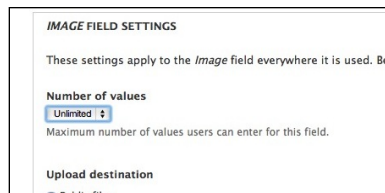# Working with Field Collections

Who here is familiar with the term "CCK"?

Who here has added custom fields to a content type? Did you let users add additional items (using the "unlimited" option)?

What kind of fields did you create? Anything for, say, people info? Or maybe a product description? Something where you needed groups of fields together to describe a particular type of entity (yes, I said entity!)? And did you use the "unlimited" option? Or did you offer only a fixed amount, because how do you offer the ability to add un-specified additional amounts without your node/edit form looking mighty unwieldy? (Not to mention, how would you theme it so the appropriate fields are rendered with each other…)

Field Collections, that's how!

Who here has used the Field Groups module?

Ever wish you could offer users the ability to add additional field groups, add multiple fields in one shot?

Guess what: Field Collections!

The Field Collection module is kind of like using an entity reference, in that your node incorporates content collected in another type of entity. But it's a simpler version, and one that by default lets your users create these referred-to entities without having to leave the node/*/edit form.

You can even nest field collections!

Notice how _moderator and _speaker fields are used in _agenda item.

Field collections and Views

When using Views to present nodes with field collections in them, you need to establish a relationship to the field collection in order for Views to reach inside and find the various sub-fields inside the collection. You also need to turn on aggregation.

It's not perfect; hinkiness (sp?) is presented when you go to create views listing nodes with field collections in them. I found that additional Field Collection items weren't displayed unless the view was sorted by one of the fields in the collection. And then it used separate rows, not ideal.

Event processing

▾ Operations

[Delete item] [Edit event fields]

		Title △	Event date	Organization name	Organization type	E-mail
group e-mail ☐	group edit ☐	ATS staff reception	Fri, May 30, 2014, 5:00 PM to 7:30 PM	Other	University department	becca@princeton.edu
group e-mail ☐	group edit ☐	Campus Green tours	Fri, May 30, 2014, 10:45 AM to 5:45 PM	Office of Sustainability	University department	jlongia@princeton.edu
group e-mail ☐	group edit ☐	Chocolate Feast	Sat, May 31, 2014, 3:00 PM to 5:00 PM	Institute for Chocolate Studies	University department	janitor@planetexpress.us
group e-mail ☐	group edit ☐	Dance The Night Away Dance-Off		BodyHype Dance Company	Student organization	ruler@omicronpersei8.com
group e-mail ☐	group edit ☐	First event to test	Thu, May 29, 2014, 9:15 AM to 10:15 AM	Other	University department	bv911@fastermac.net
group e-mail ☐	group edit ☐	Lorem ipsum	Fri, May 30, 2014, 10:45 AM to Sat, May 31, 2014, 10:45 AM	Daily Princetonian	Alumni organization	llilly@princeton.edu

[Send e-mail]

Filter sidebar: Title / Public event – Any – / Organization / Organization type – Any – / Location / Parent location / Event type – Any – / Additional considerations – Any – / Event details Contains / Sort by Title / Order Asc / [Apply] [Reset]

Default view sort, no repeating rows, but no additional values for Field Collection items.

Event processing

▾ Operations

[Delete item] [Edit event fields]

		Title △	Event date	Organization name	Organization type	E-mail
group e-mail ☐	group edit ☐	ATS staff reception	Fri, May 30, 2014, 5:00 PM to 7:30 PM	Other	University department	becca@princeton.edu
group e-mail ☐	group edit ☐	First event to test	Thu, May 29, 2014, 9:15 AM to 10:15 AM	Other	University department	bv911@fastermac.net
group e-mail ☐	group edit ☐	Chocolate Feast	Sat, May 31, 2014, 3:00 PM to 5:00 PM	Institute for Chocolate Studies	University department	janitor@planetexpress.us
group e-mail ☐	group edit ☐	Campus Green tours	Fri, May 30, 2014, 10:45 AM to 5:45 PM	Office of Sustainability	University department	jlongia@princeton.edu
group e-mail ☐	group edit ☐	Lorem ipsum	Fri, May 30, 2014, 10:45 AM to Sat, May 31, 2014, 10:45 AM	Daily Princetonian	Alumni organization	llilly@princeton.edu
group e-mail ☐	group edit ☐	Dance The Night Away Dance-Off		BodyHype Dance Company	Student organization	ruler@omicronpersei8.com
group e-mail ☐	group edit ☐	First event to test	Thu, May 29, 2014, 9:15 AM to 10:15 AM	Other	University department	veale@princeton.edu

[Send e-mail]

Filter sidebar: Title / Public event – Any – / Organization / Organization type – Any – / Location / Parent location / Event type – Any – / Additional considerations – Any – / Event details Contains / Sort by E-mail / Order Asc / [Apply] [Reset]

Notice how "First event to test" shows up twice when the view is sorted by e-mail.

But, if you want users to be able to filter a view using a value specified for one of the collection's fields (exposing a filter), well, that worked for me.

Events

Use the search fields to find particular events. Speaker(s) information may not be available for all events.

2013-2014

Spring

Testing conference creation
Fri, 02/21/2014 - 9:00am
A sample location with a really rather long name (just in case)

The Role of Technology in Postsecondary Education
Thu, 05/22/2014 (All day)
Woodrow Wilson School

2014-2015

Fall

Natalie's birthday conference
Sat, 10/18/2014 (All day)
Lewis Library

Search fields: Title / Speaker (last name) / Subject / Term – Any – / Year / When filtering by Term/Year, only events occurring today or in the future will be included in the results. / [Apply] [Reset]

Events

Use the search fields to find particular events. Speaker(s) information may not be available for all events.

2013-2014

Spring

Testing conference creation
Fri, 02/21/2014 - 9:00am
A sample location with a really rather long name (just in case)

Search fields: Title / Speaker (last name) donuts / Subject / Term – Any – / Year / When filtering by Term/Year, only events occurring today or in the future will be included in the results. / [Apply] [Reset]

Exposed filters will find those buried fields.

Displaying field collections

Maserati cabriolet at a car show
Year: 1952
Make: Maserati
Model: Cabriolet (I don't really know...)

Out of the box, the way Field Collections fields are displayed on a node is, well, it's okay. But hey, if "okay" was good enough for us, we wouldn't be Drupal developers, would we?

Fortunately, as is often the case with things Drupal, there's a module to fix that: Field Collection Views. This lets you create a view to determine how the Field Collection fields will be displayed on your nodes.

At right: Field Collection items formatted in a table with Field Collection Views.

Links

Module, documentation, tutorials:
- https://drupal.org/project/field_collection
- https://drupal.org/node/1353926
- http://codekarate.com/daily-dose-of-drupal/drupal-7-field-collection-module
- http://codekarate.com/daily-dose-of-drupal/drupal-7-field-collection-views-module
- http://nodeone.se/en/the-aggregation-setting-the-emmajane-episode

Related modules:
- https://drupal.org/project/field_collection_views
- https://drupal.org/project/field_collection_fieldset
- https://drupal.org/project/quicktabs_field_collection
- https://drupal.org/project/field_collection_tabs
- https://drupal.org/project/field_collection_table
- https://drupal.org/project/field_collection_modals
- https://drupal.org/project/apachesolr_field_collection

Pertinent issues:
- https://drupal.org/node/1171012
- https://drupal.org/node/2008468
- https://drupal.org/node/1936620
- http://drupal.stackexchange.com/questions/5101/how-to-integrate-field-collection-module-in-views
- https://drupal.org/node/1276258
- https://drupal.org/node/1788222
- https://drupal.org/node/1239946
- https://drupal.org/node/1157794