

Demystifying Collections, Info Templates, Collection Pages, and Display Pages

Delivering Content Efficiently with the Power of Collections



Lead Sales Engineer
Wesley Kempa

Demystifying Collections, Info Templates, Collection Pages, and Display Pages

Delivering Content Efficiently with the Power of Collections



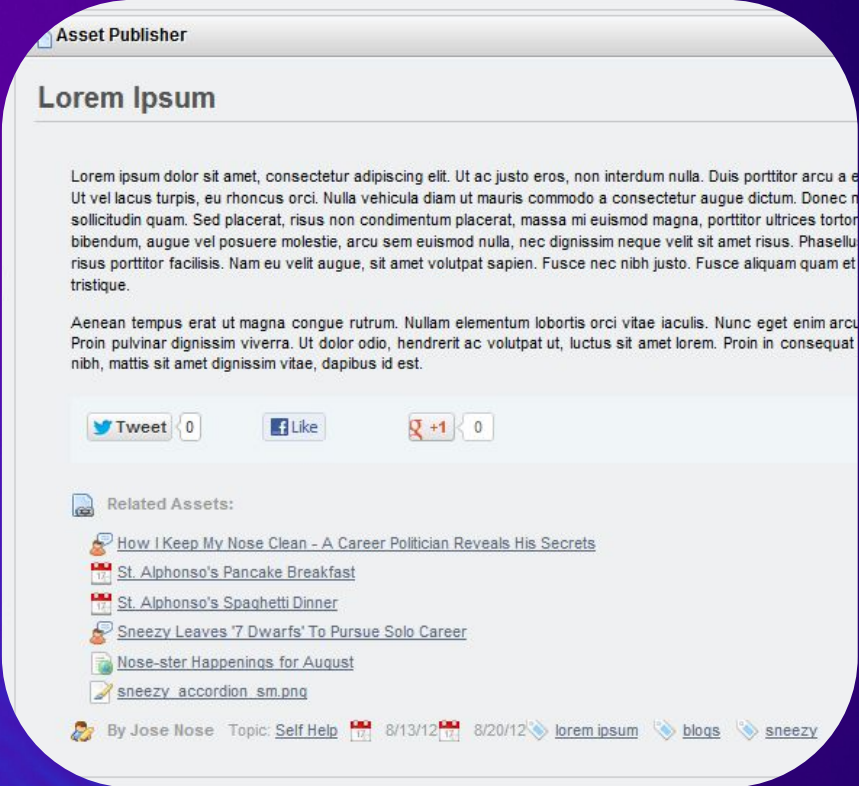
Lead Sales Engineer
Wesley Kempa

Not too long ago...



Before Collections and Collection Displays

Not too long ago...



Before Collections and Collection Displays

Then and Now

Asset Publisher

Lorem Ipsum

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Ut ac justo eros, non interdum nulla. Duis porttitor arcu a e. Ut vel lacus turpis, eu rhoncus orci. Nulla vehicula diam ut mauris commodo a consectetur augue dictum. Donec n sollicitudin quam. Sed placerat, risus non condimentum placerat, massa mi euismod magna, porttitor ultrices tortor bibendum, augue vel posuere molestie, arcu sem euismod nulla, nec dignissim neque velit sit amet risus. Phasellu risus porttitor facilisis. Nam eu velit augue, sit amet volutpat sapien. Fusce nec nibh justo. Fusce aliquam quam et tristique.

Aenean tempus erat ut magna congue rutrum. Nullam elementum lobortis orci vitae iaculis. Nunc eget enim arcu Proin pulvinar dignissim viverra. Ut dolor odio, hendrerit ac volutpat ut, luctus sit amet lorem. Proin in consequat nibh, mattis sit amet dignissim vitae, dapibus id est.

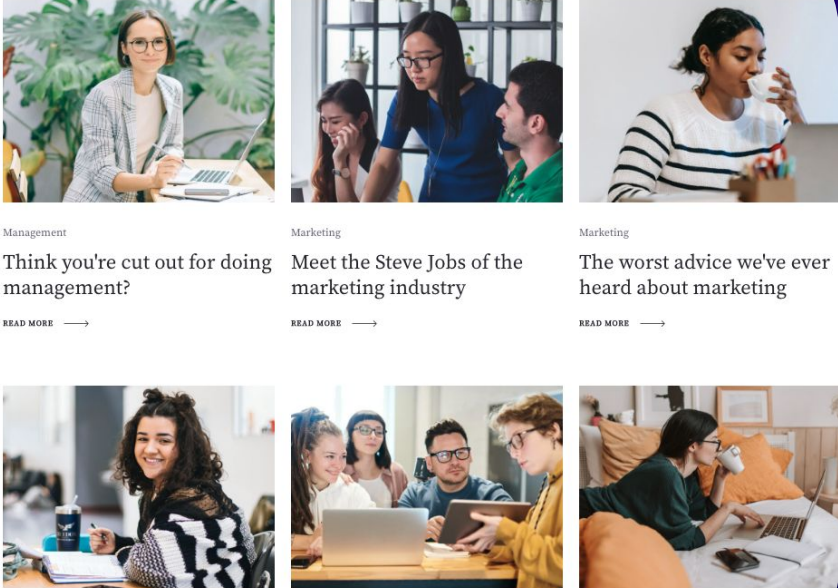
Tweet 0 Like +1 0

Related Assets:

- How I Keep My Nose Clean - A Career Politician Reveals His Secrets
- St. Alphonso's Pancake Breakfast
- St. Alphonso's Spaghetti Dinner
- Sneezy Leaves '7 Dwarfs' To Pursue Solo Career
- Nose-ster Happenings for August
- sneezy accordion_sm.png

By Jose Nose Topic: Self Help 8/13/12 8/20/12 lorem ipsum blogs sneezy

st News VIEW



Management
Think you're cut out for doing management?
READ MORE →

Marketing
Meet the Steve Jobs of the marketing industry
READ MORE →

Marketing
The worst advice we've ever heard about marketing
READ MORE →

Design
Tools everyone in the design industry should be using

Design
When professionals run into problems with design

Design
Great people doing a great job in the design industry

Then and Now

Asset Publisher

Lorem Ipsum

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Ut ac justo eros, non interdum nulla. Duis porttitor arcu a e. Ut vel lacus turpis, eu rhoncus orci. Nulla vehicula diam ut mauris commodo a consectetur augue dictum. Donec n sollicitudin quam. Sed placerat, risus non condimentum placerat, massa mi euismod magna, porttitor ultrices tortor bibendum, augue vel posuere molestie, arcu sem euismod nulla, nec dignissim neque velit sit amet risus. Phasellu risus porttitor facilisis. Nam eu velit augue, sit amet volutpat sapien. Fusce nec nibh justo. Fusce aliquam quam et tristique.

Aenean tempus erat ut magna congue rutrum. Nullam elementum lobortis orci vitae iaculis. Nunc eget enim arcu Proin pulvinar dignissim viverra. Ut dolor odio, hendrerit ac volutpat ut, luctus sit amet lorem. Proin in consequat nibh, mattis sit amet dignissim vitae, dapibus id est.

Tweet 0 Like +1 0

Related Assets:

- How I Keep My Nose Clean - A Career Politician Reveals His Secrets
- St. Alphonso's Pancake Breakfast
- St. Alphonso's Spaghetti Dinner
- Sneezy Leaves '7 Dwarfs' To Pursue Solo Career
- Nose-ster Happenings for August
- sneezy accordion_sm.png

By Jose Nose Topic: Self Help 8/13/12 8/20/12 lorem ipsum blogs sneezy

st News

Management
Think you're cut out for doing management?

Marketing
Meet the Steve Jobs of the marketing industry

Marketing
The worst advice we've ever heard about marketing

Design
Tools everyone in the design industry should be using

Design
When professionals run into problems with design

Design
Great people doing a great job in the design industry

 Liferay® **DEVCON**

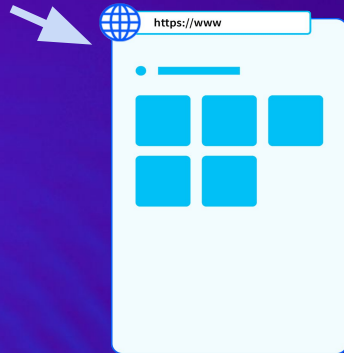
**“ Focus your
DEV TALENT on
key tasks ”**

Comparing Options

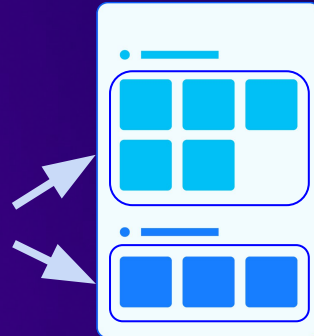
	Collection Displays	Asset Publishers
Supports low-code/no-code templating	✓	✗
Supports client side, post query, filtering	✓	✗
Supports personalization of rendered content	✓	✗
Supports collection pages	✓	✗
Supports content pages	✓	✓

Collection Delivery Approaches

Collection Pages



Collection Display Fragments



Headless APIs for Collections

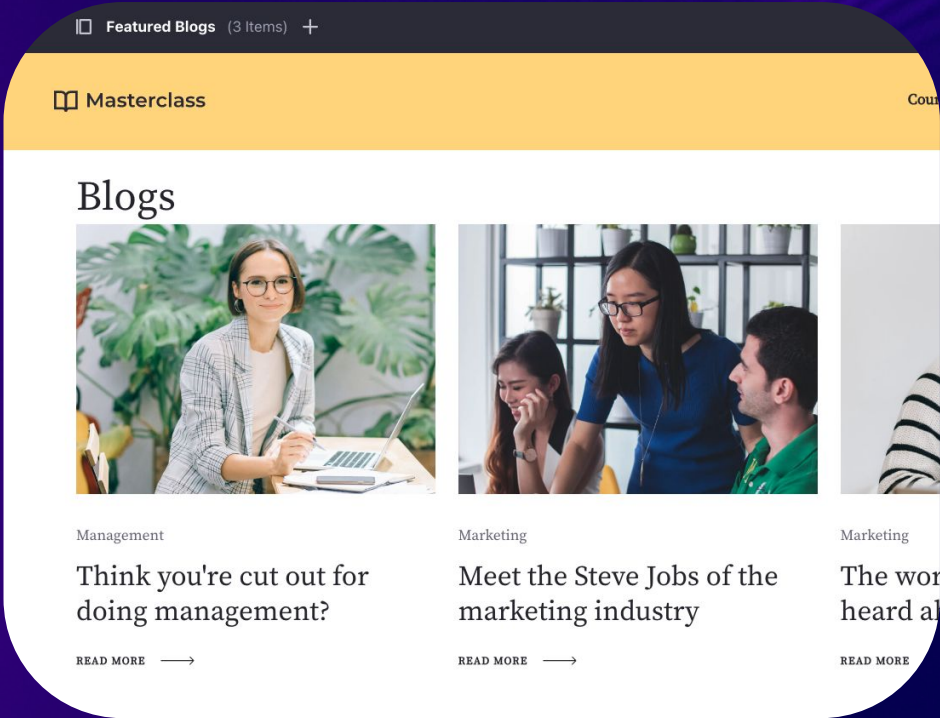


Collections Framework

Collection Pages

A Collection Page links a page to a Collection. Collection Pages include Collection Display Fragments as part of the page.

- Makes it easy for authors to create more content of this type (add button)
- Additional widgets and fragments can be added to a collection page

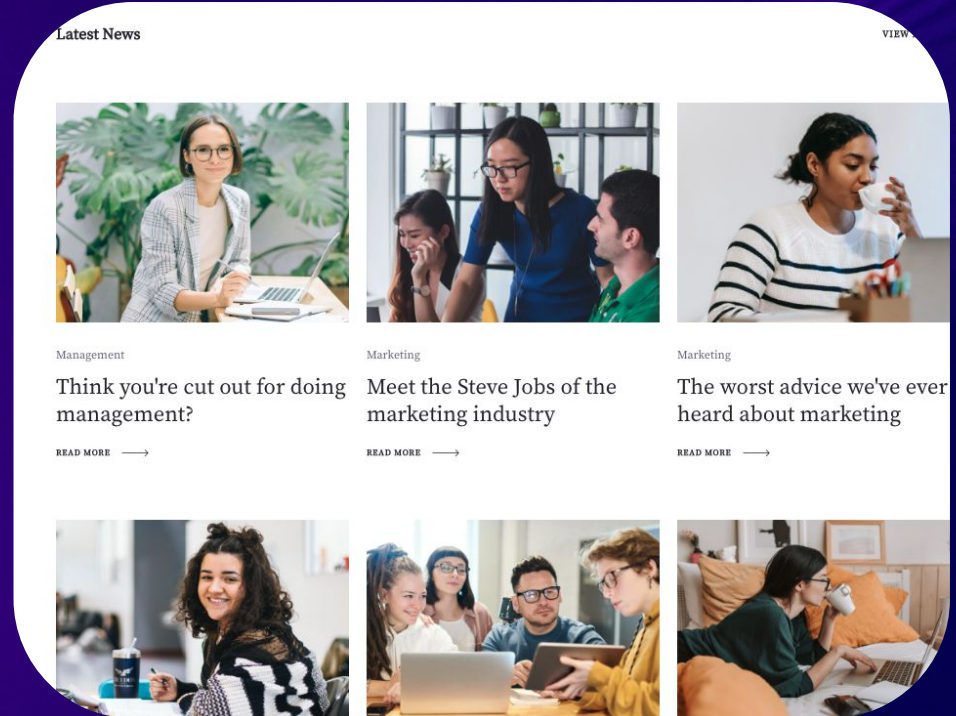


Collections Framework

Collection Display Fragment

A Collection Display fragment shows a Collection in a Content Page and can be configured to display a chosen Collection in any desired style or layout.

- Content mapping surfaces the dynamic content
- Not available for widget pages



Collections Framework

Headless Delivery

Liferay provides fully OpenAPI compliant API services for most of its applications.

Includes both REST and GraphQL

Collection assets are available from `/content-sets/`

- By KEY or UUID
- From Site or Asset Library

```
curl -X 'GET' \
  'https://webserver-lct...prd.lfr.cloud/o/headless-delivery/v1.0/content-sets/44094/content-set-elements' \
  -H 'accept: application/json' \
  -H 'x-csrf-token: IgzSgMln'
```

Request URL

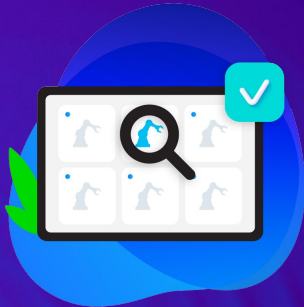
```
https://webserver-lct...prd.lfr.cloud/o/headless-delivery/v1.0/content-sets/44094/content-set-elements
```

Server response

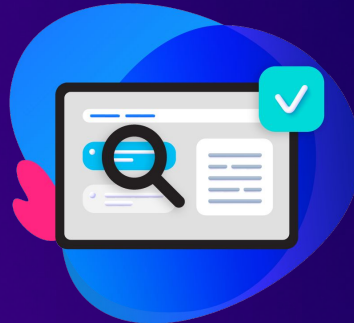
Code	Details
200	<p>Response body</p> <pre>{ "taxonomyCategoryId": 44473, "taxonomyCategoryName": "Design" }, { "taxonomyCategoryId": 49450, "taxonomyCategoryName": "Employees" }], "title": "Product Design Considerations You Might Not Have Considered", "uuid": "1a5f7281-dd24-b952-5d42-4ebdf97c54c3" }, "contentType": "StructuredContent", "id": 48047, "title": "Product Design Considerations You Might Not Have Considered" }], "lastPage": 1, "page": 1,</pre>

Collections Display Components

Fragments



Information
Templates



Display Pages

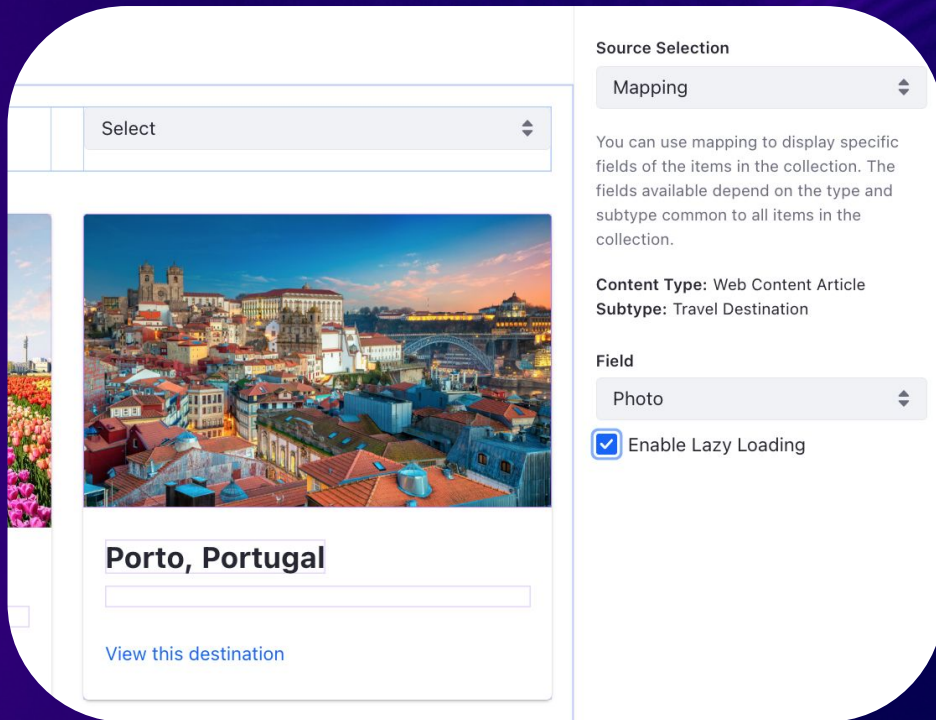


Content Delivery Components

Fragments

Page Fragments are the building blocks for Content, Collection, and Display Pages. They're made from the three components of web pages: CSS, HTML, and JavaScript.

- Allow configuration and mapping
- Can be added inside of Collection Display Components
- Not available for widget pages



The screenshot shows a configuration interface for a content fragment. On the left, there is a preview area with a "Select" dropdown menu and a large image of Porto, Portugal. Below the image, the text "Porto, Portugal" is displayed, followed by a search bar and a link "View this destination". On the right, the "Source Selection" panel is visible, showing a "Mapping" dropdown menu. Below this, there is a text block explaining that mapping can be used to display specific fields of items in a collection. Further down, the "Content Type" is set to "Web Content Article" and the "Subtype" is "Travel Destination". The "Field" dropdown menu is set to "Photo", and the "Enable Lazy Loading" checkbox is checked.

Source Selection

Mapping

You can use mapping to display specific fields of the items in the collection. The fields available depend on the type and subtype common to all items in the collection.

Content Type: Web Content Article
Subtype: Travel Destination

Field

Photo

Enable Lazy Loading

Select

Porto, Portugal

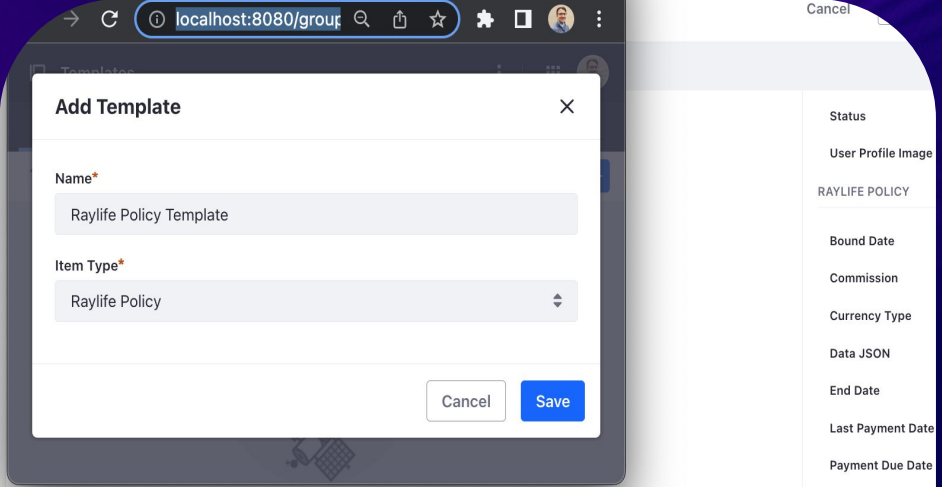
[View this destination](#)

Content Delivery Components

Information Templates

With Information Templates, you can create FreeMarker templates for any item type that implements the Info Framework.

- Entities can have multiple information templates
- Same fields available as for mapping in page editor



The screenshot shows a web browser window at localhost:8080/group. A modal dialog titled "Add Template" is open, allowing the user to create a new template. The dialog has two required fields: "Name*" and "Item Type*". The "Name*" field contains the text "Raylife Policy Template". The "Item Type*" field is a dropdown menu with "Raylife Policy" selected. At the bottom right of the dialog are "Cancel" and "Save" buttons.

Below the dialog, a portion of a table is visible, showing a list of templates. The table has a "Status" column and a "Name" column. The visible entries are:

Status	Name
	User Profile Image
	RAYLIFE POLICY
	Bound Date
	Commission
	Currency Type
	Data JSON
	End Date
	Last Payment Date
	Payment Due Date
	Policy Create Date
	Policy Owner Email
	Policy Owner Name
	Policy Status
	Product External
	Product N

```
<#if (ObjectField_policyCreateDate.getData())??>
  ${ObjectField_policyCreateDate.getData()}
</#if>

<#if (ObjectEntry_userProfileImage.getData())?? && ObjectEntry_userProfileImage.getData()

#if>
```

Content Delivery Components

Display Pages

Display pages act as the default template for displaying specific content types.


- Map assets or asset types to display pages
- Use low-code and no-code page building to define the user experience

Management

Project Manager Certification

This is a short description to introduce the key aspects of the course.

[APPLY NOW](#) →



Course Program

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia.

Duration: 4 weeks

Max Retakes: 2

Pass Percentage: 90%

Lessons: 9

Quizzes: 3

Module 1

Exploration & Strategy

Module 2

Agile Product Development

Module 3

Refining Products

Additional Delivery Options

Custom Collection
Providers



Collection Filters



Personalized
Collections



More Delivery Options

Custom Collection Providers

Custom Collection Providers can be developed in order to meet specific business requirements

- Add a collection provider by implementing the **InfoCollectionProvider** interface
- Define included assets, order, and personalization

```
ExampleCollectionProvider  
implements InfoCollectionProvider<AssetEntry> {
```

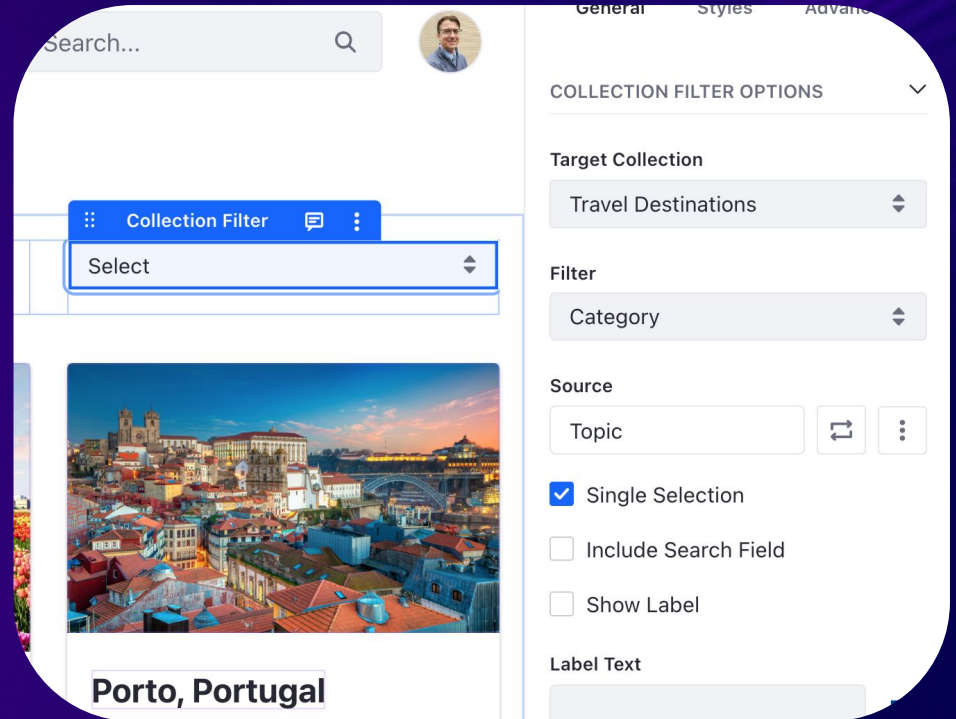
```
@author Pavel Savinov  
*/  
@Component(service = InfoCollectionProvider.class)  
public class ExampleCollectionProvider  
    implements InfoCollectionProvider<AssetEntry> {  
  
    @Override  
    public InfoPage<AssetEntry> getCollectionInfoPage(  
        CollectionQuery collectionQuery) {  
  
        ServiceContext serviceContext =  
            ServiceContextThreadLocal.getServiceContext();  
  
        AssetEntryQuery assetEntryQuery = getAssetEntryQuery(  
            serviceContext.getCompanyId(), serviceContext.getScopeGroupId(),  
            collectionQuery.getPagination(), new Sort("viewCount", true),  
            new Sort("title", true));  
  
        try {  
            return InfoPage.of(  
                _assetEntryService.getEntries(assetEntryQuery),  
                collectionQuery.getPagination(),  
                _assetEntryService.getEntriesCount(assetEntryQuery));  
        }  
  
        catch (Exception exception) {  
            _log.error("Unable to get asset entries", exception);  
        }  
  
        return InfoPage.of(  
            Collections.emptyList(), collectionQuery.getPagination(), 0);  
    }  
}
```

More Delivery Options

Collection Filters

To improve the experience for Users viewing Collections on your Site, you can add Page Fragments to filter content in those Collections.

- Custom Collection Filter Modules can be developed by implementing the following interfaces:
 - InfoFilter
 - InfoFilterProvider
 - FragmentCollectionFilter

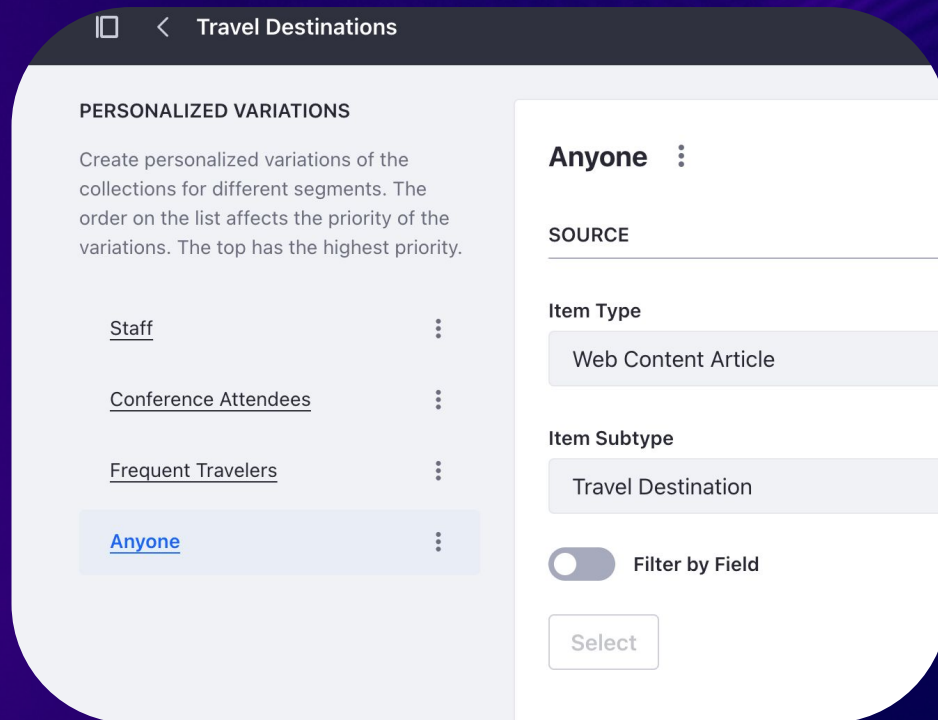


More Delivery Options

Personalized Collections

Personalized collections allow you to quickly deliver targeted content to user segments

- You can create a Personalized Variation of the Collection's items using Segments.
- More features in development!



 Liferay® **DEVCON**

**Lets Build
Great Things
Together!**



How was this session?

Please share your rating in
the event app. Thank you!