BALTIMORE
DRUPALCON 2017

Mastering Drupal 8 Views

Gregg Marshall
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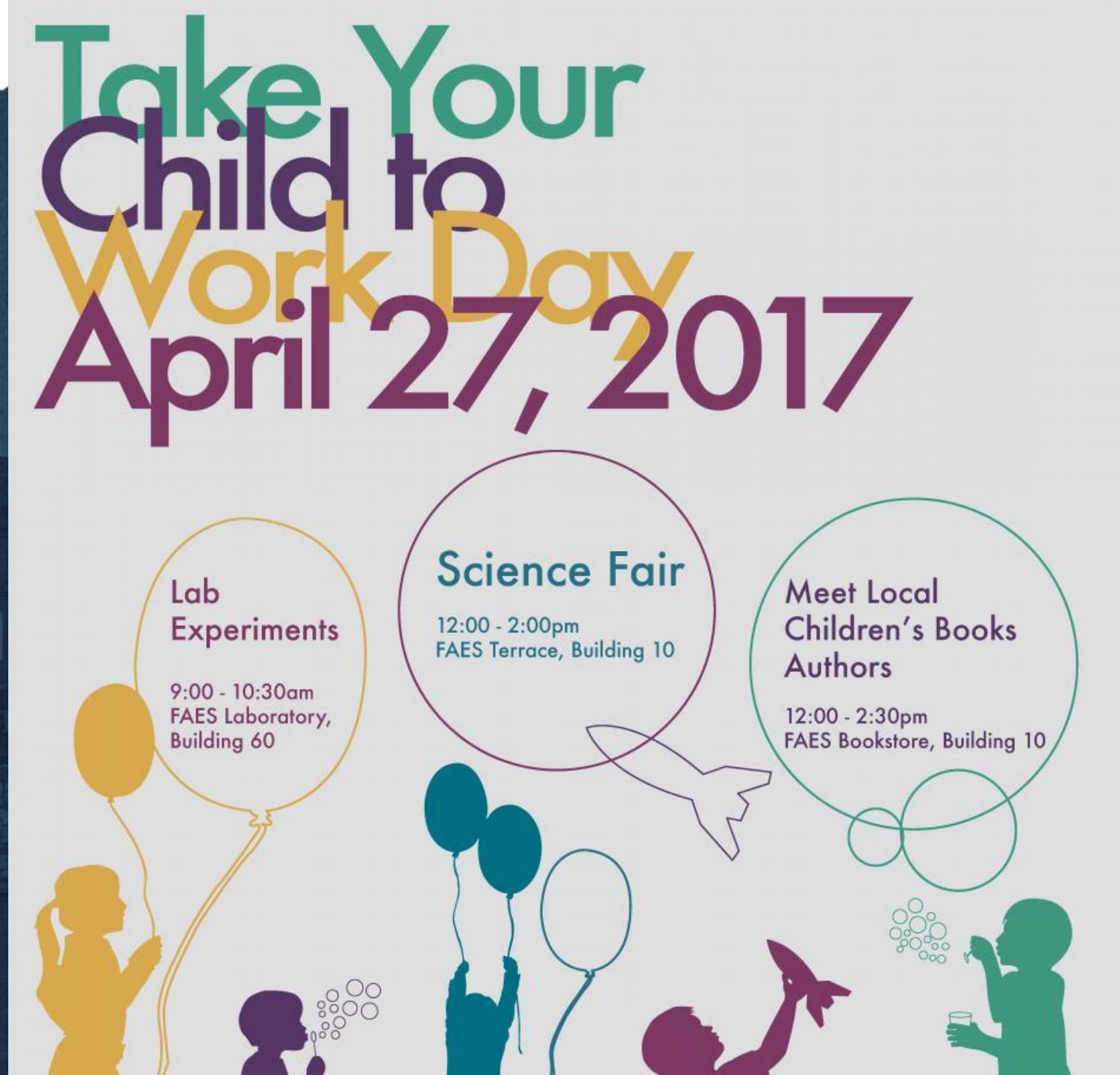
http://bit.ly/D8Views

Today


Take Your Child to Work Day
April 27, 2017
Lab Experiments
9:00 - 10:30am
FAES Laboratory, Building 60
Science Fair
12:00 - 2:00pm
FAES Terrace, Building 10
Meet Local Children's Books Authors
12:00 - 2:30pm
FAES Bookstore, Building 10

About Gregg

accenture digital

Digital Technology Developer Manager
(Drupal Architect)

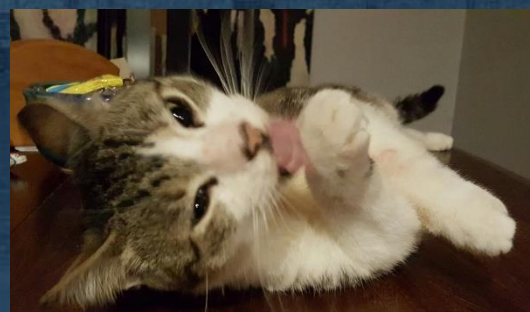
drupal.org since 2006

1st DrupalCon 2010 San Francisco

Acquia
CERTIFIED GRAND MASTER DEVELOPER
2015

About Amanda

BS Business, CU Denver
Graduate certificate energy & sustainability, DU
Drupaleasy Academy graduate
drupal.org since 2008
1st DrupalCon 2017 Baltimore
Intern on a UN humanitarian response Drupal site
Looking for 1st Drupal developer job



Disclaimer

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Sam's
No 3
HAMBURGERS

What is Views?

Views == Views module
(before D8 http://drupal.org/project/views)

Creates dynamic lists

A “report writer”

View == a single list

Why Views?

5 Most recent blog posts block

Manual

- Add blog post
- Edit block with title and link

Automatic (aka Views)

- Add blog post
- Block updates

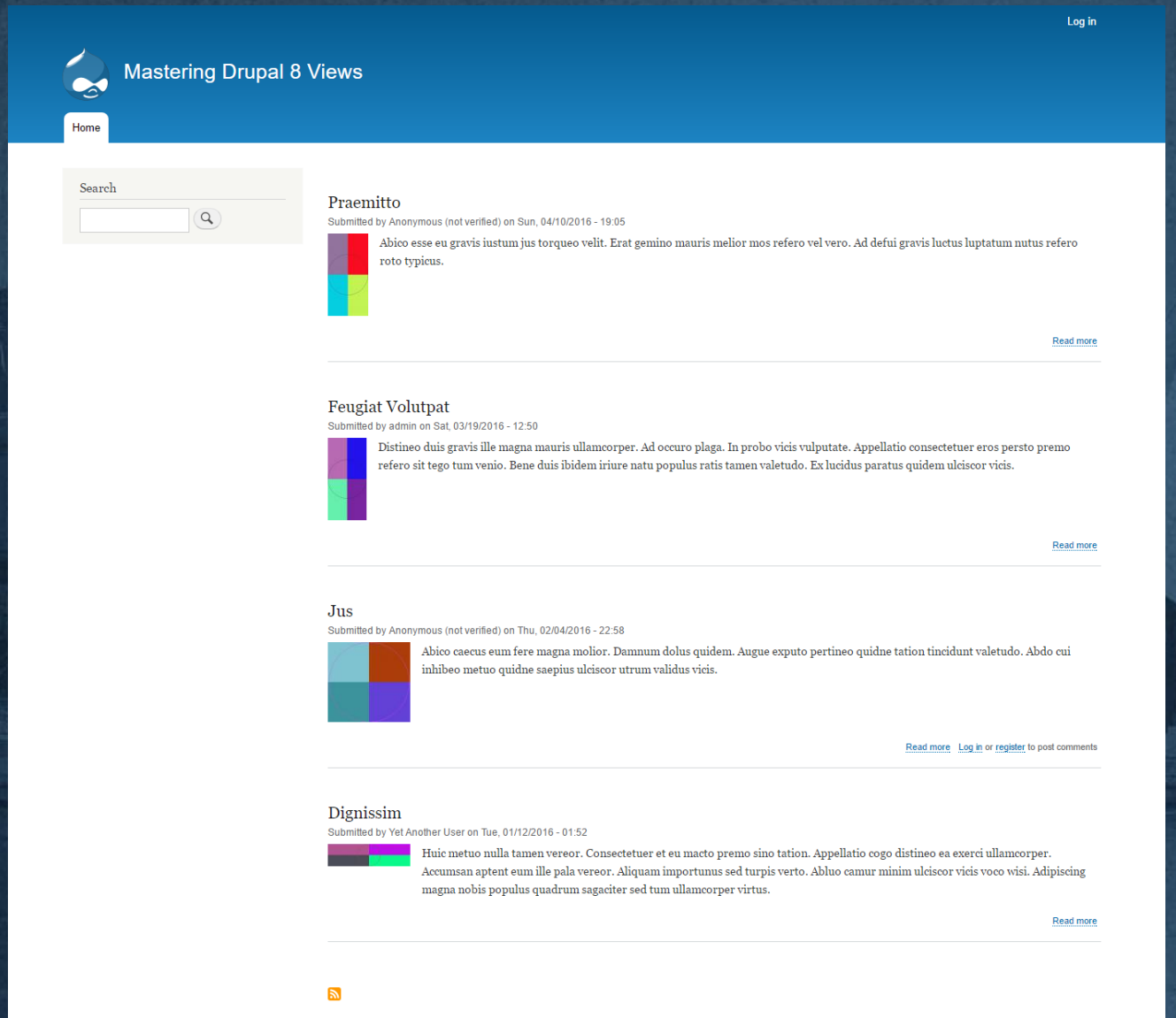
Views is in Drupal 8 Core

Views was #1 Drupal 7 contributed module

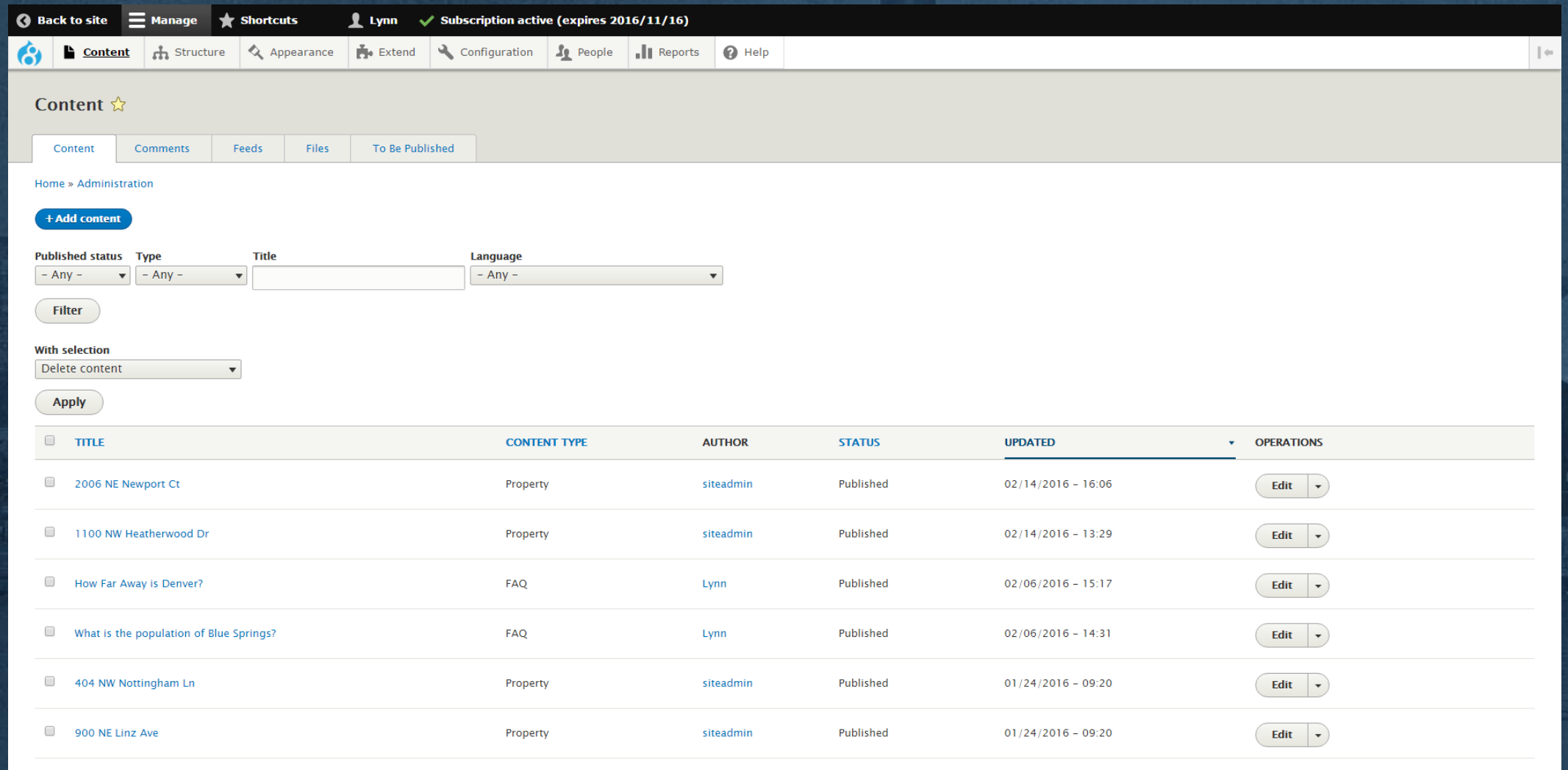
D7 required Views and CTools contributed modules

Front page and many Drupal administration pages are now views

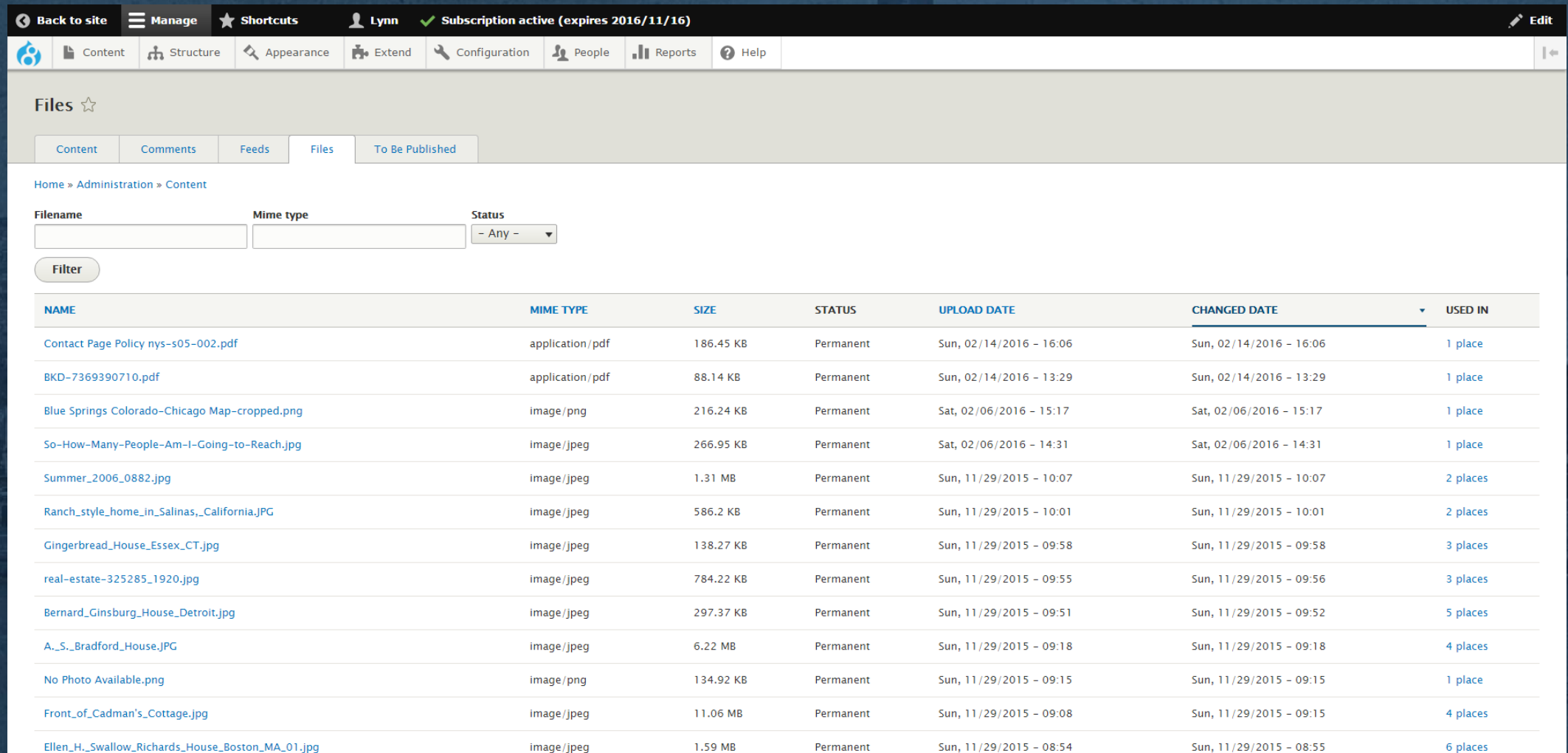
Drupal 8 Views Examples
Front Page



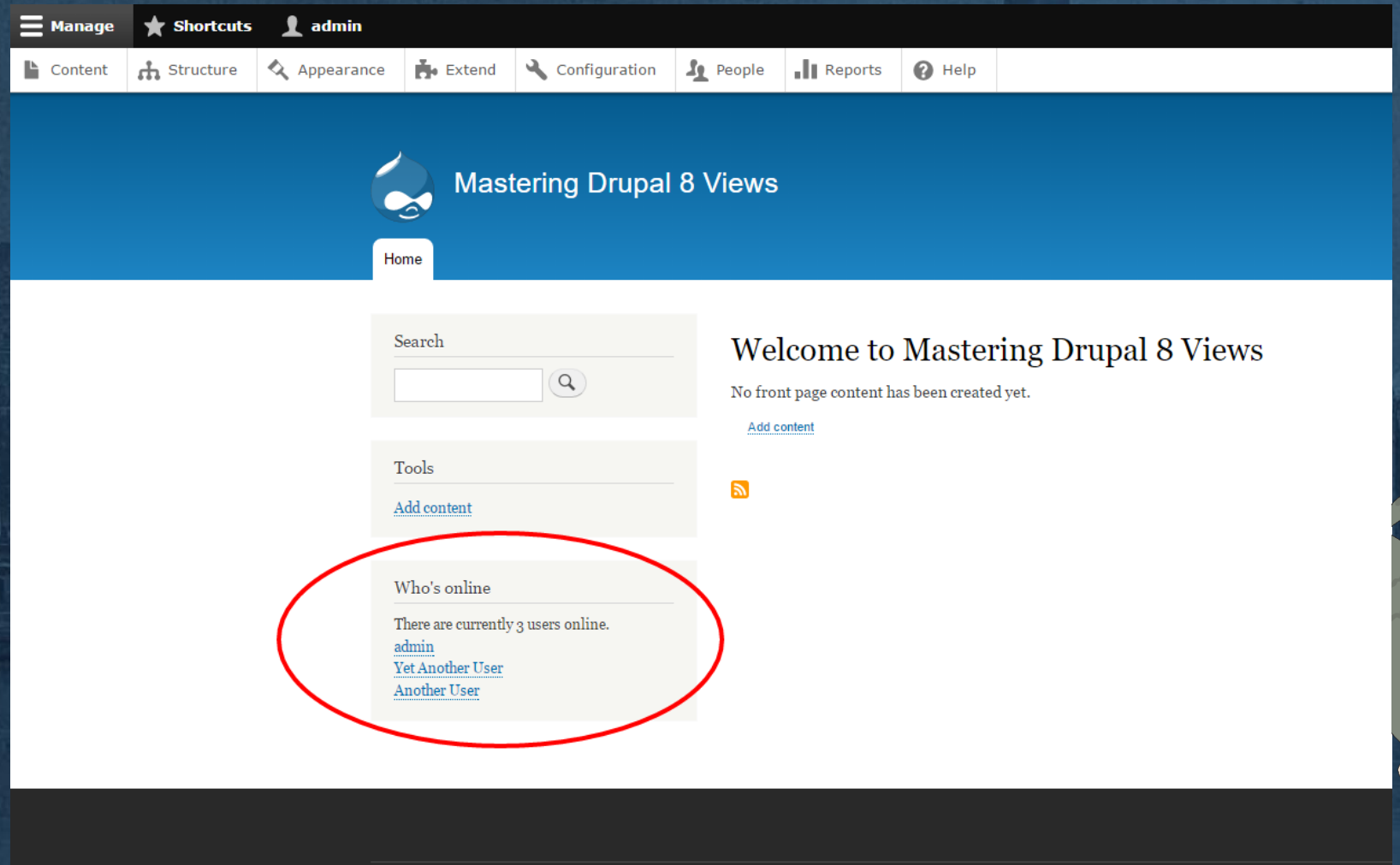
Drupal 8 Views Examples
Content List



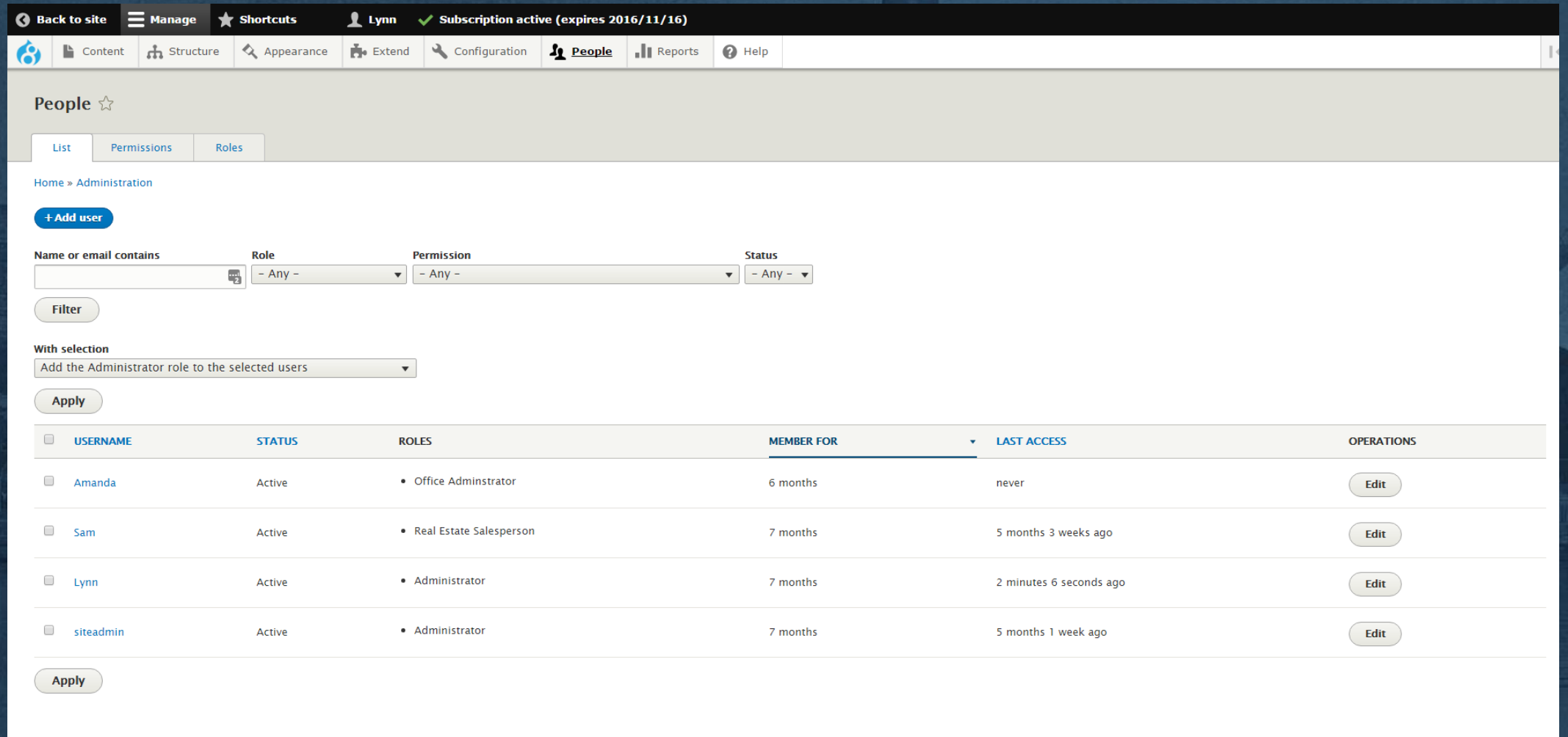
Drupal 8 Views Examples
Files View



Drupal 8 Views Examples
Who's Online



Drupal 8 Views Examples
People List



Components of a View

Base / View Type

Display

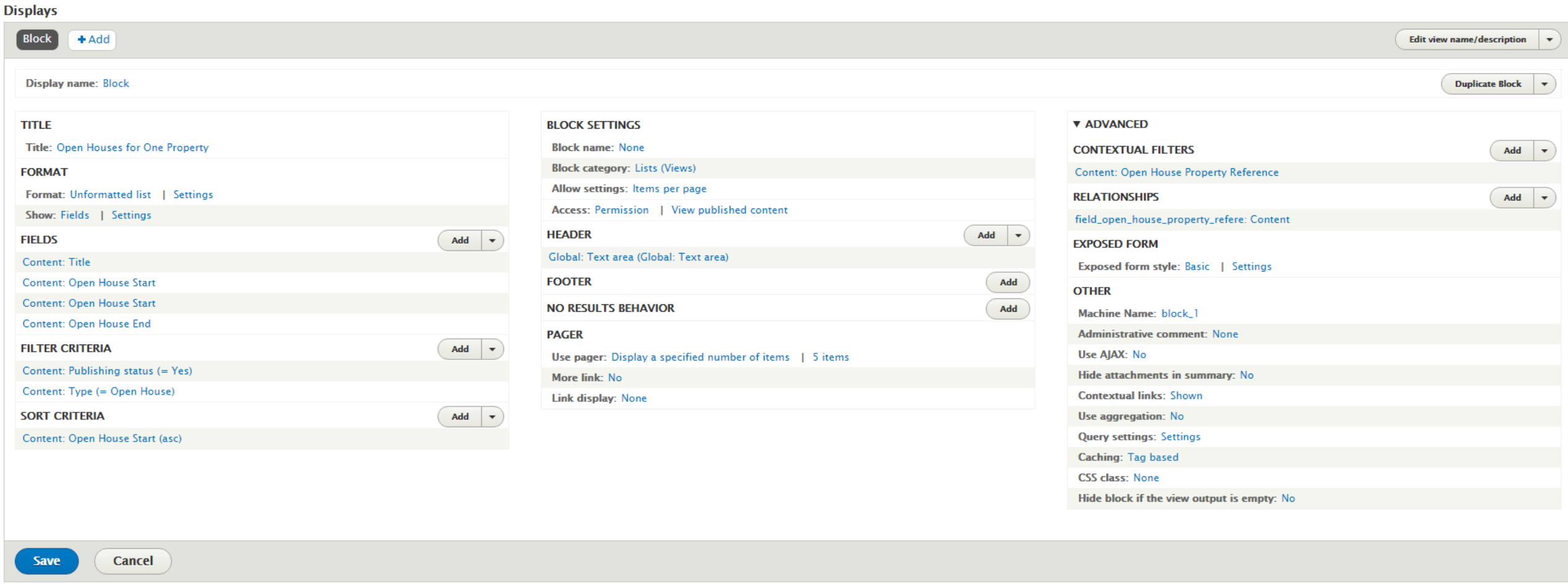
Format

Display type

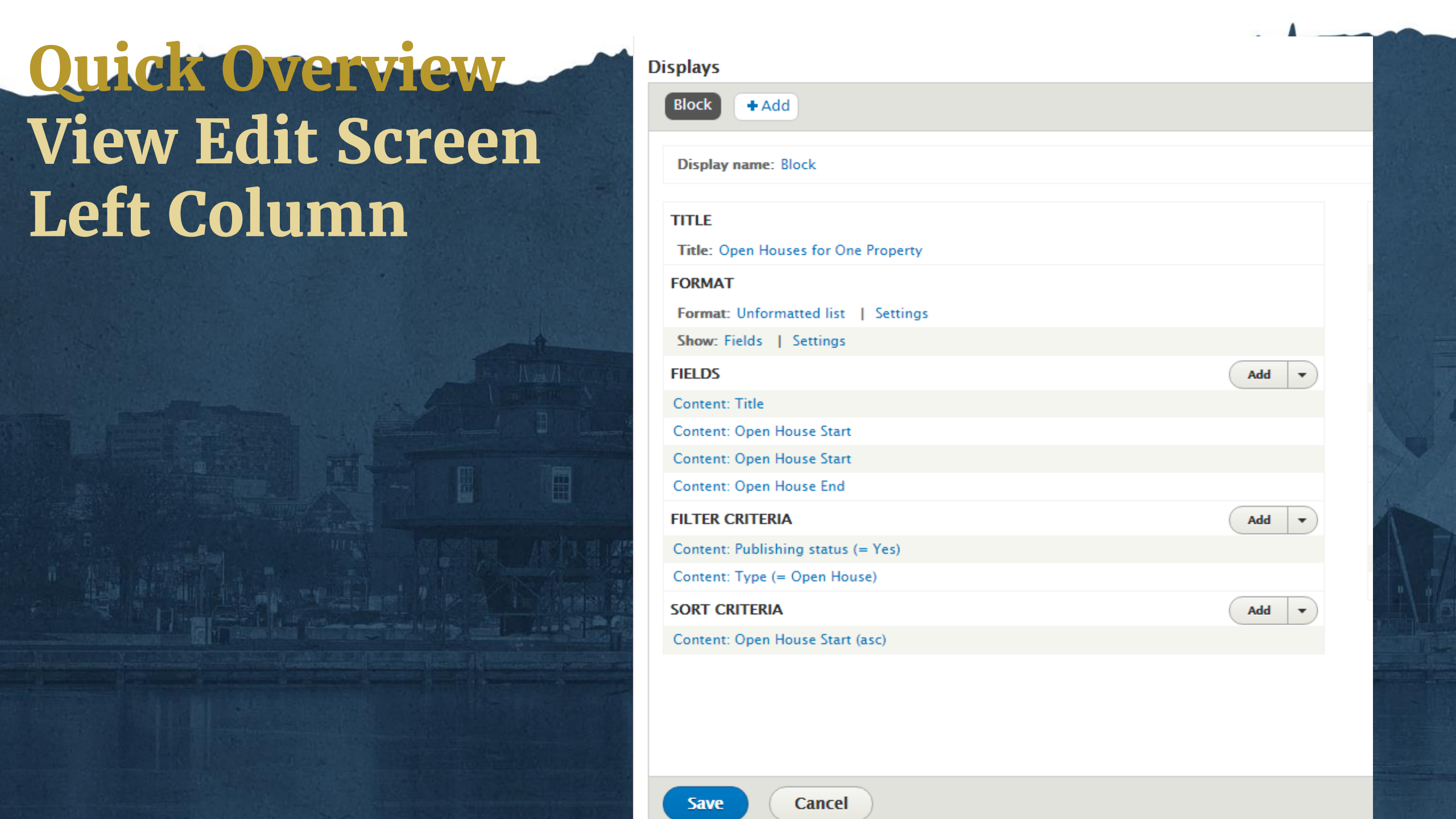
Filter

Sort

A Quick Overview
View Edit Screen



Quick Overview
View Edit Screen
Left Column



Quick Overview
View Edit Screen
Center Column

BLOCK SETTINGS

Block name: None

Block category: Lists (Views)

Allow settings: Items per page

Access: Permission | View published content

HEADER Add

Global: Text area (Global: Text area)

FOOTER Add

NO RESULTS BEHAVIOR Add

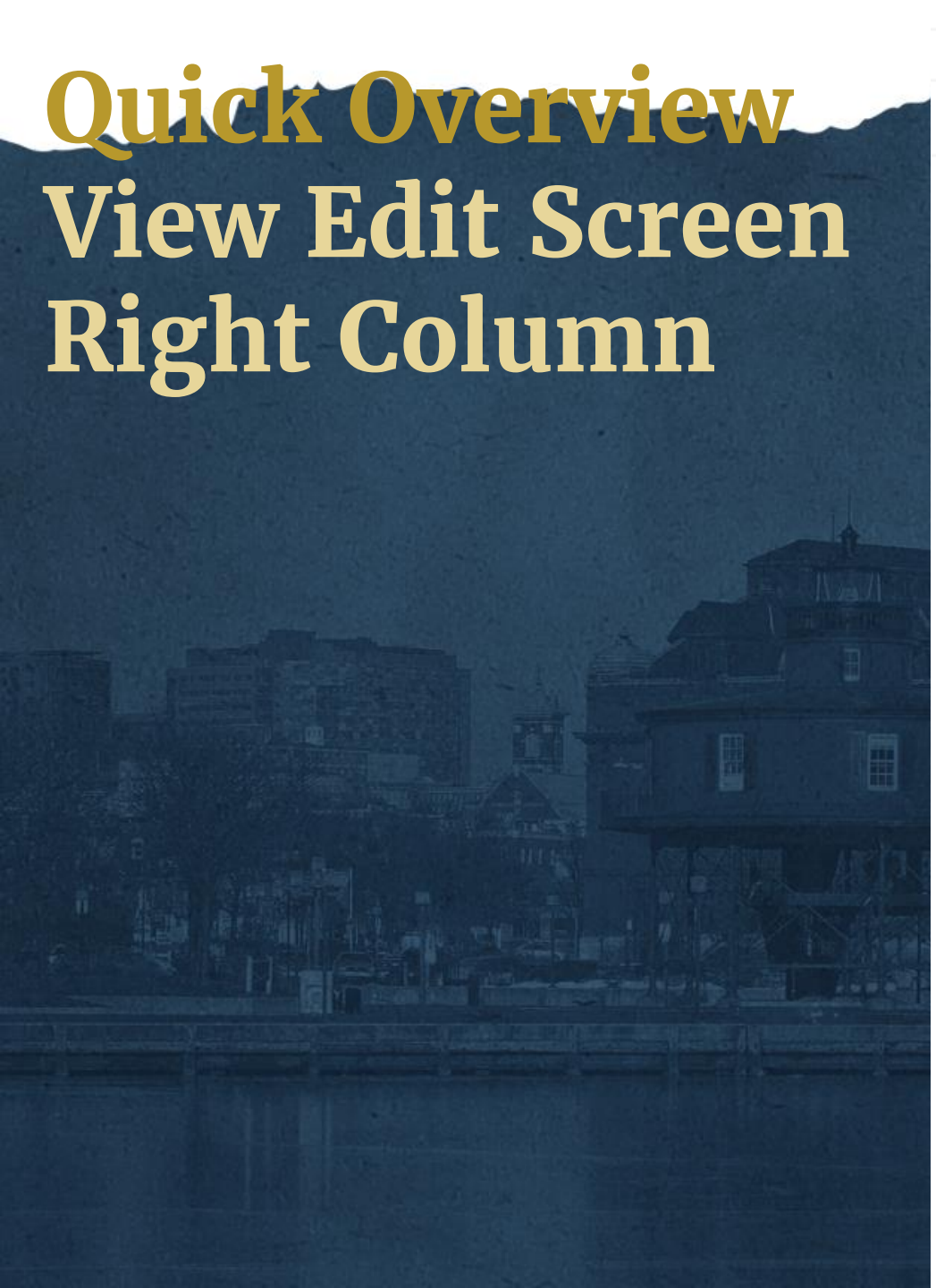
PAGER

Use pager: Display a specified number of items | 5 items

More link: No

Link display: None

Quick Overview
View Edit Screen
Right Column



Duplicate Block

Duplicate Block

▼ ADVANCED

CONTEXTUAL FILTERS Add

Content: Open House Property Reference

RELATIONSHIPS Add

field_open_house_property_refere: Content

EXPOSED FORM

Exposed form style: Basic | Settings

OTHER

Machine Name: block_1

Administrative comment: None

Use AJAX: No

Hide attachments in summary: No

Contextual links: Shown

Use aggregation: No

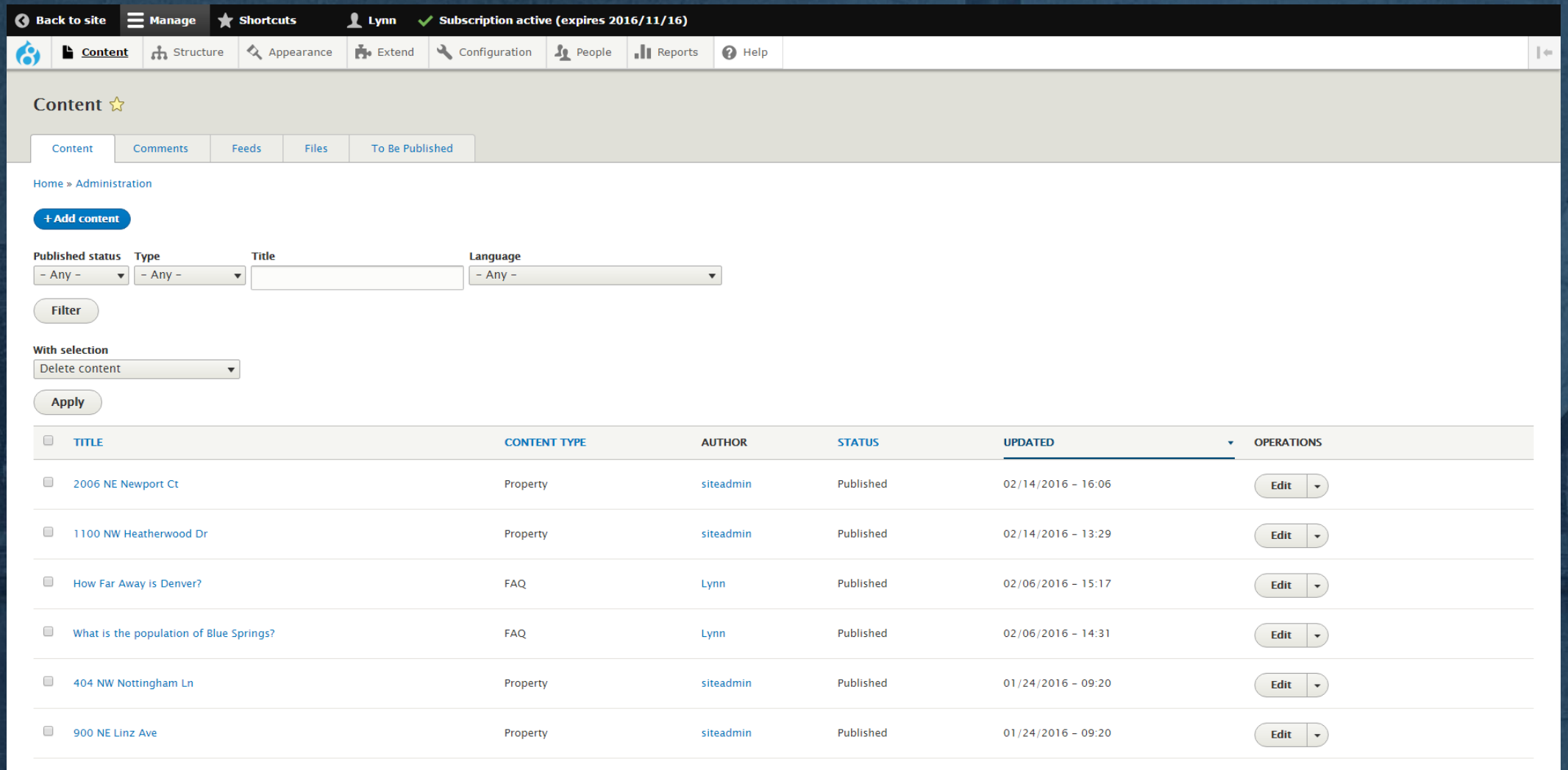
Query settings: Settings

Caching: Tag based

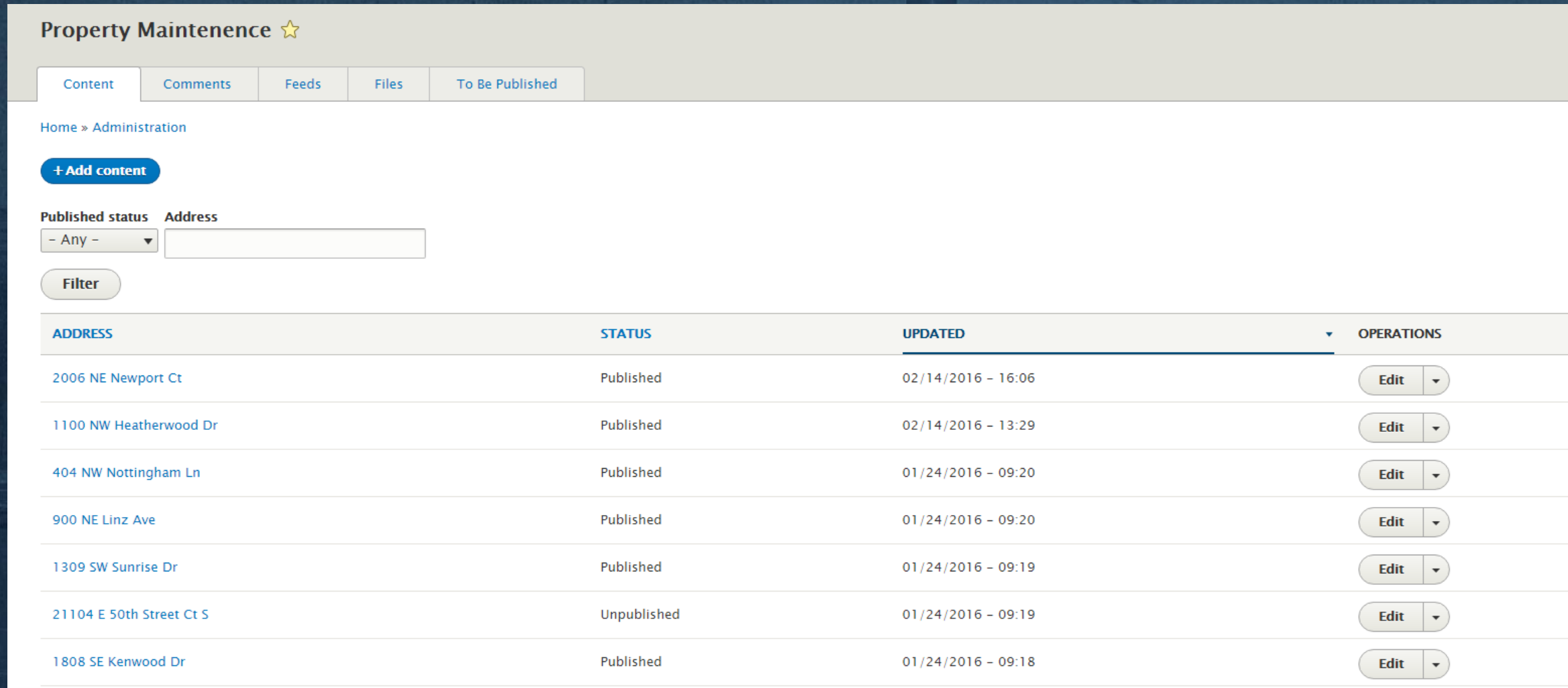
CSS class: None

Hide block if the view output is empty: No

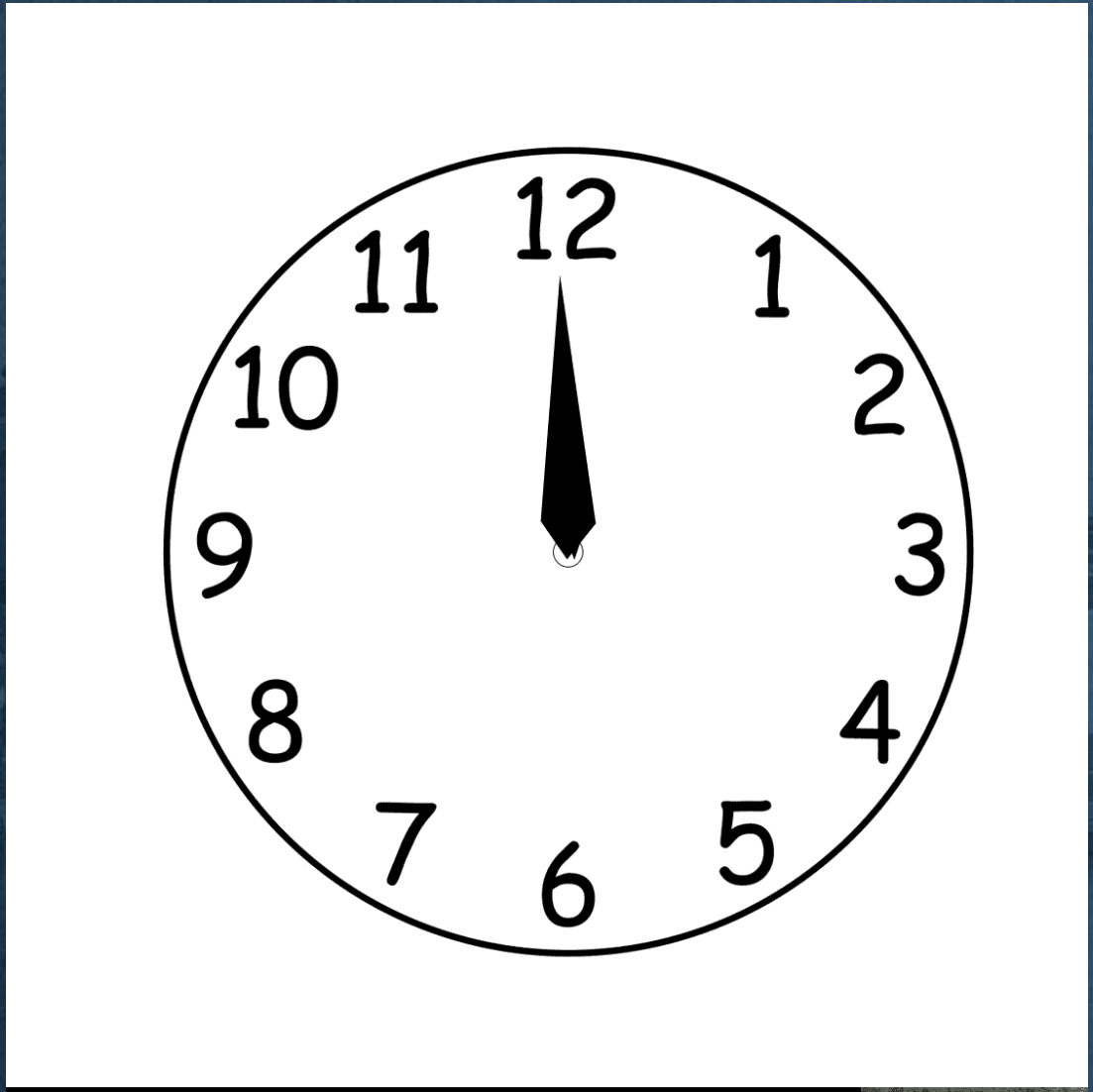
Editing an Existing View
Content List



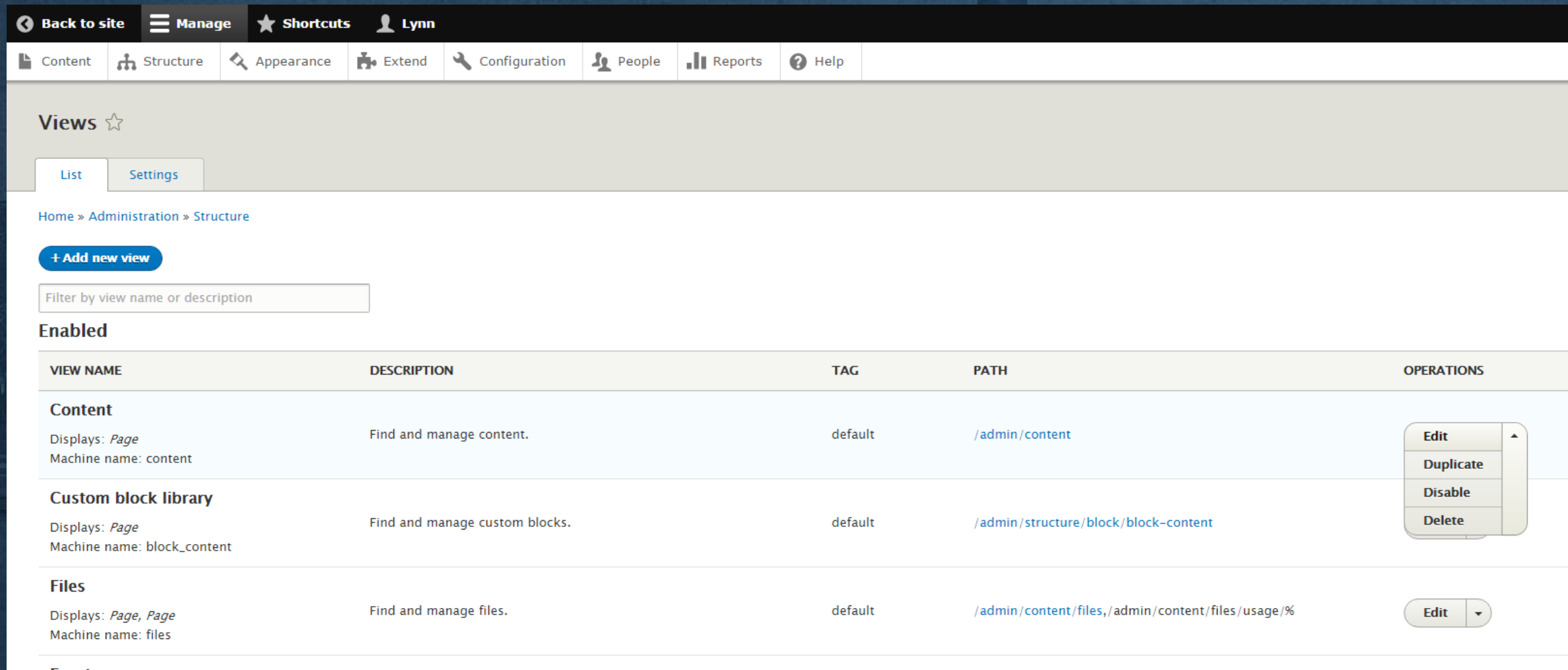
Editing an Existing View
Desired Result



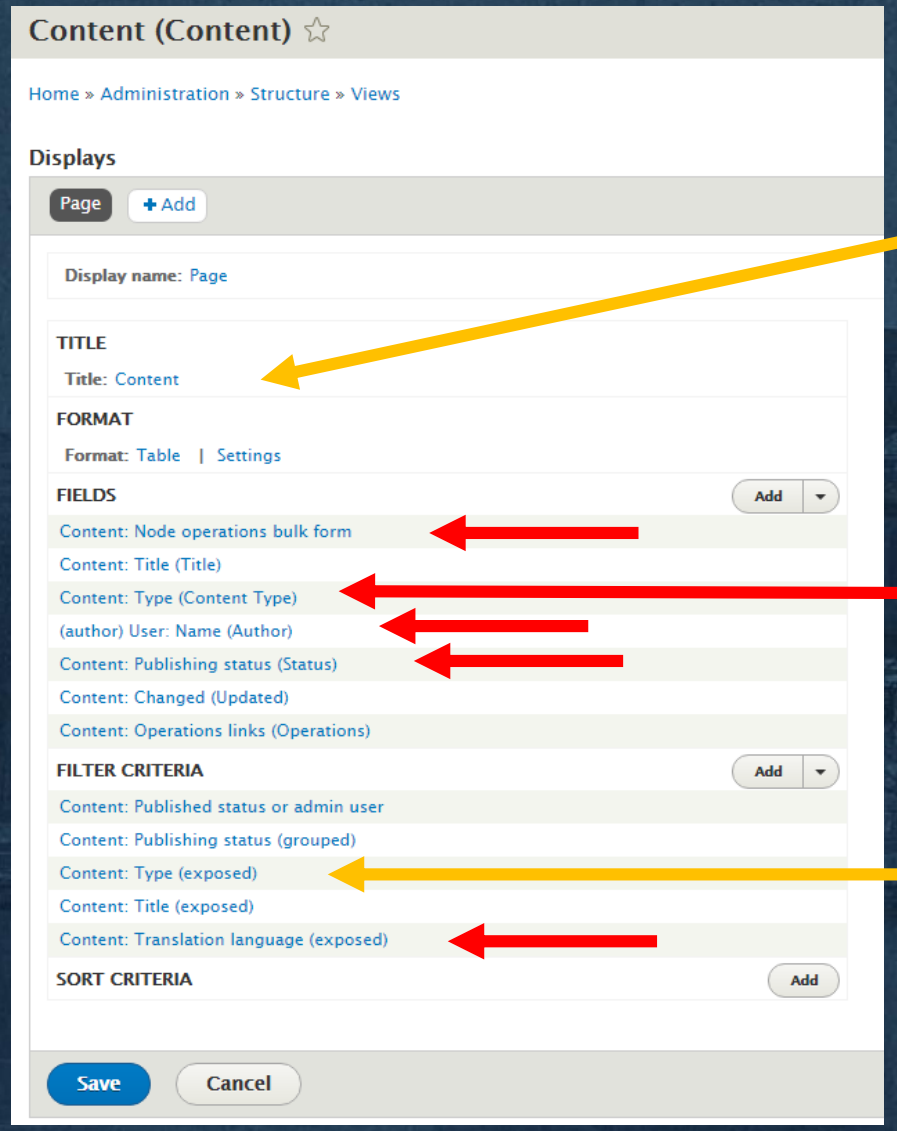
Later that day

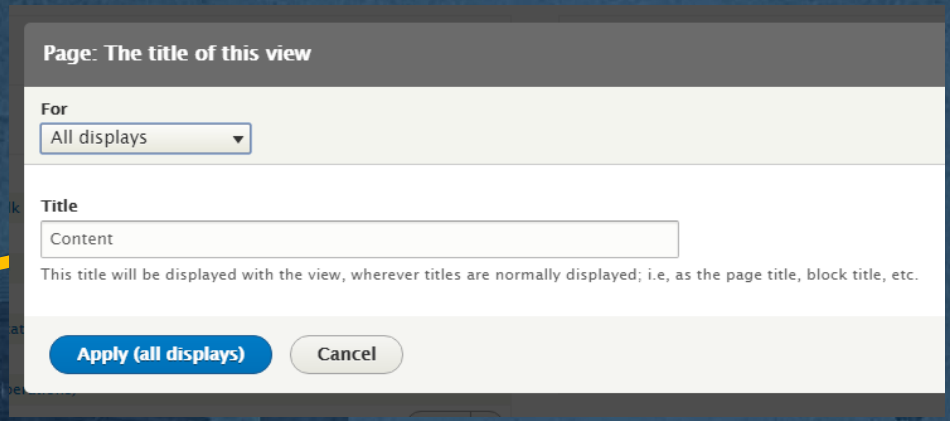


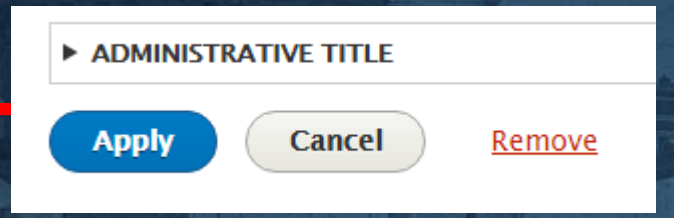
Editing an Existing View
Views Listing Page

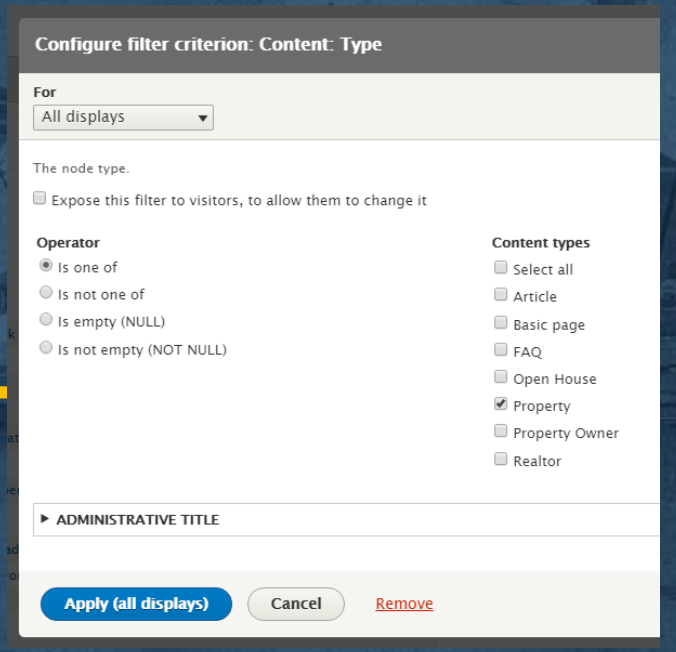


Edit Screen

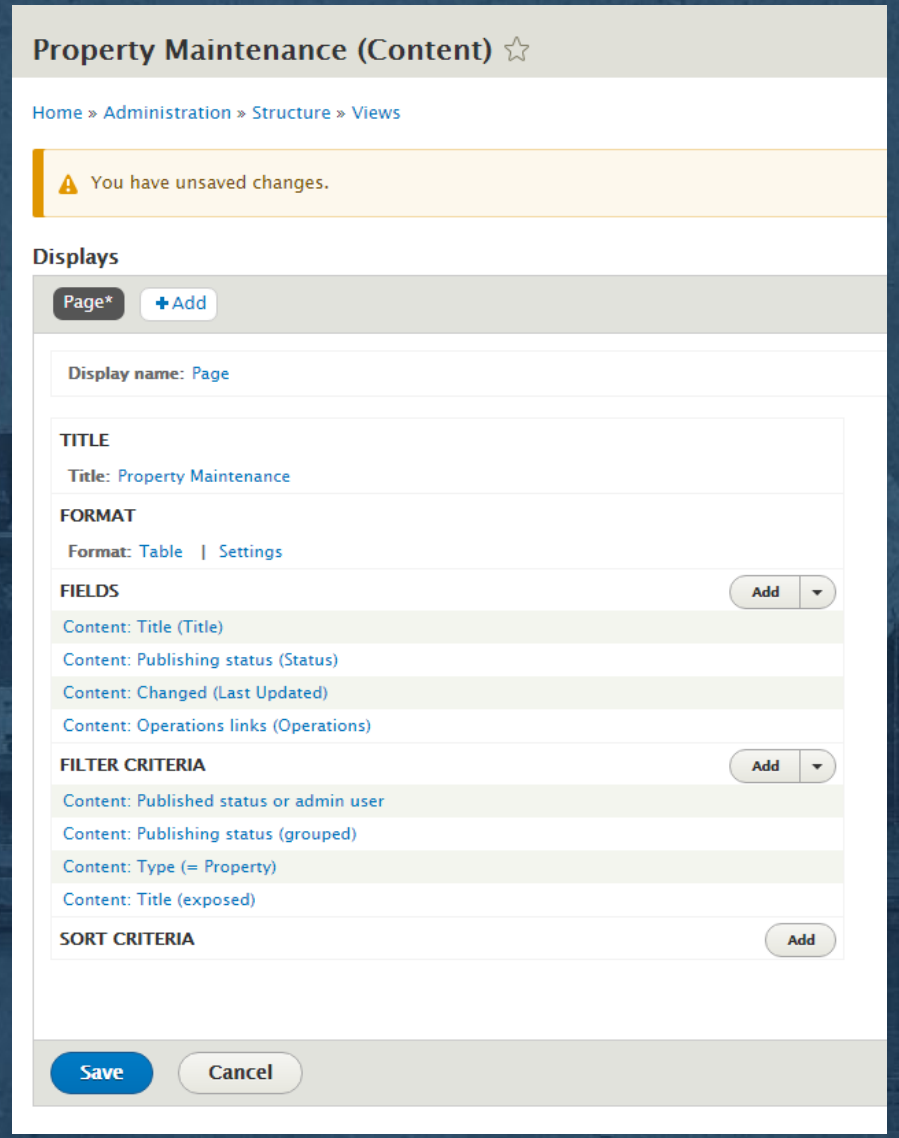

Content (Content)
Home » Administration » Structure » Views
Displays
Page
+ Add
Display name: Page
TITLE
Title: Content
FORMAT
Format: Table | Settings
FIELDS
Add
Content: Node operations bulk form
Content: Title (Title)
Content: Type (Content Type)
(author) User: Name (Author)
Content: Publishing status (Status)
Content: Changed (Updated)
Content: Operations links (Operations)
FILTER CRITERIA
Add
Content: Published status or admin user
Content: Publishing status (grouped)
Content: Type (exposed)
Content: Title (exposed)
Content: Translation language (exposed)
SORT CRITERIA
Add
Save
Cancel


Page: The title of this view
For
All displays
Title
Content
This title will be displayed with the view, wherever titles are normally displayed; i.e, as the page title, block title, etc.
Apply (all displays)
Cancel


ADMINISTRATIVE TITLE
Apply
Cancel
Remove


Configure filter criterion: Content: Type
For
All displays
The node type.
Expose this filter to visitors, to allow them to change it
Operator
Is one of
Is not one of
Is empty (NULL)
Is not empty (NOT NULL)
Content types
Select all
Article
Basic page
FAQ
Open House
Property
Property Owner
Realtor
ADMINISTRATIVE TITLE
Apply (all displays)
Cancel
Remove

Editing an Existing View



Why Views – Structured Content

Drupal 7 added Fields
  before D7, CCK module added Fields

Relationships
  D7 Entity Reference module
  (Node Reference module)

Text, Number, Boolean, File, Image, Reference

Contributed – e.g. Geolocation

Example Data Structure
Real Estate Agency website

Property

Label	Machine name	Field type
Property Address 2	field_property_address_2	Text (plain)
Property Asking Price	field_property_asking_price	Number (decimal)
Property City	field_property_city	Text (plain)
Property County	field_property_county	Entity reference (County)
Property Description	body	Text (formatted, long, with summary)
Property Featured	field_property_featured	Boolean
Property Featured Image	field_property_featured_image	Image
Property Geolocation	field_property_geolocation	Geolocation
Property Image Gallery	field_property_image_gallery	Image
Property Listed Date	field_property_listed_date	Date
Property Neighborhood	field_property_neighborhood	Entity reference (Neighborhood)
Property Number Bathrooms	field_property_number_bathrooms	List (text)
Property Number Bedrooms	field_property_number_bedrooms	Number (integer)
Property Owners	field_property_owners	Entity reference (Property Owner)
Property PDF Listing	field_property_pdf_listing	File
Property Realtors	field_property_realtors	Entity reference (Realtor)
Property Square Footage	field_property_square_footage	Number (integer)
Property State	field_property_state	Text (plain)
Property Status	field_property_status	List (text)
Property Zip	field_property_zip	Text (plain)

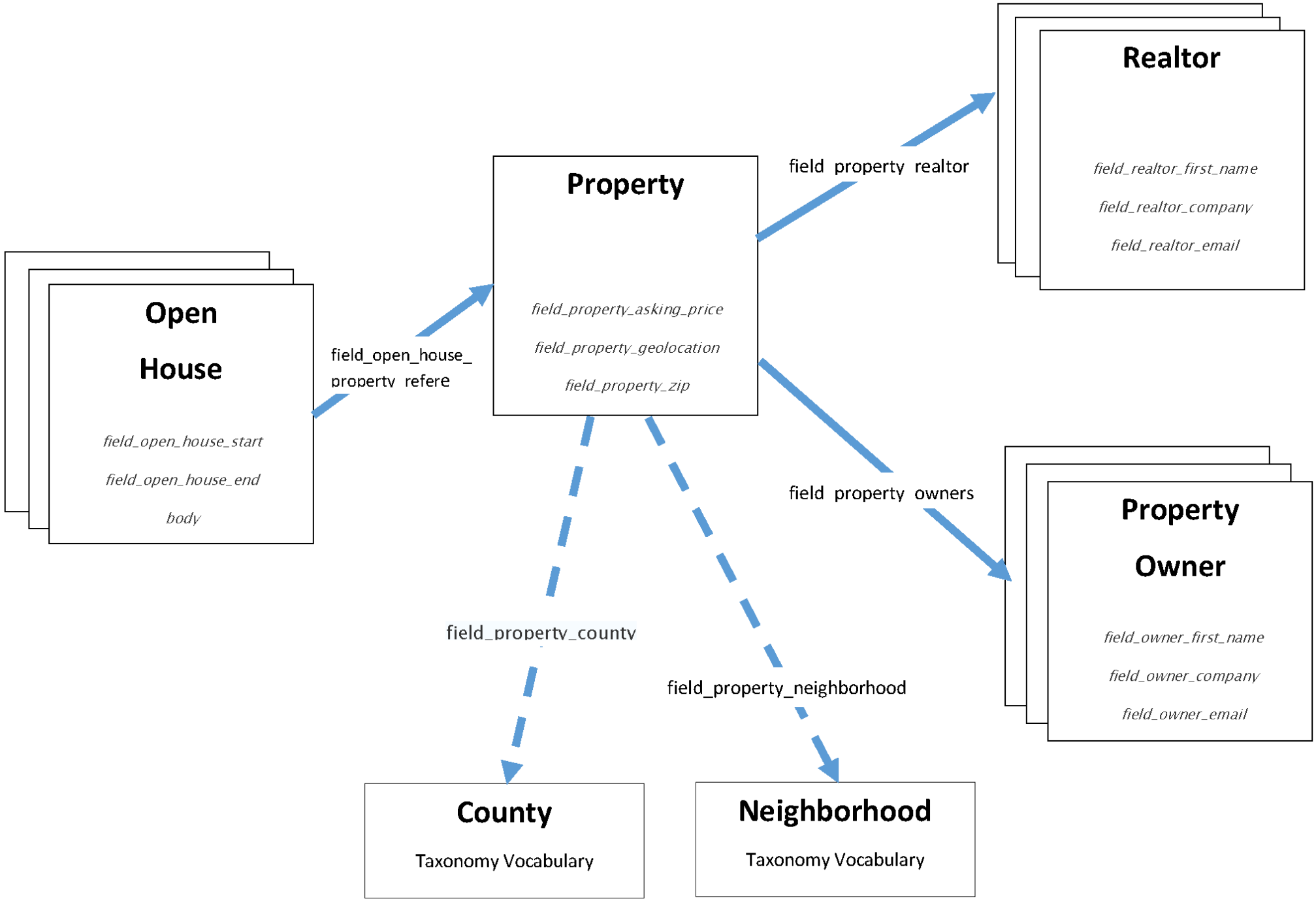
Owner (Realtor)

Label	Machine name	Field type
Owner Address 1	field_owner_address_1	Text (plain)
Owner Address 2	field_owner_address_2	Text (plain)
Owner City	field_owner_city	Text (plain)
Owner Company	field_owner_company	Text (plain)
Owner Email	field_owner_email	Email
Owner First Name	field_owner_first_name	Text (plain)
Owner Last Name	field_owner_last_name	Text (plain)
Owner Phone	field_owner_phone	Telephone number
Owner State	field_owner_state	Text (plain)
Owner Zip	field_owner_zip	Text (plain)

Open House

Label	Machine name	Field type
Notes	body	Text (formatted, long, with summary)
Open House End	field_open_house_end	Date
Open House Property Reference	field_open_house_property_refere	Entity reference (Property)
Open House Start	field_open_house_start	Date

Real Estate Relationships



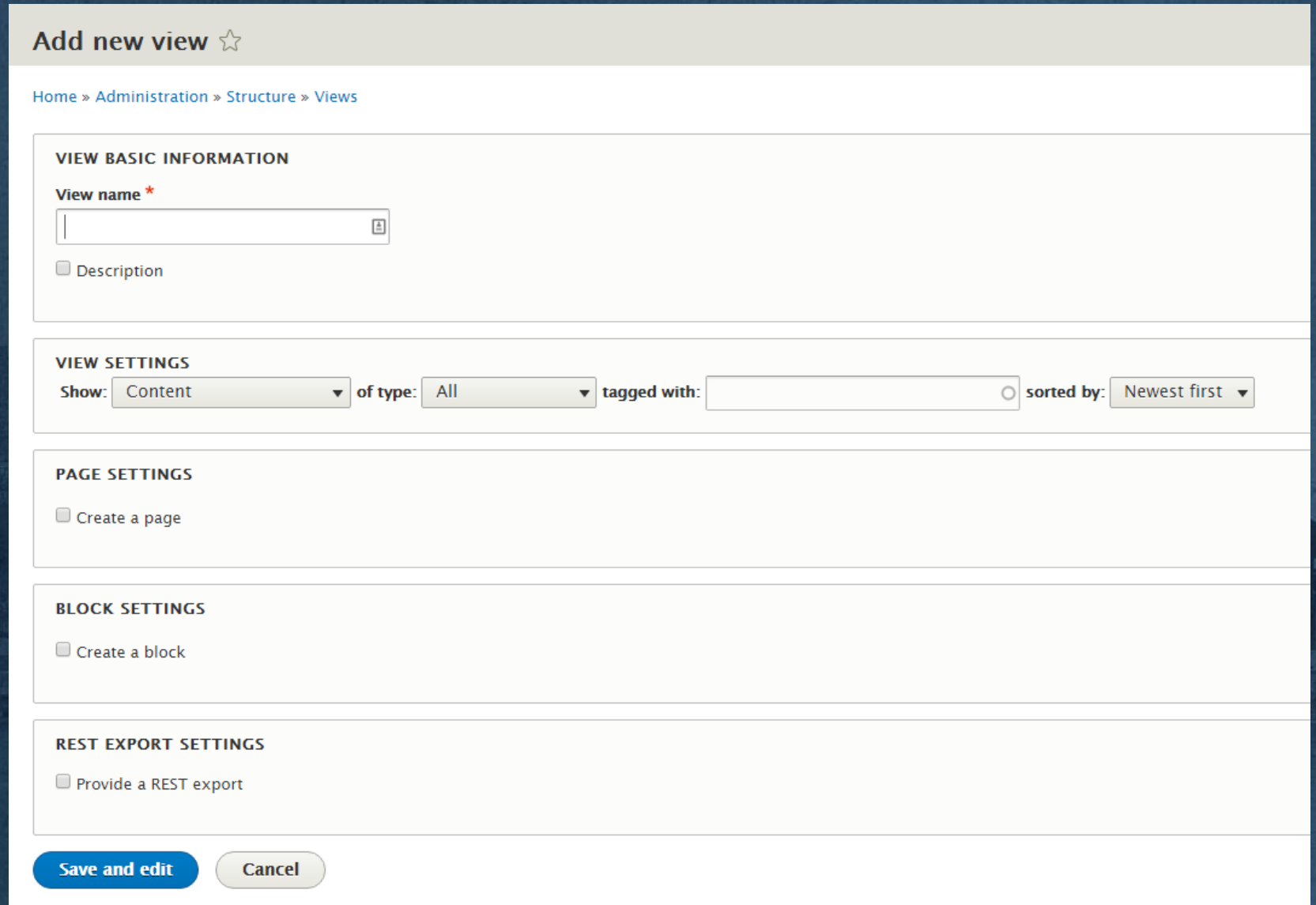
Creating a New View

Wizard page

Expanding form!

Not all displays can be created via wizard

Creating a New View



Creating a New View

Add new view ☆

Home » Administration » Structure » Views

VIEW BASIC INFORMATION

View name *
Available Property Listing — Machine name: available_property_listing [Edit]

Description
List the properties that are available for sale

VIEW SETTINGS

Show: Content of type: Property sorted by: Newest first

PAGE SETTINGS

Create a page

Page title
Available Property Listing

Path
available-property-listing

PAGE DISPLAY SETTINGS

Display format:
Table of fields

Items to display
10

Use a pager

Create a menu link

Menu
Main navigation

Link text
What's For Sale

Include an RSS feed

Feed path
available-property-listing.xml

Feed row style
Content

BLOCK SETTINGS

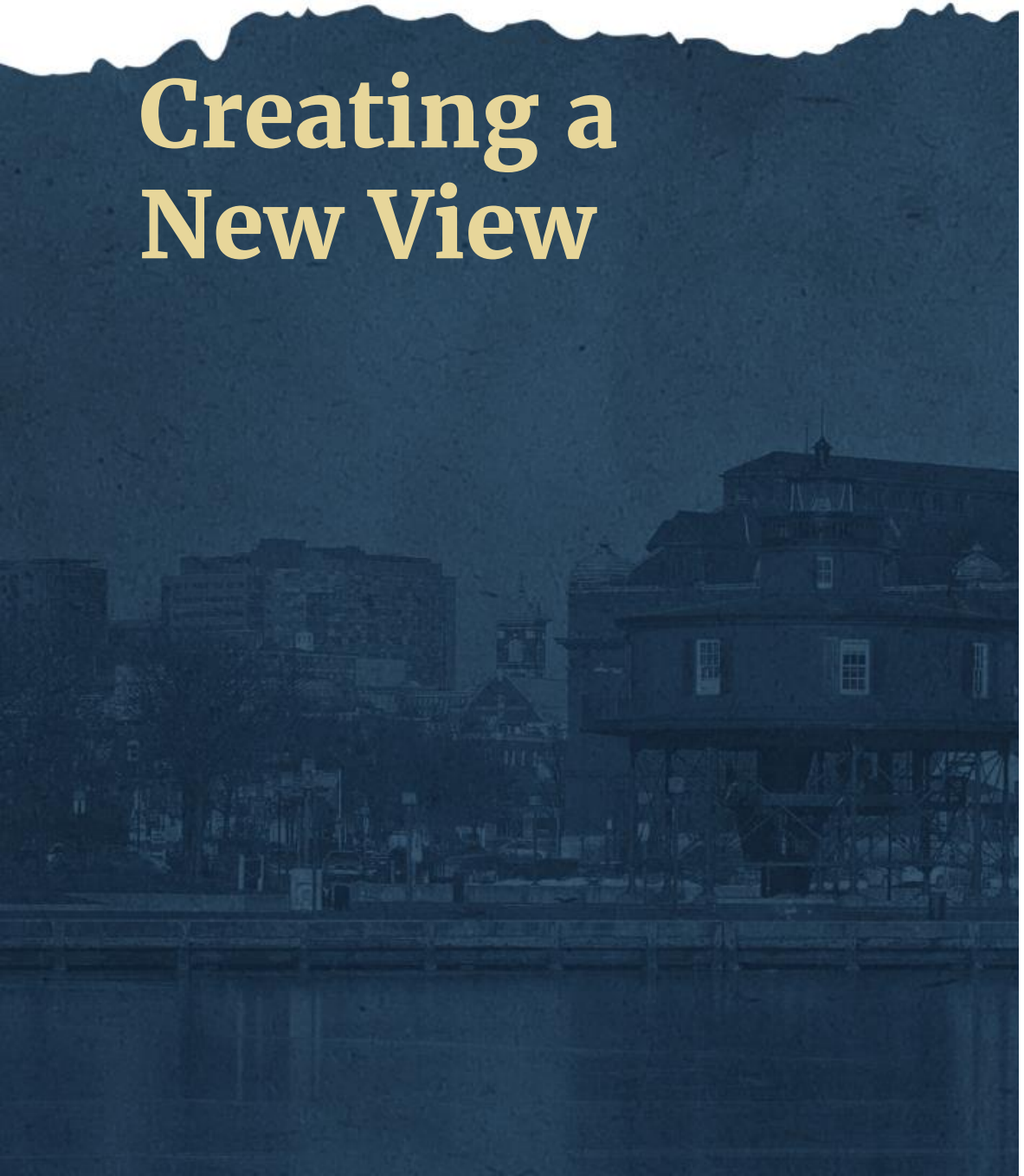
Create a block

REST EXPORT SETTINGS

Provide a REST export

Save and edit Cancel

Creating a New View



PAGE SETTINGS

- [x] Create a page

Page title

Available Property Listing

Path

available-property-listing

PAGE DISPLAY SETTINGS

Display format:

Table of fields

Items to display

10

- [x] Use a pager

- [x] Create a menu link

Menu

Main navigation

Link text

What's For Sale

- [x] Include an RSS feed

Feed path

available-property-listing.xml

Feed row style

Content

Base / View Type

- Content
- Content Revisions
- Comments
- Log Entries
- Files
- Taxonomy Terms
- Users
- Custom Blocks
- Custom Block Revisions
- (types added by contributed or custom modules)

Displays

- Page
- Block
- Master
- Attachment
- Embed
- Entity Reference
- Feed
- REST Export

Format Options

- Grid
- HTML List
- Unformatted List
- Table
- Contributed Modules
  - Accordion
  - Slide Show
  - Map

Format Options Have Settings

Page: Style options ×

Place fields into columns; you may combine multiple fields into the same column. If you do, the separator in the column specified will be used to separate the fields. Check the sortable box to make that column click sortable, and check the default sort radio to determine which column will be sorted by default, if any. You may control column order and field labels in the fields section.

FIELD	COLUMN	ALIGN	SEPARATOR	SORTABLE	DEFAULT ORDER	DEFAULT SORT	HIDE EMPTY COLUMN	RESPONSIVE
Title	Title	None		☑	Ascending	○	☐	High
Asking Price	Asking Price	Right		☑	Ascending	○	☐	High
# Bedrooms	# Bedrooms	None		☑	Ascending	○	☐	High
Square Feet	Square Feet	Right		☑	Ascending	○	☐	High
Neighborhood	Neighborhood	None		☑	Ascending	○	☐	High
None						◉		

Grouping field Nr.1

– None –

You may optionally specify a field by which to group the records. Leave blank to not group.

Row class

The class to provide on each row. You may use field tokens from as per the "Replacement patterns" used in "Rewrite the output of this field" for all fields.

☑ Add views row classes

Add the default row classes like views-row-1 to the output. You can use this to quickly reduce the amount of markup the view provides by default, at the cost of making it more difficult to apply CSS.

☐ Override normal sorting if click sorting is used

☐ Enable Drupal style "sticky" table headers (Javascript)

Fields

FORMAT

Format: Table | Settings

FIELDS Add

Content: Title (Title)

Content: Property Asking Price (Asking Price)

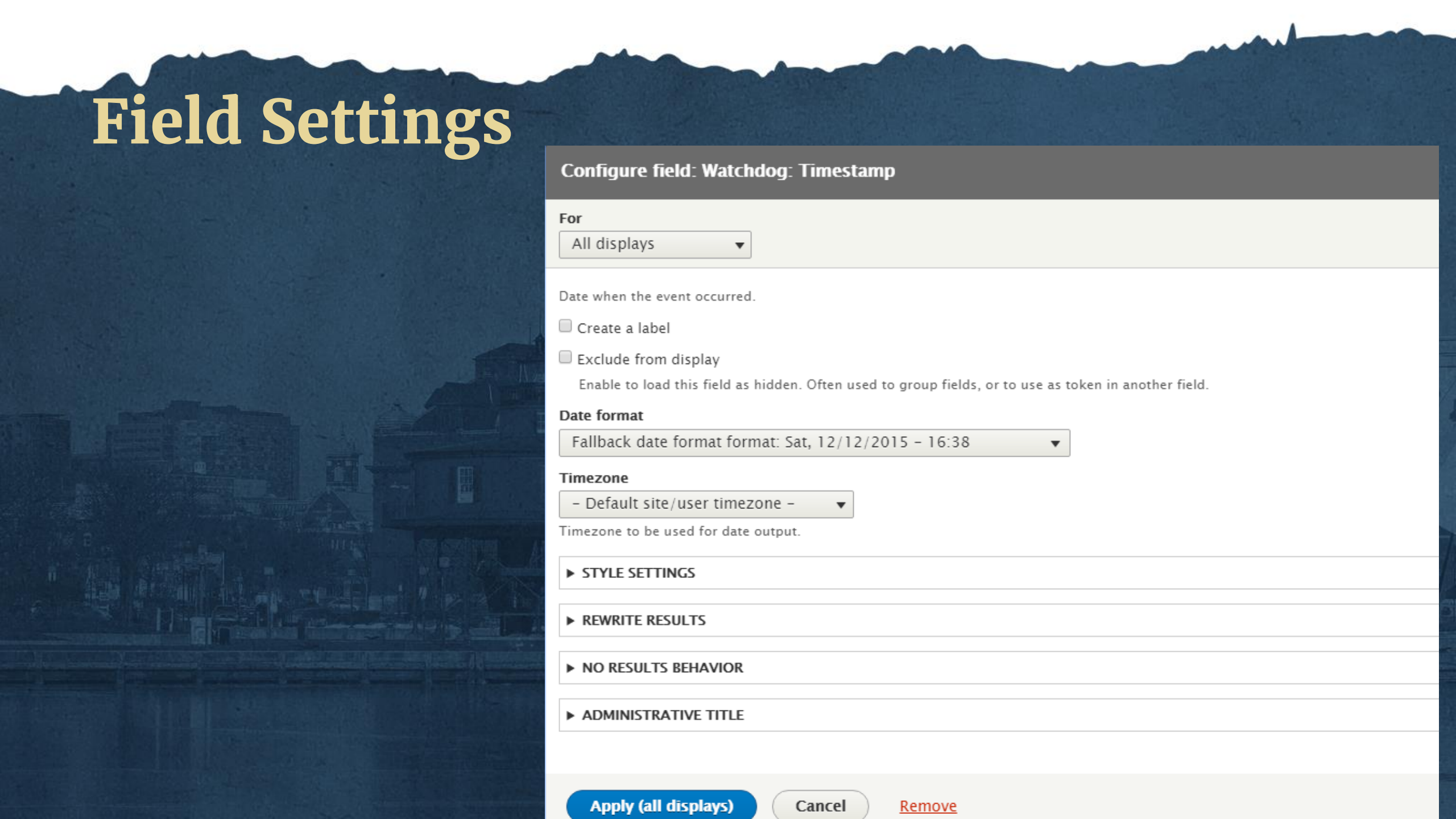
Content: Property Number Bedrooms (# Bedrooms)

Content: Property Square Footage (Square Feet)

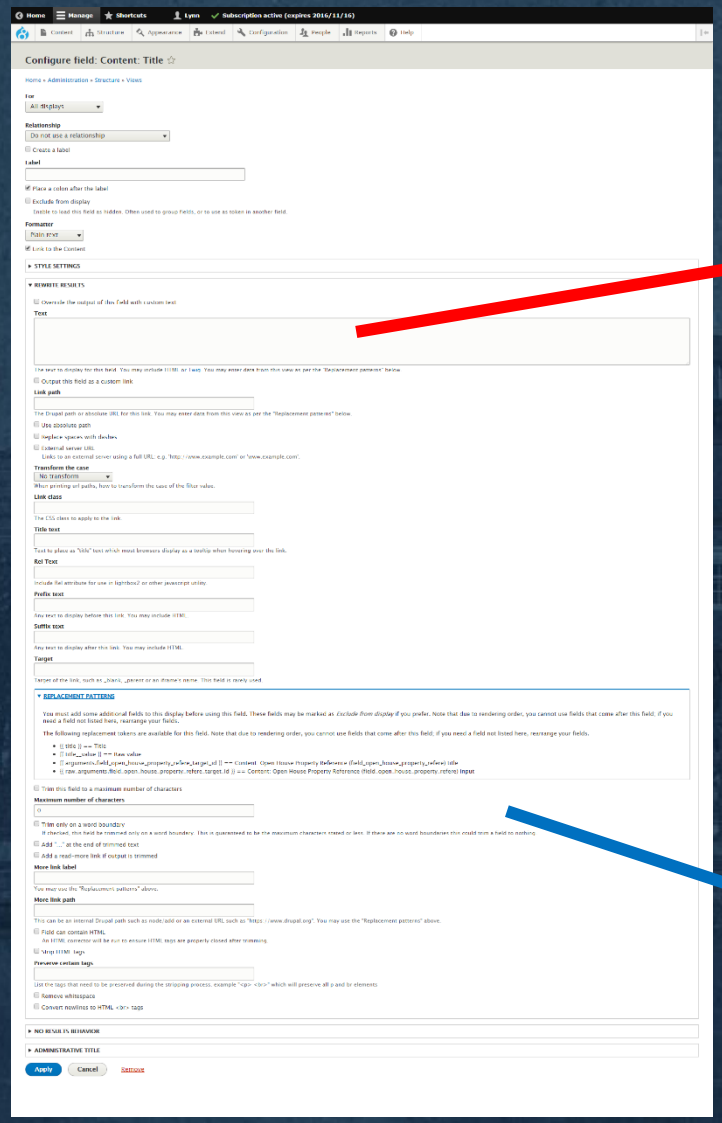
Content: Property Neighborhood (Neighborhood)

FILTER CRITERIA Add

Field Settings



Field Rewrites



▼ REWRITE RESULTS

☐ Override the output of this field with custom text

Text

The text to display for this field. You may include HTML or Twig. You may enter data from this view as per the "Replacement patterns" below.

☐ Output this field as a custom link

Link path

The Drupal path or absolute URL for this link. You may enter data from this view as per the "Replacement patterns" below.

☐ Use absolute path

☐ Replace spaces with dashes

☐ External server URL

▼ REPLACEMENT PATTERNS

You must add some additional fields to this display before using this field. These fields may be marked as *Exclude from display* if you prefer. Note that come after this field; if you need a field not listed here, rearrange your fields.

The following replacement tokens are available for this field. Note that due to rendering order, you cannot use fields that come after this field; if you ne

- {{ title }} ==
- {{ field_property_asking_price }} ==
- {{ field_property_number_bedrooms }} ==
- {{ field_property_square_footage }} ==
- {{ field_property_neighborhood }} == Property Neighborhood
- {{ field_property_neighborhood__target_id }} == Raw target_id
- {{ arguments.field_property_neighborhood_target_id }} == Content: Property Neighborhood (field_property_neighborhood) title
- {{ raw_arguments.field_property_neighborhood_target_id }} == Content: Property Neighborhood (field_property_neighborhood) input

Field Rewrites Power Tip

```
{% for letter in
'a'|upper..'m'|upper %}
    * {{ letter }}
{% endfor %}
```

```
* A * B * C * D * E * F * G * H * I * J * K * L * M
```

Filter Criteria

Configure filter criterion: Content: Property Square Footage (field_property_square_footage)

For

This page (override)

Appears in: property.

☑ Expose this filter to visitors, to allow them to change it

Filter type to expose

◉ Single filter

○ Grouped filters

Grouped filters allow a choice between predefined operator|value pairs.

☐ Required

Label

Property Square Footage (field_property_square_fo

Description

Operator

Is between

☐ Expose operator

Allow the user to choose the operator.

Min

And max

☐ Remember the last selection

Enable to remember the last selection made by the user.

Filter identifier

field_property_square_footage_value

This will appear in the URL after the ? to identify this filter. Cannot be blank.

Exposed Filters

Available Property Listing

Square Footage **And** **Asking Price** **And**

 # Bedrooms **And** **Neighborhood**

Buckner Tarsney and Major Road
City Center
Route 40
Route 7 and Pink Hill Road
U.S. Route 40 and 10th Street

Apply

Title	Asking Price	# Bedrooms	Square Feet	Neighborhood
1808 SE Kenwood Dr	$146,000.00	4	1,871 sq ft	

Title	Asking Price	# Bedrooms	Square Feet	Neighborhood
1100 NW Heatherwood Dr	$197,000.00	3	2,052 sq ft	City Center
2006 NE Newport Ct	$191,000.00	3	2,938 sq ft	City Center
2705 NE Sonora Valley Dr	$57,000.00	1	1,117 sq ft	City Center

Contextual Filters
Filters configured via URL

http://....com/available-property-listing-neighborhood/**City%20Center**

Blue Drop Realty

About Blue Springs | What's For Sale | About Us | Tiny Houses

Home » Available Property Listing

Search

Tools

Recent content

Available Property Listings for City Center

Square Footage | **And** | **Asking Price**

And | **# Bedrooms** | **And**

Apply

Neighborhood: City Center

Address	Asking Price	# Bedrooms	Square Feet	Neighborhood
1100 NW Heatherwood Dr	$197,000.00	3	2,052 sq ft	City Center
2006 NE Newport Ct	$191,000.00	3	2,938 sq ft	City Center
2705 NE Sonora Valley Dr	$57,000.00	1	1,117 sq ft	City Center

Contextual Filters
Filters configured via URL

Available Property Listing (Content) ☆

Home » Administration » Structure » Views » Available property listing » Edit

⚠ You have unsaved changes.

Displays

Page | Feed | Tiny Houses | Selectable Page | **Neighborhood Page*** | + Add | Edit view name/description

Display name: Neighborhood Page | View Neighborhood Page

TITLE
Title: Available Property Listing

FORMAT
Format: Table | Settings

FIELDS Add
- Content: Title (Title)
- Content: Property Asking Price (Asking Price)
- Content: Property Number Bedrooms (# Bedrooms)
- Content: Property Square Footage (Square Feet)
- Content: Property Neighborhood (Neighborhood)

FILTER CRITERIA Add
- Content: Publishing status (= Yes)
- Content: Type (= Property)
- Content: Property Square Footage (exposed)
- Content: Property Asking Price (exposed)

PAGE SETTINGS
Path: /available-property-list...
Menu: No menu
Access: Permission | View published content

HEADER Add

FOOTER Add

NO RESULTS BEHAVIOR Add

PAGER
Use pager: Full | Paged, 5 items
More link: No

ADVANCED

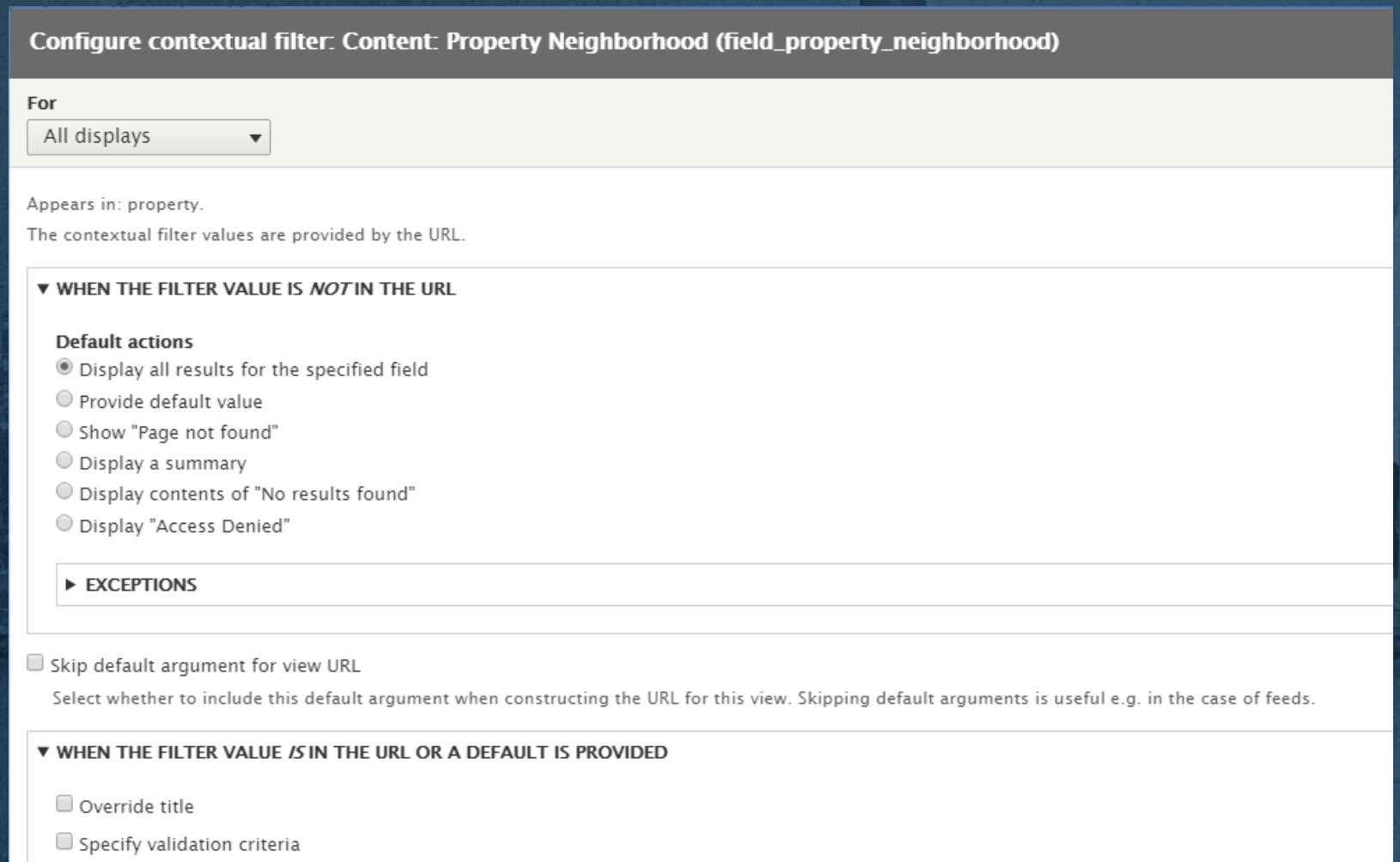
CONTEXTUAL FILTERS Add
Content: Property Neighborhood

RELATIONSHIPS Add

EXPOSED FORM
Exposed form in block: No
Exposed form style: Basic | Settings

OTHER
Machine Name: page_4
Administrative comment: None
Use AJAX: No
Hide attachments in summary: No
Contextual links: Shown
Use aggregation: No
Query settings: Settings

Contextual Filters
Filters configured via URL



Sort Criteria

Content | Structure | Appearance | Extend | Configuration | People | Reports | Help

Available Property Listing (Content)

Home » Administration » Structure » Views

You have unsaved changes.

Displays

Page* | Feed | + Add | Edit view name/description

Display name: Page | View Page

TITLE
Title: Available Property Listing

FORMAT
Format: Table | Settings

FIELDS Add
- Content: Title (Title)
- Content: Property Asking Price (Asking Price)
- Content: Property Number Bedrooms (# Bedrooms)
- Content: Property Square Footage (Square Feet)
- Content: Property Neighborhood (Neighborhood)

FILTER CRITERIA Add
- Content: Publishing status (Yes)
- Content: Type (= Property)

SORT CRITERIA Add
- Content: Property Neighborhood (asc)
- Content: Title (asc)

PAGE SETTINGS
Path: /available-property-list...
Menu: Normal: What's For ...
Access: Permission | View published content

HEADER Add

FOOTER Add

NO RESULTS BEHAVIOR Add

PAGER
Use pager: Full | Paged, 5 items
More link: No

▼ ADVANCED

CONTEXTUAL FILTERS Add

RELATIONSHIPS Add

EXPOSED FORM
Exposed form in block: No
Exposed form style: Basic | Settings

OTHER
Machine Name: page_1
Administrative comment: None
Use AJAX: No
Hide attachments in summary: No
Contextual links: Shown
Use aggregation: No
Query settings: Settings
Caching: Tag based
CSS class: None

Save | Cancel

Sort Criteria

Configure sort criterion: Content: Authored on

For

All displays

The time that the node was created.

Expose this sort to visitors, to allow them to change it

Order

Sort ascending

Sort descending

Granularity

Second

Minute

Hour

Day

Month

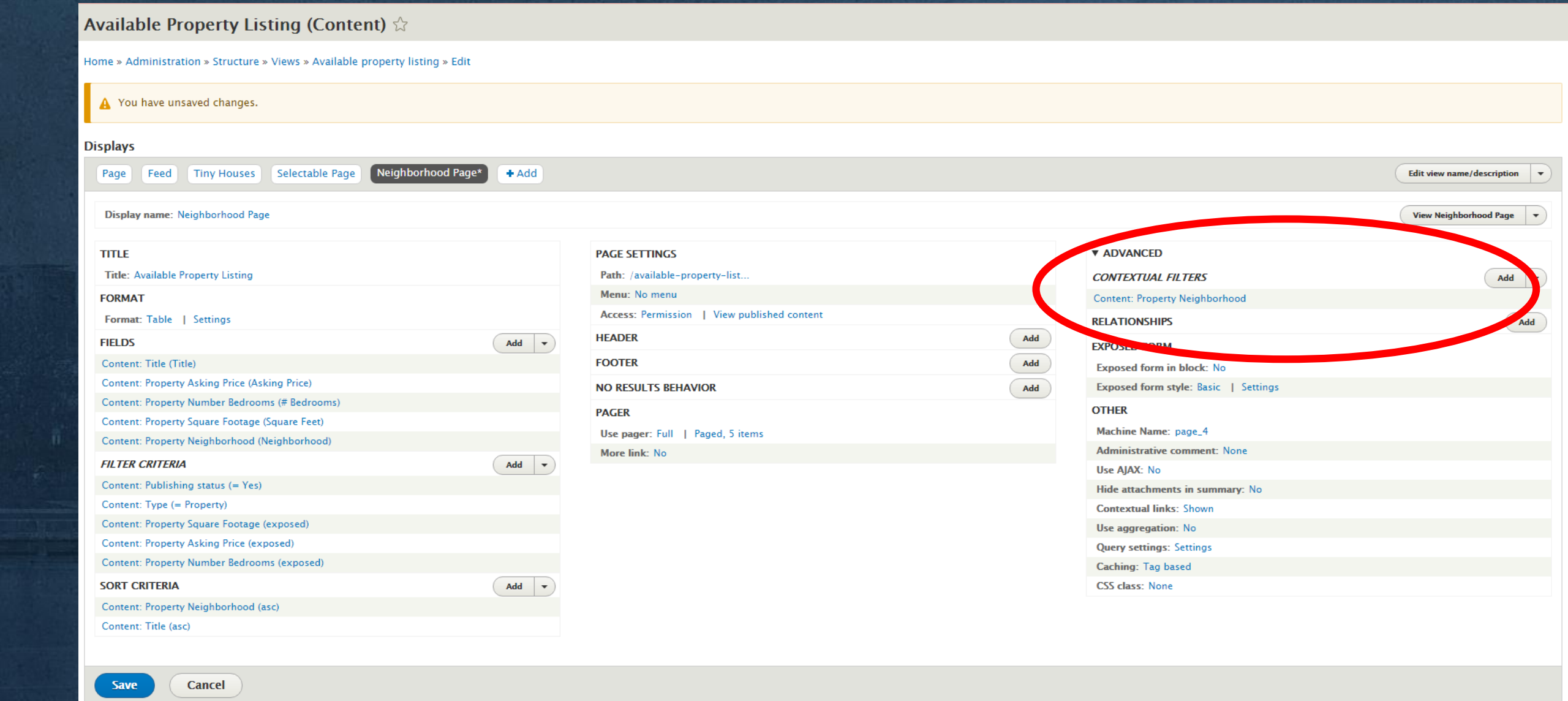
Year

The granularity is the smallest unit to use when determining whether two dates are the same; for example, if the granularity is "Year" then all dates in 1999, regardless of when they fall in 1999, will be considered the same d

▶ ADMINISTRATIVE TITLE

Apply (all displays) Cancel Remove

Relationships



Relationships

Add relationships

For
All displays (except overridden)

Search
open

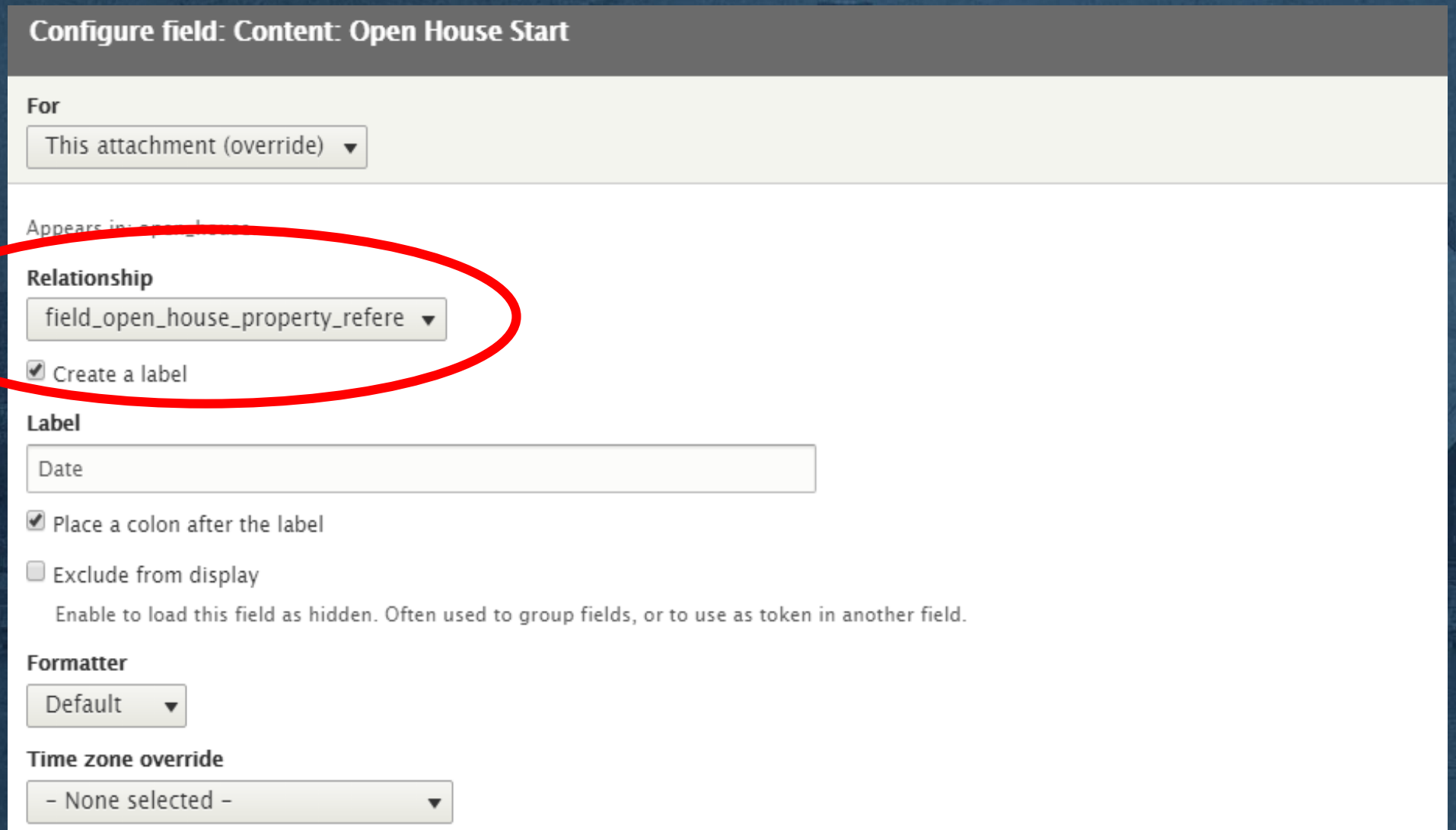
Type
– All –

	TITLE	CATEGORY	DESCRIPTION
☐	**Content referenced from field_open_house_property_refere**	Content	Appears in: open_house.
☑	**Content using field_open_house_property_refere**	Content	Relate each Content with a field_open_house_property_refere set to the conter

Selected: Content using field_open_house_property_refere

Apply (all displays) Cancel

Relationships



Relationships

Format: Table | Settings

FIELDS Add

Content: Title (Address)

Content: Property Asking Price (Asking Price)

Content: Property Number Bedrooms (# Bedrooms)

Content: Property Square Footage (Square Feet)

Content: Property Neighborhood (Neighborhood)

Content: Title (Realtor) [hidden]

Content: Realtor Phone

FILTER CRITERIA Add

Content: Publishing status (= Yes)

Front Page

My account Log out

Blue Drop Realty

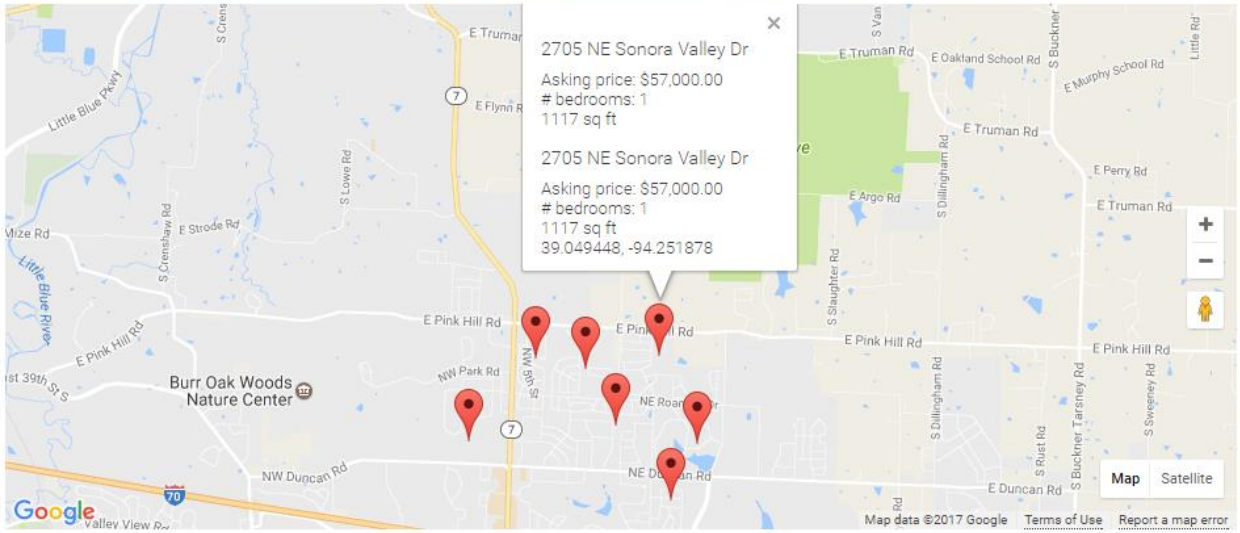
About Blue Springs | What's For Sale | About Us | Tiny Houses

Search

Tools

Add feed

404 NW Nottingham Ln



Welcome to Blue Drop Realty

Exposed Filters

Blue Drop Realty

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Search

Tools

Add feed

Available Property Listing

Square Footage **And** **Asking Price**

And **# Bedrooms** **And**

Neighborhood

Buckner Tarsney and Major Road
City Center
Route 40
Route 7 and Pink Hill Road
U.S. Route 40 and 10th Street

Apply

Neighborhood: City Center

Address	Asking Price	# Bedrooms	Square Feet	Neighborhood
1100 NW Heatherwood Dr	$197,000.00	3	2,052 sq ft	City Center
2006 NE Newport Ct	$191,000.00	3	2,938 sq ft	City Center
2705 NE Sonora Valley Dr	$57,000.00	1	1,117 sq ft	City Center

Neighborhood: Route 40

Address	Asking Price	# Bedrooms	Square Feet	Neighborhood
1309 SW Sunrise Dr	$45,000.00	1	499 sq ft	Route 40
1808 SE Kenwood Dr	$146,000.00	4	1,871 sq ft	Route 40

1 2 Next › Last »

Contextual Filter

Available Property Listings for City Center

Square Footage | **And** | **Asking Price**

And | **# Bedrooms** | **And**

Apply

Neighborhood: City Center

Address	Asking Price	# Bedrooms	Square Feet	Neighborhood
1100 NW Heatherwood Dr	$197,000.00	3	2,052 sq ft	City Center
2006 NE Newport Ct	$191,000.00	3	2,938 sq ft	City Center
2705 NE Sonora Valley Dr	$57,000.00	1	1,117 sq ft	City Center

Infinite Scroll Gallery

Blue Drop Realty

About Blue Springs | What's For Sale | About Us | Tiny Houses

Search

Tools

Add feed

Available Property Gallery

2204 NE 3rd St

Asking price:: $168,000
bedrooms: 3
1,806 sq ft
Parade of Homes
Saturday, March 5, 2016
9:00 am
3:00 pm
2204 NE 3rd St
311

2637 NE 1st Ter

Asking price:: $90,000
bedrooms: 1
1,022 sq ft

404 NW Nottingham Ln

Asking price:: $153,000
bedrooms: 4
1,888 sq ft

2006 NE Newport Ct

Asking price:: $191,000
bedrooms: 3
2,938 sq ft
900 NE Linz Ave

1300 NW Heatherwood Dr

Questions?

http://bit.ly/D8Views
50% discount eBook, MD8VeB50
20% print, MD8VpB20
Expires May 10, 2017

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