

Learning Paths - Level 01

Users and Permissions

Session Breakdown

- 5 min — 01 Introduction
- 15 min — 02 Customizing User Experiences with User Groups, Roles, and Permissions
- 15 min — 03 Managing External Parties with Accounts



Part 01

Introduction and Session Scope



What do we mean by User Management and why is it important?

Introduction

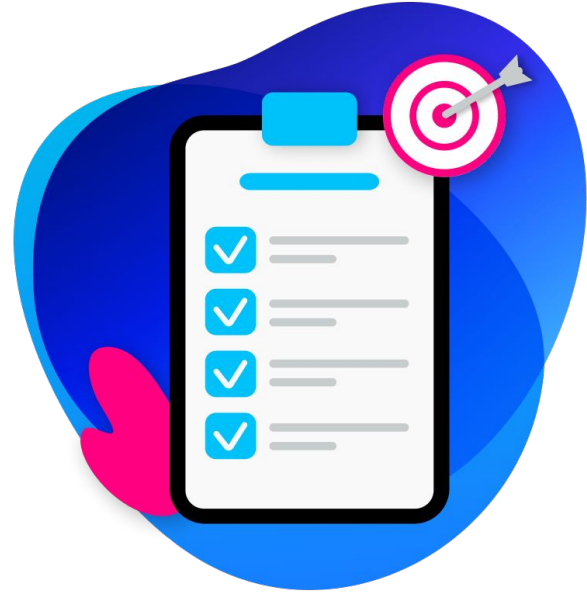
- User experience is everything on a platform
- Broad term that describes handling activities related to user access, permissions, and actions
- The primary means of customizing user experience on a platform (i.e. distinguishing between user privileges, restricting user access)
- Driven by two considerations:
 - Allow meaningful interaction with the platform
 - Maintain security in an organization



What we are planning to cover in this session

Session Scope

- Understanding Liferay's framework for user management
- See the granularity and versatility of Liferay permissions
- Learning best practices when designing permissioning architecture
- Examine user management in our case study–Clarity Vision Solutions



Part 02

Customizing User Experiences with User Groups, Roles, and Permissions



Clarity's Critical Success Factors

- ✓ 1. Non-technical participation
- ✓ 2. Simplified maintenance (and evolution)
- ✓ 3. Future proofed and flexible
- ✓ 4. Increase engagement and user experience through personalization
- ✓ 5. Risk mitigation with better governance
- ✓ 6. Lower investment / total cost of ownership



Customizing user experiences

Clarity Business Requirements

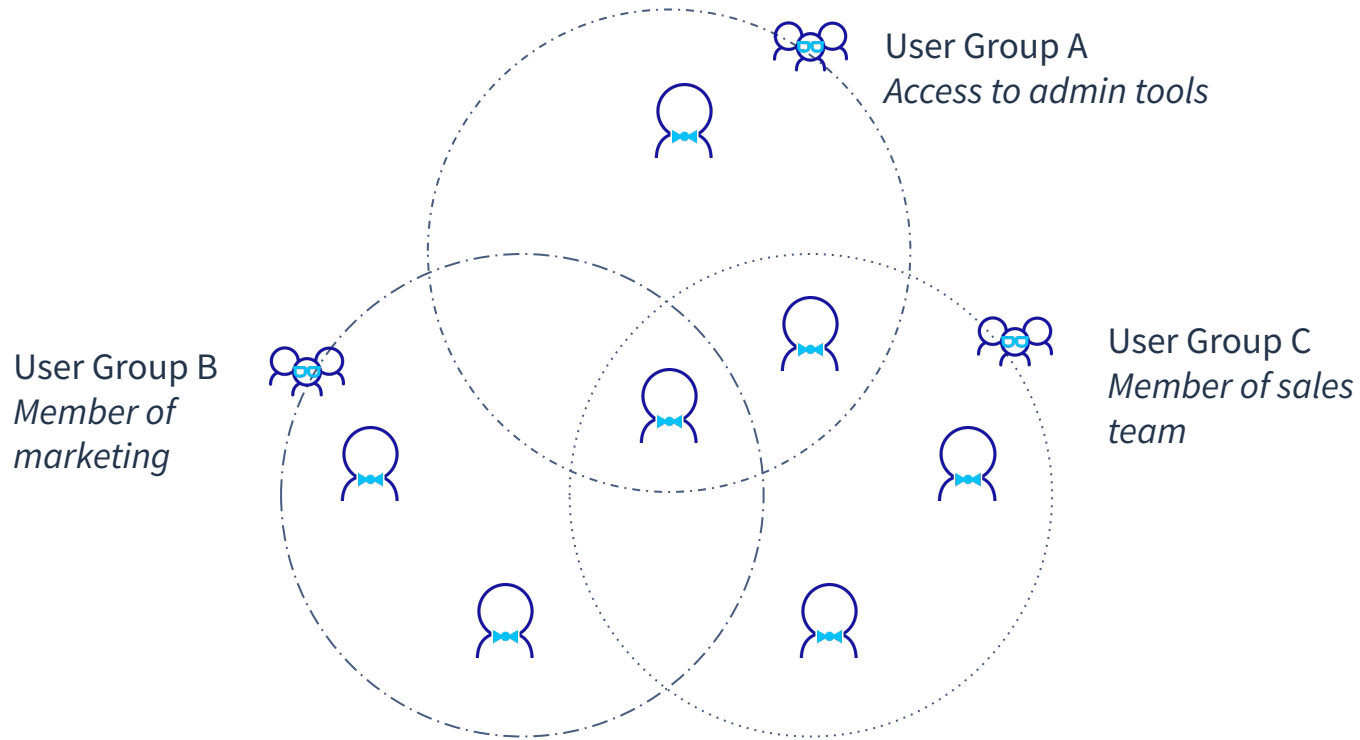
- Make user management accessible to non-technical parties
- Accommodate future growing user bases with a scalable yet flexible system
- Provide all users necessary and appropriate means of interacting with the platform
- Promote reusable user segments and reduce user management time and costs
- Allow both internal and external users to engage with the platform in meaningful ways



Users and User Groups

- The user is the fundamental entity that interacts with Liferay's platform
- Managing users with user groups tends to fall into one of three common use cases:
 - Collecting permissions
 - Managing site membership
 - Managing users' personal pages
- User groups represent commonalities, responsibilities, or other shared features between users
- User groups are LDAP-compatible, meaning groupings from LDAP systems can be mapped to Liferay User Groups





What is a role and how does it interact with permissions?

Roles and Permissions

- Roles are collections of permissions
- Permissions are the individual checks that grant a user access to an action or resource
- Users or user groups and roles are related by a *has-a* relationship
 - I.e. Adam has a Administrator role
 - I.e. The “Content Management” User Group has a Content Manager role
- Creating roles promotes *reuse* in permissions structure, and disallows direct assignment of permissions to users
- Permissions are *additive* and *not exclusionary*



How are permissions defined?

Configuring Permissions

Users and Organizations

APPLICATION PERMISSIONS ⓘ

<input type="checkbox"/>	Action
<input type="checkbox"/>	Access in Control Panel
<input type="checkbox"/>	Configuration
<input type="checkbox"/>	Export User
<input type="checkbox"/>	Permissions
<input type="checkbox"/>	Preferences
<input type="checkbox"/>	View

Associated with roles

RESOURCE PERMISSIONS ⓘ

USER

<input type="checkbox"/>	Action
<input type="checkbox"/>	Activate
<input type="checkbox"/>	Deactivate
<input type="checkbox"/>	Delete
<input type="checkbox"/>	Impersonate
<input type="checkbox"/>	Permissions
<input type="checkbox"/>	Update
<input type="checkbox"/>	View

Associated with instances of resources

Permissions ✕

Search for

Role	View	Add to Page	Configuration	Permissions	Preferences
👤 Analytics Administrator	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
👤 Guest	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
👤 Owner	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
👤 Portal Content Reviewer	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
👤 Power User	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
👤 Publications User	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
👤 Site Content Reviewer	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
👤 Site Member	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
👤 User	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

How are permissions defined?

Configuring Permissions (cont.)

Users and Organizations

Users Organizations

Filter and Order Search for

Export Users
Manage Custom Fields

Application permissions

Name	Screen Name	Job Title	Organizations	User Groups
<input type="checkbox"/> <u>Test Test</u>	<u>test</u>			<u>Test group 1</u>

Resource permissions

How are permissions defined?

Configuring Permissions (cont.)

Users and Organizations

APPLICATION PERMISSIONS ⓘ

<input type="checkbox"/>	Action
<input type="checkbox"/>	Access in Control Panel
<input type="checkbox"/>	Configuration
<input type="checkbox"/>	Export User
<input type="checkbox"/>	Permissions
<input type="checkbox"/>	Preferences
<input type="checkbox"/>	View

Associated with roles

RESOURCE PERMISSIONS ⓘ

USER

<input type="checkbox"/>	Action
<input type="checkbox"/>	Activate
<input type="checkbox"/>	Deactivate
<input type="checkbox"/>	Delete
<input type="checkbox"/>	Impersonate
<input type="checkbox"/>	Permissions
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<input type="checkbox"/>	View

Associated with instances of resources

Permissions ✕

Search for

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👤 Owner	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
👤 Portal Content Reviewer	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
👤 Power User	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
👤 Publications User	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
👤 Site Content Reviewer	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
👤 Site Member	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
👤 User	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

What are the different types of roles and what are they used for?

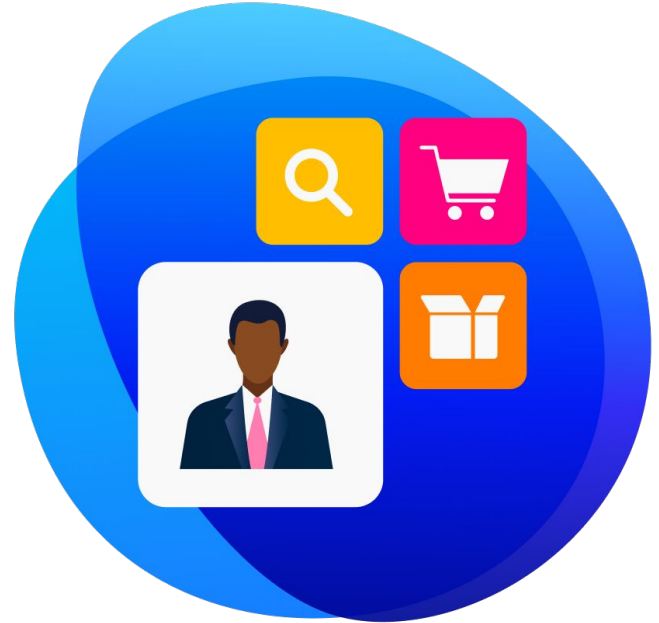
“Role” Call

- **Regular Role** - instance-wide [most expansive] permission scope, often given to users who need administrative access
- **Site Role** - permissions that are scoped per site; assigning them follows principle of least privilege
- **Organization Role** - permissions that are scoped to a particular organization, sometimes the in-between level of regular and site roles
- **Asset Library Role** - permissions attached specifically to shared resources; collects access to various categories of assets under asset library
- **Account Role** - collections of permissions given to users of accounts, used to customize user experience for external parties



Designing Role Architecture

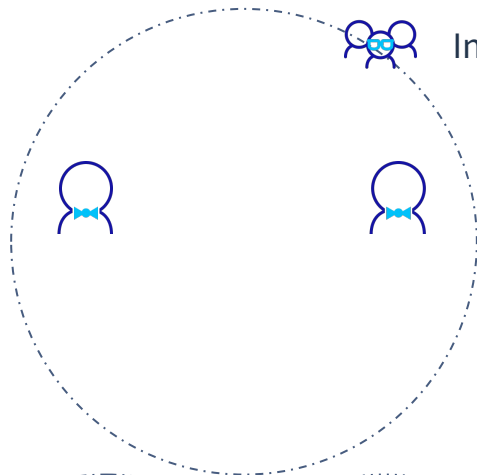
- Start by listing out responsibilities (roles)
- Evaluate responsibilities and scope them into the 4 categories of roles, Regular, Site, Organization, or Asset Library-related, according to principle of least privilege
- Match scoped role-responsibilities to user groups
- Optionally, factor out shared groups of permissions to reduce duplicate permissions
- There is no singular right solution



Roles in Action

- Clarity has different teams to facilitate daily operations, each with their respective responsibilities
 - **Info tech team** (IT dept.): Administrative staff trained on user management in Liferay, responsible for resolving platform questions from employees and customers
 - **Site management team** (Marketing dept.): Staff responsible for site and page creation and maintenance. They create the site and page structure on the Clarity platform, but do not touch content
 - **Content creation team** (Marketing dept.): Staff that creates and owns content that's displayed on Clarity's various sites

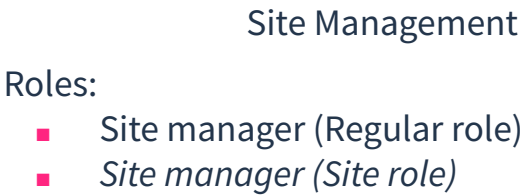
Info tech	Site mgmt.	Content creation
User management (Regular)	Site management (Regular)	Site page editing (Site)
Account management (Organization)	Site management (Site)	Asset library management (Asset Library)



Info Tech Team

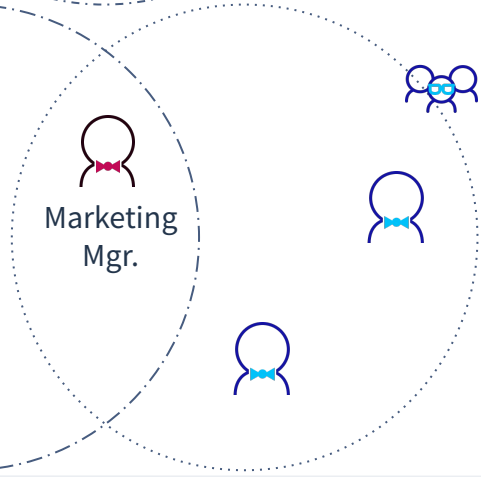
Roles:

- User admin (Regular role)
- Account manager (Organizational role)



Roles:

- Site manager (Regular role)
- *Site manager (Site role)*



Marketing Mgr.

Roles:

- Site editor (Site role)
- *Asset library manager (Asset library role)*

Demo – User Groups, Roles and Permissions

Search

Summary

Control Panel

General Permissions

Users

Accounts

Sites

Configuration

Notifications

Object

Security

System

Marketplace

Commerce

Order Management

Inventory Management

Pricing

Summary

Permissions

Sites and Asset Libraries

Asset Libraries: Access in Control Panel

[Remove](#)

Asset Libraries: View

[Remove](#)

Asset Library Settings > Asset Library Entry: View

Liferay DXP

[Remove](#)

Pages: Access in Site and Asset Library Administration

All Sites and Asset Libraries

[Remove](#)

Pages: Add to Page

All Sites and Asset Libraries

[Remove](#)

Pages: Configuration

All Sites and Asset Libraries

[Remove](#)

Pages: View

All Sites and Asset Libraries

[Remove](#)

Pages > Page: Add Page

All Sites and Asset Libraries

[Remove](#)

Pages > Page: Configure Applications

All Sites and Asset Libraries

[Remove](#)

Pages > Page: Page Rule Builder

All Sites and Asset Libraries

[Remove](#)

Pages > Page: Update

All Sites and Asset Libraries

[Remove](#)

Part 03

Managing External Parties with Accounts



Clarity's Critical Success Factors

- ✓ 1. Non-technical participation
- ✓ 2. Simplified maintenance (and evolution)
- ✓ 3. Future proofed and flexible
- ✓ 4. Increase engagement and user experience through personalization
- ✓ 5. Risk mitigation with better governance
- ✓ 6. Lower investment / total cost of ownership



Clarity Business Requirements

- Allow external parties (i.e. businesses, customers) to engage with the platform
- Support non-technical management of external party user experience
- Organizationally distinguish between internal and external user management to reduce clutter



Accounts

- Accounts, introduced in 7.4, are an organizational structure to manage users and customize user experiences related to commerce or business needs
- The account framework is designed specifically for B2B or B2C needs
- Accounts can be one of 3 types:
 - **Business:** account that can have multiple users
 - **Person:** account that is associated to at most one user
 - **Guest:** account that allows unregistered users to interact with the site



Account Groups

- Like user groups, account groups collect accounts into logical (or arbitrary) categories (i.e. geography, industry, etc.), but account groups are integrated with Liferay's commerce framework, enabling administrators to:
 - Target price lists (i.e. Platinum members receive 10% discount on their orders)
 - Targeted discounts (i.e. Gold members receive free shipping)
 - Limit product visibility (i.e. Certain products are visible only to NA customers)
- Roles cannot be assigned to account groups as they are assigned to user groups



Account Roles

- Within a business account, users may have different roles and responsibilities
- Account roles allow for varying user experiences within an account
- There are 2 kinds of account roles:
 - **Shared**—These roles exist on all accounts and give the same set of permissions to all users who have this role
 - **Owned**—These roles are created per account, and can be further customized for each account
- Note: shared account roles cannot be customized per account, (i.e. referring to account-specific resources)

Shared Account Roles	Owned Account Roles
<ul style="list-style-type: none">■ Account roles available for all accounts on the instance■ Account roles give the same permissions across all accounts■ Cannot be customized at the account level	<ul style="list-style-type: none">■ Account roles are created per account and not shared■ Must use owned account roles to interact with account-specific resources■ A lot of possible overlap across accounts if not designed properly

How do Accounts fit in to Liferay's permission framework?

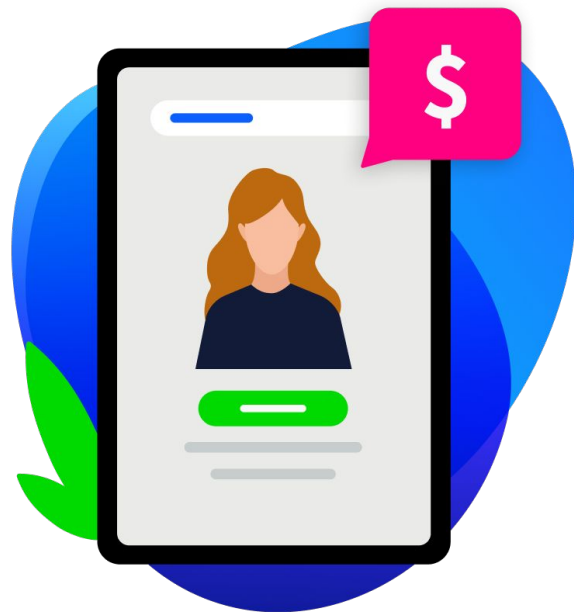
Account Permissioning

- Accounts are built on Liferay's permissions framework so that visibility rules are configured for each account
 - I.e. Orders and shipments that are placed on an account are by default visible only to authorized users in the same account
- Account permissions can also be defined at the group scope level, allowing account users to interact with resources owned by other accounts (i.e. Sites, channels, asset libraries, etc.)
 - I.e. Clarity has 5 accounts for 20/20 Eyewear Company, that belong to different regions. Clarity can use group-scope permissions to allow the different accounts to collaborate on shared resources



Accounts in Action

- Clarity has suppliers and partners that work with the eyewear company to supply its online sales
- Clarity customers also need a way to purchase directly from Clarity's site
- Clarity needs a management system that allows for a customized user experience as well as the ability to engage different audience segments





**Loyalty
Account Group**





Empower access, enrich experiences.
Re-define user management with Liferay.

Thank you