Gramps Wordpress Integration

Hans Boldt
September 25, 2021
DRAFT

Introduction

Today, the problems associated with website design, development, and maintenance have become overwhelming for most websites. As a result, most websites depend on a content management system (CMS), the most popular of which is WordPress (WP). Currently, more than 40% of the top 100 million websites use WP.

Gramps has a "narrated web site" tool that can be used to create a set of static web pages, which can be included on any web site. There are a number of problems with this. First, the generated pages are not necessarily device friendly. Second, there is no search capability. With a large Gramps database, some of the files can be very large.

It is proposed that new tools be developed to export Gramps data to a specific format for use in a WP plugin. (This could potentially be used for other CMS's.)

Gramps Tool

From the main Gramps menu, click on "Reports", then "Web pages", then "Wordpress" to invoke the export to WordPress tools. Options would include the following:

- Include/exclude private individuals

- What specific attributes to include for each individual (to be determined)

- Location of resulting zip file(s)

Implementation

To minimize load on the WP server, as much processing as possible should be done in the Gramps extension.

The output zip file(s) would consist of the following. The first four correspond to tables in the WP database:

- An index, consisting of a list of names, parents, and dates and places of birth/baptism and death/burial.

- Alternate names for each individual.

- A list of the most common surnames.

- For each person, information about spouses, children, a detailed listing of events, research notes, and a list of sources and citations.

- A collection of media images and thumbnails.

Questions:

1. Should the output be one zip file containing everything? Or two files, one with media, and the other with json data?

Wordpress Plugin

The Gramps plugin for WP would have a settings dialog allowing for the import of the data exported from Gramps. On import, the index, alternative names, surname cloud, and detailed individual data would be saved in the database, while the media files would be saved on the server's file system.

Also included in the settings page are options to tailor the output from the plugin, such as detail on the search results.

To include the Gramps content on a WP page, the web developer would code the `[Gramps]` tag. (No parameters for the tag since all options would be specified on the settings dialog.)

Implementation

The settings page would simply take the json files and write data to the database and file system with a minimum amount of processing. The WP database would include the following tables:

- gramps-index – primary name, dates/places of birth/baptism and death/burial

  - person# - int (foreign key)

  - father# - int. (foreign key) note: father# and mother# are included so a pedigree can be constructed with repeated fetches to this table

  - mother# - int (foreign key)

  - surname – string

  - given_name – string

  - birth_event_type – B: birth, P: baptism

  - birth_event_date – ISO date

  - birth_event_place – string

  - death_event_type – D: death, B: burial

  - death_event_date – ISO date

- death_event_place – string
- gramps-names – alternate names for each individual
  - person# - int (primary key)
  - surname – string
  - given-names – string
- gramps-name-cloud – most common names in the database
  - surname – string
  - count – int
- gramps-indi – detailed information about the individual.
  - Person# - int (primary key, unique)
  - detail – json string containing the detailed information about the individual

This tool would use json to communicate between the server and the client with client-side JavaScript formatting the data. The server would provide the following services to the JavaScript client:

- gramps-search – returns a list of search results based on surname, given name, place, and range of years
- gramps-get-indi – returns the detailed data for a specified individual
- gramps-get-name – returns the primary name, and dates and places of birth/baptism and death/burial for a specific individual

The WP plugin also needs code to install and uninstall the plugin.

Client

When visiting the WP page with the Gramps plugin, the user first sees a list, possibly in "cloud" style, of the most common surnames in the local database. Each name would link to a list of search results for that name.

The user can also click on a "Search" button which opens a dialog allowing the user to search on name, place, and range of years.

When clicking on any name, the detail for that individual is displayed in the plugin, replacing the previous content. The content includes:

- Primary name, and alternate names, and thumbnail of primary photo
- Date and place of birth/baptism, and date and place of death/burial
- Names of parents, grandparents, spouses, and children (perhaps optionally siblings)

- Events in the person's life. This would optionally include events where the person is a witness to come other event.

- Photo gallery

- Sources and citations, including thumbnails

- Optionally, links to other external websites referencing the person

Clicking on any thumbnail would display the full image. All references to any other named person would link to that person.