

What is behind Kontent

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Kontent by Kentico uses several services and platforms to provide a reliable content experience for customers and end-users. Are you evaluating Kontent and want to find out what services it uses behind the scenes? Want to make informed decisions about your own app's architecture? You're in the right place.

🔑 Key points

- Kontent's main infrastructure is hosted in Microsoft Azure. This includes the administration interface and the APIs for adding, managing, and getting your content.
- Kontent uses third-party systems for email notifications, payments, identity management, and content delivery.
- The API calls you make go through a content delivery network (CDN), which makes content delivery extremely fast.

Kontent architecture in a nutshell

The core services behind Kontent by Kentico are running in [Azure](#), a Microsoft-operated cloud computing service. The Azure infrastructure model used by Kontent is Platform as a Service (PaaS) and it's also where your content is stored.

All Azure resources (such as App Services, Cosmos DBs, Azure SQL databases) are regularly reviewed and secured based on the latest industry standards using Azure Security Center. We also have a [security policy](#) in place to ensure your content is safe.

Simplified overview of Kontent's architecture and the third-party services it uses.

See the diagram on <https://viewer.diagrams.net?lightbox=1&nav=1#Uhttps%3A%2F%2Fraw.githubusercontent.com%2FKenticoDocs%2Fkontent-docs-diagrams%2Fmaster%2Farchitecture%2Fkontent%2520architecture%2520lite.drawio>

Azure aside, Kontent uses the following third-party services:

- [Auth0](#) for authenticating Kontent users
- [SendGrid](#) for sending email notifications
- [FastSpring](#) for subscription payments
- [Fastly](#) content delivery network (CDN) for delivering your content to your customers and users

The Fastly CDN has edge nodes all around the world, ensuring fast content delivery no matter the destination.

How Kontent stores your data

The data of your project is stored in a specific [data center](#). In every data center, Kontent uses a decoupled architecture for storing your content. The content you create is saved in two repositories: the content repository and delivery repository.

- The content repository is optimized for writing data. This data is used for the [administration interface](#), [Management API](#), [full-text search](#), and backups.
- The delivery repository is optimized for reading data. This data is used for the [Delivery REST API](#) and [Delivery GraphQL API](#). To ensure high availability of the live data, the live and preview environments are isolated from one another.

The services in these repositories are written in [ASP.NET](#).

Simplified overview of Kontent [data centers](#). Each data center contains the content and delivery repositories with several services.

See the diagram on <https://viewer.diagrams.net?lightbox=1&nav=1#Uhttps%3A%2F%2Fraw.githubusercontent.com%2FKenticoDocs%2Fkontent-docs-diagrams%2Fmaster%2Farchitecture%2Fkontent%2520architecture%2520data%2520centers.drawio>

We back up your data daily and store the backups for 14 days for the purposes of [disaster recovery](#). All your data is safely encrypted at rest.

What's next?

- [Learn more about headless CMSs](#) in our free micro-course.
- [Check how Kontent is different](#) from traditional and other headless CMSs.
- [See a list of features](#) you get with Kontent.
- Find out how Kontent [backs up your data](#) and what to do in case of a data loss.
- [Set up Kontent](#) the right way to reap all the benefits.
- [Develop your apps](#) to get your content to your users.