

# Creating custom entry forms

- [Overview](#)
- [An example](#)
- [How is it created?](#)

## Overview

Custom entry forms allow VIVO to transcend the general-purpose, utilitarian editing scheme of Vitro. Without custom entry forms, VIVO users must edit each RDF triple individually. With a custom entry form, users can edit a complex data structure on a single page.

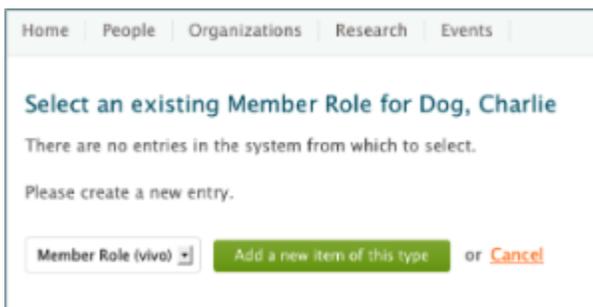
VIVO is distributed with a dozens of custom entry form generators. You may want to modify these form generators, or add more of your own.

## An example

Say you wish to establish that a particular person is a member of a particular academic department. This relationship can be expressed as a member role. See [Membership Model](#)

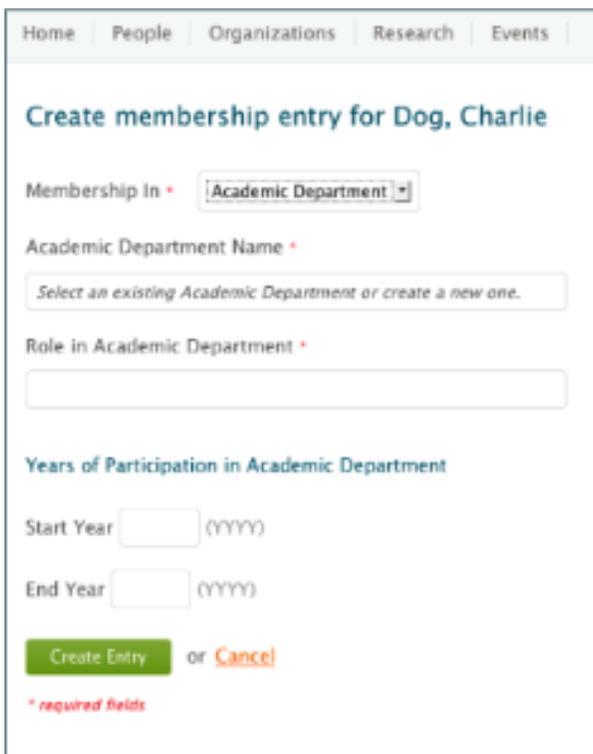
But what if the academic department doesn't exist in VIVO yet? You will want to create that department, and assign a name to it. You may also want to record the member role in that department, when their membership began, and when it ended (if it is not ongoing).

Without a custom entry form, you would need to record each piece of data individually.



The screenshot shows a web interface with a navigation bar at the top containing 'Home', 'People', 'Organizations', 'Research', and 'Events'. The main heading is 'Select an existing Member Role for Dog, Charlie'. Below the heading, it states 'There are no entries in the system from which to select.' and 'Please create a new entry.' At the bottom, there is a dropdown menu showing 'Member Role (vivo)', a green button labeled 'Add a new item of this type', and a red link labeled 'or Cancel'.

VIVO includes a custom form generator for this relationship. The custom entry form looks like this:



The screenshot shows a web interface with a navigation bar at the top containing 'Home', 'People', 'Organizations', 'Research', and 'Events'. The main heading is 'Create membership entry for Dog, Charlie'. The form contains several fields: 'Membership In' with a dropdown menu showing 'Academic Department'; 'Academic Department Name' with a text input field containing the placeholder 'Select an existing Academic Department or create a new one.'; 'Role in Academic Department' with a text input field; 'Years of Participation in Academic Department' with two text input fields for 'Start Year (YYYY)' and 'End Year (YYYY)'. At the bottom, there is a green button labeled 'Create Entry', a red link labeled 'or Cancel', and a red asterisk followed by the text '\* required fields'.

## How is it created?

The creation of custom entry forms is an arcane and eldritch art, for which little documentation is available.



Each form requires a Java class known as a `EditConfigurationGenerator`. The generator describes the data structure being created, lists the SPARQL queries used, and includes a reference to the Freemarker template that will render the form.

You can start by examining the existing generators in this directory

```
[VIVO]/src/edu/cornell/mannlib/vitro/webapp/edit/n3editing/configuration/generators
```

and the Freemarker templates found here

```
[VIVO]/productMods/templates/freemarker/edit/forms
```

- Note: The directory structure has changed in version 1.9+.  
[VIVO]/src/... is now [VIVO]/api/src/main/java/...  
[VIVO]/productMods/... is now [VIVO]/webapp/src/main/webapp/...

There is also a short page of technical description called [Implementing custom forms using N3 editing](#).