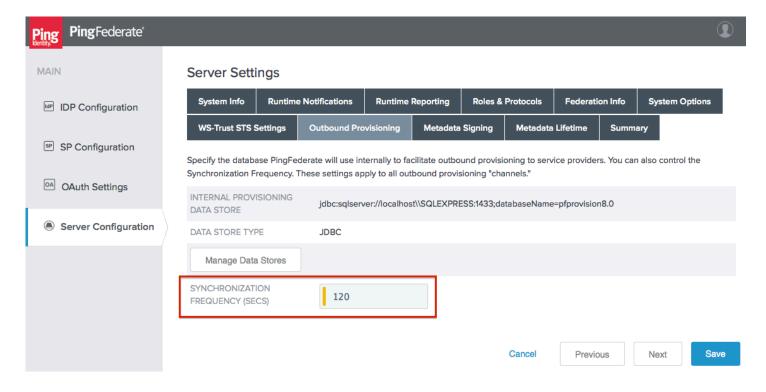
- 1. Login to your PingFederate admin console.
- 2. Go to Server Settings >> Roles & Protocols.
- 3. Enable **Outbound Provisioning** under the IdP role.



- 4. Click Save.
- 5. Select the Provisioning Data Store you wish to use from the drop down list or if you have not configured a Provisioning Data Store, click Manage Data Stores...
 - a. Click Add New Data Store.
 - b. Select Database and click Next.
 - c. Complete the required fields for JDBC URL, Driver Class, and the Username/Password for an account with Administrator permissions to the database. For further details on Data Store configuration go here:
 - https://documentation.pingidentity.com/pingfederate/pf80/index.shtml#concept managingDataSt ores.html#concept managingDataStores



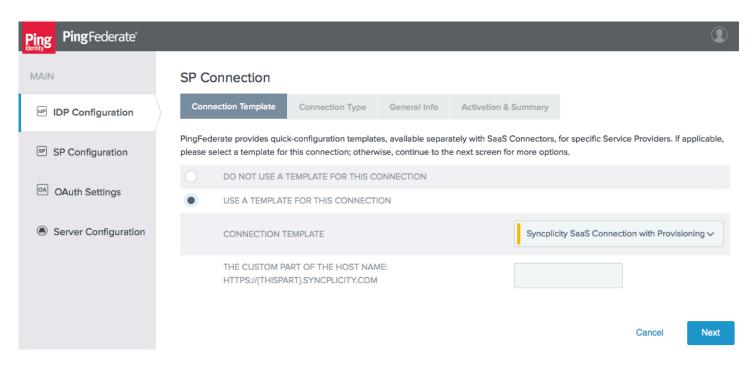
- d. Click Next.
- e. Click Done.
- f. Click Save.
- g. On the Outbound Provisioning page, you should now select your new Data Store from the drop down list.
- **6.** Select the **Synchronization Frequency** at which you want changes to be monitored (i.e. If you add a new user, do you want this to be synchronized to your service providers within 60 seconds or more, etc.).



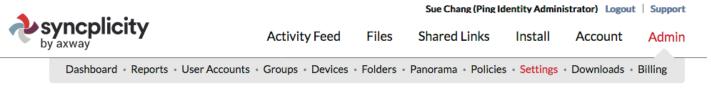
- 7. Click Save.
- 8. If you are running PingFederate in a cluster, you should **replicate** your changes now.
- **9.** Next, open the **run.properties** file located in your <pf_install>/pingfederate/bin folder.
- 10. Update the pf.provisioner.mode setting to STANDALONE or FAILOVER
 - a. Note: If you run PingFederate as a cluster, you'll likely want FAILOVER capabilities for this Provisioning feature to ensure there are no delays in user synchronization to your Service Providers.
- **11.** If you selected FAILOVER:
 - a. Ensure you specify a unique provisioner.node.id for each PingFederate node.
 - b. Specify a value for provisioner.failover.grace.period. This means if the current provisioning node is down for that amount of seconds, the next node will take over provisioning.
- 12. Save the file.
- 13. If you are running PingFederate in a cluster you must repeat steps 9-12 on each node.

3.2 Create the SP Connection with Provisioning

- 1. Login to your PingFederate Administrator Console.
- 2. Under IdP Configuration >> SP Connection >> click Create New.
- 3. On the Connection Template page
 - a. Select Use a template for this connection
 - b. For Connection Template select Syncplicity SaaS Connection with Provisioning



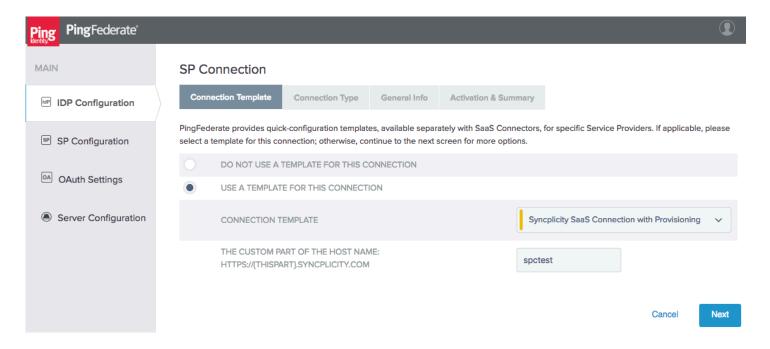
- c. For the custom part of the hostname, you'll have to get the value by completing the following steps:
 - i. Login to Syncplicity with your administrator account: https://my.syncplicity.com/LoginWithPassword.aspx
 - ii. Go to admin >> settings >> Custom domain and single sign-on.
 - iii. Copy the **Custom Domain** value and paste it into PingFederate (if the Syncplicity field was empty, you may set it at this time and click Save Changes in Syncplicity so we can proceed).



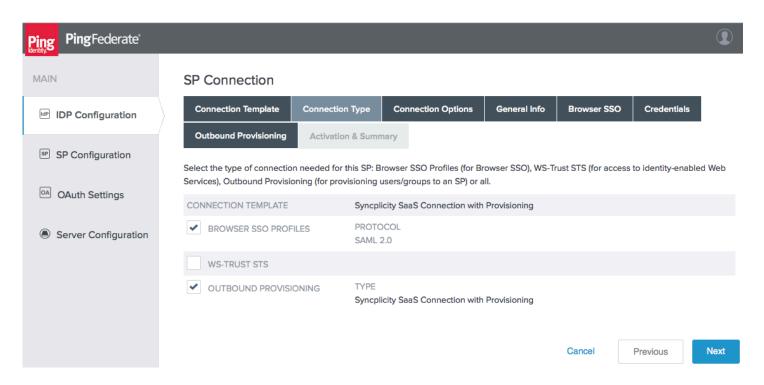
Configure Authentication Settings



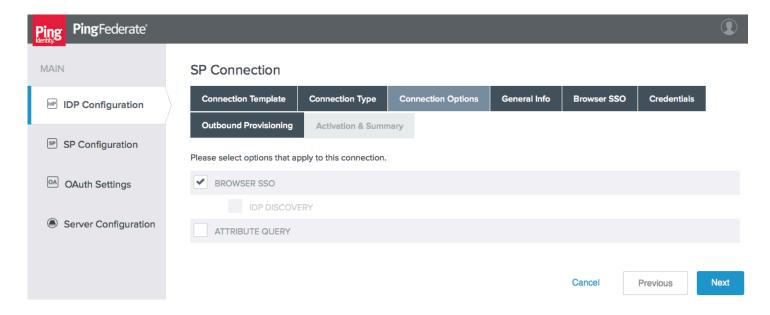
d. Click Next.



4. On the **Connection Type** page, leave Browser SSO Profiles and Outbound Provisioning enabled and click **Next**.

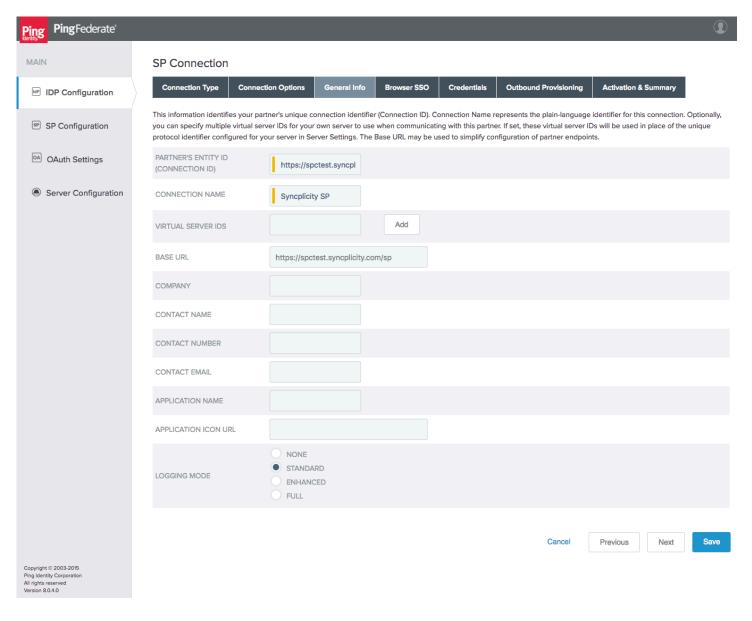


5. On the Connection Options page, leave Browser SSO enabled, click Next.

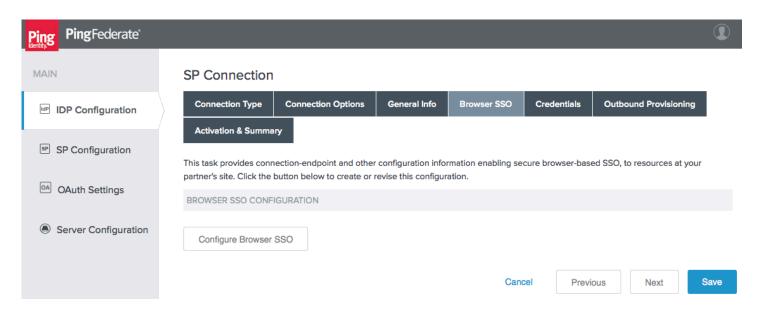


6. On the General Info page

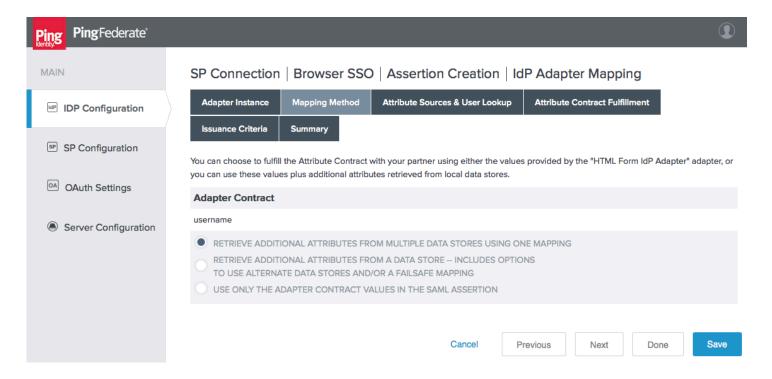
- a. Notice your Entity ID should have been pre-populated, copy that value and paste it as the **Connection Name** as well.
- b. The BaseURL should have also been pre-populated.
- c. Click Next.



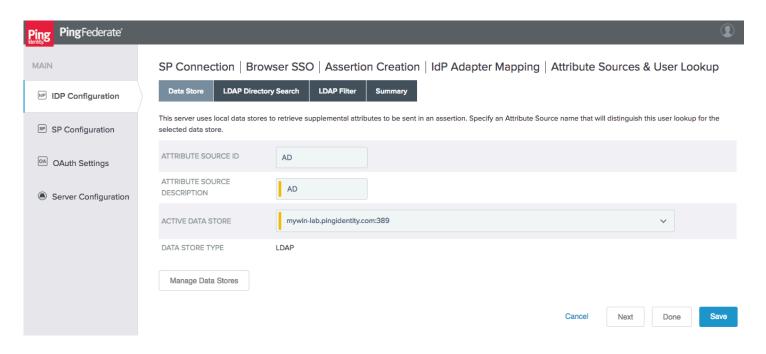
7. On the Browser SSO page, click Configure Browser SSO.



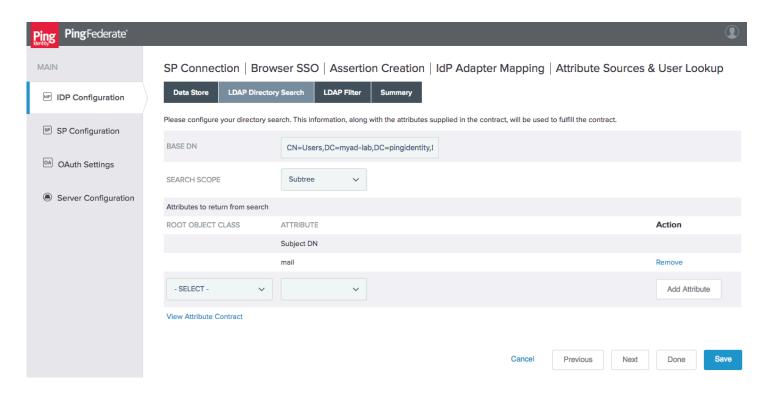
- 8. On Assertion Creation page, click Configure Assertion Creation.
- 9. On IdP Adapter Mapping, click Map New Adapter Instance...
- 10. Select an existing IDP Adapter (like HTML Form) and click Next.
 - a. If you have not created an IDP Adapter yet, you will have to follow the prompts to create one before being able to proceed.
- 11. On the Assertion Mapping page...
 - a. Select "Use only the Adapter Contract values in the SAML assertion" if your IDP Adapter already contains the Syncplicity username. Click Next.
 - b. Otherwise, select "Retrieve additional attributes from multiple data stores using one mapping". Click Next.
 - In this example we will use this option because our IDP Adapter is only giving us username=sAMAccountName and we want to use the mail attribute as the Syncplicity username.



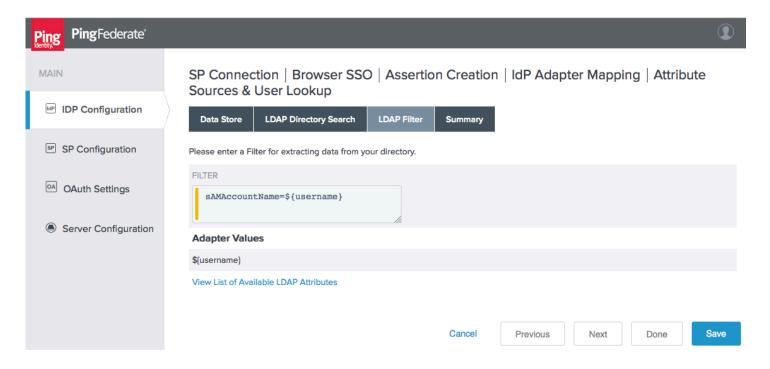
- ii. On the Attribute Sources & User Lookup page, click Add Attribute Source...
- iii. On the **Data Store** page, provide an Attribute Source Id, Attribute Source Description, select the relevant Data Store and click **Next**.



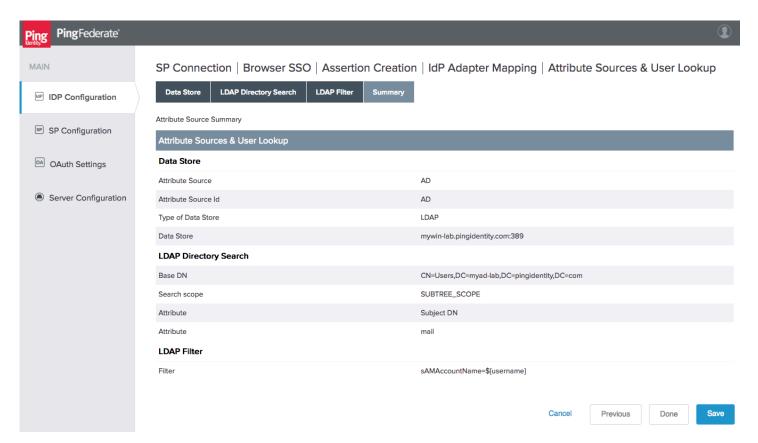
- iv. On the **LDAP Directory Search** page, fill in the Base DN and LDAP attributes you want to use, then click **Next**.
 - In this example we wanted to use the mail attribute, so to add it you must select <Show All Attributes> under ROOT OBJECT CLASS, and then under ATTRIBUTE you should be able to select "mail" from the list. Once the attribute is selected click Add Attribute to add it.



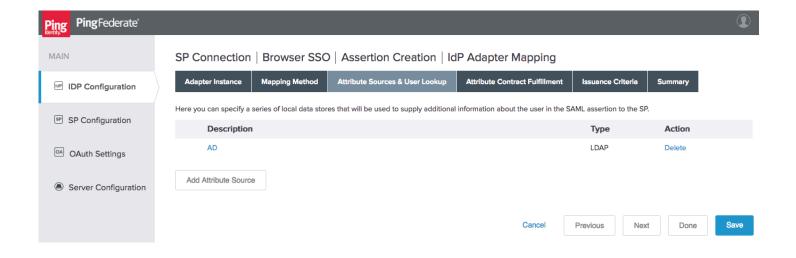
v. On the LDAP Filter page, fill in the Filter field and click Next.



vi. On the **Summary** page, click **Done**.

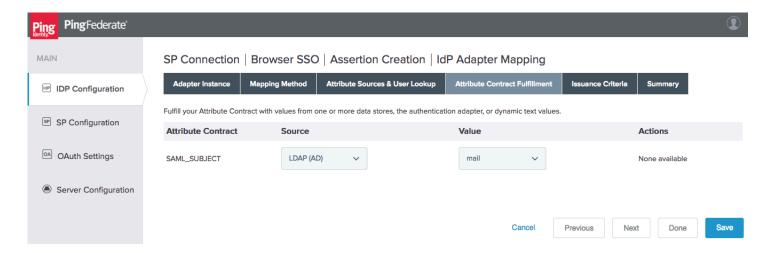


vii. On the Attribute Sources & User Lookup page, click Next.

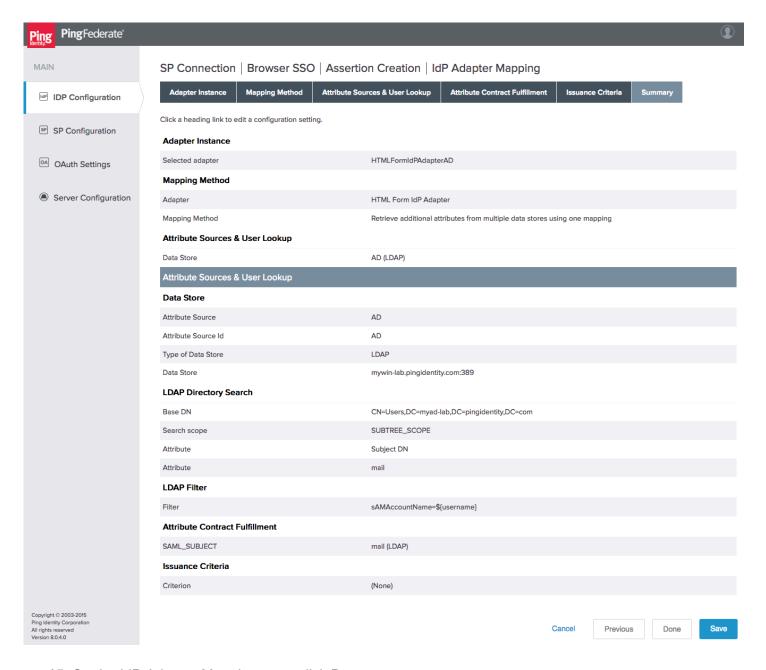


12. On the Attribute Contract Fulfillment page, for SAML_SUBJECT

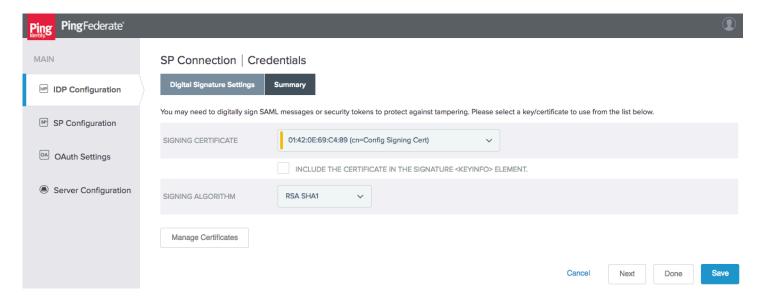
- a. Select the relevant Source and Value for the Syncplicity username
- b. Click Next.



- 13. On the Issuance Criteria page, click Next.
- 14. On the Summary page, click Done.



- **15.** On the IdP Adapter Mapping page click **Done**.
- **16.** On the Assertion Creation page, click **Done**.
- 17. On the Browser SSO page, click Next.
- 18. On the Credentials page, click Configure Credentials.
- 19. Select the Signing Certificate which your IDP will use, and click Done.



- **20.** On the Credentials page, click **Next**.
- **21.** On the Outbound Provisioning page, click **Configure Provisioning**.
- 22. On the Configure Channels >> Target page
 - a. Notice the Service URLs are pre-populated for the first 3 fields.
 - b. For Behavior of the Provisioner. When the provisioner believes the user has been removed or disabled you have two choices, please select one:
 - Selecting "Disable User" will result in the user account being disabled in Syncplicity
 - ii. Selecting "Delete User" will result in the user account being deleted in Syncplicity

 Note: A deprovisioning event is triggered by removing the user from the target provisioning
 group or by disabling their account after they were already a member of the provisioning group.
 - c. For The Application Token for performing Authentication copy the value from Syncplicity:
 - Login to Syncplicity with your administrator account: https://my.syncplicity.com/LoginWithPassword.aspx
 - ii. Go to the Account >> Account >> Application Token (bottom left-hand corner)
 - iii. If you don't already have an Application Token listed there, click Create to create one, then copy that value. If the Application Token is not visible on the Account page, please contact Syncplicity Support: support@syncplicity.com

Activity Feed

Files

Shared Links

Install

Account

Admin

Account • Login History • Devices

Manage Your Account

Plan

Syncplicity Enterprise Edition Trial (24 days remaining) Ping Identity

Enterprise Edition trial plan. Click here to

Owned by **Sue Chang**You are subscribed to your company's

Usage

		File Usage		
Storage Vaults	Storage Quota	Active	Previous Versions	Deleted
Syncplicity Cloud Storage US		0 bytes	0 bytes	0 bytes
Total Storage Quota:		Total Storage Consumed: 0 bytes		

You are syncing your files with 0 devices

Profile

Password:

upgrade.

Name: Sue Chang

Change name

schang@pingidentity.com

Change password Add or edit emails

Email addresses

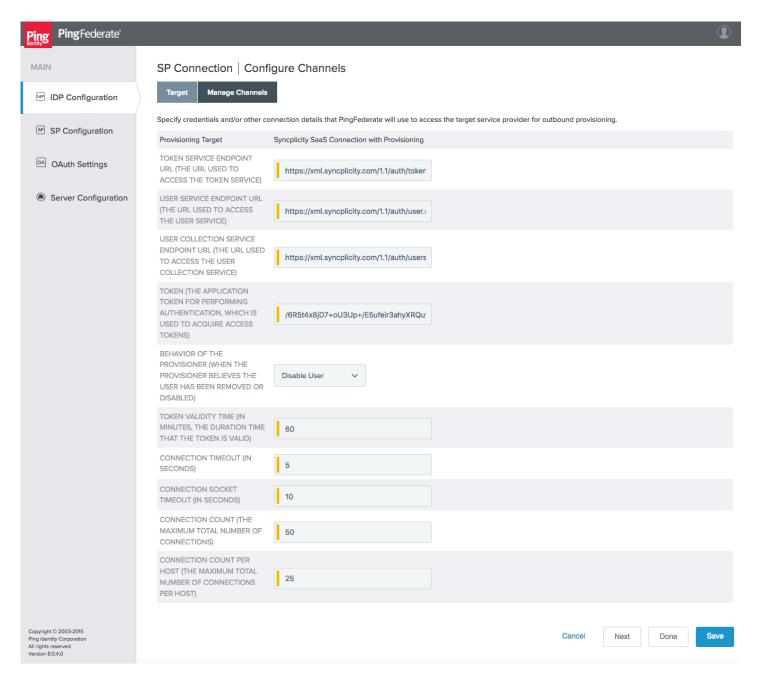
Application Token:

/6R5t4x8jD7 + oU3Up + /E5ufeir3ahyXRQuyPa67I40xRvPpCXMTcxe6bp1Jgc9we

Renew or Delete

Cancel your account

d. Click Next when you are done.



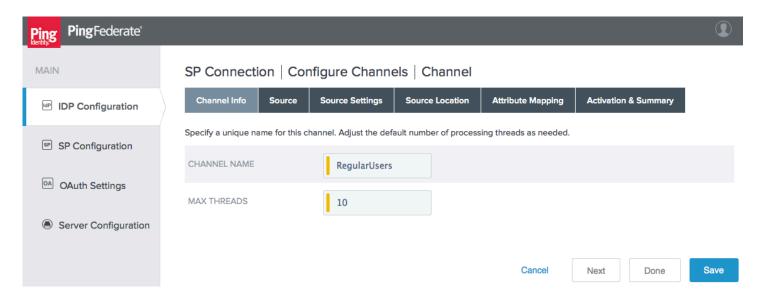
Token Validity Time should be adjusted to how long the token should be valid during the processing of life cycle management events by the provisioner. After the duration validity time has been reached, the provisioner will request a new token to be created from Syncplicity. As of October 2015, the duration of a Syncplicity token is 90 minutes. So, if the **Token Validity Time** has been configured for 60 minutes, the token will expire after 60 minutes, regardless if the Syncplicity token is set to expire in another 30 minutes. Setting the **Token Validity Time** to 0 or more than 90 minutes will automatically default to the Syncplicity token duration time of 90 minutes. The recommended setting for **Token Validity Time** is 60 minutes.

Please also note that the **Connection Count** and **Connection Count Per Host** configuration fields will need to be adjusted to your PingFederate environment (i.e., maximum number of threads the server can handle, etc.).

23. On the Manage Channels page, click Create...

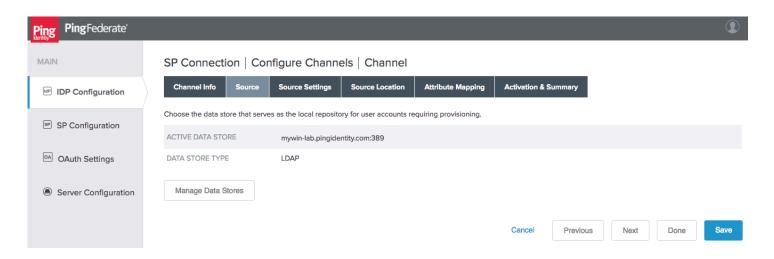
24. On the Channel Info page

- a. For Channel Name type in a name of your choosing.
- b. For Max Threads, choose the number of threads you want for that channel.
- c. Click Next.



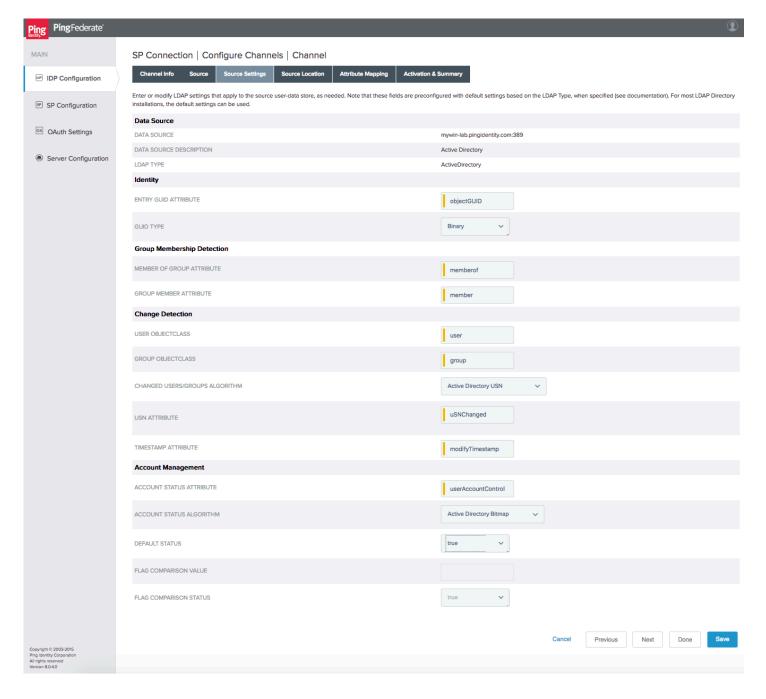
25. On the Source page

- a. For **Active Data Store** select the Data Store which contains the accounts you want to provision in Syncplicity.
- b. Click Next.



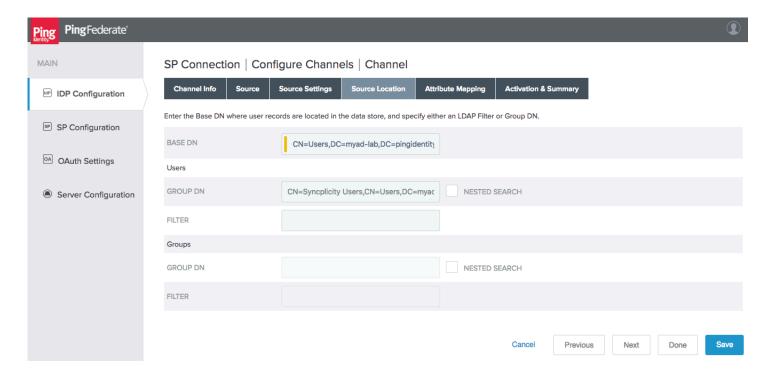
26. On the Source Settings page

a. Review the configuration and make any edits if needed, then click Next.



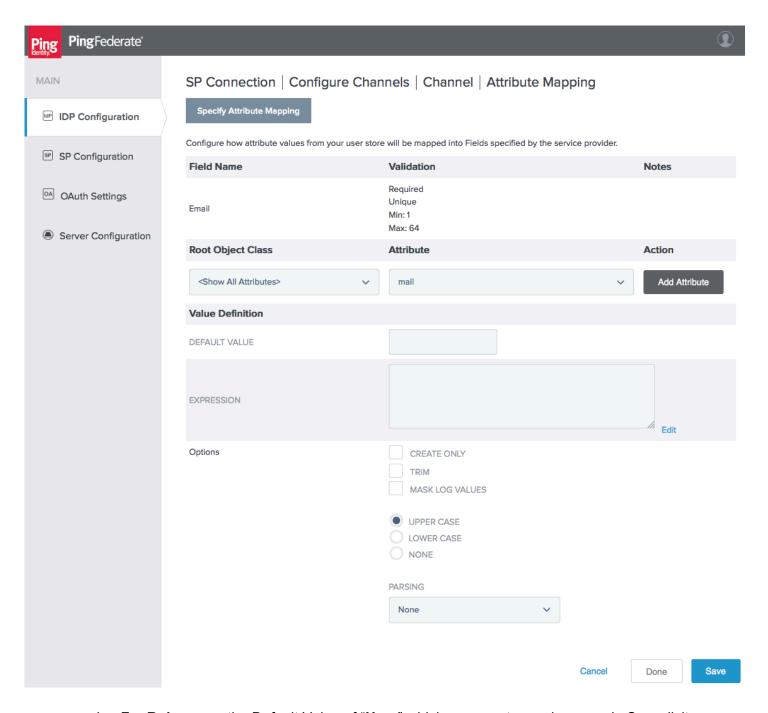
27. On the Source Location page

- a. Specify the Base DN where the user accounts exist.
- b. Under **Users** you can either specify an AD group that contains the user accounts you want to provision in Syncplicity or you can use an LDAP Filter to query the users based on some criteria you decide.
- c. Click Next.

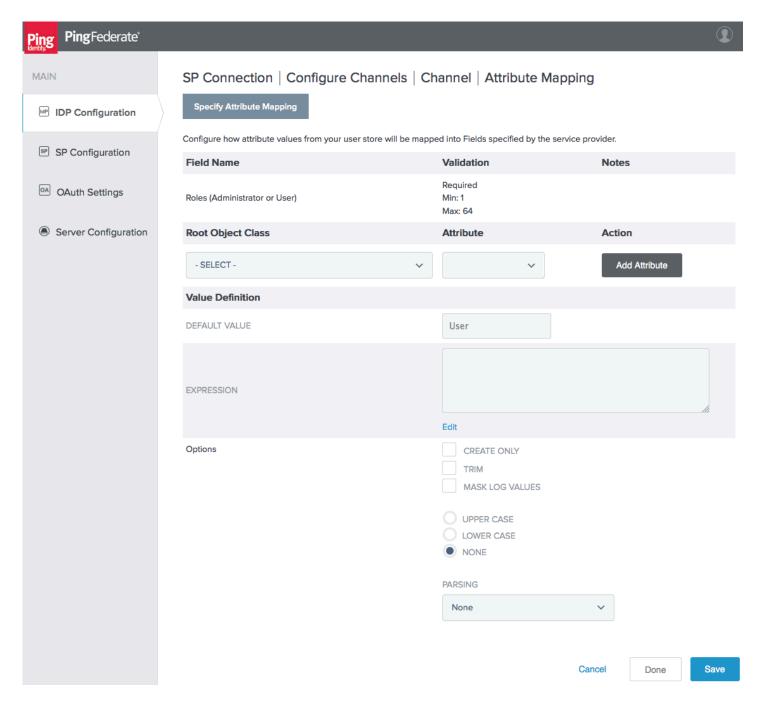


28. On the Attribute Mapping page

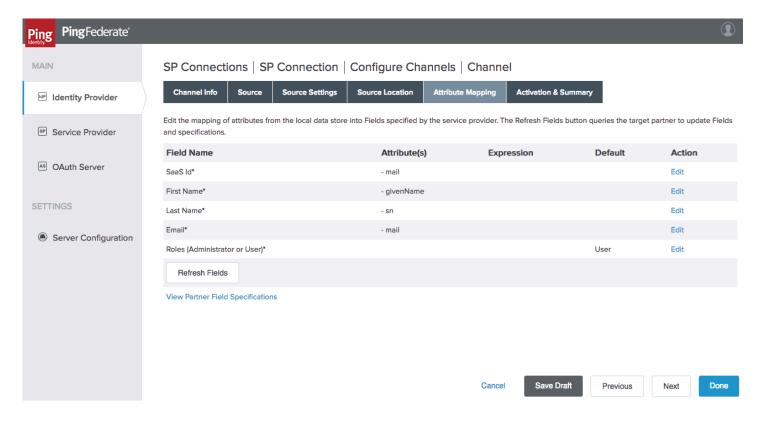
- a. For Email, First Name and Last Name:
 - i. Click the Edit link next to each attribute.
 - ii. Map it to the relevant attribute from your data store (e.g. Email = mail).
 - iii. Click Add Attribute and then click Done.



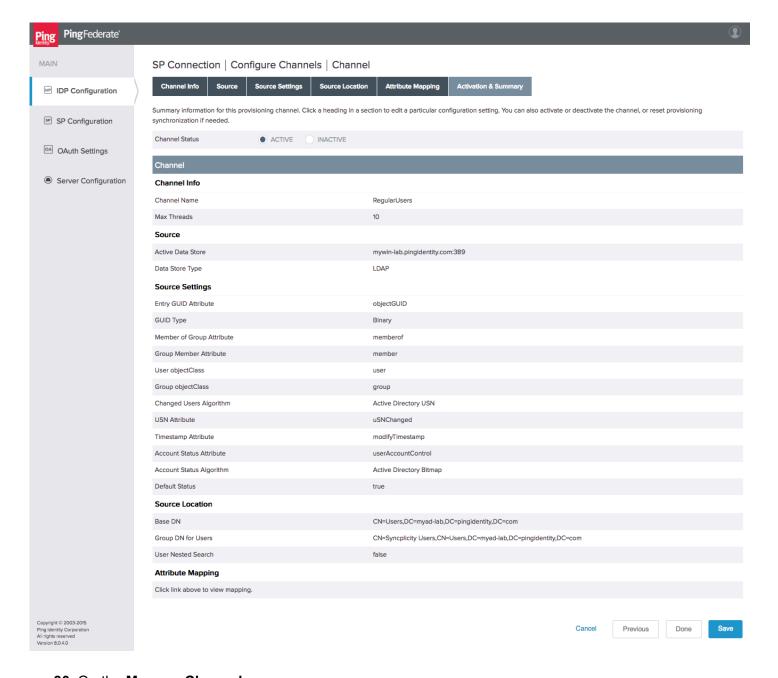
- b. For Roles use the Default Value of "User" which represents regular users in Syncplicity.
 - i. If you need to also provision users with the Administrator role, you should create a second Provisioning Channel to target your Syncplicity Administrator User Group and then set this attribute value to "Administrator". Note: It is important that users are only a member of either the Syncplicity regular user group, or only a member of the Syncplicity administrator user group. If they are a member of both groups, the Provisioner will only process their account based on the first group they joined.



c. Once you're finished mapping the attributes, click Next.

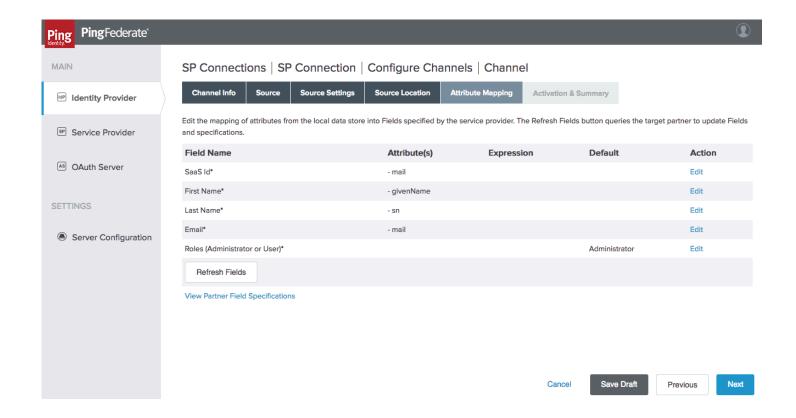


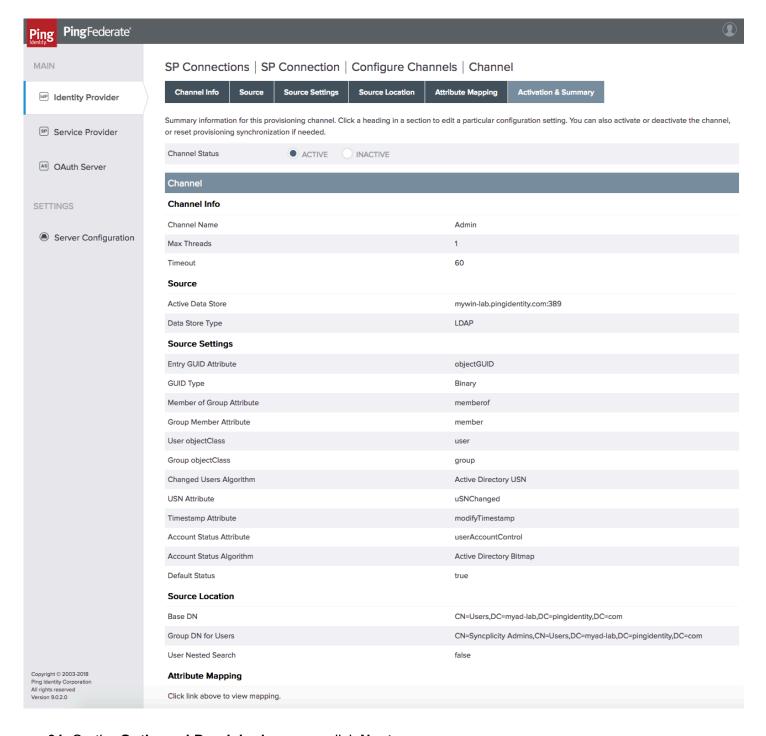
29. On the Activation & Summary page, click Active, then click Done.



30. On the **Manage Channels** page..

- a. If you need to provision Syncplicity users with the Administrator Role then please repeat steps 23-29 to add a second provisioning channel for SyncplicityAdminUsers.
- b. Click Done when you are finished adding channels.



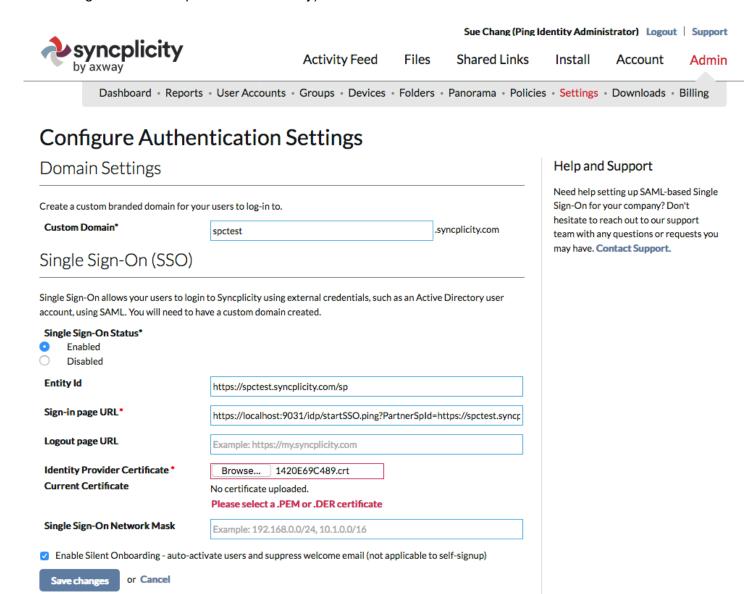


- 31. On the Outbound Provisioning page, click Next.
- 32. On the Activation & Summary page, click Active then click Save.

4.0 Syncplicity SSO Configuration

- 1. Login to Syncplicity with your Administrator account.
- 2. Go to admin >> settings >> Custom domain and single sign-on.
- 3. Under Single Sign-On (SSO) >> Single Sign-On Status >> select the option for Enabled.
- 4. For Entity ID, copy/paste the Entity ID from your PingFederate environment.
- 5. For Sign-in page URL, enter your PingFederate IDP SSO URL.
- 6. For Identity Provider Certificate, select the public key Signing Certificate from your PingFederate.

- a. Note: Syncplicity requires a .PEM or .DER certificate file.
- 7. Enable the checkbox for "Enable Silent Onboarding" if you prefer this setting.
- 8. Click **Save** Changes (you should then get a confirmation message saying Domain and Single Sign-On Settings have been updated successfully).



Tip: Once you enable SSO on the site, everyone will be prompted to go through SSO login (including your administrator accounts). If you need to bypass the SSO login while troubleshooting SSO, you can login to Syncplicity with your Administrator credentials via this direct link: https://my.syncplicity.com/LoginWithPassword.aspx

5.0 Testing & Verification

- 1. In order to test, please open a new browser window to your SP-Initiated Login URL.
 - a. That would be in the format https://<your custom domain>.syncplicity.com (our example would be https://csa-pfdemo.syncplicity.com).
- 2. You can then proceed to login with a user account that is a member of the AD group you configured for

- Syncplicity Provisioning.
- 3. In a separate browser window, you can go to the same SP-initiated Login URL, but try to login with a user account who is not a member of the Syncplicity Provisioning AD Group. You should receive a Login Error from Syncplicity indicating you do not have an account.

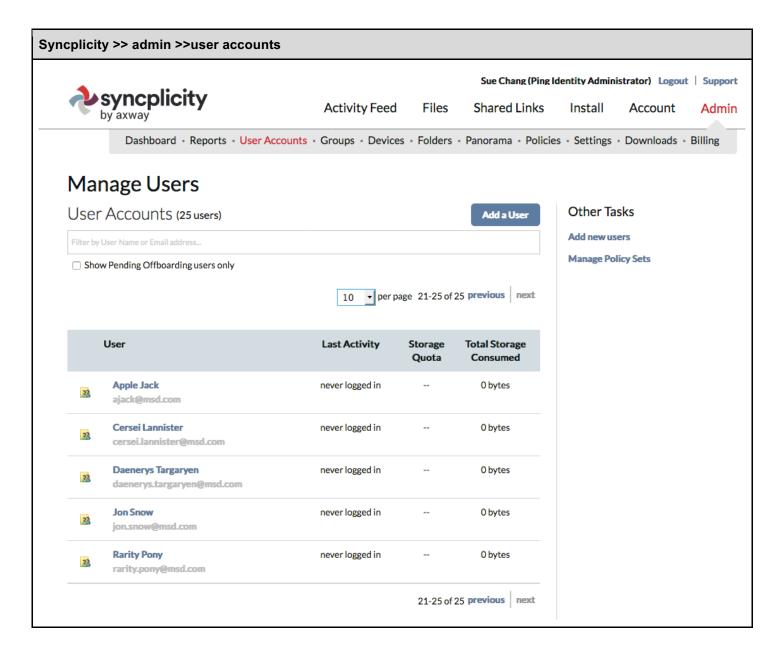
Note: The following scenarios have been tested, and you are welcome to try these on your environment as well:

Scenario 1: Provisioning Users

The PingFederate system is configured with a specific AD group for Provisioning to Syncplicity. All accounts in that group should be created in Syncplicity, you can confirm this by adding a user to the group and then checking the PingFederate provisioner.log and the User accounts in Syncplicity.

Provisioner.log (<pf install directory>\pingfederate\log) 14:04:25,644 DEBUG [SyncplicitySaasProvisioner] getUser() :: BEGIN 14:04:25,644 DEBUG [SyncplicitySaasProvisioner] getUser() (before) :: guid :: null :: username :: rarity.pony@merck.com 14:04:25,644 DEBUG [SyncplicitySaasProvisioner] getUser() (after) :: guid :: rarity.pony@merck.com :: username :: rarity.pony@merck.com 14:04:25,644 DEBUG [UserManager] getUser() :: PROCESSING A GET USER REQUEST FOR :: rarity.pony@merck.com :: BEGIN 14:04:25,644 DEBUG [TokenManager] isTokenExpired() :: token expiration set by Syncplicity was set at :: Mon Feb 26 15:28:23 PST 2018 14:04:25,645 DEBUG [TokenManager] isTokenExpired() :: it is now :: Mon Feb 26 14:04:25 PST 2018 14:04:25,645 DEBUG [TokenManager] isTokenExpired() :: token was created at :: Mon Feb 26 13:58:23 PST 2018 14:04:25,645 DEBUG [TokenManager] isTokenExpired() :: token expiration set by the Syncplicity Provisioner was set at :: Mon Feb 26 14:58:23 PST 2018 14:04:25,645 DEBUG [TokenManager] getToken() :: token has not expired yet, reusing existing token 14:04:25,645 DEBUG [TokenManager] getToken() :: token response's token :: FOn05cX10F757jXzj5TqfZHMZHp0aumzjh0MuDYv6vhv8B6BwQN9bXnX4HM6qImR 14:04:25,645 DEBUG [UserManager] getUser() :: getting an access token for the get user request 14:04:25,645 DEBUG [UserManager] processRequest() :: active connections in the pool :: 1 14:04:25,645 DEBUG [GetUserRequest] GetUserRequest - execute() :: processing get user request for :: rarity.pony@merck.com 14:04:25,645 DEBUG [GetUserRequest] GetUserRequest - execute() :: releasing connection 14:04:25,645 DEBUG [GetUserRequest] BaseRequest - execute() :: performing GET request on :: https://xml.syncplicity.com/1.1/auth/user.svc/rarity.pony%40merck.com 14:04:25,645 DEBUG [SyncplicityAccessToken] SyncplicityAccessToken applyAuthenticationMechanism() :: applying authentication mechanism 14:04:25,645 DEBUG [SyncplicityAccessToken] SyncplicityAccessToken applyAuthenticationMechanism() :: releasing connection 14:04:26,017 DEBUG [GetUserRequest] BaseRequest - execute() :: received status code :: 403 :: while performing GET request on :: https://xml.syncplicity.com/1.1/auth/user.svc/rarity.pony%40merck.com with the following response body :: {"StatusCode":403,"StatusDescription":"Not A Business Admin"} 14:04:26,018 DEBUG [GetUserRequest] BaseRequest - execute() :: releasing connection 14:04:26,018 DEBUG [UserManager] processRequest() :: finished processing :: GET USER transaction request, and received status code :: 403 14:04:26,018 DEBUG [UserManager] processRequest(); :: releasing connection 14:04:26,018 DEBUG [UserManager] getUser() :: get user request is not ok, status code is :: 403 :: for saas ID :: rarity.pony@merck.com 14:04:26,018 DEBUG [UserManager] getUser() :: releasing connection 14:04:26,018 DEBUG [UserManager] getUser() :: PROCESSING A GET USER REQUEST FOR :: rarity.pony@merck.com :: END 14:04:26,018 DEBUG [SyncplicitySaasProvisioner] getUser() :: did not get user, user is null 14:04:26,018 DEBUG [SyncplicitySaasProvisioner] getUser() :: END 14:04:26,018 DEBUG [SyncplicitySaasProvisioner] createUser() :: BEGIN 14:04:26,018 DEBUG [SyncplicitySaasProvisioner] createUser() :: SaaS user data :: accountEnabled = true

```
FirstName = [Rarity]
      Roles = [User]
      LastName = [Pony]
      SaasId = [rarity.pony@merck.com]
      EmailAddress = [rarity.pony@merck.com]
14:04:26,018 DEBUG [SyncplicitySaasProvisioner] populateUserFromSaasUserData(2) BEGIN
14:04:26,018 DEBUG [SyncplicitySaasProvisioner] populateUserFromSaasUserData() :: saas ID (saas
user data) :: null
14:04:26,018 DEBUG [SyncplicitySaasProvisioner] populateUserFromSaasUserData() :: saas ID (user)
14:04:26,018 DEBUG [SyncplicitySaasProvisioner] populateUserFromSaasUserData() :: saas ID
(attribute) :: rarity.pony@merck.com
14:04:26,018 DEBUG [SyncplicitySaasProvisioner] populateUserFromSaasUserData(3) BEGIN
14:04:26,018 DEBUG [SyncplicitySaasProvisioner] populateUserFromSaasUserData() :: saas ID (saas
user data) :: null
14:04:26,018 DEBUG [SyncplicitySaasProvisioner] populateUserFromSaasUserData() :: saas ID (user)
:: null
14:04:26,018 DEBUG [SyncplicitySaasProvisioner] populateUserFromSaasUserData() :: saas ID
(attribute) :: rarity.pony@merck.com
14:04:26,018 DEBUG [SyncplicitySaasProvisioner] populateUserFromSaasUserData(3) END
14:04:26,018 DEBUG [SyncplicitySaasProvisioner] populateUserFromSaasUserData(2) END
14:04:26,018 DEBUG [UserManager] createUser() :: PROCESSING A CREATE USER REQUEST FOR ::
rarity.pony@merck.com :: BEGIN
14:04:26,018 DEBUG [TokenManager] isTokenExpired() :: token expiration set by Syncplicity was set
at :: Mon Feb 26 15:28:23 PST 2018
14:04:26,018 DEBUG [TokenManager] isTokenExpired() :: it is now :: Mon Feb 26 14:04:26 PST 2018
14:04:26,018 DEBUG [TokenManager] isTokenExpired() :: token was created at :: Mon Feb 26 13:58:23
PST 2018
14:04:26,018 DEBUG [TokenManager] isTokenExpired() :: token expiration set by the Syncplicity
Provisioner was set at :: Mon Feb 26 14:58:23 PST 2018
14:04:26,018 DEBUG [TokenManager] getToken() :: token has not expired yet, reusing existing token
14:04:26,018 DEBUG [TokenManager] getToken() :: token response's token ::
FOn05cX1OF757jXzj5TqfZHMZHp0aumzjh0MuDYv6vhv8B6BwQN9bXnX4HM6qImR
14:04:26,018 DEBUG [UserManager] createUser() :: getting an access token for the create user
request
14:04:26,019 DEBUG [UserManager] processRequest() :: active connections in the pool :: 1
14:04:26,019 DEBUG [CreateUserRequest] CreateUserRequest - execute() :: processing create user
request for :: rarity.pony@merck.com
14:04:26,021 DEBUG [CreateUserRequest] CreateUserRequest - execute() :: releasing connection
14:04:26,021 DEBUG [CreateUserRequest] BaseRequest - execute() :: performing POST request on ::
https://xml.syncplicity.com/1.1/auth/users.svc/
14:04:26,021 DEBUG [SyncplicityAccessToken] SyncplicityAccessToken -
applyAuthenticationMechanism() :: applying authentication mechanism
14:04:26,021 DEBUG [SyncplicityAccessToken] SyncplicityAccessToken -
applyAuthenticationMechanism() :: releasing connection
14:04:26,475 DEBUG [CreateUserRequest] BaseRequest - execute() :: received status code :: 200 ::
while performing POST request on :: https://xml.syncplicity.com/1.1/auth/users.svc/ with the
following response body ::
[{"EmailAddress":"rarity.pony@merck.com","FirstName":"Rarity","LastName":"Pony","Disabled":false,"
Company":{"Name":"Ping Identity"}, "Roles":[], "AccountType":7}]
14:04:26,475 DEBUG [CreateUserRequest] BaseRequest - execute() :: releasing connection
14:04:26,475 DEBUG [UserManager] processRequest() :: finished processing :: PROVISION transaction
request, and received status code :: 200
14:04:26,475 DEBUG [UserManager] processRequest(); :: releasing connection
14:04:26,475 DEBUG [UserManager] createUser() :: create user request is ok, status code is :: 200
:: for saas ID :: rarity.pony@merck.com
14:04:26,475 DEBUG [UserManager] createUser() :: response body ::
[{"EmailAddress":"rarity.pony@merck.com", "FirstName":"Rarity", "LastName":"Pony", "Disabled":false,"
Company":{"Name":"Ping Identity"},"Roles":[],"AccountType":7}]
14:04:26,475 DEBUG [UserManager] createUser() :: releasing connection
14:04:26,475 DEBUG [UserManager] createUser() :: PROCESSING A CREATE USER REQUEST FOR ::
rarity.pony@merck.com :: END
14:04:26,475 DEBUG [SyncplicitySaasProvisioner] createUser() :: END
```



Scenario 2: Deprovisioning Users

You can test deprovisioning by either removing a test user from the Syncplicity Provisioning AD group or by deactivating the user account in Active Directory.

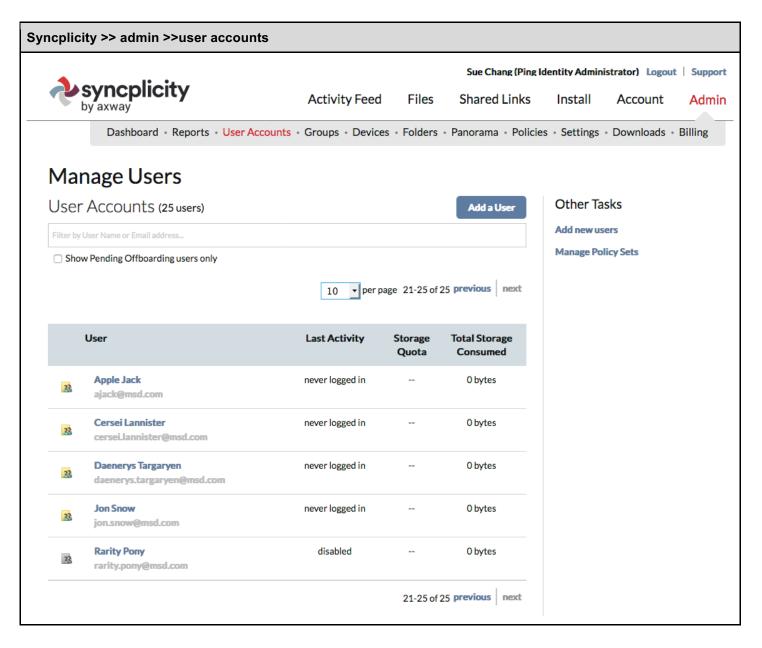
```
Provisioner.log (<pf install directory>\pingfederate\log)

14:42:17,056 DEBUG [SyncplicitySaasProvisioner] getUser() :: BEGIN
14:42:17,056 DEBUG [SyncplicitySaasProvisioner] getUser() (before) :: guid :: rarity.pony@msd.com
:: username :: rarity.pony@msd.com
14:42:17,056 DEBUG [SyncplicitySaasProvisioner] getUser() (after) :: guid :: rarity.pony@msd.com
:: username :: rarity.pony@msd.com
14:42:17,056 DEBUG [UserManager] getUser() :: PROCESSING A GET USER REQUEST FOR :: rarity.pony@msd.com :: BEGIN
14:42:17,056 DEBUG [TokenManager] isTokenExpired() :: token response is null, returning isTokenExpired as true
14:42:17,056 DEBUG [TokenManager] getToken() :: token has expired, getting new token
14:42:17,056 DEBUG [TokenManager] initToken() :: BEGIN
```

```
14:42:17,056 DEBUG [TokenManager] isTokenExpired() :: token response is null, returning
isTokenExpired as true
14:42:17,056 DEBUG [CreateTokenRequest] CreateTokenRequest - execute() :: releasing connection
14:42:17,056 DEBUG [CreateTokenRequest] CreateTokenRequest - execute() :: executing token creation
request
14:42:17,056 DEBUG [CreateTokenRequest] BaseRequest - execute() :: performing GET request on ::
https://xml.syncplicity.com/1.1/auth/tokens.svc/
14:42:17,056 DEBUG [ApplicationTokenCredential] ApplicationTokenCredential -
applyAuthenticationMechanism() :: applying authentication mechanism
14:42:17,056 DEBUG [ApplicationTokenCredential] ApplicationTokenCredential -
applyAuthenticationMechanism() :: releasing connection
14:42:17,437 DEBUG [CreateTokenRequest] BaseRequest - execute() :: received status code :: 200 ::
while performing GET request on :: https://xml.syncplicity.com/1.1/auth/tokens.svc/ with the
following response body ::
[{"Id":"z3Rd017PRqOciQoUqBifXo10Jfv3YfVIbBnELte0mkl3tUWRy2jKj67W5qs0ak30","Duration":5399.9822188,
"User": { "Id": "ebb99234-4b68-403f-8e85-
419884aa401a", "EmailAddress": "", "FirstName": "Sue", "LastName": "Chang", "Company": { "Id": "bc096d16-
f58b-41f6-8142-859553e89b46", "Name": "Ping Identity", "AccountType": 3}, "AccountType": 14}}]
14:42:17,437 DEBUG [CreateTokenRequest] BaseRequest - execute() :: releasing connection
14:42:17,437 DEBUG [TokenResponse] fromHttpResponse() :: response status code is ok [200] :: with
body ::
[{"Id":"z3Rd017PRqOcIQoUqBiFXo10Jfv3YfVIbBnELte0mkl3tUWRy2jKj67W5qs0ak30","Duration":5399.9822188,
"User": { "Id": "ebb99234-4b68-403f-8e85-
419884aa401a", "EmailAddress": "", "FirstName": "Sue", "LastName": "Chang", "Company": { "Id": "bc096d16-
f58b-41f6-8142-859553e89b46", "Name": "Ping Identity", "AccountType": 3}, "AccountType": 14}}]
14:42:17,437 DEBUG [TokenResponse] TokenResponse() :: JSON string ::
[{"Id":"z3Rd017PRgOciQoUqBifXo10Jfv3YfVIbBnELte0mkl3tUWRy2jKj67W5gs0ak30","Duration":5399.9822188,
"User": { "Id": "ebb99234-4b68-403f-8e85-
419884aa401a", "EmailAddress": "", "FirstName": "Sue", "LastName": "Chang", "Company": { "Id": "bc096d16-
f58b-41f6-8142-859553e89b46", "Name": "Ping Identity", "AccountType": 3}, "AccountType": 14}}]
14:42:17,437 DEBUG [TokenResponse] TokenResponse() :: received status code :: 200 for token
14:42:17,437 DEBUG [TokenResponse] TokenResponse() :: time before request (used for setting
expected token expiration) :: 1519684937437
14:42:17,437 DEBUG [TokenResponse] TokenResponse() :: status is ok and received a JSON array when
requesting token
14:42:17,437 DEBUG [TokenResponse] TokenResponse() :: Received [1] tokens from attempt to acquire
14:42:17,437 DEBUG [TokenResponse] TokenResponse() :: Received
[[{"User":{"Company":{"Id":"bc096d16-f58b-41f6-8142-859553e89b46","AccountType":3,"Name":"Ping
Identity"},"FirstName":"Sue","Id":"ebb99234-4b68-403f-8e85-
419884aa401a", "LastName": "Chang", "AccountType": 14, "EmailAddress": "" }, "Duration": 5399.9822188, "Id":
"z3Rd017PRg0cIQoUqBiFXo10Jfv3YfVIbBnELte0mkl3tUWRy2jKj67W5gs0ak30"}]] tokens from parse.
14:42:17,437 DEBUG [TokenResponse] TokenResponse() :: token response status code has been set to
:: 200
14:42:17,437 DEBUG [TokenResponse] TokenResponse() :: token response token has been set to ::
z3Rd017PRgOcIQoUqBiFXo10Jfv3YfVIbBnELte0mkl3tUWRy2jKj67W5gs0ak30
14:42:17,437 DEBUG [TokenResponse] TokenResponse() :: expected token expiration set to :: Mon Feb
26 16:12:16 PST 2018
14:42:17,437 DEBUG [TokenResponse] TokenResponse(); :: JSON object is not null, user object has
been set
14:42:17,437 DEBUG [TokenResponse] fromHttpResponse() :: releasing connection
14:42:17,437 DEBUG [TokenManager] initToken() :: user from token response is not null
14:42:17,437 DEBUG [TokenManager] initToken() :: releasing connection
14:42:17,437 DEBUG [TokenManager] initToken() :: END
14:42:17,437 DEBUG [TokenManager] getToken() :: token response's token ::
z3Rd017PRg0cIQoUqBiFXo10Jfv3YfVIbBnELte0mkl3tUWRy2jKj67W5gs0ak30
14:42:17,437 DEBUG [UserManager] getUser() :: getting an access token for the get user request
14:42:17,437 DEBUG [UserManager] processRequest() :: active connections in the pool :: 1
14:42:17,437 DEBUG [GetUserRequest] GetUserRequest - execute() :: processing get user request for
:: rarity.pony@msd.com
14:42:17,438 DEBUG [GetUserRequest] GetUserRequest - execute() :: releasing connection
14:42:17,438 DEBUG [GetUserRequest] BaseRequest - execute() :: performing GET request on ::
https://xml.syncplicity.com/1.1/auth/user.svc/rarity.pony%40msd.com
14:42:17,438 DEBUG [SyncplicityAccessToken] SyncplicityAccessToken -
applyAuthenticationMechanism() :: applying authentication mechanism
14:42:17,438 DEBUG [SyncplicityAccessToken] SyncplicityAccessToken -
applyAuthenticationMechanism() :: releasing connection
14:42:17,534 DEBUG [GetUserRequest] BaseRequest - execute() :: received status code :: 200 ::
```

```
while performing GET request on ::
https://xml.syncplicity.com/1.1/auth/user.svc/rarity.pony%40msd.com with the following response
body :: {"Id":"e31c32b7-1da1-4d36-85fa-
396ac614ad63", "EmailAddress": "rarity.pony@msd.com", "FirstName": "Rarity", "LastName": "Pony", "Roles":
[], "AccountType":7, "Status":2, "CreatedDateUtc": "\/Date(1519682666237)\/"}
14:42:17,534 DEBUG [GetUserRequest] BaseRequest - execute() :: releasing connection
14:42:17,534 DEBUG [UserManager] processRequest() :: finished processing :: GET USER transaction
request, and received status code :: 200
14:42:17,534 DEBUG [UserManager] processRequest(); :: releasing connection
14:42:17,534 DEBUG [UserManager] getUser() :: get user request is ok, status code :: 200 :: for
saas ID :: rarity.pony@msd.com
14:42:17,534 DEBUG [UserManager] getUser() :: response body :: {"Id":"e31c32b7-1da1-4d36-85fa-
396ac614ad63", "EmailAddress": "rarity.pony@msd.com", "FirstName": "Rarity", "LastName": "Pony", "Roles":
[], "AccountType":7, "Status":2, "CreatedDateUtc":"\/Date(1519682666237)\/"}
14:42:17,534 DEBUG [UserManager] getUser() :: releasing connection
14:42:17,534 DEBUG [UserManager] getUser() :: PROCESSING A GET USER REQUEST FOR ::
rarity.pony@msd.com :: END
14:42:17,534 DEBUG [SyncplicitySaasProvisioner] getUser() :: got user, user exists
14:42:17,534 DEBUG [SyncplicitySaasProvisioner] getUser() :: END
14:42:17,534 DEBUG [SyncplicitySaasProvisioner] updateUser() :: BEGIN
14:42:17,535 DEBUG [SyncplicitySaasProvisioner] updateUser() :: existing user data ::
      accountEnabled = true
      SaasId = [rarity.pony@msd.com] :: updated user data ::
                                                                  accountEnabled = false
      FirstName = [Rarity]
      Roles = [User]
      LastName = [Pony]
      SaasId = [rarity.pony@msd.com]
      EmailAddress = [rarity.pony@msd.com]
14:42:17,535 DEBUG [SyncplicitySaasProvisioner] updateUser() :: Triggering an update for ::
rarity.pony@msd.com (SaaS ID), rarity.pony@msd.com (SaaS Username)
14:42:17,535 DEBUG [SyncplicitySaasProvisioner] populateUserFromSaasUserData(3) BEGIN
14:42:17,535 DEBUG [SyncplicitySaasProvisioner] populateUserFromSaasUserData() :: saas ID (saas
user data) :: rarity.pony@msd.com
14:42:17,535 DEBUG [SyncplicitySaasProvisioner] populateUserFromSaasUserData(3) END
14:42:17,535 DEBUG [UserManager] updateUser() :: PROCESSING AN UPDATE USER REQUEST FOR ::
rarity.pony@msd.com :: BEGIN
14:42:17,535 DEBUG [TokenManager] isTokenExpired() :: token expiration set by Syncplicity was set
at :: Mon Feb 26 16:12:16 PST 2018
14:42:17,535 DEBUG [TokenManager] isTokenExpired() :: it is now :: Mon Feb 26 14:42:17 PST 2018
14:42:17,535 DEBUG [TokenManager] isTokenExpired() :: token was created at :: Mon Feb 26 14:42:16
14:42:17,535 DEBUG [TokenManager] isTokenExpired() :: token expiration set by the Syncplicity
Provisioner was set at :: Mon Feb 26 15:42:16 PST 2018
14:42:17,535 DEBUG [TokenManager] getToken() :: token has not expired yet, reusing existing token
14:42:17,535 DEBUG [TokenManager] getToken() :: token response's token ::
z3Rd017PRgOcIQoUqBiFXo10Jfv3YfVIbBnELte0mkl3tUWRy2jKj67W5gs0ak30
14:42:17,535 DEBUG [UserManager] updateUser() :: getting an access token for the update user
request
14:42:17,535 DEBUG [UserManager] processRequest() :: active connections in the pool :: 1
14:42:17,535 DEBUG [UpdateUserRequest] UpdateUserRequest - execute() :: processing update user
request for :: rarity.pony@msd.com
14:42:17,535 DEBUG [UpdateUserRequest] UpdateUserRequest - execute() :: releasing connection
14:42:17,535 DEBUG [UpdateUserRequest] BaseRequest - execute() :: performing PUT request on ::
https://xml.syncplicity.com/1.1/auth/user.svc/rarity.pony%40msd.com
14:42:17,535 DEBUG [SyncplicityAccessToken] SyncplicityAccessToken -
applyAuthenticationMechanism()::applying authentication mechanism
14:42:17,535 DEBUG [SyncplicityAccessToken] SyncplicityAccessToken -
applyAuthenticationMechanism() :: releasing connection
14:42:17,665 DEBUG [UpdateUserRequest] BaseRequest - execute() :: received status code :: 200 ::
while performing PUT request on ::
https://xml.syncplicity.com/1.1/auth/user.svc/rarity.pony%40msd.com with the following response
{"EmailAddress":"rarity.pony@msd.com","FirstName":"Rarity","LastName":"Pony","Disabled":true,"Comp
any":{"Name":"Ping Identity"}, "Roles":[], "AccountType":7, "Active":true}
14:42:17,665 DEBUG [UpdateUserRequest] BaseRequest - execute() :: releasing connection
14:42:17,665 DEBUG [UserManager] processRequest() :: finished processing :: UPDATE transaction
request, and received status code :: 200
14:42:17,665 DEBUG [UserManager] processRequest(); :: releasing connection
```

```
14:42:17,665 DEBUG [UserManager] updateUser() :: update user request is ok, status code is :: 200
:: for saas ID :: rarity.pony@msd.com
14:42:17,665 DEBUG [UserManager] updateUser() :: releasing connection
14:42:17,665 DEBUG [UserManager] updateUser() :: PROCESSING AN UPDATE USER REQUEST FOR ::
rarity.pony@msd.com :: END
14:42:17,665 DEBUG [SyncplicitySaasProvisioner] updateUser() :: Update processed for ::
rarity.pony@msd.com (SaaS ID), rarity.pony@msd.com (SaaS Username)
14:42:17,665 DEBUG [SyncplicitySaasProvisioner] updateUser() :: END
14:42:17,666 DEBUG [JdbcUserStore] Setting SaaS GUID for user in JDBC store: channel=4,
dsGUID=b96ae5d22be29949bc946bcb4d397bb6, saasGuid=rarity.pony@msd.com []
14:42:17,928 DEBUG [JdbcUserStore] Clearing user in JDBC store: channel=4,
dsGUID=b96ae5d22be29949bc946bcb4d397bb6 []
14:42:18,185 DEBUG [JdbcUserStore] Setting SaaS Identity for user in JDBC store: channel=4,
dsGUID=b96ae5d22be29949bc946bcb4d397bb6,
saasIdentity=eyJhbGciOiJkaXIiLCJlbmMiOiJBMTI4Q0JDLUhTMjU2Iiwia2lkIjoiZ2FCQkR5UzdlZCIsInZlcnNpb24iO
iI4LjAuNC4wIn0..QZKhX76a05HwfJXjNEfMNQ.qKt-
kWUaqAV7hPTXxJ0pJveqbAz1NlPbdE4LIqWRAyM.UHZDuqGATKRji7pf42H3zw []
14:42:18,444 INFO [SystemOut] 14:42:18,444 INFO [UserActivityLogger] Updated:
rarity.pony@msd.com
```



Scenario 3: Reactivating a De-provisioned User Account

In order to reactivate the Syncplicity account for the deprovisioned user from the above example, we just need to reactivate his AD account or re-add him to the AD group (depending on how you chose to remove him).

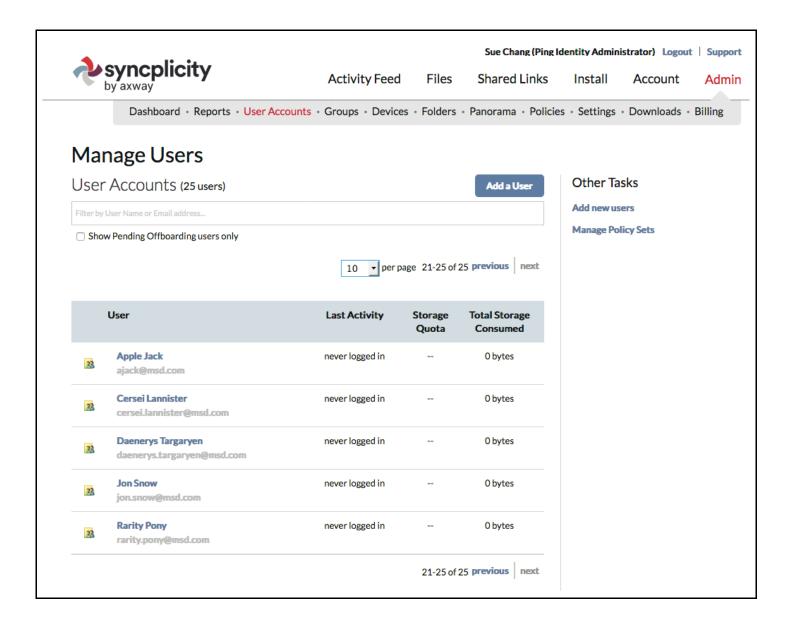
We can confirm this was successful by checking the following:

Provisioner.log (<pf install directory>\pingfederate\log) 14:52:44,136 DEBUG [SyncplicitySaasProvisioner] getUser() :: BEGIN 14:52:44,136 DEBUG [SyncplicitySaasProvisioner] getUser() (before) :: guid :: null :: username :: rarity.pony@msd.com 14:52:44,136 DEBUG [SyncplicitySaasProvisioner] getUser() (after) :: guid :: rarity.pony@msd.com :: username :: rarity.pony@msd.com 14:52:44,136 DEBUG [UserManager] getUser() :: PROCESSING A GET USER REQUEST FOR :: rarity.pony@msd.com :: BEGIN 14:52:44,137 DEBUG [TokenManager] isTokenExpired() :: token response is null, returning isTokenExpired as true 14:52:44,137 DEBUG [TokenManager] getToken() :: token has expired, getting new token 14:52:44,137 DEBUG [TokenManager] initToken() :: BEGIN 14:52:44,137 DEBUG [TokenManager] isTokenExpired() :: token response is null, returning isTokenExpired as true 14:52:44,158 DEBUG [CreateTokenRequest] CreateTokenRequest - execute() :: releasing connection 14:52:44,158 DEBUG [CreateTokenRequest] CreateTokenRequest - execute() :: executing token creation request 14:52:44,158 DEBUG [CreateTokenRequest] BaseRequest - execute() :: performing GET request on :: https://xml.syncplicity.com/1.1/auth/tokens.svc/ 14:52:44,158 DEBUG [ApplicationTokenCredential] ApplicationTokenCredential applyAuthenticationMechanism() :: applying authentication mechanism 14:52:44,158 DEBUG [ApplicationTokenCredential] ApplicationTokenCredential applyAuthenticationMechanism() :: releasing connection 14:52:44,573 DEBUG [CreateTokenRequest] BaseRequest - execute() :: received status code :: 200 :: while performing GET request on :: https://xml.syncplicity.com/1.1/auth/tokens.svc/ with the following response body :: [{"Id": "w8lCBe28tmOWA6cUtf8i6Fc4aUtNO9ifMWaVnCZaDIiGM581jW6tz5zAk0DznOj8", "Duration": 5399.9939232, "User":{"Id":"ebb99234-4b68-403f-8e85-419884aa401a", "EmailAddress": "", "FirstName": "Sue", "LastName": "Chang", "Company": { "Id": "bc096d16f58b-41f6-8142-859553e89b46","Name":"Ping Identity","AccountType":3},"AccountType":14}}] 14:52:44,573 DEBUG [CreateTokenRequest] BaseRequest - execute() :: releasing connection 14:52:44,574 DEBUG [TokenResponse] fromHttpResponse() :: response status code is ok [200] :: with body :: [{"Id":"w8lCBe28tm0WA6cUtf8i6Fc4aUtN09ifMWaVnCZaDIiGM581jW6tz5zAk0Dzn0j8","Duration":5399.9939232, "User":{"Id":"ebb99234-4b68-403f-8e85-419884aa401a", "EmailAddress": "", "FirstName": "Sue", "LastName": "Chang", "Company": { "Id": "bc096d16f58b-41f6-8142-859553e89b46", "Name": "Ping Identity", "AccountType": 3}, "AccountType": 14}}] 14:52:44,574 DEBUG [TokenResponse] TokenResponse() :: JSON string :: [{"Id":"w81CBe28tmOWA6cUtf8i6Fc4aUtNO9ifMWaVnCZaDIiGM581jW6tz5zAk0DznOj8","Duration":5399.9939232, "User": { "Id": "ebb99234-4b68-403f-8e85-419884aa401a", "EmailAddress": "", "FirstName": "Sue", "LastName": "Chang", "Company": { "Id": "bc096d16f58b-41f6-8142-859553e89b46", "Name": "Ping Identity", "AccountType": 3}, "AccountType": 14}}] 14:52:44,574 DEBUG [TokenResponse] TokenResponse() :: received status code :: 200 for token 14:52:44,574 DEBUG [TokenResponse] TokenResponse() :: time before request (used for setting expected token expiration) :: 1519685564574 14:52:44,580 DEBUG [TokenResponse] TokenResponse() :: status is ok and received a JSON array when requesting token 14:52:44,580 DEBUG [TokenResponse] TokenResponse() :: Received [1] tokens from attempt to acquire tokens. 14:52:44,581 DEBUG [TokenResponse] TokenResponse() :: Received [[{"User":{"Company":{"Id":"bc096d16-f58b-41f6-8142-859553e89b46","AccountType":3,"Name":"Ping Identity"}, "FirstName": "Sue", "Id": "ebb99234-4b68-403f-8e85-419884aa401a", "LastName": "Chang", "AccountType": 14, "EmailAddress": "" }, "Duration": 5399.9939232, "Id": "w8lCBe28tmOWA6cUtf8i6Fc4aUtN09ifMWaVnCZaDIiGM581jW6tz5zAk0DznOj8"}]] tokens from parse. 14:52:44,581 DEBUG [TokenResponse] TokenResponse() :: token response status code has been set to :: 200

```
14:52:44,581 DEBUG [TokenResponse] TokenResponse() :: token response token has been set to ::
w81CBe28tmOWA6cUtf8i6Fc4aUtNO9ifMWaVnCZaDIiGM581jW6tz5zAk0DznOj8
14:52:44,581 DEBUG [TokenResponse] TokenResponse() :: expected token expiration set to :: Mon Feb
26 16:22:43 PST 2018
14:52:44,585 DEBUG [TokenResponse] TokenResponse(); :: JSON object is not null, user object has
been set.
14:52:44,585 DEBUG [TokenResponse] fromHttpResponse() :: releasing connection
14:52:44,585 DEBUG [TokenManager] initToken() :: user from token response is not null
14:52:44,585 DEBUG [TokenManager] initToken() :: releasing connection
14:52:44,585 DEBUG [TokenManager] initToken() :: END
14:52:44,585 DEBUG [TokenManager] getToken() :: token response's token ::
w81CBe28tmOWA6cUtf8i6Fc4aUtNO9ifMWaVnCZaDIiGM581jW6tz5zAk0DznOj8
14:52:44,585 DEBUG [UserManager] getUser() :: getting an access token for the get user request
14:52:44,586 DEBUG [UserManager] processRequest() :: active connections in the pool :: 1
14:52:44,586 DEBUG [GetUserRequest] GetUserRequest - execute() :: processing get user request for
:: rarity.pony@msd.com
14:52:44,586 DEBUG [GetUserRequest] GetUserRequest - execute() :: releasing connection
14:52:44,586 DEBUG [GetUserRequest] BaseRequest - execute() :: performing GET request on ::
https://xml.syncplicity.com/1.1/auth/user.svc/rarity.pony%40msd.com
14:52:44,586 DEBUG [SyncplicityAccessToken] SyncplicityAccessToken -
applyAuthenticationMechanism() :: applying authentication mechanism
14:52:44,586 DEBUG [SyncplicityAccessToken] SyncplicityAccessToken -
applyAuthenticationMechanism() :: releasing connection
14:52:44,682 DEBUG [GetUserRequest] BaseRequest - execute() :: received status code :: 200 ::
while performing GET request on ::
https://xml.syncplicity.com/1.1/auth/user.svc/rarity.pony%40msd.com with the following response
body :: {"Id":"e31c32b7-1da1-4d36-85fa-
396ac614ad63", "EmailAddress": "rarity.pony@msd.com", "FirstName": "Rarity", "LastName": "Pony", "Roles":
[], "AccountType":7, "Status":1, "CreatedDateUtc": "\/Date(1519682666237)\/"}
14:52:44,682 DEBUG [GetUserRequest] BaseRequest - execute() :: releasing connection
14:52:44,682 DEBUG [UserManager] processRequest() :: finished processing :: GET USER transaction
request, and received status code :: 200
14:52:44,682 DEBUG [UserManager] processRequest(); :: releasing connection
14:52:44,682 DEBUG [UserManager] getUser() :: get user request is ok, status code :: 200 :: for
saas ID :: rarity.pony@msd.com
14:52:44,682 DEBUG [UserManager] getUser() :: response body :: {"Id":"e31c32b7-1da1-4d36-85fa-
396ac614ad63", "EmailAddress": "rarity.pony@msd.com", "FirstName": "Rarity", "LastName": "Pony", "Roles":
[], "AccountType":7, "Status":1, "CreatedDateUtc": "\/Date(1519682666237)\/"}
14:52:44,682 DEBUG [UserManager] getUser() :: releasing connection
14:52:44,682 DEBUG [UserManager] getUser() :: PROCESSING A GET USER REQUEST FOR ::
rarity.pony@msd.com :: END
14:52:44,683 DEBUG [SyncplicitySaasProvisioner] getUser() :: got user, user exists
14:52:44,683 DEBUG [SyncplicitySaasProvisioner] getUser() :: END
14:52:44,683 DEBUG [SyncplicitySaasProvisioner] updateUser() :: BEGIN
14:52:44,683 DEBUG [SyncplicitySaasProvisioner] updateUser() :: existing user data ::
      accountEnabled = true
      SaasId = [rarity.pony@msd.com] :: updated user data ::
                                                                  accountEnabled = true
      FirstName = [Rarity]
      Roles = [User]
      LastName = [Ponv]
      SaasId = [rarity.pony@msd.com]
      EmailAddress = [rarity.pony@msd.com]
14:52:44,683 DEBUG [SyncplicitySaasProvisioner] updateUser() :: Triggering an update for ::
rarity.pony@msd.com (SaaS ID), rarity.pony@msd.com (SaaS Username)
14:52:44,683 DEBUG [SyncplicitySaasProvisioner] populateUserFromSaasUserData(3) BEGIN
14:52:44,684 DEBUG [SyncplicitySaasProvisioner] populateUserFromSaasUserData() :: saas ID (saas
user data) :: null
14:52:44,684 DEBUG [SyncplicitySaasProvisioner] populateUserFromSaasUserData() :: saas ID (user)
:: null
14:52:44,684 DEBUG [SyncplicitySaasProvisioner] populateUserFromSaasUserData() :: saas ID
(attribute) :: rarity.pony@msd.com
14:52:44,684 DEBUG [SyncplicitySaasProvisioner] populateUserFromSaasUserData(3) END
14:52:44,684 DEBUG [UserManager] updateUser() :: PROCESSING AN UPDATE USER REQUEST FOR ::
rarity.pony@msd.com :: BEGIN
14:52:44,684 DEBUG [TokenManager] isTokenExpired() :: token expiration set by Syncplicity was set
at :: Mon Feb 26 16:22:43 PST 2018
14:52:44,684 DEBUG [TokenManager] isTokenExpired() :: it is now :: Mon Feb 26 14:52:44 PST 2018
14:52:44,684 DEBUG [TokenManager] isTokenExpired() :: token was created at :: Mon Feb 26 14:52:43
```

```
14:52:44,684 DEBUG [TokenManager] isTokenExpired() :: token expiration set by the Syncplicity
Provisioner was set at :: Mon Feb 26 15:52:43 PST 2018
14:52:44,684 DEBUG [TokenManager] getToken() :: token has not expired yet, reusing existing token
14:52:44,684 DEBUG [TokenManager] getToken() :: token response's token ::
w81CBe28tmOWA6cUtf8i6Fc4aUtNO9ifMWaVnCZaDIiGM581jW6tz5zAk0DznOj8
14:52:44,684 DEBUG [UserManager] updateUser() :: getting an access token for the update user
14:52:44,685 DEBUG [UserManager] processRequest() :: active connections in the pool :: 1
14:52:44,685 DEBUG [UpdateUserRequest] UpdateUserRequest - execute() :: processing update user
request for :: rarity.pony@msd.com
14:52:44,688 DEBUG [UpdateUserRequest] UpdateUserRequest - execute() :: releasing connection
14:52:44,688 DEBUG [UpdateUserRequest] BaseRequest - execute() :: performing PUT request on ::
https://xml.syncplicity.com/1.1/auth/user.svc/rarity.pony%40msd.com
14:52:44,688 DEBUG [SyncplicityAccessToken] SyncplicityAccessToken -
applyAuthenticationMechanism() :: applying authentication mechanism
14:52:44,688 DEBUG [SyncplicityAccessToken] SyncplicityAccessToken -
applyAuthenticationMechanism() :: releasing connection
14:52:44,818 DEBUG [UpdateUserRequest] BaseRequest - execute() :: received status code :: 200 ::
while performing PUT request on ::
https://xml.syncplicity.com/1.1/auth/user.svc/rarity.pony%40msd.com with the following response
body ::
{"EmailAddress": "rarity.pony@msd.com", "FirstName": "Rarity", "LastName": "Pony", "Disabled": false, "Com
pany":{"Name":"Ping Identity"}, "Roles":[], "AccountType":7, "Active":true}
14:52:44,818 DEBUG [UpdateUserRequest] BaseRequest - execute() :: releasing connection
14:52:44,818 DEBUG [UserManager] processRequest() :: finished processing :: UPDATE transaction
request, and received status code :: 200
14:52:44,818 DEBUG [UserManager] processRequest(); :: releasing connection
14:52:44,818 DEBUG [UserManager] updateUser() :: update user request is ok, status code is :: 200
:: for saas ID :: rarity.pony@msd.com
14:52:44,818 DEBUG [UserManager] updateUser() :: releasing connection
14:52:44,818 DEBUG [UserManager] updateUser() :: PROCESSING AN UPDATE USER REQUEST FOR ::
rarity.pony@msd.com :: END
14:52:44,818 DEBUG [SyncplicitySaasProvisioner] updateUser() :: Update processed for ::
rarity.pony@msd.com (SaaS ID), rarity.pony@msd.com (SaaS Username)
14:52:44,818 DEBUG [SyncplicitySaasProvisioner] updateUser() :: END
14:52:44,818 DEBUG [JdbcUserStore] Setting SaaS GUID for user in JDBC store: channel=4,
dsGUID=b96ae5d22be29949bc946bcb4d397bb6, saasGuid=rarity.pony@msd.com []
14:52:45,080 DEBUG [JdbcUserStore] Clearing user in JDBC store: channel=4,
dsGUID=b96ae5d22be29949bc946bcb4d397bb6 []
14:52:45,342 DEBUG [JdbcUserStore] Setting SaaS Identity for user in JDBC store: channel=4,
dsGUID=b96ae5d22be29949bc946bcb4d397bb6,
saasIdentity=eyJhbGciOiJkaXIiLCJlbmMiOiJBMTI4Q0JDLUhTMjU2Iiwia2lkIjoiZ2FCQkR5UzdlZCIsInZlcnNpb24iO
iI4LjAuNC4wIn0..mditAx9Pn30oIlCeygbt10.BNoKHIbvkgCc151Han9-Cekh3yx2-
Yxwp4xecvrYoek.lp3Qm8V9LQj4cfxbtyQSoQ []
14:52:45,606 INFO [SystemOut] 14:52:45,606 INFO [UserActivityLogger] Updated:
rarity.pony@msd.com
```

Syncplicity >> admin >>user accounts



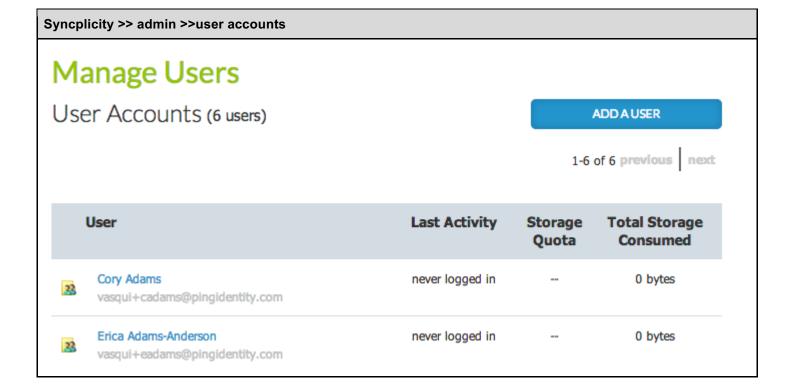
Scenario 4: Update Syncplicity profile due to user Name Change

In this scenario we created a user (Erica Adams) as a member of the AD Provisioning group.

Then we changed her last name in Active Directory to Adams-Anderson and confirmed the name change was reflected in the Syncplicity profile within minutes.

Provisioner.log (<pf install directory>\pingfederate\log) 12:48:54,756 DEBUG [SpringLdapDirectoryDriver] Getting group modify time for: CN=SyncplicityUsers,CN=Users,DC=corp,DC=partnera,DC=com; using attribute: modifyTimestamp Channel: channel1 12:48:54,756 DEBUG [GenericUserProvisioningChannel] not needed. Channel: channel1 12:48:54,756 DEBUG [GenericUserProvisioningChannel] Collecting changed users... Channel: channel1 12:48:54,772 DEBUG [JdbcUserStore] Updating user in JDBC store: channel=1, saasUsername=vasqui+eadams@pingidentity.com, hash=0264ef92f53ac38ad6e7018a40c47fa1, saasIdentity=EmailAddress&true&EmailAddress=vasqui%2Beadams%40pingidentity.com&FirstName=Erica&Las tName=Adams-Anderson&Roles=BLANK&AccountType=7, dsGUID=c66c0cd64c5a8c458bebc51fb380f96d Channel: channel1

```
12:48:54,788 DEBUG [SaasProvisioningEventTracker] User provisioning event during cycle
1381430934756 in channel 1 @ Thu Oct 10 12:48:54 MDT 2013 type: 'UPDATE_USER_INTERNAL' successful:
'true' source id: 'c66c0cd64c5a8c458bebc51fb380f96d' target id: 'vasqui+eadams@pingidentity.com'
Channel: channel1
12:48:54,788 DEBUG [AttributeSyncCallback] User marked for update, GUID:
c66c0cd64c5a8c458bebc51fb380f96d Channel: channel1
12:48:54,788 DEBUG [PagingLdapTemplate] Simple Paged Search: Page size: 500, Result size: 1
Channel: channel1
12:48:54,788 DEBUG [GenericUserProvisioningChannel] Clearing dirty user records... Channel:
channel1
12:48:55,616 DEBUG [JdbcUserStore] Clearing user in JDBC store: channel=1,
dsGUID=c66c0cd64c5a8c458bebc51fb380f96d Channel: channel1
12:48:55,647 INFO [UserActivityLogger] Updated: vasqui+eadams@pingidentity.com Channel: channel1
12:48:55,647 DEBUG [SaasProvisioningEventTracker] User provisioning event during cycle
1381430934756 in channel 1 @ Thu Oct 10 12:48:55 MDT 2013 type: 'UPDATE' successful: 'true' source
id: 'c66c0cd64c5a8c458bebc51fb380f96d' target id: 'vasqui+eadams@pingidentity.com' Channel:
channel1
```



Scenario 5: Update Syncplicity profile due to user Email Change

In this scenario we created a user (Erica Adams) as a member of the AD Provisioning group. Then we changed her email in Active Directory (from erica.adams@pingidentity.com to eadams@pingidentity.com), and confirmed the email change was reflected in the Syncplicity profile within minutes.

Server.log (<pf install directory>\pingfederate\log) 2015-10-06 14:39:08,704 DEBUG [com.pingidentity.clientservices.product.provisioner.SyncplicitySaasProvisioner] updateUser() ::

```
Update triggering an update on + (eadams@pingidentity.com (SaaS GUID), eadams@pingidentity.com
(SaaS Username))
2015-10-06 14:39:08,704 DEBUG
[com.pingidentity.clientservices.product.provisioner.SyncplicitySaasProvisioner]
populateUserFromSaasUserData() :: guid (saas user data):: erica.adams@pingidentity.com
2015-10-06 14:39:08,704 DEBUG
[com.pingidentity.clientservices.product.provisioner.SyncplicitySaasProvisioner] updateUser() ::
SaaS GUID is being updated :: erica.adams@pingidentity.com (before), eadams@pingidentity.com
(after)
2015-10-06 14:39:08,704 DEBUG
[com.pingidentity.clientservices.product.provisioner.token.TokenManager] Testing tokenExpiration
2015-10-06 14:39:08,813 DEBUG
[com.pingidentity.clientservices.product.provisioner.user.UpdateUserRequest] UpdateUserRequest()
:: user saas id :: erica.adams@pingidentity.com
2015-10-06 14:39:08,813 DEBUG
[com.pingidentity.clientservices.product.provisioner.user.UserManager] Connections in Pool: 1
2015-10-06 14:39:08,813 DEBUG
[com.pingidentity.clientservices.product.provisioner.user.UpdateUserRequest] execute() :: user
saas id :: erica.adams@pingidentity.com
2015-10-06 14:39:08,813 DEBUG
[com.pingidentity.clientservices.product.provisioner.user.UpdateUserRequest] getEndpointURL() ::
saasIdToQuery :: erica.adams@pingidentity.com
2015-10-06 14:39:08,813 DEBUG
[com.pingidentity.clientservices.product.provisioner.user.UpdateUserRequest] createRequestURL() ::
url :: https://xml.syncplicity.com/1.1/auth/user.svc/erica.adams%40pingidentity.com
2015-10-06 14:39:08,813 DEBUG
[com.pingidentity.clientservices.product.provisioner.user.UpdateUserRequest] execute() :: url ::
https://xml.syncplicity.com/1.1/auth/user.svc/erica.adams%40pingidentity.com
2015-10-06 14:39:08,844 DEBUG
[com.pingidentity.clientservices.product.provisioner.user.UpdateUserRequest] execute() ::
performing PUT on https://xml.syncplicity.com/1.1/auth/user.svc/erica.adams%40pingidentity.com
2015-10-06 14:39:08,954 DEBUG
[com.pingidentity.clientservices.product.provisioner.user.UpdateUserRequest] execute() :: received
status code :: 200
2015-10-06 14:39:08,954 DEBUG
[com.pingidentity.clientservices.product.provisioner.SyncplicitySaasProvisioner] updateUser() ::
Update processed on + (eadams@pingidentity.com (SaaS GUID), eadams@pingidentity.com (SaaS
Username))
```

6.0 Troubleshooting

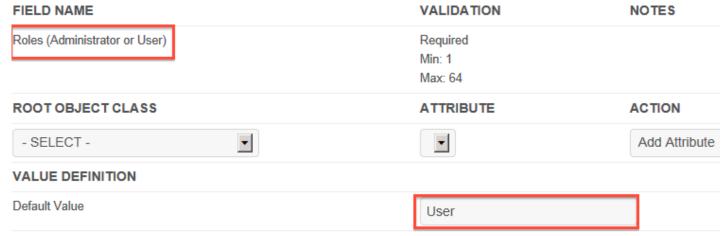
Error [The role was not specified as "Administrator" or "User"] in Provisioner.log

Issue: This error can occur if you failed to specify Administrator or User as the default value for the Role attribute in the Attribute Mapping for the Syncplicity Provisioning channel.

Solution:

- 1. Login to your PingFederate Administrator console and open the Syncplicity SP Connection
 - a. Go to the Outbound Provisioning page, click Configure Provisioning
 - b. On the Configure Channels >> Manage Channels page, click on your Syncplicity channel (if you have more than one you'll want to repeat this process for each).
 - c. Click on Attribute Mapping

- d. For the "Roles (Administrator or User)" field, click the Edit link (under Action)
- e. Set the Default value to either User or Administrator then click Done



- f. On the Attribute Mapping page, click Done
- g. On the Manage Channels page, click Done
- h. On the Outbound Provisioning page, click Save
- i. On the Activation & Summary page, click Save
- j. You will then need to re-trigger the action for the user that was encountering the error to ensure they get provisioned properly at Syncplicity (you do that by adding or removing them from the provisioning group). If you forget to do this, you'll continue to see the error in the log.

```
Provisioner.log sample
14:35:10,037 ERROR [AbstractSaasPluginBase] Exception in doCreateUser(). The role was not
specified as "Administrator" or "User" Channel: channel1
14:35:10,037 DEBUG [SaasProvisioningEventTracker] User provisioning event during cycle
1384378509396 in channel 1 @ Wed Nov 13 14:35:10 MST 2013 type: 'CREATE' successful: 'false'
source id: '606937bb1ab98742bba016a433730a22' target id: 'vasqui+dadams@pingidentity.com' cause:
'com.pingidentity.provisioner.sdk.SaasPluginException: The role was not specified as
"Administrator" or "User"! Channel: channel1
14:35:10,037 ERROR [SynchronousSaasCallback] Cannot process resource:
vasqui+dadams@pingidentity.com Channel: channel1
com.pingidentity.provisioner.saas.SaasException:
com.pingidentity.provisioner.sdk.SaasPluginException: The role was not specified as
"Administrator" or "User"
com.pingidentity.provisioner.sdk.internal.AbstractSaasPluginBase.doCreateUser(AbstractSaasPluginBa
se.java:118)
      at com.pingidentity.provisioner.saas.BaseSaasPlugin.updateUser(BaseSaasPlugin.java:165)
com.pingidentity.provisioner.channel.synchronous.SynchronousSaasUserRunner.run(SynchronousSaasUser
Runner.java:28)
      at java.lang.Thread.run(Thread.java:722)
Caused by: com.pingidentity.provisioner.sdk.SaasPluginException: The role was not specified as
"Administrator" or "User"
com.pingidentity.clientservices.syncplicity.provisioner.SyncplicitySaaSProvisioner.populateUserFro
mSaasUserDate(SyncplicitySaaSProvisioner.java:150)
com.pingidentity.clientservices.syncplicity.provisioner.SyncplicitySaaSProvisioner.createUser(Sync
plicitySaaSProvisioner.java:116)
com.pingidentity.provisioner.sdk.internal.AbstractSaasPluginBase.doCreateUser(AbstractSaasPluginBa
se.java:104)
      ... 3 more
```

```
14:35:10,349 DEBUG [JdbcUserStore] Clearing user in JDBC store: channel=1, dsGUID=c66c0cd64c5a8c458bebc51fb380f96d Channel: channel1
```

Error [403] in Provisioner.log

Issue: This error can occur if your Application Token is misconfigured.

Solution:

- 2. Please login to Syncplicity and go to the Account page
 - a. Copy the Application Token value listed under Account
- 3. Login to your PingFederate Administrator console and open the Syncplicity SP Connection
 - a. Go to the Outbound Provisioning page, click Configure Provisioning
 - b. On the Configure Channels page, click on Target
 - c. Verify the Application Token value here matches what you copied from Syncplicity in step 1.

Provisioner.log sample

```
09:31:52,670 DEBUG [SpringLdapDirectoryDriver] Getting group modify time for:
CN=SyncplicityUsers,CN=Users,DC=corp,DC=partnera,DC=com; using attribute: modifyTimestamp
Channel: channel1
09:31:52,670 DEBUG [GenericUserProvisioningChannel]
                                                            not needed. Channel: channel1
09:31:52,670 DEBUG [GenericUserProvisioningChannel] Collecting changed users... Channel:
channel1
09:31:52,670 DEBUG [GenericUserProvisioningChannel] Clearing dirty user records... Channel:
channel1
09:31:52,749 ERROR [SynchronousSaasCallback] Cannot process resource:
vasqui+asmith@pingidentity.com Channel: channel1
com.pingidentity.provisioner.sdk.SaasPluginException: response with error code [403] with body
com.pingidentity.clientservices.syncplicity.provisioner.token.TokenResponse.fromHttpResponse(Token
Response.java:111)
      at
com.pingidentity.clientservices.syncplicity.provisioner.token.TokenManager.initToken(TokenManager.
java:51)
com.pingidentity.clientservices.syncplicity.provisioner.token.TokenManager.getToken(TokenManager.j
ava:27)
com.pingidentity.clientservices.syncplicity.provisioner.user.UserManager.getUser(UserManager.java:
37)
com.pingidentity.clientservices.syncplicity.provisioner.SyncplicitySaaSProvisioner.getUser(Syncpli
citySaaSProvisioner.java:224)
com.pingidentity.provisioner.sdk.internal.AbstractSaasPluginBase.doGetUser(AbstractSaasPluginBase.
java:127)
      at com.pingidentity.provisioner.saas.BaseSaasPlugin.updateUser(BaseSaasPlugin.java:149)
      at
com.pingidentity.provisioner.channel.synchronous.SynchronousSaasUserRunner.run(SynchronousSaasUser
Runner.java:28)
      at java.lang.Thread.run(Thread.java:722)
09:31:52,811 ERROR [SynchronousSaasCallback] Cannot process resource:
vasqui+bsmith@pingidentity.com Channel: channel1
com.pingidentity.provisioner.sdk.SaasPluginException: response with error code [403] with body
      at
com.pingidentity.clientservices.syncplicity.provisioner.token.TokenResponse.fromHttpResponse(Token
Response.java:111)
com.pingidentity.clientservices.syncplicity.provisioner.token.TokenManager.initToken(TokenManager.
```

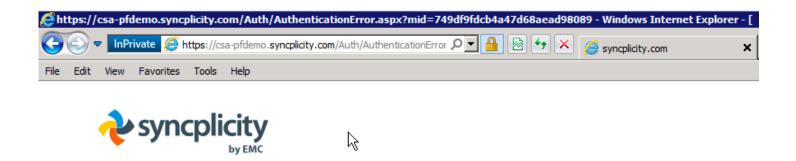
```
java:51)
com.pingidentity.clientservices.syncplicity.provisioner.token.TokenManager.getToken(TokenManager.j
ava:27)
com.pingidentity.clientservices.syncplicity.provisioner.user.UserManager.getUser(UserManager.java:
37)
com.pingidentity.clientservices.syncplicity.provisioner.SyncplicitySaaSProvisioner.getUser(Syncpli
citySaaSProvisioner.java:224)
com.pingidentity.provisioner.sdk.internal.AbstractSaasPluginBase.doGetUser(AbstractSaasPluginBase.
java:127)
      at com.pingidentity.provisioner.saas.BaseSaasPlugin.updateUser(BaseSaasPlugin.java:149)
com.pingidentity.provisioner.channel.synchronous.SynchronousSaasUserRunner.run(SynchronousSaasUser
Runner.java:28)
      at java.lang.Thread.run(Thread.java:722)
09:31:52,874 ERROR [SynchronousSaasCallback] Cannot process resource: vasqui@pingidentity.com
Channel: channel1
com.pingidentity.provisioner.sdk.SaasPluginException: response with error code [403] with body
      at
com.pingidentity.clientservices.syncplicity.provisioner.token.TokenResponse.fromHttpResponse(Token
Response.java:111)
com.pingidentity.clientservices.syncplicity.provisioner.token.TokenManager.initToken(TokenManager.
java:51)
com.pingidentity.clientservices.syncplicity.provisioner.token.TokenManager.getToken(TokenManager.j
ava:27)
com.pingidentity.clientservices.syncplicity.provisioner.user.UserManager.getUser(UserManager.java:
37)
com.pingidentity.clientservices.syncplicity.provisioner.SyncplicitySaaSProvisioner.getUser(Syncpli
citySaaSProvisioner.java:224)
com.pingidentity.provisioner.sdk.internal.AbstractSaasPluginBase.doGetUser(AbstractSaasPluginBase.
java:127)
      at com.pingidentity.provisioner.saas.BaseSaasPlugin.updateUser(BaseSaasPlugin.java:149)
      at
com.pingidentity.provisioner.channel.synchronous.SynchronousSaasUserRunner.run(SynchronousSaasUser
Runner.java:28)
      at java.lang.Thread.run(Thread.java:722)
```

Syncplicity Login Error

Issue: This error can occur if your username has not yet been provisioned with a user account in Syncplicity.

Solution:

- 1. Verify the user is a member of the Active Directory security group or AD Filter that you specified to target Syncplicity users for provisioning.
- 2. Check the provisioner log to see if there were any errors attempting to provision this user account.
- 3. Have the user re-try once the provisioning task is completed successfully.



Login Error

An error occurred logging you in the web site.

Could not verify your identity.

User's Name in Syncplicity changes after SSO login

Known Issue: Once a user is Provisioned in Syncplicity and they login via SSO for the first time, their First Name in Syncplicity gets changed to their email address value.

7.0 Logging

To enable various logging modes for the Syncplicity Provisioner, add the following in the logger section (near the bottom) to <PingFederateInstall>/pingfederate/server/default/conf/log4j2.xml:

<Logger name="com.pingidentity.clientservices.product.provisioner" level="[DEBUG | INFO | WARN |
ERROR]" />

Log4J Standard Levels:

intLevel		
0		
100		
200		
300		
400		
500		
600		
Integer.MAX_VALUE		

Reduced logging begins at the first level to more detailed at the bottom.

Detailed training on using Log4j in PingFederate can be found at: https://ping.force.com/Support/PingIdentityKnbSearchHome?searchText=log4j