

Product Overview: AppConfig²

What is AppConfig²?






AppConfig² is a comprehensive tool for managing, configuring, and testing **Microsoft Entra™ ID** applications.

It provides a single, unified interface that handles **app registration, authentication flow testing and troubleshooting, API permission management, user provisioning, security analysis**, and more.

Developers, IT administrators, security engineers, and L2/L3 support teams can streamline their work by eliminating the guesswork and manual scripting typically associated with application management.

 **Live Demo & More Info:** appconfig.app

Why Use AppConfig²?

-  **Faster & Easier Management** – Create and update Entra ID app registrations in a friendly UI. Configure permissions, callbacks, token lifetimes, and platform settings (SAML vs. OIDC) without heavy scripts.
-  **Enhanced Security & Compliance** – Detect misconfigurations, enforce security best practices, and leverage built-in **admin consent** features for delegated and application permissions.
-  **Streamlined Troubleshooting** – Test and debug **OIDC, OAuth, SAML** flows in real time. Inspect tokens, decode assertions, and track authentication steps through integrated **flow testers**.
-  **Data-Driven Insights** – Use the **integrated Graph Explorer** to query and manage Entra ID objects on the fly, from listing users and groups to editing application settings.
-  **Test & Restore Configurations** – Save app settings locally using both **manual** and **silent** backups and revert quickly to known-good configurations when testing new changes.

Key Features

✔ **Manage Redirect URIs** – Troubleshoot authorization issues by adding or removing URIs (for both SPA and Web platforms) using a guided “Platform Manager.”

✔ **View & Decode Tokens** – Inspect OIDC/OAuth2 (JWT) and **SAML** tokens in real time. A built-in “Token Decoder” displays claims in a friendly format.

✔ **Customize Token Claims** – Modify optional claims and test them right away. Validate how additional claims appear in ID tokens or access tokens.

✔ **Register & Modify Applications** – Easily spin up new Entra ID app registrations or update existing ones. Manage sign-in audiences, branding, and supported account types.

✔ **Test Authentication Flows** – Validate **OIDC, OAuth 2.0, and SAML** flows with dedicated testers:

- **Auth Flow Tester** for interactive sign-in (Auth Code Flow w/ PKCE and hybrid flow) or client credentials flow.
- **SAML Tester** to capture and decode SAML assertions.
- Automatic pop-up or redirect flows with real-time logging.

✔ **User Provisioning & Role Assignments** – Assign users to an app with the correct roles, remove users, and handle role-based access without leaving AppConfig².

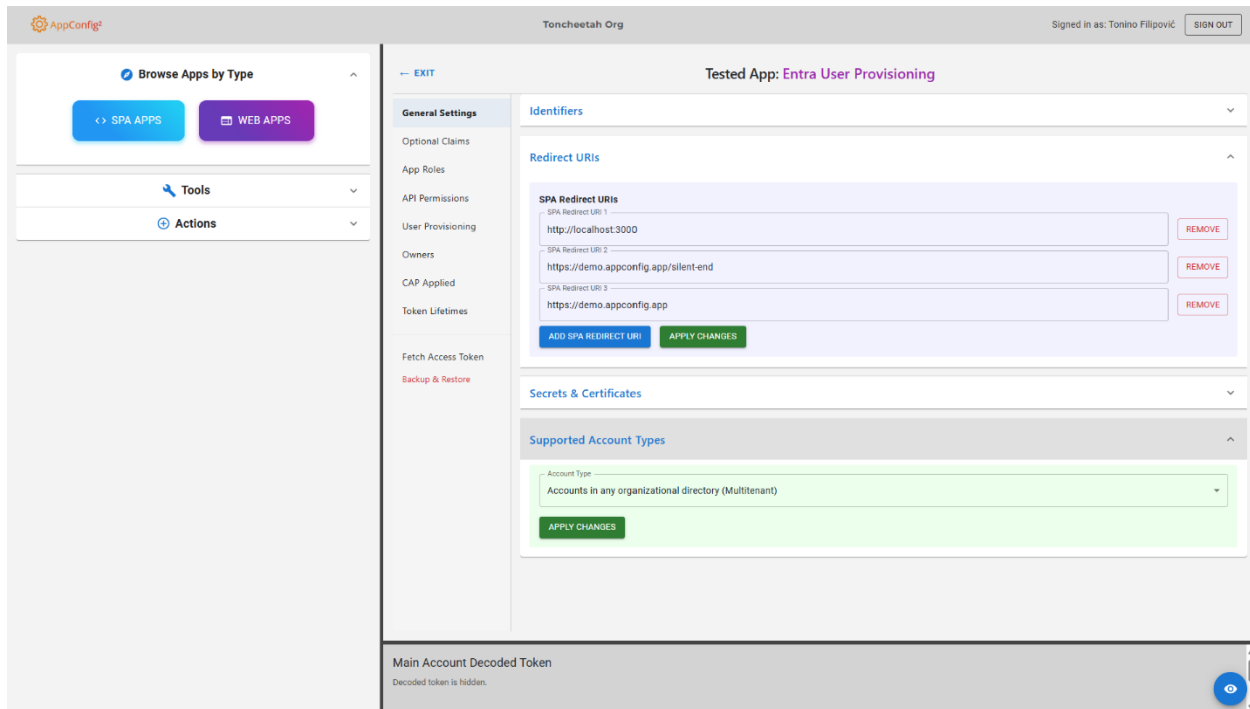
✔ **Embedded Graph Explorer** – Send GET, POST, PATCH, or DELETE requests to the Microsoft Graph API to retrieve or modify Entra ID objects. Handy for verifying properties or applying custom updates.

✔ **Backup & Restore Configurations** – Perform manual backups to JSON, plus **silent local backups** stored in your browser. Revert to a previous version of the app registration in one click.

✔ **Application Role & API Permission Management** – Dynamically create or update app roles. Link them to your Entra ID applications and manage assignments. Add and remove delegated or application (client) permissions. Grant admin consent for Microsoft Graph and custom APIs directly from the UI.

✔ **Owner Management** – Easily add or remove application owners. Resolve user details from Microsoft Graph in real time.

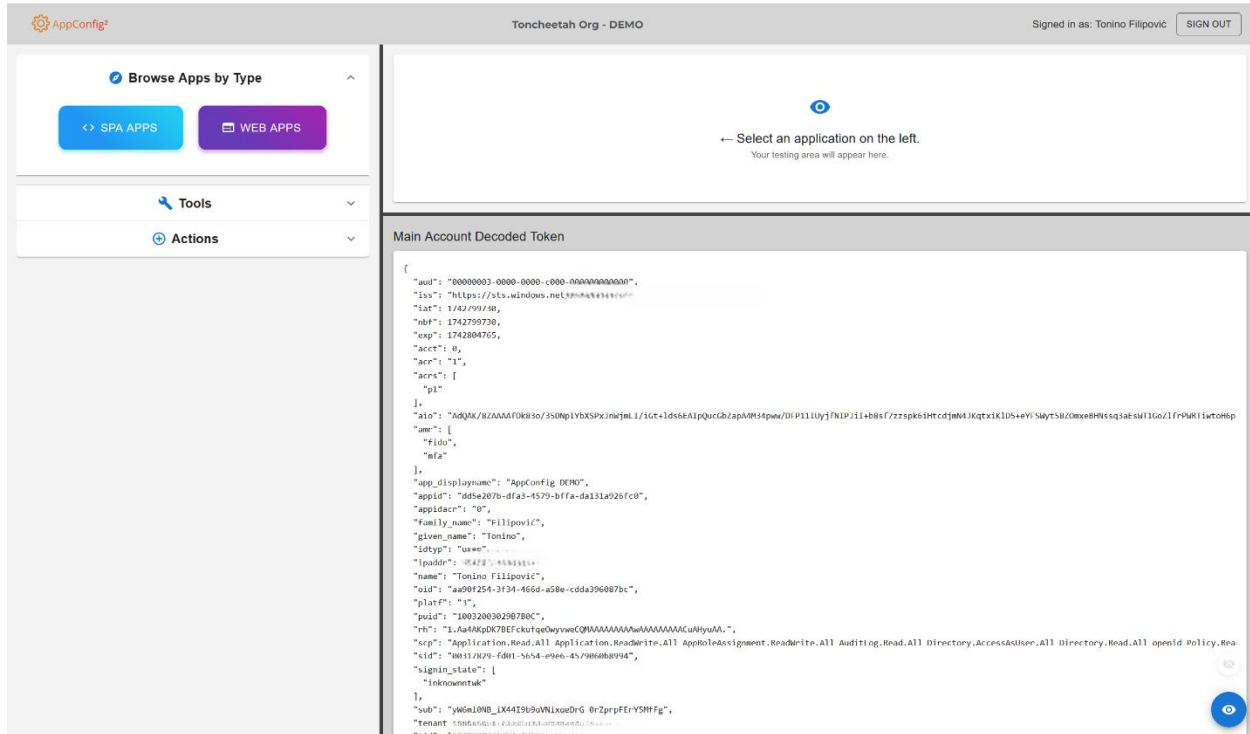
✓ **“Authenticate As” & Impersonation** – Generate tokens as a “test user” directly in AppConfig². Quickly verify how different roles or scopes affect the resulting tokens.




How It Works


1. **Sign in** using your Microsoft Entra ID administrator account (with the relevant permissions).
2. **Browse Applications** – Filter by type (SPA or Web) or search by name. Click on an application to open its details.
3. **Modify & Test Configurations** – Update redirect URIs, add or remove optional claims, configure roles, and assign users. Use the **Auth Flow Tester** to validate sign-in OIDC/OAuth flows or the integrated **SAML Tester** for SAML flows.
4. **Analyze Tokens & Grant Consent** – Decode access tokens and validate authentication responses. Review or change delegated and application permissions.


5. **Restore & Secure** – Capture a **silent** or **manual** backup prior to major changes. Restore from local files or revert to a stored backup if needed.





Who Should Use AppConfig²?

 **Developers** – Debug authentication flows, test custom claims, and iterate on app registration settings without repeated visits to the Azure portal.

 **Security Engineers** – Confirm compliance with best practices, check for missing admin consents, and review assigned roles or user access.

 **IT Administrators** – Handle day-to-day Entra ID application management, user provisioning, and platform configuration in one place.

 **L3 Support Teams** – Diagnose and resolve login, token, or permission issues efficiently—no specialized scripts required.

 *AppConfig² is built for professionals managing identity and authentication systems within Microsoft Entra ID environments.*

Detailed Capabilities

1. User Authentication & Authorization

- Secure login via **MSAL (Microsoft Authentication Library)**.
- Supports **popup-based authentication**.
- Retrieves **user display name** upon login.
- Handles **MSAL initialization and authentication errors gracefully**.

2. Application Listing & Filtering

- Fetches all **registered applications** from **Microsoft Graph API**.
- Allows filtering based on **application type (SPA or Web)**.
- Displays applications in an intuitive UI.

3. Application Selection & Configuration

- Select an application and access its **detailed settings**.
- Configure **authentication methods, optional claims, API permissions, Redirect URIs**, and more.
- Switch between OIDC and SAML with the Platform Configuration Manager.

4. Application Testing

- Provides a **real-time testing environment** for authentication & authorization.
- Modify settings dynamically and **test their effects immediately**.
- Supports **user impersonation (“Authenticate As”) & permission validation**.

5. Token Decoding & Visualization

- Decodes **JWT ID & access tokens** and **SAML** assertions in real time.
- Displays token contents in an **easy-to-read format**.

6. Graph Explorer Integration

- A built-in Graph Explorer to perform **GET, POST, PATCH, DELETE** requests on Azure AD objects.

- Displays **formatted API responses**.

7. Authentication Flow Tester

- Validate Auth Code Flow (PKCE), hybrid flow, or Client Credentials flow with real-time logs.
- Retrieve tokens, decode them, and compare claims right inside the app.
- Supports both single-tenant or multi-tenant scenarios.

8. New Application Registration

- Enables **direct registration of new applications**.
- Supports **SPA and Web applications**.
- Configures **initial Redirect URIs and Sign-In Audience**.

9. Backup & Restore

- Automatic “silent” backups in local storage for easy rollbacks.
- Create a **backup of current application settings** before modifying.
- Download or restore backups at any time to revert the app’s state.

10. Application Role & API Permission Management

- **Add, modify, and remove App Roles** dynamically.
- **Manage API permissions**, including **scopes and delegated permissions**.
- Grant admin consent directly from AppConfig², tracking partial vs. full coverage.

11. Owner Management

- Assign and remove **application owners**.
- Resolves owner details **via Microsoft Graph API**.

12. User Provisioning

- Assign or remove users from the app with specific app roles.
- Resolve users by searching the directory (UserPicker) or inputting their UPN.
- Use bulk provisioning when needed

Try AppConfig² Today!

1. **Live Demo:** See it in action at appconfig.app.
2. **Contact Us:** For enterprise pricing or integrations, reach us at support@appconfig.app.
3. **Get Started:** Onboard your Entra ID environment and start configuring, testing, and securing your apps with ease!

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