

Case Study:

Senior Software Engineer (IAM)

Identity and Access Management Platform Team

Background

You are joining Fabrikam as a senior software engineer on the IAM team who focus on managing the standardization and implementation for Identity and access management across Fabrikam.

The company was founded over 20 years ago and has its origins as an entrepreneur-led, disruptive business that replaced newspaper & magazine classifieds and has organically expanded across the region and eventually joined a larger multi-national conglomerate. It remains a very profitable business. The company has software delivery teams based in several development centres around the region as the result of some mergers.

The Challenge

The team are embarking on a new green field project that includes developing a web application that will allow Fabrikam customers (typically recruiters) to have video conferencing calls with other Fabrikam customers (typically candidates) to screen call them on the fly using their existing identities stored in the Fabrikam identity provider without requiring from them to use and share external party identities like Zoom, Skype .. etc.

The new application will show a single **“Sign in with your Fabrikam account”** form for both recruiters and candidates. The user can select to login as a recruiter or candidate.

Once the user selects the login link or button, the login process is outsourced by the app to Fabrikam identity provider, so the end-users will be able to key in their credentials and click login (if they don't have an already established session), once the validation on Fabrikam IdP side is done, the request will be directed back to the screening application and the security token(s) will be stored in the session accordingly.

Those security token(s) will be used by the screening application to carry out subsequent API calls to a backend that is dedicated to serve this new application. This backend is part of the greenfield project.

Requirements:

1. Write a proof of concept (PoC) for (only) the identity and access management parts of the application including the following software components:
 - a. Fabrikam identity provider
 - b. Screening web application
 - c. Screening application backend
2. You are encouraged to show in this PoC your capability of using a standard protocol, preferably OAuth 2/OpenID Connect, to govern the relationship among those parties:
 - a. User
 - b. Identity Provider (authorization server)
 - c. Backend (Resource Server)
 - d. Application (client)
3. You are encouraged to use an open source project that acts as an identity provider out of the box with some customization for the business logic, **or** use an Identity as a service solution like Auth0 that has free tier for the sake of this PoC.
4. You can use any stack/framework for the web application and the backend that you are familiar with.
5. You are encouraged to use any publicly available package/component to facilitate the authentication/authorization flows on frontend and backend.