Day two: Advanced Organizing

Powerbase Training

Location: Ginn Parlour, 1233 Preservation Park Way, Oakland, CA 94612
Date: Tuesday, March 10, 9:00 - 5:00 pm

- Following along: https://training.ourpowerbase.net/
- Resources and documentation: https://network.progressivetech.org/

Start	Topic	Instructor
09:00 AM	Logistics	Natalie
09:05 AM	Welcome, Introductions, and Ground Rules	Alice
09:15 AM	Review of the day's schedule	Jamie
09:30 AM	Explanation of Scenarios	Jamie
09:45 AM	Small groups plan strategy	All
10:10 AM	Small group report back	Alice
10:30 AM	Measuring Engagement and Segmenting	Jamie
11:30 PM	Break	
11:45 PM	Deduplication and merging	Jamie
12:30 PM	Lunch	
01:30 PM	Political Education: Free Software	Jamie
01:45 PM	Import Part 1: Follow along	Alice
02:30 PM	Import Part 2: Exercises	Alice
03:00 PM	Break	
03:15 PM	Energizer (DJ if no other suggestions)	Volunteer
03:30 AM	Custom Data and Profiles	Jamie
04:30 PM	Online Data Collection	Jamie
04:45 PM	Recap of day and Evaluations	Natalie
05:00 PM	Done	

Training Category:
PowerBase

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A Movement Technology Platform

Build a healthy environment for technology

1. Provide everyone with full, affordable, high-speed, equitable, content-neutral access to the Internet
2. Develop an Internet that is democratic, community-centered and governed, open, decentralized, and free of corporate pressure and monopolies.

Change the direction of technology development

3. Build a political and technology campaign to oppose, restrain and ultimately eliminate intrusive government technology surveillance.
4. Fundamentally refocus technology development to repair damage to the environment and build a world of climate justice.
5. To seek out, build, and embrace the potential of digital technologies to protect and advance our movements.

Deepen the collaboration between technologists and the movement

6. To develop and utilize culturally relevant, intersectional, interpersonal technology for movement work that is grounded in political education and historical context.
7. Foster political consciousness about the centrality of technology in movement work, and the urgency of revolutionary movement based technology.

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Scenarios for Advanced Powerbase Training

Scenario 1: Healthy Food Campaign

You have just received city funding to run a healthy food campaign in Columbus that educates your constituents around the issue and with a requirement to bring at least 1,000 people to a series of public events on the topic. Additionally, your organization has identified 4 zip codes that are considered food "deserts" and you want to take advantage of this opportunity to build leadership in these zip codes to change city policy to enable better access to fresh food in these areas.

Scenario 2: Youth Leadership Environment Justice

Your city has just cut its public school budget by 20%. While other organizations are organizing teachers and parents, your organization has decided to focus on youth. Your goals are to identify youth leaders, develop them politically, and contribute to the bigger campaign to restore the funding. There are four schools you are currently working in - and you have ally teachers and about 5 - 10 students in each school that you are already in contact with.

Scenario 3: Statewide Campaign

You are organizing a statewide living wage campaign. A few years ago you successfully organized for a city-wide living wage and now you and your allies are ready to take the campaign state-wide. You will be working with Faith-based institutions, labor unions, migrant rights organizations and college-based organizations. Your overall goals are to organize state-wide to pass a living wage ordinance at the state level during the next legislative session six months from now. You will be taking hundreds of constituents to the state capital to lobby legislators. You will also hold a massive rally the day before the session starts.

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Case Study: Purging useless contacts from your Database

One PowerBase group with over 150,000 records wanted to purge their database. They knew they had a lot of contacts that were just dead weight: no contact information or bad contact information or incomplete names or duplicate records.

Here is the process we went through to clean things up.

First - we identified that we would take two approaches:

- Delete contacts
- De-dupe contacts

We decided that deleting contacts first made more sense - since there would be less contacts to dedupe - which is the far more time-consuming processes.

Deleting Contacts

There are many ways to find and delete contacts, but the hard part is coming up with the criteria.

We started with the idea that if we can't contact the person, they should be removed.

So, we began searching for everyone who didn't have an email address AND didn't have a phone number AND didn't have a city. Since you can't do this type of search in Advanced search, we did it in Search Builder. We used "Primary" as the location type and "Is Empty" as the criteria.

We later changed city to street address - because some people had a city but no street address.

At this point we got to a list of about 4,000. However, we noticed two problems:

- Some people had contribution or event records. We don't want to lose them.
- Some contacts were Organizations that had relationships to contacts with contact information. Probably want to keep this data

To avoid deleting these contacts, we created two more groups using advanced search:

- Everyone with a contribution OR an attendance record (We used the and/or search option for this). We expanded both the contribution and event accordions. For contribution - we simply but both contributions and soft credits to get every conceivable donation. For event, we put an end date of today to match all participation records.
- All organizations with an employer relationship. It does not seem possible to search for all organizations with any relationship - and all the organization relationships seem to be employer relationships - so this search got all that we needed.

Now that we had these three groups we were ready.

We did an include/exclude search that included everyone without an email/phone/address and excluded everyone *with* a contribution or attendance record and excluded every organization with an employer relationship.

About 3500 records, all of which were deleted.

More criteria needed

3500 records removed from a database with 150,000 records is a great start, but doesn't add up to much.

Next we proposed:

- Delete everyone without a first name OR without a last name (provided they are not in any of our two exclusion groups)
- Delete everyone with just an asterisk as a first name or last name (quite a few of these)

Still waiting to hear back.

Now let's dedupe.... not so fast.

First and last name are critical to de-duping. However, our contacts had some atrocious data in the first and last name.

It turns out that there are many contacts with a last name or first name *plus* an asterisk or a number. It seems these characters were some kind of code in the imported data.

There is no point in de-duping with these characters because we won't get a clean match on first and last name.

Category:
Collecting and Managing Contact Information

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How to Make Groups with Good and Bad Mailing Addresses

Introduction

The best practice for managing contacts' mailing addresses is to make two smart groups:

- one with all the contacts with complete mailing addresses which you can use for generating mailing labels and letters, and
- another group with incomplete mailing addresses, which is a group you can use to target your data cleaning efforts.

In order to find contacts based on their addresses, you'll need to use **Search Builder. Click Search > Search Builder to get to the Search Builder screen as shown below.**
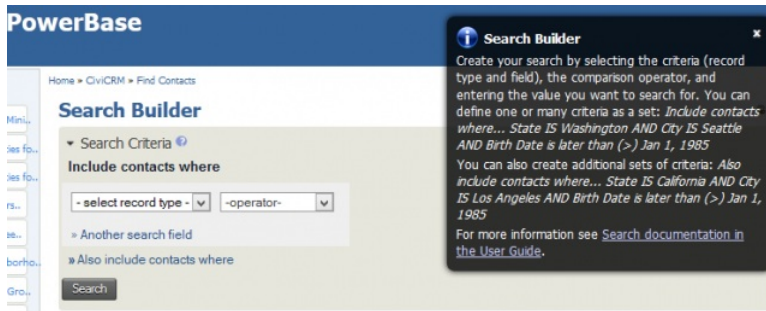
You will be searching for different component parts of mailing address: street address, city, state and zip code. If they are there, you have probably have a good address. That's the best we can do, since it's not possible to tell if an address that is entered is invalid. Only the Post Office can tell us that. If some are missing (called NULL in database language), you have a bad mailing address.

To work with Search Builder, you first select the record type. In this case, you will be using **Contacts.** Selecting it will open up another drop down **-select field-** where you can select the parts of the address. Then you select the **Location Type** of the address. In this search we are going to look at the **Primary** location, because it will typically be the address that you are using for mailing. However, you can check any of the other address types using this technique as well. Finally you select the **-operator-** which is computer speak for the type of comparison you will be making. We will be looking for either **Null** or **not Null.** Null simply means that there is no data in the field.

Looking for Incomplete Mailing Addresses

For incomplete mailing addresses, the idea is that we want to find any contact that has any of the key address fields blank. So we're looking for any contact that doesn't have a **Street Address** OR any contact that doesn't have a **City **OR any contact that doesn't have a **State** OR any contact that doesn't have a **Zip Code** (currently known as **Postal Code** in CiviCRM). We will then save the results in a Smart Group. This will let us go through those contacts to clean up their addresses later.

Choose **Contact** in the first dropdown. Select **Street Address** in the dropdown that appears next to it. Choose **Primary,** which is the address type. Choose **IS EMPTY** in the **–operator–** dropdown.

Select **Also include contacts** where below, and do the same thing again but choose **City.** Using **Also include contacts** where again, repeat the above steps for **State** and **Postal Code.**

Make a Smart Group of the results. Call it **GEN Incomplete Mailing Addresses.** As you enter complete addresses in the address fields of these contacts, the group will get smaller.

Why the prefix GEN in both of these groups? We recommend adopting a naming convention to manage groups. For groups that will be of general use, we recommend starting their name with "GEN". Feel free to use something else if you prefer.

Category:
Collecting and Managing Contact Information

Advanced: Advanced Search Exercise

Report the number of contacts returned for each search.

1. Find all contacts attending 2 or more events: _____
2. Find all contacts who signed up for one or more events of the type Direct Action: _____
3. Find all contacts with a meeting that is scheduled.
4. Find all contacts that participated in the "Lead poisoning Abatement" Campaign with an engagement level over 3: _____
5. Find everyone with a life time contribution level over $1000.

Extra Credit.

Log into your organization's database and run three searches that return useful information for your work. Be prepared to report on what the searches were and what the results were and why it is useful to you.

Category:
Search

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Strategies around duplicate contacts and merging

Balancing Act

This article covers the concepts around de-duplicating contacts. If you want to jump to the chase and learn how to run the de-dupe process, please see our screen cast on de-duping.

Every organizing strategy has to manage a balancing act when it comes to entering contacts into your database:

1. *On the one hand, we don't want to create duplicates.* If we are importing a record for Alberto, and Alberto is already in the database, we want to update his record, not create a duplicate.
2. *On the other hand, we don't want to update the wrong record.* What if the new Alberto we are bringing into the database is different from the one in our database? If we update our existing record, it will create a big mess.

This balancing act has to be re-enacted in many very different situations. For example:

- When importing a spread sheet
- When a staff person enters a record by hand
- When a person makes a contribution via a public contribution page
- When a person registers for an event
- When someone fills out a profile online or fills out a webform

Dedupe rules

CiviCRM decides whether to create a duplicate or merge with an existing contact based on a set of de-dupe rules.

A de-dupe rule essentially says: Every time a new contact is about to be entered, see if there are any existing contacts in which the following fields are the same. If there is an existing contact, then update that contact rather than creating a new one (if there is more than one matching contact, the first one found is updated).

As you can imagine "the following fields" is the critical part.

Some organizers rely exclusively on email address matching rules. If the email address is the same, then we declare it to be the same.

Other situations require more nuance. For example, what if someone registers several people to an event but doesn't know all of their email addresses? They might enter their own email address for all of them.

Some organizers require that the first name, last name and one of the following match: email, phone or street address.

Your dedupe rules page

The best place to start thinking about de-duplication and merging is with your de-dupe rules page.

This page lists the rules that CiviCRM follows when determining if two contacts are the same person or not.

You can access it via: `Contacts -> Find and Merge duplicate contacts`

The default settings look like this:

Since we don't use Households, you can ignore those rules.

That leaves rules for handling organizations and rules for handling individuals.

Let's focus on individuals.

You can create as many rules as you want, but you always must have at least one "Unsupervised" rule and at least one "Supervised" rule.

The "Supervised" rule is used by default anytime a contact is added by someone who is logged in and paying attention. In other words, when you manually add a contact.

The "Unsupervised" rule is used all other times. For example: when a user registers for an event or makes a contribution or fills out a profile. In addition (and this is a bit unintuitive), it is also used during imports. While there is a logged in user who is paying attention, they are not able to review every single one of the imported contacts. As a result, the "Unsupervised" rule is used.

What a dedupe rule looks like

If you click to edit a dedupe rule, you can see how it works.

If you pick one that is "reserved" (meaning you can't change the rule), it might look like this:

This rule is pre-configured to trigger if the first name, last name and email address all match.

This screen also shows you how to change a rule's settings from General to Supervised or Unsupervised.

Additionally, you can create your own rules, but that is best left for later.

How do I use these rules?

At any time, you can use these rules to find duplicate records in your database and merge them. That process is covered in our Dedupe screencast.

However, there are many other ways to use these rules.

Importing

When importing contacts, you can choose what to do with duplicate records.

But there's more... you can also choose which dedupe rule you want to use for every individual import.

For example, your default unsupervised rule might be to match on email address only. That could work for most imports. But one day you might import records that don't have an email address. For that import, you may need to use an import rule that matches on name and street address.

Profiles

If you are collecting data via profiles, you can click the Settings link, then expand the Advanced accordion and modify what action to take if a duplicate is found (note: profiles always use the Unsupervised rule):

This setting only applies to stand-alone forms. If a profile is part of a contribution or event registration form, then the contribution/registration information will always be added to the matched contact (if one is found).

Events

With online event registration pages, you can specify which dedupe rule should be used. By default, the unsupervised rule will be chosen,

but you can change it:

For example, if you always want duplicates created for event registration, you could specify an impossible to match de-dupe rule for a particular event.

How to create your own dedupe rule

Now that you have the big picture, you may want to create some custom de-dupe rules.

You can do that by going to `Contact -> Find and merge duplicates` and clicking the button to add a new rule.

Here's an example rule that can be useful:

You can select any field you want from the field drop down.

The length column allows you to specify the length of the field you want to search. For example, if you chose First Name and length 3, then it would only match the first 3 characters of the first name, so "Jamie" and "James" would be considered a match. **Despite the usefulness of this feature we discourage it's use because it causes your database queries to slow to a crawl and often timeout.**.

The weight column describes what score a match should get.

Lastly, the Threshhold column determines what total score should decide if it's a duplicate or not.

In the example above, if the first name, last name and email address match, the score would be 3 + 3 + 1, or 7. Since that matches the threshhold it would be considered a duplicate. If the email, phone and street address matched, it would only add up to 3, not enough for the score to match.

So, what should my strategy be?

If in doubt, set your Unsupervised rule to be quite strict (like first name, last name and email address) and regularly search for and merge duplicate records. It's far better to have a database full of duplicates than to try to untangle records that were merged that should not have been merged.

Category:
Collecting and Managing Contact Information

Spreadsheet Tips for Importing

Before you import a spread sheet, carefully review it to make sure the data makes sense. Importing garbage will cause you pain!

Data -> Text to Columns…

Very useful for separating data from one column into two. The easiest example is having Last, First. You can use Text to Columns by identifying the comma as the Delimiter, causing the column to be broken into two columns without the comma.

Copying values, not functions

After you use a function in a spreadsheet, you will need to copy the data and paste special just the values in each cell. This is how you get rid of your formula and just keep the data.

Function: PROPER

Formula: `=PROPER(A1)`

This is what you use if you have all UPPERCASE and want to change it to capitalize the first letter of every word.

`= PROPER()` capitalises the first letter of each word (like Title Case) `= UPPER()` - forces all letters to be UPPER CASE `= LOWER()` - forces all letters to be lower case

If you want to capitalize only the First letter of a sentence use this formula

`=UPPER(LEFT(A2,1))&LOWER(RIGHT(A2,LEN(A2)-1))`

Function: VLOOKUP

Formula: `=VLOOKUP(lookup_value, table_array, col_index_num, range_lookup)`

By far my most used formula. The official description of what it does: "Looks for a value in the leftmost column of a table, and then returns a value in the same row from a column you specify…".

Basically, you define a value (the lookup_value) for the formula to look for. It looks for this value in the leftmost column of a table (the table_array).

Function: TRIM

Formula: `=TRIM(A1)`

Gets rid of any space in a cell, except for single spaces between words. I've found this formula to be extremely useful because I've often run into situations where you pull data from a database and for some reason extra spaces are put in behind or in front of legitimate data. This can wreak havoc if you are trying to compare using IF statements or VLOOKUP's.

Function: RIGHT, LEFT, MID

Formulas: `= RIGHT(text, number of characters)` , `=LEFT(text, number of characters)` , `=MID(text, start number, number of characters)` .

(Note: In all of these formulas, wherever it says "text" you can use a cell reference as well)

These formulas return the specified number of characters from a text string. RIGHT gives you the number of characters from the right of the text string, LEFT gives you the number of characters from the left, and MID gives you the specified number of characters from the middle of the word. You tell the MID formula where to start with the start_number and then it grabs the specified number of characters to the right of the start_number.

`=UPPER(LEFT(A2,1))&LOWER(RIGHT(A2,LEN(A2)-1))` will capitalize only the First letter of a sentence.

Function: IF

Formula: `=IF(logical_statement, return this if logical statement is true, return this if logical statement is false)`

When you're doing an analysis of a lot of data in Excel there are a lot of scenarios you could be trying to discover and the data has to react differently based on a different situation.

Function: CONCATENATE

A fancy word for combining data in 2 (or more) different cells into one cell. This can be done with the Concatenate excel formula or it can be

done by simply putting the & symbol in between the two cells. If I have "Juan" in cell A1 and "Hernan" in cell B1 I could put this formula: `=A1&" "&B1` and it would give me "Juan Hernan". (The " " puts a space in between what you are combining with the &). I can use `=concatenate(A1, " ", B1)` and it will give me the same thing: "Juan Hernan"

Category:
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*CiviCRM
User
Guide*
*(English
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     *(Other
editions)*

Importing Data into CiviCRM

Most organisations have data in sources outside CiviCRM, such as previously used database platforms, spreadsheets created on the fly for specific events or other purposes, and email address books. Because manually entering large amounts of data can be tedious, CiviCRM provides a way do import data en masse if the source can export it into some common format such as a Comma Separated Version (CSV) file.

Imports can also be used to update existing data. This will be covered in the final section of this chapter.

Considerations before importing

For more details on how to think about your data before importing into CiviCRM, please read the section on "Organizing your data", especially "Mapping your data into CiviCRM".

Preparing to import data

Importing data requires considerable attention and care, so we'll present some concepts here that you should know before you start your first import. You can import both core and custom data for contacts, as well as data for event attendance, activities, memberships and contributions. This chapter will focus on the import process for contacts. The processes for other data are similar.

There are two ways to import data:

- from CSV files. Most database and spreadsheet applications (e.g. OpenOffice.org Calc, Google Spreadsheets, Microsoft Excel) can create and manipulate files in this format. It is often easier to view and clean your data when it's in a CSV file than while it's still inside your old database.

  Each column in your CSV file will map to a field in CiviCRM, so make sure you use a different column for every distinct bit of information.

  Depending on your country or region, fields in your CSV files might be separated by semicolons (;) instead of commas. If so, you'll need to change the Import/Export Field Separator value in the CiviCRM Localization settings by going to the navigation menu and choosing Administer > Configure > Global Settings > Localization.

- from another SQL or MySQL database stored on the same server, using an SQL query. (This option is only for advanced users who have a clear understanding of server and database administration.)

If you do not have a clear understanding of your existing data and how it will map to CiviCRM fields, you will experience frustrations and problems when you try to import the data. Please read about each type of data in other sections of this CiviCRM Manual and visit the CiviCRM online documentation for more information: http://wiki.civicrm.org/confluence/display/CRMDOC/Importing+Data

The following rules and recommendations will help you to import data with minimal problems:

- Always test your data import with a small subset of your records. After importing the test set, visit the records within

CiviCRM and ensure that the data was imported and functions as you expected.

- It can be helpful to create a test contact that has every attribute you've defined in your existing data set. Then import the contact and check results to ensure that CiviCRM correctly represents all the data.

- When you map the columns or fields from your source data to CiviCRM fields during the import, CiviCRM can save this field mapping as an *import map* for future use. This is helpful if you will be importing multiple files with the same structure. To save an import map for future use, click the "Save this field mapping" check-box at the bottom of the Match Fields screen of the import wizard and enter an appropriate name and description. To reuse a saved import map, select it from the Load Saved Field Mapping dropdown menu on the Choose Data Source screen (step 1) of the import wizard.

- If your imports are timing out or taking too long, try splitting up the imports into smaller batches. If you have the appropriate permissions on your web server, you can also increase the memory_limit and max_execution_time values in the file php.ini.

- You can add all of the contacts imported in an import to new or existing groups or tags. All of the contacts in a single import will be given the same groups and tags. This limitation has a couple effects on your import:

  - Make sure that you assign groups and tags that are applicable to every contact in the imported set. If you need to assign groups or tags on a contact-by-contact basis, import contacts in small, discrete batches in which all contacts share the same tags and groups. Alternatively, you can create searchable custom data fields in CiviCRM that contain the groups and tags that you want to assign to imported contacts. After the import you can run searches on those fields and use the "Add Contacts to Group" or "Tag Contacts" batch actions on the search results.

  - You can use this feature to manage the import. Consider adding contacts to a new group or tag that indicates what batch of imports the contacts were a part of, thereby allowing you to easily identify when a contact was imported and undo an entire import if necessary.

- CiviCRM stores first names and last names in separate fields, so these should appear as separate columns in your CSV file. The same goes for city and postal code/zip code. Most spreadsheet programs contain tools that automate the process of splitting text across fields.

- Ensure that your country names are expressed in the same way as they are in CiviCRM, i.e., 'United States', not 'United States of America', and 'United Kingdom', not 'Britain'.

- If you are importing multiple locations, the first location will be set as the primary location address. You may want to move your columns around to ensure that the desired location becomes the Primary Location. You may also need to split your import so that some records have one type of record as their Primary Location, while others have a different one.

- If you choose the location type 'Primary' for an address field then it will update the existing primary address, if there is one, for an existing contact. If it is a new contact or they do not have an existing address the location type will be your site's default.

- If you are importing data into multi-choice (e.g. check-box or radio button) custom fields, your data source can use either the label (what's visible to the user in the CiviCRM front end) or the value (what's actually stored in the database for that choice). CiviCRM will recognise it and import it appropriately. When importing into multi-choice core data fields, you can specify only the value(s) in your data source, not the label.

- If you are updating multiple choice options, new values will replace the entire field. For example, if you update the value of the Colors field to be "orange" for a contact that currently has Colors set to "blue", the result will be that Colors is set to orange, not orange and blue.

- To import multiple values into a multiple choice field use the "," (comma) character as a separator - using either the Label OR the Value of the required option(s) i.e.: "1, 2, 3" or "fred, red, yellow".

- Make sure your data source uses an accepted date format and that you select the same date format on the Choose Data Source screen of the import wizard.

- Make sure any name prefixes and suffixes you use have been set up in the administration interface (go to: Administer

> Option Lists**in the navigation menu).

- If you plan to do additional imports of related data that's associated with your contact data, e.g. contribution data, event participation data, membership data, you can make things easier by ensuring that your contact records have unique IDs that are also associated with the related data. When you do the initial import of your contact data, import these unique IDs and map them to CiviCRM's External ID field, so that you can then use your original (or legacy data) IDs to match to the contact records records for later imports of the related data.

- Master Address Belongs To is a special import field that only works with the CiviCRM_Address.id. The information needed to use this field for imports is only available directly from the MySQL database tables directly. They are not shown anywhere in CiviCRM including on data screens, link urls, profiles, or exports. Information on how to use this special field is available in the Wiki.

Required Fields for Contact Imports

When preparing your data import it is helpful to know what fields are required for Import. You'll want to be sure that these fields are included in your CSV import file. Below is a list of the required fields. They are marked red and starred in the interface. In case you have less data, **selecting one field is enough**. The External Identifier field is only useful if you want to update existing contacts. Please note that the field with the identifier **(Match to Contact)**is required for deduplication purposes.

- **Email (Match to Contact)**
- **External Identifier**
- **First Name**
- **Last Name**

Setting up a CSV file for importing

Example of spreadsheet .csv format

First Name	Last Name	Grade	Student Number	Contact SubType	Father First Name	Father Last Name
Yonce	Johns	1	Student-111	Student	Meeka	Colla
Sophia	Camp	1	Student-112	Student	Jan	Rodney
Bel	Jason	1	Student-113	Student	Jilie	Jason
Lizzy	Bell	1	Student-114	Student	Martia	Bell
Helen	White	1	Student-115	Student	Karen	White
Isaac	Bell	2	Student-221	Student	Martia	Bell
Josie	Zen	2	Student-222	Student	Betty	Zen
Jenny	Zen	2	Student-223	Student	Betty	Zen
Anni	Stinson	2	Student-224	Student	Maggie	Stinson
Shane	Stinson	2	Student-225	Student	Maggie	Stinson
Al	Jason	3	Student-333	Student	Jilie	Jason
Ella	White	3	Student-334	Student	Karen	White
Greg	Camp	3	Student-335	Student	Jan	Rodney
Smita	Johns	3	Student-336	Student	Meeka	Colla
Lee	Stinson	3	Student-337	Student	Maggie	Stinson

When thinking about setting up your spreadsheet, think about the data that you are collecting and plan out your column headings. Keep in mind that you may need to create more than one .csv file and perform multiple imports before you are finished.

If you plan to import related data that pertains to a specific contact, e.g. event participant information, contribution data, etc., you will need to make sure that each contact record has a unique identifier or the contact record should have First Name, Last Name and Email, so that you can link their related data during later imports. If you have unique ID, you would map the ID to CiviCRM's External Identifier on import.

Running an import

The import process has four steps.

Step 1: Setup

Setup lets you specify the basic details of your import, including the source of the data. Data can come from either a CSV file, or an SQL query of a database on your server. A check-box lets you indicate whether the first row of your file contains column headers.

Note that imports use the default **unsupervised** Dedupe Rule to decide whether a contact record is a duplicate, unless you select another Dedupe Rule during this step. Refer to the *Deduping and Merging* chapter in this section for information on duplicate matching rules in CiviCRM. You can specify what action to take when an import encounters a duplicate:

- **Skip**: skip the duplicate contact, i.e. leave the original record as it is.

- **Update**: update the original record with the database fields from the import data. Fields that are not included in the import data will be left as they are.

- **Fill**: fill in the additional contact data, if it contains fields that are missing or blank in the original records, and leave fields which currently have values as they are.

- **No Duplicate Checking**: this inserts all valid records without comparing them to existing contact records for possible duplicates.

Import mappings tell CiviCRM how the fields of data in your import file correspond to the fields in CiviCRM. The first time you import from a particular data source, it's a good idea to check the box to "Save this field mapping" at the bottom of the page before continuing. The saved mapping can then be easily reused the next time similar data is imported, by requesting

that it be loaded at this step.

Step 2: Match the fields

If you had column headings in your file, these headings will appear in the first column on the left-hand side of the Field Map, while the next two columns show two rows of data in your file to be imported, and the fourth column is the Matching CiviCRM Field. If you loaded an import mapping in Step 1, your choices will be reflected here. You can change them if they are inappropriate for this import.

The matching CiviCRM fields include standard CiviCRM data such as First Name and Last Name as well as any custom data fields that have been configured for use with contact records on your site. Match the fields by clicking the dropdown list and selecting the appropriate data. For example, if the heading of the second column in your input is Surname, you should choose Last Name as your Matching CiviCRM Field.

Select "- do not import -" for any columns in the import file that you don't want to import into CiviCRM.

If you have a saved mapping for a specific set of spreadsheet columns, and your spreadsheet layout has changed (for instance, you need to import additional fields, so you add the appropriate columns of data in the spreadsheet), you can modify and save the field mapping. One tip to ease the mapping process when you need to import additional fields is to place the additional columns of data in your import spreadsheet to the right of the columns you've previously mapped in CiviCRM. This allows you to use the existing saved field mapping to map the initial import fields, and then continue mapping the new data fields.

Note that if you add new data columns in your spreadsheet and do not position the columns AFTER the columns you previously mapped, you then can't use the saved mapping and will have to map all your import fields again.

Once you've mapped your fields, you can decide if you want to keep the original saved mapping unchanged, or check the box to "Update this field mapping" to include the new field mappings.

Step 3: Preview

This screen previews the results of importing your data, reports the number of rows to be imported, and allows you to

This screen previews the results of importing your data, reports the number of rows to be imported, and allows you to double check your field matches.

If some of the rows in your spreadsheet contain data that doesn't match CiviCRM's requirements for one or more fields, you'll see an error message with a count of the invalid rows (see the screenshot below). Click the Download Errors link and review the errors reported in the downloaded file, so you can fix them before doing the import.

Preview (step 3 of 4)

Total Rows	6	Total number of rows in the imported data.
Rows with Errors	6	Rows with invalid data in one or more fields (for example, invalid email address formatting). These rows will be skipped (not imported). » Download Errors
Valid Rows	0	Total rows to be imported.

At the bottom of the form, you can choose to add the contacts to an existing group, import to a new group, create a new tag, or tag imported records. Adding imported records to a separate group is strongly recommended in order to be able to quickly find the imports and, if necessary, delete and reimport them.

Home Phone	415-586-1000	415-282-5000	- do not import -
Fatheremail	rello@sbcglobal.net	jrody@yahoo.com	- do not import -
Motheremail	c3jon@yahoo.com	dean@tworks.com	- do not import -
Grade SIS	1	1	Grade SIS :: School Information

▸ Add imported records to a new group

▾ Add imported records to existing group(s)

> Keeping Up with the Joneses
> Newsletter Subscribers
> School
> Student_Parent
> Summer Program Volunteers

▸ Create a new tag and assign it to imported records

▸ Tag imported records

[<< Previous] [Import Now >>]   [Cancel]

Step 4: Summary

The final screen reports the successful imports along with Duplicate Contacts and Errors. If you have set the import to add all contacts to a Group or Tag, you can click through to see your imported contact records.

Import Contacts

Import has completed successfully. The information below summarizes the results.

√1. Choose Data Source | √2. Match Fields | √3. Preview | »4. Summary

Summary (step 4 of 4)

Total Rows	15	Total number of rows in the imported data.
Total Contacts	15	Total number of contact records created or modified during the import.
Import to Groups		School: 15 contacts added to this existing group.

[Done]

At this point it makes sense to check to make sure that your import has worked as expected. Search for the contacts that you just imported and examine their fields and custom data to make sure all is as expected.

Importing relational data

We have just described the process of importing one data file. But what about if you want to import related data, like organizational addresses with employees, parent child relationships, activities, contributions, etc.? For each type of data you want to import, you will need to import a separate CSV file.

CiviCRM has specific tools for importing related contact data and a set of specific import tools for contributions, memberships, event participation etc. (and you should see specific chapters for details of how to use these tools). To import relationships, you should run multiple contact imports.

For example if we want to import data for children and then for both parents, we run three imports, one for the child, one for the father and one for the mother.

We first import the child remembering to include an external identifier that we can use to match the child to their parents. We then import the father, and then the mother, as related contacts, linking them to the child using the child's external identifier.

In the example below we have one CSV file which contains father and mother information. We use this CSV file twice as part of the import. Have a look at the fields below to understand what is happening.

Import Contacts

Review the values shown below from the first 2 rows of your import file and select the matching CiviCRM database fields from the drop-down lists in the right-hand column. Select '- do not import -' for any columns in the import file that you want ignored.

If you think you may be importing additional data from the same data source, check 'Save this field mapping' at the bottom of the page before continuing. The saved mapping can then be easily reused the next time data is imported.

√1. Choose Data Source   »2. Match Fields   3. Preview   4. Summary

Match Fields (step 2 of 4)

Column Names	Import Data (row 1)	Import Data (row 2)	Matching CiviCRM Field
First Name	Yonce	Sophia	First Name *
Last Name	Johns	Camp	Last Name *
Grade Level	1	1	- do not import -
Student Number	Student-111	Student-112	External Identifier *
Contact SubType	Student	Student	- do not import -
Father First Name	Meeka	Jan	Child of / First Name *
Father Last Name	Colla	Rodney	Child of / Last Name *
Contact SubType	Parent	Parent	Child of / SubType :: School Information
Mother First Name	Cento	Dean	- do not import -
Mother Last Name	Johns	Camp	- do not import -
Contact SubType	Parent	Parent	- do not import -
Home Phone	415-586-1000	415-282-5000	Child of / Phone

We are linking the father to the original child using the external identifier and are then importing the related father name using the 'Child of' relationship type.

When the import is done, go back and verify the data by searching for the parent and examining the relationship tab. They should have a relationship linking them to the child.

You can then repeat this process for the mother, and also for other relationships as necessary.

Address standardisation

For many organisations, an important element of cleaning your data is standardising addresses. In the US, this means conform to conventions defined by the United States Postal Service's Standards for Addresses. Standardising how addresses are entered into CiviCRM will allow for more accurate search results when searching by address, as CiviCRM can parse addresses based on the USPS standards if you choose to do so. To find out more about how Address Parsing is handled and used in CiviCRM, refer to the Installation chapter of the Configuration section of this manual. When adding or editing contacts, you will enter and edit such address elements as street number, street name, and Apt/Unit/Suite number according to these standards.

Import Activities

When preparing your data import it is helpful to know what fields are required for Import. You'll want to be sure that these fields are included in your CSV import file. Below is a list of the required fields. The Contact ID field is used to cross reference and attach the activity to the contact so it must match the contact ID of the contact in the system exactly.

- Activity Date
- Activity Type IDs
- Activity Type Label
- Contact ID (Match to Contact)
- Subject

The import tool for Activities is similar to that of contacts, but there are some pre-requisites which must be met before running the import. Firstly, Activities cannot be imported unless the contacts and Activity Types already exist in the database. If you need to import Activities for contacts that are not yet available, run a contact import first, preferably including a unique external identifier (most often an ID assigned by the database or application you are importing records from).

Remember, CSV files must be less than 2MB in size. If the file size exceeds this, create multiple CSV files and distribute the data between them.

Import Contributions

You can insert new contributions or update existing ones.

If you **insert new contributions,** your CSV file must include at least the following fields:

- Contact Id or External Identifier or all the fields used in your Unsupervised Duplicate Matching rule (to match to an existing contact)
- Financial Type
- Total Amount

If you want to **update existing contributions,** your CSV file must include at least the following fields:

- Transaction ID or Invoice ID or Payment ID (to match to an existing contribution)
- Financial Type
- Total Amount

You can use also use **update existing contributions** to import new or change existing data in other core or custom contribution fields. When doing this you will still need to include an ID to match to an existing contribution and the Financial Type and Total Amount fields in you CSV file, even if the values you import for those fields are no different from the values already in your database.

Import Memberships

You can insert new memberships or update existing memberships.

If you **insert new memberships** your CSV file must include at least the following fields:

- Contact Id or External Identifier or all the fields used in your Unsupervised Duplicate Matching rule (to match to an existing contact)
- Membership Type
- Membership Start Date

If you want to **update existing memberships** your CSV file must include at least the following fields:

- Membership Id (to match to an existing membership)
- Membership Type
- Membership Start Date

You can use also use **update existing memberships** to import new or change existing data in other core or custom membership fields. When doing this you will still need to include Membership ID to match to an existing membership, and the Membership Type and Membership Start Date fields in you CSV file, even if the values you import for those fields are no different from the values already in your database.

> **See also**
> Importing memberships in the Memberships chapter.

Import Participants

In each import session you can either insert new registrations or update existing participant records.

If you **insert new registrations** you need to decide whether to restrict registrations for each event to just one per person

(set **On duplicate entries** to **Skip)** or to allow duplicate registrations for the same event from a given contact (set **On duplicate entries** to **No Duplicate Checking)**. In either case your CSV file must include at least the following fields:

- Contact Id or External Identifier or all the fields used in your Unsupervised Duplicate Matching rule (to match to an existing contact)
- Event ID
- Participant Status

If you want to **update existing registrations,** you should set **On duplicate entries** to **Update**. Your CSV file must include at least the following fields:

- Participant ID (to match to an existing registration)
- Event ID or Event Title
- Participant Status

You can use also use **update existing registrations** to import new or change existing data in custom participant fields. When doing this you will still need to include Participant ID to match to an existing registration, and the Event ID or Event Title and Participant Status fields in you CSV file, even if the values you import for those fields are no different from the values already in your database.

Import Tags

There is currently no inbuilt way of importing tags or tag sets. You can use this advanced extension though.

If you want to assign individual tags during your contacts import, you will have to either:

- split your CSV file by individual tags and import each subset separately as described above,
- create temporary custom fields and import tags into them as standard data, then after the import use advanced searches to isolate contacts with particular values and mass tag them. Once you're done, you can remove the custom fields.

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Creating Custom Fields

This chapter explains how you can collect information beyond that which CiviCRM allows by default through adding custom fields to hold the data you want to collect.

For example, you could add a set of checkboxes to organisations so that you could track the clients that they serve. You can also restrict custom fields to certain types of that object. For example, if you have a contact type Student, you might have a custom field listing the subjects they study.

Custom data fields are always stored as sets of custom fields in CiviCRM. Therefore, adding custom data is a two-stage process:

1. Create a custom field set, which is simply like a container to hold these custom fields together.

2. Add custom fields to this set. (You may find it helpful to read the information about custom fields first, but you will need to create the field set before you create the fields in it).

To clarify, a field is a unit of information entered into the database, such as someone's primary spoken language, or high school graduation date. A custom field set is a group of fields containing related data - that is, a set of fields related to a certain activity type, to participation in events, or to contributions.

Custom field sets

Custom fields are always part of custom field sets, and each set has a scope as wide or as narrow as you choose. For instance, you might associate a custom field set called "nationality" with all contact types, another set such as "immigration status" with a specific contact type (e.g. Individuals), and yet another set with a specific component (CiviMember, CiviEvent), or with other elements such as Relationships and Groups. The scope of a custom field set is one of the few decisions that is irreversible (you will not be able to change it after creating it) so it is important to consider carefully what you want to associate your custom field set with when you start.

When creating custom field sets, you should ask:

- How will the fields in this set be used?

- What types of contacts or records will these fields be appropriate for?

- Will the fields have broad applicability, or are they relevant to a specific Contact Type, Event, Financial Type, etc.? For example, a field which stores a person's entree choice at a dinner event should be assigned to the *Participant* record, and not to the *Individual Contact* record; this data describes the person as a participant in an event (they might not have or make the same choices for another dinner).

Taking the time to think through these questions helps keep your application screens as relevant and clear of superfluous fields as possible. For example, if your custom field set contains contact characteristics such as a field for the "color of eyes", you should associate them with the Individual contact type rather than the generic Contacts option, as this field would be irrelevant to Organization and Household contact types. Another example would be if custom data is specific to a particular event registration page. You should create this custom data for an Event type Participant for the specific

Event.

Depending on how many custom fields you are creating, you should also consider grouping the fields topically. For example, you may associate 20 custom fields with Individual contacts, 12 of which relate to an online membership directory. Rather than group all 20 fields in a single custom field set, you may want to split them into two sets - one for the directory-related fields, and a second for more general Individual details.

To create a custom field set and custom fields, go to: **Administer** > **Customize Data and Screens** > **Custom Data**. This screen lets you assign a title to the field set, specify what type of records it will be used for, select the display characteristics, and enter help text. The form appears in the following image, and we'll describe each field.

New Custom Field Set

Use Custom Field Sets to add logically related fields for a specific type of CiviCRM record (e.g. contact records, contribution records, etc.). ❷

✔ Save   ✘ Cancel

Set Name *   [   ] ❷
Used For *   [Individual   ▾]   [- Any -   ] ❷
                                             [Student   ]
                                             [Parent   ]
                                             [Staff   ]
                                             [Volunteer   ]

Order *   [6   ] ❷

                    ☐ Does this Custom Field Set allow multiple records? ❷
Display Style   [Inline ▾] ❷
                    ☑ Collapse this set on initial display ❷
                    ☐ Collapse this set in Advanced Search ❷
                    ☑ Is this Custom Data Set active?
                    ☑ Is this Custom Data Set public?
Pre-form Help ❷   [   ]
                    [   ]
                    [   ]

Post-form Help ❷   [   ]

Set Name

For custom field sets which are displayed inline, this name appears as the legend of the field set. If this set uses the tab display style, the name appears as the navigation tab label.

Used For

You can use this option to ensure that the fields appear only where they are relevant. The choices are:

- **Activity:** fields that may be assigned to all activities or to a specific activity type, such as Meeting or Phone Call.
- **Addresses:** creates an address block, which allows the administrator to create additional fields related to an address.
- **Contacts:** fields that may be assigned to all contacts.
- **Contributions:** fields that may be assigned to all contributions or to a specific Financial Type, such as Donations or Event Fees.
- **Events:** fields that may be assigned to all events or a specific event type (e.g., Conference or Fundraiser). These fields are applied to an actual event, not the participant registration record.

- **Grants:** fields specific to grants.
- **Groups:** displayed in the Group settings (note that these fields are not searchable).
- **Household:** fields specific to the Household contact type.
- **Individual:** fields specific to the Individual contact type.
- **Memberships:** fields that may be assigned to all membership records or to a specific membership type.
- **Organization:** fields specific to the Organization contact type.
- **Participants:** fields that appear on the participant registration record. There are three options for these: general fields applied to all registration records, role-type fields assigned to a specific participant role, and event participant fields assigned to a specific event.
- **Pledges:** fields specific to pledges.
- **Relationships:** fields that may be assigned to all relationship records or to a specific relationship type, such as "Spouse of" or "Employee of".

Order

This controls the order in which your custom field sets are presented when you have created more than one set. Lower numbers (e.g. 1, 2) are displayed above higher numbers (e.g. 8, 9).

Multiple record fieldsets

By default custom data sets have a 'one-to-one' relationship to the entity they are attached to. For example, *one* field set for a person's physical attributes which contains one field for their height and one for their eye colour will be attached to *one* individual record. This makes sense because we only ever need to record one eye colour and one height for each person. However, in certain circumstances, we want to record multiple custom field sets for a single contact, for example, when recording a person's educational history. In this case, a single person may have multiple educational degrees, so a custom field set about educational history, which contains fields for subject, institution, and grade, should allow multiple records, and this is what multiple record fieldsets allow.

You can only add multiple record field sets to contacts - you can't add them to other entities. To use this option, select the "Does this Custom Field Set allow multiple records?" option. A few things to bear in mind when creating mutiple record custom field sets:

- Multiple data applies to the whole field set, not to individual fields.
- Multiple data can only be added to Contacts. It **cannot** be added to Activities, or Contributions, etc.
- Mutiple data cannot currently be exported.
- Before deciding to model something as a multiple value custom field set, you may wish to consider whether it could or should be modelled as an activity. For example, an educational degree could be an activity with custom data added.

Display options

The display style tab is only visible for custom data fields attached to contacts. We can choose to display contact field sets either **inline**, i.e. on the summary screen, or in their own **tab**. Whether you use a tab or inline depends on a number of factors. For example, how frequently do you need to access the data, how large is the data set, etc. You can switch between display styles at a later date if you so wish.

You can also specify that you want the custom field set to be "collapsed" on initial display. If you check this box, only the title for this field set is displayed when the page is initially loaded, because the fields are hidden. This is helpful for field sets that are infrequently used because it reduces the amount of space taken up by the data when the page opens. A similar "collapsed" property is available for the display of custom data in Advanced Search.

There are two options for displaying in a tab. **Tab with table** and **Tab**.

Tab with table provides a concise overview of the data in the set. New records can be added and existing records can be edited in pop-up windows. Under **more** there is the option to "copy a record". For consecutive records that have the same value in many fields this lets you edit just one or two fields and save the copy as a new record.
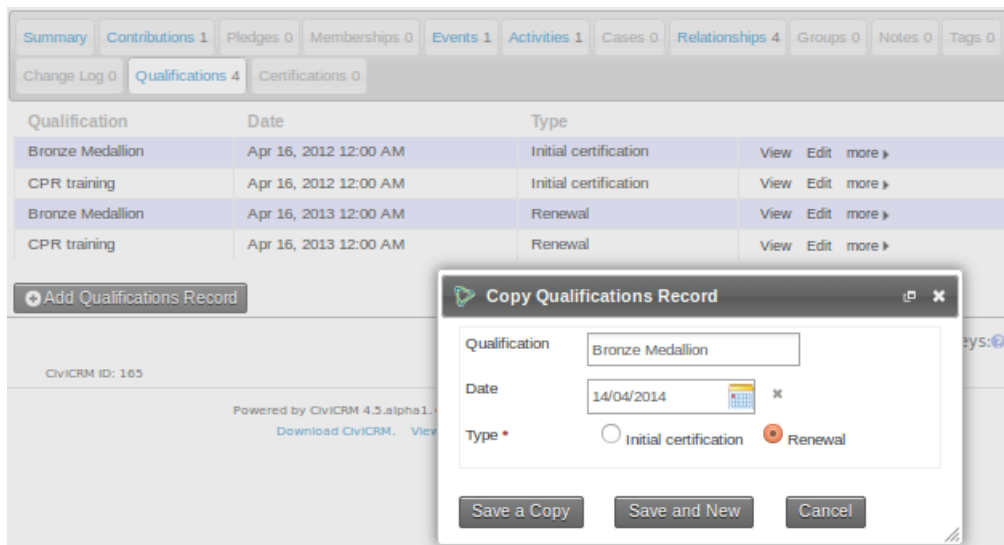
Tab displays data in a similar format to the inline style.
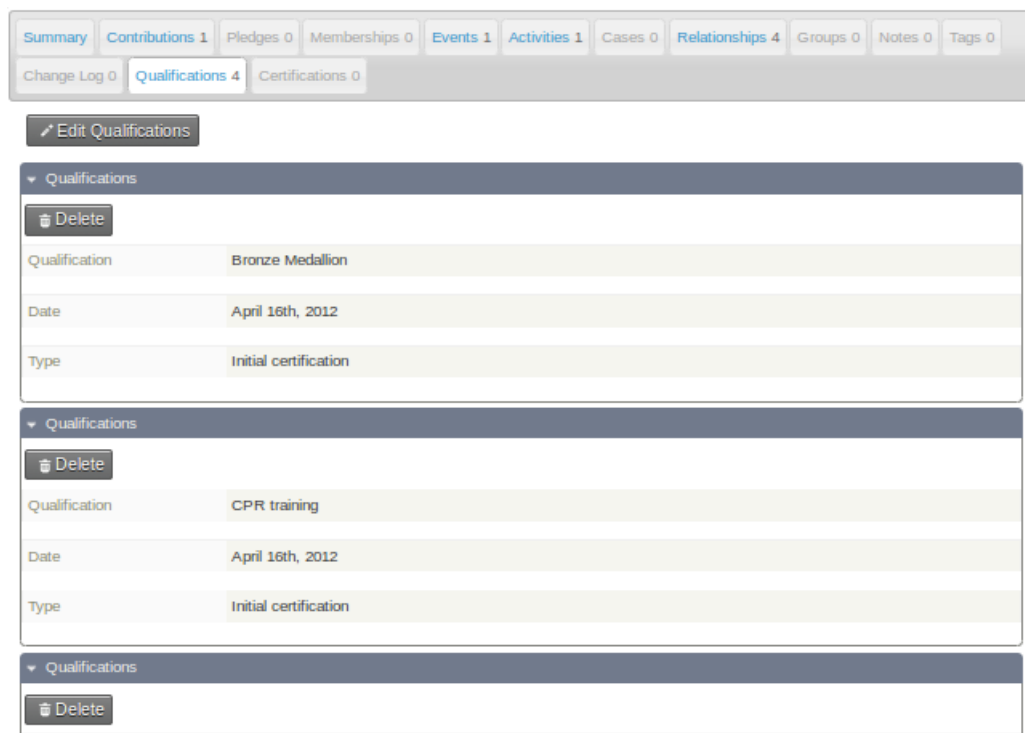
Is this Custom Field Set active?

If a custom field set is active, its fields can be viewed and changed. Otherwise, the fields are in the CiviCVRM system but hidden from the user interface. This option can be valuable for managing your data, especially if you are migrating from an existing database system.

For example, your existing database may have fields you would like to transfer to CiviCRM for historical data keeping purposes, but plan to then deprecate or migrate to a new data structure. Suppose you are importing membership records from an MS Access database. Each record in Access has a unique ID (key) field, which has no direct benefit in CiviCRM. Rather than ignoring it altogether, you could create a custom field to hold the value, import the records, and then disable the field (keep the Activate option unchecked), thereby hiding it from view and minimising the interface clutter.

Though not visible to users, the field value is stored in the system and can be referenced at a later date. For instance, if you ever need to investigate archived data for a possible discrepancy or compare the field value with a printed record.

Individual fields can be made inactive in the form defining those fields, once the custom field set is active.

Is this Custom Field Set public?

If a custom field set is marked as public, its fields will be shown on public-facing pages.

For example, custom fields that should be shown on an event information page should belong to a field set marked as public. Custom fields that relate to administrative information about an event should be part of a field set that is not be marked as public.

Note that the setting is at the Custom Field Set level and applies to all Custom Fields in the Set. Individual fields cannot be marked as public or not.

Pre-form Help and Post-form Help

If you enter text in Pre-form Help, your help text appears above the form field, and if you enter text in Post-form Help it appears below the form field. Use help at this level to provide instructions related to the entire set of custom fields.

Custom fields

Once you have created a custom field set, you can create custom data fields within the set. Click "View and Edit Custom Fields" followed by "New Custom Field" and you will see the screen in the image below. We'll explain each of the options in this section.

After completing the field configuration options, click 'Save' to record the field and return to the field listing for your current custom field set, or click 'Save and New' to save the field and begin defining a new field.

With the exception of the data and input field type selection, all of the configuration options may be modified after your initial creation of the field. You may also find it useful to preview your custom fields, as well as the whole set of custom fields, as you are defining them. This is particularly useful for checking the layout of radio button and check-box fields with a large number of choices.

Field label

The text next to the field when displayed to the user. Text entered here is also the label shown when you export data. When using fields in a profile, you can overwrite the Field Label. So on this screen you can choose names that are suitable for administrators, and give more user-friendly names when exposing them in profiles.

Type

Custom fields can be of many different types, many of which you've probably encountered when filling out forms on websites. When you create a custom field, CiviCRM presents a dropdown list of data types from which you can select that which best represents the data you plan to store. The menu on the left (shown open in the following figure) indicates the format of data you wish to store, whereas the menu on the right indicates the way you want to interact with the user.

The types of fields are:

- **Alphanumeric** (i.e. text and number fields), which can be of the following types:
  - Text: a simple area in which users can enter text.
  - Select: a dropdown box which limits choice to one selection.
  - Radio: a list of options where you can make one selection. Unlike a Select box, all the options are visible on the screen at the same time.
  - Yes and No: a special kind of radio list with two contrasting options.
  - Check-box: a list of options that allows multiple selections.
  - Multi-select: a list of options in a single box. You can select multiple selections using control+click.
  - Advanced Multi-select: two lists side by side in which items can be moved from one to the other.
  - Autocomplete select: an autocomplete widget. The user can start typing, and when the text entered uniquely identifies a selection, the field automatically fills in the complete selection.
- **Note**: a longer text box which allows multiple lines. Notes come in two flavours:
  - plain, and
  - rich text, which displays a WYSIWYG editor that allows HTML.
- **Integer**, i.e. a whole number. This can be displayed as a:
  - text box
  - select box
  - radio list.
- **Number**: i.e. any number that includes decimals, such as 3.175. This can be displayed as a:
  - text box

- select box
- radio list.

- **Money**: similar to a number, but treated according to the local currency as configured in CiviCRM's administrative pages. This can be displayed as a:
  - text box
  - select box
  - radio list

- **Date**: a way of entering a date (and optionally time) value using a calendar widget. You can set a range of years which can be selected prior to and after the current date.

- **State/Province**: a list of available geographical locations as configured in CiviCRM's Localization settings (Administer > Configure > Global Settings >> Localization). Can be offered as either a select box or a multi-select box.

- **Country**: a list of geographical locations. Can be offered as either a select box or a multi-select box.

- **File**: offered as a browser where the user can select and upload a file.

- **Link**: an active internet hyperlink.

- **Contact Reference**: an autocomplete widget for an existing CiviCRM contact.

We suggest you experiment with creating different field types to get an idea of how they behave. Different options have implications for use. For example, check-boxes enable you to use OR as well as AND searches in Advanced Search, whereas multi-select will not.

Display in Table?

This check box only appears when you are creating a field in a multi-record field set that you have elected to display as **tab with table**. It is checked by default. If you unselect this then the field will not be displayed in the table. You might want to do this for less important fields if you have a large dataset that is too wide for your screen.
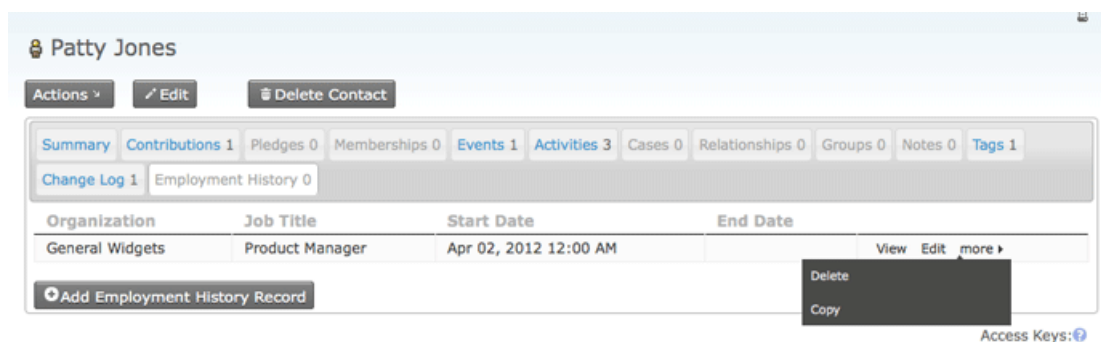
Fields hidden in the table view will still be available when adding a new record or viewing, editing or copying a particular row.
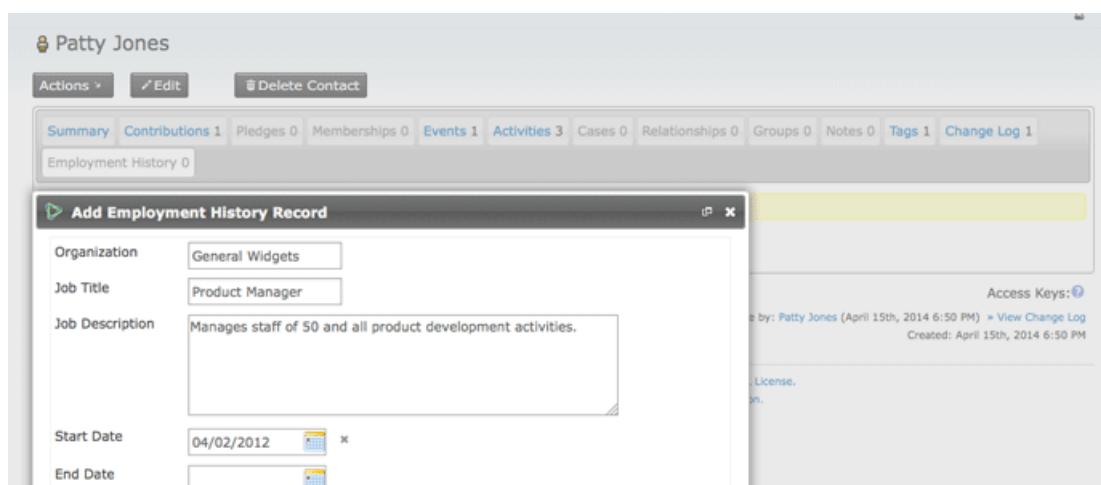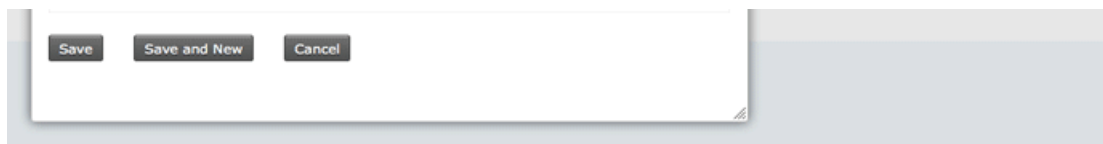
Database Field Length

The database field length allows you to specify the number of characters that this field will contain. You should normally leave this at the maximum. In certain cases (for example if you are dealing with extremely large field sets) it might make sense to shorten this field to improve performance and decrease storage space, but setting a shorter length will not make a difference to the vast majority of users.

Order

Controls the order in which the fields appear. You may assign the order in the field edit form, or use the up/down icons on the main field listing table to adjust the field presentation. By default, new fields appear at the bottom of the field list within a set.

Default Value

Where applicable, you may designate a default value for a field. This value is automatically displayed or selected when users go to a form containing this field.

Pre-form Help and Post-form Help

Ideally, your field name is self-explanatory and users will immediately know what to enter. But in those cases where there is some ambiguity, or where you wish to help regulate how a certain field is used, you may enter help text here. If you enter it in Pre-form Help, your help text appears above the form field, and if you enter text in Post-form Help it appears below the form field.

The help text appears in all uses of the field in administration pages and is inserted as the default help text when fields are assigned to a profile (see 'profiles'). The person creating the profile can remove or change the help text there without impact on the original custom field definition.

Required

When selected, a value must be provided for this field before the form can be submitted. Failure to do so will result in an error message directing the person to complete the required fields.

If you want a field to be required only when a user fills out a particular profile, you can leave this box unchecked and check the Required field later within the profile.

Is this Field Searchable?

Makes the field appear in a panel of custom fields in CiviCRM's Advanced Search page. While you may be tempted to mark every field as searchable, doing so may unnecessarily clutter the Advanced Search custom field panel, when in fact certain fields will probably never be used in that way. You may toggle this option on or off at any time, so do not be overly concerned about arriving at a final decision when you first define a custom field.

Active

As with the active check-box in the form defining the custom field set, this box determines whether the field is disabled or enabled when CiviCRM displays it to the user

enabled when CiviCRM displays it to the user.

View Only

This allows you to designate a field as visible but uneditable. There are two general uses for this field:

- To store data imported from another system that you want available for reference to the user, but do not want them to be able to modify.
- To store data that is not entered directly through the user interface but rather through a method set up by your developer.

Multiple choice options

For field types that involve selecting from a set of multiple options (such as Select, Radio, Check-box, Multi-select and Advanced Multi-select) you are given the choice of either using an existing set of options that you've already created for another custom field or create a new set. You can enter these values while creating the field, or enter the values later. The option's label is displayed on the form, while the option's value is stored in the contact record.

If you choose to use the same set of options for several fields, you will be notified when making any changes that this will affect an option set used by several fields.

When you create a new set, you have the option of initially entering up to ten multiple choice options in a table. If you need more than ten options, you can create an unlimited number of additional choices after saving this new field by using the 'Edit Multiple Choice Options' link. Go to: **Administer** > **Customize** > **Custom Data** > **View and Edit Custom Fields** > **Edit Multiple Choice Options**. You may go to this screen at a later date to modify the label, order and active status of any multiple choice option, or add more choices.

If desired, you can also mark one of the choices as the default option.

Inactive options are hidden when the field is presented.

Managing custom field sets.

You can view a listing of all the custom fields in a custom field set at any time by navigating to **Administer > Customize Data and Screens > Custom Data** and clicking 'View and Edit Custom Fields' for the relevant field set.

As well as the expected options of edit field settings, edit multiple choice options (if applicable), preview, disable or delete, you also have the option to **Move** a custom field to another data set. You can move custom fields between sets used for all contacts or for contact sub-types but otherwise you can only move fields between data sets of the same type.

Multiple choice options headings

You can also create headings in your multiple choice option lists. For example you may wish to make a list as follows:

To put headings in your options, follow these steps:

1. When configuring the field, choose "Select" or "Multi-Select" as the input type.

2. When configuring the options for the field, add your headings as follows:
   - Set the "Label" for your heading to be the text displayed to the user
   - Set the "Value" for your heading to be some piece of text prefixed by "crm_optgroup_".

| ✛ Alsation | 6 | | Yes | | Edit Option View more ▸ |
| ✛ Poodle | 7 | | Yes | | Edit Option View more ▸ |

Showing 1 to 7 of 7 entries

First   Previous | 1 | Next   Last

⊕ Add Option   ✕ Done

Choosing between fields, groups and tags

Data fields, groups and tags are three major ways to associate information with contacts. Although it can be tempting to create a custom data field for every attribute of your data, take time to learn about the alternatives. They offer powerful functionality that you may miss out on if you rely only on custom data. Furthermore, using data fields for information where they could be stored more appropriately as groups or tags can slow your system. Finally, proper use of groups and tags makes it much easier for administrative staff to maintain the records.

Some tips that may help you choose are:

- Data that can take a wide range of values, such as a person's address or biography, should be stored in an alphanumeric custom data field.

- Custom data fields can be grouped and displayed on their own tab on the contact's record.

- As the name implies, Groups are used to group contacts. For instance, you'll probably assign board members to one group, staff to another, volunteers to a third, and so on. If you use Drupal, you can assign permissions based on group membership. You can also define a group that CiviCRM automatically adds contacts to and deletes contacts from, based on some characteristic. This feature is called a Smart Group.

- If you plan to use CiviMail for mass mailings and you want certain contacts to get a particular mailing, those contacts must be assigned to a Group. For instance, you may want a press release to go only to certain contacts; those contacts should be assigned to a particular group. This group could be a Smart Group.

- Both Tags and Groups can be structured hierarchically. For instance, a group or tag labeled 'Regions' can have a subgroup or subtag for each geographic region your organisation covers (see "Case study in hierarchical tags" later in this section).

- Tags support more powerful search options than data fields or groups. For instance, visitors can search through multiple tags with both AND and OR operators. Data fields support only lists of words (which is effectively the same as an AND operator), except for fields represented as check-boxes, which support OR operators.

- Tags have a more sophisticated user interface than data fields or groups. The interface allows the visitor to add and remove tags without reloading the page in edit mode.

- Custom data fields can be assigned to a specific record type (e.g., only households), whereas tags will be assigned to all types once the tags are defined.

Custom field set storage limitations

A large number of custom field sets or custom field sets with a larger number of fields may cause problems when searching, exporting data or running reports. It is hard to give specific limits on the number of data sets you should create or the number of fields that you should add to field sets because a lot depends on the type of data you are collecting, and the server that your installation is hosted on, but if in doubt, you should discuss with your system administrator or CiviCRM service provider.

Creating Profiles for Online Data Collection

Introduction

To collect information from your web site, you have to tell PowerBase what fields you would like to collect. For example, if you'd like to send newsletters to supporters, you'll need to collect email address, at minimum, and first name and last name and an email address and possibly an address field such as zip code. A profile allows you to define those fields and create a form for people to fill out.

Or, if you're collecting registrations for a fundraising dinner, you might need to collect additional information such as the full street address and dietary preferences. A profile allows you to specify these fields and the configure your event or contribution page to use the profile you have created.

Some of this data might not be predefined as part of PowerBase. In that case, you'll will have to create custom fields.

This document describes how to use Profiles to create these forms. In addition, there is a more advanced way to create forms called webforms. And, once you master profiles, you may want to use profiles to get your members to update their own information.

NOTE: We refer to any data collected from your external public-facing pages that appear on your web site or directly on your PowerBase site as "on-line", "public", or "external" and data input by you or your colleagues who have logged in as "off-line", "User and User Admin Only", or "internal" . Of course, all of it is online, but this is a convenient way to separate out pages that you are preparing for the general public and pages that will be used internally.

This section draws on information from the CiviCRM manual on profiles.

Create a Group

We recommend creating a group beforehand that will hold the new entries that come into your database through the external site. You can do this with the Contacts -> New Group menu option .

Creating your Profile

To start, click Administer -> Customize Data and Settings -> Profiles

Then click the Add Profile link

Carefully choose your profile name and description. Several months from now you want to be sure that any staff person will easily understand what the purpose of the profile is. In a year or two you may want to delete unused profiles to reduce clutter so the name and description is key.

In the "Used for" box, leave all options un-checked if you are creating a profile to go with an Event page or a Contribution page. If you are creating a profile for people to fill out directly, then check the "Standalone Form or Directory" option.

The "Order" box simply controls where it appears on the list of profiles. It can be left to the default value.

The pre and post help allows you to add additional help text to your form and are optional.

Advanced Settings is quite important:

- "Add new contacts to a group" is where you can choose the group you created in the earlier step
- "What to do upon duplicate match," in most cases, should be set to "Allow duplicate contact to be created". It is better to manually review your duplicates and merge them by hand then to risk an automatic merge that may overwrite good data with bad data. If you are putting your contacts in a group, then you can de-dupe just the group to save time. After they have been de-duped you can remove them from the group.
- You can also set options such as a thank you page to redirect users to upon completion and an email address to use to notify admins when it is filled out.

Once you have saved your profile, you will be prompted to add the fields you want to it.

Using your profile

Now that you have your profile, what next?

You can start using it right away. From the profile listing page, if you click More -> Use Profile - Create mode you will be able to start using it right away.

You can also ask support to link your profile to your custom theme so it appears to look like your web site. Then, you can simply add a link to your main web page that takes you to the profile page.

You can also click "More" and then "HTML Form Snippet" and copy and paste this code directly on your web site (this approach is difficult so we encourage you to ask for help from support).

Browsing your profiles

If you have Administer menu access, you can create the profile going to Administer -> Customize Data and Screens -> Profiles .

You will come to another screen that allows you to add or update an existing profile. It has two tabs: User-defined Profiles and Reserved Profiles. We are interested in the User-defined Profiles for this document, but from time to time knowing where the Reserved Profiles are stored can come in handy for changing some default settings.

The list includes the:

Profile Title which is name of the profile which, by the way, is used on Public facing pages as the heading above the fields,

Type, which indicates which tables are being used,

ID is very important. It's used to differentiate among all the profiles that you have. You need to know it in many cases for external web form use.

Used for, which shows the uses that it can have. On the right you have some options for modifying the profile.

Fields brings up the list of fields associated with the profile.

Settings changes the overall profile. It has fields like Profile Name (aka Profile Title), help text, and some other critical information.

The **more** option includes additional actions.

- **Preview** shows the entire profile.
- **Use Profile-Create Mode** will allow you to do data entry with the profile, if it's been set up for that.
- **Disable** makes the profile unavailable for use, but does not delete it.
- **Delete** does delete it. Deleting a profile will not delete any data in your database, but it may cause a problem if the profile is in use on an external page somewhere.
- **HTML Form Snippet** opens a page with html coding that can be copied and used in another web site. This is typically used in situations where your web site is collecting contact information such as name and email address for e-newsletter sign ups.
- **Copy Profile** will make a duplicate of the profile. This is a handy way to get started with a new profile. Just rename it after you get it duplicated.

Category:

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Using Web Forms for additional flexibility

Why use webform?

Most PowerBase users are familiar with the standard tools for online organizing, e.g.

- Using a Contribution page to solicit contributions or solicit memberships
- Using an Event page to invite people to register to attend an event
- Using Profiles so people can sign up for your newsletter
- Using Petitions

However, there are times when these methods don't quite work. For example, if you want people to:

- sign up **and** create a custom activity at the same time; or,
- register for your event **and** optionally make a contribution; or,
- make a contribution **and** create an activity; or,
- sign up two people at the same time (e.g. a parent and a child with a relationship); or,
- simply receive an email after they have filled out a form

All of these kinds of data entry are possible using Webforms.

Preparing PowerBase
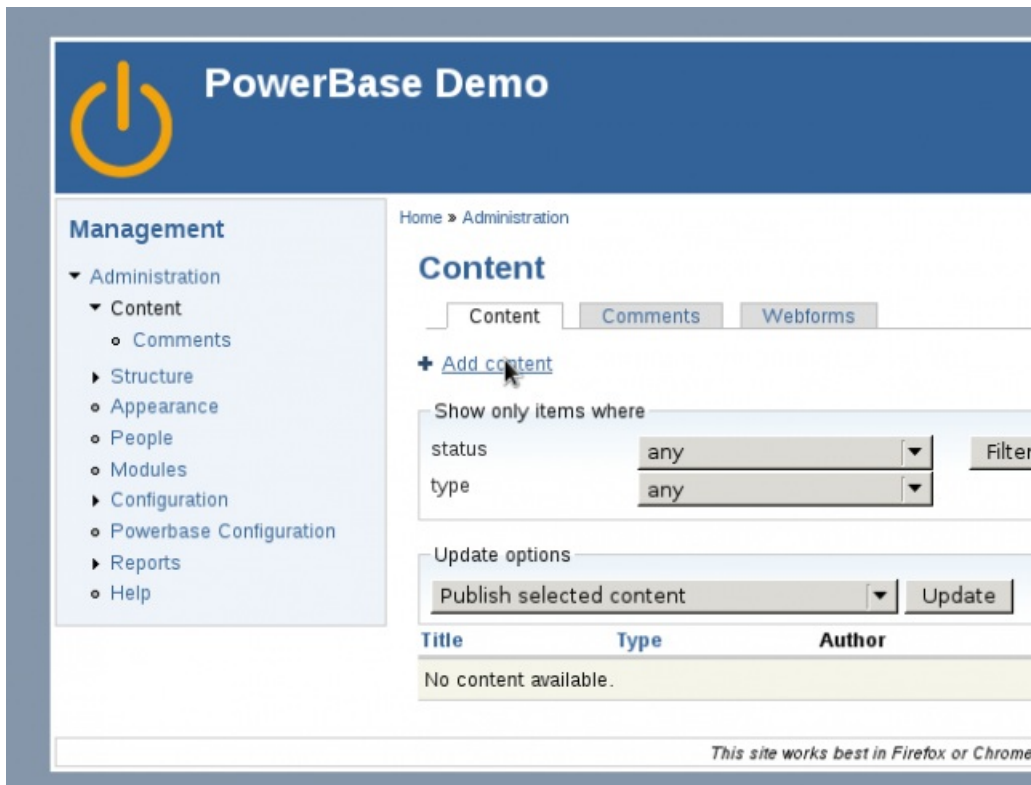
Sometimes, you may need to do some work in PowerBase before making your webform.

For example, if you want to record an activity **with a custom activity type** or any custom fields that don't yet exist, you must first create them in PowerBase. For example, you may want to create a Custom Activity Type (Administer -> Customize Data and Screens -> Activity Types) and/or create custom fields (Administer -> Customize Data and Screens -> Custom Data).

Once you create them in PowerBase, they will be available in the webform.

Getting Started

To begin with, click Administration -> Content -> Add Content

Then fill out a title and click save.

Enable CiviCRM

Click the CiviCRM tab and enable CiviCRM Processing

Choose the contact fields you want to appear.Existing Contact is a special case! That allows you to select a contact that already exists in your database to update. It's a useful feature if you are creating a webform for staff or volunteers to fill out however if you are making a public webform be sure to uncheck that field.

You can add a lot more things to your webform, including contribution pages, memberships and event registration. Click on the tab for each area and then select the fields you want. When you are done, click save.

Making more adjustments

After you have clicked save, you can review the fields that you included by clicking the webform tab. You can change the order if you want.

You can also edit a field to change it's properties (like the default value or the way it is displayed)

For example, you can change the "widget" (way it is displayed)

And the default value

When you are done, click the view tab to see the results

Webforms are quite complex and powerful so please feel free to contact support with questions on how to use them the most effectively.

If you are interested in diving in fully, please see the full Webform CiviCRM documentation.