



2015

Combining the Power of Views and Rules



Who are we?

2015

Onaje Johnston
PhD
Senior Developer

@ ForumOne

Leanne Duca
Educator



Views Rules module

Assumptions

You are familiar with setting up a Drupal site

You are familiar with the views module

You are familiar with the rules module

The Rules module is often used as a site building tool to create Drupal websites.

Rules limitation

- Not able to access all site data
- Depending on which trigger/event occurred only a few contextual variables will be available for use in a rule.

Background

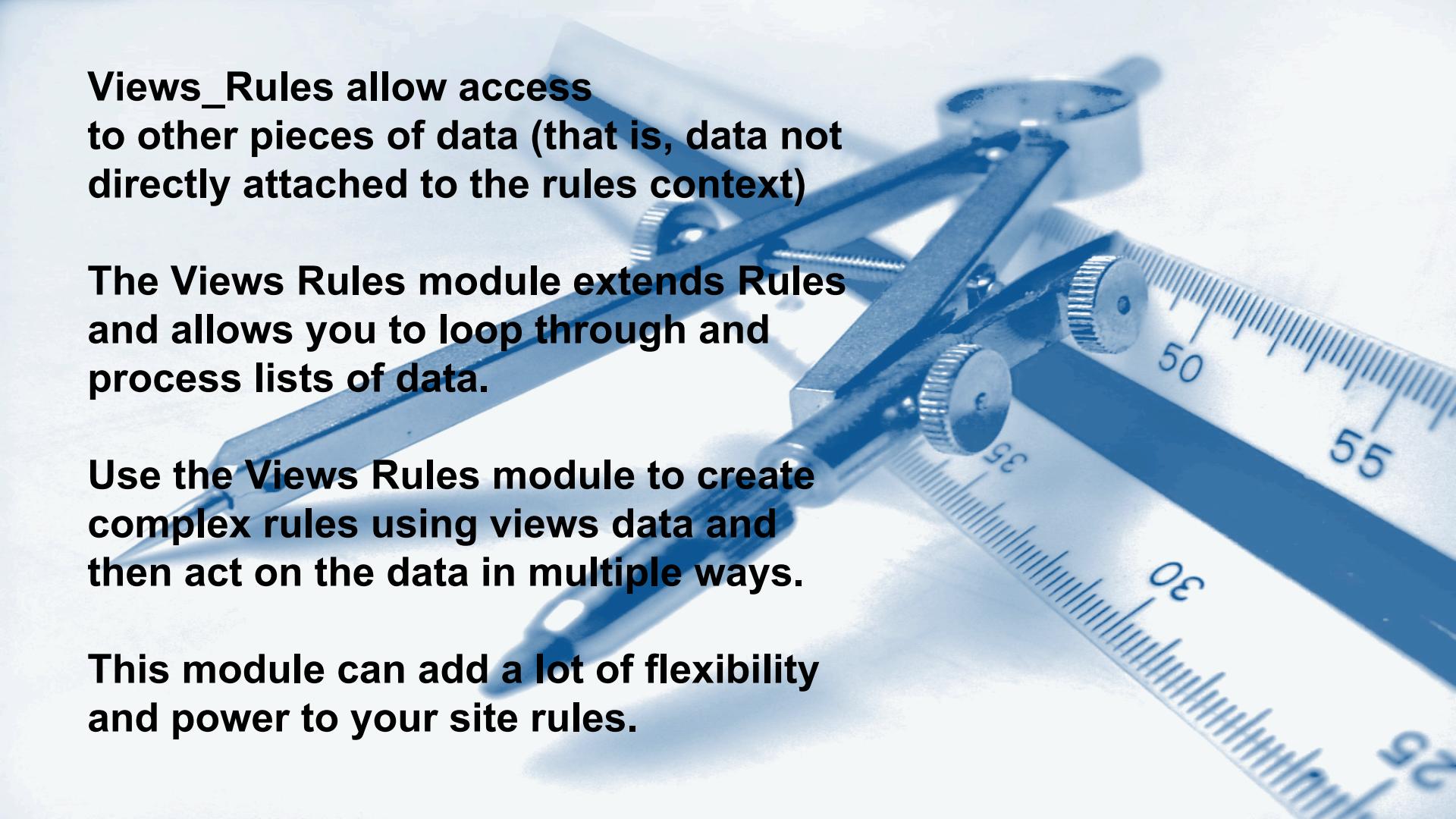
views_rules makes dealing with complex loops in rules easier

Provides a View loop in Rules

- similar to a regular Rules loop, but allows looping over rows of view results.

Collect view result rows in Views

- collects each variable in all view result rows into list variables for use in Rules.



**Views_Rules allow access
to other pieces of data (that is, data not
directly attached to the rules context)**

**The Views Rules module extends Rules
and allows you to loop through and
process lists of data.**

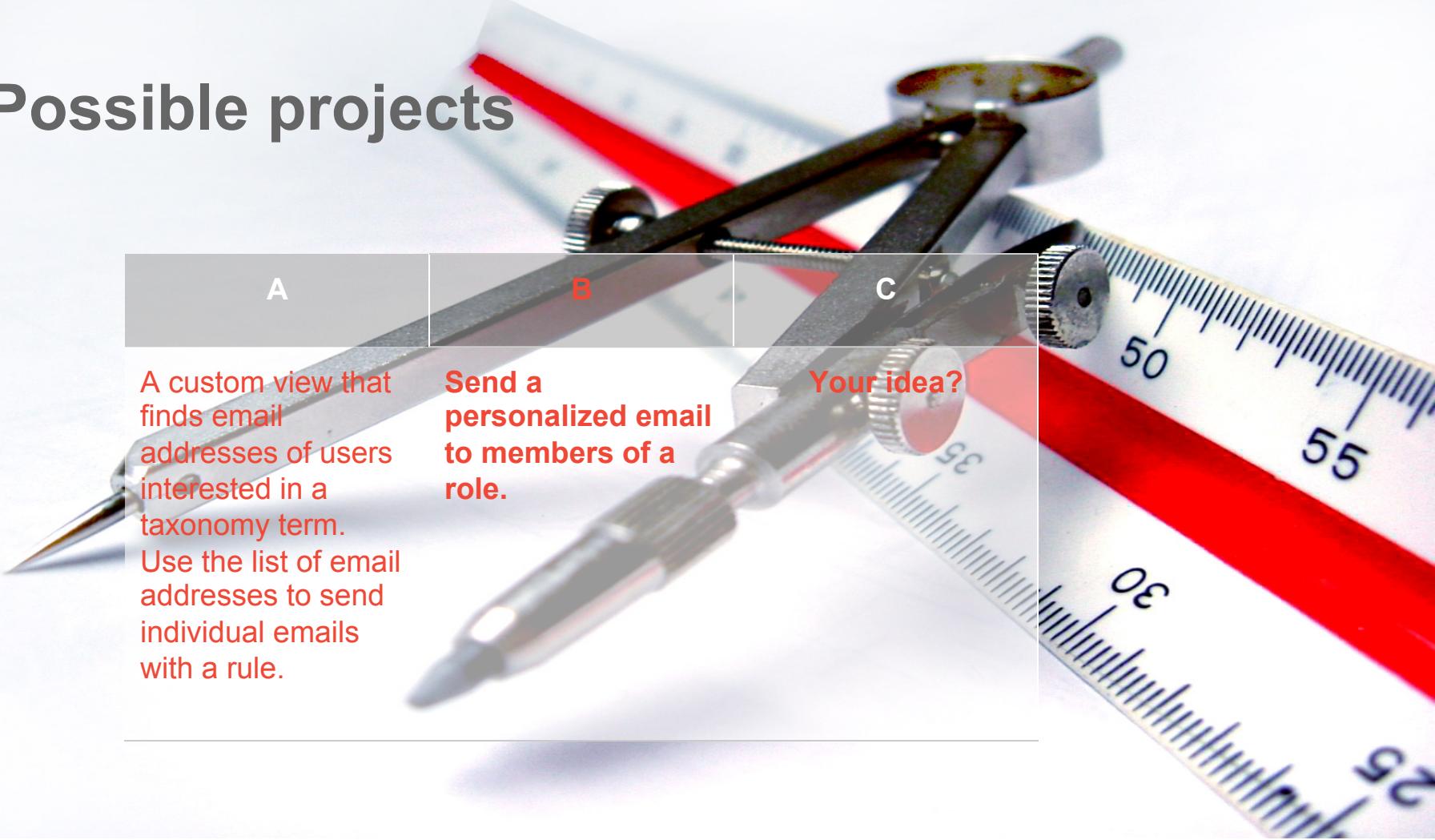
**Use the Views Rules module to create
complex rules using views data and
then act on the data in multiple ways.**

**This module can add a lot of flexibility
and power to your site rules.**

Possible Projects



Possible projects



A

A custom view that finds email addresses of users interested in a taxonomy term.

Use the list of email addresses to send individual emails with a rule.

B

Send a personalized email to members of a role.

C

Your idea?

Modules

Required modules

Entity API - *Entity Token*

Mime Mail

Mail System

Rules

Tokens

Views

Views Rules



Configure mail: mail system

Mail System •

MAIL SYSTEM SETTINGS

Drupal provides a default `MailSystemInterface` class called `DefaultMailSystem`. Modules may provide additional classes. Each `MailSystemInterface` class may be associated with one or more identifiers, composed of a *module* and an optional *key*. Each email being sent also has a *module* and a *key*. To decide which class to use, Drupal uses the following search order:

1. The class associated with the *module* and *key*, if any.
2. The class associated with the *module*, if any.
3. The site-wide default `MailSystemInterface` class.

Site-wide default `MailSystemInterface` class

MimeMailSystem ▾

Mime Mail module class

MimeMailSystem ▾

Theme to render the emails

Current ▾

Select the theme that will be used to render the emails. This can be either the current theme, the default theme, the domain theme or any active theme.

Configure mail: mime mail

Mime Mail •

Sender name

The name that all site emails will be from when using default engine.

Sender e-mail address

The email address that all site e-mails will be from when using default engine.

Use simple address format
Use the simple format of user@example.com for all recipient email addresses.

Include site style sheets
Gather all style sheets when no mail.css found in the default theme directory.

Send plain text email only
This option disables the use of email messages with graphics and styles. All messages will be converted to plain text.

Link images only
This option disables the embedding of images. All image will be available as external content. This can make email messages much smaller.

E-mail format

Personalized Email



How do you personalize the email?

The rule that sends the emails needs to have access to the information you want to insert into the email.

- The user's name
- In other words, it needs to have access to a token that contains the information.

Create a View that will list all of the users that have the role Member.

- The view will contain the user's name from their user profile

Create a Rule that will use this view to loop through the list of users and send a personalized email, with the user's name, to each one.



Views: Create a Rules Display

Displays

Entity Reference Rules + Add

▼ Rules details

Display name: **Rules**

Title
Title: **Members**

Format
Format: **Table** | Settings

Fields Add ▾
User: Name
User: E-mail

Filter criteria Add ▾
User: Active (Yes)
User: Roles (= member)

Sort criteria Add ▾
User: Name (asc)

Rules settings
Row variables: edit field info
Access: Permission | View user profiles

Header Add

Footer Add

Pager
Items to display:
Display a specified number of items | 10 items

Add fields from the user profile

- Name
- Email

If a field is not in the Rule display for the view, it will not be available for use by a rule

Rules Display :: Rules :: row variables

Configure the row variables

Member Info (User)

Rules: row variables

Configure the variable info for each field as they would be used in Rules.

User: Name

Enabled
Uncheck this box to make this variable unavailable for use in Rules.

Use rendered result
Check to use rendered value (e.g. rewritten) instead of the raw value. Note that a rendered field may contain markup but is not affected by the field's "Style settings".

Data type	Label	Name
Text	User: Name	name

User: E-mail

Enabled
Uncheck this box to make this variable unavailable for use in Rules.

Use rendered result
Check to use rendered value (e.g. rewritten) instead of the raw value. Note that a rendered field may contain markup but is not affected by the field's "Style settings".

Data type	Label	Name
Text	User: E-mail	mail

[Apply](#) [Cancel](#)

view name/description ▾

clone Rules ▾

Add

Add

avoir Add

style: Basic | Settings

: views_rules_1

comment

al links: No

on: No

�: Settings

e:

�: language

Caching: none

Rules

Active rules

Name	Event	Status	Operations
Send Email to Member of Role Machine name: rules_news_email_to_member, Weight: 0	After saving new content of type <i>Responsive Email</i>	Custom	edit disable clone delete export
Assign Role to New User Machine name: rules_register_new_member_for_news_letter, Weight: 0	After saving a new user account	Custom	edit disable clone delete export
ReSend Email to Member of Role Machine name: rules_resend_email_to_member_of_role, Weight: 0	After updating existing content of type <i>Responsive Email</i>	Custom	edit disable clone delete export

Inactive rules

Name	Event	Status	Operations
There are no inactive rules.			

Rules: send email

Events

Event	Operations
After saving new content of type <i>Responsive Email</i>	delete
Add event	

Conditions

Elements	Operations	Show row weights
+ Content is of type Parameter: Content: [node], Content types: Responsive Email	edit delete	
Add condition Add or Add and		

Actions

Elements	Operations	Show row weights
+ Views loop: Member Info - Rules Row variables: User: Name (name), User: E-mail (mail)	edit view display edit delete Add view loop Add action Add loop	
+ Send mail Parameter: To: [mail:value], Subject: [node:title], Message: Dear [name:value], ...	edit delete	
Add view loop Add action Add loop		

→ [Settings](#)

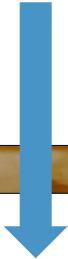
Rules: send email :: add view loop

Views iterator display *

- Select - ▾

Select the view display to use for looping. To add a display to the list, add a "Rules" display to a view.

Continue



Views iterator display *

- Select - ▾

- Select - ▾ play to use for looping. To add a display to the list, add a "Rules" display to a view.

Member Info

Rules



Rules: send email :: add view loop

Row variables

Adjust the names and labels of row variables (from the view) available in each iteration of the view loop, but note that renaming of already utilized variables invalidates the existing uses.

User: Name

Variable label *

User: Name

Variable name *

name

The variable name must contain only lowercase letters, numbers, and underscores and must be unique in the current scope.

User: E-mail

Variable label *

User: E-mail

Variable name *

mail

The variable name must contain only lowercase letters, numbers, and underscores and must be unique in the current scope.

Views Rules Connections

Row variables

Adjust the names and labels of row variables (from the view) available in each iteration of the view loop, but note that renaming existing uses.

User: Name

Variable label *
User: Name

Variable name *
name
The variable name must contain only lowercase letters, numbers, and underscores and must be unique in the current scope.

User: E-mail

Variable label *
User: E-mail

Variable name *
mail
The variable name must contain only lowercase letters, numbers, and underscores and must be unique in the current scope.

Fields Add ▾

- User: Name
- User: E-mail



Views Rules Connections

Member Info (User)

Rules: row variables

Configure the variable info for each field as they would be used in Rules.

User: Name

Enabled
Uncheck this box to make this variable unavailable for use in Rules.

Use rendered result
Check to use rendered value (e.g. rewritten) instead of the raw value. Note that a rendered field may contain markup but is not affected by the field's "Style settings".

Data type	Label	Name
Text	User: Name	name

User: E-mail

Enabled
Uncheck this box to make this variable unavailable for use in Rules.

Use rendered result
Check to use rendered value (e.g. rewritten) instead of the raw value. Note that a rendered field may contain markup but is not affected by the field's "Style settings".

Data type	Label	Name
Text	User: E-mail	mail

Basic | Settings

: views_rules_1
comment
all links: No
on: No
;: Settings
;:
\$language

Caching: none

Apply Cancel



Rules: send email :: add view loop :::: add action

The screenshot shows a user interface for configuring rules, specifically for adding actions to a view loop. The interface consists of three main sections:

- Top Panel:** A modal window titled "Select the *action* to add". It contains a dropdown menu set to "Add a variable" and a "Continue" button.
- Left Panel:** A list of actions under the heading "User". The actions listed are: Send HTML e-mail, Send HTML mail to all users of a role, Send mail, **Send mail to all users of a role**, Set breadcrumb, Show a message on the site. Below this, under "User", are: Add user role, Block a user, Remove user role, Send account e-mail. At the bottom is a dropdown menu set to "Add a variable" with a "Continue" button.
- Right Panel:** A list of actions under the heading "User". The actions listed are: Send HTML mail to all users of a role, **Send mail**, Send mail to all users of a role, Set breadcrumb, Show a message on the site. Below this, under "User", are: Add user role. At the bottom is a dropdown menu set to "Add a variable" with a "Continue" button.

Rules: send email ::

Token Replacement in Send mail to all users of a role

To

The e-mail address or addr

Value *

[mail:value]

Subject

The mail's subject.

Value *

[node:title]

Message

The mail's message body.

Value *

Dear [name:value],

[node:body]

**Views Rules
Display
configuration**



Views: add new view

Home > Administration > Structure > Views

Add new view

LIST **SETTINGS**

View name *
 Machine name: user_interests [\[Edit\]](#)

Description

Show of type tagged with sorted by

Create a menu link Content Taxonomy terms Files Content revisions Users Page Module/Theme/Theme engine Rules configuration

Path

Display format
 of with links (allow users to add comments, etc.) without comments

Items to display

Use a pager

Create a menu link

Include an RSS feed

Create a block

Views: Rules Display

The view *User Interests* has been saved.

Modify the display(s) of your view below or add new displays.

Displays

Page **+ Add**

- Attachment
- Block
- Date browser
- Entity Reference
- Feed

TITLE Page
Title: User Interests (Rules)

FORMAT

Format: Unformatted list | Settings
Show: Fields | Settings

FIELDS

User: Name
User: E-mail (E-mail)
User: Interests (Interests)

FILTER CRITERIA

User: Active (Yes)

SORT CRITERIA

PAGE SETTINGS

Path: /user-interests
Menu: No menu
Access: Permission | View user profiles

HEADER

FOOTER

PAGER

Use pager: Full | Paged, 10 items
More link: No

edit view name/description

view Page

Advanced

CONTEXTUAL FILTERS

RELATIONSHIPS

NO RESULTS BEHAVIOR

EXPOSED FORM

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

OTHER

Machine Name: page
Comment: No comment
Use AJAX: No

You do not need to define a Page display if you only need the view for the purpose of exposing data to rules.



Views: Configuration

FORMAT
Form: Unformatted list | Settings

Access: Permission | View user profiles

RELATIONSHIPS

CONTINGENT FILTERS

Configure filter criterion: User: Interests (field_interests)

For All displays

Appears in: user: user.

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

Select terms from vocabulary User Interests

Operator

- Is one of
- Is all of
- Is none of
- Is empty (NULL)
- Is not empty (NOT NULL)

Reduce duplicates

This filter can cause items that have more than one of the selected options to appear as duplicate results. If this filter causes duplicate results to occur, this checkbox can reduce those duplicates; however, the more terms it has to search for, the less performant the query will be, so use this with caution. Shouldn't be set on single-value fields, as it may cause values to disappear from display, if used on an incompatible field.

[MORE](#)

Auto preview Preview with contextual filters

Apply (all displays) Cancel Remove

Title ↗
User Interests
Content ↗
jack
E-mail: trudesaconoj@devmirror.info.invalid
Interests:
Featured

peter
E-mail: jespomewes@devmirror.info.invalid
Interests:
Featured

Home » Administration » Structure » Views

User Interests (User) o

Modify the display(s) of your view below or add new displays.

Displays

Page + Add

Page details

Display name: Page

PAGE SETTINGS

Title: User Interests

Path: /user-interests

Menu: No menu

Access: Permission | View user profiles

HEADER

FOOTER

PAGER

Use pager: Full | Paged, 10 items

More link: No

FILTER CRITERIA

User: Active (Yes)
User: Roles (= Gallery Member)
User: Interests | Settings

SORT CRITERIA

User: Created date (desc)

▼ Advanced

CONTEXTUAL FILTERS

RELATIONSHIPS

NO RESULTS BEHAVIOR

EXPOSED FORM

Exposed form in block: No

Exposed form style: Basic | Settings

OTHER

Machine Name: page

Comment: No comment

Use AJAX: No

Hide attachments in summary: No

Hide contextual links: No

Use aggregation: No

Query settings: Settings

Field Language: Current user's language

Caching: None

CSS class: None

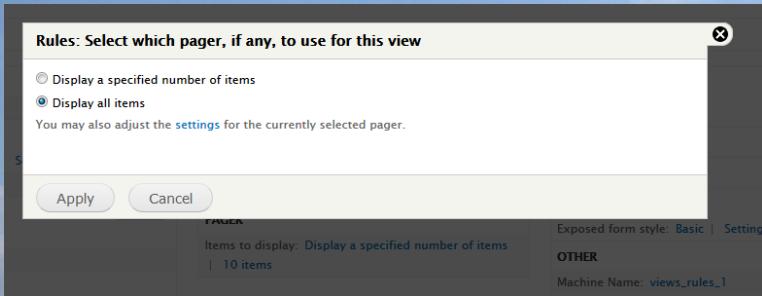
Theme: Information

Auto preview Preview with contextual filters: Separate contextual filter values with a "/". For example, 40/12/10. Update preview

Title ↗
User Interests
Content ↗
jack
E-mail: trudesaconoj@devmirror.info.invalid
Interests:
Featured

peter
E-mail: jespomewes@devmirror.info.invalid
Interests:
Featured

Views: Configuration



Set the Pager to “Show all items”.
The rule needs all the information
- paging will cause the rule not to email
all of the matched users.

Rules :: row variables

Rules: row variables

USER: NAME

Enabled
Uncheck this box to make this variable unavailable for use in Rules.

Use rendered result
Check to use rendered value (e.g. rewritten) instead of the raw value. Note that a rendered field may contain markup but is not affected by the field's "Style settings".

Data type	Label	Name
- None -	User: Name	name

EMAIL

Enabled
Uncheck this box to make this variable unavailable for use in Rules.

Use rendered result
Check to use rendered value (e.g. rewritten) instead of the raw value. Note that a rendered field may contain markup but is not affected by the field's "Style settings".

Data type	Label	Name
- None -	Email	mail

USER: INTERESTS

Enabled

Apply **Cancel**

Row variables in display "Rules" are not correctly configured.

Rules :: row variables

Rules: row variables

Enabled
Uncheck this box to make this variable unavailable for use in Rules.

Use rendered result
Check to use rendered value (e.g. rewritten) instead of the raw value. Note that a rendered field may contain markup but is not affected by the field's "Style settings".

Data type	Label	Name
- None -	User: Name	name
- None -		
Date		
Decimal number		
Duration		
Flag		
Formatted text		
IP Address		
Integer		
Text		
Text token		
Truth value		
URI		
Watchdog log entry		
Entity		
Any entity		
File		
Flagging		
Node		
Rules configuration		
Taxonomy term		

unavailable for use in Rules.

(e.g. rewritten) instead of the raw value. Note that a rendered field may contain markup but is not affected by the field's "Style settings".

Name
mail

clone Rules

Add Add Add

Settings

s_1

user's language

Apply Cancel

 Row variables in display "Rules" are not correctly configured.

Rules :::: row variables

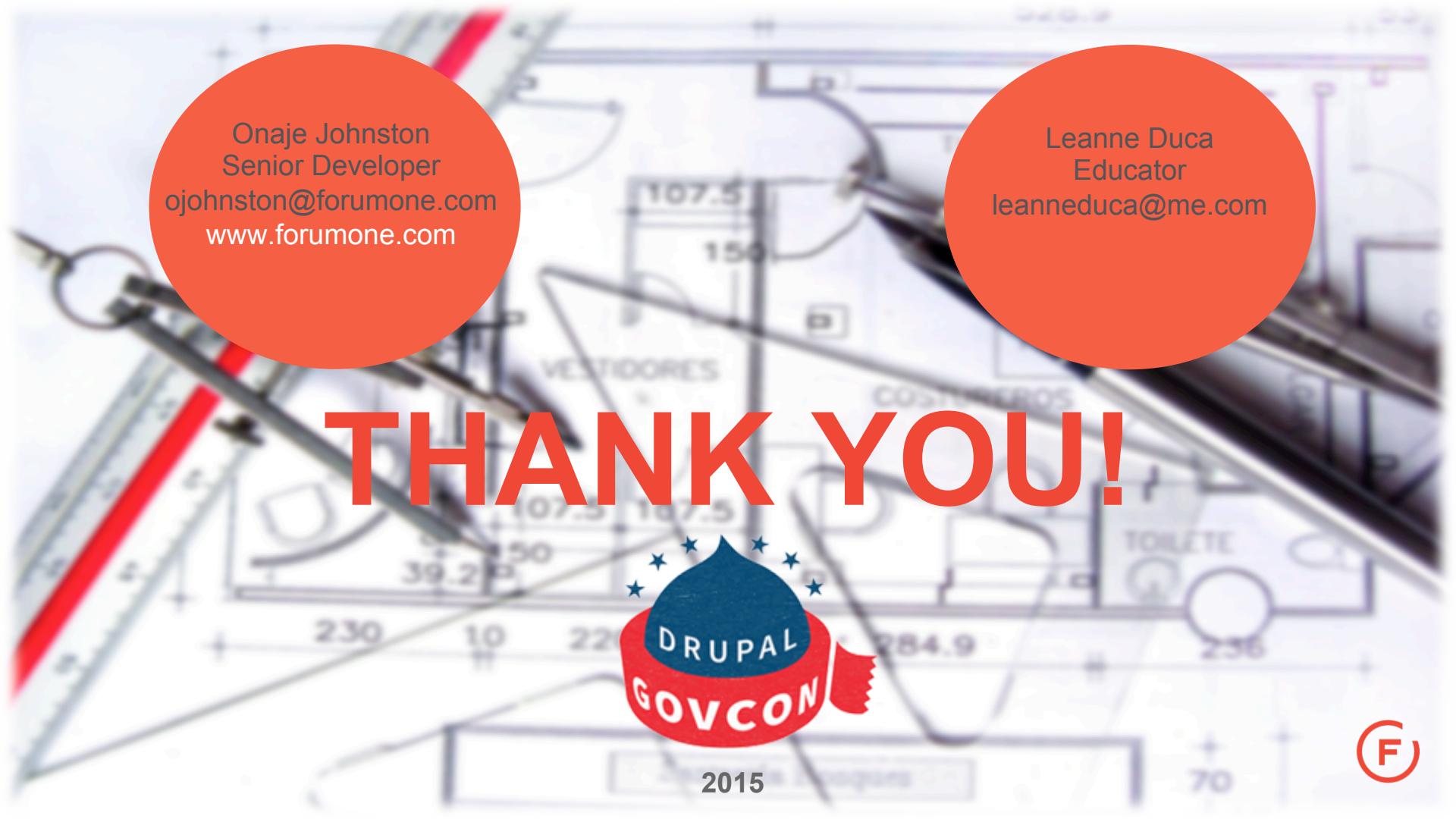
If the field has a label,
the label will auto-populate

If the field does not have a label,
the fieldname will auto-populate

The screenshot shows the 'Rules details' configuration interface. On the left, there's a sidebar with sections like 'Display name', 'TITLE', 'FORMAT', 'FIELDS', 'FILTER CRITERIA', 'SORT CRITERIA', and 'Auto preview'. The main area is titled 'Rules: row variables' and contains three entries:

Data type	Label	Name
Text	User: Name	name
Text	Email	mail
Text	User: Interests	field_interests

Each entry includes a checkbox labeled 'Enabled' and a note about using rendered results.



Onaje Johnston
Senior Developer
ojohnston@forumone.com
www.forumone.com

Leanne Duca
Educator
leannededuca@me.com

THANK YOU!

