

PingFederate®

Remember Me Adapter v1.6.0

User Guide



© 2005-2019 Ping Identity ® Corporation. All rights reserved.

PingFederate Remember Me Adapter User Guide

Version 1.6.0

June 2019

Ping Identity Corporation
1001 17th Street, Suite 100
Denver, CO 80202
USA

Phone: 877.898.2905 (+1 303.468.2882 outside North America)

Fax: 303.468.2909 E-mail: info@pingidentity.com

Web Site: <http://www.pingidentity.com>

Trademarks

Ping Identity, the Ping Identity logo, PingFederate, PingAccess, PingID, PingOne, PingConnect, and PingEnable are registered trademarks of Ping Identity Corporation ("Ping Identity"). All other trademarks or registered trademarks are the property of their respective owners.

Disclaimer

This document is proprietary and not for general publication. It may be provided ad hoc for informational purposes only, and the information herein is subject to change without notice. Ping Identity does not provide any warranties and specifically disclaims any liability in connection with this document.

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>).

Table of Contents

Purpose	4
Prerequisites	4
Installation.....	4
Configuration	4
Testing	14
Logging.....	18

Purpose

The PingFederate Remember Me Adapter provides device fingerprint and token generation functionality to be able to skip an authentication method after a user has successfully authenticated against that authentication method.

Prerequisites

This document assumes that you already have the following installed and configured:

- A functional PingFederate environment, version 9.x
- JDK version 8
- A following database – qualified for:
 - MySQL
 - Microsoft SQL Server

Installation

1. Extract the contents of *pf-remember-me-adapter-1.6.0.zip* into a temporary directory that can be removed after installation.
2. Change directories to *pf-remember-me-adapter-1.6.0*.
3. Copy the noted files/folders to the following directories in your PingFederate:

From:	To:
<code>/dist/</code> <ul style="list-style-type: none">• <code>pf-remember-me-adapter-1.6.0.jar</code>• <code>commons-dbutils-1.7.jar</code>	<code><PingFederateInstall>/pingfederate/server/default/deploy</code>
<code>/dist/templates/</code> <ul style="list-style-type: none">• <code>/assets/*</code>• <code>*.html</code>	<code><PingFederateInstall>/pingfederate/server/default/conf/template</code>

4. Append all content from `/dist/config/pingfederate-messages.properties` to `<PingFederateInstall>/pingfederate/server/default/conf/language-packs/pingfederate-messages.properties`.
5. Repeat Steps 3 and 4 on all other clustered engine nodes.
6. Execute the appropriate SQL file from the `/dist/sql/` folder.
7. Start or restart PingFederate.

Configuration

Note: Before configuring the Remember Me adapters, ensure that a datastore has been pre-configured with the SQL database created in Step 6 under [Installation](#).

Generating an AES Key

Generate an AES key by executing:

```
java -classpath pf-remember-me-adapter-1.6.0.jar com.pingidentity.ps.adapter.idp.rememberme.EncryptCookieValue
```

Which will give output like:

```
mxU5vI3XcDCczkiRwOPMDw  
Test Passed: match!
```

Use the first line from the output in your Pre and Post Remember Me Adapter configurations.

Configuring the Pre Remember Me Adapter

1. Log into the PingFederate admin console and click on **Identity Provider >> Application Integration >> Adapters**.
2. Click **Create New Instance**.
3. Enter the **Instance Name**, **Instance ID**, select **Pre Remember Me Adapter 1.6.0** from the **Type** dropdown, and click **Next**.

The screenshot shows the PingFederate admin console interface. On the left is a sidebar with navigation links: MAIN, Identity Provider, Service Provider, OAuth Server, SETTINGS, Security, and System. The main content area is titled 'Manage IdP Adapter Instances | Create Adapter Instance'. It features a tabbed interface with 'Type' selected. Below the tabs is a text instruction: 'Enter an Adapter Instance Name and ID, select the Adapter Type, and a parent if applicable. The Adapter Type is limited to the adapters currently installed on your server.' The form contains four fields: 'INSTANCE NAME' with the value 'RememberMePreIdPAd', 'INSTANCE ID' with the value 'RememberMePreIdPAd', 'TYPE' with a dropdown menu showing 'Pre Remember Me Adapter 1.6.0', and 'PARENT INSTANCE' with a dropdown menu showing 'None'. At the bottom right of the form are 'Cancel' and 'Next' buttons.

4. Enter/select the appropriate data, and click **Next**.

PingFederate®

MAIN

Identity Provider

Service Provider

OAuth Server

SETTINGS

Security

System

Copyright © 2003-2018
Ping Identity Corporation
All rights reserved
Version 9.2.0.10

Manage IdP Adapter Instances | Create Adapter Instance

Type | IdP Adapter | Extended Contract | Adapter Attributes | Adapter Contract Mapping | Summary

Complete the configuration necessary to look up user security contexts in your environment. This configuration was designed into the adapter for use at your site.

Pre Remember Me Adapter 1.6.0

Field Name	Field Value	Description
JDBC DATASOURCE	jdbc:mysql://mssql-lab.pingidentity. ▼	The JDBC dataSource.
DEVICE FINGER PRINT TEMPLATE	device.fingerprint.template.html	Name of the velocity template that will do the device fingerprint (default is device.fingerprint.template.html).
COOKIE NAME	fingerprint	Name of the cookie that the fingerprint will be inserted into.
COOKIE PATH	/idp	Path of the cookie that the fingerprint will be inserted into.
COOKIE MAXIMUM AGE	1	Maximum age of the cookie in days.
AES KEY	The AES Key used to decrypt/encrypt the cookie value
ENABLE REMEMBER ME QUERY TEMPLATE	<input checked="" type="checkbox"/>	If enabled, display the template that queries the user if he/she wants to be remembered.
REMEMBER ME QUERY TEMPLATE	remember.me.template.html	Name of the velocity template that will query the user if he/she wants to be remembered (default is remember.me.template.html).
WEBSITE NAME CHAINED ATTRIBUTE	websiteName	Name of the website name attribute passed down from the previous adapter.
COMPOSITE ADAPTER ORDER	1	If a composite adapter is the first form of authentication specify the adapter order for retrieving the username (comma separated list).

Manage Data Stores

Cancel Previous Next Done

5. Add **websiteName** (optional) and extend the contract as needed, and click **Next**.

For example:

PingFederate

MAIN

- IdP Identity Provider
- SP Service Provider
- AS OAuth Server

SETTINGS

- Server Configuration

Manage IdP Adapter Instances | Create Adapter Instance

Type	IdP Adapter	Extended Contract	Adapter Attributes	Adapter Contract Mapping	Summary
------	-------------	-------------------	--------------------	--------------------------	---------

This adapter type supports the creation of an extended adapter contract after initial deployment of the adapter instance. This adapter contract may be used to fulfill the attribute contract, look up additional attributes from a local data store, or create a persistent name identifier which uniquely identifies the user passed to your SP partners.

Core Contract

username

Extend the Contract	Action
websiteName	Edit Delete
<input type="text"/>	<input type="button" value="Add"/>

[Cancel](#)

6. Select **username** as the **Pseudonym**, and click **Next**.

PingFederate

MAIN

- IdP Identity Provider
- SP Service Provider
- AS OAuth Server

SETTINGS

- Server Configuration

Manage IdP Adapter Instances | Create Adapter Instance

Type	IdP Adapter	Extended Contract	Adapter Attributes	Adapter Contract Mapping	Summary
------	-------------	-------------------	--------------------	--------------------------	---------

As an IdP, some of your SP partners may choose to receive a pseudonym to uniquely identify a user. From the attributes in this authentication adapter, please select the values that you would like to use in constructing this unique identifier. Optionally, specify here any attributes that must be masked in log files.

Attribute	Pseudonym	Mask Log Values
username	<input checked="" type="checkbox"/>	<input type="checkbox"/>
websiteName	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> MASK ALL OGNI-EXPRESSION GENERATED LOG VALUES		

[Cancel](#)

7. Configure the adapter contract if needed, and click **Next**.

8. Review the **Summary**, and click **Done**.

PingFederate®

MAIN

Identity Provider

Service Provider

OAuth Server

SETTINGS

Security

System

Manage IdP Adapter Instances | Create Adapter Instance

Type
IdP Adapter
Extended Contract
Adapter Attributes
Adapter Contract Mapping
Summary

IdP adapter instance summary information.

Create Adapter Instance

Type

Instance NameRememberMePreIdPAdapter

Instance IDRememberMePreIdPAdapter

TypePre Remember Me Adapter 1.6.0

Class Namecom.pingidentity.ps.adapter.idp.rememberme.PreRememberMeAdapter

Parent Instance NameNone

IdP Adapter

JDBC Datasourcejdbc:mysql://mssql-lab.pingidentity.com:3306/remember_me (sa)

Device Finger Print Templatedevice.fingerprint.template.html

Cookie Namefingerprint

Cookie Path/idp

Cookie Maximum Age1

Enable Remember Me Query Templatetrue

Remember Me Query Templateremember.me.template.html

Website Name Chained AttributewebsiteName

Composite Adapter Order1

Extended Contract

Attributeusername

AttributewebsiteName

Adapter Attributes

Pseudonymusername

Adapter Contract Mapping

Attribute Sources & User Lookup

Data Sources(None)

Adapter Contract Fulfillment

websiteNamewebsiteName (Adapter)

usernameusername (Adapter)

Issuance Criteria

Criterion(None)

Copyright © 2003-2018
Ping Identity Corporation
All rights reserved
Version 9.2.010

9. Click **Save**.

Configuring the Post Remember Me Adapter

1. Repeat the steps under [Configuring the Pre Remember Me Adapter](#), but for the **Post Remember Me Adapter**.

For example:

MAIN

Identity Provider

Service Provider

OAuth Server

SETTINGS

Security

System

Manage IdP Adapter Instances | Create Adapter Instance

Type

IdP Adapter

Extended Contract

Adapter Attributes

Adapter Contract Mapping

Summary

IdP adapter instance summary information.

Create Adapter Instance

Type

Instance Name

Instance ID

Type

Class Name

Parent Instance Name

IdP Adapter

JDBC Datasource

Device Finger Print Template

Cookie Name

Cookie Path

Cookie Maximum Age

Enable Remember Me Query Template

Remember Me Query Template

Website Name Chained Attribute

Composite Adapter Order

Extended Contract

Attribute

Attribute

Adapter Attributes

Pseudonym

Adapter Contract Mapping

Attribute Sources & User Lookup

Data Sources

Adapter Contract Fulfillment

websiteName

username

Issuance Criteria

Criterion

RememberMePostIdPAdapter

RememberMePostIdPAdapter

Post Remember Me Adapter 1.6.0

com.pingidentity.ps.adapter.idp.rememberme.PostRememberMeAdapter

None

jdbc:mysql://mssql-lab.pingidentity.com:3306/remember_me (sa)

device.fingerprint.template.html

fingerprint

/idp

1

true

remember.me.template.html

websiteName

3

username

username

(None)

websiteName (Adapter)

username (Adapter)

(None)

Copyright © 2003-2018
Ping Identity Corporation
All rights reserved
Version 9.2.0.10

Configuring the Composite Adapter to Leverage the Pre and Post Remember Me Adapters

Note: The Pre and Post Remember Me Adapters can also be implemented with the PingFederate policies framework. The below is an example of how to configure them in a composite adapter.

1. Log into the PingFederate admin console and click on **Identity Provider >> Application Integration >> Adapters**.
2. Click **Create New Instance**.
3. Enter the **Instance Name**, **Instance ID**, select **Composite Adapter** from the **Type** dropdown, and click **Next**.

Ping

Identity

PingFederate

MAIN

IdP

Identity Provider

SP

Service Provider

SETTINGS

Server Configuration

Manage IdP Adapter Instances | Create Adapter Instance

Type

IdP Adapter

Extended Contract

Adapter Attributes

Adapter Contract Mapping

Summary

Enter an Adapter Instance Name and ID, select the Adapter Type, and a parent if applicable. The Adapter Type is limited to the adapters currently installed on your server.

INSTANCE NAME

RememberMeldPComp

INSTANCE ID

RememberMeldPComp

TYPE

Composite Adapter

PARENT INSTANCE

None

Cancel

Next

4. Create a composite adapter instance where the Pre and Post Remember Me Adapters sandwich the IdP adapter that will leverage the Remember Me functionality. Ensure that the Pre Remember Me adapter is marked as **Sufficient** in the composite adapter. For example:

PingFederate

MAIN

IdP
Identity Provider

SP
Service Provider

SETTINGS

Server Configuration

Manage IdP Adapter Instances | Create Adapter Instance

Type	IdP Adapter	Extended Contract	Adapter Attributes	Adapter Contract Mapping	Summary
------	-------------	-------------------	--------------------	--------------------------	---------

Complete the configuration necessary to look up user security contexts in your environment. This configuration was designed into the adapter for use at your site.

A Composite Adapter allows existing adapter instances to be chained together to execute in sequence. Each configured instance of a Composite Adapter is treated as a single logical adapter instance.

ADAPTERS
(Chained adapters)

ADAPTER INSTANCE	POLICY	AUTHN CONTEXT WEIGHT	AUTHN CONTEXT OVERRIDE	Action
RememberMePreIdPAdapter	<input type="radio"/> Required <input checked="" type="radio"/> Sufficient	3		Move Down Edit Delete
HTMLFormIdPAdapter	<input checked="" type="radio"/> Required <input type="radio"/> Sufficient	3		Move Up Move Down Edit Delete
RememberMePostIdPAdapter	<input checked="" type="radio"/> Required <input type="radio"/> Sufficient	3		Move Up Edit Delete

Add a new row to 'Adapters'

INPUT USER ID MAPPING
(Create mappings)

TARGET ADAPTER	USER ID SELECTION	Action
Add a new row to 'Input User ID Mapping'		

ATTRIBUTE NAME SYNONYMS
(Create synonyms between adapter attributes)

NAME	SYNONYM	Action
Add a new row to 'Attribute Name Synonyms'		

Field Name	Field Value	Description
ATTRIBUTE INSERTION	<input checked="" type="radio"/> Add To Back <input type="radio"/> Add To Front	Defines the order in which different values are returned for the same attribute name.

Cancel

Previous

Next

Done

5. Click **Next**, and extend the contract as needed.

For example:

The screenshot shows the 'Create Adapter Instance' wizard in PingFederate. The left sidebar has 'Identity Provider' selected under the 'MAIN' section. The main content area is titled 'Manage IdP Adapter Instances | Create Adapter Instance'. It features a tabbed interface with 'Extended Contract' selected. Below the tabs, a text box explains that this adapter type supports creating an extended adapter contract. A table titled 'Extend the Contract' lists attributes: 'username' and 'websiteName'. Each attribute has an 'Edit | Delete' link. Below the table is an 'Add' button. At the bottom right are 'Cancel', 'Previous', 'Next', and 'Done' buttons.

Type	IdP Adapter	Extended Contract	Adapter Attributes	Adapter Contract Mapping	Summary
This adapter type supports the creation of an extended adapter contract after initial deployment of the adapter instance. This adapter contract may be used to fulfill the attribute contract, look up additional attributes from a local data store, or create a persistent name identifier which uniquely identifies the user passed to your SP partners.					
Extend the Contract				Action	
username				Edit Delete	
websiteName				Edit Delete	
<input type="text"/>				<input type="button" value="Add"/>	

6. Select **username** as the **Pseudonym**, and click **Next**.

The screenshot shows the 'Create Adapter Instance' wizard in PingFederate, Step 4: Adapter Attributes. The left sidebar has 'Identity Provider' selected. The main content area is titled 'Manage IdP Adapter Instances | Create Adapter Instance'. It features a tabbed interface with 'Adapter Attributes' selected. Below the tabs, a text box explains that as an IdP, some SP partners may choose to receive a pseudonym to uniquely identify a user. A table titled 'Attribute' lists attributes: 'username' and 'websiteName'. Each attribute has a 'Pseudonym' checkbox (checked for 'username') and a 'Mask Log Values' checkbox. Below the table is a checkbox for 'MASK ALL OGNL-EXPRESSION GENERATED LOG VALUES'. At the bottom right are 'Cancel', 'Previous', 'Next', and 'Done' buttons.

Attribute	Pseudonym	Mask Log Values
username	<input checked="" type="checkbox"/>	<input type="checkbox"/>
websiteName	<input type="checkbox"/>	<input type="checkbox"/>

☐ MASK ALL OGNL-EXPRESSION GENERATED LOG VALUES

7. Click **Next**.

8. Review the **Summary**, click **Done**.

PingFederate

MAIN

Identity Provider

Service Provider

OAuth Server

SETTINGS

Server Configuration

Copyright © 2003-2018
Ping Identity Corporation
All rights reserved
Version 9.0.2.0

Manage IdP Adapter Instances | Create Adapter Instance

Type	IdP Adapter	Extended Contract	Adapter Attributes	Adapter Contract Mapping	Summary
------	-------------	-------------------	--------------------	--------------------------	---------

IdP adapter instance summary information.

Create Adapter Instance

Type

Instance Name

RememberMeldPCompositeAdapter

Instance ID

RememberMeldPCompositeAdapter

Type

Composite Adapter

Class Name

com.pingidentity.pf.adapters.composite.CompositeAdapter

Parent Instance Name

None

IdP Adapter

Adapters

RememberMePrelIdPAdapter, Sufficient, 3, (no value)

Adapters

HTMLFormIdPAdapter, Required, 3, (no value)

Adapters

RememberMePostIdPAdapter, Required, 3, (no value)

Attribute Insertion

Add To Back

Extended Contract

Attribute

username

Attribute

websiteName

Adapter Attributes

Mask all OGNL expression log values

false

Pseudonym

username

Adapter Contract Mapping

Attribute Sources & User Lookup

Data Sources

(None)

Adapter Contract Fulfillment

websiteName

websiteName (Adapter)

username

username (Adapter)

Issuance Criteria

Criterion

(None)

9. Click **Save**.

Configuring the Connection to Leverage the Composite Adapter

1. Log into the PingFederate admin console and click **Create New** under **Identity Provider >> SP Connections**.
2. Go through the flow to create the connection. Ensure that the Remember Me Composite Adapter is mapped as an **Adapter Instance** under **Authentication Source Mapping**.
3. Save the connection.

For example:

Ping
Identity

PingFederate

MAIN

Identity Provider

Service Provider

OAuth Server

SETTINGS

Server Configuration

Assertion Creation

Identity Mapping

Enable Standard Identifiertrue

Attribute Contract

AttributeSAML_SUBJECT

Subject Name Formaturn:oasis:names:tc:SAML:1.1:nameid-format:unspecified

AttributewebsiteName

Attribute Name Formaturn:oasis:names:tc:SAML:2.0:attrname-format:basic

Authentication Source Mapping

Adapter instance nameRememberMeldPCCompositeAdapter

Adapter Instance

Selected adapterRememberMeldPCCompositeAdapter

Virtual Server IDs

Restricted Virtual Server ID(none)

Mapping Method

AdapterComposite Adapter

Mapping MethodUse only the Adapter Contract values in the mapping

Attribute Contract Fulfillment

websiteNamewebsiteName (Adapter)

SAML_SUBJECTusername (Adapter)

Issuance Criteria

Criterion(None)

Configuring Device Request Parameters

To save device ID and device description to the database add “device_id” and “device_description” as query or POST parameters to the startSSO url or to the authorization.oauth2 endpoint. For example:

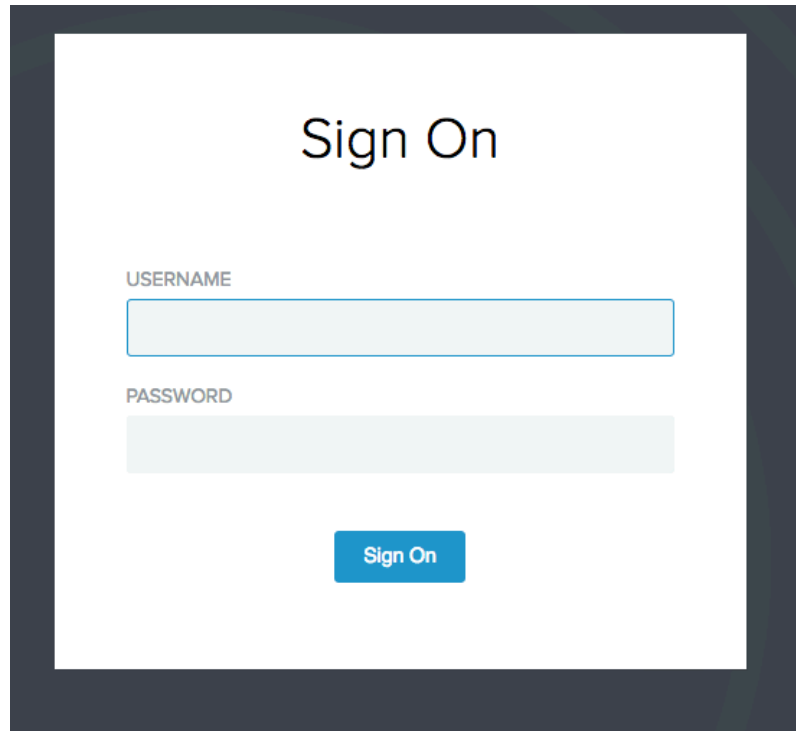
https://localhost:9031/as/authorization.oauth2?client_id=im_client&response_type=token&device_id=A+device+ID&device_description=This+is+my+description

Testing

Please note: For all test cases below, please make sure to log out, clear browser data, close and re-open the browser.

Test Case 1: Enable Remember Me Query Template is disabled for both Pre and Post Remember Me Adapters

1. Open a browser and go to the first factor authentication configured in the SSO flow. In this example, the HTML Form Adapter leveraging an LDAP PCV was chosen.

A screenshot of a 'Sign On' form. The form is centered on a white background with a dark gray border. At the top, the text 'Sign On' is displayed in a large, black, sans-serif font. Below this, there are two input fields. The first is labeled 'USERNAME' in a small, gray, sans-serif font, and the second is labeled 'PASSWORD' in the same font. Both labels are positioned to the left of their respective input fields. The input fields are light gray with a thin blue border. Below the input fields, there is a blue button with the text 'Sign On' in white, sans-serif font.

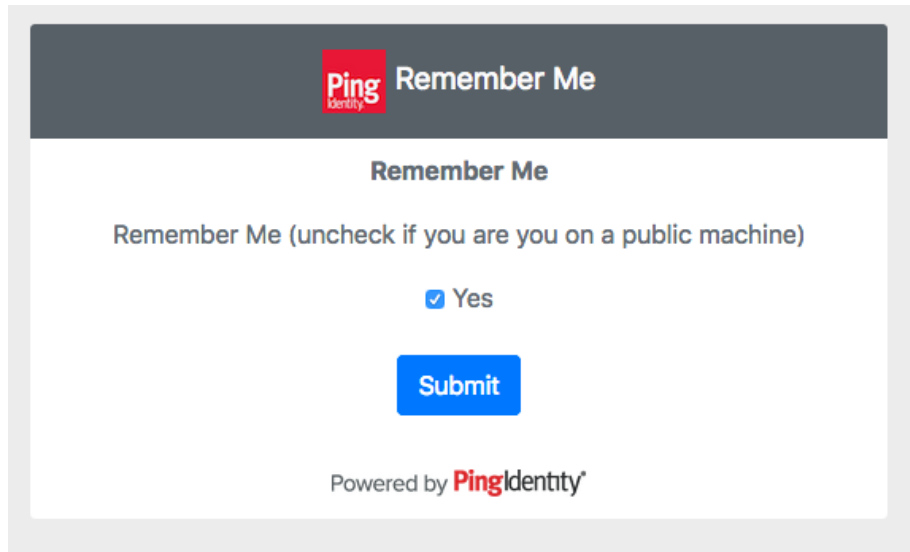
2. Log in using the test credentials.

Results:

- If authorized into the target destination, authentication was a success.
- A new cookie should have been set in the web browser each time the user goes through the same test case in the same browser session.
- A new fingerprint and token should have been inserted into the database browser each time the user goes through the same test case in the same browser session.

Test Case 2: Enable Remember Me Query Template is enabled for both Pre and Post Remember Me Adapters, User is on Private Machine

1. Open a browser and go to the first factor authentication configured in the SSO flow.
2. When presented the Remember Me Query Template, ensure that 'Yes' is checked.



The screenshot shows a web form titled "Remember Me" with the Ping Identity logo. Below the title, it says "Remember Me (uncheck if you are you on a public machine)". There is a checked checkbox labeled "Yes". A blue "Submit" button is centered below the checkbox. At the bottom, it says "Powered by Ping Identity".

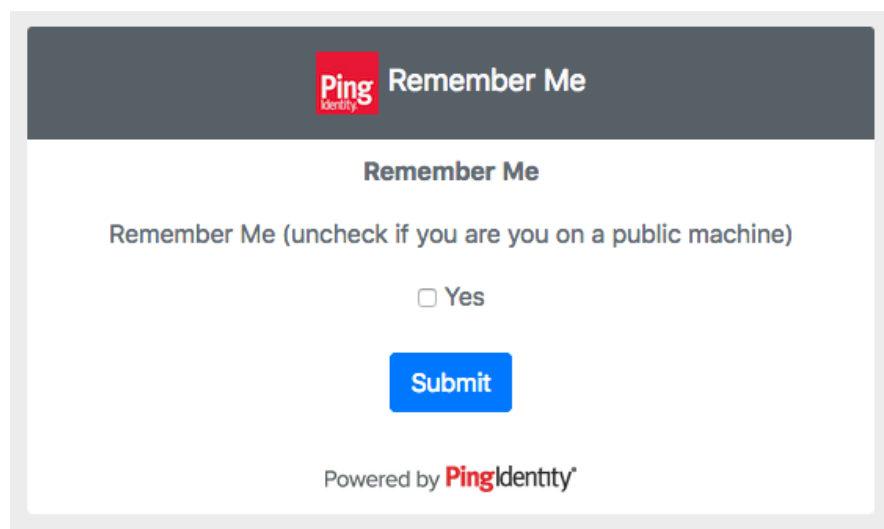
3. Log in using the test credentials.

Results:

- User should have been redirected to the Remember Me Query Template prior to the login page.
- User should not have been prompted again with the Remember Me Query Template after the login page.
- If authorized into the target destination, authentication was a success.
- A cookie should have been set in the web browser.
- A fingerprint and token should have been inserted into the database.

Test Case 3: Enable Remember Me Query Template is enabled for both Pre and Post Remember Me Adapters, User is on a Public Machine

1. Open a browser and go to the first factor authentication configured in the SSO flow.
2. When presented the Remember Me Query Template, uncheck 'Yes'.



The screenshot shows the same "Remember Me" form as above, but the checkbox labeled "Yes" is now unchecked. The "Submit" button and the "Powered by Ping Identity" text remain the same.

3. Log in using the test credentials.

Results:

- User should have been redirected to the Remember Me Query Template prior to the login page.
- User should not have been prompted again with the Remember Me Query Template after the login page.
- If authorized into the target destination, authentication was a success.
- A new cookie should have been set in the web browser each time the user goes through the same test case in the same browser session.
- A new fingerprint and token should have been inserted into the database each time the user goes through the same test case in the same browser session.
- User should be prompted again with the Remember Me Query Template if he/she goes through the same test case in the same browser session.

Test Case 4: Enable Remember Me Query Template is enabled for Pre and disabled for Post Remember Adapters, User is on Private Machine

1. Open a browser and go to the first factor authentication configured in the SSO flow.
2. When presented the Remember Me Query Template, ensure that 'Yes' is checked.
3. Log in using the test credentials.

Results:

- User should have been redirected to the Remember Me Query Template prior to the login page.
- User should not have been prompted with the Remember Me Query Template again after the login page.
- If authorized into the target destination, authentication was a success.
- A cookie should have been set in the web browser.
- A fingerprint and token should have been inserted into the database.

Test Case 5: Enable Remember Me Query Template is enabled for Pre and disabled for Post Remember Adapters, User is on Public Machine

1. Open a browser and go to the first factor authentication configured in the SSO flow.
2. When presented the Remember Me Query Template, uncheck 'Yes'.
3. Log in using the test credentials.

Results:

- User should have been redirected to the Remember Me Query Template prior to the login page.
- User should not have been prompted with the Remember Me Query Template again after the login page.
- If authorized into the target destination, authentication was a success.
- A cookie should not have been set in the web browser.
- A new fingerprint and token should have been inserted into the database each time the user goes through the same test case in the same browser session.
- User should be prompted again with the Remember Me Query Template if he/she goes through the same test case in the same browser session.

Test Case 6: Enable Remember Me Query Template is disabled for Pre and enabled for Post Remember Adapters, User is on Private Machine

1. Open a browser and go to the first factor authentication configured in the SSO flow.
2. Log in using the test credentials.
3. When presented the Remember Me Query Template, ensure that 'Yes' is checked.

Results:

- User should not be prompted with the Remember Me Query Template prior to the login page.
- User should have been redirected to the Remember Me Query Template after the login page.
- If authorized into the target destination, authentication was a success.
- A cookie should have been set in the web browser.
- A fingerprint and token should have been inserted into the database.

Test Case 7: Enable Remember Me Query Template is disabled for Pre and enabled for Post Remember Adapters, User is on Public Machine

1. Open a browser and go to the first factor authentication configured in the SSO flow.
2. Log in using the test credentials.
3. When presented the Remember Me Query Template, uncheck 'Yes'.

Results:

- User should not be prompted with the Remember Me Query Template prior to the login page.
- User should have been redirected to the Remember Me Query Template after the login page.
- If authorized into the target destination, authentication was a success.
- A cookie should not have been set in the web browser.
- A new fingerprint and token should have been inserted into the database each time the user goes through the same test case in the same browser session.
- User should be prompted again with the Remember Me Query Template if he/she goes through the same test case in the same browser session.

Logging

To enable various logging modes for the Remember Me Adapter, add the following in the logger section (<Loggers>...</Loggers>) to

<PingFederateInstall>/pingfederate/server/default/conf/log4j2.xml:

```
<Logger name="com.pingidentity.ps.adapter.idp.rememberme" level="[ DEBUG | INFO |  
WARN | ERROR ]" />
```

To enable logging for the Remember Me Adapter in a separate file, add the following in the relevant sections in <PingFederateInstall>/pingfederate/server/default/conf/log4j2.xml.

```
<RollingFile name="RememberMeAdapter"
```

```

fileName="${sys:pf.log.dir}/remembermeadapter.log"
filePattern="${sys:pf.log.dir}/remembermeadapter.%d{yyyy-MM-dd}.log"
ignoreExceptions="false">
  <PatternLayout>
    <!-- Uncomment this if you want to use UTF-8 encoding instead of system's
    default encoding.
    <charset>UTF-8</charset> -->
    <pattern>%d %m%n</pattern>
  </PatternLayout>
  <Policies>
    <TimeBasedTriggeringPolicy />
  </Policies>
</RollingFile>

<Logger name="com.pingidentity.ps.adapter.idp.rememberme"
level="[ DEBUG | INFO | WARN | ERROR ]" additivity="false" includeLocation="true"/>
  <appender-ref ref="RememberMeAdapter" />
</Logger>

```

Detailed training on using Log4j in PingFederate can be found at:

<https://ping.force.com/Support/PingIdentityKnSearchHome?searchText=log4j>