

# Liferay Digital Experience Platform 7.3

Datasheet

# Liferay Digital Experience Platform 7.3

Liferay Digital Experience Platform (DXP) 7.3 is software to create and manage digital experiences across web, mobile and connected devices. Built on a highly flexible architecture with portal, CMS and collaboration capabilities, Liferay DXP can be customized to meet the needs of today's digital-first business teams to deliver personalized experiences rapidly across channels for employees, customers or partners.

For a full features list, please read the [Liferay DXP 7.3 Features Overview](#).

## Key Benefits

### Personalization at Scale

Achieve greater control over managing personalized experiences across multiple touchpoints for rapid delivery of user experiences. Business users can easily define audience segments with robust rules for fine-grained personalization and engage these segments with a range of personalized experiences across pages, navigation and assets. Automate content personalization based on user behavior with interest-based content recommendations.

### Increased Headless Freedom

Leverage a decoupled CMS with improved APIs that give developers the benefits of headless freedom with traditional CMS-like management for the business user. This hybrid approach offers the best of both worlds to enterprises looking to efficiently deliver experiences at scale.

### Streamlined Business Processes

Gain end-to-end visibility on critical business processes with workflow reports and real-time workflow analytics. Working from shared data across systems, employees can implement initiatives to improve services and give other departments the insight they need to make operations run better. Back office operations are further enhanced with peer-to-peer document sharing and open data engine APIs designed to help developers build more flexible business applications.

## Integrates With Everything

Integrate the systems that power the core of your business. Liferay DXP builds on our portal heritage with a set of comprehensive business components that can connect all of your systems and processes. Our platform is compatible with most things out there, even closed-source software. With Liferay DXP, you aren't limited to buying software from one massive vendor. APIs, web services and messaging services make it easy to unite third-party software and legacy systems on Liferay DXP.

## Flexibility for Your Business

Liferay DXP's suite of business tools and features allows you to leverage core technologies like portal servers and content management systems within one cohesive platform that is secure, scalable and extensible. Liferay DXP includes a broad set of out-of-the-box features so you can set up the majority of what you need right away, then customize for your unique needs.

## Organic Innovation

Liferay DXP is developed completely in-house, rather than through acquiring third-party solutions. Rely upon a comprehensive platform with a full suite of features that was designed from the start to work well together as the foundation for your digital strategy.

## Feature Highlights

### Segmentation and Personalization

Meet customer demands for meaningful and seamless experiences across touchpoints with robust segmentation and personalization tools. Continually improve these experiences with content and user insights provided by Liferay Analytics Cloud.

**Enhanced Segmentation:** Easily personalize anything on a page for different segments. From 7.2 release, Liferay DXP provides improved segmentation which includes a rule builder that can accommodate complex rules, session rules to target visitors based on cookies, device or URL and extension points for use case-specific segmentation rules. In addition, integrate advanced segmentation rules provided in Analytics Cloud. From Liferay CE/DXP 7.3, it is possible to reuse existing segments and combine them with complex rules to create new audiences. In DXP, this allows marketers to mix DXP and Analytics Cloud segments to create new and more powerful criteria.

**Content Recommendations:** Automate personalization of content based on a user's past behavior powered by Liferay Analytics Cloud integration, such as behavior-based and interest-based recommendations.

**Personalized Content Sets:** Define content that can be reused through site pages and across different channels. Easily execute personalized variations to display different content depending on segmentation.

**Analytics and Insights:** Deliver the right content to the right audience with insights about your pages, content and users from Liferay Analytics Cloud. The latest version of Liferay DXP includes engagement and SEO metrics in the very context of the display pages.

## Content Management

Leverage content management tuned for enterprise teams, with tools to better manage and deploy content to any digital channel.

**Decoupled CMS:** Because content management is detached from the front-end with an API, users can publish content across multiple channels freely without needing new front-end templates everytime. Developers can leverage the freedom of a headless system while business users still have the comfort of traditional content management tools.

**Structured Content:** Manage and create different content models as needed, to make sure your case-specific content management becomes a reality. This also includes an improved content authoring interface, streamlined structured content authoring, easy visibility to web content usages and reusable collections. Web content authors also have the ability to preview content before it's published, at any stage in the workflow and can also preview with any desired template or within a specific page.

**Auto-tagging:** Liferay DXP enables content teams to work more efficiently by automatically adding tags to images, web content and documents upon upload through a machine learning service for improved search.

**Enterprise DAM:** Efficiently organize and share enterprise assets on one central system with features such as bulk editing and tagging, peer-to-peer document and asset sharing and editing, automatic versioning policies and integrated online document editing with Google Docs and Office 365.

**Content Audit Tool:** Streamline the content audit process and minimize the effort of finding gaps in the content strategy execution by easily selecting the vocabularies whose contents need to be audited. Out-of-the-box Audience, Stage and Topic Global Vocabularies provide a more systematic categorization throughout sites.

**Content Promotion:** Liferay DXP provides a variety of tools for content to be workflowed, staged, and deployed to production as required by your business use case.

**Asset Libraries:** Organize content in dedicated libraries to help reuse content across different sites and have better-isolated control on them. Connect the asset libraries only to the sites where it is needed to provide access so content authors can use the assets stores while creating a page, or writing a blog post.

## Experience Management

Build and customize digital experiences that are tailored for your users' needs easily with the following capabilities on Liferay DXP.

**Fragments:** Easily and quickly build new pages with designed, reusable components. Create fragments with turn key elements and component sets. Fragments use in-line editing to change text and images and can incorporate Liferay DXP applications for advanced functionality.

**In-Context Creation:** Drag and drop to create page layouts with content, fragments and widgets. Business users can even define complex custom page layouts with the new section builder. In addition, map content to individual sections with display page templates. Integration with Analytics Cloud also helps provide insight into users, referrals and engagement.

**Widgets:** Empower business users to drag and drop from a generous collection of out-of-the-box widgets for different business needs that can be easily added to any page, including a JavaScript widget creator that can easily build front-end apps using the latest libraries through a CLI tool.

## Multichannel Support

From storefront to mobile to IoT, reach customers wherever they are with multichannel experiences that can adapt to your channels and target segments with ease.

**Headless APIs:** Give front-end developers headless freedom from back-end conventions and structures. Developers can now focus on building great experiences and do it simultaneously alongside content teams using content delivery, management and participation APIs.

**Adaptive Media:** Liferay DXP dynamically adjusts images to best fit the screen size and network speed of each device, addressing experience and performance issues.

**Mobile Support:** Rapidly develop native and hybrid apps, create mobile experiences and define mobile device rules using Liferay DXP as a mobile back end.

## Integration and Interoperability

Liferay DXP can integrate across multiple back-end systems for a unified user experience.

**Improved Frontend Toolkits:** Liferay JS Themes, Bundle and Fragment Toolkits help developers create, update and maintain themes built on Liferay DXP as well as help produce an OSGi bundle containing the needed NPM dependencies to ensure that it runs when deployed to Liferay DXP.

**Integration Framework:** Liferay DXP is a central presentation layer platform for integrating content and services from back-end or legacy applications. Liferay DXP supports multiple methods to integrate, including SOAP, REST, RSS, as well as proprietary APIs.

**Upgrade Tool:** A revamped Upgrade Tool simplifies the upgrade process from previous versions of Liferay, reducing the amount of time spent troubleshooting.

**REST API Builder:** This tool will help accelerate development by generating scaffolding needed for business logic used for custom REST and GraphQL APIs.

**Remote Applications:** Micro frontends, created in any language, may be registered, and become full functioning widgets.

## Forms, Workflows and Business Process Automation

Accelerate and streamline business processes with robust features for creating forms and workflows.

**App Builder:** Empower business users with an intuitive GUI to define forms and table views to build applications and digitize business operations. Applications can be deployed in standalone fashion or added to pages as a widget or through the product menu.

**Process-Driven Apps:** Automate business processes by creating workflow powered Apps. Define the stages of the process and specify which information should be requested and/or displayed in each step of the application. Users can also make use of Workflow Metrics to understand the performance and health of the App's processes.

**Form Creation and Rules:** Design forms for everything from business process automation to replacing complex paper applications. Create personalized forms with conditional rules, which allows users to introduce dynamic behavior in forms.

**Forms Reports:** Leverage a built-in summary report of the answers received in a Form, allowing users to not only see the data collected, but also have an overall analysis of answers of each field according to the field type.

**Data Engine APIs:** Use data engine APIs to help build flexible business applications. Execute CRUD operations on data definitions to quickly assemble business applications that can scale with flexibility.

**Organization and User-Driven Workflows:** Define any number of simple to complex business processes or workflows, leveraging users, groups and roles defined in Liferay DXP with a graphical workflow designer. In addition to these organization-wide workflows, users can create individual workflows based on their own requirements.

**Workflow Process Analytics:** Define any number of simple to complex business processes or workflows, leveraging users, groups, roles and due dates for specific tasks within the workflow process. Use progress analytics to see the status of all open tasks within the workflow process in real-time.

See a complete list of features on [page 8](#).

## Liferay DXP's Modular Core

Liferay DXP leverages a modular core, with benefits that include:

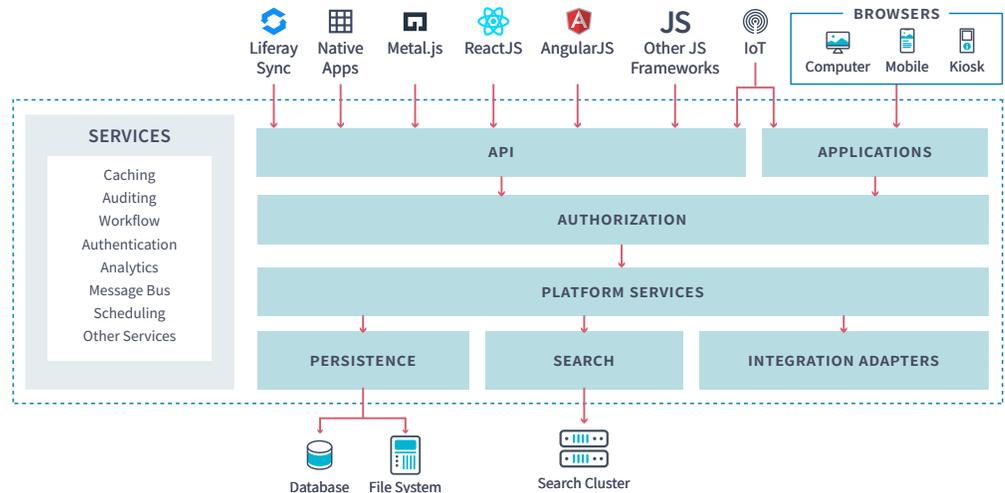
**Standards Based Customization:** Less reliance on underlying app server technology makes it easier to create applications and extensions that now follow an OSGi based approach.

**Incremental Release Cycles:** New features and bug fixes can be released on an as-needed basis, eliminating the need to wait for major version releases.

**Reliable Deployment:** Deploying modules is now independent of underlying app server technology, leading to fewer deployment issues and fewer server restarts.

**Modern Development:** Leverage modules that are smaller and more concise than legacy portlet plugins. Rest assured since Liferay uses industry-based development standards such as OpenAPI, Portlet 3.0, etc.

**Dynamic Dependency Resolution:** Modules have built-in dependency resolution, which makes it easier to determine what dependencies the application needs to run and minimizes severe consequences from conflicts during deployment.



Liferay DXP Product Architecture

# Deployment Compatibility

## Operating Systems

CentOS  
Debian  
IBM AIX  
Oracle Linux  
Oracle Solaris  
Red Hat Enterprise Linux  
SUSE  
Ubuntu  
Windows Server

## Public and Private Clouds

Liferay DXP is deployable to the cloud and virtualized environments

## Application Servers

JBoss EAP  
tcServer  
Tomcat  
WebLogic  
WebSphere  
Wildfly

## Databases

Amazon Aurora  
DB2  
MariaDB  
MySQL  
Oracle  
PostgreSQL  
SQL Server

Contact [sales@liferay.com](mailto:sales@liferay.com) for the latest list of supported configurations and versions.

# Key Components

## Analytics and Optimization

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### Insights

Page analytics	Asset analytics	Customer Profiles	User Identity Services
Path analytics	Content Performance Analytics	Dynamic segments	A/B testing

To see how Liferay Analytics Cloud further supports DXP see: [liferay.com/products/analytics-cloud](https://liferay.com/products/analytics-cloud).

## Cloud Capability

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### Application Management

Log management  
Shell access  
Autoscaling  
Backup and restore  
Environments management  
Environment variables  
Custom domains

### Development Lifecycle

Continuous Integration  
Continuous Deployment  
Zero downtime deployments  
GitHub integration  
Dependency management  
Persistent file system  
Port configuration

### Performance and Availability

HTTP/2  
SSD  
Self-healing  
Multi-AZ database instance

### Monitoring

Usage (CPU, memory and data transfer)  
Health  
Advanced monitoring with Dynatrace Software Intelligence  
Real-time alerts

## Governance

Access control  
Team activities

## Security

Private network  
Public/private access  
HTTPS  
Database with encryption at rest  
VPN connection

See how Liferay DXP Cloud further supports DXP: [liferay.com/products/dxp-cloud](https://liferay.com/products/dxp-cloud).

## Collaboration and Social

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### Shared Features

AlloyEditor  
Ratings/Comments  
RSS feeds  
Categories/Tags  
Related assets  
Reader subscriptions  
Polls  
Bookmarks  
Similar Results

### Wikis

Versioning and reversion  
Creole, HTML or MediaWiki syntax  
Attach files  
Threaded comments  
Inline image editing

### Blogs

Recent blogs lists  
Badge icon for social activity  
Social bookmarks  
Inappropriate content flagging  
Friendly URLs  
Estimated reading time  
Embedded videos  
Inline image editing  
Microblogs

### Message Boards and Forums

Recent Posts list, My Posts list  
Reader subscriptions  
Anonymous posting  
File Attachments  
Support for categories/threads reorganization  
Inappropriate content flagging  
Inline image editing

### Social Networking

Friends list  
Activity wall  
Activity tracker  
Social Activity  
Tagging

### Calendar

AJAX-based interface  
iCal and microformats support  
Personal and group  
Task lists  
Resource scheduling  
Email, IM or SMS event reminders

### Alerts/Announcements

Broadcast news or status  
Scheduled start/stop  
Site or role based targeting

## Content Management

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<b>Headless CMS</b> Headless REST and GraphQL APIs	<b>Site Content Sharing and Publishing</b> Dynamic and static site templates	<b>Enterprise DAM and EFSS</b> Multi-repository support	Preview Generation
<b>Content Creation</b> AlloyEditor	Drag and drop site maps	Customizable document types	Search
Templating: FreeMarker	Sitemap protocol support	Metadata per document type	Versioning
Global content sharing between sites	Friendly page URLs	CMIS support	Media Selector
Content sharing in site hierarchy	Remote server staging and scheduling	Check in/check out	<b>Enterprise File Sync and Sharing</b>
Reusable collections	Multiple site variations/versions	Content previews	Mobile/desktop file synchronization using Liferay Sync
Content sharing with asset libraries	Faceted search	Live preview	WebDAV
<b>Themes and Layout</b>	Recycle bin	Automatic content versioning	<b>Integration</b>
JavaScript framework: Metal.js	User customizable pages	Bulk tag management	Google Docs integration
CSS framework: Twitter Bootstrap	Content performance analytics	Image and content auto-tagging	Microsoft Office® integration
HTML 5.0 compliant	Content Audit Tool	Online document editing with Google Docs and Office 365	Office 365 integration
Responsive mobile theme	URL Redirections management	Peer-to-peer document and asset sharing	
Multiple page layout templates	OpenGraph support	<b>DAM and EFSS Integration</b>	
		Document Types and Metadata Sets	

## Experience Management

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<b>Experiences</b>	<b>Widgets</b>	<b>Pages</b>	Search engine optimization
Fragments with editor	Drag-and-drop interface	Personalized experiences per segment	Analytics Cloud integration
Fragments Toolkit	Widget Library	Display page templates	

## Forms, Workflow and Business Process Automation

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<b>App Builder</b>	Form View Rules	Product Menu Deployment	Linear Process Steps
Custom Objects	Fieldsets	Widget Deployment	Task assignment
Form Views	Fixed Filters	<b>Process-Driven Apps</b>	Data and Views
Table Views	Localization	Custom Object	Transition Actions
Standard Apps	Standalone Deployment	Table View	In-App Task Assignment

In-App Transitions	Versioning	<b>Data Engine APIs</b>	Text box
Standalone Deployment	Element sets	Data Definitions	Web content
Product Menu Deployment	Validation	Data Layouts	Localization
Widget Deployment	Data storage	Data Records	<b>Workflow</b>
<b>Form Creation</b>	Form Reports	Data Record Collections	Define workflows per document type and folder
Autocomplete	<b>Form Fields</b>	Taglib	Versioning and reversion
Multi-page forms	Paragraph	Fieldsets	Drafts
Configured success page	Text field	Search Data Records	Localization
Duplicate fields	Select from list	Search Data Layouts	Duplicate workflows
Clone forms	Single selection	Version Attributes	Preview revisions
Autosave	Date	Scope Data Definitions	User notifications
Import/export data provider definitions	Multiple selection	Localizable Data Records	Model workflows with a graphical interface or by writing XML definitions
Localization	Grid	Nest fields	<b>Workflow Metrics</b>
CAPTCHA enablement	Numeric	<b>Dynamic Data Lists</b>	Overview of Pending Items by SLA Status
User authentication	Upload	Boolean	Workload by Assignee
Translations/multi-language support	Color	Color	Workflow by Step
Data provider integration	Image	Date	Overview of Completed Items by SLA Status
Reports with Liferay Analytics Cloud	Rich Text	Decimal	Completion Throughput
Page Reordering	<b>Conditional Rules</b>	Documents and Media	Assignee Performance
<b>Form Management</b>	Require	Geolocation	Step Performance
Shareable form URLs	Enable	HTML	
Redirect after form submission	Autofill	Integer	
Workflow integration	Show/hide	Link to page	
Email notification	Jump to page	Number	
	Calculation	Radio	
	Belong to	Select	
	API for customized rules	Text	

## Integration and Interoperability

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<b>Foundation</b>	<b>Developer Tools</b>	<b>Developer Studio</b>	AngularJS
Integration framework	Integrated development/test environment	Java	Senna.js
Workflow Framework	Front-end toolkits	JSF	Vaadin
Upgrade Tool	Liferay Marketplace	Clay	Ruby, Scala and others
Custom fields	Liferay Workspace	Groovy	<b>Theme Developer Languages</b>
REST API Builder	Liferay Connected Services (LCS)	JQuery	FreeMarker
Modularity	Blade CLI	Twitter Bootstrap	Lexicon
		Metal.js	
		ReactJS	

## Multichannel Support

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### Headless

Headless APIs

REST APIs

GraphQL APIs

### Mobile Support

Mobile device rules

Previews within browser

Responsive theme

Device recognition

Eclipse-based Mobile SDK

Service Builder

Push notifications

Mobile Sync app

### Platform Support

iOS

Android

Cordova

Xamarin.iOS

Xamarin.Android

### Adaptive Media

Control image resolution and size per device

Enable/disable rules

Automatic optimization

### Native and Hybrid App Development with Liferay Screens

Log in

Sign up

Forgot Password

User portrait

DDL form

DDL list

Asset list

Web content display

Web content list

Image gallery

Rating

Comment List

Comment Display

Comment Add

Asset Display

Blogs entry display

Image display

Video display

Audio display

PDF display

File display

Web page display

## Personalization and Context Awareness

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### Audience Targeting

User segmentation

Time bound campaigns

Campaign prioritization

Personalized and targeted content

Custom reporting and data export

### Segmentation

Analytics Cloud integration

Personalize experiences with page editor

### Segmentation Rules

#### BEHAVIOR

Content visited

Page visited

Score based on content and pages visited

Use case-specific

#### FACEBOOK PROFILE (AUDIENCE TARGETING)

Age

City

Education

Friends

Gender

Page likes

### USER ATTRIBUTES

Age

Gender

Regular role

Site membership

Site role

Organization membership

Organization role

User group membership

Currently signed in

User created date

User last login date

Language

IP

Region

Tag

SegmentsCustom fields

### SESSION ATTRIBUTES

Browser

Cookies

Device

Location

Local Date

Referrer URL

Request Parameters

Operating system

URL

### CONTENT TARGETING

Content recommendations powered by Analytics Cloud

Personalized reusable content sets

## Platform Services

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### Performance and Scalability

Clustering at any combination of tiers (presentation, service, business logic and database)

Advanced caching (e.g., Ehcache)

Performance monitoring support (JMX, Java profiling and more)

Single page applications

Simplified UI

Multitenancy

Dynamic virtual hosting

### Other Standards/ Technologies

AJAX

JSR-362 (Portlet 3.0)

JSR-344 (JSF 2.2)

Spring 3.0

CMIS 1.0/1.1

Hibernate collection of projects

OSGi Core 6.0

SAML 2.0

OAuth 2.0

### Other Back-End APIs

Asset

Cache

Comments

Data handlers

File storage

Membership policies

Message bus

Permissions

Ratings

Recycle bin

Scheduler

Scripting

Upgrade

Workflow

## Search

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### Search Tools

Elasticsearch integration

Solr integration

Multi-tier search

Faceted search

Filter/sort

Multi-language search

Search administration tools

Search Tuning:

Result Rankings

Search Tuning: Synonyms

Low-level search APIs

## Security Administration and Access Control

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### Security

Government-grade encryption

Pluggable authentication

Email verification

Granular permissioning

LDAP authentication

Session management

Data protection for GDPR compliance

### Access Control

CORS (Cross-origin resource sharing)

OAuth 2.0

Service Access Policies

### Identity Management Support

LDAP

SAML

OpenSSO / OpenAM

SiteMinder

Facebook Login

CAS

OpenID Connect

Multi-factor Authentication

### Web Services

SOAP

JSON

REST

# What's Next

## Get Started With Liferay University

Liferay offers free access to Liferay University to active Liferay DXP subscribers. Equip your entire team with self-paced lessons and courses so that they can learn how to use Liferay anytime, anywhere on their own schedule. Gain access to courses for content managers, back-end and front-end developers and system administrators.

Learn more at [university.liferay.com](https://university.liferay.com)

## Put Liferay DXP to the Test

Explore the possibilities of Liferay DXP free for 30 days. Our trial includes access to professional documentation, exclusive Liferay Marketplace apps and more.

Get started at [liferay.com/dxp-trial](https://liferay.com/dxp-trial)



Liferay makes software that helps companies create digital experiences on web, mobile and connected devices. Our platform is open source, which makes it more reliable, innovative and secure. We try to leave a positive mark on the world through business and technology. Hundreds of organizations in financial services, healthcare, government, insurance, retail, manufacturing and multiple other industries use Liferay. Visit us at [liferay.com](https://liferay.com).

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