

EXTENDING FABRIK WITH SOURCERER

Bob Nightingale, webmaster
Friends of Silverbrook Cemetery



YOUR PRESENTER

- Bob Nightingale started using Joomla in 2007, shortly after joining the Friends of Silverbrook Cemetery, a non-profit organization
- 35 years IT experience—coding, databases, system management, implementations, consulting, customer support, sales engineering
- Currently works as a database developer for a Federal contractor
- Contributes on Quora, LinkedIn
- webmaster@friendsofsilverbrook.org



WHAT IS ...?

- Pieces that make this work
- You will need some skills

Joomla:
Your Content Management System

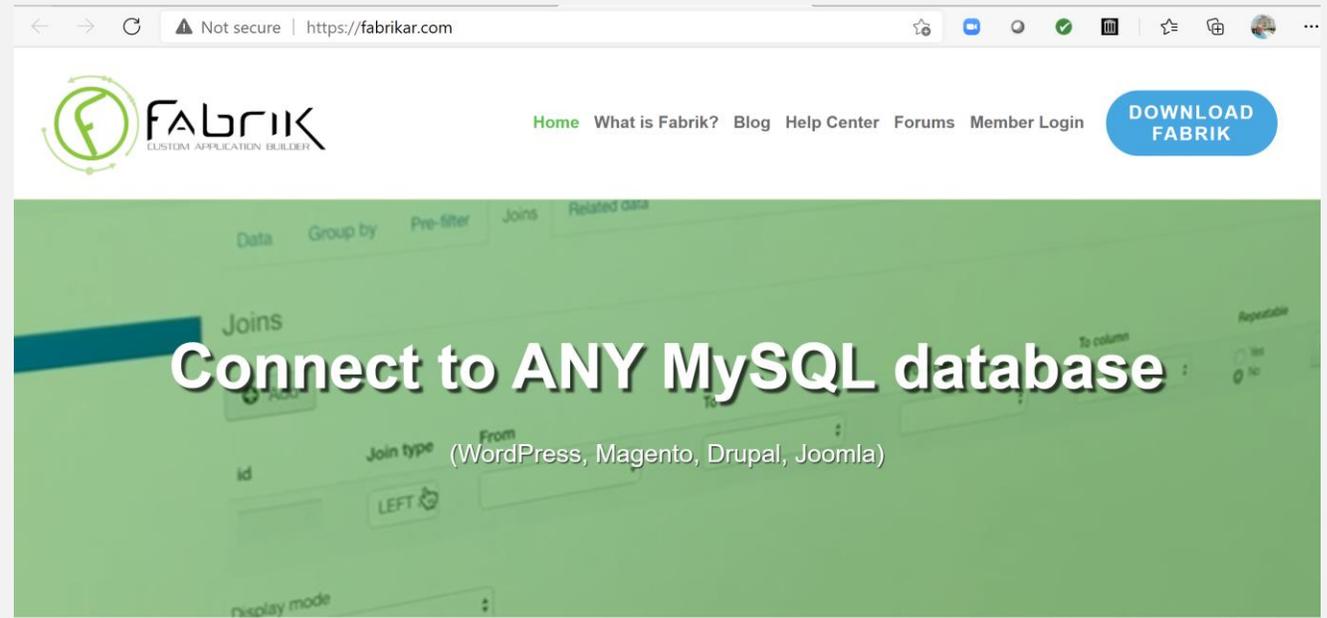
Fabrik
Database presentation add-In for Joomla

Sourcerer
Plugin that allows source code to run in Joomla articles

PHP
Web language of choice

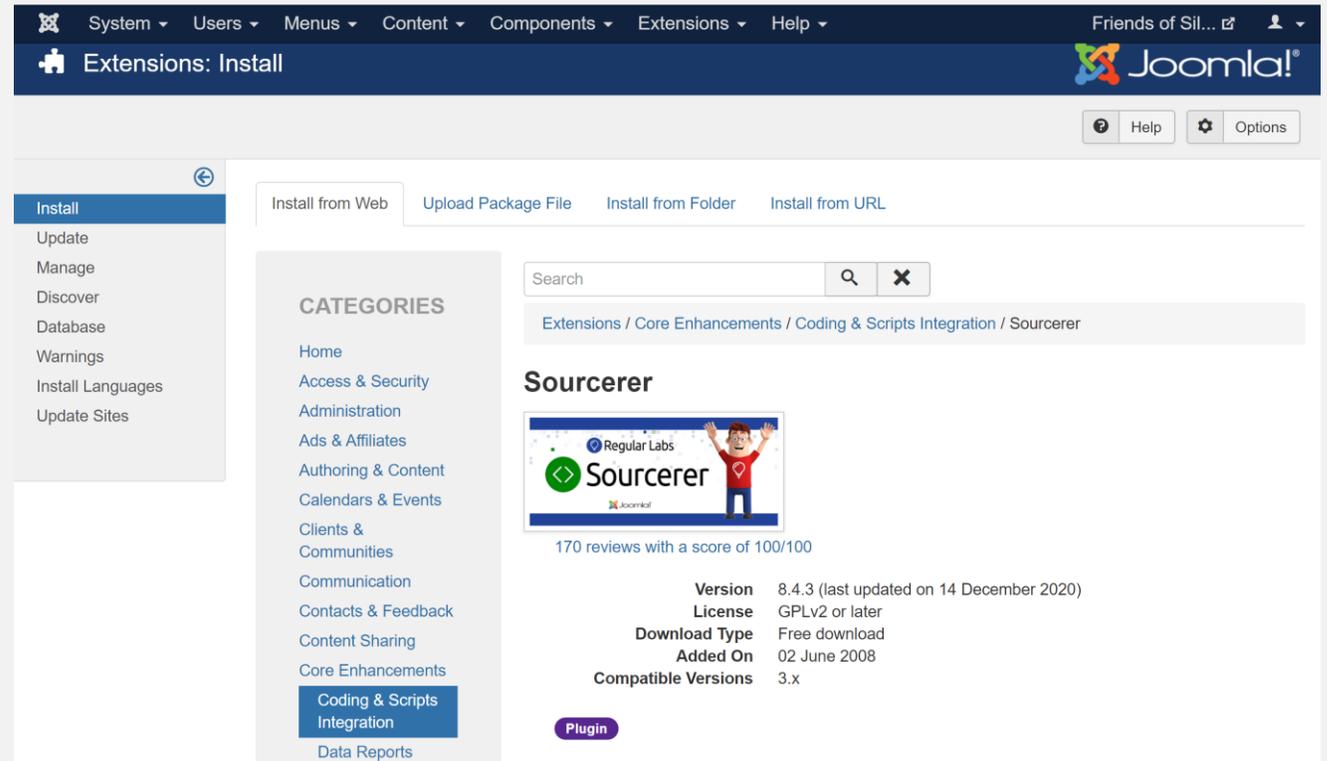
INSTALL FABRIK

- Download from <https://fabrikar.com>
- Free!
- Tutorial YouTube videos by Robbie Adair of ostraining.com



INSTALL SOURCERER

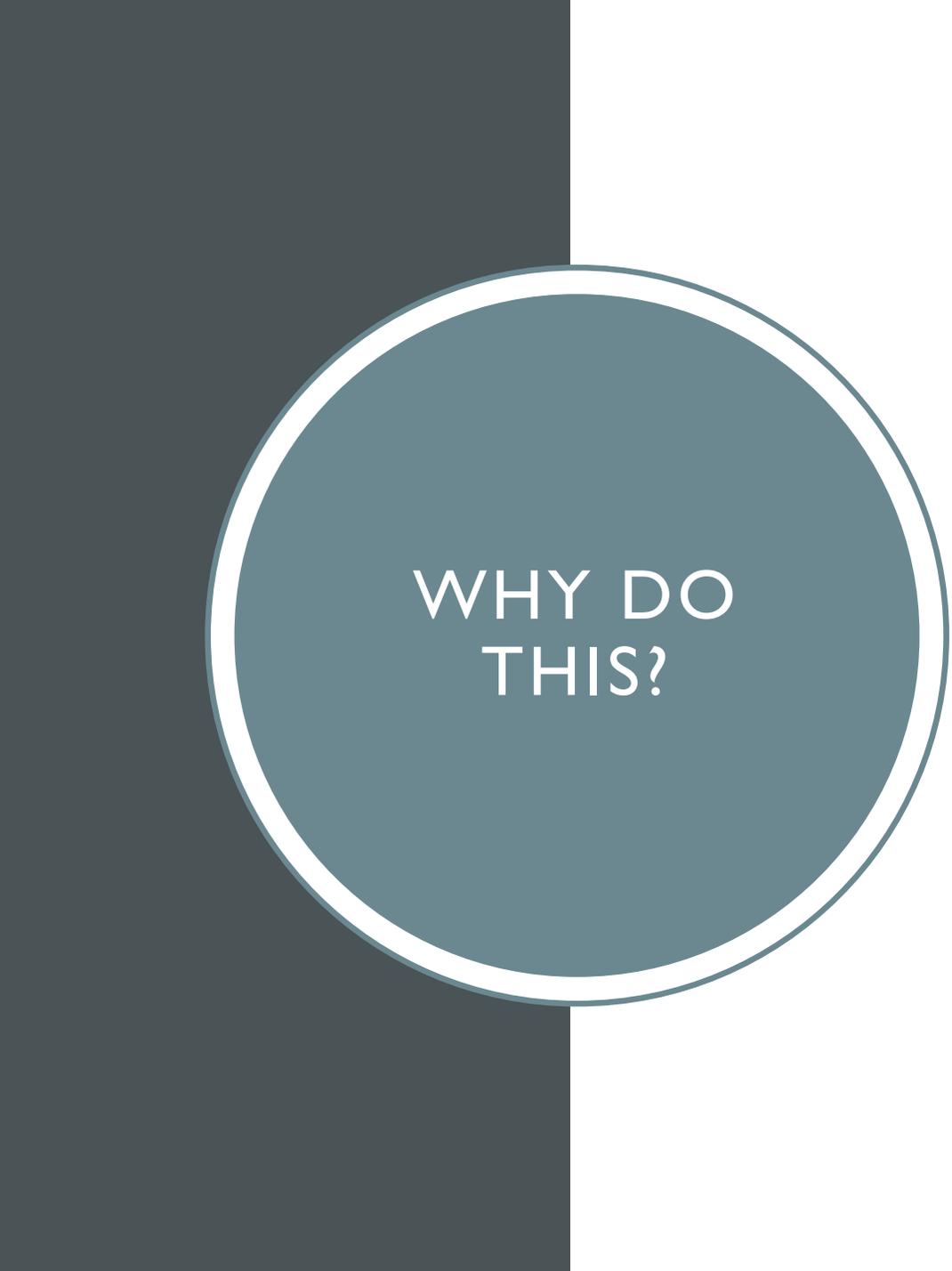
- Regular Labs Sourcerer
- [https://regularlabs.com/
extensions/sourcerer](https://regularlabs.com/extensions/sourcerer)



The screenshot shows the Joomla! administrator interface for installing extensions. The top navigation bar includes menus for System, Users, Menus, Content, Components, Extensions, and Help. The current page is titled "Extensions: Install". On the left, a sidebar menu lists various actions: Install (selected), Update, Manage, Discover, Database, Warnings, Install Languages, and Update Sites. The main content area has tabs for "Install from Web", "Upload Package File", "Install from Folder", and "Install from URL". A search bar is present, and a breadcrumb trail shows "Extensions / Core Enhancements / Coding & Scripts Integration / Sourcerer". The extension "Sourcerer" by Regular Labs is featured, with a rating of 170 reviews and a score of 100/100. A table of details is provided below the extension name:

Version	8.4.3 (last updated on 14 December 2020)
License	GPLv2 or later
Download Type	Free download
Added On	02 June 2008
Compatible Versions	3.x

A "Plugin" badge is visible at the bottom of the extension details.



WHY DO THIS?

- By using Fabrik, your report will look like all the rest of the pages on your website
- Since Fabrik is a Joomla extension, it is managed within the Joomla administration screens. Rapid development, easy admin!
- Do not need to use an iFrame to another program
- You can control what is on the screen (add/hide/modify columns quickly)
- Not a fan of Fabrik Advanced Search
- I like it this way—similar to the old search



GRAVE
SEARCH
APPLICATION

- Silverbrook is a 190-year-old municipal cemetery in Niles, Michigan, USA
- Graves table contains 22,000 entries
 - Last Name, First Name, Dates of Birth, Death, Interment, Location, Funeral Home, Veteran flag, URLs to Obituaries (7,000) and Flickr photo pages (14,000)
- 2007 website single Front Page
- 2008 Joomla goes live (Jamba template)
- First graves listing was a spreadsheet
- 2009 Grave search as an iframe page, PHP/MySQL
- 2014 Current template installed (Alasse)
- 2019 Fabrik grave search goes live

OLD SEARCH WITHOUT FABRIK

- All PHP and MySQL
- Presented in a Joomla iframe page or standalone
- Not Responsive
- https://friendsofsilverbrook.org/gravesearch/gravesearch_notitle7.php

Choose how you want to search and type in a starting point. Each search will give you up to 15 interments per page. From there, you can page forward or backward. Total records in database: 20,889. If you find any transcription errors, please send corrections to searchedits@friendsofsilverbrook.org.

Search by: Last Name, First (or first few letters) Veterans only:

Starting with:

[Next 15 rows](#)

Photo	Obit	Last Name	First Name	Date of Birth	Date of Death	Date of Interment	Location	Funeral Home
		Smith	Ada G.	1890-00-00	1969-11-14	1969-11-17	NEW-62,7,3	Halbritter
		Smith	Adah E.	1861-12-14	1941-01-28	1941-02-01	NEW-63,230,1	Price & Kiger
		Smith	Adam	1858-00-00	1932-05-07	1932-05-10	NEW-63,78,1	Augustine
		Smith	Adelia	1856-00-00	1883-08-18	1883-08-20	OLD-13,222,1	
		Smith	Albert H.	1865-00-00	1923-01-25	1923-01-27	CITY-53,42,8	Newell
		Smith	Alfred A.	1857-10-16	1904-09-17	1904-09-20	CITY-17,16,7	
		Smith	Amanda Dorothy	1870-00-00	1947-04-02	1947-04-04	CITY-47,8,6	Pifer
		Smith	Amanda I.	1911-00-00	1986-04-05	1986-04-08	GM-Q,219,1	Halbritter
		Smith	Amanda L.	1918-00-00	1964-07-11	1964-07-14	GM-G,174,3	Pifer
		Smith	Amy	1863-12-25	1951-03-12	1951-03-14	CITY-49,3,1	Kiger
		Smith	Anna	1872-08-25	1943-01-18	1943-01-21	NEW-62,8,6	Pifer
		Smith	Anna B. (Hossfeld)	1883-02-22	1952-12-10	1952-12-12	NEW-57,20,2	Pifer
		Smith	Anna M.	1849-00-00	1932-10-09	1932-10-12	OLD-20,510,2	
		Smith	Anna Marie	1912-00-00	1987-01-11	1987-01-14	NEW-50,14,7	Halbritter
		Smith	Anna Mary	1891-05-20	1977-06-24	1977-06-28	GM-Q,245A,1	Halbritter

WHAT IS YOUR QUEST?

- Custom search form written in PHP
- Fabrik list view
- <https://friendsofsilverbrook.org/gravesearch>

Grave Search

Search by: Veterans only

Starting with:

For questions or corrections, please email searchedits@friendsofsilverbrook.org.

Photo	Obit	Last Name	First Name	Date of Birth	Date of Death	Date of Interment	Location	Funeral Home
		Abair	Calvin J.	1918-01-07	1973-02-26	1973-03-01	GM-H,125,2	Halbritter
		Abair	Dorothy M.	1914-00-00	1989-05-15	1989-05-18	NEW-58,3,7	Halbritter
		Abair	Genevieve R. (Hamilton)	1920-07-19	2018-01-17	2018-07-23	GM-H,125,1	Halbritter-Wickens
		Abair	Gerald H.	1913-09-20	1994-12-05	1994-12-08	NEW-58,3,8	Halbritter

STEPS



Find a table or view you want to display



Create a list view in Fabrik



Formulate GET calls to display your search



Create PHP code to do the GET call



Add it to the Introduction of your Fabrik page with Sourcerer

CHOOSE YOUR
TABLE OR
VIEW

DESCRIBE `GravesSearchView`

Field	Type	Null	Key	Default	Extra
AliasID	bigint(11)	NO		0	
AliasStatus	varchar(1)	YES		NULL	
GraveID	int(11)	NO		0	
PhotoID	bigint(20)	YES		NULL	
LastName	varchar(50)	NO			
FirstName	varchar(50)	NO			
lcfname	varchar(255)	YES		NULL	
DOB	varchar(10)	YES		NULL	
DOD	varchar(10)	YES		NULL	
DOI	varchar(10)	YES		NULL	
VetY	varchar(1)	NO			
PhotoPageURL	text	YES		NULL	
ObitPageURL	text	YES		NULL	
Location	varchar(50)	YES		NULL	
LocSort	varchar(35)	YES		NULL	
FuneralHome	varchar(50)	YES		NULL	
phot	varchar(1)	NO			
obit	varchar(1)	NO			
Lnam	varchar(1)	NO			
id	decimal(9,0)	NO		0	

CREATE LIST VIEW IN FABRIK

The screenshot shows the Joomla! administrator interface for the 'Fabrik: lists' component. The browser address bar indicates the URL is <https://friendsofsilverbrook.org/site4/administrator/i...>. The top navigation bar includes 'System', 'Users', 'Menus', 'Content', 'Components', 'Extensions', and 'Help'. The 'Components' menu is open, showing a list of components with 'Lists' selected. The main content area displays a message: '1 lists checked in'. Below the message is a table with columns for 'ID', 'List name', and 'Db'. The table contains three rows of data:

ID	List name	Db	Form	View data	View detail!	
13	Duplicate Graves by Location	Graves	Edit	View data	View details	
22	Grave Search	GravesSearchView	Add	Edit	View data	View details
24	Grave Search Map Detail	GravesSearchView	Add	Edit	View data	View details

At the bottom of the table, there is a row for ID 5 with the list name 'Grave Search' and database 'Graves', with 'Add', 'Edit', 'View data', and 'View details' actions.

CREATE LIST VIEW IN FABRIK

The screenshot shows the Microsoft Fabric 'edit list' configuration interface for 'Grave Search'. The interface includes a top navigation bar with 'System', 'Users', 'Menus', 'Content', 'Components', 'Extensions', and 'Help'. Below the navigation bar, there are several action buttons: 'Save', 'Save & Close', 'Save & New', 'Save as Copy', and 'Close'. The main configuration area is divided into tabs: 'Data', 'Group by', 'Pre-filter', 'Joins', and 'Related data'. The 'Data' tab is selected, and the configuration is organized into sections: 'Details', 'Data', 'Publishing', 'Access', and 'Plug-ins'. The 'Data' section contains the following fields:

- Connection *: graves2
- Database table: GravesSearchView
- Primary key: id
- Auto increment: No (selected), Yes
- Order by: lcfname, Ascending

CREATE LIST VIEW IN FABRIK: PREFILTER

System Users Menus Content Components Extensions Help Friends of Sil...

Save Save & Close Save & New Save as Copy Close Help

Data Group by **Pre-filter** Joins Related data

Details
Data
Publishing
Access
Plug-ins

Prefilters

Add

Join	Field	Condition	Value	Type	Apply to
WHERE	LastName	GREATER THAN	A	Text	Public

Overriden by menu/modules No Yes

Pre-filter query

CREATE LIST VIEW IN FABRIK: DISABLE ACCESS

System Users Menus Content Components Extensions Help

Save Save & Close Save & New Save as Copy Close

Access

Details
Data
Publishing
Access
Plug-ins

View list	Public
View records	Disabled for All
Edit records	Disabled for All
or use field	-
Add records	Disabled for All
Delete records	Disabled for All
or use field	-
Empty records	Disabled for All
Menu Access Only	<input checked="" type="radio"/> No <input type="radio"/> Yes

CREATE LIST VIEW IN FABRIK: EDIT ELEMENTS

System Users Menus Content Components Extensions Help Friends of Sil...

Fabrik: edit element "photo" Save Save & Close Save & New Save as Copy Close Help

Details
Publishing
Access
List view settings
Validations
JavaScript

Details

Label	<input type="text" value="Photo"/>
Name *	<input type="text" value="photo"/>
Plug-in *	<input type="text" value="display"/>
Id	<input type="text" value="116"/>
Group *	<input type="text" value="Grave Search"/>
Order	<input type="text" value="1. photo"/>

Renders Display text

Options [More](#)

Default

```
1 $PhotoURL='{Graves__PhotoPageURL}';  
2 if (stripes($PhotoURL,"flickr")>>0 || stripes($PhotoURL,"picasa")>>0 ) {  
3 return '<a href=' . $PhotoURL . ' target="_blank"></a>';
```

Help

FABRIK GET NAME/VALUES

- Website's home page: <https://friendsofsilverbrook.org/site4/index.php>
- Component: `option=com_fabrik`
- List or detail page: `view=list`
- List number in Fabrik: `listid=22`
- Forget last Fabrik call: `resetfilters=1`
- Filter string by element: `GravesSearchView___lcfname[value][]=smith`
- Filter operator (Greater Than or Equal):
`GravesSearchView___lcfname[condition]=%3E=`
- Sort by element: `order_by=GravesSearchView___lcfname`

SCRIPT GET NAME/VALUES

- First load of page? `ReloadFlag=0`
- Search Field Text: `Lname=smith`
- Dropdown default: `SearchType=LastName`
- Veterans box checked: `VetY=Y`

TWO PASS LOGIC

- When the page is first loaded, ReloadFlag is not defined.
- The parameters Lname, SearchType and VetY are read with `$_GET`
- Location is reformatted if necessary
- Fabrik URL is built up and page called again

```
header("Location: " . $newURL);  
die();
```

- On second pass, ReloadFlag is set to “1” in hidden input parameter in Submit form so that the previous code is not called

PHP FOR SEARCH

```
$currentfile = $_SERVER['HTTP_HOST']. $_SERVER["SCRIPT_NAME"];

// Make sure you change $listid if you clone this code!

$listid = 22;

// print "You are here: ". $currentfile . "\n";

$VetY = $_GET['VetY'];
$Lname = $_GET['Lname'];

$Lname = str_replace(' ',",$Lname);
$SearchType = "LastName";
if (isset($_GET['SearchType'])) $SearchType = $_GET['SearchType'];

$SearchCol = $SearchType; //Changed to support Last,First Name search 10/13/19

if ($SearchType=="LastName") $SearchCol ="lcfname";

if ($SearchType=="Location") $SearchCol ="LocSort";

$newURL = 'https://' . $currentfile;
$ReloadFlag = $_GET['ReloadFlag'];

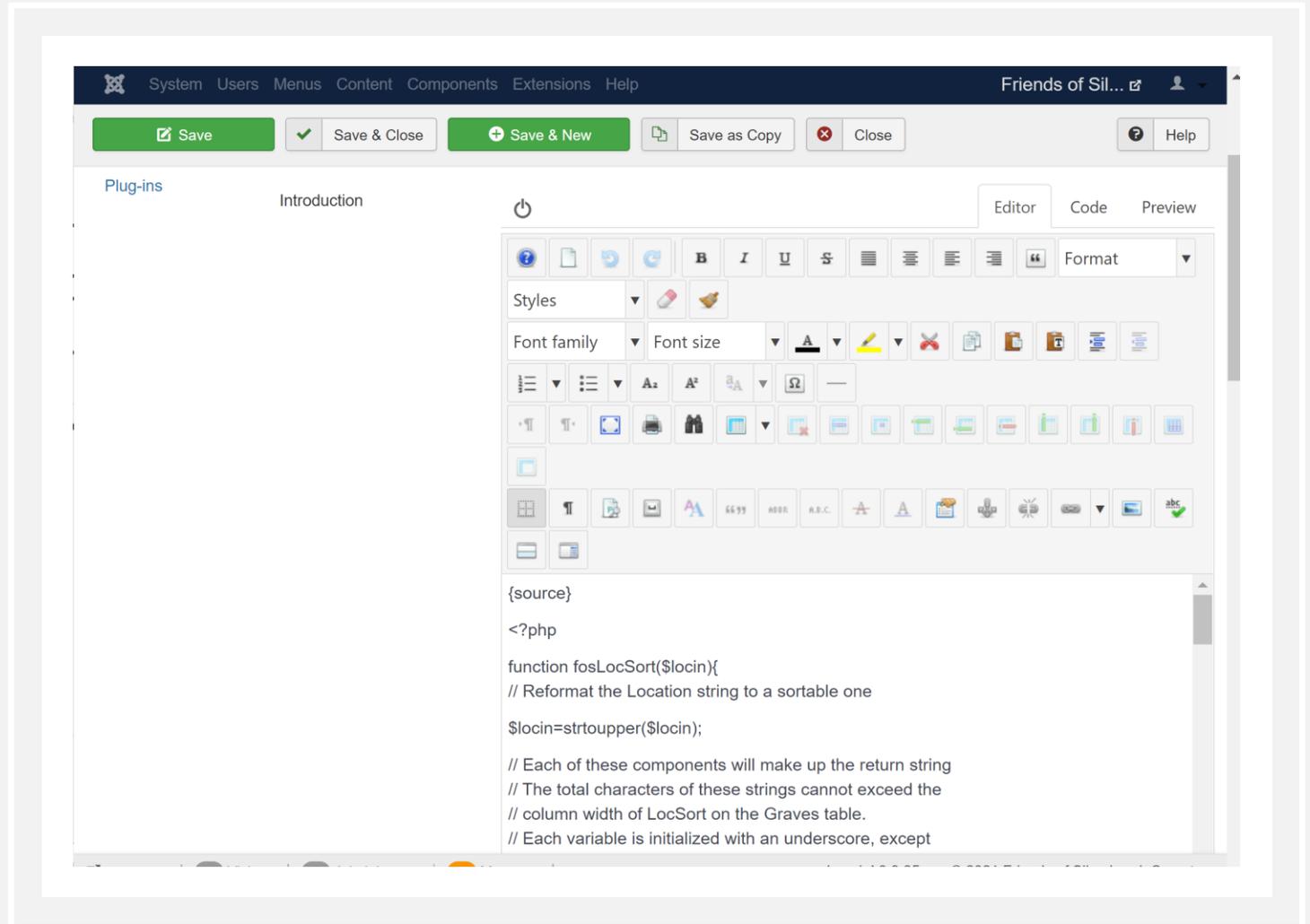
if ( strlen($Lname) > 0 && $ReloadFlag == "1" ) {

$newURL .= '?option=com_fabrik&view=list&listid=' . $listid . '&resetfilters=1';

$newURL .= '&GravesSearchView ';
```

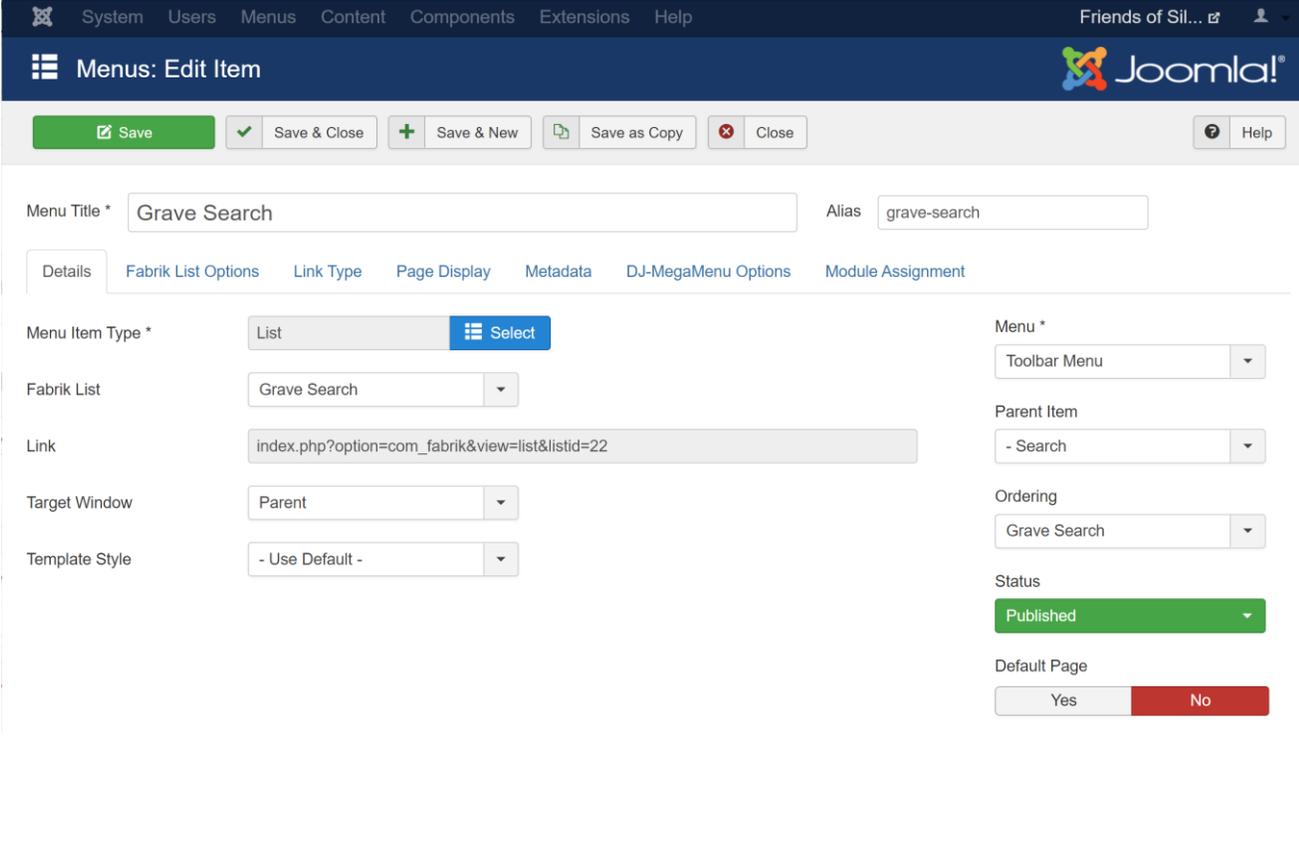

ADD CODE TO PAGE WITH SOURCERER

- Use the Editor panel
- DO NOT USE
CODE PANEL!
- In the first line of the
edit text area, use
`{source}`



ADD FABRIK LIST TO MENU

- Don't add as "detail"
- Remember your list number from the Fabrik components screen



The screenshot shows the Joomla! administration interface for editing a menu item. The page title is "Menus: Edit Item". The breadcrumb navigation includes "System", "Users", "Menus", "Content", "Components", "Extensions", and "Help". The user is logged in as "Friends of Sil...".

The main form contains the following fields and options:

- Menu Title ***: Grave Search
- Alias**: grave-search
- Menu Item Type ***: List (with a "Select" button)
- Fabrik List**: Grave Search
- Link**: index.php?option=com_fabrik&view=list&iistid=22
- Target Window**: Parent
- Template Style**: - Use Default -
- Menu ***: Toolbar Menu
- Parent Item**: - Search
- Ordering**: Grave Search
- Status**: Published
- Default Page**: No

Navigation tabs include "Details", "Fabrik List Options", "Link Type", "Page Display", "Metadata", "DJ-MegaMenu Options", and "Module Assignment". Action buttons at the top include "Save", "Save & Close", "Save & New", "Save as Copy", "Close", and "Help".

LAST WORDS

- There is a bug in some versions of Fabrik that needs a manual update to make a list against a view.
 - In the column `xxx_fabrik_list.params`, for your listid, add `"isview": "1"`
- Try disabling Joomla system caching for better performance (wha??)
- When pasting code into the Introduction panel, paste as PLAIN TEXT
 - Don't edit in the panel. If you need to make changes, copy the code out to Notepad++ to remove any formatting, change the code, and replace.

QUESTIONS?

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