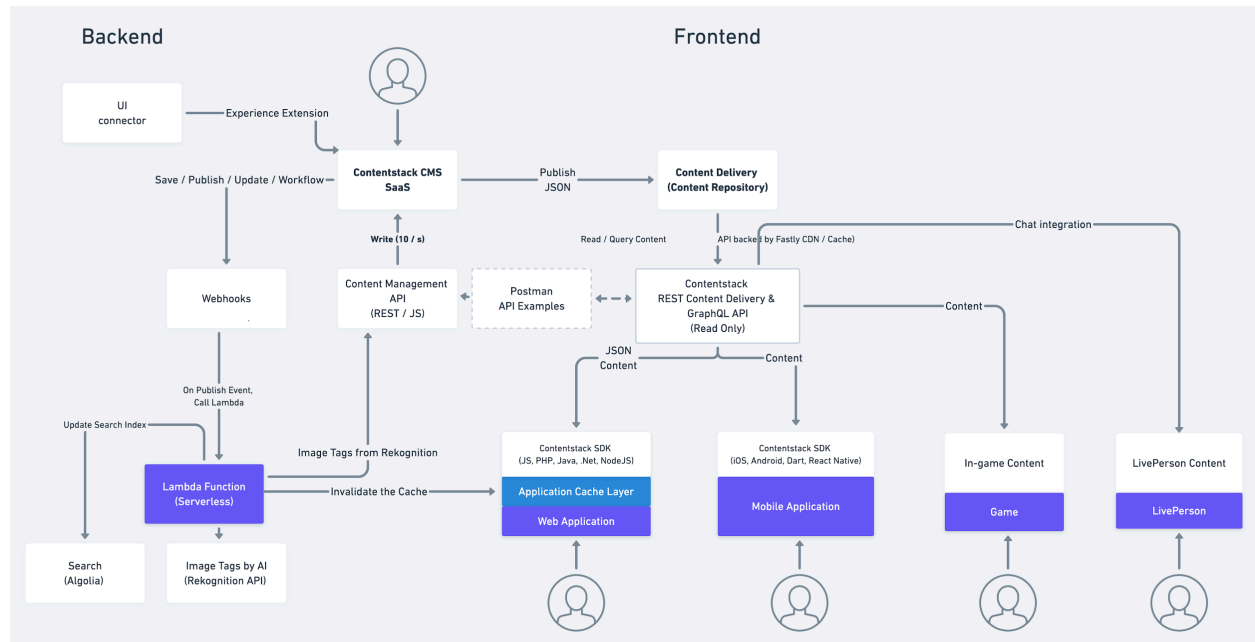# Architecture

Big Picture Architecture Diagram

Backend

The Backend of Contentstack is the CMS with the ability to create and publish content. The focus here is on editor ease-of-use by providing a simple, powerful and flexible UI for content creation and management. In addition to the out of the box functionality, we also provide an ability to extend the interface by creating UI Extensions using our App SDK and connect to 3rd-party applications such as DAM providers, Analytics, E-Commerce platforms and more.
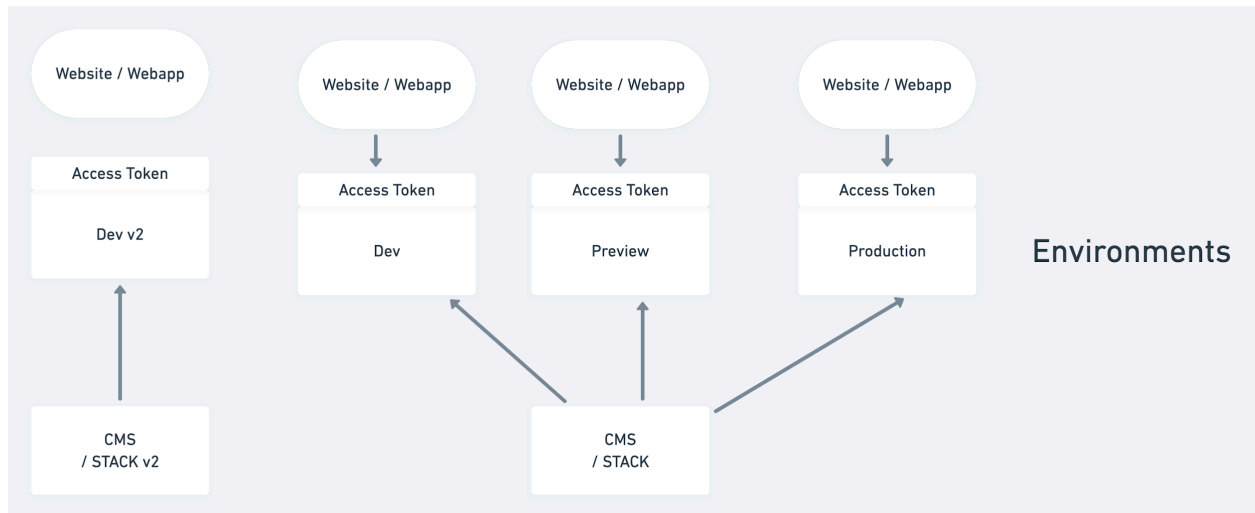
Frontend

The focus on the frontend is high-performance for your website and web application. APIs and SDKs are provided to the developer for using in their applications to perform read-only queries to the content. The Content Delivery APIs use an internal CDN to cache all queries to the platform which results in higher performance for all your web applications. This is also where we find the Images API for delivering image assets.

Backend   Frontend

UI
connector

—— Experience Extension

**Contentstack CMS
SaaS**

Publish
JSON

**Content Delivery
(Content Repository)**

Save / Publish / Update / Workflow —

Write (10 / s)

Read / Query Content

API backed by Fastly CDN / Cache

Chat integration

Webhooks
.

Content Management
API
(REST / JS)

Postman
API Examples

Contentstack
REST Content Delivery &
GraphQL API
(Read Only)

Content

On Publish Event,
Call Lambda

Update Search Index

Image Tags from Rekognition

JSON
Content

Content

Lambda Function
(Serverless)

Invalidate the Cache

Contentstack SDK
(JS, PHP, Java, .Net, NodeJS)

Application Cache Layer

Web Application

Contentstack SDK
(iOS, Android, Dart, React Native)

Mobile Application

In-game Content

Game

LivePerson Content

LivePerson

Search
(Algolia)

Image Tags by AI
(Rekognition API)

Environments

- One Stack can publish to multiple Environments. Think of Environments as "publish destinations".
- Each Environment has one Delivery Token, otherwise known as an Access Token. That token is unique per Environment.
- Each Stack has an API key. There is only 1 API key per Stack and it is unique.
- Most API calls will require both an API token and a Delivery / Access Token.

Environments

Multi-Stack Architecture Diagram