

# Supabase Overview

## 1. What is Supabase?

Supabase is an open-source backend-as-a-service (BaaS) that provides tools to quickly build and scale web and mobile applications without managing your own backend infrastructure. It's often compared to Firebase but is built on PostgreSQL (SQL-based) instead of a NoSQL database.

## 2. How Supabase Works

Supabase provides the following core services:

1. Database – A fully managed PostgreSQL database with built-in authentication and real-time capabilities.
2. Authentication – Handles user sign-up, login, password recovery, and social logins.
3. Storage – Stores files (images, videos, documents) securely.
4. APIs – Automatically generates RESTful and GraphQL APIs for your database tables.
5. Edge Functions – Serverless functions to run custom backend code.

Workflow example for authentication:

- A user signs up or logs in via Supabase Auth.
- Supabase verifies credentials and returns a JWT (JSON Web Token).
- Your app uses that token to access protected routes or fetch data.

## 3. Benefits of Using Supabase

- Fast development – No need to set up your own backend manually.
- Open-source – You can self-host or use their hosted service.
- SQL database – Flexible queries with PostgreSQL's power.
- Built-in auth – Supports email/password, magic link, and social logins.
- Real-time updates – Listen for database changes instantly.
- Scalable – Works for small apps and enterprise projects.
- Good integration – Works smoothly with Next.js, React, Vue, etc.

## 4. Supabase Login URL

When you use Supabase authentication, you can set a redirect URL (also called `redirectTo` in the API).

- After login or signup, Supabase redirects the user to this URL.

Example:

```
await supabase.auth.signInWithOtp({
  email: 'user@example.com',
  options: {
    emailRedirectTo: 'https://myapp.com/welcome'
  }
});
```

- This is especially useful for:

- Email confirmation – After a user clicks the verification link.
- Magic link login – Directly logging in without entering a password.
- OAuth redirects – After signing in via Google, GitHub, etc.