Customised Dynamic Web B report

John Vitlin, Sep 2021, updated Dec 2021

I have been using the Gramps Narrative Web report to generate my web site but have recently looked at the Dynamic Web report again. I like its use of tabs rather than the linear but longer flow of a narrative report page. Also, Dynamic Web has a search box. I thought I might look at enhancing it, to better suit me, and the changes might be useful to others.

My tree is an average family tree of mostly related people. I started with my own grandparents but moved on and added my wife's family as well. There are also people who are not direct relatives.

Enhancements

Timeline Events

This is the biggest change.

In the original you need to open many tabs to see information about a person; when were their children born, was their spouse still alive at the time, etc. I changed that, and the Events table now is a timeline display like this:

Age	Event	Date	Who	Place	☑ Notes
0 mths	**Birth**	2019-09-01			*Other participants:* Flopsy Bunny [I0014] (b. 2018, d. 2021-06-00) role Bi unknown Bunny [I0025] (b. 2017) role Birth father
0 mths	**Death of sibling**	2019-10-00	(half-brother) Ralph Rabbit [I0015]		
1 yrs	**Death of parent**	2021-06-00	(Birth mother) Flopsy Bunny [I0014]		
2 yrs	**Death of sibling**	2022	(other brother) Oddbod Rabbit [I0026]		

It is a bit like Ancestry and other tree sites that show a timeline. The table lists the following events for a person:

- their individual events as usual, such as birth, residence, occupation, census, news, military service...
- vital events (birth and death) for their direct family:
  - themselves
  - their children
  - their spouses
  - their siblings
  - their parents

Events are sorted by date. If an event does not have a date, it is sorted at the top of the table.

If no event is recorded for a family member it can't be shown. This means for example that a parent without a birth event will not be shown as a 'birth of parent' event.

Children, Spouses, Siblings, and Parent tick boxes

Vital events can be turned on or off for different kinds of relatives. You can make the event list shorter (or longer) by using the 'vital events' tick boxes.

Some people have large families - a person in my tree has 14 children, which means there are 28 children vital events in that person's event list. I can hide those vital events for children, to focus on the other events.

Checkbox ticks are remembered in your browser; they remain as you set them when you go to a new person page.

Siblings

Siblings includes:

- birth brothers and sisters (both birth parents the same), listed as brother or sister
- half-brothers and half-sisters (children with one common birth parent)
- others, who are listed as non-birth brother or sister.

Non birth includes siblings who are step , adopted, sponsored and so on. The family details will tell you more.

I thought about changing this, so the description 'non-birth' is replaced by 'adopted', 'step', and so on. However, it is tricky to code, because a sibling might be a member of more than one family, for example might be a birth child in one family and an adopted child in another. And the two siblings might be siblings in more than one family. And do we want the relationship to mother, or the relationship to father? (The database structure has a person 'adopted by the mother', or 'adopted by the father' (or both) –not 'adopted into a family'.)

Step sibling option

Strictly, stepchildren are recorded as such in Gramps by recording a Stepchild kind of relationship in the family details. A less strict but sometimes useful interpretation of step sibling allows any child in a

different family to be considered a stepchild, provided there is a parent is common between the two families, and a few date conditions are met (for example, the child is still alive when the other marriage is recorded).

There is an option to include wider step siblings, by turning off the 'strict stepchild' interpretation. The option finds other families of a person's parents, finds children in the other family, applies a few tests, and lists those children with an asterisk, eg as * step brother. Strict stepchild is the default because I think that is how 'Step' is meant to work - not every child of a parent with a second marriage should be a step child of the second marriage. But over-ride it if you like - in the Advanced options, untick it.

✔ Strict stepchild

To do:

- The implementation needs a bit more work – It shows wider step siblings for a person, but does not yet identify the corresponding wider step parents or step children.

Lifespan event filter

The timeline event table includes birth and death events for all family members. It will thus show births for parents, which of course are prior to the person's birth, and it will show deaths which may be after a person's death. You can filter the events list and show only those events that are within the person's lifespan.

Tick the 'Limit events to lifespan' tickbox:

Events	Notes	Ancestors	Descendants			
Show vital events for: ☑ **Children** ☑ **Spouses** ☑ **Siblings** ☑ **Parents**						☑ **Limit events to lifespan**
Age	**Event**	**Date**	**Who**	**Place**	☑ **Notes**	

Notes filter

Depending on the size of your notes, the Events list might be quite long. For a shorter display that is more like a list view, you can turn off the display of Notes column content.

Tick the 'Notes' tickbox in the heading for the notes column:

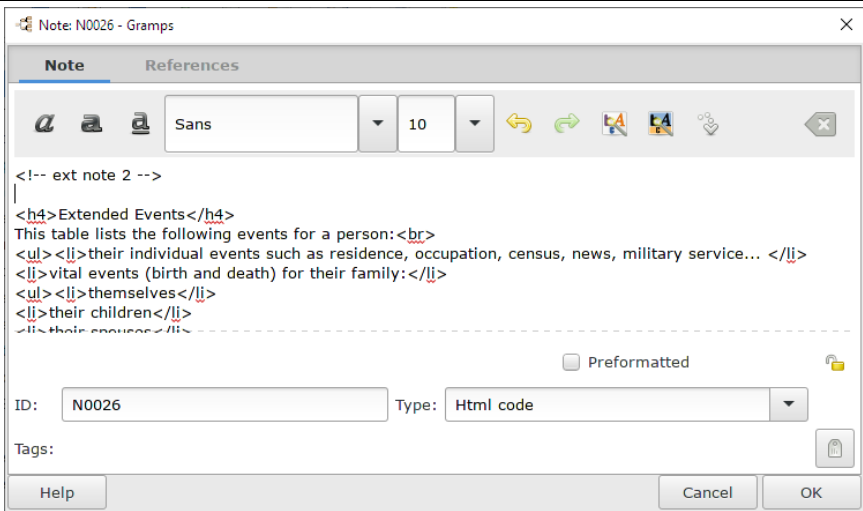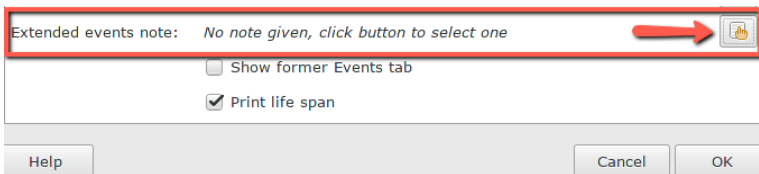| Notes on	Show vital events for: ☑ **Children** ☑ **Spouses** ☑ **Siblings** ☑ **Parents** ☐ **Limit events to lifespan**				
	Age	**Event**	**Date**	**Who**	**Place** ☑ **Notes**
		Birth			*Notes:* *Event Note* Nobody knows when Old Man Rabbit was born; it seems like he has been on the farm forever.
		Birth of spouse	2012	Old Mrs Hare [10018]	*Other participants:* Old Mrs Hare [10018] (b. 2012)
		Birth of child	2014	Peter Rabbit [10013]	*Other participants:* Peter Rabbit [10013] (b. 2014)

Notes off	

Events 'About…' box

Because the events tab now has filters that change what is shown in the table, it might need an explanation for its users. You can explain it in a Gramps note that will be displayed to users. It's an option. If you don't choose a note, then nothing happens.

The note displays a collapsible 'About…' box. It is like the collapsible boxes in the ancestors and descendants tabs.

Example

Example of an Extended event note: I used the 'Html code' type.	
Selection: Event note option on Advanced options page: Click the note button and select your note	
No note selected	
Selected (collapsed)	

Selected (expanded)	

	Events Notes Ancestors Descendants
	
	About…|
	
	Extended Events
	This table lists the following events for a person:
	• their individual events such as residence, occupation, census, news, military service…
	• vital events (birth and death) for their family:
	    ○ themselves
	    ○ their children
	    ○ their spouses

The About… box is just a Gramps note. The text is not hard coded in the report, it is displayed from this note, and the note can say whatever you want, in whatever language you need.   I made up my note with a note type of 'Html code'. This means that the note can use html headings, bulleted lists, and so on. An example of html note content is shown at the end of this document.

Tickbox state
The settings of the tick boxes are saved and remembered as you open or reload a page. So, if Siblings is turned off, it is still turned off for the next person you open. Also, if you close a tab, or close the browser, the settings are remembered for next time.

If you already have a couple of person pages open, then changing the settings in one page won't update the settings of the other opened page, unless/until you reload that other page.

This saved tick behaviour depends on your browser's cookie settings. The original dynamic web report also relied on browser settings to function properly. If the original report worked for you, this one should also work. If you are interested, the original report accesses a browser's SessionStorage; this version accesses LocalStorage as well. IF you have set up your browser to disable LocalStorage, the ticks won't be remembered.

Old events tab option
The report's option page has a 'Show former Events tab' option. If you tick that, you will see both the former Events tab and the new timelined Events tab.

In practice I leave the old display un-ticked, and just have the new Events tab (which includes the old events plus more). You might show both if you wanted to compare the two event tabs to see what the difference is.

Set up

Tick Show former Events tab It is on the Advanced options page	
	☑ Show former Events tab ☑ Print life span Help Cancel OK

Report

former Events tab	Events	Ancestors	Descendants

Event	Date	Place	Notes
Birth			Notes: *Event Note* Nobody knows when Old Man Rabbit was born; it seems like he has been on the farm

Events participants - bug fix

I have fixed what I think is a bug in the original code regarding event participants (participants are shown in the Events tab in the Notes column).

The original Python code attempts to retrieve a family index, but retrieves from the person index; the handle will never match, and so no family is returned. The corresponding code in dwr.js is also in error. It attempts to print a family link, but calls for a person link, which also would never match.

function	old	new
dynamicweb.py fn _data_events	`for familyhandle in persons:`	`for familyhandle in families:`
dwr.js fn EventTable	`if (p_fdx != fdx) participants += ' ' + indiLinked(p_fdx, false);`	`if (p_fdx != fdx) participants += ' ' + famLinked(p_fdx, false);`

Events participants

The participants list now shows the role of the participant.

For births, 'other participants' includes the individual's birth parents as participants. This is a report feature only, the parents are not updated into the event within Gramps.

Because of the Python fix noted above, marriages show the 'Family of...' as a participant. If the report is generated with family pages turned off, then the family link is not actually a link.

Possible to do:

- Perhaps for a marriage the couple should be individually listed and clickable, but for now the 'Family of' is listed.
- Perhaps the display of participants should be optional, it would enable a more compact view.

Marriage sharing de-duplication

Sometimes tree managers share marriage events. The original report for a person showed a person's events. Because marriage is not a person event (it's a family event) it never showed in the events table. To get around the fact that the marriage did not show in the individual's events I used to share the marriage. That was well intentioned, and made the marriage appear in the individual's events table.

Now, this new timeline event table shows a marriage if a person has one. But in the timeline event table, the well-intentioned sharing meant I see the marriage event twice. So, I have had to go back and un-share marriage events, so they only appear once in the timeline table. In retrospect I was subverting the Gramps data design to fix an issue with a Gramps report.

Tracking

When you are looking at someone in the tree, it's nice to know how they are connected to you.

I added a 'Tracking' concept. It's like showing a link to an Active person, multiplied. You can have as many tracked relatives as you like, or none. In my tree I use 4 tracking relations, my two parents plus my partner's two parents. Because, if you're on her side of the family looking at the tree you would like to see how people are related to her parents.

The Tracking tag is optional; if you no longer want to show Tracking, then select the blank row in the tag option before re-generating the report.

Set up

First, tag individuals in your tree. I use a tag I called Tracking, but you can use any tag name.	**Rabbit, Bunny 1** Title: [ ] Nick: [ ] Given: [Bunny 1] Surname: [prefix] [Rabbit] **General** Gender: [male ▼] ID: [I0016] Tags: Tracking
Select your tracking tag in the report options when you create the report. It is on the Advanced options page.	☐ Suppress Gramps ID Tracking tag: [Tracking ▼]

Report

The tracked relations are shown on the Report's home page In this case I am Tracking against two people If there are no people in the report who have the tracking tag attached, then this table does not show on the home page	**Family Tree** Click a category to see a list **Category** Surnames: 10 Individuals: 26 Families: 9 Sources: 5 Media: 3 Places: 7 **Tracked relations** Relationship tracking will show connections, if any, to these individuals: • Old Mrs Hare [I0018] (b. ?) • Ralph Rabbit [I0016] (b. ?) [Person to search for] [🔍]
For each person in the report the Tracking box is shown in their header This person is related to two of the tracked individuals, so two tracks are shown If there are no relationships to any of the tracked individuals, then the Tracking box is not displayed	*Peter Rabbit* [I0013] **Birth Name**	Peter Rabbit **Gender**	Male Life span	? - ? **Tracking: I am the**	father of Bunny 1 Rabbit [I0016] (b. ?) 	son of Old Mrs Hare [I0018] (b. ?) Ancestors ┊ *Descendants*

Why Me box

There are many reasons people might be in my tree. The Tracking box mentioned earlier shows the results from the Gramps relationship calculator, but if you are not the right kind of relative, or not a relative at all, then there is no result from that. So Why Me is a mechanism to answer the question – Why is that person in this tree? It shows aa a note in the individual's page header.

It works using a custom note type. In my tree I have added a new note type of 'Why Me'. But you can use any name you want for your custom note type. You select the note type to display in the report's options.

Set up

Create a note on your person Here I created a note (with a custom type named Why Me). This note is attached to the person (here Farmer McGregor is the person) You can use any custom note type you like	
Select your note type in the Why Me note report options when you create the report. It is on the Advanced options page.	

Report

The report page shows the note that is attached to Farmer McGregor:

The Why Me note display is optional; if you no longer want to show it at the top, then select the blank row in the Why Me note type option before re-generating the report. Why Me notes are still notes, so they will show in the Notes tab for a person. The above also shows an example of what I call local labelling. I have
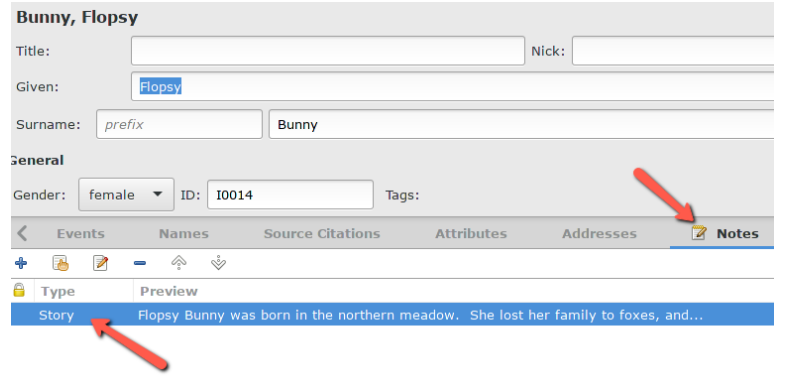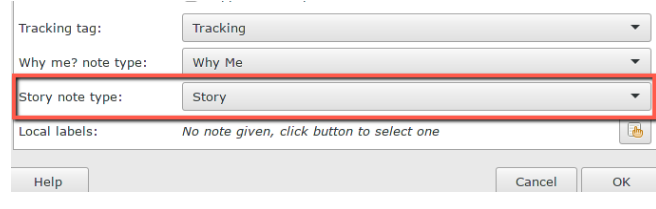
changed the standard label (Why me) to a longer more informative label. Local labels are described in another part of this document.

Any person in the tree can have a Tracking result and can also a Why Me result. I have given almost every person in my tree a Why Me note, even those who I know will have a Tracking result.

Story box

When people cruise through a few pages they sometimes don't want to read a lot, just a bit about a person. This enhancement shows a brief story about the person at the top of their page.

Set up

Create a note on your person Here I created a note with a custom type name of 'Story' You can use any name you like	
Select your note type in the Story note type option when you create the report It is on the Advanced options page	

Report

Their story is shown in the person's header. If there is no Story note for a person, then a Story box is not displayed.

9

The Story box display is optional; if you no longer want to show Stories at the top, then select the blank row in the Story note type option before re-generating the report. Stories are still notes, so they will still show in the Notes tab for a person.

My stories for display are only a few sentences. If you have a long story, this is not the best place for it –if it is long, it requires the user to scroll down the page. I save any long stories I may have as a PDF document. I use MS Word's document capabilities, headings, images etc, save the docx as a PDF and then put that in Gramps as media. I then link to it just like any media can be linked.

Life Span box

To save me the effort of looking in events (some people have many events), I added a Life span box in the person's header.

Set up

Tick the Life span option It is on the Advanced options page	Story note type: ▼ Local labels: _No note given, click button to select one_ 🔲 ☑ Print life span Help Cancel OK

Report

Birth Name	Othero Windsor
Gender	Male
Age at death	about 45 years, 10 months, 21 days
Life span	Abt Jan 1955 - - - 22 Nov 2000

Life span display is optional; if you no longer want to show Life span at the top, then un-tick the 'Print life span' option before re-generating the report. The option is on the Advanced options tab.

Multiple Family clarity

I thought the display of unusual families when the option to display half and step siblings is ticked was a bit confusing.

The average family is fine, there is a box for parents, and a box for siblings. But it was hard to follow if there were two or three families, it was just a list of boxes for parents that were somehow related to the person, and the children in those families. The reader had to puzzle out what was going on. I think the Narrative Web report has a simpler display, but I don't know enough yet to put a similar thing into my Dynamic Web B report.

I added extra information to the parents and siblings boxes to make it more obvious who was a birthparent, and a foster child and so on. I make use of the birth status that has been recorded in Gramps. It does not do any calculations.

I also nested the siblings display into their parents. The connection is more obvious, and if you collapse a parent box then parents and siblings will both collapse.

Ancestors tab

This shows the family in which the individual is a child.

Because I have the 'Include half and or step siblings' options tuned on, more than one family is showing in the screen grab below.

Now I can see that Lulu Bunny was born to Flopsy and Unknown Bunny. Later, Flopsy married Peter Rabbit, but Lulu was never part of that family (left home when Flopsy married I suppose).

As an aside, the Tracking box at the top shows that Ralph Rabbit is a half-sister of Lulu (which is correct, they have the same mother) but lower down for Peter and Flopsy the parental relationships are none to Lulu. Which is also correct because Lulu was never added as a child in the Peter and Flopsy family editor. This shows that Lulu's ancestral and social connections are different.

Visually, the tab has a fair bit of vertical empty space (most was already there) but is OK for the average family.
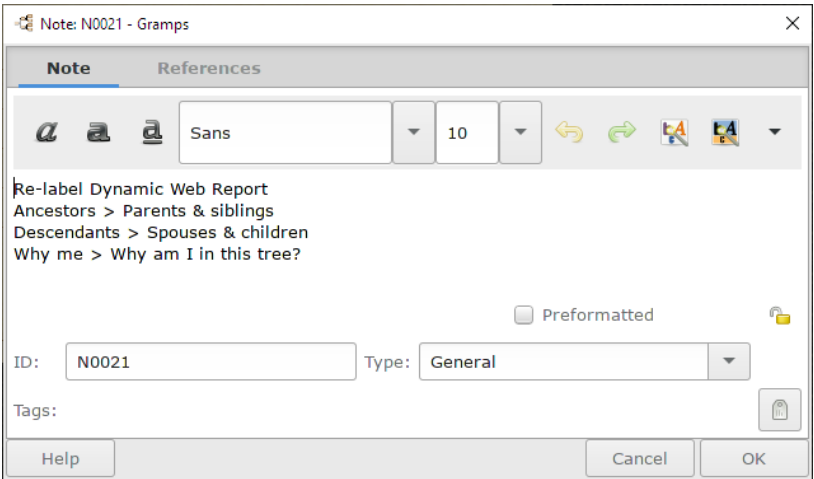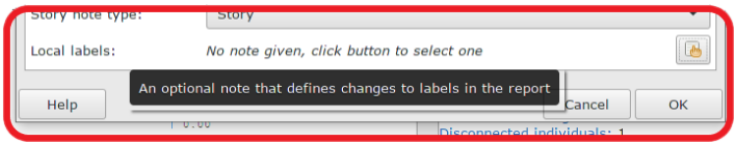
Descendants tab

I have not changed that tab yet other than to add the marriage type onto the Family. I did fix a collapsing box bug (the collapse/expand icons were the wrong way around).

Local Labels

When working out the 'best' labels to put on the report, I wanted a way to change the labels, without having to edit the Python code. It is an easier way for the tree manager who is generating the report to change labels, it's not a way for the final viewer or end user to change labels.

It works by reading a Gramps note. The note to use for local labels is selected as a report option. The option can be left empty, in which case nothing will change.

Example

Example of a local labels note: It is just an ordinary text note. I used the General type.	
Selection: Local Labels option on Advanced options page: Click the note button and select your note	
Result: Before	
After	
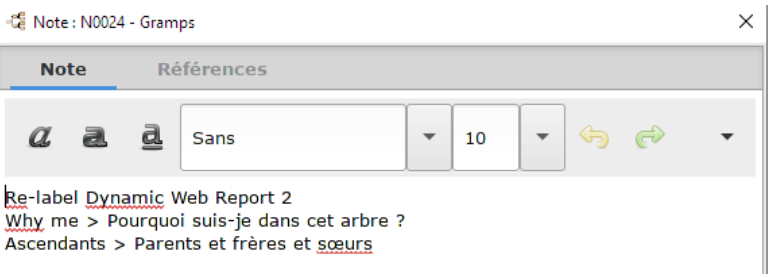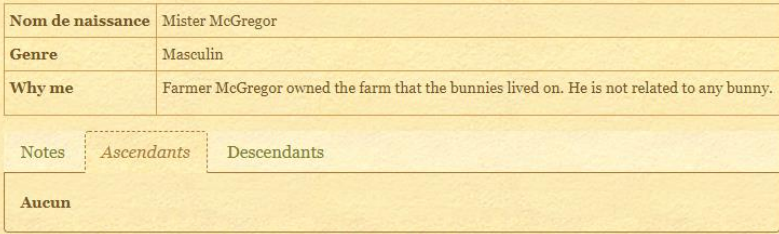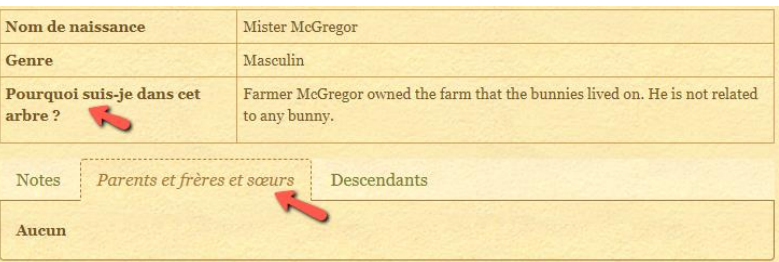
Any lines without the > separator, such as the first line shown in the example note are ignored; they can act as comments. And the first line is a useful description to help find the note when you are looking through a long list of notes to select it for the report.

A line consists of the old label, separator, and new label. The old label must match exactly the label on the report that you want to change. It will be replaced by the new label. The separator is the righthand angle bracket >

The method does not permanently replace the originals, so if you decide not to use local labels the originals will still be there. In the Local labels option (in Advanced options), remove your note selection.

I have used a method that seems to cope with other languages, as far as my tests go. I don't know much about internationalisation in Gramps and have only recently installed Gramps for one extra language (French), but I can see my labels were changed. It works because the original labels had already been translated.

|	
Example local labels note: I changed one new label and one French label (I got the translations from Google)	**Note : N0024 - Gramps** × **Note** **Références** *a* a **a** Sans ▾ 10 ▾ ↶ ↷ ▾ Re-label Dynamic Web Report 2 Why me > Pourquoi suis-je dans cet arbre ? Ascendants > Parents et frères et sœurs
Result: Before	**Nom de naissance** Mister McGregor **Genre** Masculin **Why me** Farmer McGregor owned the farm that the bunnies lived on. He is not related to any bunny. Notes *Ascendants* Descendants **Aucun**
After	**Nom de naissance** Mister McGregor **Genre** Masculin **Pourquoi suis-je dans cet arbre ?** Farmer McGregor owned the farm that the bunnies lived on. He is not related to any bunny. Notes *Parents et frères et sœurs* Descendants **Aucun**

Note separator line

You can print a line to distinguish each note in the Notes tab for a person (and in the Story and Why Me boxes if there are more than one of the note types you used for them). It is useful when reading through the Notes tab if you turned off the display of note type.

It is an option in the Options tab just under the existing Print notes type option.

☑ Print the notes type
☑ Print separator line between notes
☑ Print place pages
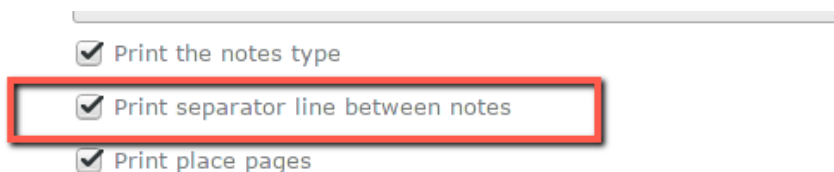
Other bits

- **Note type** will never show in Why Me and Story boxes, even if you have 'Print notes type' turned on. Because you already know what kind of note they will be. Note type still toggles in the other places.
- Story and Why Me notes are shown in the person's Notes tab. It's **duplication**, but I left them there in case end users exploited that tab to copy/paste every one of a person's notes into somewhere else. If that never happens, I could suppress them in the notes tab.
- Put the **categories** list on the Homepage into a table so it looked useful.

- Added an option to enable 20 entries at a time in the **Show Entries** selector on a table page - 10 was too few and 50 was too big a step.
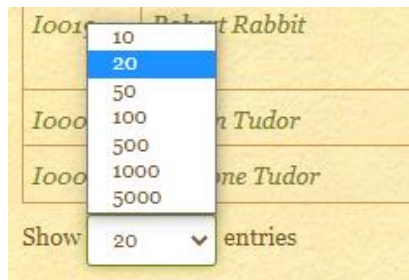
- **Sorting** a Persons list by birth or death date can now be by earliest first, or latest first: (but you could already sort a Persons table using the up/down symbol in the table column)

- The **help page** link is hard coded inside Python. I have not done anything about that yet – the existing report points it to the original Dynamic Web report help page. I would need to adapt that at some time and point this to its own page.
- I think that the report's **CSS** might need to be changed so that clickable links look more like clickable links without having to mouse about, but I haven't changed the css file. (Sometimes links have a blue font, which is fine, but sometimes the links are not show as blue. I am unsure of the cause.)
- Hyphens in dates are now non-breaking hyphens.
- The collapse **chevrons** were round the wrong way, changed it to show a down chevron if already collapsed, and an up chevron if already opened. (I changed the Mainz and the Default css, but it might be that the glyphicons.less file needs changing.)

Report option tabs

New Options
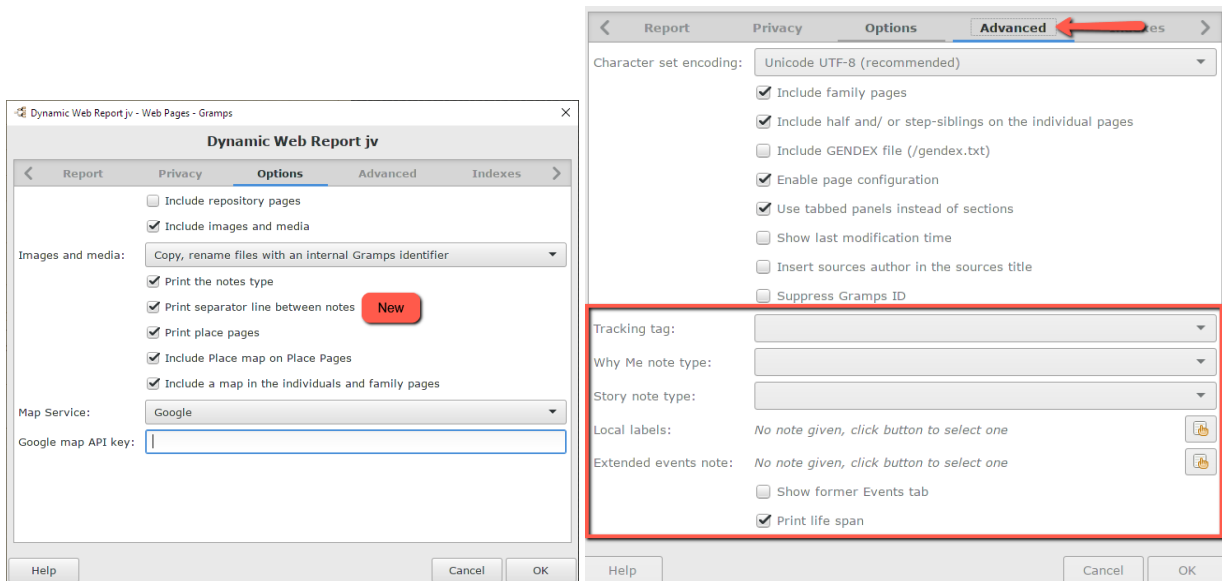
I added the options to Advanced, as it (originally) had more space at the bottom. Except for the note separator option, which seemed best under 'Print note type' on the Options page.

Running time

I have about 800 people in my tree (research gets away from you). The enhanced report took about 40 seconds to generate on my three-year-old laptop, then about 30 seconds the second time.

Hint for optional notes

If you use the 'Local label note' or the 'timeline events note' options, and you have more than one tree that you run the report against, it is likely that the note IDs you use for each option are different in each tree. Because the option saved is the note ID you will have to adjust these options when you run the report for a different tree. There is a workaround.

- As an example, for the Local label note, you can work around this by choosing a note ID, for instance note 0005. Within each tree database, make a copy of its existing note numbered 0005 and attach that new copy to the event etc that 0005 was attached to. Now you can detach 0005 from any events. Now you can use note 0005 as your Local label note. Do that in each tree database. The report options if you open a tree will be pointing to note 0005 as the Local label note, and it is right for each database.
- It seems there is no easy way to copy a note. You can just create a new note and copy the content. Be sure to make it the same kind of note. Check if any styling and links are correct.
- Also, I attach such notes to a false person in my tree named '*Gramps'. This means the notes are no longer seen as 'unused objects' if you run tree repair tools.

Program code

I have used other languages but have never written Python or JavaScript for a living. I have therefore relied on a lot of cut and paste from other Gramps code, and Google, and trial and error (with quite a lot of error). The code might not meet standards, and the logic can be improved.

I don't know how a lot of the original Dynamic Web report works yet. I have only modified the parts I wanted to work better for me.

I noticed in the code the bits that seem to allow other languages to be slotted in. So, I added new report text as _(text) but may have missed some. I don't know how to do translations.

Having started with just Notepad++, I use a copy of PyCharm (an older version) as my programming environment. I probably use about 5% of its capabilities.

Have not looked much at GitHub. Except to store files. Think I might need that to package the report, and manage it into the future.

Appendix

These example notes can be used as they are or adapted to your needs. All these notes are optional.

[1]Example of Timeline event note

This uses html, saved as note type html code. You can cut and paste this into a note.

```
<!-- timeline events note for Dynamic Web B report-->
<h4>Extended Events</h4>
This table lists the following events for a person:<br>
<ul><li>their individual events such as residence, occupation, census, news, military service... </li>
<li>vital events (birth and death) for their family:</li>
<ul><li>themselves</li>
<li>their children</li>
<li>their spouses</li>
<li>their siblings</li>
<li>their parents</li></ul>
</ul>
<p>Events are sorted by date. If no event is recorded for a family member it can't be shown. This means for example that a parent without a birth won't show as a 'birth of parent' event</p>
<p> If an event does not have a date, it is sorted at the top of the table. Undated events won't show in 'limit to lifespan'.</p>
<p>Siblings includes full brothers and sisters (both birth parents the same), half-brothers and half-sisters (children with one common birth parent), and others.
Others includes siblings who are step, adopted, sponsored and so on. The family details will tell you more.
</p>
<p>You can turn off the display of notes - it gives a better list view if there are a lot of vitals to show. The notes in an event row are notes about that event (eg if the event is a birth of parent, the note is about the parent).</p>
<p>'Other' participants are other than the person already named in 'who' and the person whose page it is. For 'birth of child' events it includes the other birth parent.<p>
<p> Note for a 'birth of parent' event the 'who' is the parent, so participants includes the birth parents of that parent.<p>
<p>Checkbox ticks remain as ticked when you open a new person page.</p>
<p>Events without a date won't show in 'limit to lifespan'.</p>
```

Example of Alternative parent child phrase note

The whole lot of this can be cut and pasted into a general note. The list of phrases with > separators is required, the rest is just informative.

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- Alternative parent child relationship phrases for DynamicWeb B report.
Used when showing vital events in a person's Events list.

The 4 separate parts on each line are:
1 Gramps text for relationship (the Gramps relationship text as in Gramps EventType class)
2 phrase to use for the parent
3 phrase to use for the child
4 'A' if kinship should be appended, ie append the word ..son, ..daughter etc
```

'None' is listed here, but is skipped (ie relationships of 'None' are never shown at all as a parent or child).
You don't need to list an item if you don't need alternative phrases.
If you have your own custom relationship type, you can add it to this list - example below is Guardianship.

Phrases:
None > None > None >
Birth > > > A
Adopted > adopting > adopted > A
Stepchild > step > step > A
Sponsored > sponsoring > sponsored> A
Foster > foster > foster >A
Unknown > unknown lineage > unknown lineage >
Custom > custom >custom > A
Guardianship > guardian > ward >

Example of Local label note

The whole lot of this can be cut and pasted into a general note. The list of phrases with > separators is required, the rest is just informative.

- Local label changes for Dynamic Web B report
The two parts on each line are:
1 The original label to replace
2 the label as you want it to appear

Ancestors > Parents & siblings
Descendants > Spouses & children
Why me > Why am I in this tree?