

The banner features a background of a technical circuit board with various components and labels. On the left, there is a shopping cart icon with a blue dome on top. The main text is centered and reads "DRUPAL COMMERCE" in large, bold, blue letters, with "Tech Talks" in a smaller, grey font below it. In the bottom right corner, there is a small square portrait of a man with a beard and short hair. To the right of the portrait, the text reads "Nick Vahalik", "Technical Sales Engineer", "@nvahalik", and "nick.vahalik@commerceguys.com".

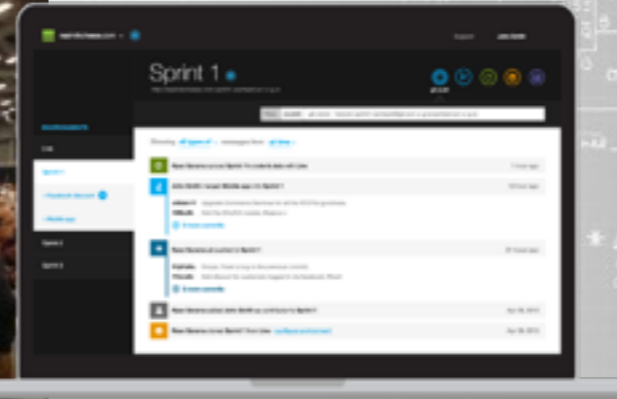
DRUPAL COMMERCE
Tech Talks



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Welcome to another Drupal Commerce Tech Talk.

DrupalCon Austin Recap



<http://bit.ly/austin-wrap-up>

If you were not able to make it to Austin, you should check out the various sessions presented or co-presented by the Commerce Guys at Drupal Con. This includes a session on Digital Commerce by Bojan and David Kitchen, a session on In-app purchasing by Scott Hooker and Tyler Frankenstein, Robert's sessions on SaaS and Drupal businesses, and a session by myself and Josh Miller titled Commerce by Example where we add commerce to an existing site live. All the DrupalCon videos are currently online at the DrupalCon site, so be sure to check those out!

Probably the most exciting part of DrupalCon was that it signaled the public release of our Continuous Delivery and Integration offering called Platform.sh, which is on its way to revolutionizing the way that Drupal projects are developed, managed, and launched. If you'd like learn more, just go to platform.sh and you can request a demo or sign up today.

Tech Talks

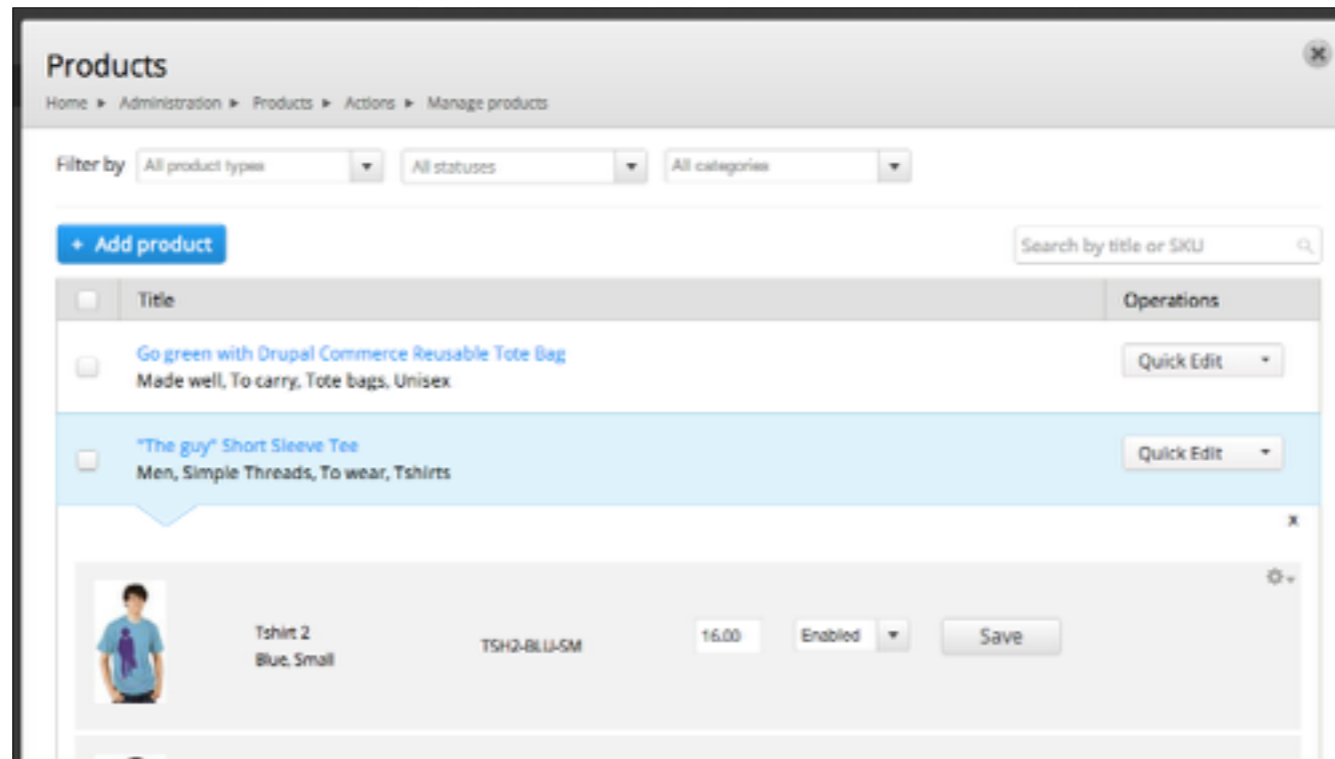
commerceguys.com/webinars/tech-talks

- March: Digital Commerce
- April: Bundles
- May: Billy
- June: **Backoffice**
- July: Shipment

This is the fourth in a series of Tech Talks where we are going over the latest and greatest of what Commerce Guys and Drupal Commerce have to offer.

(quick recap)

So today, we're going to talk about Commerce Backoffice.



Commerce Backoffice provides some user experience enhancements that makes it much easier to manage content, products, and orders in a Drupal Commerce backend environment. Commerce Backoffice is included with Commerce Kickstart 2, but you don't need Commerce Kickstart 2 to use Backoffice, you can install it on any Drupal Commerce site.

They also serve as a great reference implementation of several modules which provide some awesome functionality, which we are going to look at first.



But first, we're going to talk about four of the dependencies of CBO, primarily because they are vital to the workings of the modules. CBO rests heavily on several modules that you may, or may not, already have on your site. And these modules are really helpful when combined (which is where so much of CBO's power comes from). The first, is Inline Entity Form.

Inline Entity Form

- dgo.to/inline_entity_form

Image	Capacity	SKU	Price	Operations
	8MB	USB-8U-08	\$11.99	Edit Delete
	16MB	USB-8U-16	\$17.99	Edit Delete
	32MB	USB-8U-32	\$29.99	Edit Delete

[Add new variation](#)

IEF provides a widget for the inline management of child/referenced entities within another entity. If you've used Commerce Kickstart 2, then you've used IEF, because it is how you manage product variation within a product. IEF comes with a pretty robust API that allows you to define and extend the base functionality to include this functionality in your own forms and customize the table to suite your needs. We'll see this feature harnessed by CBO during our demo.

Views Megarow

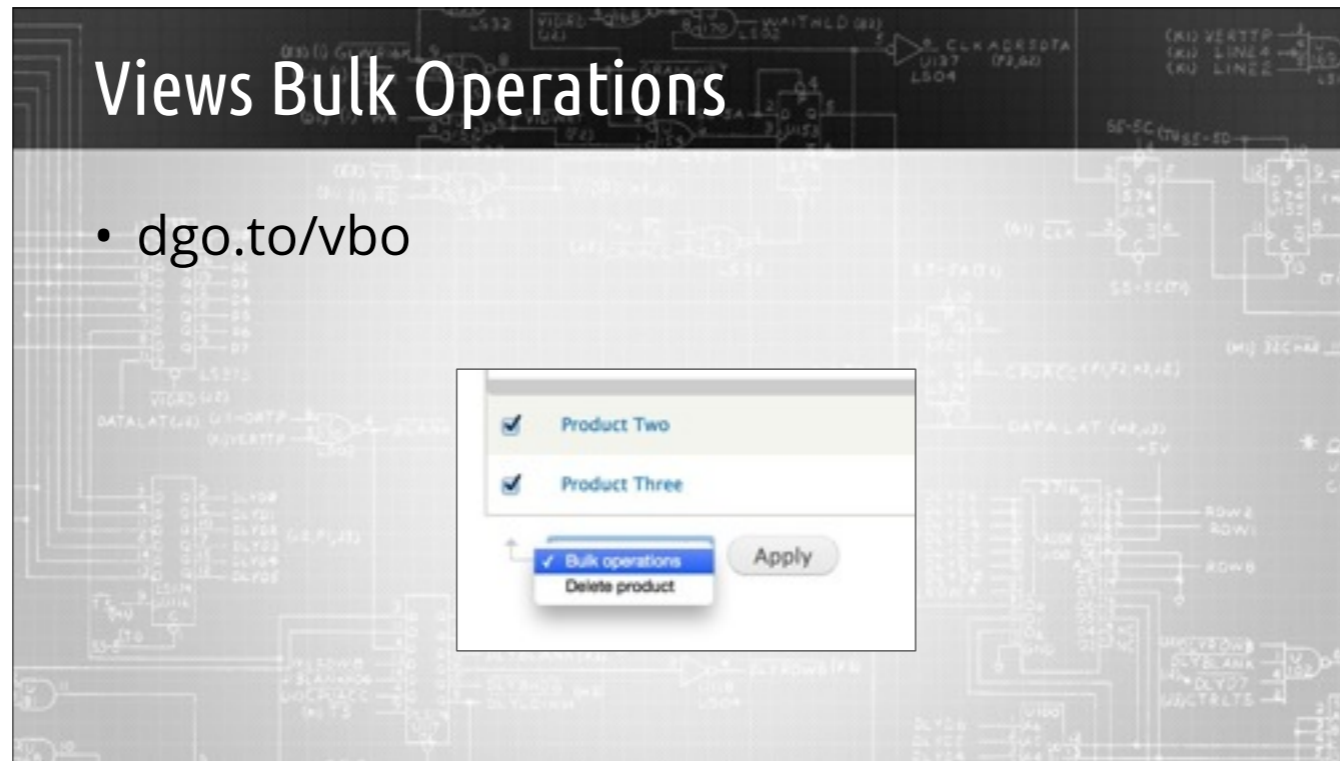
- dgo.to/views_megarow



Megarow provides a new table display handler that gives you the ability to view related (but long) information about an entity, or short related operations on table rows (usually an entity) by expanding from beneath the row selected by a drop-down. In the screenshot here, there are 3 options, and you can see the result of selecting "Quick edit" below, but if Edit or Delete were selected, it would just send you to a page. You can, however, tell VMR to set the destination parameter, and so once you do finishing editing, you're forwarded back to the view/page you came from. And if you're interested in using this functionality in your own screens, the CBO modules are a great reference for how to accomplish just that.

Views Bulk Operations

- dgo.to/vbo



VBO really needs no introduction, since it's installed on over 170k sites. In fact, it's a prime example of our philosophy on how to improve instead of reinventing the wheel — as Commerce Guys were fundamental in the rewrite and implementation of the VBO module for Drupal 7, form support in Views, and Rules integrations. This is a great addition to any site and can really make life easier for your site admins by automating complex or tedious tasks in code or with rules, and then allow them to work in groups of entities at time.

Entity Views Attachment

- dgo.to/eva



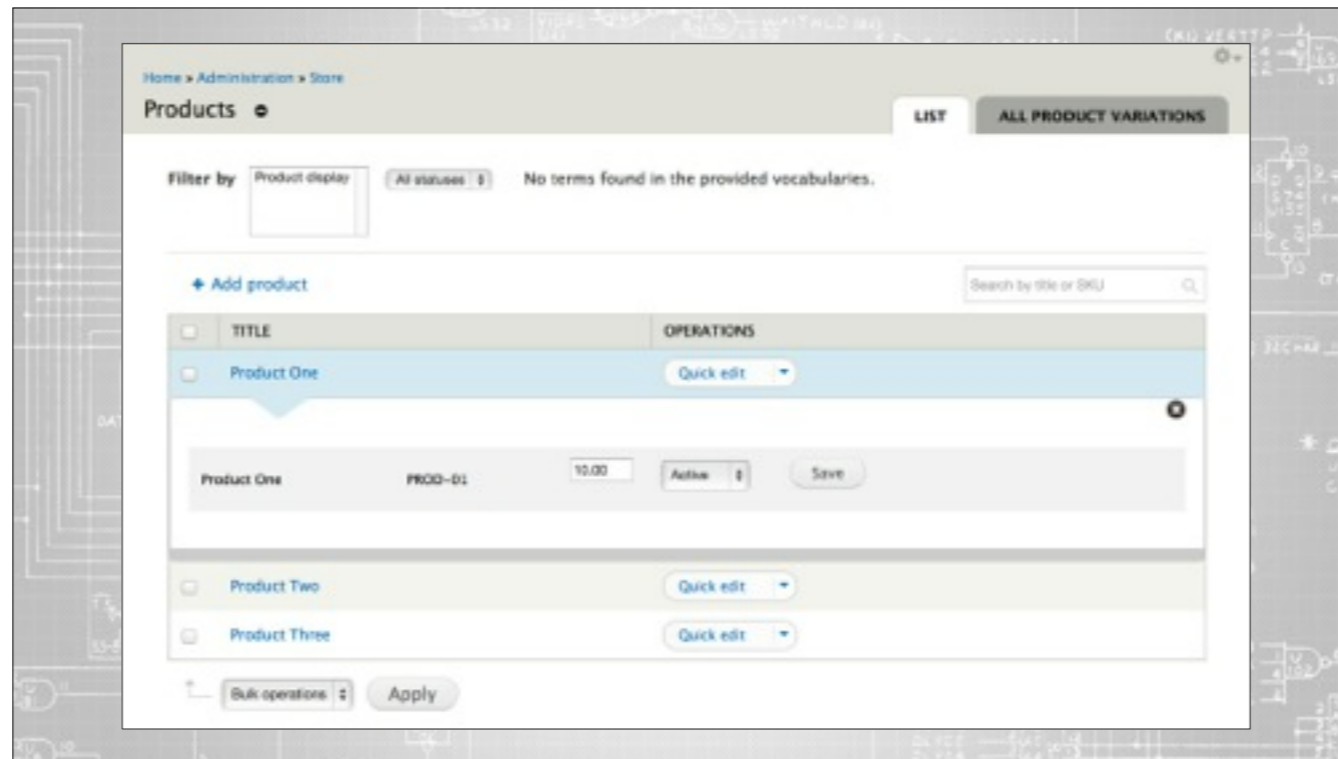
The EVA module allows you to create a view display that ends up getting rendered as part of an entity's display. This is great because, it ties view output to a display mode of the entity rather than through, say, a block, which is usually tied to a page or some other custom code in order to render properly. Though EVA has many, many uses, we'll specifically see EVA in action when looking at the CBO Order module and how it's used for displaying payments.



With the dependencies out of the way, let's take a look at the three components of Commerce Backoffice. The three components are actually 4 modules. One of the modules is a "common" module that provides some functionality that all three of the other modules use — but really does nothing on it's own. So, with that in mind, let's talk about Backoffice Products first.



Backoffice Products is probably the most “intrusive” of the CBO modules because it provides a drastic “rethink” of how product types and products are seen and managed. It can greatly improve your workflow and make product management easier for folks who have less Drupal experience.



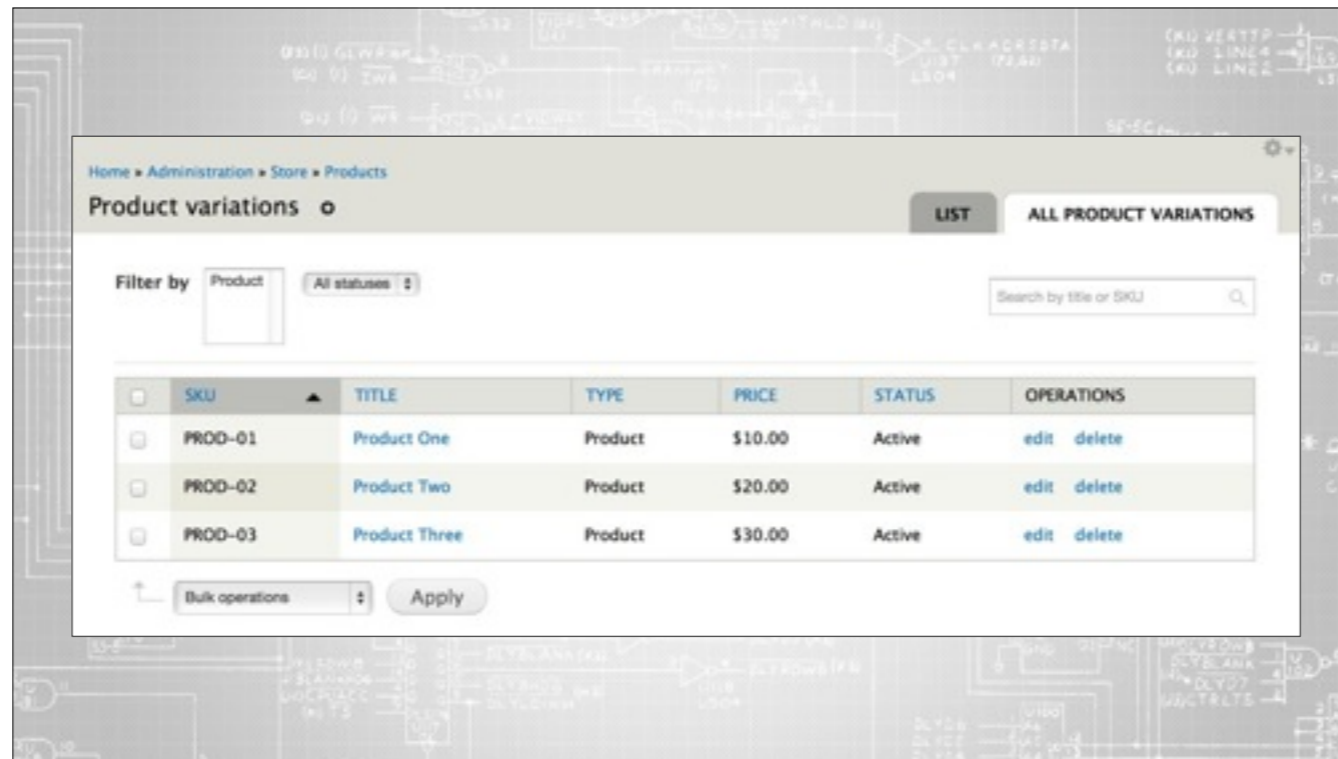
The biggest change is that product management is now focused around products instead of strictly separating products and product variations, which is what Commerce does normally. And yes, the terminology is different from Commerce core. This difference in naming is something that will be fixed in DC 2.x. But CBO uses the same naming standards that Kickstart does, so just keep that in mind as we go through these slides. Products, within the context of CBO specifically mean Nodes which have product reference fields in them.

The goal of this page is to make editing and management of products much more straightforward by putting common change elements on the page, instead of requiring you to go to each individual product page to make those changes. Need to mark something as unavailable or change a price? You can do it now without ever leaving the product list. The new page also contains some more user-friendly vocabulary and attribute filtering, as well as a seamless integration with Bulk operations. This whole page is a view and can be customized, too.

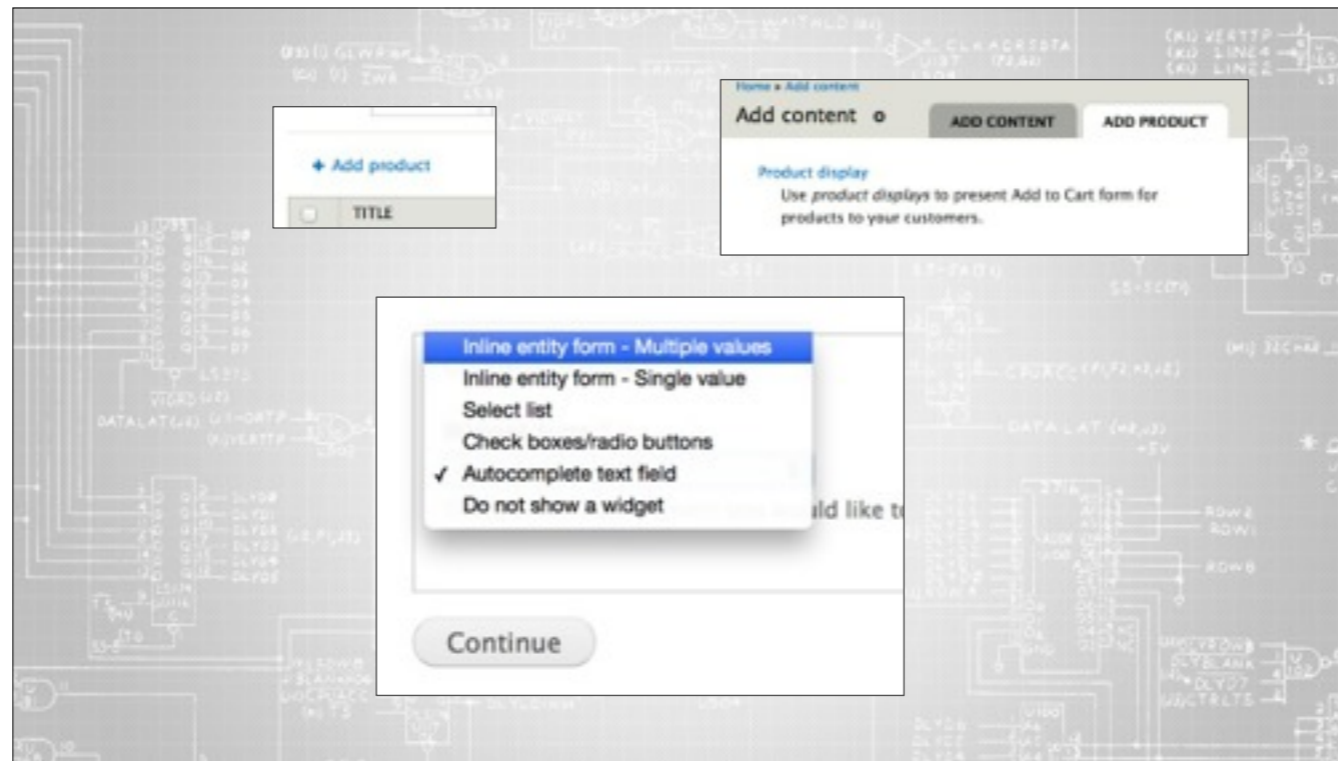
You'll notice that operations is now a "dropdown." This UI concept started back in the new Views 3 UI and is becoming mainstream in Drupal 8. Clicking on the quick-edit feature reveals quick and easy access to editing things like price and status of individual products — and this particular feature is actually a view and can be customized to display whatever you'd like. From this menu you can also edit or delete the product.

The image shows a screenshot of a Drupal interface. At the top, there is a table with one row containing the text "Product One" and "PROD-01". To the right of this row is a "Quick Edit" form, which is highlighted with a blue dashed border. This form contains a text input field with the value "10.00", a dropdown menu currently set to "Active", and a "Save" button. To the right of the table is a configuration panel with sections for "FORMAT" (set to "Table | Settings"), "FIELDS" (with an "Add" button and a list of fields including "Commerce Product: All taxonomy terms", "Commerce Product: Title", "Commerce Product: SKU", and "Commerce Product: Quick Edit Form"), "FILTER CRITERIA" (with an "Add" button), and "SORT CRITERIA" (with an "Add" button). At the bottom of the screenshot is a code editor showing PHP code for a class `commerce_backoffice_product_handler_field_product_quick_edit_form` that extends `views_handler_field`. The code includes a `render($values)` function that queries for an entity, resets the first entity in the results, and then renders a form using `drupal_get_form()` and `drupal_render()`.

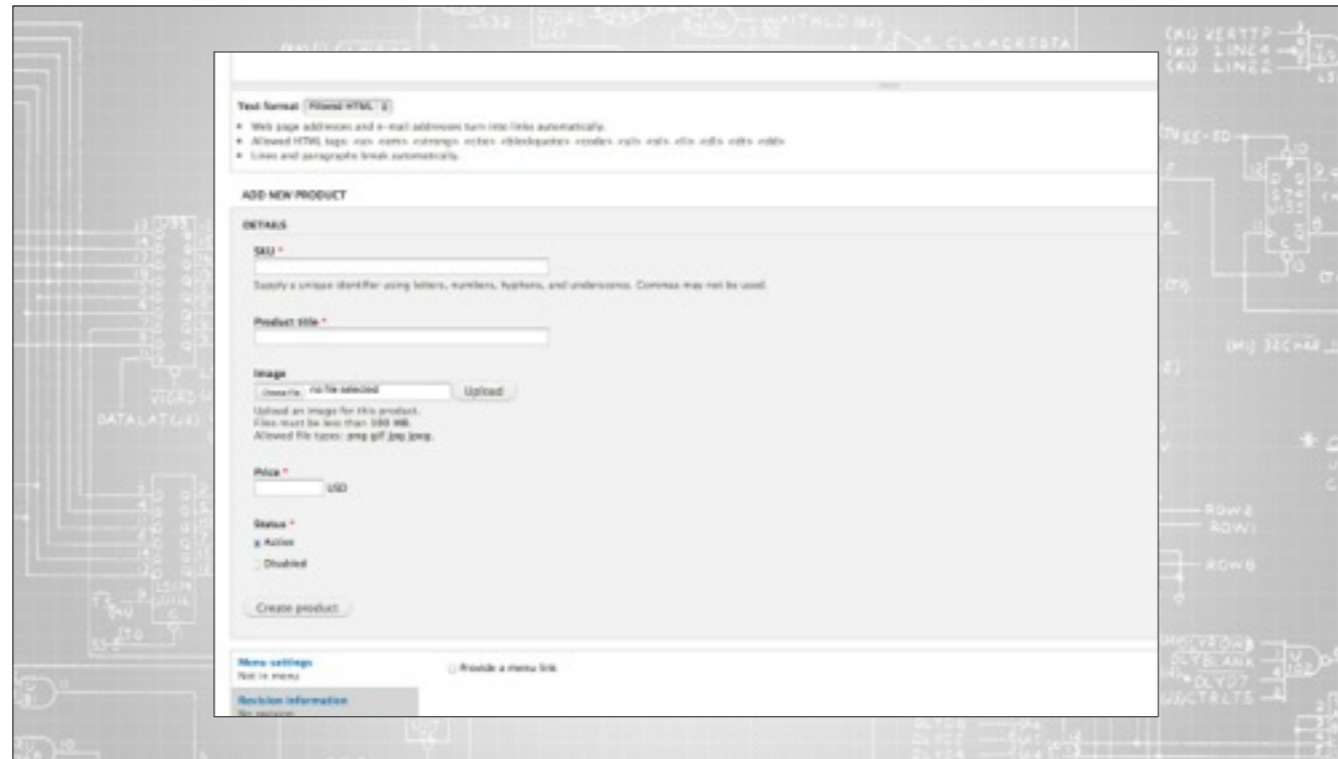
Once you hit the quick-edit button, you're presented with the output of a view. By default, that view has 4 fields. The last field is the one we're really interested in. This field's handler renders a form. And, if you were so inclined, you could modify this form to your liking by altering it through hooks, or even building upon the concept here and building your own.



Over to product variations. Product Variations are actual product entities. From this screen, you've got the search and filter capabilities as well as VBO. You'll notice, though, that there isn't a way to add a product on this screen! It hasn't been removed completely, but it has been mostly eliminated due to how CBOP is designed to handle product creation.

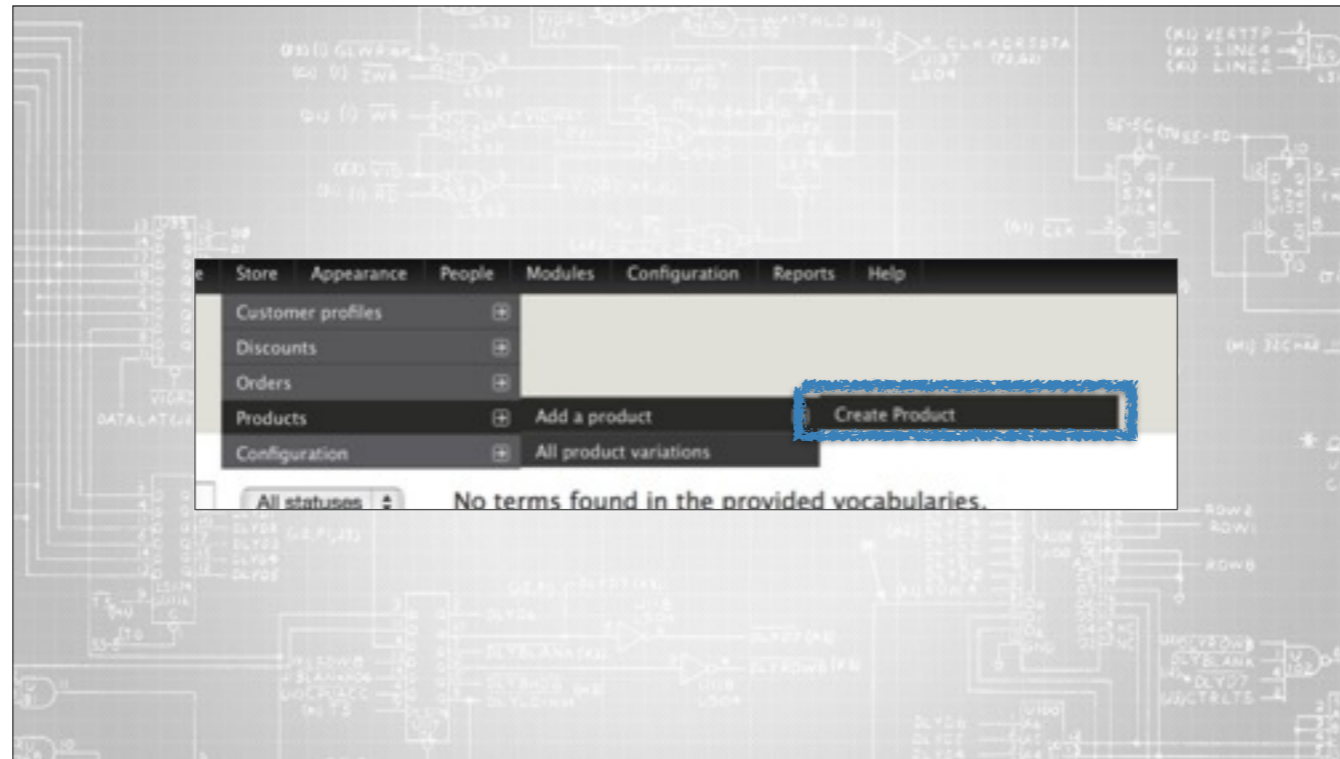


To add/edit products, just go back to the main product listing page and click add product. That link will then take you to a new "Add product" page that lists only the content types that have product reference fields on them. The next piece is really the only non-automated part of this module and that's enabling the IEF. The IEF widget will need to be enabled on every product display type you want to use it with — could be all of them or just one or two. But the end result will be this...

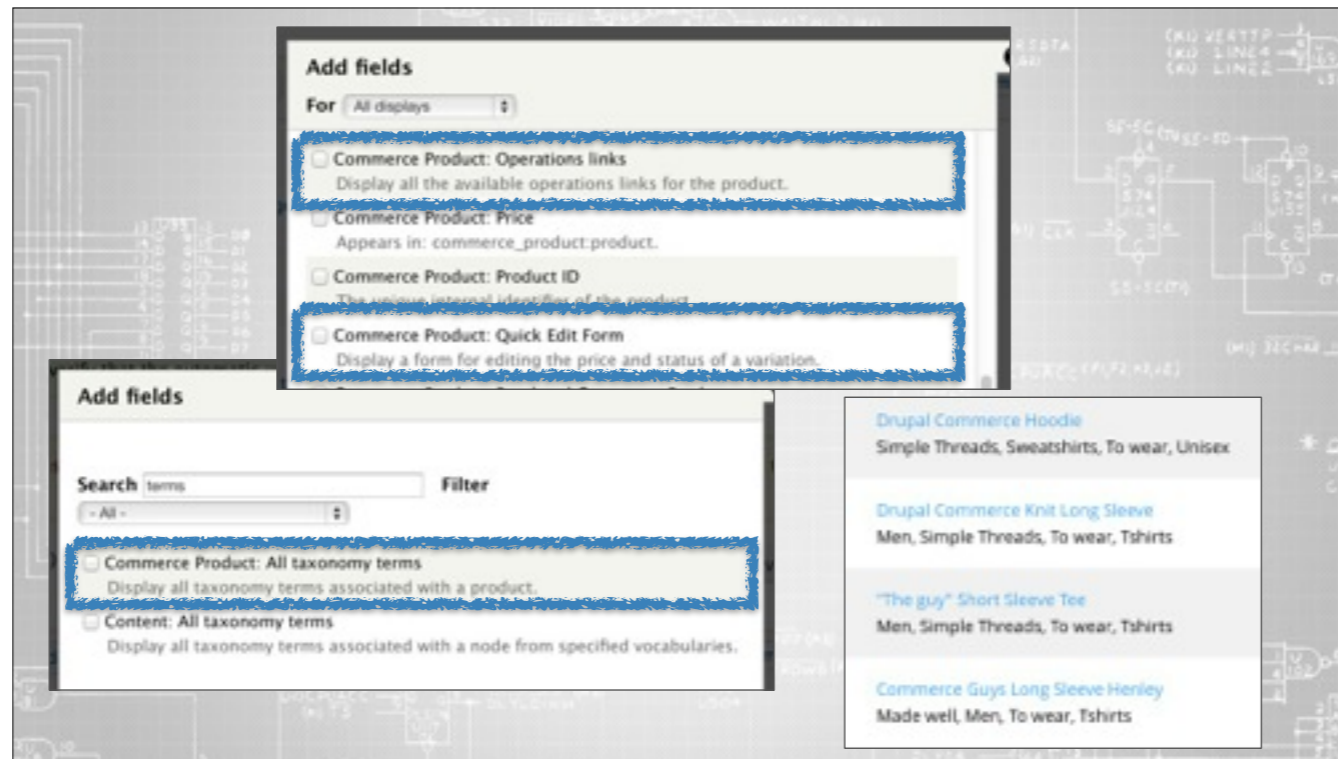


When using IEF, you'll be able to add new products from within your product pages. This can save a lot of time because it removes the need first create all of your products and then associate them with a product display separately. Another side effect is that it forces you to think about attributes and categories in a more structured format. If something doesn't need to be added with each new product you're creating, it should go on the display page and not in the product creation form.

Now, you might be thinking — what if I want to edit products directly?



It's still here! The tabs are removed on the individual pages, but using admin menu, you can still create individual products like normal.



Under the hood, CBOP adds a couple of view field handlers. One for operations links, another for the quick-edit form, and another that allows you to display all taxonomy terms.

As mentioned earlier, the operations handle replaces all of the text links that would normally be displayed for actions and puts them into a nice menu. It will also look at the contextual links for a given node and include those in the menu as well.

The taxonomy term field can be seen in its full form in the Kickstart demo, where the product listing lists the brand, category, and other taxonomy fields together. It also has a robust token integration so you can reuse the information loaded by the field in other fields to further customize the output.



Next, we're going to talk about Backoffice Orders.

Home > Administration > Store

Orders

Filter by: Canceled (Canceled), Shopping cart (Shopping cart), Checkout: Checkout (Checkout), Checkout: Review (Checkout)

Start date: E.g., Friday, June 20, 2014

End date: E.g., Friday, June 20, 2014

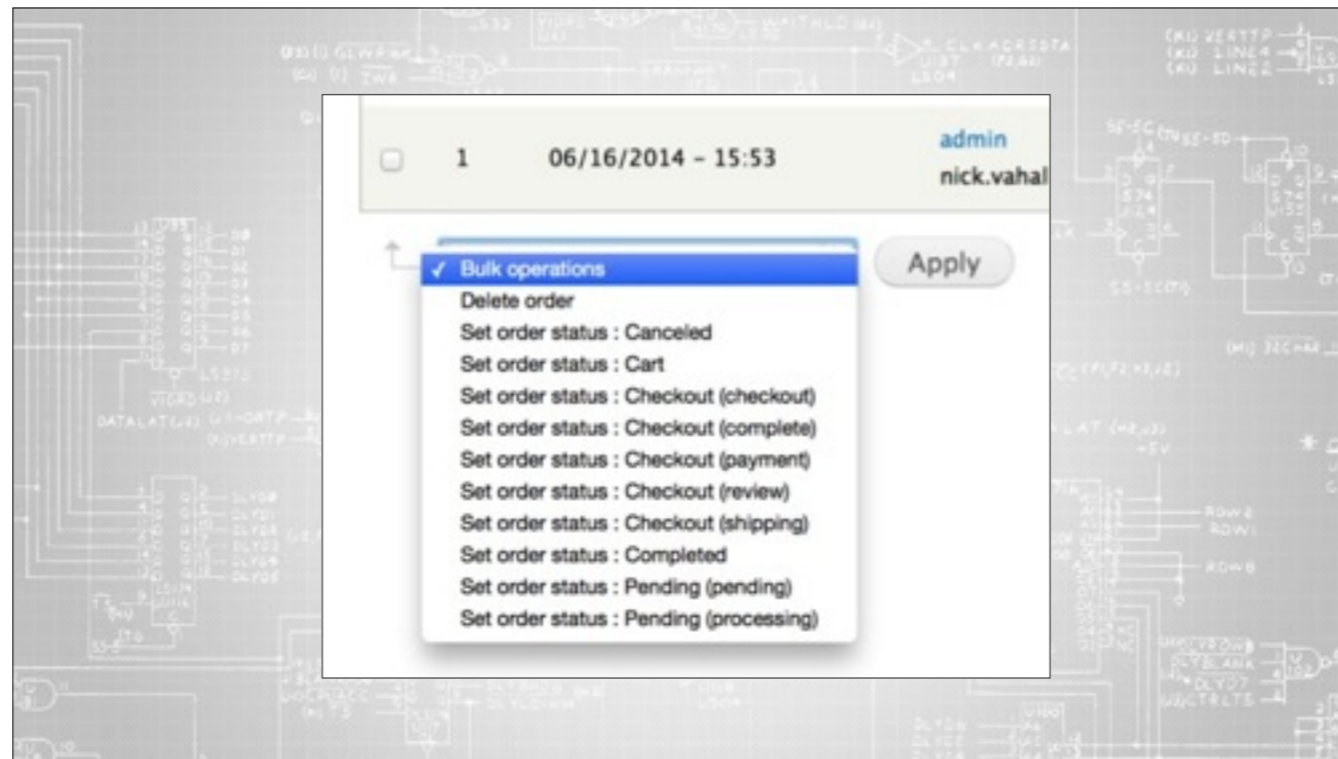
+ Create an order

Search by username, email, order ID

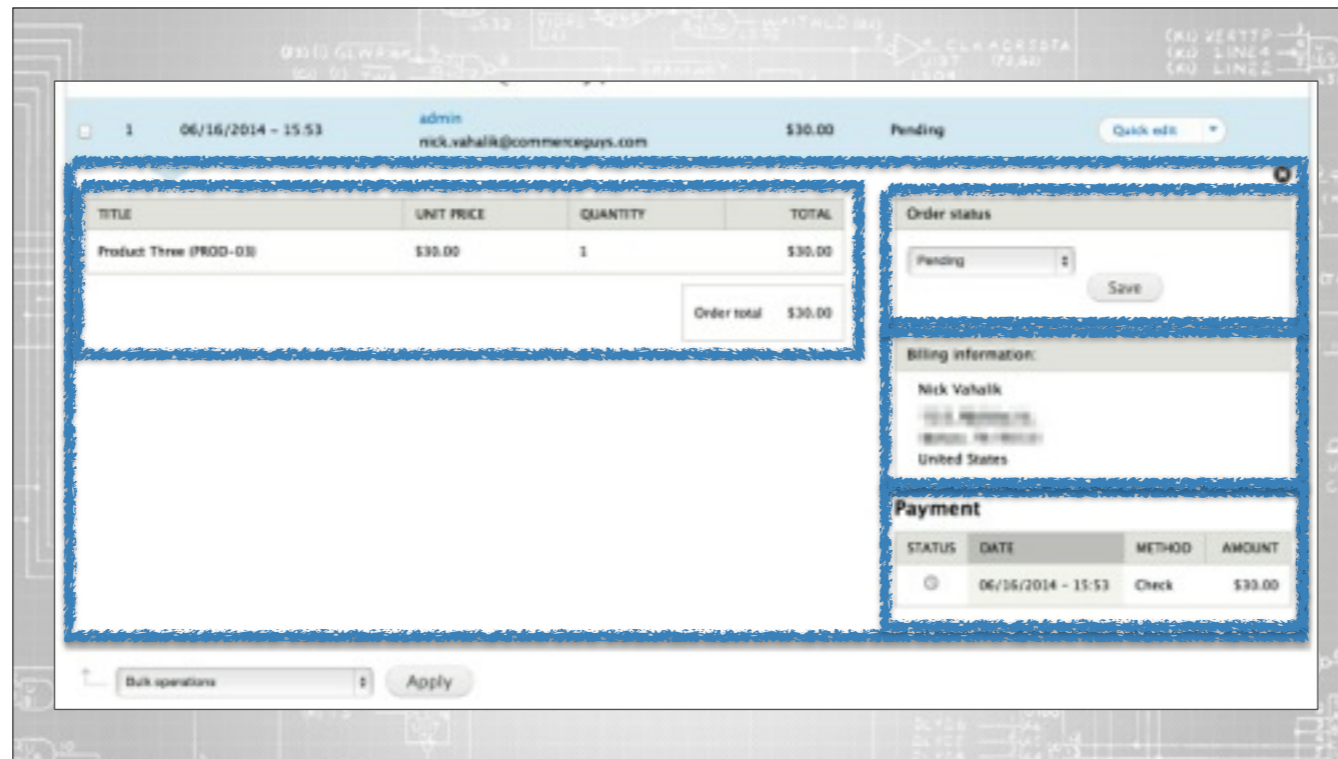
ID	CREATED	NAME/EMAIL	TOTAL	STATUS	OPERATIONS
2	06/16/2014 - 16:11	admin nick.vahalik@commerceguys.com	\$20.00	Checkout: Review	Quick edit
1	06/16/2014 - 15:53	admin nick.vahalik@commerceguys.com	\$30.00	Pending	Quick edit

Bulk operations: [dropdown] Apply

Just like the products page, the order page has been replaced with a new View that follows the same basic pattern. We've got filters for status, start and end date, as well as a search bar for easy access to orders by username, e-mail, or order ID.



CBO Orders also provides some extra rules for VBO which allows for changing the order status of one or more orders from the main order listing screen.



Probably one of the coolest features of CBO is the order quick-edit screen. With it, you can easily see an overview of common order-related information: billing/shipping info, order status (with a quick-change dropdown) payment information, and a list of line items. Let's talk a bit about this screen, but there is actually quite a bit going on.

This is, of course, using Views Megarow to display the information, but as you've guessed, it's a bit more complex than just a form. **<advance>**

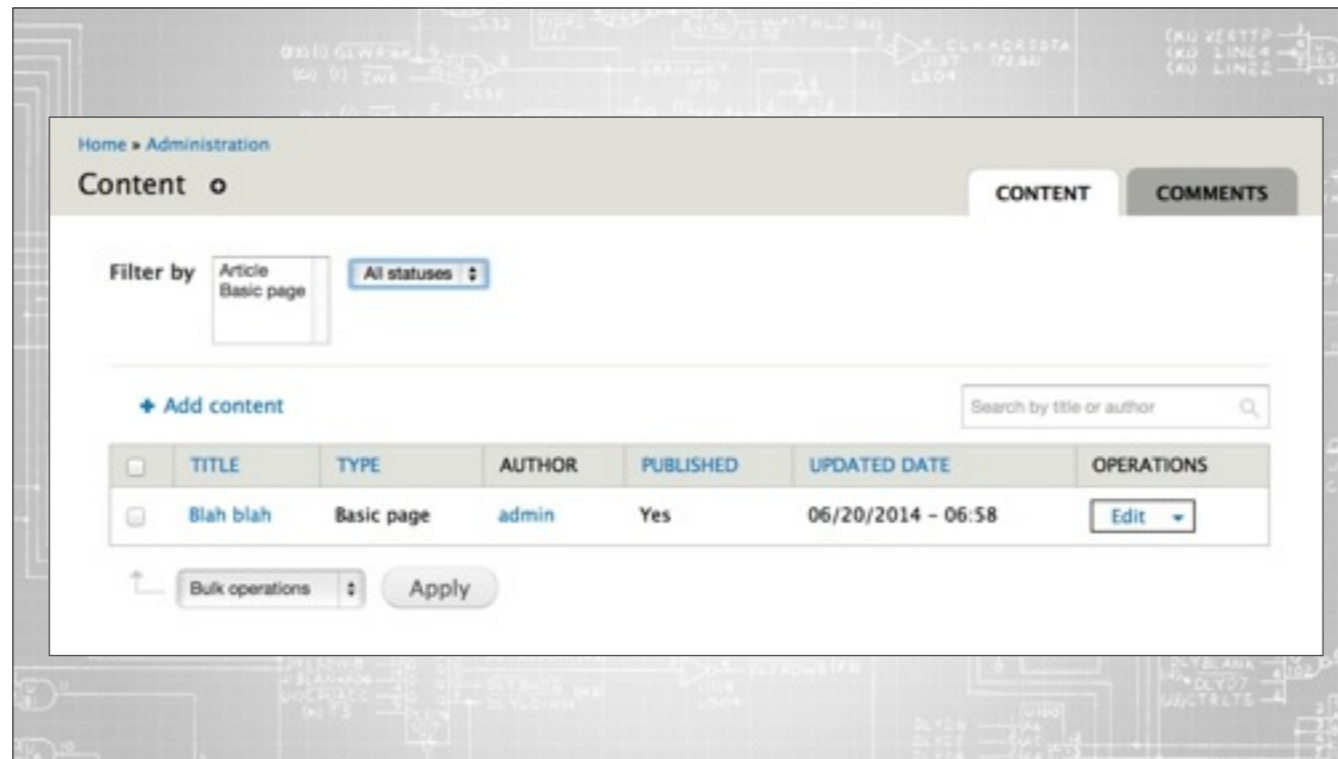
Views Megarow is actually loading a menu handler via Ajax — so this is actually generated in a menu handler and is a rendered template. Internally, the menu call back is actually calling `commerce_backoffice_order_view`, which is loading the order, rendering it, and then returning a megarow/ajax command structure. This is a great example of how you could build your own custom quick-edit or quick-view megarows. CBO Order also defines its own view mode "Backoffice" that it uses to render this page. Subsequently, you can modify the "commerce-order—backoffice.tpl.php" template to modify the output further. But let's look at what you get. **<advance>**

The first thing is a list of line items, which is actually a view that can be customized to your liking. In this left column, you'd also get messages if you have the Commerce Messages module installed. **<advance>**

There is an option to change order status. This is provided by an extra field that CBO Order adds to the entity and it just defines a form that allows you to choose an order status. **<advance>**

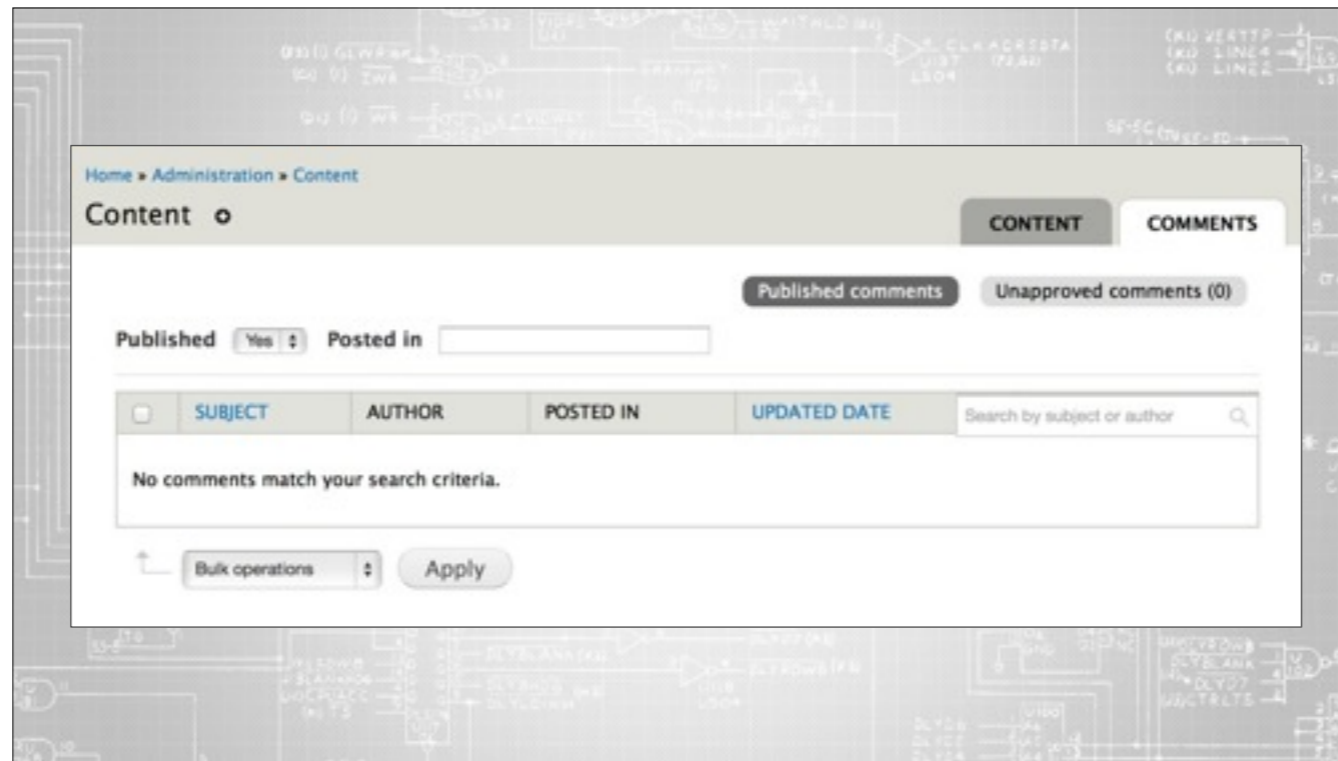


Next, we'll talk about the Content module... the content module overrides Drupal's standard content and comment management screen and replaces them with something a more flexible.

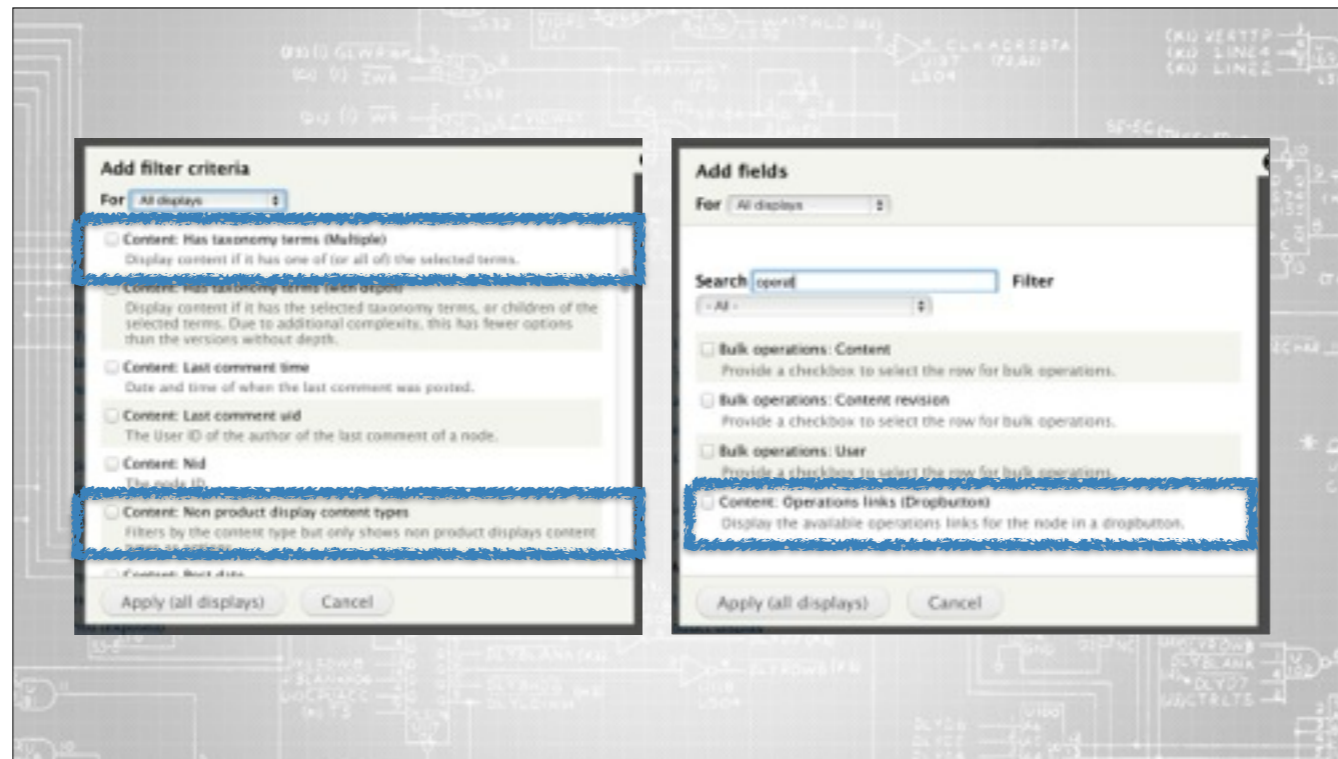


The content page is now a view. You can see Megarow over under the Operations heading and there are a few UI tweaks in the search bar and under the filters. It changes some of the wording and provides a better UI if you have large taxonomies.

Now, it's hard to tell because this is just a slide, but if you look at the filter in the top left, you'll notice that the Product content type isn't there — that's because this revamped content screen filters out anything that isn't strictly content and hides it from this list. It can really clean up a site that might have a small number of actual content types but a large number of product display content types.



The comments page is also a view now and it adds bulk operations to the comments and adds the subject/author search box.



In order to accomplish the functionality that we just talked about, CBOC defines 2 new views filters, and 1 new field handler. The field handler is the operations dropdown that we saw on the first screenshot on the content view. The next addition is a filter to eliminate non-product display node types from the listing. You'll notice that once you enable this module, the only content types you'll see in the listing are content types that don't have a product reference field on them — this can be really helpful if you want to bifurcate product and content management on your backend. And finally, the last piece is a multiple taxonomy search filter, which allows you to select multiple taxonomies to filter down content. Again, this is great if you have several taxonomies and it makes it easy to drill down within the UI. These are all components that you can use to build or enhance your own content experience.

Linkfest

Commerce Backoffice: dgo.to/commerce_backoffice

- Inline Entity Form
dgo.to/inline_entity_form
- Views Bulk Operations
dgo.to/vbo
- Views Megarow
dgo.to/views_megarow
- EVA:
dgo.to/eva

Here are some links to stuff we've talked about. If you're interested in building upon CBO or building your own management interface, you will likely find these modules to be helpful in making Commerce more custom tailored to you or your customer's experience.



Any questions?

Thanks! Don't forget to invite your friends to the next tech talk which will be in July and will be about Commerce Shipment!