# **Technical Specifications**

Deployment Compatibility

## **Operating Systems**

- Linux (CentOS, RHEL, SUSE, Ubuntu, and others)
- Unix (AIX, HP-UX, Solaris, and others)
- Windows Server
- Mac OS X

#### Public & Private Clouds

Liferay DXP is deployable to the cloud and virtualized environments.

# **Application Servers**

- JBoss EAP
- Resin
- tcServer
- Tomcat
- WebLogic
- WebSphere
- Wildfly

#### **Databases**

- DB2
- MariaDB
- MySQL
- Oracle
- PostgreSQL
- SQL Server
- Sybase

# Platform Details

# Performance & Scalability

- Clustering at any combination of tiers (presentation, service, business logic, and database)
- Advanced caching (i.e., Ehcache)
- Elasticsearch platform support
- Performance monitoring support (JMX, Java profiling, etc.)

## Security

- Government-grade encryption such as: DES, MD5, SHA and RSA.
- Pluggable authentication
- Email verification
- Granular permissioning
- LDAP authentication
- Session management

# Developer Languages

- Java
- Groovy
- Ruby
- Python
- Scala

#### Web Services

- SOAP
- JSON
- RMI
- Spring Remoting
- WebDAV

## **Identity Management Support**

- LDAP authentication
- SAML producer / consumer OAuth
- Oracle Access Manager
- Novell Identity Manager
- Sun Identity Manager
- OpenSSO / OpenAM
- SiteMinder
- Tivoli Access Manager
- Facebook standards

## JavaScript Frameworks

- AlloyUI
- GWT
- JQuery
- JSF
- Metal.js
- Vaadin

#### Frontend Frameworks

- AlloyUI
- Application Display Templates
- Device detection
- TagLibs
- Twitter Bootstrap

#### **Backend Frameworks**

- Asset
- Cache
- Comments
- Data handlers
- File storage
- Membership policies
- Message bus
- Permissions
- Ratings
- Recycle bin
- Scheduler
- Scripting
- ServiceContext
- Upgrade
- Workflow

### Theme Developer Languages

- Freemarker
- Velocity

# Other Standards/Technologies

- AJAX
- iCalendar & Microformat
- JSR-168 (Portlet)
- JSR-286 (Portlet 2.0)
- WSRP 1 & 2
- JSR-127 (JSF)
- JSR-314 (JSF 2.0,2.1), JSR-344 (JSF 2.2)
- JSR-170 (Content Repository)
- Spring 3.0 & AOP
- CMIS 1.0/2.0
- OpenSearch 1.1

- OpenSocial 2.5
- Hibernate collection of projects
- OSGi Core 6.0
- SAML 2.0
- OAuth 1.1

# Content Management Features Content Repository

- Multi-repository support
- Customizable document types
- Metadata per document type
- Microsoft Office© integration
- CMIS support
- Check in/check out
- · Content previews
- Content versioning
- · Define workflows per document type
- Mobile/desktop file synchronization using Liferay Sync

# Site Publishing

- Dynamic and static site templates
- Drag and drop site maps
- Sitemap protocol support
- Friendly page URLs
- Remote server staging and scheduling
- Multiple site variations/versions
- Faceted search
- Recycle bin
- User customizable pages

#### **Content Creation**

- AlloyEditor
- Templating: FreeMarker or Velocity
- Global content sharing between sites
- Content sharing in site hierarchy

### Themes & Layout

- JavaScript framework: AlloyUI 3.0
- CSS framework: Twitter Bootstrap
- HTML 5.0 compliant

- Responsive mobile theme
- Multiple page layout templates

#### **Mobile**

- Mobile previews within browser
- Mobile responsive theme
- Mobile device recognition
- Eclipse-based Mobile SDK

# Collaboration & Social Features

# Wikis, Blogs, Message Boards

- AlloyEditor
- · Ratings / Comments
- RSS feeds
- · Categories / Tags
- Related assets
- Reader subscriptions

#### Wikis

- AlloyEditor
- Versioning & reversion
- Creole, HTML or MediaWiki syntax
- Attach files
- Threaded comments

## Blogs

- AlloyEditor
- Recent blogs lists
- Badge icon for social activity
- Social bookmarks
- Inappropriate content flagging

## Message Boards

- · Recent Posts list, My Posts list
- Reader subscriptions
- Anonymous posting
- Attach files
- Support for categories/threads reorganization
- Inappropriate content flagging

### Online Presence & Social

- Friends list
- Activity wall
- Activity tracker

## 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