Multi-Factor App Enrollment (URL) realm configuration

Use this guide to create an app enrollment page with a URL workflow for end users to connect to their profile in the following ways to enroll and provision using multi-factor authentication (MFA):

- SecureAuth Passcode app to receive one-time passcodes (OTPs) on their desktop
- SecureAuth Authenticate app to receive one-time passcodes (OTPs) on their mobile device
- SecureAuth Authenticate app to receive time-based one-time passcodes (TOTPs), Push Notification one-time passcodes (OTPs), Push-to-Accept, and Symbol-to-Accept login requests on their mobile device

The passcode and login requests from the app is used to validate the end user attempting to log in to a protected resource.

For supported versions of mobile apps, OTP clients, desktop browsers, and paired smartwatches, see the SecureAuth compatibility guide

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What's new in SecureAuth IdP version 9.3

The new PIN Length field enables a 4, 6, 8, or 10-digit PIN to be configured as a security setting for use on:

- SecureAuth Authenticate app for iOS (version 5.2)
- SecureAuth Passcode app for Windows / Mac (version 2.1)

If configured, users of these apps will be required to enter a PIN of the configured length to view the TOTP on the app.

Previous version of URL realm configuration

See Multi-Factor App Enrollment (URL) Realm Configuration Guide (version 9.1 and 9.2) for the previous version of this guide.

Prerequisites

- SecureAuth IdP 9.3 or later
- SecureAuth IdP realm or integrated application with the following tabs configured:
  - Overview
  - Data / Directory integrations
  - Workflow
  - Multi-Factor Methods

You can use the existing SecureAuth998 realm, which by default is configured for Multi-Factor App Enrollment (URL) provisioning. Or, create a new realm for URL provisioning.

More than one app enrollment page can be created on a single SecureAuth IdP appliance to meet different URL workflows.

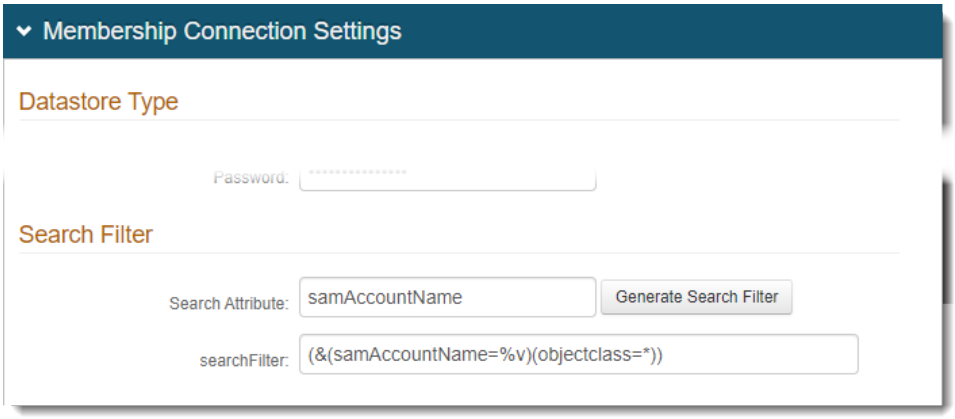
SecureAuth IdP configuration

1. Go to the **Data** tab.
2. In the **Membership Connection Settings** section, set the following:

This step is only for LDAP directories.

To use a different directory (SQL, ASPNET, Oracle, and so on), then the stored procedures for these fields must be mapped to Properties in the next step.

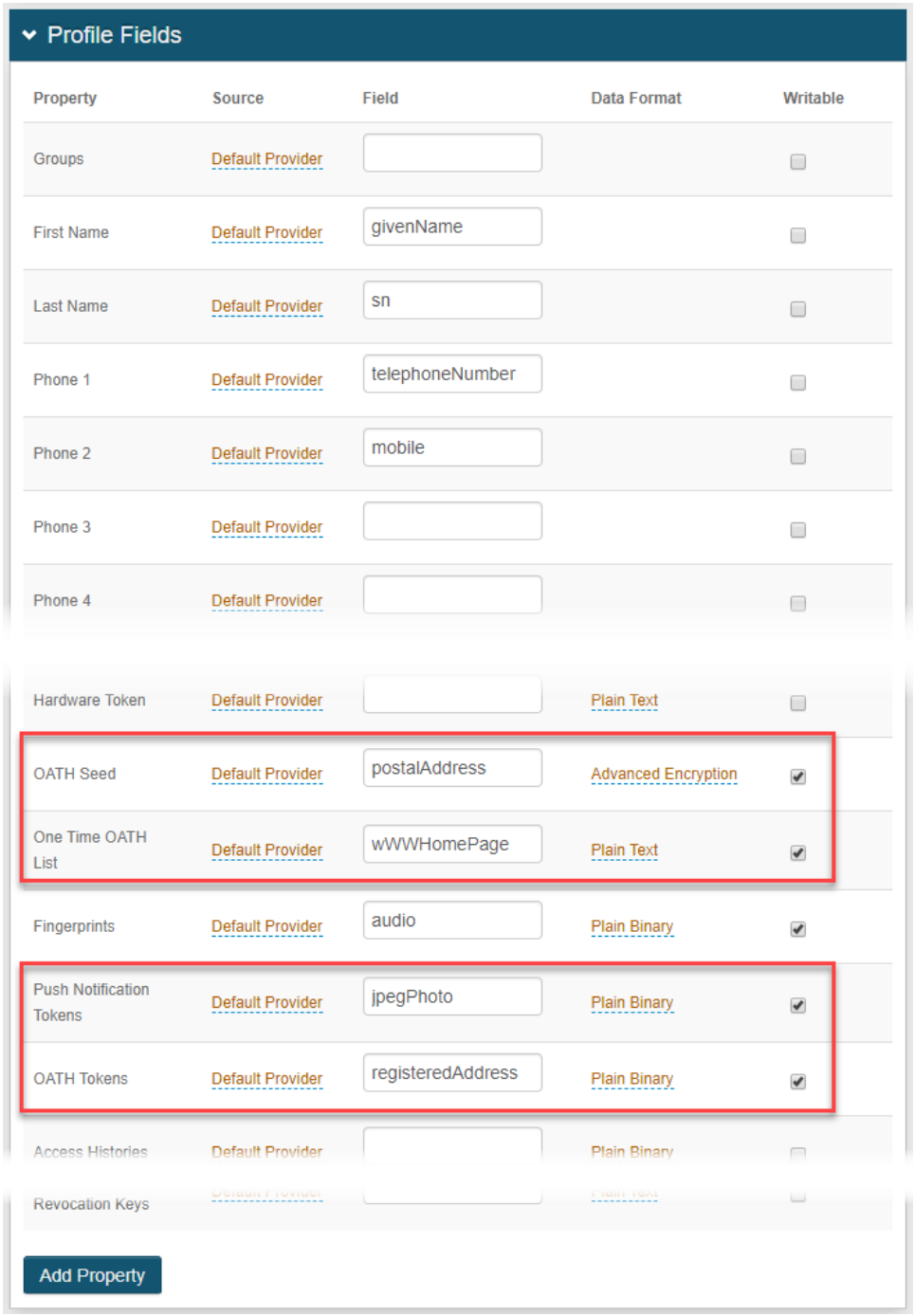
Search Attribute	Set to the directory field. For example, sAMAccountName.



3. In the **Profile Fields** section, map the following **Properties** to data store fields and select the **Writable** check box:

OATH Seed	This property is only required if **OATH Seed (Single)** is selected in the **Multi-Factor App Enrollment** section on the **Post Authentication** tab. Map this property to a directory field that meets the following requirements: • **DirectoryString** (syntax: 2.5.5.12) • **Upper Range** of at least **4096** • Supports **Advanced Encryption**, as selected from the **Data Format** options For Active Directory data stores, you can use the **postalAddress** field.
One Time OATH List	The One Time OATH List temporarily stores a Time-based Passcode in the directory until the configured expiration to ensure that the OTP is used only once throughout its validity. To use this feature, map this property to any directory field that is a **DirectoryString**. For Active Directory data stores, you can use the **wWWHomePage** field (among many others).
Push Notification Tokens	This property is required to enable the use of Push Notifications or Push-to-Accept / Symbol-to-Accept requests. This property can be stored as **plain binary** or in **JSON** format, and has distinct requirements for the LDAP directory attribute mapped to the property based on the **Data Format** selection. For **plain binary**, map this property to a directory field containing the Push Notification Token and meets the following requirements: • **Length**: 4096 minimum • **Data Type**: Octet string (bytes) • **Multi-valued** For **JSON**, map this property to a directory field containing the Push Notification Token and meets the following requirements: • **Length**: 4096 minimum • **Data Type**: DirectoryString • **Multi-valued** For typical Active Directory integrations, the **Data Format** is **plain binary** and uses the **jpegPhoto** field.

OATH Tokens	This property is required if **OATH Token (Multi)** is selected in the **Multi-Factor App Enrollment** section on the **Post Authentication** tab. This property can be stored as **plain binary**, in **JSON**, or **JSON encrypted** format, and has distinct requirements for the LDAP directory attribute mapped to the property based on the **Data Format** selection. For **plain binary**, map this property to a directory field that meets the following requirements: • **OctetString** (syntax: 2.5.5.10) • **Upper Range** of at least **4096** • **Multi-valued** For **JSON** or **JSON encrypted**, map this property to a directory field that meets the following requirements: • **DirectoryString** (syntax: 2.5.5.12) • **Upper Range** of at least **4096** • **Multi-valued** For typical **Active Directory** integrations, the **Data Format** is **plain binary** and uses the **registeredAddress** field.



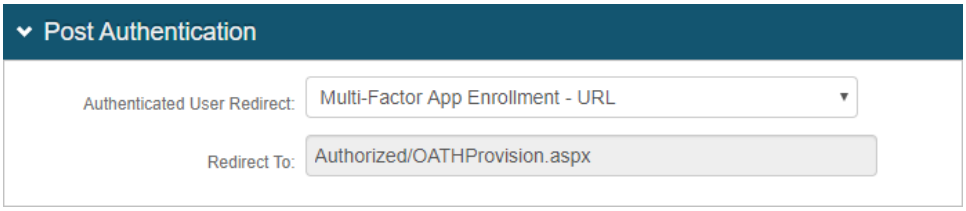
NOTES

- If the **DirectoryString** data type is not present, you can use **UnicodeString**, as long as it meets other requirements for the attribute.
- For SQL, ASP.net, and Oracle data stores, only the **plain binary Data Format** is supported for **OATH Tokens** and **Push Notification Tokens** properties (configured on the Data tab). For ODBC data stores, these two properties are *not* supported.
- For a full list of data mapping requirements, see LDAP Attributes / SecureAuth IdP Profile Properties Data Mapping

4. **Save** your changes.
5. Go to the **Post Authentication** tab.
6. In the **Post Authentication** section, set the following:

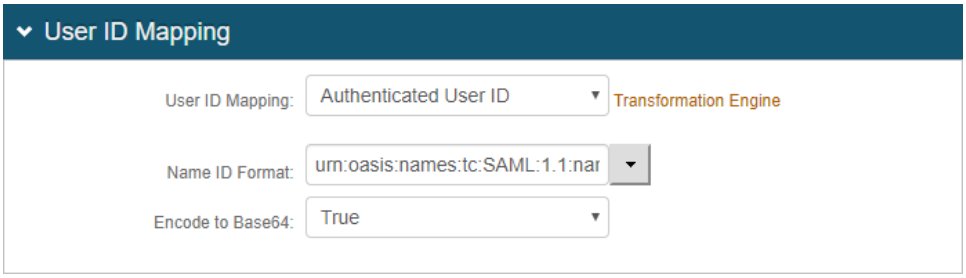
Authenticated User Redirect	Set to **Multi-Factor App Enrollment - URL**.

Redirect To	This field is auto-populated with an URL, which appends to the domain name and realm number in the address bar. For example,Authorized/OATHProvision.aspx.



7. In the **User ID Mapping** section, set the following:

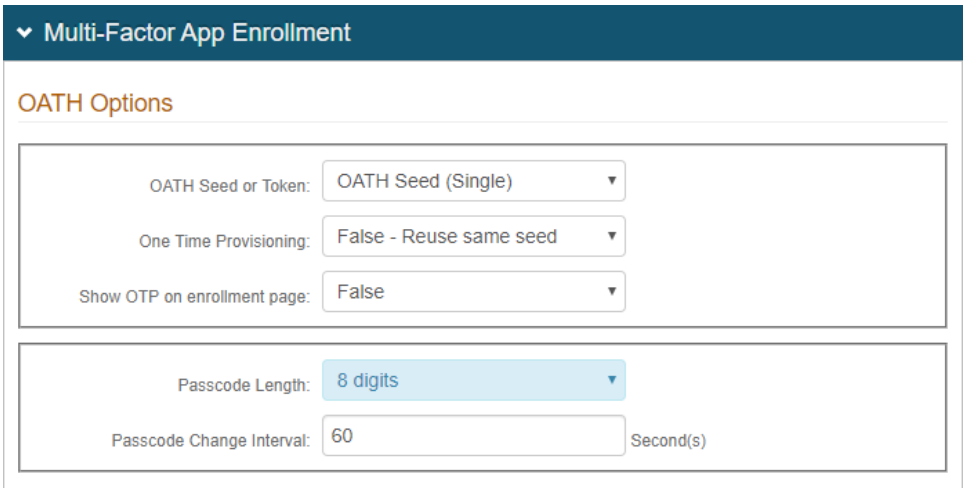
User ID Mapping	Set to **Authenticated User ID**.



8. In the **Multi-Factor App Enrollment** section, choose which provisioning method you want to use in **OATH Options**:
   - Provision user devices with a single seed generating time-based passcodes / push notifications across multiple devices, select **OATH Seed (Single)**
   - Provision user devices with multiple tokens on a single device; each token containing a distinct OATH seed, select **OATH Token (Multi)**
9. If you selected **OATH Seed (Single)** set the following:

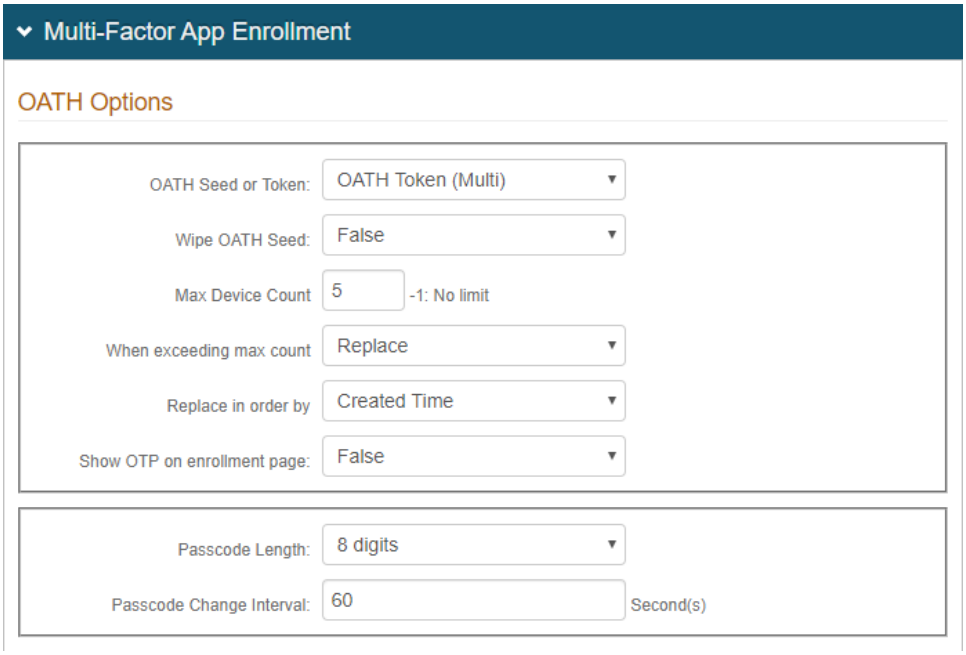
> It is recommended to use the OATH Token (Multi) option instead of OATH Seed.
>
> SecureAuth has deprecated OATH Seeds in favor of OATH Tokens, however this option still available. The seed is converted to a token and there are some prerequisites for this to happen. Both OATH Seed and OATH Tokens must be mapped in the Directory Property mapping. For more information, see How to convert an OATH Seed to an OATH Token.

One Time Provisioning	Select one of these options: • **False - Reuse same seed** – Use one seed with multiple devices. For example, each newly provisioned device reuses the same seed • **True - Generate new seed** – Restricts the use of time-based passcodes to one device at a time. For example, each newly provisioned device gets a new seed that disables the use of the old seed
Show OTP on enrollment page	Indicate whether to show the OTP on the app enrollment page.
Passcode length	Set the number of digits in a time-based passcode (6 or 8 digits).
Passcode Change Interval	Set the time in seconds for which a time-based passcode is valid.



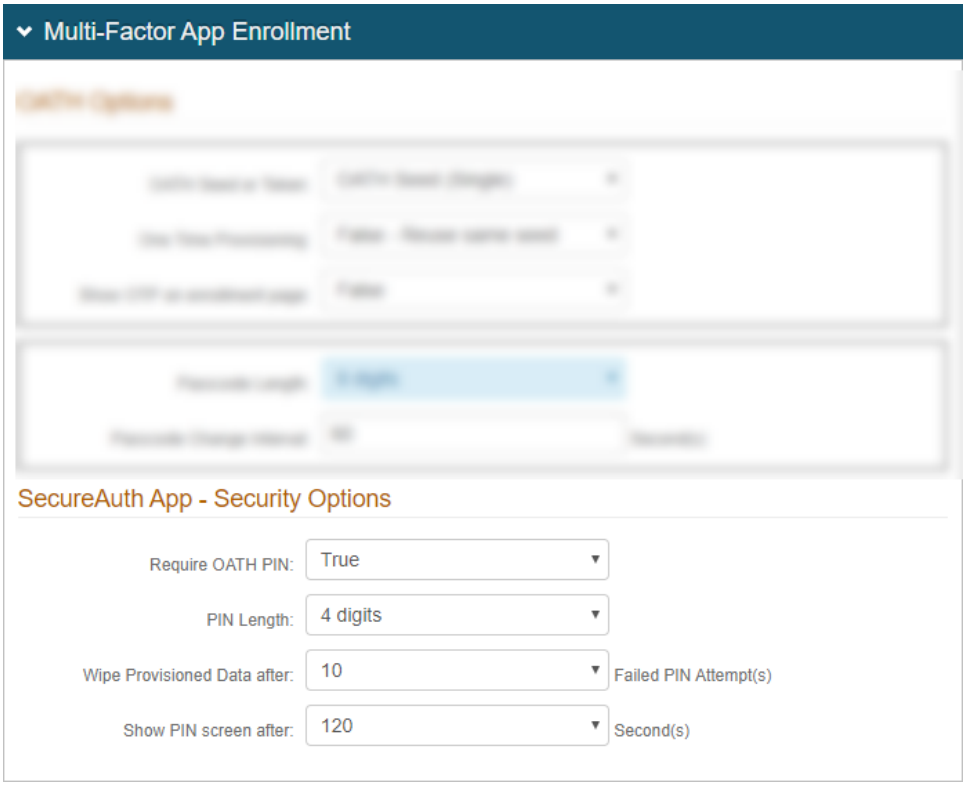
10. If you selected **OATH Token (Multi)** set the following:

Wipe OATH Seed	Select one of these options: • **False** – Continue use of the already-provisoned deviceds (pre-SecureAuth IdP 8.1) • **True** – Delete the existing OATH seed and use only an OATH token
Max Device Count	Set the number of accounts / OATH tokens allowed per user profile. Set to **-1** if there is no limit.
When exceeding max count	When a max device count is specified, select one of the following options when max count is reached: • **Replace** – Allow replacement of accounts / OATH tokens • **Don't replace** – Requires manual removal of accounts
Replace in order by	To replace an account / OATH token due to exceeding maximum device count, choose the replacement method: • **Created Time** – Replace the oldest account / OATH token with the newest one • **Last Access Time** – Replace the least frequently used account / OATH token with the newest one
Show OTP on enrollment page	Indicate whether to show the OTP on the app enrollment page.
Passcode length	Set the number of digits in a time-based passcode (6 or 8 digits).
Passcode Change Interval	Set the time in seconds for which a time-based passcode is valid.

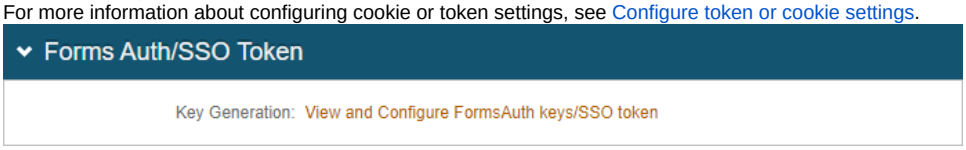


11. In the **SecureAuth App - Security Options** subsection, set the following:

Require OATH PIN	Select one of these options: • **True** – To view the time-based one-time passcode (TOTP) on the Authenticate app, require users to provide a PIN or biometric ID (fingerpint) • **False** – PIN is not required to view the TOTP on the Authenticate app
PIN Length	Set the number of digits in the PIN (4, 6, 8, or 10 digits).
Wipe Provisioned Data after	Set the number of failed PIN attempts allowed before the application data is removed and requires re-enrollment.
Show PIN screen after	Set the time in seconds allowed for app to remain idle before the PIN is required (30, 60, 90, 120, or 180 seconds).



12. **Save** your changes.
13. Optional: In the **Forms Auth / SSO Token** section, to configure the token and cookie properties for this realm, click the **View and Configure FormsAuth keys/SSO token** link.
    For more information about configuring cookie or token settings, see Configure token or cookie settings.



Related information

Multi-Factor App Enrollment (QR Code) realm configuration