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Microsoft Entra ID OIDC Implementation

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https://bitwarden.com/help/oidc-microsoft-entra-id/

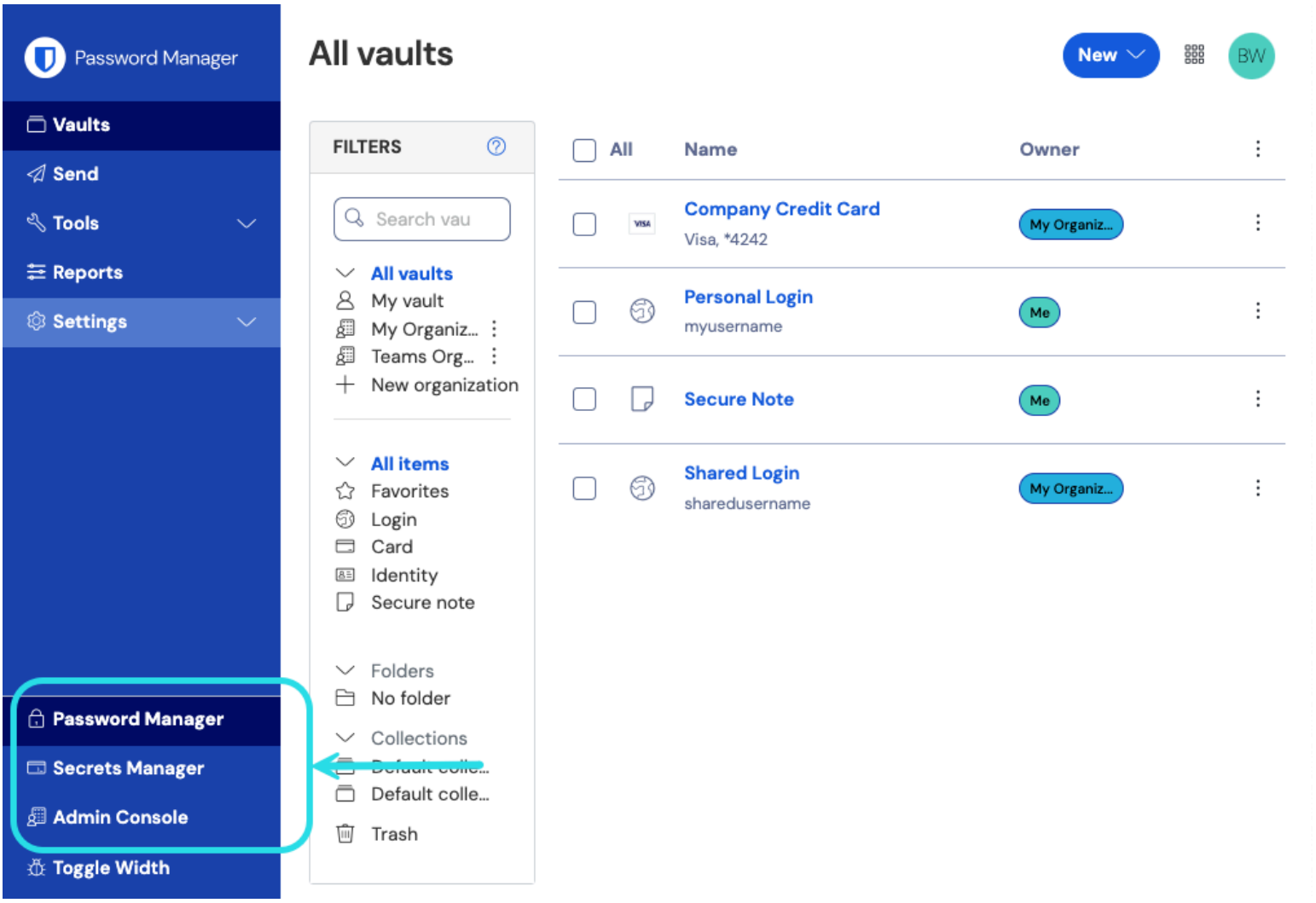
Microsoft Entra ID OIDC Implementation

This article contains **Azure-specific** help for configuring Login with SSO via OpenID Connect (OIDC). For help configuring Login with SSO for another OIDC IdP, or for configuring Microsoft Entra ID via SAML 2.0, see OIDC Configuration or Microsoft Entra ID SAML Implementation.

Configuration involves working simultaneously within the Bitwarden web app and the Azure Portal. As you proceed, we recommend having both readily available and completing steps in the order they are documented.

Open SSO in the web vault

Log in to the Bitwarden web app and open the Admin Console using the product switcher:



Product switcher

Select **Settings** → **Single sign-on** from the navigation:

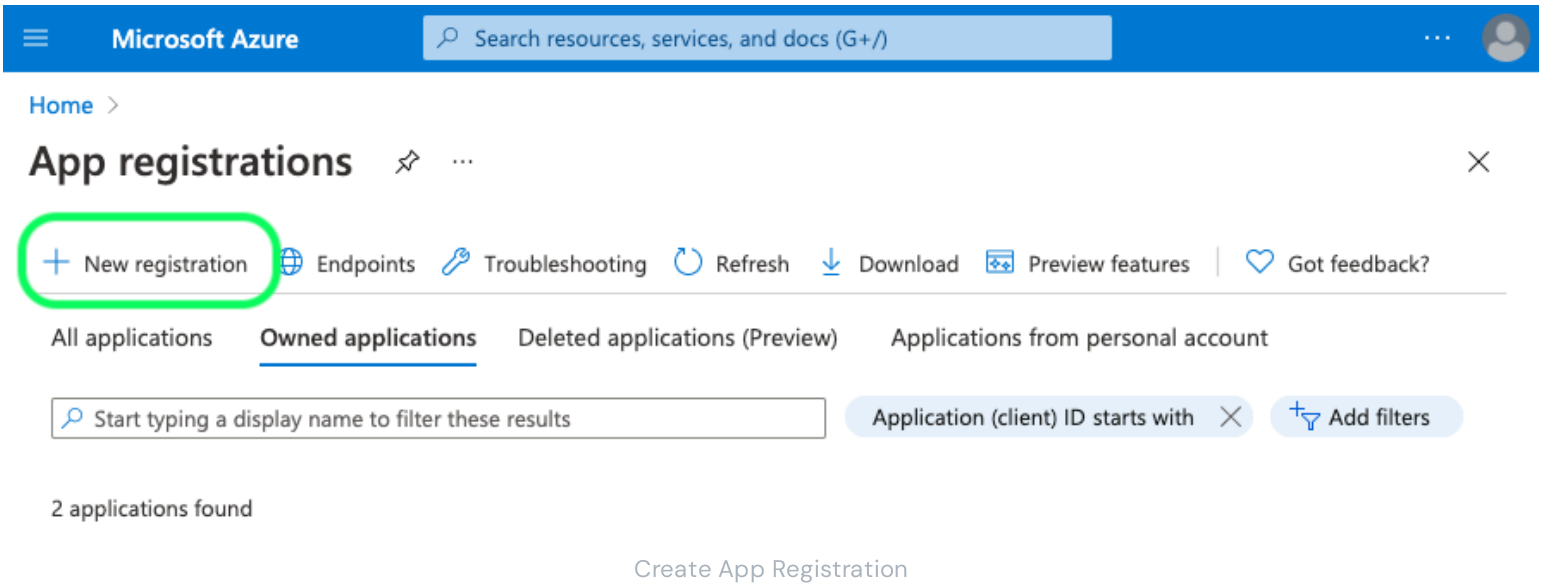
OIDC configuration

If you haven't already, create a unique **SSO identifier** for your organization. Otherwise, you don't need to edit anything on this screen yet, but keep it open for easy reference.

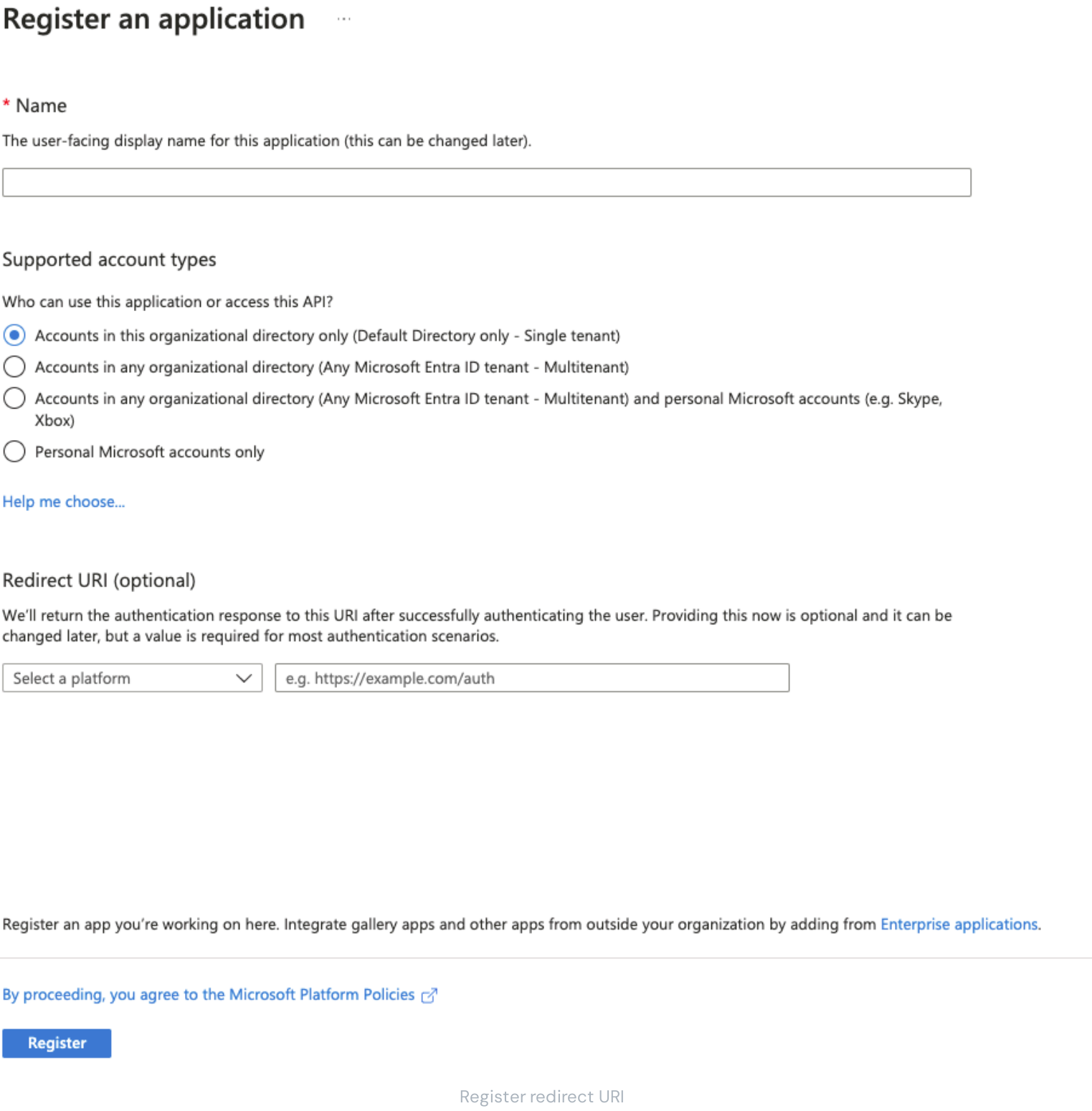
> **Tip**
>
> There are alternative **Member decryption options**. Learn how to get started using SSO with trusted devices or Key Connector.

Create an app registration

In the Azure Portal, navigate to **Microsoft Entra ID** and select **App registrations.** To create a new app registration, select the **New registration** button:



Complete the following fields:



1. On the **Register an application** screen, give your app a Bitwarden-specific name and specify which accounts should be able to use the application. This selection will determine which users can use Bitwarden login with SSO.

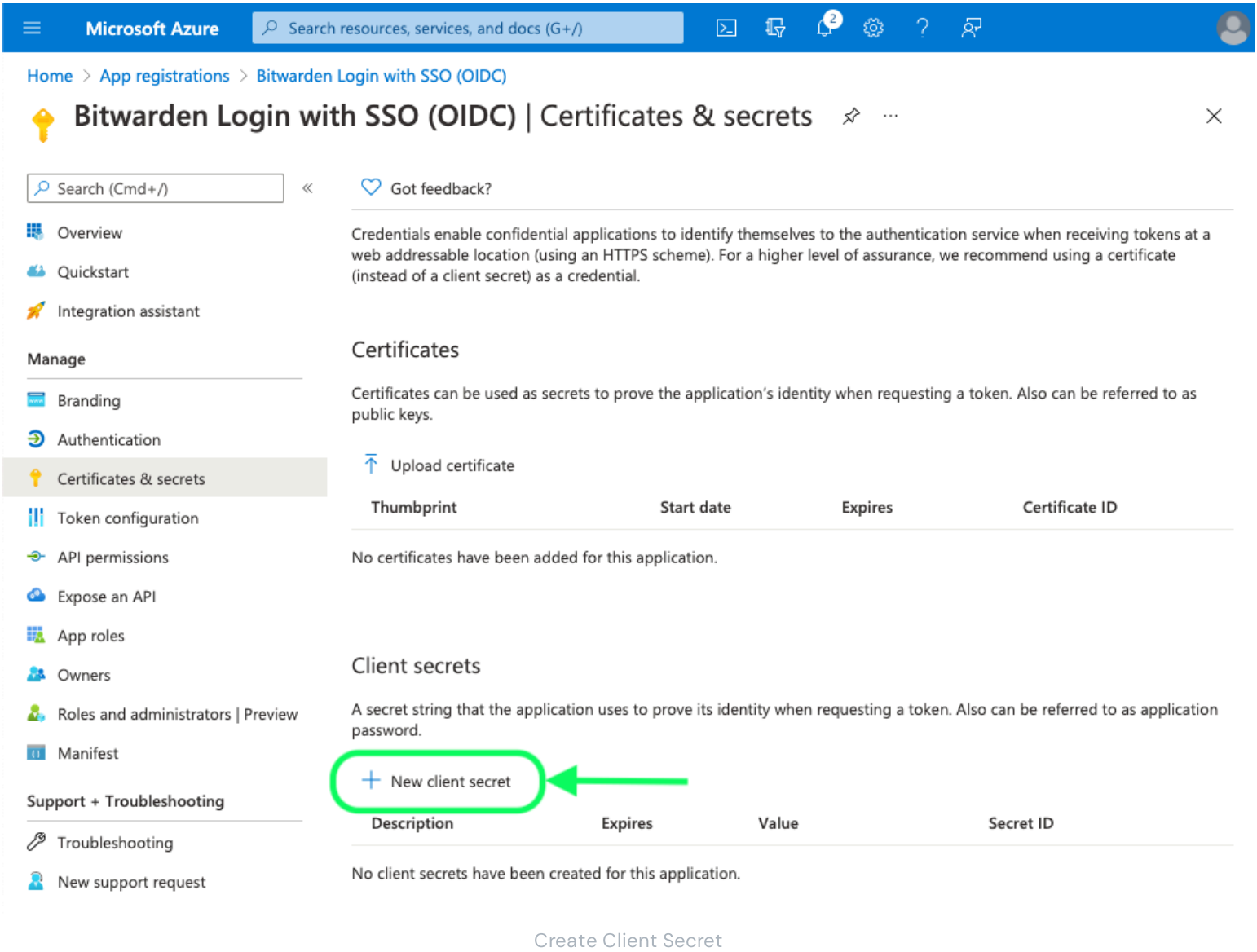
2. Select **Authentication** from the navigation and select the **Add a platform** button.

3. Select the **Web** option on the Configure platforms screen and enter your **Callback Path** in the Redirect URIs input.

> **Note**
> Callback Path can be retrieved from the Bitwarden SSO Configuration screen. For cloud-hosted customers, this is `https://sso.bitwarden.com/oidc-signin` or `https://sso.bitwarden.eu/oidc-signin`. For self-hosted instances, this is determined by your configured server URL, for example `https://your.domain.com/sso/oidc-signin`.

Create a client secret

Select **Certificates & secrets** from the navigation, and select the **New client secret** button:



Give the certificate a Bitwarden-specific name, and choose an expiration timeframe.

Create admin consent

Select **API permissions** and click ✓ **Grant admin consent for {your directory}**. The only permission needed is added by default, Microsoft Graph > User.Read.

Back to the web app

At this point, you have configured everything you need within the context of the Azure Portal. Return to the Bitwarden web app to configure the following fields:

Field	Description
Authority	Enter `https://login.microsoftonline.com/<TENANT_ID>/v2.0`, where `TENANT_ID` is the **Directory (tenant) ID** value retrieved from the app registration's Overview screen.
Client ID	Enter the App registration's **Application (client) ID**, which can be retrieved from the Overview screen.
Client Secret	Enter the **Secret Value** of the created client secret.
Metadata Address	For Azure implementations as documented, you can leave this field blank.
OIDC Redirect Behavior	Select either **Form POST** or **Redirect GET**.
Get Claims From User Info Endpoint	Enable this option if you receive URL too long errors (HTTP 414), truncated URLS, and/or failures during SSO.
Additional/Custom Scopes	Define custom scopes to be added to the request (comma-delimited).
Additional/Custom User ID Claim Types	Define custom claim type keys for user identification (comma-delimited). When defined, custom claim types are searched for before falling back on standard types.
Additional/Custom Email Claim Types	Define custom claim type keys for users' email addresses (comma-delimited). When defined, custom claim types are searched for before falling back on standard types.
Additional/Custom Name Claim Types	Define custom claim type keys for users' full names or display names (comma-delimited). When defined, custom claim types are searched for before falling back on standard types.

Field	Description
Requested Authentication Context Class Reference values	Define Authentication Context Class Reference identifiers (`acr_values`) (space-delimited). List `acr_values` in preference-order.
Expected "acr" Claim Value in Response	Define the `acr` Claim Value for Bitwarden to expect and validate in the response.

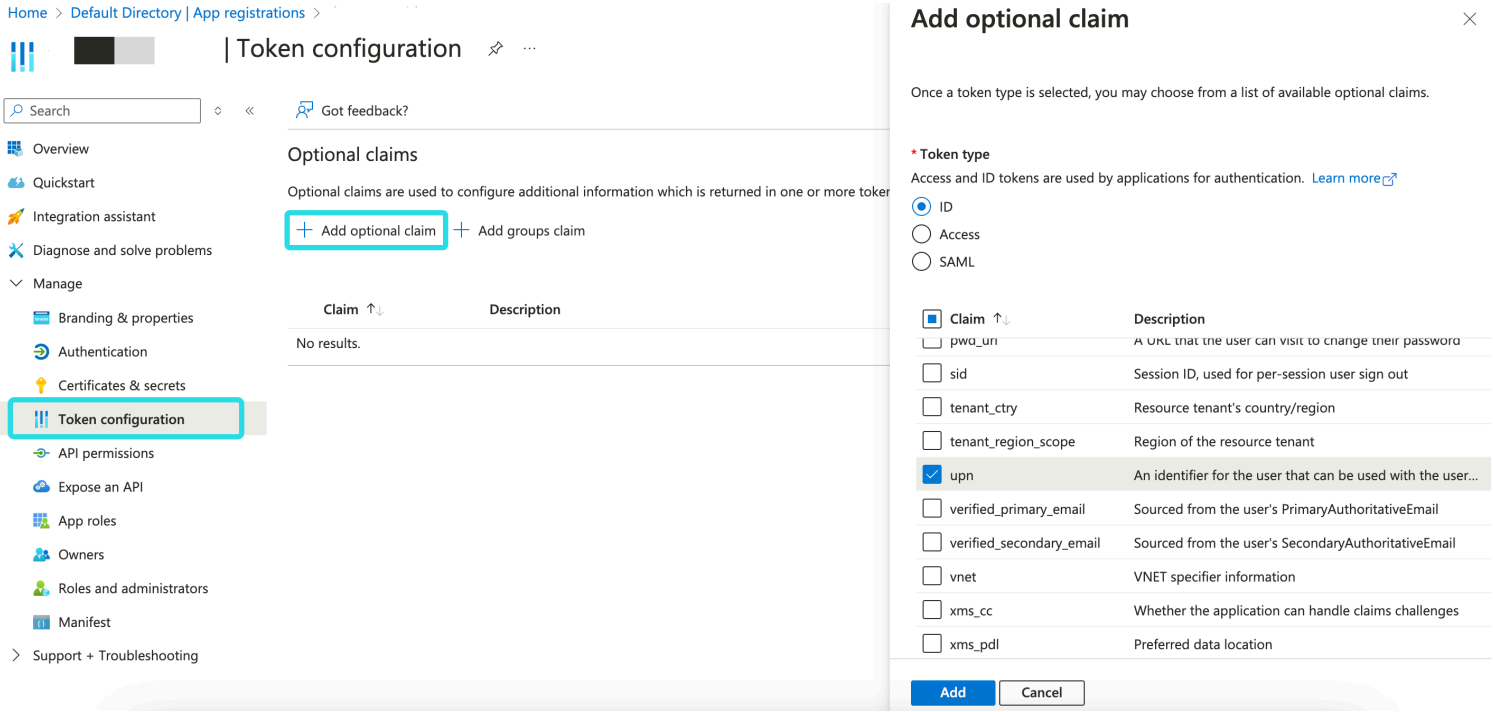
When you are done configuring these fields, **Save** your work.

> **Tip**
>
> You can require users to log in with SSO by activating the single sign-on authentication policy. Please note, this will require activating the single organization policy as well. Learn more.

Additional custom claim types

If your SSO configuration requires custom claim types, additional steps are required in order for Microsoft Entra ID to recognize the non-standard claims.

1. On Microsoft Entra ID, add a custom claim type by navigating to **Enterprise applications → App registrations → Token configuration**.
2. Select ＋ **Add optional claim** and create a new optional claim with a selected value.



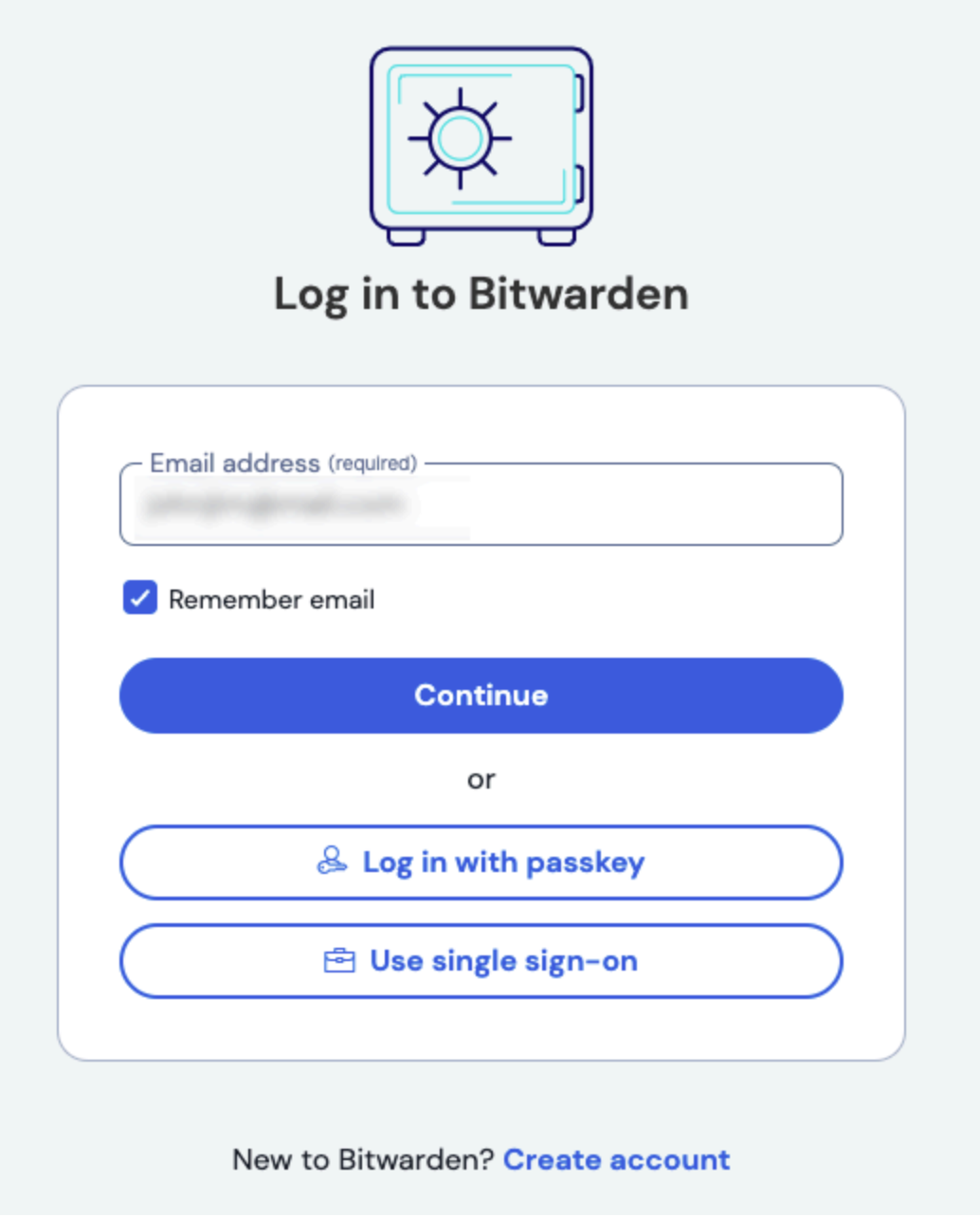
Microsoft Entra ID custom claim

3. On the Bitwarden SSO configuration screen, enter the fully qualified path for a custom claim field in the corresponding **custom claim types** field. For example: `https://schemas.xmlsoap.org/ws/2005/05/identity/claims/upn`.

4. Select **Save** once you have completed the configuration.

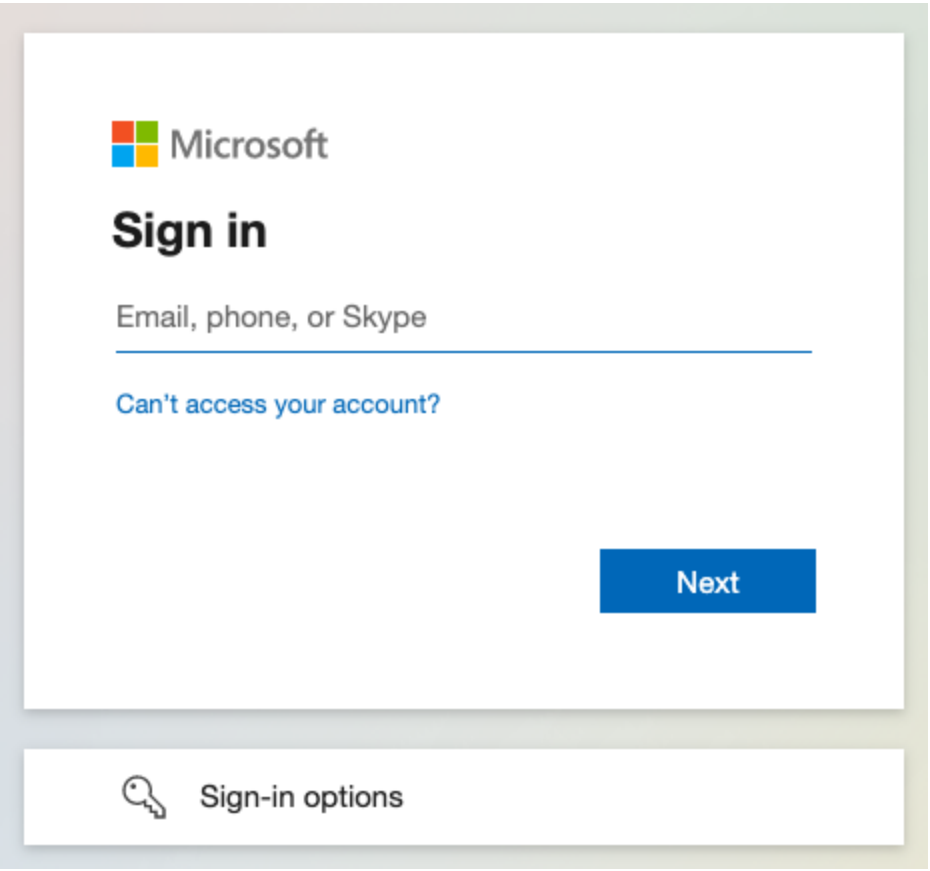
Test the configuration

Once your configuration is complete, test it by navigating to https://vault.bitwarden.com, entering your email address and selecting the **Use single sign-on** button:



Log in options screen

Enter the configured organization identifier and select **Log In**. If your implementation is successfully configured, you will be redirected to the Microsoft login screen:



Azure login screen

After you authenticate with your Azure credentials, enter your Bitwarden master password to decrypt your vault!

> **Note**
> Bitwarden does not support unsolicited responses, so initiating login from your IdP will result in an error. The SSO login flow must be initiated from Bitwarden.

Next steps

1. Educate your organization members on how to use login with SSO.