

Feature Catalog



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Overview: Features and Packages





For far too long, organizations have been forced to make too many trade-offs when it comes to building digital experiences. You have to choose between a fast launch now or robust editing later. Or flexibility vs. enterprise features. Or what's best for marketers vs. what's best for developers. But, if you're going to be more competitive, you've got to get past all the compromises.

Magnolia lets you build a composable digital experience platform made for your real-world needs. By unifying your unique tech stack – from legacy systems to the latest martech – you can create fully integrated customer experiences and speed up your digital delivery.

- **Consolidate:** Our content hub gives access to all content in one place, allowing reuse across channels and preventing duplication.
- **Connect:** Easy integrations connect any data source, application, or channel – today and in the future.
- **Create:** Unified authoring streamlines composition in one seamless workflow, regardless of content source.

Depending on your deployment strategy, you can choose from the two options in which our product is available:

Magnolia DX Core is the self-hosted version of our product, which gives you full control over your DXP customization and deployment.

Magnolia DX Cloud is our platform-as-a-service (PaaS) offering, a turnkey solution to customize, host and operate your DXP in the cloud using proven infrastructure and best practices from us.

This catalog provides a comprehensive overview of the product features and capabilities you get, regardless of your deployment choice.

If you'd like to evaluate our PaaS offering more in-depth, we recommend you check our white paper "[Evaluating Magnolia DX Cloud Deployment](#)".

OVERVIEW: FEATURES AND PACKAGES



Content and Experience Management

Content Management WYSIWYG, SPA Editor, Forms, Microsites & Landing Pages, Content Reuse, Instant Preview, Optimized Content Authoring (Stories App), Content Tagging, Categorization & Taxonomies, Accessibility & SEO, Data Privacy & GDPR

AI Accelerator Content Creation, Image Generation, Content Optimization, Content Classification, Personalization, Translations, Hyper Prompt, RAG (Retrieval Augmented Generation)

Personalization Targeting and User Segments, Component-based and Page-based Personalization, Web and Headless Personalization

Globalization and Localization Multilingual Content & Admin Interface, Multi-site Management, Automatic Translation

Multi Channel Delivery Omnichannel, REST API, GraphQL, Feeds & Syndication, Newsletter

Asset Management Centralized Asset Management, Image Recognition, Metadata, Image Editor, Imaging Engine

Enterprise Search OOTB Search, SOLR integration, Full-text Search (Find Bar), External Search (Content Hub), User-based Ranking of Search Results

Teamwork and Collaboration Workflows, Dashboard, Concurrent Editing, Versioning

OVERVIEW: FEATURES AND PACKAGES



Easy and Powerful Development

Development Light Dev, Content Types, Javascript & Groovy, Modular Architecture, Java Modules, Light Modules, CLI, Hot Fix, JCR, App Framework

Design & Templating Template Models, Email Templates, Hyper Config, Frontend Friendly

Interoperability Standard UI for Integrations, REST Client, REST API, Custom REST Endpoints, Spring Framework Integration, SSO

IT & Administration

Application Servers Tomcat, IBM WebSphere, Oracle WebLogic, Wildfly (formerly JBoss) Application Servers

Administration Scheduled Backup & Restore, Extensible Config, Export & Import, Shell Access, Logging

OVERVIEW: FEATURES AND PACKAGES

magnolia SPECIAL FEATURES

- Monitoring Module** In-depth monitoring, analysis and visualization of Magnolia internal metrics and activities over time
- Live Copy** Manage complex multi-site installations that share similar content, creating referenced copies of master sites
- A/B/n Testing** Optimize the performance of your content, and convert more visitors into leads.

magnolia INTEGRATION FRAMEWORKS & CONNECTORS

- Commerce**
 - eCommerce framework
 - Commercetools connector
 - Adobe Commerce Cloud connector (formerly Magento)
 - Salesforce Commerce Cloud connector
 - SAP Commerce Cloud connector
- DAM**
 - DAM framework
 - Amazon S3 connector
 - Cloudinary connector
 - Bynder connector
- Translations**
 - Translations framework
 - DeepL connector
- Marketing Automation**
 - External Forms framework
 - Marketo connector
 - Salesforce Marketing Cloud connector
- CDP**
 - CDP framework
 - Segment connector
- Analytics**
 - Analytics framework
 - Google Analytics connector
 - Matomo connector (formerly Piwik)
 - Adobe Analytics connector
- Optimization**
 - Siteimprove connector

High Level Overview



Key Capabilities

Agility Go to market sooner with the CMS that is fast and easy to learn for developers. Release improvements faster with Light Development and Light Modules. Get Continuous Delivery out-of-the-box with Magnolia Cloud. Publish faster with the Stories App. Create future-proof content now with our Content Apps, so you can deliver to the new devices and social channels as they arrive.

Platform Build a digital platform to support your network of franchises, country sites or subsidiary websites. Magnolia provides the foundation and features required for these advanced scenarios: Multi-site, multi-language, content from multiple sources, content reuse, themes, role-based access control and enterprise performance.

Best of Breed Take the Best of Breed approach: Create the DXP platform that is best for your company by choosing the tools you actually want. Incorporate your existing tools and systems, instead of migrating to theirs. And stay open and flexible for the future. Magnolia's rich set of integration and customisation points, Open Source codebase and flexible UI makes a great foundation for a Best of Breed approach.

No Limits With Magnolia, there's no limits to what you can do with your CMS. Magnolia is designed to be customized and to be integrated with other systems. Create the UI that makes the most sense for your authors. Deliver with both traditional rendering and headless. Magnolia is the CMS you won't outgrow.

Multi-Language Magnolia can handle all your multi-language and multi-locale requirements.

Multi-Site Magnolia can manage multiple sites within a single installation. Sites can be completely independent or share content, templates or any other data between each other, depending on your needs.

Multi-Team Large projects have more than one team. Magnolia's modularity allows multiple development teams to each contribute their own modules so they don't block each other's work. Customizable workflows allow you to coordinate your content authoring activities.

Multi-Channel With its personalization, sophisticated templating, and flexible headless capabilities, Magnolia can serve the right content to the right audience at the right time.

HIGH LEVEL OVERVIEW

Governance Make governance processes easier and more predictable with previews of both content and features, and robust workflows. Templates enforce a unified look and feel and editorial guidelines throughout the site. Define content ownership and roles.

Continuous Delivery in the Cloud Get your new features to market faster, with less risk, and higher quality. With continuous delivery you can bring value to your customer sooner. Make small releases every week instead of “big bang” releases every quarter or year. Magnolia Cloud gives you an instant best-practice CD setup complete with Integration, UAT (User Acceptance Testing) and Live environments. Ship new features at the click of a button.

Headless Already have a delivery system, or you’re developing your own native app or frontend app? Then you’ll want to use Magnolia in a pure headless mode. Access your content via our comprehensive REST API’s.

Hybrid Headless When your project requires full CMS functionality and deep REST API access, then you have a Hybrid Headless scenario. Maintain a single source for your structured and semi-structured content, that you can use for your website, mobile site, social channels and any current and future channels via REST. Have a frontend with React, Angular, Vue or metaframeworks like Next.js, Gatsby or Nuxt, use the Visual SPA Editor to manage the content, controls and layout of remote REST based applications.

Cloud Hosting Magnolia Cloud is a platform-as-a-service (PaaS) offering. You get a best practice CMS project deployment, complete infrastructure (network, load balancer, servlet container, database), operations and monitoring. Three separate environments (Dev, UAT, Live) in one subscription. Safe and fast website development and testing workflow.

On-premises Hosting Magnolia partners will be happy to host your website and optimize their service for your particular Magnolia setup. You can benefit from their expertise in hosting other Magnolia websites. Already have the infrastructure and expertise in-house? Host Magnolia on-site, on your own.

Enterprise Grade

Decoupled Author and Public servers

Magnolia is distributed as two web-applications, one acting as the authoring server and one as the public environment for website visitors. This provides better security by having one application inside your firewall, and one outside.

Scalable

A single Magnolia author instance can connect to multiple public instances. This flexible deployment model fits any infrastructure size and scales up and down as necessary. In a typical production setup you have at least two public instances, often more. Advanced dynamic caching ensures the fastest possible delivery even while delivering personalized content.

Transactional Publishing

Transactional publishing ensures that the same content is published to all public instances successfully. In case any one instance cannot be reached the entire transaction is rolled back and the user is notified of the situation. This ensures that all public instances are in sync.

Role-based Security

Administrators can define roles for content access, editing and publishing and assign them to users. This way, each user has only the rights that he or she should have. Content can only be read, changed or published by those who are allowed to do so. Groups and Roles are both supported. Roles also support usage of other user and rights registries, i.e. via LDAP.

Single Sign-on (SSO)

Build single sign-on logins with the Magnolia SSO module. It allows a user to log in once to a system and then automatically gain access to all related systems. This avoids the need to log into each system individually. It also allows to use multiple login providers simultaneously.

Approval Workflows

Ensure that the right people have seen and approved content before it is published. Magnolia supports custom workflows and comes with a standard 4-eye workflow out-of-the-box.

Content and Experience Management



Content Management

Easy to Use Our user interface is carefully crafted to be clear, consistent, and easy to understand for marketing teams and other content authors. Specific apps for key tasks allow the user to focus on the task at hand.

WYSIWYG Content Authoring The Pages app allows you to build complete web pages in an intuitive What-you-see-is-what-you-get fashion. Select the components you need, configure them as you wish, and place them where you want. Developers can configure which components are available to ensure the overall design of the site is not broken.

Visual SPA Editor Authors can use the Pages app, with its intuitive control and live preview, even for headless projects using Single Page Application (SPA) frameworks like Angular, React, Vue, Next.js, Gatsby or Nuxt.

Form-based Content Authoring Content apps are for managing structured content via forms. Content apps make it easy and fast to enter items with a specific set of fields, such as products or events. Project owners can create and configure as many content apps as they need.

Optimized Content Authoring The Stories App provides content authors with a comfortable and streamlined authoring experience. Authors fill in a structured outline with standard fields, and can then build their story with a stack of whatever content blocks they need: images, text, video, embeds, etc. Save and publish in one click to get content live fast. Use the Stories App for news, products, blogs, landing pages, content curation and more.

Reusable Content Create once, publish everywhere (COPE). Whether your content is an image asset, a teaser for a campaign, or a unit of structured content like a product, you only need to maintain it in one place. This ensures all content instances are in sync, prevents stale content, and reduces maintenance.

Future-proof Content Our Content apps and Stories apps are designed to store your content in a pure way - separate from any presentation details. In this way, when you decide to target new digital channels, with brand new requirements and techniques for presentation, your content is ready for them.

CONTENT AND EXPERIENCE MANAGEMENT

Instant Preview Toggle instantly between editing and preview modes in the Page editor. Preview your content in different device resolutions, and even see how your content looks to different personalization segments.

Content Tagging Tags are short keywords such as “food” or “sports” that you can easily apply to content items. Tags make finding and reusing content easier for authors. Tags are an important enabler for targeting content and generating dynamic lists of content.

Text Classification Save time by moving from manual to automated content tagging. Analyze and tag your content directly in the Pages app with the Amazon Comprehend service. This also provides a more accurate search experience for content authors, as these tags are then searchable via the Find bar.

Categorization and Taxonomies Categories allow you to organize the primary topics of your site. For example, tours can be organized into categories such as active, cultural and family. Since categories are content items themselves, they can be customized to have images, icons, descriptions, etc. Since categories are hierarchical, you can build rich taxonomies with them.

Dynamic Lists Templates can display lists of content that are dynamically generated. An author could configure a component to list items that match certain criteria such as a date range or that have a certain tag or category.

Theming A theme is a collection of resource files that gives a site its visual identity through the use of colors and typography via CSS, JavaScript, and imaging configuration. The theming system allows you to centralize resources and modify sites without editing templates. Configure multiple themes and apply them to different websites.

Microsites & Landing Pages Quickly and easily create landing pages with the WYSIWYG Page editor, personalization and reusable content features of Magnolia. Use the multi-site feature to create and run 10's or 100's of microsites on one Magnolia installation.

Content Marketing Implement your content marketing strategy on a solid content management system. The ability to reference content items from each other makes it easy to showcase products on story, news, or blog pages for example.

Marketing Tags Management Marketing tags are snippets of code that you insert on web pages. Tags allow you to integrate 3rd party systems, most commonly to collect analytics information. In Magnolia, content authors can easily manage which tags show up on which pages without a developer's assistance.

CONTENT AND EXPERIENCE MANAGEMENT

WYSIWYG Form Builder

Content authors can easily create web forms on pages for visitors to fill in. They can group related fields such as address fields together, validate form data, and configure what happens on form submission. Magnolia forms are fully HTML5 compliant.

Multi-step Forms

Splitting a large form into multiple steps allows the visitor to focus on one step at a time such as in a checkout process. Content authors can use the same WYSIWYG form builder to create multi-step forms.

Scheduled Publishing

Publishing of changed content can be easily scheduled to take place at any future date and time.

Content Dependencies

Content dependencies are references between content items. When a page links to another page, a dependency is created. Magnolia displays dependencies between the selected content item and other items. Editors can see the consequence of deleting the selected item and whether dependent items need to be published together.

Accessibility Conformance

Magnolia templates follow the guidelines of W3C Web Content Accessibility Guidelines (WCAG2m) as well as Germany's BITV (Barrierefreie Informationstechnik-Verordnung).

SEO

Magnolia supports the following search engine optimization (SEO) best practices: W3C compliant code, sitemap, secure and easy crawler access, search-friendly URLs, shallow site structure, prevent broken links, categorize content, redirects, optimized images, keywords and meta elements.

Data Privacy & GDPR

May 2018 saw the introduction of new European regulations to protect the online rights and data of European citizens. Magnolia helps you manage personal data, track website visitor consent, facilitate data portability and ensure your visitors' right to be forgotten.

A/B/n Testing

SPECIAL FEATURE

Optimize the performance of your content, and convert more visitors into leads. Magnolia allows you to test multiple variants and determine which option is preferred by each audience. It also persists the winning variant to the CMS easily.

AI Accelerator

Content Creation	Automatically create components (text, images, or a combination of these) and even entire pages.
Image Generation	Generate the perfect images based on custom textual input, offering creative freedom.
Content Optimization	Generate metadata and image description (SEO and OG), to optimize content before you hit publish.
Content Classification	Automatic recognition and tagging of images, so that search becomes more accurate.
Personalization	Generate variations for every audience. Create content once, and let AI do the heavy lifting.
Translations	Speed up your translation process, and write precise, high-quality content for every market.
Hyper Prompt	Create and reuse complex prompts that include tone of voice, SEO keywords or anything you need to craft content that is on brand, on target and highly optimized.
RAG (Retrieval Augmented Generation)	Enhance the accuracy and reliability of your content output with facts fetched from external sources.

Personalization

Page-based Personalization

Adapt content to visitors according to their preferences, needs, and behavior. With personalization, your visitors will see more relevant content, raising engagement and conversion. Magnolia allows content authors to easily create multiple variants of a page to be served to different user segments or based on user traits.

Component-based Personalization

Easily manage more sophisticated personalization scenarios by personalizing individual components on a page. Authors can personalize any number of components on a page, and each component can be personalized based on different user segments or traits.

Targeting and User Segments

Define your audience by individual traits or segment your visitors into meaningful groups. Magnolia comes with standard traits out-of-the-box such as geolocation and visitor status. Use one of our CRM connectors to base your targeting on previously captured information.

Headless Personalization

Our personalization-aware API recognizes audience traits and responds with personalized content. Trait types can be specified as request, header, and cookie parameters, enabling you to easily personalize experiences in any front end.

Globalization and Localization

Multilingual Content

Manage and serve several languages from within Magnolia in the way that works best for your project. For websites, create a single tree of pages with multilingual content - or create a tree of pages for each language, or a mix of the two approaches.

Authors can easily switch between languages in any content editing UI. Magnolia has full UTF-8 support and supports right-to-left languages.

Multilingual Admin Interface

The Magnolia user interface for content authors is available in over 15 languages, including English, Russian, Chinese, French, German and Spanish.

Translation Management

Speed up translations for international enterprises who have sites in many languages. Export content in translation-friendly XLIFF or Excel format. Import translated content into Magnolia.

Automatic Translation

Easily support additional languages with automatic content translation support. Magnolia has out-of-the-box support for Google Translate, Microsoft Translator, translations.com and DeepL Translator services, and you can integrate other services.

Multi Channel

Omni-channel Create customized rendering of your single-source content to publish to the web, smartphone, tablet, social channel, newsletter or any other output channel. Channels can be defined by location, device or any user behavior you can define.

Multi-Site Manage multiple websites from a single Magnolia installation. You have complete flexibility in how to share content, functionality, and templates across your sites. Multi-site is perfect for scenarios like country specific sites, franchises, campaign microsites and landing pages.

Live Copy Manage complex multi-site installations that share similar content.

SPECIAL FEATURE

Create referenced copies of master sites, which are automatically updated when you make changes to the master. Components on referenced pages can be changed individually and protected from master content changes.

REST API The flexible out-of-the-box REST API's make it easy to serve modern channels which often get their content via REST: such as mobile devices, games, desktop apps, marketing systems and IoT.

GraphQL Retrieve Content Types from any frontend or static site generator instantly with Magnolia's GraphQL API.

Headless Development Magnolia's Headless Accelerator includes a rich set of ready-made Web Components that work with the CMS and the Jamstack, documented into a central design system, and a unified workflow to customize and deliver them to any frontend application. Our CLI ensures that all changes are reflected in the CMS and dialogs and templates are automatically updated for authors. Developers can use their preferred IDE and benefit from a typesafe development environment, making headless development a lot faster and convenient.

Feeds and Syndication Provide feeds of content in standard formats to support Blogs, Podcasts or other forms of syndication. You can also aggregate external feeds for display on your website or other digital experience.

Newsletter Render content in an email-friendly format and connect Magnolia to an external newsletter service like Campaign Monitor. You can create your email pages in Magnolia to ensure a consistent design and import them into an external email or marketing automation tool.

Digital Asset Management

DAM The Digital Asset Management (DAM) system stores all assets, such as images and PDF files, in a centralized location. You can view, manage and edit assets in the Assets app. You can use assets on pages and create download links to them.

Image Recognition Automatically recognize the content of image assets via AI and add content tags to them. The feature can either use a local recognition module from Magnolia or an external service such as Amazon Rekognition.

Customizable Standards-based Metadata Assets support the Dublin Core metadata standard out-of-the-box. The DAM can be configured to support additional or alternative custom metadata fields. All fields are fully indexed, allowing you to categorize and retrieve content based on the metadata.

Image Editor The DAM provides basic image editing functionality. You can crop, rotate and flip images.

Imaging Engine Imaging simplifies working with images. You don't need to resize and crop each image manually as the imaging engine generates variations on-the-fly. Create rules for desired image sizes. Editors save time as they can upload originals and the system will automatically resize them.

Enterprise Search

Search Search across all content with the out-of-the-box search functionality. Or connect to a search indexing system with our SOLR integration module or other 3rd party system.

Find Bar The Find Bar is the heart of the Magnolia user interface. It offers powerful full-text search across all your content and provides a starting point for many tasks. The Find Bar is the heart of the Magnolia user interface. It offers powerful full-text search across all your content and provides a starting point for many tasks. With its user based ranking, results are personalized for each user based on the most recent and most frequently clicked items.

Find Bar External Content Find content from connected systems too, the Find Bar can easily be configured to provide search results from external systems, such as a DAM.

Teamwork and Collaboration

4-Eye & Customizable Workflows

Magnolia provides a 4-eye publishing workflow out-of-the-box and supports the creation of custom workflows, all based on the popular JBPM workflow engine. Workflows can contain a mix of steps performed by the system, and steps which depend on author, publisher, or other user interactions. Use Magnolia as the cornerstone, or integrate Magnolia as part of a business process managed architecture.

Dashboard

The Magnolia Pulse is your dashboard for workflow notifications and system messages. Publishers see notifications whenever a publishing request is created.

Campaign Publisher

The Campaign Publisher module allows you to manage all elements of a campaign in one app. Create a campaign and add pages and other dependent content such as assets and configuration into the campaign. See the state of readiness and activation status of each item, preview items, and publish the whole campaign with a single click.

Concurrent Editing

Magnolia allows high speed content authoring without losing data. Members of editorial teams can edit pages simultaneously, see who else is actively editing the page, and coordinate all their activities without leaving the authoring interface.

Content Versioning

Magnolia stores a version of a content item when it is published, creating a history of versions. You can always audit what has changed, see previous versions and restore to a previous version if necessary.

Visual Version Compare

You can compare any two versions of content. For web pages, changes are “redlined”, clearly marked on the page itself.

Easy and Powerful Development



Development

Dev Teams Can Work in Parallel

A modular architecture enables each team to work in parallel on their own module. Large projects have more than one team. Projects may have tech partners, creative agencies, outsourced teams, or just different internal partners. Splitting up the work can be critical to meet project goals.

Empower Frontend & Backend Devs

Magnolia provides a great development experience for both FE and BE developers. Devs can easily separate their responsibilities: FE devs can work with resources, config and REST endpoints in their familiar dev tools and a CLI. There's no need to learn a new admin web interface. BE devs can hook directly into the full Java API for limitless customization.

Easy & Fast to Learn

Magnolia adheres to standard frontend and backend development patterns and has a logical and consistent configuration and templating system. Extensive tutorials and docs are available. Developers don't need to work through a web UI. Since everything is in files, they can use the development tools they already know and prefer.

Light Development

Frontend developers, or other non-Java developers, can complete the most common tasks and entire projects with Light Development. Java developers can take advantage of its flexible configuration and deployment features as well. Config by file: Complete common tasks with lean YAML config files. Live files: File changes are detected and implemented immediately by Magnolia. Light modules: Deploy features and updates with a normal directory of files.

No Java Required / Full Java Available

Our "dual-mode" approach to project development lets you distribute your dev resources in a way that makes sense for your team and your project. No Java developers on staff? Not a problem, develop your project without it. You're a Java shop? Great, you choose when to use Java and when to go with simple config.

Content Types

Define your content models, including types, properties and the relationships between them, with slim and easy to read YAML configuration. Full content apps with complete editing interfaces are created automatically so your content authors can get to work in a matter of minutes. Developers have complete control to tune the user interface of the automatically provisioned apps.

JavaScript and Groovy

JavaScript and Groovy scripting languages are supported and provide additional flexibility for performing customizations and integrations.

EASY AND POWERFUL DEVELOPMENT

Open Source See our quality by browsing our open git code repository. We've nothing to hide. When you have a unique requirement, you can go right to the source to truly understand the system. The modularity of the system allows you to augment or plug in your own custom functionality. Found a bug? Fix it yourself or provide some tips to the Magnolia team to help the whole community.

Modular Architecture Use as little or as much Magnolia as you need by choosing which modules to include. Add features with additional modules from Magnolia or 3rd parties. Or reuse your own custom modules across multiple projects.

Maven Java Modules Java modules enable unlimited customization and integration as well as advanced content migration features. The core Magnolia system is built with Java modules.

Light Modules A Light Module is a normal directory of files. This makes it easy for any developer to work with, and they can use the tools and processes they already know. Magnolia instantly detects and applies all file changes, making development fast and fun, and deployment simple. You can share them and manage dependencies with npm.

Migratable You can always migrate to the latest version of Magnolia to keep your project secure and get the latest improvements and features. Magnolia provides automatic migrations as well as APIs to enable you to migrate when a project needs content changes. (For example, renaming a field.) When your Java customizations require migration, our release notes include all necessary information, and our deprecation policy ensures you'll have adequate time to prepare.

DRY (Don't Repeat Yourself) Developers keep their code clean by consolidating similar or duplicated code, making code shorter, easier to maintain, and ensuring consistent behavior. Magnolia supports the DRY principle in configuration as well as code. A fragment of configuration can be included in many other configs via the `!include` directive. For example, configure a field a certain way in a file - and then `!include` it in many dialogs. Need a slight change in one usage? You can override properties too.

CLI Our Command Line Interface helps developers with every step of their project. Download, install and start a Magnolia bundle. Create light modules. Create page and component templates. And much more! Supports Mac, Windows and Linux.

EASY AND POWERFUL DEVELOPMENT

Hot Fix When you, or your authors or customers, discover a problem on your site - you can't always wait for a new deployment to fix it. With a hot fix, you don't have to. Connect to any instance and override any resource or configuration directly from the web interface.

Observation Observation is a clean and convenient mechanism to automatically react to any change of content or configuration in the system. Custom event listeners can react to any event. Use observation to automate tasks such as publishing newly added assets or sending an email notification when a comment is added.

Java Content Repository (JCR) JCR is a standard interface for accessing content repositories. Magnolia uses the open-source Apache Jackrabbit reference implementation. JCR is wonderfully flexible, combining some of the best features of a database and a filesystem: hierarchical storage, accessing content by path, versioning, access control, full text searching, sophisticated querying, and event monitoring. Magnolia leverages all these benefits.

App Framework Developers can leverage the Magnolia App framework to create whatever UI your project requires. Apps can often be created with configuration alone. Magnolia provides the API's and UI primitives you need when your project requires a more sophisticated customization.

Cache System Advanced cache strategies help minimize load on the server while ensuring that fresh content is served to the users. Choose from out-of-the-box caching strategies such as serving old content while re-caching and eager re-caching. Dynamic caching allows partial-page caching to support fast performance, even with personalized web pages.

Advanced Cache Further improve performance with advanced cache strategies such as serving existing content while re-caching, eager caching, and caching on a per-site basis.

Dynamic Page Cache Cache just the static portions of dynamic pages, decreasing rendering time by up to 50%. Uses SiteMesh. Compatible with component personalization feature.

Design and Templating

Frontend Friendly

Less is more. Magnolia is so good for frontend development because of what it doesn't do. It doesn't assume a particular CSS or JS framework, it doesn't force a particular build-system, and it doesn't provide a stale set of HTML templates. We've been there and learned the hard way that frontend tech changes fast, and teams have very different approaches. Simply put, we provide the hooks you need, then get out of your way and let you do your thing.

Powerful Templating

The full-featured and flexible templating system enables developers to craft the exact structure and building blocks your project requires - providing your content authors the desired mix of freedom and design-security for your project. Use Freemarker or frontend templating languages like React and Angular. Component availability, auto-generated components, and template inheritance are just a few of the advanced templating features.

Template Models

Every page and component template can have a model - allowing it to interact with any part of the Magnolia system. This is an incredibly useful and powerful feature. Perform validation, process forms or other client-side actions, send emails, perform REST queries, publish content, or literally anything else. Template models can be implemented in Java, Groovy classes, or JavaScript files.

Email Templates

Create email-friendly templates with your existing Magnolia templates, content and assets. Connect with your external newsletter or marketing automation system to send to your audiences.

Hyper Config

Magnolia has a powerful hierarchical configuration system which enables you to accomplish more with less. Fragments of config can be included in another config, enabling reuse of common config. Properties in included fragments can be overridden. Modules can dynamically change the config brought in by other configs with the decoration mechanism. Config can be stored in YAML files, or "hot-fixed" live in the database.

Interoperability

Fits in Your Network Diagram

You have many software systems, and probably a diagram showing how they all connect. How will a new CMS fit in? What additional work will that cause? Above all, Magnolia is flexible. Use it in the way that solves your problems, without creating new ones. Put it “in front”, or “behind” one of your existing systems. Use as much or as little of Magnolia as you need. Magnolia has the power to act as the hub at the center of the diagram, or the flexibility to be just another box.

Standard UI for Integrations

All integrations follow standard UI patterns within Magnolia, developers can use standard UI elements and styles to accomplish this. It makes the integrations easy to learn and use for content authors and administrators.

IUX Slots

Surface relevant information and tools from integrated systems directly where content authors can profit from them most, using standard IUX slots. For example, display analytics data in the Pages App.

Light Integrations

Integrate content from external systems quickly and easily with configuration alone.

Content Hub

Magnolia is more than a content repository, it's also a content hub for all your other existing content sources. Seamlessly create and deliver experiences that connect and augment content from all of your sources.

Pluggable User-Management & SSO

Integrate Magnolia with your Single Sign On (SSO) provider or your existing LDAP / Active Directory setup. Magnolia supports connecting to multiple login providers simultaneously.

REST Client

Use Magnolia's REST Client feature to manage and provision REST access to external systems for your developers. Configure a REST Client with the remote URL and necessary credentials and keys, then developers can access the client in templates and throughout the system.

REST API

Get, create, update or delete any content, or trigger any command with Magnolia's comprehensive REST API and REST integration points. Control access to REST resources with the full-featured role-based security system. Get the exact content you need in one request with the delivery API and its search, filter and sorting features. Even get linked content with the reference resolving feature. Configure your desired CORS behavior.

EASY AND POWERFUL DEVELOPMENT

Webhooks Trigger user-defined HTTP REST requests (such as a build, content synchronization, send notification, search index update). Webhooks are implemented in Magnolia using Light Development and processing is done asynchronously, not interrupting the main UI thread.

Custom REST Endpoints In addition to out-of-the-box endpoints, you can create custom endpoints to match your exact needs. Frontend developers can create and maintain their own custom delivery APIs via simple YAML configuration. Or use Java to create fully customized endpoints.

Custom Java Classes With custom Java classes, there is no limit to the customizations you can implement: Replace classes with your own implementation and wire it up easily with DI and simple configuration. Create Template Models that run whenever the template is rendered. Create Commands that can then be triggered by UI Actions, workflows or REST. Add a Filter to the servlet filter chain. And more.

Spring Framework Integration The popular Spring Framework application stack makes it easy to connect to business systems to fetch information that you want to present in your pages. The Blossom module makes the Spring Framework available for Magnolia. Blossom enables you to create editing components that display a high level of dynamic behavior. These components can be used by editors to create interactive web pages.

IT and Operations



Application Servers

Tomcat Application Server All editions of Magnolia are compatible Tomcat Application Server.

Wildfly (JBoss) Application Server All editions of Magnolia are compatible with Wildfly Application Server. (Formerly known as JBoss Application Server.)

WebSphere Application Server Magnolia is compatible with IBM WebSphere Application Server.

WebLogic Application Server Magnolia is compatible with Oracle WebLogic Application Server.

Administration

Scheduled Backup & Restore

Perform manual and scheduled backups of content and configuration. You can backup all versions of content in any workspace.

Extensible configuration

Extensible (inheritable) configuration simplifies life for administrators and developers. You don't need to copy a site or dialog configuration in order to customize it. Extend the configuration instead. You can add and overwrite any property as needed. This avoids duplication and lowers maintenance effort.

Export & Import

Importing and exporting content and configuration is useful in many scenarios such as automated testing and migrating from one instance to another. Content can be export in XML or YAML format, and can be performed in the UI or via automation.

Shell Access

You can access the Magnolia repository through a Groovy command console directly in the user interface. This allows for powerful ad-hoc queries and data manipulation. You can store often-used Groovy scripts in the system.

Logging with Log4J

Magnolia uses standard Log4j logging. Its extensive customization options allow developers and administrators to tailor logs to their particular needs.

Single Download Installation

Magnolia is available as a bundle that includes Apache Tomcat and all dependencies for immediate deployment without the need for additional software.

Monitoring Module

SPECIAL FEATURE

Monitor key performance and status metrics to get a real-time overview of the health of your Magnolia instance. The module provides dashboards showing memory usage, rendering performance for pages and components, running time CPU load and memory usage, module versions, system environment and properties, and more. Key performance metrics are tracked with Prometheus and visualized with Grafana dashboards. Available on premises or as a cloud solution.

Integration Frameworks & Connectors

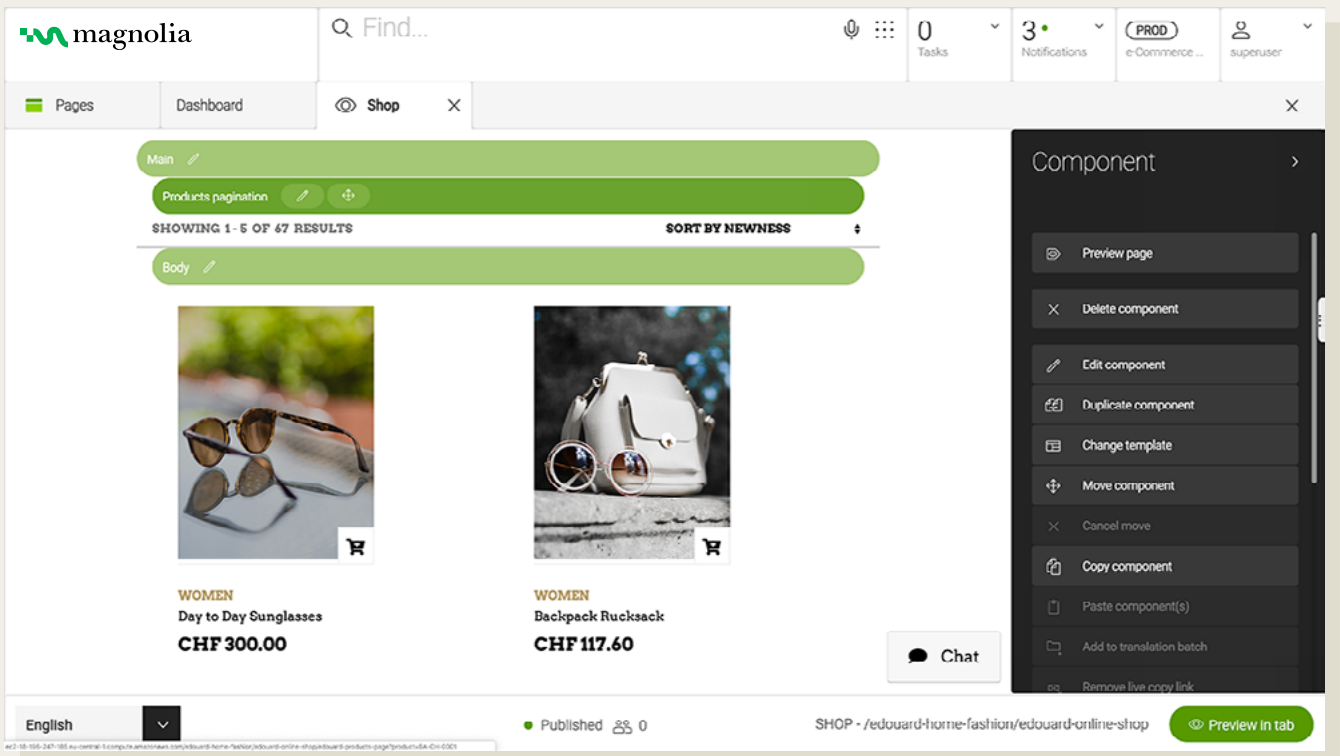


Commerce

Connect your external e-commerce solution to Magnolia. The Commerce Integration Framework and ready-to-use connectors offer a strong ROI for businesses looking to combine content and commerce effectively.

Key capabilities and benefits

- Use e-commerce content within Magnolia as if it were native Magnolia content. Find products in the Find Bar, browse the product catalog, view product details, and place products into pages or components using templating.
- Use the shopping cart and checkout functionality of your connected e-commerce system over REST APIs. Magnolia provides a friendly API that is the same for all systems. No need to learn a new API when swapping e-commerce systems.
- Faster integration time. Magnolia provides out of the box connectors for popular eCommerce platforms and you can create connectors for other systems using minimal configuration and small amount of custom Java code.

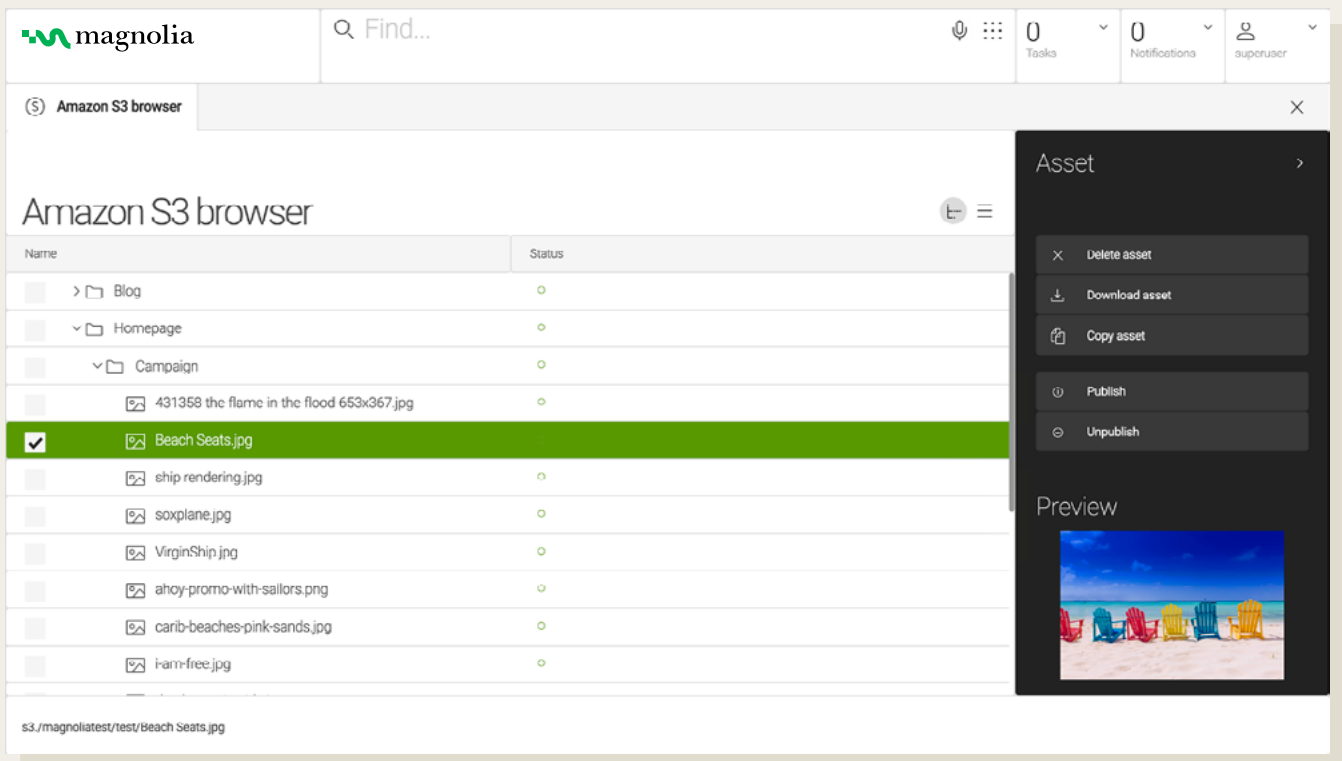


DAM (Digital Asset Management)

Integrate an external DAM with just a few lines of configuration. Fast, easy, and no coding is required. Assets from existing DAM systems become available directly within Magnolia.

Key capabilities and benefits

- Browse and view assets from the external DAM system in a fullscreen content app within Magnolia.
- Content authors can browse and select assets from the external DAM to place in pages or any other content types within Magnolia. The external DAM is just as easy to use as Magnolia’s internal DAM.
- Websites and headless experiences can include assets from the external DAM. Multiple DAM systems can be integrated and used in parallel.

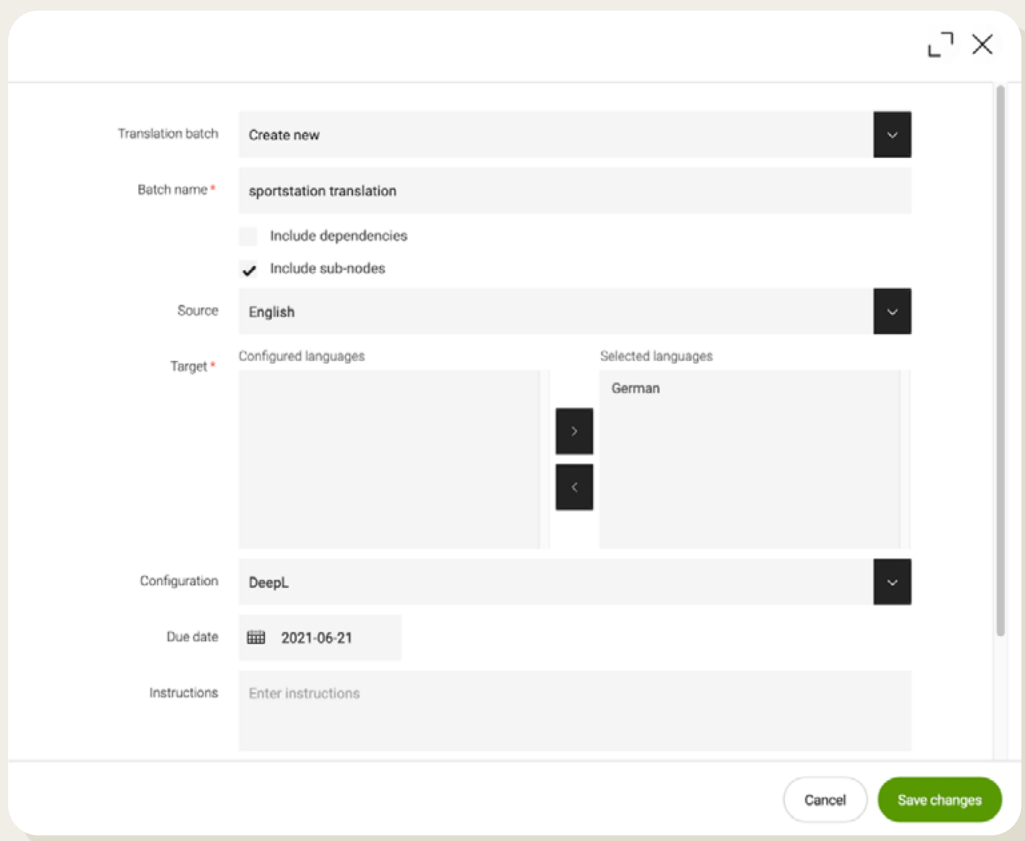


Translations

Translate content automatically over a translation provider, ensuring a more accurate, faster and higher quality translation. Editors can comfortably trigger content translations and manage the entire translation workflow from the Magnolia UI.

Key capabilities and benefits

- Send your content to the translation service. You can choose single pages or batches of pages for translation and select from a list of languages.
- When Magnolia receives the translated content, authors are notified and can review and approve translations with the click of a button. Alternatively, you can configure Magnolia to skip the review and automatically import translated content.
- A Translation app in Magnolia allows editors to easily manage translation files and submissions: batches, histories to view and manage batch histories, queues to manage translation submission, and comparison to see original vs translated values before importing or rejecting.

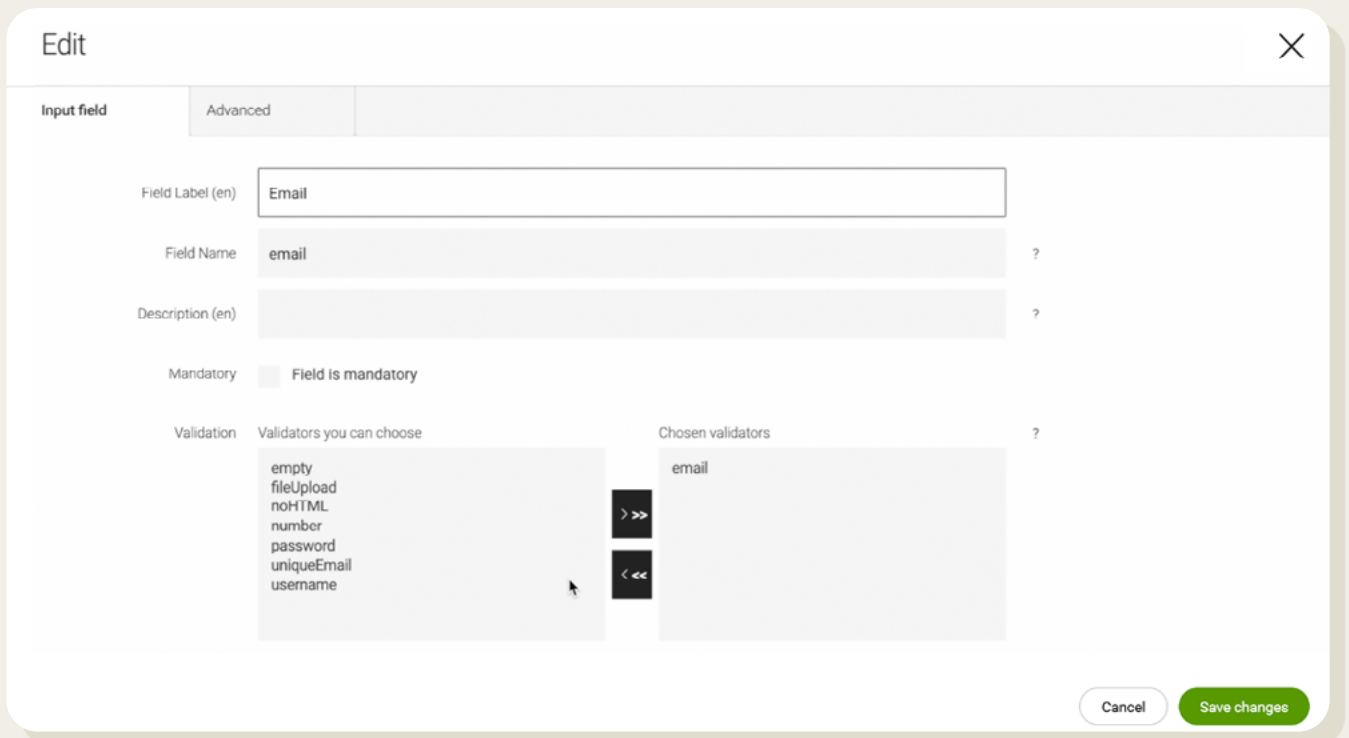


Marketing Automation

Use best in class solutions that automate your core sales, customer service and marketing processes, with a focus on the individual.

Key capabilities and benefits

- Create lead capture forms. Magnolia fetches the forms and displays them to your website editors as a user-friendly list. Editors can embed a form on the website with a few clicks.
- Track user behavior on your Magnolia websites, with your visitors consent, and send to your Marketing Automation solution to be analyzed and scored.
- Tailor the user’s journey with personalized content. Lead details from your Marketing Automation solution are available for content targeting in Magnolia.

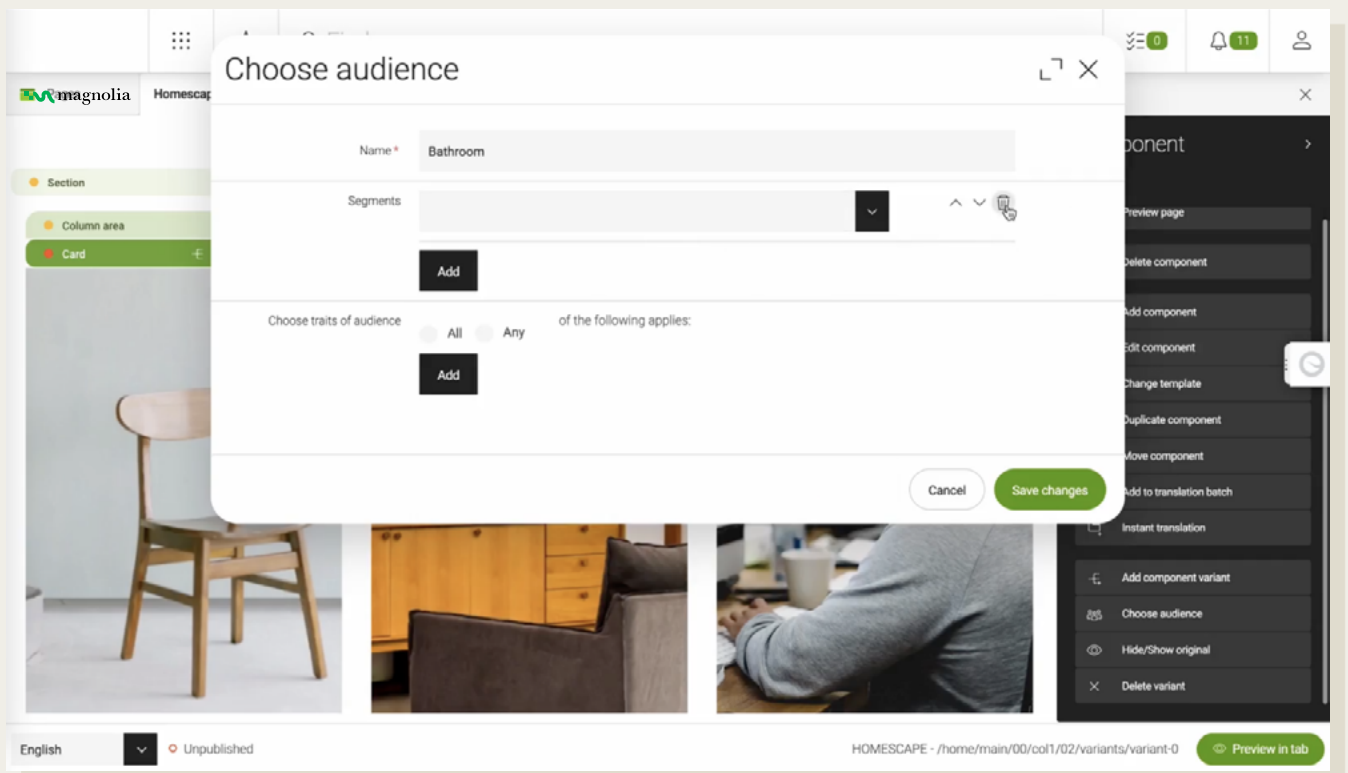


CDP (Customer Data Platforms)

Unify and personalize your customers' journey. Magnolia enables marketers to create variants of content and define which audiences will see each content variant, all in a WYSIWYG high fidelity visual environment. To help brands unify their customer data on every channel and touchpoint, Magnolia integrates with Customer Data Platform (CDP) technology.

Key capabilities and benefits

- Use your CDP of choice to track and understand your customers' needs at every stage in their journey, on any channel or application (whether Magnolia rendered or headless frontend application).
- Marketers and other content editors can use Magnolia's out-of-the-box personalization features to serve the right content based on the audience traits defined in the CDP - all without leaving the Magnolia UI.
- Developers get to implement the integration using a low code approach. Adding CDP scripts to any frontend application, defining and sending tracking events to the CDP, fetching the data for personalization - all can be done using simple YAML configuration.

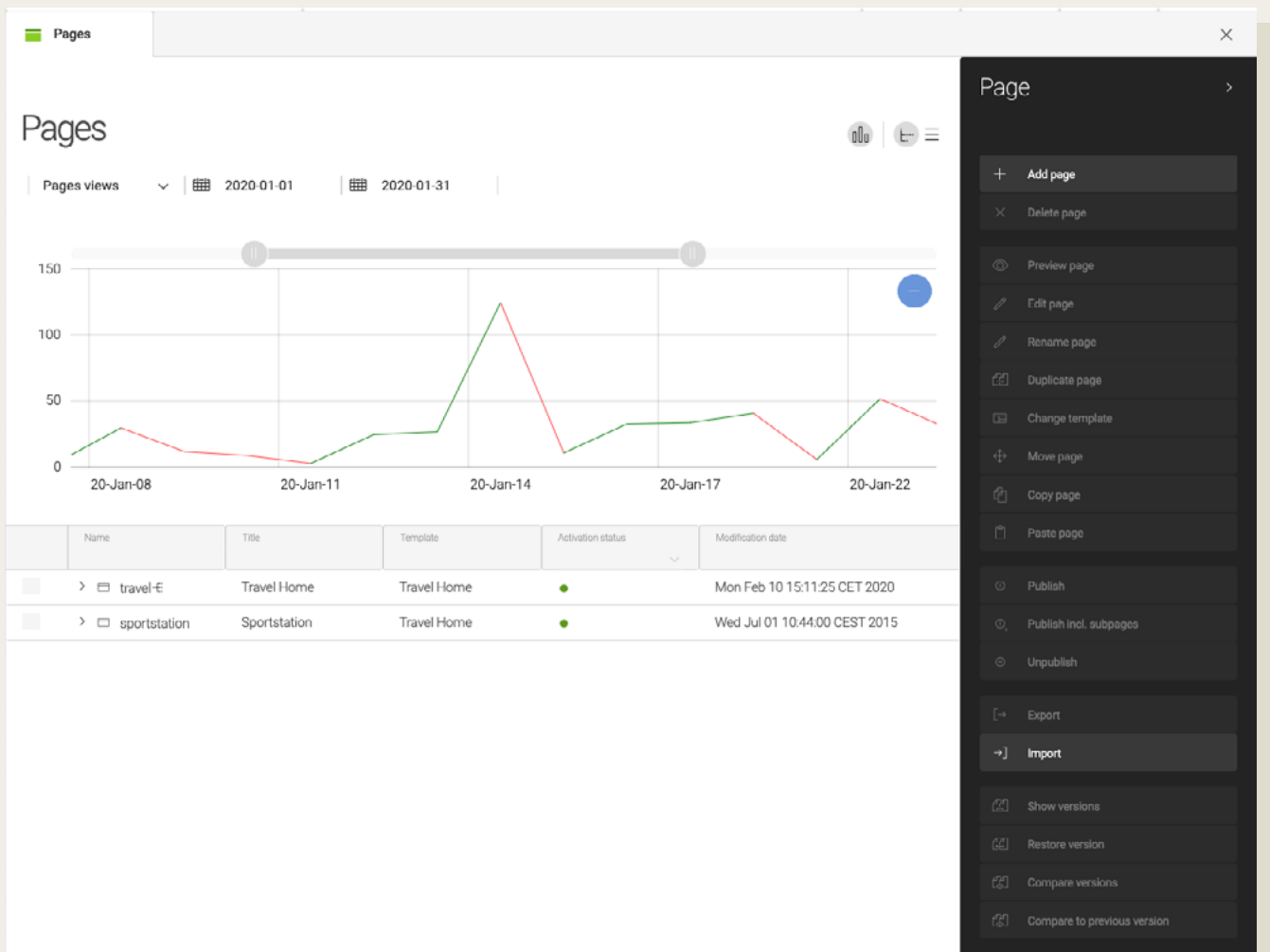


Analytics

Track the performance of your content and campaigns and see analytics in your screen via Magnolia's Analytics Integration Framework and out-of-the-box connectors. The solution enables fast integration to any analytics tools you choose, dashboarding and visualization of data directly in Magnolia.

Key capabilities and benefits

- Aggregate and merge analytics data from multiple sources into a single dashboard.
- Inject analytics straight in the Magnolia authoring UI, tightly coupled to content.
- Flexibly display the metrics you are interested in, and get detailed insights about traffic, engagement and conversions, across your entire website or specific pages.



Optimization

Optimize the quality of your content for both search engines and users. We offer a one-stop-shop solution for SEO, compliance and content quality via the Siteimprove Intelligence Platform - in one seamless workflow inside Magnolia.

Key capabilities and benefits

- All-in-one SEO. Get on-page diagnostics, keywords insights, and prioritized list of recommendations to improve technical platform, on-page SEO, user and mobile experience.
- Create accessible and highly compliant web content, by getting visibility into accessibility issues and industry benchmarks, save time by automating accessibility checks, and track progress towards compliance via dashboards and reports.
- Enhance the quality of your content and user experience via readability checks, broken links and spell checks.

The screenshot displays the Magnolia CMS interface. At the top, there is a search bar and navigation tabs for 'Pages', 'Dashboard', and 'Shop'. The main content area shows a product page for 'idouard FRANCE' with two featured items: a 'Blue Charmeuse jumpsuit' for CHF 336.00 and 'Just Plain Me' for CHF 84.00. A Siteimprove dashboard is overlaid on the right side, providing a summary of website health metrics:

Metric	Value	Sub-metric
Broken Links	0	Quality Assurance
Misspellings	0	2 potential misspellings, Quality Assurance
A Errors	65	63 warnings, Accessibility
AA Errors	18	44 warnings, Accessibility
AAA Errors	24	2 warnings, Accessibility
Pumpkins are bad	1	High priority Policy

At the bottom of the dashboard, there is a user profile for 'Jan Schulte' with a 'Log out' button, and navigation options for 'Refresh', 'Need help?', and 'Settings'. The footer of the interface includes language and device settings (English, Desktop), a 'Published' status indicator, and a 'Preview in tab' button.

Get started with Magnolia

Navigating the wide range of digital experience technologies available today can be difficult. Even after exploring different solution types, deployment options, editorial experiences, development approaches, and delivery methods, you need to carefully weigh the benefits and drawbacks of each choice for your marketing and technology teams.

Magnolia helps you capitalize on the best technologies for your business while overcoming key limitations. You gain a truly composable, modular platform with essential building blocks for creating a robust DXP plus the flexibility for change. Magnolia also fosters real collaboration, enabling multiple teams to work together using a single, unified interface.

Importantly, Magnolia is committed to your success. Instead of remaining invisible to a large DXP vendor or attempting to build a DXP all on your own, you can work closely with our digital experience architects to help you realize your ideal business outcomes.



Laura Delnevo,
Product Manager DX Core

Ready to learn more?

[Book a demo with us](#)