

# Better Living through Extensions



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# What are we covering here?

- A NON-technical discussion of extensions.
- A tour of the public, private, semi-private and core extension ecosystems.
- A peek into the future of extensions.
- I'm keeping this short – lots of Q&A time.

# What is an extension?

- It's a way to add (or remove!) functionality from CiviCRM.
- It can be literally anything. Some examples:
  - “This report in CiviCRM almost meets my needs, but I need to add new fields.”
  - “If the person making a donation is a major donor, show them a different set of donation options.”
  - “I want to use a new payment processor, but it's not built in to CiviCRM.”
  - “I want to automatically look up and contact someone's elected officials when they fill out a petition.”

# What is an extension?

- They can use information stored in CiviCRM (e.g. “Campaign in Contribution Tab”).

The screenshot shows the CiviCRM interface for a contact's contributions. At the top, there are navigation tabs: Summary, Contributions 17, Activities 52, Events 1, Relationships 2, Groups 8, Notes 1, Tags 0, Change Log 9, and Codes Redeemed 0. Below the tabs is a summary bar with statistics: Current Year-to-Date - \$ 30.00, # Completed Contributions - 1, Avg Amount - \$ 30.00, Total - \$ 3,988.00, # Completed - 17, Avg - \$ 234.59, Median - \$ 125.00, and Mode - \$ 100.00. A table of contributions follows, with columns for Amount, Type, Source, Received, Thank-you Sent, Status, and Premium. Each row includes a 'View Edit Delete' link.

Amount	Type	Source	Received	Thank-you Sent	Status	Premium
\$ 30.00	Event Fee	CiviCRM # Online Event Registration: A GODDESSEY	June 17th, 2017 11:24 AM		Completed	
\$ 125.00	Donation		November 18th, 2015 12:00 AM		Completed	
\$ 125.00	Donation		June 9th, 2015 12:00 AM		Completed	
\$ 75.00	Donation		June 2nd, 2015 12:00 AM		Completed	
\$ 100.00	Donation		October 29th, 2014 12:00 AM		Completed	
\$ 125.00	Donation		May 1st, 2014 12:00 AM		Completed	
\$ 0.00	Donation		February 12th, 2014 12:00 AM		Completed	
\$ 100.00	Donation		December 11th, 2013 12:00 AM		Completed	
\$ 1,200.00	Donation		March 20th, 2013 12:00 AM		Completed	
\$ 250.00	Donation		October 22nd, 2012 12:00 AM		Completed	
\$ 1,000.00	Donation		February 15th, 2012 12:00 AM		Completed	
\$ 100.00	Donation		December 28th, 2011 12:00 AM		Completed	
\$ 333.00	Donation		March 31st, 2011 12:00 AM		Completed	
\$ 75.00	Donation		June 16th, 2010 12:00 AM		Completed	
\$ 150.00	Donation		June 7th, 2010 12:00 AM		Completed	
\$ 0.00	Donation		January 11th, 2010 12:00 AM		Completed	
\$ 200.00	Donation		June 10th, 2009 12:00 AM		Completed	

# What is an extension?

## • With extension applied:

The screenshot displays a CRM interface for a contact's contribution history. At the top, there are navigation tabs: Summary, Contributions 17, Activities 52, Events 1, Relationships 2, Groups 8, Notes 1, Tags 0, Change Log 9, and Codes Redeemed 0. Below the tabs, there are two buttons: "Record Contribution (Check, Cash, EFT ...)" and "Submit Credit Card Contribution".

Summary statistics are shown below the buttons:

- Current Year-to-Date – \$ 30.00
- # Completed Contributions – 1
- Avg Amount – \$ 30.00
- Total – \$ 3,988.00
- # Completed – 17
- Avg – \$ 234.59
- Median – \$ 125.00
- Mode – \$ 100.00

A message states: "Click [Record Contribution](#) to record a new contribution received from this contact. Click [Submit Credit Card Contribution](#) to process a new contribution on behalf of the contributor using their credit card."

Below the message, there is a link: "Click arrow to view payment details."

Amount	Type	Source	Received	Thank-you Sent	Status	Campaign	
\$ 30.00	Event Fee	CIVICRM # Online Event Registration: A GODDESSEY	June 17th, 2017 11:24 AM		Completed	A Goddessey - Run @ LAVA	<a href="#">View</a> <a href="#">Edit</a> <a href="#">Delete</a>
\$ 125.00	Donation		November 18th, 2015 12:00 AM		Completed	RITES 2015 Thank You	<a href="#">View</a> <a href="#">Edit</a> <a href="#">Delete</a>
\$ 125.00	Donation		June 9th, 2015 12:00 AM		Completed	MOTHERS - Benefit Spring 2015	<a href="#">View</a> <a href="#">Edit</a> <a href="#">Delete</a>
\$ 75.00	Donation		June 2nd, 2015 12:00 AM		Completed	MOTHERS - Benefit Spring 2015	<a href="#">View</a> <a href="#">Edit</a> <a href="#">Delete</a>
\$ 100.00	Donation		October 29th, 2014 12:00 AM		Completed	Handstand-a-Thon 2014	<a href="#">View</a> <a href="#">Edit</a> <a href="#">Delete</a>
\$ 125.00	Donation		May 1st, 2014 12:00 AM		Completed	Tracks Opening Night Benefit	<a href="#">View</a> <a href="#">Edit</a> <a href="#">Delete</a>
\$ 0.00	Donation		February 12th, 2014 12:00 AM		Completed	Online Auction - Spread the Love, Feb 2014	<a href="#">View</a> <a href="#">Edit</a> <a href="#">Delete</a>
\$ 100.00	Donation		December 11th, 2013 12:00 AM		Completed	Handstand-A-Thon 2013	<a href="#">View</a> <a href="#">Edit</a> <a href="#">Delete</a>
\$ 1,200.00	Donation		March 20th, 2013 12:00 AM		Completed	Online Auction Donors March 2013	<a href="#">View</a> <a href="#">Edit</a> <a href="#">Delete</a>
\$ 250.00	Donation		October 22nd, 2012 12:00 AM		Completed	Benefit - October 2012	<a href="#">View</a> <a href="#">Edit</a> <a href="#">Delete</a>
\$ 1,000.00	Donation		February 15th, 2012 12:00 AM		Completed	Online Auction Donors Feb 2012	<a href="#">View</a> <a href="#">Edit</a> <a href="#">Delete</a>
\$ 100.00	Donation		December 28th, 2011 12:00 AM		Completed	End of Year 2011	<a href="#">View</a> <a href="#">Edit</a> <a href="#">Delete</a>
\$ 333.00	Donation		March 31st, 2011 12:00 AM		Completed	Benefit - March 2011	<a href="#">View</a> <a href="#">Edit</a> <a href="#">Delete</a>
\$ 75.00	Donation		June 16th, 2010 12:00 AM		Completed	Loving & Daring Benefit - June 2010	<a href="#">View</a> <a href="#">Edit</a> <a href="#">Delete</a>
\$ 150.00	Donation		June 7th, 2010 12:00 AM		Completed	Handstand-a-Thon - May 2010	<a href="#">View</a> <a href="#">Edit</a> <a href="#">Delete</a>
\$ 0.00	Donation		January 11th, 2010 12:00 AM		Completed	Online Auction Dec 2009	<a href="#">View</a> <a href="#">Edit</a> <a href="#">Delete</a>
\$ 200.00	Donation		June 10th, 2009 12:00 AM		Completed	Handstand-a-Thon - May 2009	<a href="#">View</a> <a href="#">Edit</a> <a href="#">Delete</a>

# What is an extension?

- They can use outside info (e.g. “Currency Converter”).

Contributor  
Financial Type \*

Total Amount **EUR (€)** **435.00** OR Choose price set

**Contribution Amount**

ITEM	FINANCIAL TYPE	QTY	UNIT PRICE	TOTAL PRICE	
Contribution Amount		€1.00	€435.00	€435.00	

« < 1 > »

Contribution Source

Contribution Status **Completed**

Contribution Date \* **12/06/2023** **06:45PM**

Send Receipt?  Automatically email a receipt for this payment to n.rounovskaia@tdva.fr?

Alternate Address **- None -**  
Specify an alternate address for this contribution.

Receipt Date

**PAYMENT DETAILS**

Amount	Type	Payment Method	Contribution Date
€435.00		FR_Societe Generale SA	12/06/2023 18:45:47

[> Record Payment](#) [> Submit Credit Card payment](#) [> Record Refund](#)

▶ Soft Credit ?

▼ Currency Conversion

Total Amount (converted) \$467.74

▼ Gift Details

# The extension ecosystems

- Public, private, semi-private, and core extensions exist. They all have their own ecosystem. Let's tour each.

# Public extensions

- Someone has solved a common problem, and they want to share it with the world!
- Some (not all) public extensions can be browsed and installed directly from within CiviCRM.
- Let's do a whirlwind tour of the most popular public extensions, because you might want one of these right away.



# CiviDiscount

- Discount codes, coupons, automatic discounts for logged-in users based on the groups they're in.

The screenshot shows the 'New Discount' form in the CiviDiscount interface. The form is titled 'New Discount' and is located within a window titled 'Discounts'. The form fields are as follows:

- Discount Code \***: A text input field containing 'MEMBERSONLY'. To its right is a 'Random' button with a double arrow icon. Below the field is the instruction: 'Do not use spaces in the Discount Code.'
- Description**: A text input field containing '20% discount on events!'.
- Is this discount active?**: A checked checkbox.
- Discount Amount \***: A text input field containing '20' and a dropdown menu set to 'Percent'.
- Additional Options**: A section with a downward arrow icon, containing:
  - Usage Limit**: A text input field with a help icon and a small dropdown arrow.
  - Activation Date**: A text input field with a help icon and a calendar icon.
  - Expiration Date**: A text input field with a help icon and a calendar icon.
  - Organization**: A dropdown menu with the selected option '- none -' and a search icon.
  - Display a message to users not eligible for this discount?
- Discounts for events**: A section with a downward arrow icon, containing:
  - Events**: A dropdown menu with the selected option 'x --any event--' and a search icon.
  - Event Types**: A dropdown menu with the selected option '- none -'.
- Discounts for memberships**: A section with a rightward arrow icon.
- Automatic Discounts**: A section with a rightward arrow icon.

# Stripe

- Adds Stripe as a payment processor option to Civi.

**New Payment Processor**

✓ Save   ✕ Cancel

Payment Processor Type  ?

Name \* **Stripe**

Description DPS Payment Express

Financial Account \* Elavon Payment Processor

Payment Method eWAY (Single Currency)

Accepted Credit Card Type(s) FirstData (aka linkpoint)

Processor Details for Live Site

User Name  ?

Password  ?

Signature

PayflowPro

PayJunction

PayPal - Express

PayPal - Website Payments Pro   in accept

PayPal - Website Payments Standard

Realex Payment

Dummy Payment Processor

# Contact Layout Editor

- Custom layouts for the contact summary tab.

The screenshot displays the 'Contact Layout Editor' interface. On the left, a 'Layouts' sidebar contains three options: 'Admin Layout' (Show: All contact types, To: Administrators), 'Layout for Fundraisers' (Show: All contact types, To: Fundraisers), and 'Simple Layout' (Show: All contact types, To: All users). The main area is titled 'Simple Layout' and includes a 'SAVE ALL' button. Below the title, there are 'Show:' and 'To:' dropdown menus. The 'Show:' menu is set to 'Contact type' and the 'To:' menu is set to 'Groups'. The central workspace is divided into two columns by a dashed line. The left column is titled 'Address' and contains a list of fields: Home Address, City, State/Province, and Postal Code. The right column is titled 'Phone' and contains a list of fields: Home Phone and Work Phone. On the right side, a 'Blocks' sidebar contains a list of available blocks: ID, Type, Tags; Employer, Nickname, Source; Demographics; Communication Preferences; Email; Instant Messenger; Open ID; Website; Constituent Information; Interesting Info; Name and Address; A custom block; Key Relationships; Extended Report - Contributions; and Extended Report - Memberships.

## And more...

- Mosaico – a drag and drop email template builder, similar to Mailchimp.
- Multisite: For organizations with branches or chapters that are autonomous from each other – they can all get their own CiviCRM, but the head office sees all the data together.

## A special mention to “No Overwrite”

- Have you (or your staff) ever entered a donation for someone else through the public page while logged in? Did your record and the donor's record get mushed together? “No Overwrite” is the extension for you!

# More public extensions!

- That was just a few of the public extensions. There are over 140 for public distribution, and hundreds in the directory – go browse!
- Those that are approved for automated distribution are available from within CiviCRM.
- There's plenty more at <https://civicrm.org/extensions>!

The screenshot shows the CiviCRM Administer menu. The 'Administer' link in the top navigation bar is circled in red. The 'System Settings' option in the dropdown menu is also circled in red. The 'Extensions' option is highlighted in the dropdown menu. The main content area shows the 'CIVICRM Extensions' page with a 'Refresh' button and a text box explaining that CiviCRM extensions allow you to install additional available "native" extensions from the CiviCRM version of CiviCRM. Below the text box, there is a table with columns for 'NAME' and 'Action Provider'. The first row in the table is for the 'Action Provider' extension, which is described as a base extension providing an abstract action interface to be used in...

# Private Extensions

- Sometimes, you have a need that's specific to your organization.
- You can hire someone to write an extension to solve it for you.
- Private extensions don't need the polish of public extensions – so they can be quick and cheap. Useful extensions can be written in as little as 20 minutes!

# Required Duration

- “Required Duration” extension – 4 lines of code makes this field required. A 20 minute extension saved hours of fixing data on reports months after the fact

The screenshot shows a CRM form for a meeting activity. The form includes the following fields and controls:

- Added By:** TestAccount, Jon
- With Contact:** [Redacted]
- Assigned to:** - none -
- Subject:** [Empty text box]
- Campaign:** - select -
- Engagement Index:** - none -
- Location:** [Empty text box]
- Date:** 09/28/2017
- Time:** 10:59AM
- Duration:** [Empty text box] minutes
- Activity Status:** Scheduled

A red asterisk is placed over the Duration field, indicating it is a required field. A tooltip below the Assigned to field states: "A copy of this activity will be emailed to each Assignee."



# Private extensions

- Private extensions are a great way to get something that works 98% out of the box to 100% functional.
- Unfortunately, you need to be a programmer to write them.
- Find extension developers at <https://civicrm.org/providers> (filter “Services” to “Custom code and extensions”).
- Fewer customizations need extensions today, thanks to a new generation of extra-versatile extensions (more later).

# Semi-private extensions

- Adding extensions to the directory is easy now, but used to be more work.
- Sometimes, we don't want to do the work to make something generally usable.
- So many (most?) extensions are never published!
- However, you can find them on Github and Gitlab. Let's take a look.

# Github users with semi-private extensions

- <https://github.com/totten>
- <https://github.com/TechToThePeople>
- <https://github.com/veda-consulting>
- <https://github.com/MegaphoneJon> (me!)
- <https://github.com/CiviCooP>
- <https://github.com/JMAConsulting>
- <https://github.com/eileenmcnaughton>
- ...and more!

# Installing semi-private extensions

- I'm not going to cover this in depth – it IS technical.
  - Find your Extensions directory (**Administer menu » System Settings » Directories**)
  - Download the extension's zip file from Github.
  - Unzip the extension and upload it to your server in the extension directory.
  - Go to **Administer menu » Extensions** and press "Refresh". You should see the new extension.

# Core extensions

- Core functionality split into extensions. For two reasons:
  - Adding next-generation functionality while allowing slower-moving organizations to keep their old setups.
    - “Admin UI” and “Search UI” are good examples – you can replace core Civi screens with SearchKit-powered versions.
  - Moving little-used functionality out of the core.
    - This prevents a bug in, e.g., CiviGrants from affecting non-CiviGrants users

# When is an extension not an extension?

- There are other ways to customize CiviCRM. Many are “old” approaches from before extensions were possible.
- However, you can also extend CiviCRM in a CMS-specific way (WordPress plugin, a Drupal/Backdrop module, a Joomla extension).
- Don't do this unless you're doing something specific to that CMS!
- However, some of the very coolest features of Civi are CMS integration plugins, like “Webform CiviCRM” or “Views Integration” or “WooCommerce CiviCRM”.

# Especially versatile extensions

- CiviRules – take custom actions based on interactions with Civi.
- SearchKit – a core extension that replaces the need for many custom reports
- SearchKit Tokens – Use SK instead of token extensions.
- Honorable mention: Advanced Import, Form Processor, Data Processor

# CiviRules

- CiviRules is a special extension. It's a sort of no-coding extension builder. It lets you create new actions in CiviCRM that used to require their own extension.
- This is NOT a non-technical extension – but it lowers the barrier. If you understand CiviCRM but not coding, you can build rules.
  - E.g. “Whenever someone donates \$500 or more, send an email to the Director of Development”.
- While it can only do a small fraction of the things a full extension can do, it can do many of the most common things you need without any coding.
- CiviRules is designed for moves management (aka “donor journeys”, “sales funnel”, “engagement ladder”, etc.). Good