

Integration document for OneWave PWA with dApps based on API

Overview

This document outlines the steps and guidelines for integrating decentralized applications (dApps) into the Progressive Web Application (PWA) of OneWave. This documentation is based on API integration, where the dApp is opened in the iFrame of PWA.

1. Overview of API workflow

1. PWA initiates User Request:
 - On clicking on the dApp Icon in the OneWave PWA, the PWA will call OneWave internal middleware for dApp integration in which the username and JWT will be shared with the dApp API
2. Middleware forwards request:
 - OneWave internal middleware will verify JWT and forward the request to the dApp API with username and JWT.
3. dApp processes request:
 - dApp checks if the username exists:
 - If 'yes', dApp should navigate the user to a specific screen for user to take some action or view the home screen of dApp
 - If 'no', dApp should create a new account and return credentials or an identifier.

2. Prerequisites

Prerequisite for starting the integration process:

- The dApp provider provides the API for their DApp
- The dApp provider whitelists the staging and production domains of OneWave to avoid CORS issue while integrating with their API
- OneWave team will whitelist dApp staging and production domain for OneWave API access
- dApp provider to provide staging as well as production API

2. API based integration

1. OneWave Middleware API:
 - At OneWave we have our middleware layer to interact with the dApps' APIs. This will:
 - Forward user details (username and JWT) to the dApp.
 - Handle responses and transform them if necessary for the PWA.
 - Manage error handling and logging for integration
2. Token Verification by dApp:
 - dApp team needs to ensure that the JWT can be verified by the dApp using a shared secret or a public key for asymmetric encryption.
3. Account Linking Logic:
 - For first-time users:
 - OneWave API will call the dApp API and send username and JWT to the dApp API.
 - We expect the dApp to create a new account and return an identifier or token
 - For returning users:
 - OneWave API will pass the same username and JWT.
 - The dApp should validate the username against its records and either return the existing user data or prompt for action
4. Based on the discussion with the dApp provider, we can provide the API for integration