

dotCMS Product Brief

What's New in dotCMS 5.1:

Making Digital Marketing Easier for Business & IT Teams

This minor release continues the dotCMS 5 Series initiative of addressing exciting new and improved capabilities that will reduce dependencies on developers and provide business teams with the tools to create trusted, continuous, and connected customer experiences. This release also introduces new tools for web developers to build integrations with adjacent systems without any Java coding to build platforms that create business value. These new features will drive marketing and IT agility, shorter time-to-market, and eventually, Total-Cost-of-Ownership and ROI your digital platform.

New for Marketing & Business Teams

Edit Mode Anywhere

When using a CMS in a headless scenario, the editor experience can be disrupted by not having the option to preview, inline editing, and the ability to drag and drop content before publishing. Edit Mode Anywhere overcomes this burden in full. Regardless of where content is exposed, users will continue to have full editing capabilities:

- Preview content
- Inline Editing
- Drag & Drop page composition
- Page Template Management



Enhanced Content Type Builder

Creating and managing new content types has been further improved, along with a new UI/UX, and now allows for multi-column forms. In addition, in dotCMS 5.1 it is possible to have per-field metadata on Content Types, which can be used for things like:

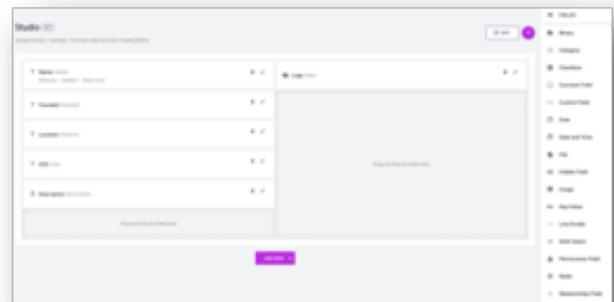
- In-tool WYSIWYG configuration
- WYSIWYG field that can be controlled in the dotCMS admin tool by specific field variables

As part of the Edit Mode environment, this tool will increase the velocity and agility for the content management process in dotCMS as a whole. Changes to the content model are made in minutes, and available across the entire platform, without the involvement of any developer.

Content Relationships

The existing capability to create and manage relationships between content types in dotCMS has been completely overhauled, simplified, and improved. The new tool makes it easier for marketing teams to build, manage, and maintain complex relationships directly via the authoring environment of dotCMS.

Like other marketing tools in dotCMS, this tool is completely NoCode compliant, significantly reducing the total level of effort for business and marketing teams.



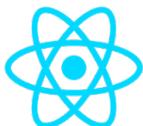
New for IT & Development Teams

Edit Mode Anywhere

Where this new capability brings undisrupted editor experience for marketing teams, the value for IT teams is equally as exciting.

First, IT teams can choose the front-end framework/programming language of their liking for building content-driven applications in dotCMS. Any framework will work seamlessly with the Edit Mode Anywhere tool in the authoring environment, which gives technology teams freedom of innovation and technology agility.

Secondly, legacy applications can be utilized going forward in order to leverage their proven value, while the technology teams accelerates innovation with new and modern technologies. dotCMS is not a limitation from an IT perspective and support IT in this scenario, while marketing teams continue to have an undisrupted editor experience.



Content Relationships

From a technology perspective, the new content relationships bring added value to IT teams.

Since the Content Relationships are now part (as a field) of the content type(s), they are searchable and can be

exposed over REST APIs, which plays well in headless deployments of dotCMS. In addition, dotCMS now also supports one-way relationships, which was previously hard to accommodate.

API Tools

Building REST endpoints in dotCMS was already easy, but with the addition of two new tools, the level of effort for web developers to build REST endpoints has been reduced even further.

SCRIPTABLE API ENDPOINTS

In this release it is possible to define and deliver scriptable REST endpoints, which is a more solid and scalable pattern

SCRIPTING-AS-A-SERVICE

In addition, permissioned users can control responses by using PUTting and GETting Velocity script in the requests.

This has a direct impact on the integrations (of any kind) with adjacent system and technology. No Java coding is required to build REST endpoints using this tool¹.

File-based Click Containers

In order to enhance dotCMS's capabilities to run in a CI/CD environment, we introduce containers on the file system. Containers and their content specific templates can now be built completely offline as files and uploaded into dotCMS as a batch, without needing to click around the authoring UI. This will further separate code and content to make it even easier to deploy dotCMS in a modern CI/CD environment.

New for IT & Development Teams

Native GraphQL Support

Starting with dotCMS 5.1, the GraphQL API and GraphQL query language are supported out-of-the-box by dotCMS. dotCMS GraphQL support



exposes the dotCMS content repository as GraphQL and provides an API that allows developers to query and return specific properties of content and shape the API response at call time. Coupled with our new content relationships, this makes delivering custom views into the content repository simple and allows developers to traverse the content graph based on content relationships and other properties.

ElasticSearch Enhancements

Elasticsearch content re-indexing has been changed in this release. Content can be checked into the content repository with one of three re-index strategies. No more calling “Is Content Indexed” is needed:



- **force** re-index syncs to Elasticsearch immediately - good for tests
- **wait for** gives Elasticsearch time (default 1s) to sync the cluster and acknowledge the re-index
- **defer** lets the content re-index take place asynchronously in the background.

Smaller Improvements

This release also brings a number of small improvements on existing capabilities and tools:

- Velocity errors bubble up using a new system notification window
- API responses now include more properties
- Content can now be checked via a workflow in Velocity e.g. `$workflow.fire($map, $workflowId)`
- Content can be imported and exported with relationships
- Added an API endpoint to pull old versions of content
- Language ids are no longer based on a counter number to prevent language id collisions across dotCMS installations

Resources

¹ Lightweight Endpoints in dotCMS <https://dotcms.com/blog/post/lightweight-endpoints-writing-custom-rest-endpoints-without-java>

dotCMS Versions at a Glance

For Business & Marketing Users

	4.0	4.1	4.2	4.3	5.0	5.1
Complete UI Overhaul in AngularJS	✓	✓	✓	✓	✓	✓
Mobile & Persona Preview	✓	✓	✓	✓	✓	✓
Layout as a Service			✓	✓	✓	✓
Edit Mode					✓	✓
• Page Editing					✓	✓
• Template Editing					✓	✓
• Content Type Editing					✓	✓
• Reporting Refresh					✓	✓
• Improved Content Type Builder						✓
Edit Mode Anywhere						✓
Additional UI / UX Improvements						✓
Enhanced & Improved Content Relationships						✓
General Platform Stability & Performance	✓	✓	✓	✓	✓	✓

dotCMS Versions at a Glance

For Developers & Administrators

	4.0	4.1	4.2	4.3	5.0	5.1
Hazelcast Integration		✓	✓	✓	✓	✓
New Caching Providers		✓	✓	✓	✓	✓
Content Relationship REST API			✓	✓	✓	✓
Vanity URL as Content			✓	✓	✓	✓
Language Variable as Content			✓	✓	✓	✓
Static Publishing				✓	✓	✓
Lightweight REST Builder & Scripting as a Service						✓
Elasticsearch Re-indexing Improvements						✓
GraphQL API & Query Language Support						✓
Containers on File System						✓
Supporting Front-End Frameworks / Technologies						
• SpringMVC					✓	✓
• PhP					✓	✓
• ASP .Net					✓	✓
• Angular					✓	✓
• React					✓	✓
• Ember					✓	✓
• Vue					✓	✓
• NodeJS					✓	✓
Docker Images & Reference Implementation					✓	✓
Security Performance	✓	✓	✓	✓	✓	✓

About dotCMS

Founded in 2003 and at the forefront of enterprise content management. It is our belief that the days of monolithic, all-in-one suite solutions are gone and will never come back. Building a digital experience platform -by definition- requires the art of seamless integration into an existing technology stack that brings marketing, transactional and experience platforms together. Integrations should be built 'on the fly' or based on NoCode capabilities to drive time-to-market, Total-Cost-of- ownership and return on investment on digital.

Business and marketing teams can orchestrate content and personalized experiences for every touchpoint along your customer journeys for any device, with real-time and actionable insights, on-premise, in the cloud or hybrid, but most of all at scale and with an availability of 99.95% if needed

The Content Management System is the foundational infrastructure of your digital experience platform.



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