

Liferay DXP Feature Overview

6.2 vs 7.0 vs. 7.1 vs. 7.2 vs. 7.3 Comparison

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Since the release of Liferay Portal 6.2, the Liferay platform has evolved to cover new use cases that digital businesses face today. The platform’s current name, Liferay Digital Experience Platform, reflects the increasing value and breadth of features that Liferay provides.

This document is a comprehensive overview and a versions comparison of the features available in Liferay DXP. Each version of Liferay improves on what was built in the previous version. For a deeper look at the new features available in 7.0, 7.1 and 7.2 please read our New Features Summaries.

- [Liferay DXP 7.0 New Features Summary](#)
- [Liferay DXP 7.1 New Features Summary](#)
- [Liferay DXP 7.2 New Features Summary](#)
- [Liferay DXP 7.3 New Features Summary](#)

Foundation

Successful digital businesses require platforms that are built on solid, reliable IT. Liferay DXP delivers features like modular architecture, a powerful search engine and advanced tools for testing and upgrades.

Integration and Interoperability

Transform the way your business is run by using a platform can evolve alongside your strategy. Liferay’s incredibly flexible architecture empowers businesses to bring systems and data together on one platform.

Feature	6.2	7.0	7.1	7.2	7.3
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.	✓	✓	✓	✓	✓

Feature	6.2	7.0	7.1	7.2	7.3
Frameworks Support Support for popular JavaScript frameworks such as Angular, Vue.js, React and modern JavaScript workflows are included out-of-the-box (OOTB). Java frameworks such as JSF and Vaadin are supported.	✓	✓	✓	✓	✓
Additional supported Java frameworks: SpringMVC (Spring Framework 4.3) and PortletMVC4Spring (Spring Framework 5.1)	■	■	■	✓	✓
Custom Fields Administrators can customize, edit, add and change user attributes (name, company, date or any other information that needs to be tracked or logged by your system) directly from Liferay, without needing to modify their database. This support extends to Pages, Web Content, Blogs Entries, Documents and its folders, images and its folders, forum messages, calendar events and wiki pages. Liferay also offers a framework so that developers can leverage this functionality in their custom applications to support custom fields for their own entities.	✓	✓	✓	✓	✓
Modularity Liferay provides a highly modular architecture that allows for greater extensibility, stability and flexibility. Developers can enjoy an elegant development model based on OSGi standards. Modularity leads to many benefits such as: <ul style="list-style-type: none"> • Greater flexibility including the ability to remove unused modules. • Faster implementation of new features with users getting new modules as they're ready rather than at the next GA release from Liferay. • Reduced complexity with greater stability since updates and bug fixes are delivered independently and routinely. • Quicker deployment since modules can be installed, uninstalled, started or updated all while running Liferay DXP. 	■	✓	✓	✓	✓

Platform Services

Liferay DXP gives businesses the ability to manage backend systems through powerful administration interface tools along with a flexible, modular architecture that enables agile growth with user needs. Key functionality includes site administration, identity management, search and more.

Feature	6.2	7.0	7.1	7.2	7.3
Multitenancy and Virtual Hosting Multiple virtual instances serving different groups of users with different domains can be administered in a single instance of Liferay DXP, leading to cost savings and operational efficiency for your organization. Enterprises have the ability to organize users by business-defined categories such as departments, geographies or offices, as well as by cross-departmental teams and workgroups. Each organization and site can inherit or define its own permissions and administer user, group and role management for the various applications it chooses to include. A single instance can be used to create multiple hosted websites within one Liferay deployment and each clone can have its own unique URL, custom theme and design. For example, a single deployment could host www.companyA.com and www.companyB.com with completely different themes, pages and applications.	✓	✓	✓	✓	✓
High Availability and Scalability The Liferay platform has been tested to support tens of thousands of simultaneous virtual users as an infrastructure portal and in collaboration use cases on a single application server. It has also been deployed in large installations with millions of active users in the most demanding environments. Liferay DXP is highly scalable — for example, it has been certified to work seamlessly with data grid products for massive scalable data caches. Additionally, customers can feel secure in deploying Liferay to cloud- based environments — many users have deployed the platform to private clouds built on top of VMWare, Xen, and KVM technologies and to public cloud infrastructures like Amazon EC2.	✓	✓	✓	✓	✓
Maximize uptime while updating your clustered environment with rolling restarts, support for blue-green deployment and cloud deployment through Liferay DXP Cloud.	■	■	✓	✓	✓

Feature	6.2	7.0	7.1	7.2	7.3
REST APIs Out-of-the-box APIs allow connections to assets, cache, comments, data handlers, file storage, geolocation, membership policies, message bus, permissions, recycle bin, scheduler, scripting, search, upgrade and workflow.	✓	✓	✓	✓	✓
Search Administration Easily manage and control indexing and other search engine features.	✓	✓	✓	✓	✓
Simplified UI Liferay DXP simplifies the user experience of internal, external and channel websites — notably those that allow users to login for personalized services or views and those that require a workflow approval process to update content and integrate or aggregate multiple existing services. Liferay DXP provides a presentation layer for integrating all enterprise systems into a single easy-to-use interface for end users.	✓	✓	✓	✓	✓
Quick Configuration A fast, responsive interface makes Liferay DXP extremely easy and enjoyable to use for everyone in your organization. Typically time-consuming tasks such as altering a page layout, adding new applications and content and changing the look and feel can all be done in a couple of clicks without ever refreshing the page.	✓	✓	✓	✓	✓
Product Menu Administrators and registered users have access to administrative and personal applications from the Product Menu, leaving the screen real estate available for site navigation and page design. The product navigation is fully extensible to allow customizing it for any need. All the tools for managing the current page are now in a bar (Product Menu, Add Content, Add Application, Add Page, Edit Page, Device Preview).	■	✓	✓	✓	✓

Feature	6.2	7.0	7.1	7.2	7.3
Site Administration Users can create and manage sites and their respective audiences. Each site gets its own set of pages, content management system, shared calendar and permissions. Users belonging to multiple communities can easily navigate between sites. Page settings allow site administrators to change the look and feel with one click, manage site pages, insert JavaScript and metadata, set friendly URLs, create page sets to help you organize your pages/navigation and more. One-click page and site creation are possible: web structures and templates allow common web layouts to be predefined and saved for future web pages. With one-click page creation, users can create a new page and immediately begin adding content to the page layout, allowing web pages to be set up within minutes without any developer support required. Users can also create Sites with sets of predefined pages configured to their needs. These site templates can be dynamic, allowing all changes to the parent template to be inherited by associated children sites.	✓	✓	✓	✓	✓
Auditing and Optimization To help administrators monitor the platform's performance and better optimize resources, Liferay DXP gives administrators access to key performance statistics (hits/page, average time/hit, maximum time per request, and more) for all applications and pages. Meanwhile, our Auditing feature allows administrators to track and manage user activity within the platform.	✓	✓	✓	✓	✓
Clustering and Performance Monitoring Liferay DXP supports clustering at any combination of tiers (presentation, service, business logic and database), advanced caching and performance monitoring support (JMX, Java profiling and more).	✓	✓	✓	✓	✓
Single Page Applications Users experience faster loading and greater performance on the Liferay platform through Single Page Applications, a technology that provides dynamic and responsive web experiences by taking only the parts of a page that need to be loaded rather than reloading the entire page. This can be achieved in Liferay DXP through Senna.js, a SPA engine.	■	✓	✓	✓	✓






Feature	6.2	7.0	7.1	7.2	7.3
Development Standards and Technologies AJAX, iCalendar, Microformat, JSR-362 (Portlet 3.0), JSR-371 (MVC1.0), JSR-344 (JSF 2.2), Spring 3.0, CMIS 1.0/1.1, Hibernate collection of projects, OSGi Core 6.0 and SAML 2.0. Please see the Compatibility Matrix for more details on specific versions support.	✓	✓	✓	✓	✓
Gogo Shell Interact with and manage Liferay DXP's module framework through a built-in Gogo shell interface.	■	✓	✓	✓	✓

Identity Management and Access Control

Liferay DXP gives businesses the ability to connect backend systems through integration along with a flexible, modular architecture that enables agile growth with user needs. Key functionality includes site administration, identity management, search and more.

Feature	6.2	7.0	7.1	7.2	7.3
Security Liferay DXP is thoroughly tested for security issues through White Hat Security, a leading provider of application risk assessment and management services. This independent third-party security audit means that Liferay DXP has successfully undergone rigorous testing based on the most widely accepted and comprehensive methods, and that the platform meets customer requirements for addressing security issues in an effective and proactive manner. In addition, Liferay DXP is developed according to secure coding best practices and guidelines such as the OWASP Top 10 and the CWE/SANS Top 25. Our continuous security testing process includes regular security code reviews, penetration testing by ethical hacking firms, continuous white and black box security scans from third-party firms and continuous vulnerability monitoring of third-party libraries included in Liferay DXP. Whenever new security vulnerabilities are found by Liferay's security team, customers are notified and provided with a security update or fix pack.	✓	✓	✓	✓	✓

Feature	6.2	7.0	7.1	7.2	7.3
Identity Management Liferay offers a customizable single sign-on (SSO) that integrates with LDAP, SAML, OAuth, OpenSSO/OpenAM, SiteMinder, Facebook Login, CAS and OpenID Connect. For example, the SAML 2.0 Provider allows Liferay to act as your SSO server to authenticate all applications integrated.	✓	✓	✓	✓	✓
Access Control The CORS (Cross-Origin Resource Sharing) system settings provide a way to configure CORS headers for Liferay services. OAuth 2.0 is the de facto standard for access delegation and for providing authorization between systems. OAuth 2.0 allows your application to access protected data inside your platform.	■	■	✓	✓	✓
Multi-factor authentication is an architectural approach to accessing resources sequentially through multiple authentication verifiers.	■	■	■	■	✓
Service Access Policies Define which services or service methods can be invoked remotely with an additional layer of web service security.	■	✓	✓	✓	✓
Configuration Admin In Liferay DXP, users have access to a better way to manage configurations through the Configuration Admin services provided by modularity.	■	✓	✓	✓	✓
User Management Create and manage users, organizations, user groups, roles and password policies. View all of the live portal sessions of your users.	✓	✓	✓	✓	✓






Feature	6.2	7.0	7.1	7.2	7.3
Data Protection <p>Data protection tools in Liferay DXP help companies address GDPR and other privacy regulations and maintain control over how their platform manages user data.</p> <p>Companies can erase a user's personal data and export a user's personal data in a machine-readable format upon request. For data erasure, administrators can review content that potentially contains personal information and edit or delete as needed through a simple interface. Both tools include APIs for third-party apps to implement this feature or override the default behavior for out-of-the-box apps. The management dashboard allows for simplified bulk deletion, anonymization, and filtering and scoping abilities for greater context in personal data review. Administrators are informed of which applications will automatically delete or anonymize data during the auto-anonymization process.</p>					

Experiences

Liferay DXP is designed to support personalized experiences across digital touchpoints including web, mobile and connected devices. Features around business productivity also help companies create useful experiences for employees and partners, making the platform a solid foundation for almost any project. Create consistent, personalized experiences quickly and easily.

Content Management

Content management features provide support for creating and managing structured web content and digital assets for developers and business users, including a modern UI, content authoring, geolocation, staging tools and others.

Feature	6.2	7.0	7.1	7.2	7.3
Liferay CMS <p>The main interface for Liferay's integrated web publishing system allows users to create, edit and publish content as well as take advantage of reusable content templates and structures. These structures and templates enable users to quickly build pages and websites while maintaining a common look and feel across an entire site. It also allows for one-click changes in layout and one-click creation of full pages. There is a built-in workflow, article versioning, search and metadata.</p>					

Feature	6.2	7.0	7.1	7.2	7.3
<i>Structured Content:</i> Manage and create different content models and web content needed, to make your use case-specific content management system a reality.	✓	✓	✓	✓	✓
<i>Content previews:</i> Easily preview created content within an associated display page, within a page before publication in a fragment, and in draft form within a Widget page.	✓	✓	✓	✓	✓
<i>AlloyEditor:</i> A modern WYSIWYG editor designed to createmodern and gorgeous web content, AlloyEditor is the default editor and aims to improve the experience when creating new content in Liferay DXP. It includes the ability to preview source written in HTML as it is being typed live, which makes it simple to add new content using only the source code. AlloyEditor uses a context-aware toolbar that stays out of the way until it is needed.	■	✓	✓	✓	✓
<i>Web Content Diff:</i> Web content can be compared when the content is being processed through a workflow. This makes it easier for the content approver to review the changes before approving them.	■	✓	✓	✓	✓
<i>Content Modelling:</i> Easily create and manage content models for your web content through Web Content Structures.	✓	✓	✓	✓	✓
<i>Content Sets:</i> Create, edit and manage collections of content in “sets” for asset publisher display. Reuse configurations for content sets.	■	■	■	✓	✓
Web Content Display Publish any piece of web content created within Liferay WEM to a page. Web Content Display is used to display most of the web content on Liferay.com and other Liferay-driven websites, and can be arranged on a page with a convenient drag-and-drop.	✓	✓	✓	✓	✓
Asset Publisher Dynamically display any piece of content, such as images, blogs, documents and web content, either through a set of publishing rules or by manual selection. Improvements made in the configuration allows for better management of content display.	✓	✓	✓	✓	✓

Feature	6.2	7.0	7.1	7.2	7.3
Related Assets Allows users to specify assets that are related to the asset they are creating. For example, when creating a new web content, users can specify that the content is related to a document, blog post, forum post or any other asset. When someone views that content, the related assets are also shown so the user can look for more information.	✓	✓	✓	✓	✓
Similar Results When viewing an asset like a blog or document, the Similar Results widget shows a list of relevant assets based on the similarity of specified fields like title or content.	■	■	■	✓	✓
Tag Cloud This displays a cloud of tags from some set of assets in a site.	✓	✓	✓	✓	✓
Dynamic Tagging Search can be used to look inside content published within the platform, but occasionally it is not enough to help users find their desired content. Dynamic Tagging is available in Liferay, allowing content creators to define keywords associated with their content. Users can add keyword tags to web content, documents, message boards and more, simplifying search and enabling powerful features like the Asset Publisher.	✓	✓	✓	✓	✓
Modern UI Liferay supports modern UI frameworks and Single Page Applications (SPAs). Users experience faster loading and greater performance on the Liferay platform through SPAs, a technology that provides dynamic and responsive web experiences by taking only the parts of a page that need to be loaded rather than reloading the entire page. This can be achieved in Liferay DXP through Senna.js, a SPA engine. Support for third-party UI frameworks include Metal.js, Twitter Bootstrap, JQuery, ReactJS, AngularJS, Senna.js, Vaadin and more.	✓	✓	✓	✓	✓

Feature	6.2	7.0	7.1	7.2	7.3
Enterprise DAM Manage documents, video, audio, images and other media types in a unified repository. Allow groups to store, tag, lock and search for assets, use them on site pages or download them for use offline. For more information about digital asset management, please refer to page 31 .	✓	✓	✓	✓	✓
Auto-Tagging Leverages third-party machine learning services to provide personalized experiences and improve the findability of assets by automatically adding tags to images and documents upon upload. Features include: <ul style="list-style-type: none"> Image Auto-Tagging: Tag providers available for images are TensorFlow, Google Cloud Vision and Microsoft Cognitive. Web Content/Document Auto-Tagging: Tag providers are OpenNLP and Google Natural Language. Auto-Tagging API: Tag any asset with any service, for your use case by leveraging an API built for extending auto-tagging functionality. 	■	■	■	✓	✓
Search Search for documents, video, audio, images and other media types based off of file names, tags, metadata and the file's text content.	✓	✓	✓	✓	✓
Content Dashboard & Content Audit Tool Streamline the content audit process and minimize the effort of finding gaps in your company's content strategy execution. Content Dashboard is a one-stop-place where content authors can access all contents, not only for a given site, but for all the sites and asset libraries in a Liferay instance. It includes the Content Audit Tool to make it easier for content teams to run content audits.	■	■	■	■	✓

Feature	6.2	7.0	7.1	7.2	7.3
Taxonomies Create taxonomies through the use of tags, vocabulary and categories to classify and organize content within Liferay DXP. Tag web content, documents, message board threads and more to dynamically share content with other users. Faceted search leverages tags to allow users to filter results by specific criteria across the platform.	✓	✓	✓	✓	✓
Foster systematic categorization with out-of-the-box Global Vocabularies.	■	■	■	■	✓
Role Based Content Delivery Liferay DXP allows for multiple user types to access a single URL and access a unique page view depending on the users role, group, organization or personal preferences. Administrator controlled and user customized, Liferay DXP provides a central platform for determining enterprise content policy, including who can edit and publish content, files, communities, files and applications.	✓	✓	✓	✓	✓
Site Content Sharing Gives you the capability to share various content pieces between child and parent sites. As the administrator of a child site, you are able to use all of the structures, templates, categories, application display templates and more from any of your parent sites that allows for it.	✓	✓	✓	✓	✓
Site Map Displays a structured directory of links to all pages. The Site Map can be used to navigate directly to any page on the site. It can be configured to display the entire site or a sub-section of pages. This site map is automatically generated and the hierarchy can be changed with drag-and-drop allowing administrators to quickly rearrange pages within the site.	✓	✓	✓	✓	✓
Breadcrumbs Displays a trail of “parent” pages for the current page. The Breadcrumb app can be placed on public pages as a navigational aid when using Liferay to publish websites.	✓	✓	✓	✓	✓

Feature	6.2	7.0	7.1	7.2	7.3
Navigation <p>Allows for dynamic generation of navigation. Displays and sorts site content based on page structure, tags and categories. Nine Application Display Styles can be used to enhance your navigation's look.</p>	✓	✓	✓	✓	✓
File Selector <p>A modern UI for file selection leverages Liferay's core navigation, search and filtering capabilities. It displays a breadcrumb of documents, images, and other files, with pagination implemented to accommodate folders with long lists of files and assets. In Liferay DXP, the File Selector has been updated with a new UI that makes use of the Documents and Media navigation and search capabilities.</p>	✓	✓	✓	✓	✓
Recycle Bin <p>All deleted content goes in a Recycle Bin that allows recovery in case of accidental deletion. The Recycle Bin supports full search as well as browsing within deleted folders.</p>	✓	✓	✓	✓	✓
Nested Layouts <p>Nested page layouts are possible through simple drag and drop.</p>	✓	✓	✓	✓	✓
Multi-language Support <p>International or multilingual organizations get out of the box support for languages. Users can toggle between different language settings with just one click. You can also easily add other languages. Starting with Liferay DXP 7.0, right to left language support is fully functional out of the box without the need to install a separate app.</p>	✓	✓	✓	✓	✓

Feature	6.2	7.0	7.1	7.2	7.3
Localization Create localized versions of sites and content for specific regions. Email notifications can also be localized.	✓	✓	✓	✓	✓
Export/Import translations for web content using the industry standard XLIFF as well as have a dedicated translation experience with integration with workflow so it is possible to delegate this process to external agencies or freelancers.	■	■	■	■	✓
Web Content Folders Workflow Give users the ability to subscribe to specific folders and content types and now also provides the ability to set up separate workflow processes per folder and content types. Web Content Folders now also have the ability to restrict specific web content structures to a specific folder.	■	✓	✓	✓	✓
Web Content Prioritization Create a ranking of assets for publishing.	✓	✓	✓	✓	✓
Staging Liferay allows multiple teams to work on several variations of a site simultaneously and schedule publication dates for each. For example, three different teams can work on sites for Halloween, Thanksgiving and Christmas and schedule their variation to publish at different times. Enhanced staging includes automatic versioning with history, undo support at the site and page level, and preview based on scheduled publications. Within the online editor, pages from a live site can be edited and previewed without affecting what is seen on the public site, and then scheduled for future publishing. Users can use this same method to edit individual pages, entire communities or full websites. Liferay also allows users to “roll-back” to previous versions of pages, sites or communities.	✓	✓	✓	✓	✓
Publish and Export Templates (Staging) Create custom export configurations in order to export Site pages from within a Site.	✓	✓	✓	✓	✓

Feature	6.2	7.0	7.1	7.2	7.3
Restart a Finished Process (Staging) <p>Saves administrators time by allowing the staging process to be restarted using the same configuration. Once you have published to live the Staging status appears on the Current and Previous tab. A drop-down option lets you relaunch the process using the same configuration.</p>	✓	✓	✓	✓	✓
Multiple Step Staging <p>Staging can go beyond two environments to multiple environments to support a greater variety of setups.</p>	■	✓	✓	✓	✓
Export/Import/Publication Lifecycle Event Listeners <p>Developers can write code pieces very easily to react on certain events during an export or import process. They can use this to facilitate logging or auditing or kicking off tasks after a certain event has happened.</p>	■	✓	✓	✓	✓
Application Display Templates <p>Application Display Templates are a way to define how built-in and custom applications display content. Site administrators and web designers can create, edit and share templates directly in Liferay, significantly reducing the time to develop and deploy customizations. You can change the look of individual apps without customizing the plugin. These templates allow you to fully customize the look and feel of an application without using a theme or hook, which require deployment and typically have to be upgraded between Liferay versions. In Liferay DXP, you have the ability to customize the RSS, Language, Wiki, Asset Publisher, Navigation and Breadcrumb apps and more.</p>	✓	✓	✓	✓	✓
Search Applications <p>Search Bar, Search Results and Facet widgets allow for flexibility in page construction and bookmarkable pages.</p>	■	■	✓	✓	✓





















Feature	6.2	7.0	7.1	7.2	7.3
Asset Libraries Organize content in dedicated libraries to reuse that content across different sites and have better control. Connect the asset libraries only to sites where it is needed in order to provide access to content authors who can use the assets stores while creating a page or writing a blog post.	■	■	■	■	✓
Content Performance Analytics Integration with Liferay Analytics Cloud provides reports that help users understand the number of views and clicks, as well as the current content engagement level, including the ability to drill down to the asset level to better understand the audience.	■	■	✓	✓	✓
Search Engine Traffic insights allows marketers and content authors to assess SEO strategy.	■	■	■	■	✓

Experience Management

Empower any member of your team to build and customize web pages in order to deliver enhanced digital experiences that are tailored to your users' needs. Additionally, leverage analytics for insights on how to improve these experiences.

Feature	6.2	7.0	7.1	7.2	7.3
Fragments Fragments are predesigned, reusable components used to quickly build new pages. Fragments use inline editing to change text and images and can incorporate Liferay DXP applications for advanced functionality. Content editors can conveniently and quickly enter and update copy on Content Pages with inline editing. This also allows editors to see a preview of the final results as they work.	■	■	✓	✓	✓
Fragment Editor Easily drag-and-drop from out of the box elements and component sets to create fragments.	■	■	✓	✓	✓





















Feature	6.2	7.0	7.1	7.2	7.3
Fragments Toolkit CLI tool allows front-end developers to code fragments in their own code editors and upload without the need to redeploy.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Widgets (Portlets) Reusable, drag-and-drop and configurable portlets can be used by any business users.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Widget Library Liferay DXP provides a generous selection of out of the box portlets for different business needs, that can be easily added to the page.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Liferay JS Bundle Toolkit A JS widget creator allows non-java developers to easily create frontend apps using the latest libraries through a CLI tool.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Widget Pages The traditional method of creating pages through adding and configuring applications (widgets) to a page layout of columns and rows is available through Widget Pages. This method is recommended for pages that want to pull in existing content and information and for content that will be reused in other pages or sites.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Content Pages Use Content Pages to create pages for structured and unstructured content, as well as applications for a variety of use cases through a drag-and-drop interface. Use page fragments and content mapping to define how different types of structured web content are displayed on a page.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Feature	6.2	7.0	7.1	7.2	7.3
Page Editor This is a way to create pages and templates with the introduction of Page Fragments and has been greatly improved in Liferay DXP 7.2. The Page Editor allows business users to visually lay out page designs and save them as reusable templates, in context of how it will appear on the live site. Within this interface, users can search through collections and add fragments to the template. Marketers can then customize content and images with a few clicks.					
Menus Menus are decoupled from page navigation in Liferay, giving business users the freedom to create custom menus for sections of the site or remove menus when desired such as on marketing landing pages. A drag-and-drop interface allows you to manage menu hierarchies and save different menu sets.					
Display Page Templates (Previously Display Pages) Create a common template for structured web content without touching code. Use page fragments to implement the design of the page and map content sections to the web content with a few clicks. When a piece of web content is published with a display page template, it will automatically be given its own page with a unique URL, replacing the default content in the template with the newly added web content.					
Page Templates A preconfigured page that can be reused throughout a Liferay site to create pages quickly. Easily drag-and-drop to create page layouts with content, sections, widgets.					

Feature	6.2	7.0	7.1	7.2	7.3
Search Engine Optimization (SEO) With its ability to easily create web content, blogs, wikis and to share documents, Liferay DXP allows a website to become a valuable repository of information. While Liferay's internal search can be used to find data within Liferay DXP, Liferay also optimizes updates to the site map information and other metadata, which allows new pages to be instantaneously searchable by external search engines. Additionally, all pages within the platform can be easily given a friendly URL (i.e., you can easily set up new pages and define their URLs as <www.companyA.com/documents or www.companyA.com/training>). Pages can define a custom robots.txt to indicate pages that should or should not be indexed. Also, Liferay's Single Page Application (SPA) technology provides the benefits of dynamic web sites without hurting SEO.	✓	✓	✓	✓	✓
The redirections management application allows admins to redirect site URLs to any valid URLs. Admins can utilize the list of 404 errors to create new redirects before search engines penalize their sites or users complain about not finding what they were looking for. The OpenGraph support allows tailoring marketers messaging when sharing pages on social platforms. For marketers and content authors, valuable metrics on search engine traffic and best performing keywords by region are provided in the display page context.	■	■	■	■	✓
Page Analytics Integration with Liferay Analytics Cloud helps you visualize a page list and understand performance through an aggregate view.	■	■	✓	✓	✓
Page Customization Depending on what the administrator allows, users can customize pages by adding, removing, positioning content or application attributes (e.g., zip code for weather application). These pages can be made public (published as a website with a unique friendly URL) or kept private.	✓	✓	✓	✓	✓

Segmentation and Personalization

In order to facilitate deeper personalization of digital experiences, Liferay DXP provides features for role-based content delivery, audience targeting and segmentation.

Feature	6.2	7.0	7.1	7.2	7.3
Experiences Create different variations of a single site page and easily personalize anything on a page for different audience segments through the page editor.					
Segmentation (Previously Audience Targeting) Create audience segments based on user behavior (e.g., page visited, device, last login date), user attributes (e.g., country, gender, language), social media profiles or custom fields. Target specific audiences for personalization for delivering prescriptive customer journeys (e.g., promoting products to a specific vertical or showing offers to a subset of customers). Functionalities include: <ul style="list-style-type: none"> • Creating complex rules to segment your visitors. • Targeting unauthenticated visitors based on cookies, device, URL, geolocation and locale. • Executing use case-specific segmentation rules. • Allowing advanced segmentation rules to have consistent functionality with the segmentation rules provided in Analytics Cloud. Segments will be available at the root level along with Users, Organizations, Roles and User Groups. • Managing and moving segments to different scopes. • Segmenting users based on profile and organization fields. 					
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.					
Optimization Measure the interaction of targeted user segments with your chosen content to optimize content delivery. This functionality is available through Liferay Analytics Cloud .					

Feature	6.2	7.0	7.1	7.2	7.3
Role Based Content Delivery <p>The Liferay platform allows multiple user types to access a single URL and a unique page view depending on the user's role, group, organization or personal preferences. Administrator-controlled and user-customized, Liferay DXP provides a central platform for determining enterprise content policy, including who can edit and publish content, files, communities and applications.</p>	✓	✓	✓	✓	✓
Page Customization <p>An administrator can allow users to customize pages without affecting other users or site members. Users can customize pages by adding, removing, positioning content or application attributes. These pages can be made public (published as a website with a unique friendly URL) or kept private.</p>	✓	✓	✓	✓	✓
Content Recommendations <p>Automated personalization of content based on a user's past behavior powered by Analytics Cloud integration, with behavior-based segmentations and interest-based content recommendations.</p>	■	■	■	✓	✓
Content Sets <p>Personalize content sets for reuse across multiple pages. Easily manage segmentation targeting for content lists.</p>	■	■	■	✓	✓

Multichannel Support

Liferay DXP provides multichannel delivery and support for the ability to offer great experiences across various channels, devices and touchpoints. REST APIs provide further ability to integrate other methods of delivery and support a range of applications and other systems.


























Feature	6.2	7.0	7.1	7.2	7.3
Headless CMS A new generation of REST and GraphQL APIs helps developers consume content from any channel, including mobile apps, chatbots or wearables. Front-end developers are free to create a presentation layer using the technologies they commonly use (Angular, React, NodeJS, etc.), leveraging on their experience while keeping all the functionality that Liferay provides such as user management, content repository, documents and media, forms and blogs. Additionally, Liferay provides a toolkit that helps developers to create their own APIs, for example, for exposing services from back end or legacy applications.					
Mobile Experience Suite Liferay DXP's mobile experience suite is a collection of software to enable responsive design, native and hybrid app development, push notifications and mobile integration with different Liferay instances and applications.					
Mobile Device Rules Feature and framework for defining different platform behavior based on device type with a built-in set of device definitions for most mobile device platforms (iOS, Android, etc.) and an optional device detection database for purchase.					
Responsive Design Liferay DXP's CSS framework is responsively designed to work with browsers on all platforms from mobile to tablet to desktop.					
Mobile Device Preview Preview your content on a variety of predetermined or custom screen sizes.					





















Feature	6.2	7.0	7.1	7.2	7.3
Adaptive Media Adaptive Media is an application in Liferay that dynamically adjusts images to best fit the screen size of the device being used. It also offers control over how images are loaded and displayed, allowing companies to address performance issues across a wide variety of devices and varying network speeds between users and countries.					
Native App Development with Liferay Screens Rapidly develop native apps with a collection of fully native mobile components, using all the power of your Liferay platform as an enterprise grade mobile backend.					
Hybrid App Development with Liferay Screens Liferay Screens enables software developers to use Apache Cordova or Xamarin to build cross-platform applications from one codebase designed for the web on a PC and embed that content into a Screens app for mobile use. Sites and applications designed for PC can be rendered in screenlets with no additional code. The resulting apps allow native mobile capabilities and navigation to be mixed with HTML content seamlessly.					
Liferay Push Liferay Push exposes a framework that lets developers send push notifications from the Liferay platform to native Android and iOS apps.					
Liferay Mobile SDK The Liferay Mobile SDK is a framework for building native mobile apps that integrate with your different Liferay DXP instances and their portlets.					
Mobile Sync App The Android and iOS mobile app for Liferay Sync gives you the convenience of sharing and viewing files in tandem across your devices while enjoying most of the desktop client's capabilities. The mobile client allows you to be connected to one account at a time and, in order to save storage space on your device, you choose the files with which you want to work in lieu of automatic downloads.					

Operations

Streamline common business processes and gather information from your users with out-of-the-box features for creating forms and workflows.
















App Builder

Feature	6.2	7.0	7.1	7.2	7.3
App Builder As its name implies, this application empowers business users with an intuitive GUI to define forms and table views and leverage workflows to build applications with the goal of digitizing and automating business processes. Applications can be deployed in standalone fashion or added to pages as widgets or through the product menu.					
Custom Objects Create Custom Objects to represent and store business specific data in Liferay. This is somewhat similar to how developers can define entity models using Service Builder or similar tools, but all done through the interface and using a Low-Code UX.					
Form Views Create multiple Form Views for each custom object in order to collect data from the target users of the application.					
Table Views Create multiple Table Views to display, update and delete captured data in the application.					
Deployment Types Applications built in App Builder can be deployed in standalone fashion or added to pages as widgets or through the product menu.					

Feature	6.2	7.0	7.1	7.2	7.3
Form View Rules Just like the Forms portlet, the App Builder also provides a Rule Builder to allow users to define dynamic behaviors for fields of each Form View of the application, such as setting the visibility of a field or using a predefined condition to enable or disable a field. To start defining rules in a Form Views, click in the Rules option present in the right menu bar of the Form View builder.					
Multi-Language Support for Apps Users can also internationalize the applications created through App Builder by translating and making Apps available in several different languages. To create localized applications, you just need to select and translate the fields to the languages you want in the Form View Builder of the application.					
Fieldsets App Builder also provides a fieldset capability, which allows users to create, update and reuse frequently used groups of fields in different objects and forms views. This way, users don't have to recreate one same group of fields (e.g. address) over and over for each application. To start creating and using fieldsets, access the Fieldset tab on the right sidebar of the Form View Builder.					
Process Driven Apps One of the main values offered by App Builder is the automation of business processes through Workflow Powered Apps. For this use case, we offer a separate and special-made experience that allows users to define the stages of the process and specify which information of the Custom Object 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.					

Forms

Design and build personalized forms to replace complex paper applications.

Feature	6.2	7.0	7.1	7.2	7.3
Forms Design, publish and manage forms with a simple-to-use drag-and-drop interface. Instead of making users fill up a long and tiring form, users can break it down and improve the experience by taking advantage of the multiple pages. Share with your target audience a form URL published into a standalone page. Assign your form to a workflow so it will follow a process suited to your business after user submission. Allow users and administrators to create multiple choice polls that keep track of responses. Customize your forms to show or hide fields, only asking relevant questions to the users.					
Form Rules Create personalized forms with conditional rules using the Form Rules feature. Conditional rules allow users to introduce dynamic behavior in forms and allow personalization of the questions or fields to show based on how users respond on your forms. A predefined set of form rules allows for quick customizations to users' form fields, including: setting a required field, enabling fields/options, autofill selects, show and hide, jump to a page, calculations, conditional success pages and an API to create and execute customized rules for forms created programmatically. Define validation logic for a specific form field by creating custom messages for form validation errors. This helps improve the completion rate of your forms.					
Translation/Multi-Language Support for Forms Add a translation for each form field when building forms. Similar to creating translations for web content, the ability to add translations for form fields allows for better support globally, where common things like names, surnames and address formats vary between countries.					

Feature	6.2	7.0	7.1	7.2	7.3
Fields and Properties Field types included in the default form fields including file upload, numeric, password and grid fields. The ability to create form field sets, by grouping fields together and repeating that group of fields, helps speed up the creation of long forms where repeated inputs may be necessary. An API also allows users to create new customized field types with a provided Blade template and documentation.	■	✓	✓	✓	✓
Forms Structure Structuring your forms is easy with the drag-and-drop interface. Users can easily layout their form fields on a page and better design their form layouts through the intuitive interface. Users can also configure a URL for redirects after a form submission and standalone forms can have URLs independent of the default site navigation.	■	■	✓	✓	✓
Validation Users can define validation logic for a specific form field by creating custom messages for form validation errors, which can help improve the completion rate of your forms.	■	■	✓	✓	✓
Field Library Liferay DXP comes with a predefined library of form fields, as well as capabilities that help users build a library of fields so that they can easily begin building forms by reusing preset fields. The set can be arranged once and deployed across a variety of situations for the business.	■	✓	✓	✓	✓
Data Provider Integration Integrate external web services using a Data Provider to apply to fields and benefit from live data. You can pre-populate fields with data from external services and import and export Data Provider definitions.	■	■	✓	✓	✓

Feature	6.2	7.0	7.1	7.2	7.3
Entries Management Liferay DXP provides functionality for improving the end user experience upon form completion. End users can receive email notifications after a form entry and export entries into different formats: CSV, XML, and XLS. Entries have workflow integration provided, so that they can also go through a workflow process after submission.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Form Entries Data Storage Save the data you gather with your forms. Use our StorageAdapter API to give more flexibility to your data management and store the data inside of the Liferay Database or externally, depending on the use case.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Forms APIs Data engine APIs help IT build more flexible business applications. These APIs can be used to execute CRUD operations on data definitions and make it possible for developers to quickly assemble business applications that can scale with flexibility.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Forms Reports with Analytics Cloud Forms reports detail the number of views, submissions, failed submissions, abandonment and completion time, user information and device usage.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Forms Reports A built-in summary report of the answers received in forms, allowing users to not only see the data collected, but also have an overall analysis of answers from each field according to the field type.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Feature	6.2	7.0	7.1	7.2	7.3
GDPR Coverage <p>Because web forms are among the most common interfaces for collecting user-provided data, there needs to be a GUI and development tools to design forms that comply with GDPR requirements. Doing so means implementing two Data Protection Features within Forms.</p>					
Data Erasure (AKA Right to be Forgotten) <p>Administrators can review Form entries that potentially contain personal information and edit, anonymize or delete as needed through a simple interface.</p>					
Data Export (AKA Right to Data Portability) <p>Administrators can export a user's personal data submitted through Forms before going through the erasure process.</p>	■	■	■	■	✓

Workflow and Business Productivity

Workflow and reporting features give users more ways to simplify processes and provide access to information.





























Feature	6.2	7.0	7.1	7.2	7.3
Workflow Framework <p>Liferay DXP allows you to incorporate workflow into any of your own custom applications by leveraging Liferay's workflow APIs. This provides a better end user experience, saves your development team a lot of effort by reusing Liferay's workflow administration tools and provides seamless integration with all supported workflow engines.</p>	✓	✓	✓	✓	✓
Reports <p>Business intelligence and reporting tool that shows the activity and history of various applications in the platform (e.g., documents downloaded by groups, statistics on message board threads, most active users). It can also make use of the JasperReports application.</p>	✓	✓	✓	✓	✓

Feature	6.2	7.0	7.1	7.2	7.3
Workflow Workflow allows a user to define any number of simple to complex business processes/workflows, deploy them and manage them through a web interface. These processes have knowledge of users, groups and roles. A graphical workflow designer gives you a point and click interface to create workflows. It can be used in conjunction with Kaleo Forms or standalone to create workflow definitions without having to write XML.	✓	✓	✓	✓	✓
Dynamic Data Lists A Dynamic Data List is a user-defined collection of records, similar to a spreadsheet. Users can create custom lists of information that can be published as workflow-enabled forms. These forms can be shared dynamically with other users to capture information such as RSVPs, tasks tracking and managing issues. Dynamic Data List record sets also include versioning for records.	✓	✓	✓	✓	✓
User-Driven Workflow and Approval Not only is there an embedded workflow for content, but Liferay DXP also allows users to create their own workflow and define the number of approval paths based on their own unique business requirements and operational needs. For example, administrators can implement an approval process for new document uploads before they appear in the Document Library.	✓	✓	✓	✓	✓
Workflow Metrics Define due dates for a workflow process and for specific tasks within the workflow process. See the status of all open instances within the workflow process in real time. Set deadlines and generate reports to better optimize your processes. Gain insight into how long certain workflow events take to complete, understand the assignee's workload and performance and identify steps that are acting as bottlenecks.	■	■	■	✓	✓
















Digital Asset Management

Manage and publish any asset on one central system to not only enable your employees or customers to easily collaborate and share documents and media, but also reduce the amount of time spent searching for those assets.

Feature	6.2	7.0	7.1	7.2	7.3
Documents Features around document and media management offer administrators more control over how assets are stored, shared and accessed. Additionally, Liferay DXP can integrate with repositories such as SharePoint, Google Drive and Alfresco.	✓	✓	✓	✓	✓
Documents and Media Unified document repository that houses documents, video, audio, images and other media types in one place. It can be leveraged across an enterprise, within a specific group, or for a single individual as a web repository. Enterprise-wide repositories allow groups to store assets, tag them, lock them, search for and leverage them in web pages or download them for use offline. It provides a clean and attractive display to find and browse all images, video and other media assets. Other features include: <ul style="list-style-type: none">• Check in/check out, metadata and versioning. Document file formats may be converted at the time of upload. Saved items are displayed through the Display app and Document and Media Display app.• Multiple-file upload allows users to upload and store a document in one file format while making it available for download in other formats (i.e., a .doc file can be available for download as a PDF with Liferay providing the conversion at download time).	✓	✓	✓	✓	✓
Bulk Management Manage digital assets and files at scale with an improved tool for bulk management of tags, categories and file operations like deletion, moving files, etc.	✓	✓	✓	✓	✓

Feature	6.2	7.0	7.1	7.2	7.3
Google Drive Plugin Allows users to create shortcuts to Google Drive files in their Documents and Media repositories. These documents can be viewed and managed from Documents and Media. Once deployed, you can configure this app from the Control Panel.					
CMIS Integration Integrate back office systems in order to surface assets to customers or add social and other metadata. Mount and browse SharePoint, Documentum, Alfresco and other CMIS-compliant repositories within Liferay DXP.					
Document Types and Metadata Sets Administrators can create their own custom metadata sets and document types into language familiar to users. For example, financial reports, surveillance videos, and so on can be defined in a way that makes sense for the business functions of the content (e.g., author, reporting period, etc.).					
Online Document Editing Leverage the Google Docs editor to allow activities related to creating and editing documents via portal.					
Office 365 Integration Create and edit Office 365 documents, presentations and spreadsheets stored in Liferay DXP. This feature will be able to take advantage of the existing permissions system, versioning and sharing capabilities that it is already included with Liferay DXP 7.2.					
Document Previews and Preview Generation Provide a preview of the document (including images, videos, audio clips) to easily identify the content of the document. Automatically generate a full document preview in Liferay DXP.					

Feature	6.2	7.0	7.1	7.2	7.3
P2P Asset Sharing Allows sharing documents and media assets with registered users to increase collaboration for instances where multiple users need to work on a single asset.					
Search (Documents and Media) Search for documents, video, audio, images and other media types based off of file names, tags, metadata and the file's text content.					
Document Types and File Types Create and manage abstracted document assets with specific metadata common to all assets of its type, such as: Request for Proposal, Statement of Work, Annual Report, Presentation. Liferay DXP also has the capability to support any file type.					
Versioning Liferay DXP versions documents and increments them as you make changes, enabling you to rollback and view the version history.					
Automatic Versioning Policies Introduces intelligent/definable versioning to enrich historical and auditing context of a document's lifecycle.					
Media Selector Easily upload or select files with the built-in media selector. This feature is also highly extensible so that new sources of media (e.g., Google, Flickr, YouTube) can be added to any application.					

Feature	6.2	7.0	7.1	7.2	7.3
Inline Image Editor <p>Allows for simple image editing directly from within Liferay, eliminating the need for an external tool while creating content. Resize, crop and make colors adjustments to any image uploaded to Documents and Media from within blogs or any other application that uses an item selector. The image editor has been designed in a way to make it easy to customize and allows for developers to create and deploy tools that modify images.</p>					
Enterprise File Sync and Sharing <p>Liferay Sync is a central, easy-to-use document sharing service that automatically synchronizes documents across popular desktop and mobile environments, empowering users to share files with a simple drag-and-drop for Liferay's Documents and Media. It exposes and synchronizes content and documents to both desktop and mobile environments with support for Windows, Mac OS, Android and iOS. You can also log all your document changes and versions. Users can seamlessly work on the same file together with versioning and revision tracking. Liferay DXP also has WebDAV functionality so users can access shared assets through browsers.</p>					
Single Sign On Support <p>Any SSO implementation that works against Liferay DXP will work with Liferay Sync as well (SiteMinder, OpenSSO, OAM, SAML, Shibboleth, etc.).</p>					

Collaboration and Social

Connect people and systems together on a modern interface focused on getting work done. Collaboration in Liferay DXP is supported with applications for blogs and social networking, as well as a solid set of tools for forums, message boards and other functionalities.

Feature	6.2	7.0	7.1	7.2	7.3
Collaboration Collaboration in Liferay DXP is supported with applications for blogs, forums, message boards and other functionalities. Social networking features such as an activity wall, friends list, @ mentions, activity tracker and social activity are also available to further support collaboration activities.	✓	✓	✓	✓	✓
Knowledge Base (and associated apps) Allows users to add and categorize content in the form of articles. Content can be added directly through the web or imported from external sources with category-based navigation. This helps users easily find answers to questions they may have. Knowledge Base includes several apps: <ul style="list-style-type: none">• Knowledge Base Display• Knowledge Base Article• Knowledge Base Search• Knowledge Base Section	✓	✓	✓	✓	✓
Search and Tagging Tag web content, documents, message board threads and more to dynamically share important or interesting content with other users. Users can then search for relevant information through faceted search, allowing one to filter results by specific criteria within specific apps, communities, the entire platform and even external integrated applications.	✓	✓	✓	✓	✓
Invitations Allows users to invite others to join a specified site and sends a notification.	■	✓	✓	✓	✓

Feature	6.2	7.0	7.1	7.2	7.3
Page Comments Allows users to leave comments on any user page.	✓	✓	✓	✓	✓
Page Ratings Allows users to leave ratings on any user page.	✓	✓	✓	✓	✓
Page Flags Allows users to report inappropriate content on a page.	✓	✓	✓	✓	✓
Blog Liferay DXP's blog widget provides a modern WYSIWYG editor (AlloyEditor) designed to create entries quickly and a modern card design for displaying blogs. The inline image editor also allows for easy image editing directly within Liferay DXP. You can drag-and-drop images right into the blog text. If you want to add format to some text, just select it and a modern toolbar will offer the format options. Additional features include friendly URL creation, estimated reading time, unsubscribe from emails, publication date, RSS support, threaded user and guest comments, tags and labels, social bookmarking links, email notifications of blog replies and an entry rating system. You can also add videos inline while writing a new entry from popular services such as YouTube, Vimeo, Facebook Video and Twitch.	✓	✓	✓	✓	✓
Blogs Aggregator Grabs blog entries from the entire portal or by specific organizations.	✓	✓	✓	✓	✓
Recent Bloggers Dynamically displays a list of recent bloggers.	✓	✓	✓	✓	✓

Feature	6.2	7.0	7.1	7.2	7.3
Forums/Message Boards A full-featured forums solution with threaded views, categories, RSS capability, avatars, drag-and-drop file attachments, drag-and-drop image additions, section renaming, category and thread grouping, notification management, previews, dynamic list of recent posts and forum statistics. Message Boards work with Liferay's fine-grained permissions to give detailed levels of control to administrators and users.	✓	✓	✓	✓	✓
Wiki (and associated apps) A straightforward Wiki solution with versioning capabilities, categories, Creole, HTML, or plain text modes, WYSIWYG editing, drag-and-drop support for page creation, page history and reversion and permissions.	✓	✓	✓	✓	✓
Calendar A community-based calendar with task lists that allows users to create, manage and search for events. Events can be shared across communities and event reminders can be set up to alert users of upcoming events by email, notifications or SMS. You can also create and manage company resources through the calendar.	✓	✓	✓	✓	✓
RSS These allow users to get dynamically updated digests of critical news topics, blogs and other publications. Users can configure the order of topics displayed and how many articles are shown per provider.	✓	✓	✓	✓	✓
Alerts and Announcements Offers a free form text area that can display and update new information quickly. You can target announcements to readers by group or role.	■	✓	✓	✓	✓
Microblogs Microblogs can be used to update your status on a Liferay social network and post your activities including @ mentions.	■	✓	✓	✓	✓

Feature	6.2	7.0	7.1	7.2	7.3
Polls Allows users and administrators to create multiple choice polls that keep track of votes and display results on the page.	✓	✓	✓	✓	✓

Developer Tools

Liferay gives you control over maintaining and extending your Liferay DXP instance with developer tools for building, managing and controlling Liferay projects with convenience and added simplicity.

Feature	6.2	7.0	7.1	7.2	7.3
Liferay Connected Services A cloud-based management solution for maintaining a Liferay DXP infrastructure, Liferay Connected Services gives businesses greater control and closer monitoring over their enterprise software's performance with fix pack management, maintenance updates and performance reports.	✓	✓	✓	✓	✓
Front-End Toolkits A set of tooling that Liferay created to help developers use NPM in their projects so that they can deploy them to Liferay DXP and see everything working seamlessly with little effort. These 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 so that it can be run when deployed to Liferay DXP.	✓	✓	✓	✓	✓
Front-End Unit Testing Unit testing is a crucial part of the development cycle that ensures that code is functioning properly. Liferay has made this a priority in Liferay DXP throughout the product. Within the UI, this is accomplished through a tool called Mocha.	■	✓	✓	✓	✓

Feature	6.2	7.0	7.1	7.2	7.3
IntelliJ IDEA Plugin Integration with IntelliJ IDEA that can be configured for use with Liferay DXP development.	✓	✓	✓	✓	✓
Liferay Marketplace Developers can sell, share and download themes, integration plugins and entire applications built on Liferay DXP in Liferay Marketplace. These apps can be quickly deployed into a Liferay DXP implementation via the Liferay Management console.	✓	✓	✓	✓	✓
Liferay Workspace Liferay Workspace is a highly structured environment for modular development. Import Workspace projects into any IDE with built-in Maven or Gradle support, eliminating the need to only use Eclipse for development.	■	✓	✓	✓	✓
Blade CLI Liferay development projects can be completely controlled from the command-line using Blade CLI. Blade CLI performs development tasks such as creating new projects, installing Liferay servers and more.	■	✓	✓	✓	✓
Upgrade Tool A revamped Upgrade Tool simplifies the upgrade process from previous versions of Liferay. The standalone tool lets system administrators restart failed upgrades, reducing the time spent troubleshooting.	■	✓	✓	✓	✓
Lexicon and Clay Liferay DXP users have access to a set of guidelines and components that allow developers to create visually stunning applications with minimal effort. Lexicon is a design language that provides a common framework for building interfaces that leads to a unified experience for its users. Clay, the web implementation of Lexicon, is based on Bootstrap and designed to be extensible.	■	✓	✓	✓	✓

Feature	6.2	7.0	7.1	7.2	7.3
REST API builder Similar to the service builder, this tool accelerates development by generating scaffolding needed to develop business logic for custom REST and GraphQL APIs.	■	■	■	✓	✓
Developer Studio An all-in-one, integrated development environment for building apps and modules. Developer Studio makes it easy to use project creation wizards to create modular projects based on Maven, Gradle and bndtools. It also includes tools for aiding in Liferay DXP upgrades and includes a migration tool to help migrate plugins to the next version.	■	✓	✓	✓	✓

Search

Recapture time users spend looking for information with powerful out-of-the-box search capabilities.

Feature	6.2	7.0	7.1	7.2	7.3
Liferay Enterprise Search (optional add-on) Liferay Enterprise Search is an add-on subscription that provides end-to-end support for Liferay DXP 7.3 and Elasticsearch, as well as additional modules for integration with Liferay DXP. Users can monitor their search cluster health, replicate search clusters, leveraging ML-driven relevance tuning, and more.	■	✓	✓	✓	✓
Elasticsearch integration Elasticsearch, the market-leading open source search engine for modern web applications, is the default search engine in Liferay DXP and provides powerful search monitoring, tuning and scaling capabilities.	■	✓	✓	✓	✓
X-Pack Security integration Liferay DXP can establish secure connections to Elasticsearch using X-Pack Security.	■	✓	✓	✓	✓





















Feature	6.2	7.0	7.1	7.2	7.3
Solr integration Integration with Solr, a popular enterprise search platform, can be configured for use with Liferay DXP through an app available in Liferay Marketplace.	✓	✓	✓	✓	✓
Multi-Tier Search A platform with web content, documents, images, wikis, blogs and other user-created content becomes a massive repository of data. Search becomes a vital aspect for users of the system since it is essential that users can find the content they need when they want it. Liferay's search also allows users to search across all assets within the platform to which they currently have access, while also restricting them from assets in which they do not. This multi-tier search capability ensures that users have access to only open content or content available to them based on their roles and membership in various communities.	✓	✓	✓	✓	✓
Faceted Search Liferay DXP provides users an efficient way to instantly refine search results by drilling down with specific constraints that match the user's search criteria. For example, a retail site built on Liferay would allow you to search for merchandise by inputting various combinations of criteria, such as color, size and price.	✓	✓	✓	✓	✓
Filter/Sort Users can filter and sort search results within the UI.	■	■	■	✓	✓
Multi-Language Search Search across all languages for Web Content for multi-language sites and portal instances.	■	■	■	✓	✓
Search Admin Tools Handle administration tasks like monitoring the health of the Elasticsearch cluster, reindex search indices, and view field mappings.	■	■	✓	✓	✓

Feature	6.2	7.0	7.1	7.2	7.3
Search Tuning Tools Liferay DXP allows granular search tuning via the Synonyms and Result Rankings applications. Synonyms sets allow defining terms with equivalent meaning. Result Rankings allow explicitly pinning or hiding specific results for a particular search query.	■	■	■	✓	✓
Low-Level Search APIs Leverage improved search APIs to interact with either Elasticsearch or Solr. Developers can call the search engine without writing or using models or indexers and allows access to every aggregator and query type of Elasticsearch.	■	■	■	✓	✓

Analytics
















Enhance your digital marketing strategies with powerful analytics that will provide key insights into your customers. See [Liferay Analytics Cloud](#) for more information.

Feature	6.2	7.0	7.1	7.2	7.3
Workflow Process Analytics Create due date definitions for workflow processes and for workflow tasks. Liferay DXP provides analytics for all instances of open and in progress processes in real time allowing for easy identification of operational bottlenecks and insight to optimize efficiency.	■	■	✓	✓	✓
Customer Profile Analytics Pull customer data from multiple sources to create in-depth analytics and a single view to create known users. Visualize customer data, build dynamic segments and analyze segments and individuals. Integration with Salesforce allows for enhanced customer profiles through tracked user and account behavior on your digital touchpoints.	■	■	✓	✓	✓

Feature	6.2	7.0	7.1	7.2	7.3
Page Analytics Measure page performance through page data visualizations in an aggregated view. Track behavior and understand page performance with touchpoint charts, bounce rate metrics and time on page. Track interactions on your custom solution developed with DXP using simple tags.					
Traffic and Path Analytics Display traffic types, filter and visualize paths for easy source identification. Display assets and filter interactions on each asset by touchpoint. Liferay DXP 7.3 includes engagement and SEO metrics in the very context of the display pages.					
Asset Analytics Track and visualize engagement levels for assets and web content through an aggregate view. Asset-specific reports detail use case-specific insight about usage, views and engagement.					
A/B Testing Content creators can use A/B testing to create and customize tests to evaluate which elements on Content Pages perform better and edit content accordingly. Liferay DXP's A/B tests leverage Bayesian statistics to identify the probable values of lift for a variant, allowing your business to make more informed decisions. Native integration with Liferay Analytics Cloud allows for data collected for the running test to determine a winning variant. Learn More >					

Cloud and Infrastructure

Simplify infrastructure management and reduce IT spending so that you can focus on what matters in your business.

Feature	6.2	7.0	7.1	7.2	7.3
Cloud Deployment (Liferay DXP Cloud) Liferay DXP can be deployed quickly and managed in the cloud with Liferay DXP Cloud, an enterprise PaaS offering available with a separate subscription. Liferay DXP Cloud takes care of many infrastructure needs to free up IT resources to focus on building the new applications and features that bring value to the business. See Liferay DXP Cloud for more information.					
Cloud Support On-premise and hosted cloud configurations are also supported by Liferay with multiple hosting and managed hosting providers available today including AWS EC2, Azure and more. See Liferay Global Services for more information.					
High Availability and Scalability The Liferay platform has been tested to support tens of thousands of simultaneous virtual users as an infrastructure portal and in collaboration use cases on a single application server. It has also been deployed in large installations with millions of active users in the most demanding environments. Liferay DXP is highly scalable—for example, it has been certified to work seamlessly with data grid products for massive scalable data caches. Additionally, customers can feel secure in deploying Liferay to cloud-based environments—many users have deployed the platform to private clouds built on top of VMWare, Xen and KVM technologies and to public cloud infrastructures like Amazon EC2.					

What's Next

Learn more about how Liferay can help your business take the next step in your digital strategy.

Request a demo from one of our team members at liferay.com/request-a-demo.



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.

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