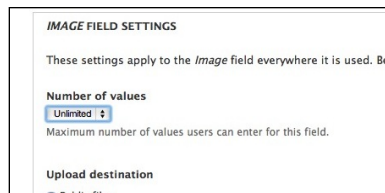


# Working with Field Collections

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)?



**IMAGE**

Upload an image to go with this article.

**Add a new file**

Choose File no file selected Upload

Files must be less than 2 MB.  
Allowed file types: png gif jpg jpeg.

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**CAPTION**

+

Add another item

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 unspecified 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?

LABEL	MACHINE NAME	FIELD TYPE	WIDGET	OPERATIONS
+ Administration	group_event_administration	Fieldset	fieldset collapsible classes group-event-administration field-group-fieldset required_fields yes	<span>edit</span> <span>delete</span>
+ Sponsoring organization	group_event_sponsor	Fieldset	fieldset collapsible classes group-event-sponsor field-group-fieldset required_fields yes	<span>edit</span> <span>delete</span>
+ Organization name	field_organization_name	Term reference	Select list	<span>edit</span> <span>delete</span> <span>validate</span>
+ Other organization name	field_organization_name_other	Text	Text field	<span>edit</span> <span>delete</span> <span>validate</span>
+ Organization type	field_event_sponsor	Term reference	Check boxes/radio buttons	<span>edit</span> <span>delete</span> <span>validate</span>
+ Billing account number	field_billing_account	Text	Text field	<span>edit</span> <span>delete</span> <span>validate</span>
+ Primary contact	field_event_item_primary_contact	Field collection	Embedded	<span>edit</span> <span>delete</span> <span>validate</span>
+ Event administration notes	group_event_notes	Fieldset	fieldset collapsed required_fields yes classes group-event-notes field-group-fieldset description You can use this field to enter any items that...	<span>edit</span> <span>delete</span>
+ Event administration notes	field_event_notes	Long text	Text area (multiple rows)	<span>edit</span> <span>delete</span> <span>validate</span>

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!**

FIELD NAME	USED IN
field_agenda_item	Conference
field_agenda_item_moderator	Field collection field_agenda_item
field_agenda_item_speaker	Event, Field collection field_agenda_item

*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@omicronperseis.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	lilly@princeton.edu

Send e-mail

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	lilly@princeton.edu
group e-mail	group edit	Dance The Night Away Dance-Off		BodyHype Dance Company	Student organization	ruler@omicronperseis.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

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

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)

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.*

### Testing conference creation

View Edit Repeats Revisions Log

**Date:** Friday, February 21, 2014 - 9:00am to 1:00pm  
**Location:** A sample location with a really rather long name (just in case)  
**Supporting Material:** [Conference flyer \(right-click to download\)](#)

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Morbi id eros placerat, pulvinar quam ac, gravida turpis. Suspendisse in interdum odio. Phasellus consequat purus orci, a accumsan velit lobortis sed. Pellentesque ut ipsum dolor. Suspendisse volutpat purus dolor, a congue enim tincidunt eget.

Time	Agenda Items
9:00am - 11:30am	<b>Breakfast</b> <b>Moderator(s):</b> Mr. Joe Bagga Donuts III <a href="#">Moderator's list of questions</a> Mr. Donuts brings to this forum a sharp wit and a keen sense of bologna  <b>Speaker(s):</b> Mr. John Bagga Donuts, BS, MS, PDQ <a href="#">How I love to roll donuts down those hills</a> John comes to us from the rolling hills of western Virginia. He'll discuss his latest tome, a preview of which is available on his website, johnbaggadonuts.com.  Prof. Jane Bagga Donuts, Ph.D <a href="#">I don't have time to sit around and eat donuts!</a> Jane has spared time from her busy schedule for us, and we heartily thank her for it.  The Donut family members assembled for this session will discuss key issues facing the community today. Joe, the senior member of the family, has proved the only individual capable of curtailing unmitigated violence when the junior family members assemble less than 100 yards from each other. Should be a positively stirring session. <a href="#">Session details (right-click to download)</a>
11:45am - 1:00pm	<b>Lunch</b>

## Links

Module, documentation, tutorials:

- [https://drupal.org/project/field\\_collection](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_views)
- [https://drupal.org/project/field\\_collection\\_fieldset](https://drupal.org/project/field_collection_fieldset)
- [https://drupal.org/project/quicktabs\\_field\\_collection](https://drupal.org/project/quicktabs_field_collection)
- [https://drupal.org/project/field\\_collection\\_tabs](https://drupal.org/project/field_collection_tabs)
- [https://drupal.org/project/field\\_collection\\_table](https://drupal.org/project/field_collection_table)
- [https://drupal.org/project/field\\_collection\\_modals](https://drupal.org/project/field_collection_modals)
- [https://drupal.org/project/apachesolr\\_field\\_collection](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>