UserExchange Web Service Custom Application Integration Guide

Introduction

Use this guide to enable Multi-Factor Authentication and Single Sign-on (SSO) access via encryption and web service to customer-controlled web applications.

Workflow:

1. End-users will be redirected (via browser) to SecureAuth IdP for authentication upon attempting access into the application without an **internal session token** or an **encrypted string** from SecureAuth

2. SecureAuth IdP will then authenticate the end-user, and send the **encrypted authenticated User ID** in a **cookie**, **query string**, or the **header** (options represented as **token** in Custom Application Configuration Steps) to the application following a successful authentication

3. The application will detect the encrypted string, **extract** it, and then contact the **SecureAuth IdP web service** to retrieve the User ID in **plaintext**

4. The application then uses the User ID to create an **internal session token** and to **authorize** the user into the application

Prerequisites

1. Have a custom web application and modification access

2. Enable the UserExchange Web Service

1. On the SecureAuth IdP appliance, open **D:\SecureAuthWS\web.config**

2. Locate the key, **EnablePOC**

3. Change the value of the key to **1**

<add key="EnablePOC" value="1" />

3. Create a **New Realm** for the custom application integration in the SecureAuth IdP Web Admin

4. Configure the following tabs in the Web Admin before configuring the **Post Authentication** tab:

- **Overview** – the description of the realm and SMTP connections must be defined
- **Data** – an enterprise directory must be integrated with SecureAuth IdP
- **Workflow** – the way in which users will access this application must be defined
- **Multi-Factor Methods** – the Multi-Factor Authentication methods that will be used to access this page (if any) must be defined

Custom Application Configuration Steps

1. Change the application's **Login Page** to look for some type of **internal session token**

    This will alert the application to allow access to end-users if it is present (bypassing additional authentication)

2. If there is no internal session token, have the **Login Page** look to see if there is a **Token Name**, **eu** (the cookie, query string, or header from SecureAuth IdP)

3. If there is no **eu** token, enable the redirection to the **SecureAuth IdP URL**, along with the **ReturnURL** as a **query string**

    Example redirect URL: **https://secureauth.company.com/secureauth2/?ReturnURL=https://app.company.com**

    The **SecureAuth IdP URL** will be the Fully Qualified Domain Name (FQDN) of the SecureAuth IdP appliance, followed by the SecureAuth IdP custom application-integrated realm (**https://secureauth.company.com/secureauth2**)

    The **ReturnURL** will typically be the FQDN of the custom application

4. If there is an **eu** token, extract the value inside of the token

5. Make a web service call to retrieve the **Authenticated User ID** value by passing in the value of the **eu** token as **input parameter** to the function

    A copy of the web service is located at the FQDN of the SecureAuth IdP appliance, followed by **/SecureAuthWS/UserService.asmx**, e.g. **https://secureauth.company.com/SecureAuthWS/UserService.asmx**

    A copy of the WSDL for development is located at the FQDN of the SecureAuth IdP appliance, followed by **/SecureAuthWS/UserService.asmx?WSDL**, e.g. **https://secureauth.company.com/SecureAuthWS/UserService.asmx?WSDL**

    The **GetUserID** takes **one input parameter**, the **EncryptedUserString** (the **eu** token value)

        This will return the **Decrypted Authenticated User ID** as a **String** regardless of when the token was generated

    The **GetUserIDWithTimeCheck** takes **two input parameters**, **EncryptedUserString** and **ValiditySeconds**

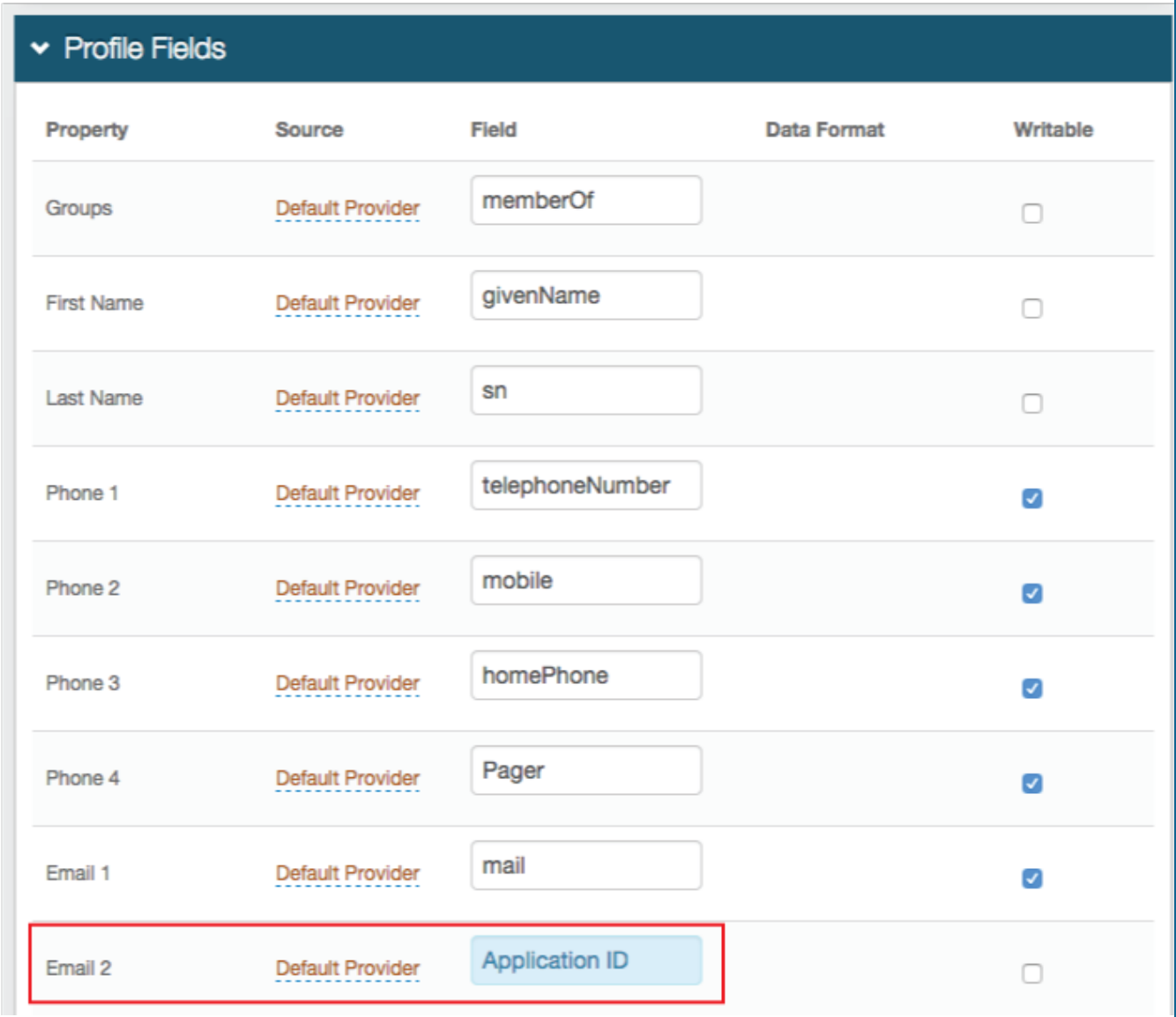
        This will only return the **Decrypted Authenticated User ID** as a **String** if the token was generated within the validity time frame (e.g. 5 - 10 seconds)

6. Generate an **internal session token**, and take the **Decrypted Authenticated User ID String** and log the user into the application

7. **(OPTIONAL)** Clear the value inside the **eu** token so that it cannot be reused

SecureAuth IdP Configuration Steps

Data

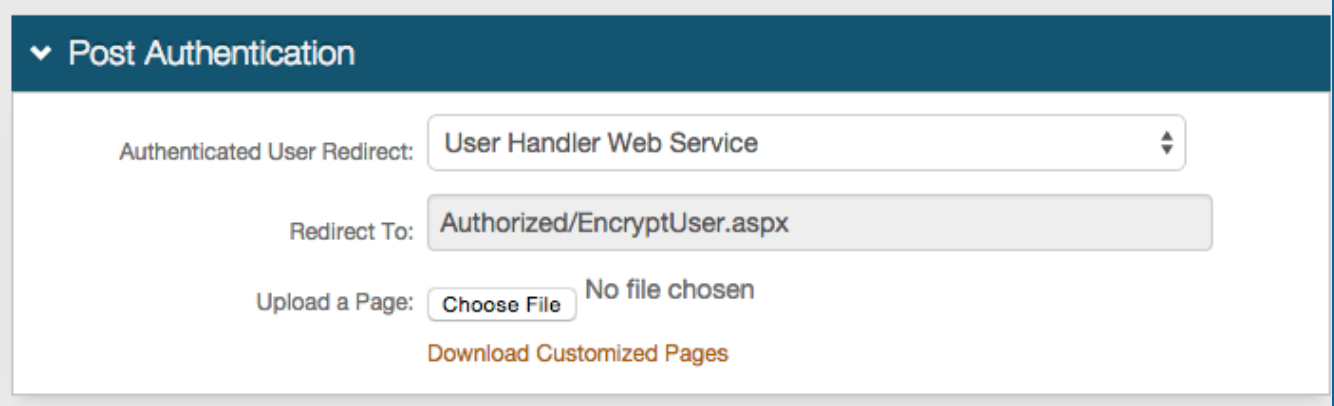


1. In the **Profile Fields** section, map the directory field that contains the user's Application ID to the SecureAuth IdP **Property**

   For example, add the Application ID to the **Email 2 Property** if it is not already contained somewhere else

Click **Save** once the configurations have been completed and before leaving the **Data** page to avoid losing changes

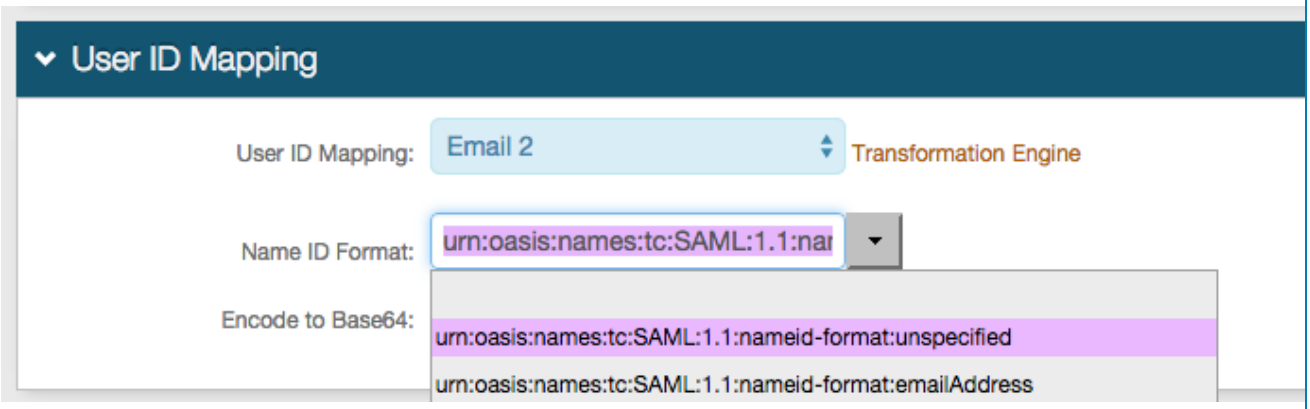
Post Authentication



2. Select **User Handler Web Service** from the **Authenticated User Redirect** dropdown in the **Post Authentication** tab in the Web Admin

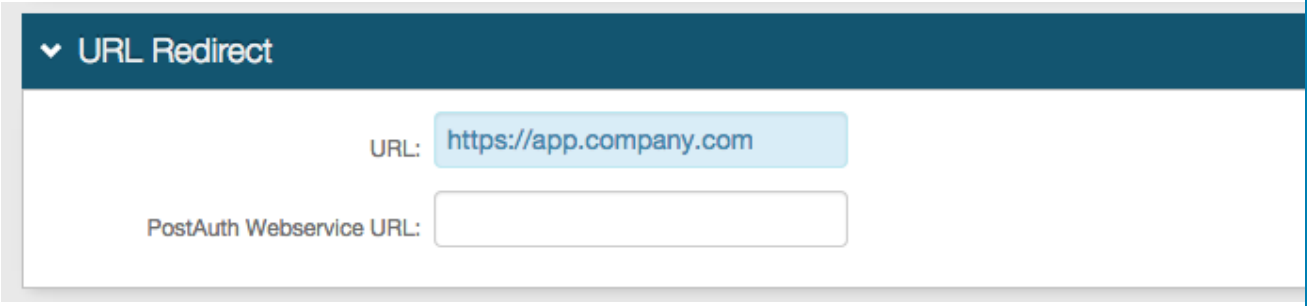
3. An unalterable URL will be auto-populated in the **Redirect To** field, which will append to the domain name and realm number in the address bar (Authorized/EncryptUser.aspx)

User ID Mapping



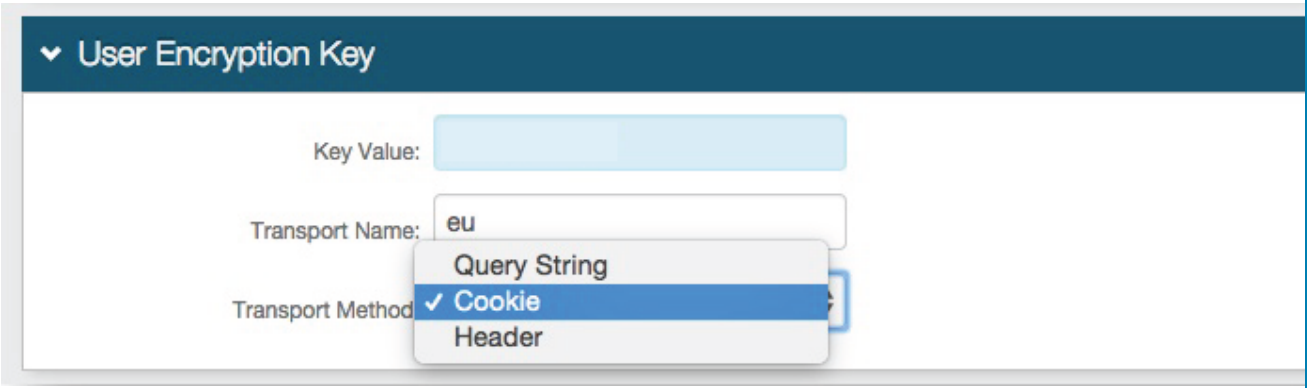
4. Select the SecureAuth IdP **Property** that corresponds to the directory field that contains the Application ID (**Email 2**)

URL Redirect



5. Set the **URL** to the application URL to where the end-user will be redirected upon successful authentication, e.g. **https://app.company.com**

User Encryption Key



6. Leave the **Key Value** field blank, or if there is a value present, then remove it
7. Set the **Transport Name** to a different name than the defaulted **eu** if preferred

    If the **Transport Name** is changed here, then it will need to be changed in the application as well

    Modify the Custom Application Configuration Steps to replace the **eu** value with the new **Transport Name** value
8. Select how the **Authenticated User ID** will be transported from the **Transport Method** dropdown

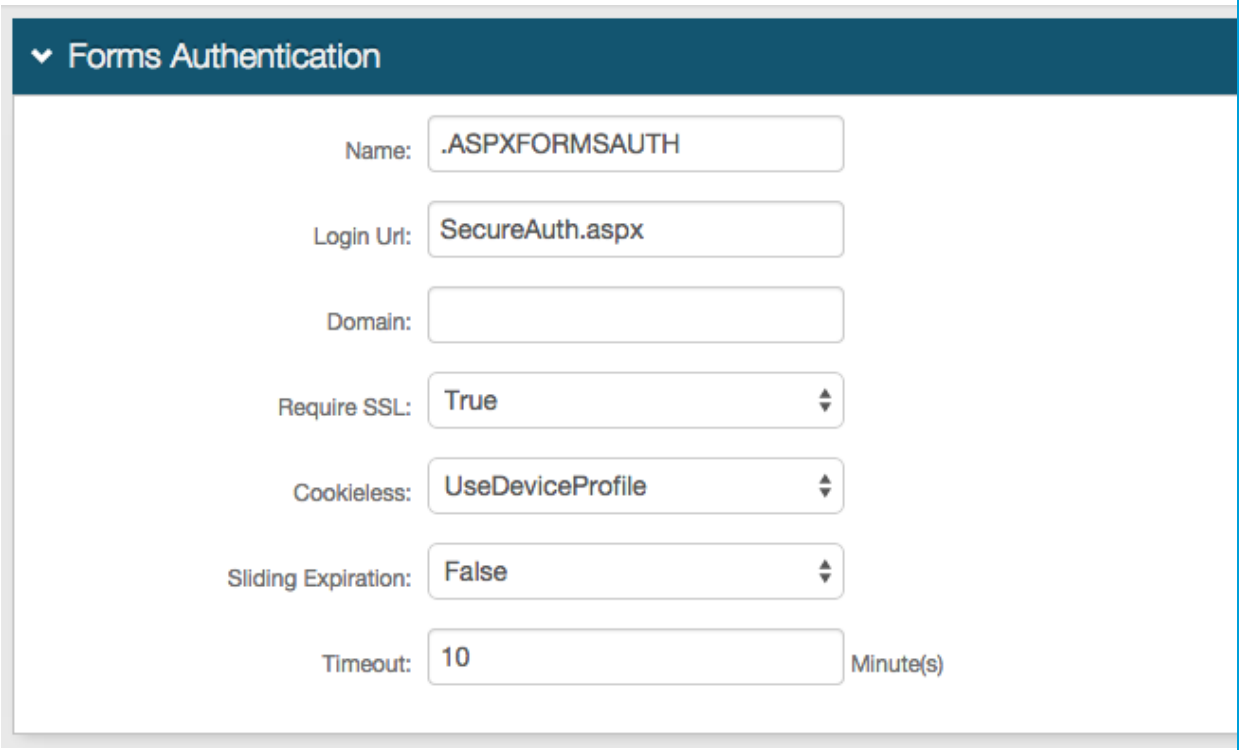
Click **Save** once the configurations have been completed and before leaving the **Post Authentication** page to avoid losing changes

Forms Auth / SSO Token

9. Click **View and Configure FormsAuth keys / SSO token** to configure the token/cookie settings and to configure this realm for SSO

These are *optional* configurations

Forms Authentication



1. If SSL is required to view the token, select **True** from the **Require SSL** dropdown

2. Choose whether SecureAuth IdP will deliver the token in a cookie to the user's browser or device:

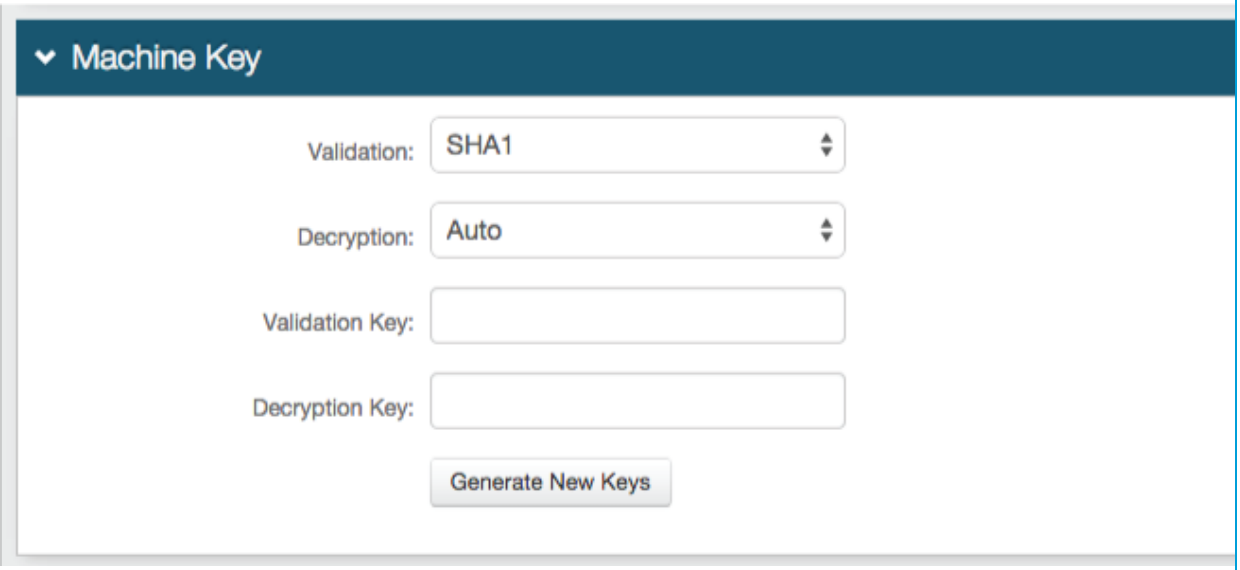
   - **UseCookies** enables SecureAuth IdP to always deliver a cookie
   - **UseUri** disables SecureAuth IdP to deliver a cookie, and instead deliver the token in a query string
   - **AutoDetect** enables SecureAuth IdP to deliver a cookie if the user's settings allow it
   - **UseDeviceProfile** enables SecureAuth IdP to deliver a cookie if the browser's settings allow it, no matter the user's settings

3. Set the **Sliding Expiration** to **True** if the cookie remains valid as long as the user is interacting with the page

4. Set the **Timeout** length to determine for how many minutes a cookie is valid

> No configuration is required for the **Name**, **Login URL**, or **Domain** fields

Machine Key



5. No changes are required in the **Validation** field, unless the default value does not match the company's requirement

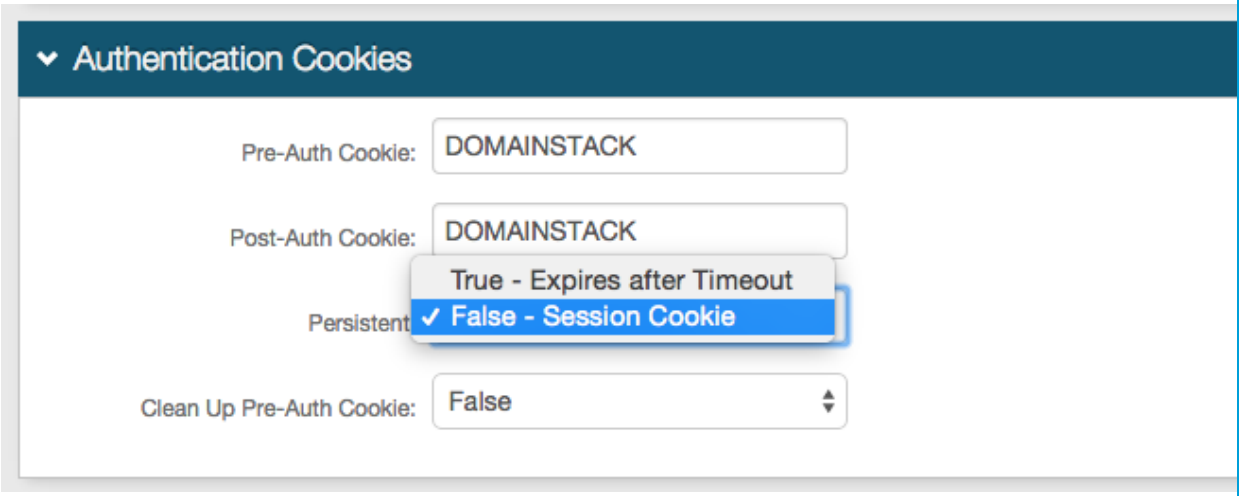
    If a different value is required, select it from the dropdown

6. No changes are required in the **Decryption** field, unless the default value does not match the company's requirement

    If a different value is required, select it from the dropdown

No configuration is required for the **Validation Key** or **Decryption Key** fields

Authentication Cookies



7. Enable the cookie to be **Persistent** by selecting **True - Expires after Timeout** from the dropdown

   Selecting **False - Session Cookie** enables the cookie to be valid as long as the session is open, and will expire once the browser is closed or the session expires

> No configuration is required for the **Pre-Auth Cookie**, **Post-Auth Cookie**, or the **Clean Up Pre-Auth Cookie** fields

Click **Save** once the configurations have been completed and before leaving the **Forms Auth / SSO Token** page to avoid losing changes

> To configure this realm for SSO, refer to **SecureAuth IdP Single Sign-on Configuration**

> To configure this realm for *Windows Desktop SSO*, refer to **Windows desktop SSO configuration**