

## September 2014 Newsletter

In 1931 the young mathematician [Kurt Gödel](#) published a paper with the ponderous title “On Formally Undecidable Propositions in the Principia Mathematica”. This is the most important mathematical paper of the 20<sup>th</sup> century, as important to Mathematics as the Theory of Relativity or Quantum Mechanics to physics or the discovery of DNA to biology, or the transistor to electronics. In essence he demonstrated that Mathematics is endless; there will always be propositions that are obviously true but that cannot be demonstrated without making a new assumption. Importantly he proved this using the concept of a machine executing an algorithm, so his work is also fundamental to the computer.

Why do I bring this up? Because in last month's newsletter I mentioned that identifying a birth, death, or marriage registration as describing an individual only created a two-way link between the registration and the individual. But no sooner had I sent that report off than I asked myself “Why not do more?” So now when you identify a birth registration as describing a particular individual in the tree not only does that process add citations for the date and place of birth and the name, but it will change the date of birth if the existing date is not set or is fuzzy, and will set the place of birth if that was not set. Similarly associating a death registration will, if required, update the date of death, place of death, and cause of death fields. In future I will make similar updates from the marriage and census update forms.

Last month I added a feature to permit you to specify when logging on that you wished to be remembered on the current computer so you do not have to log on every time. Bypassing the logon meant that the normal opportunity for displaying any messages sent to you was bypassed and you were directed to use the account administration panel, accessed by clicking on the button displaying your user name at the top right of every page in order to check on your mail. That button now displays a dark red exclamation mark in front of your user name to let you know there are messages waiting for you.

The site does not currently support either the import or export of traditional GEDCOM 5.5 documents to communicate family tree information in a machine readable form. One reason is because that technology is over twenty years old now, and full of quaint poorly documented irregularities. Another is that importing a GEDCOM results in many duplicate individuals because the program is not smart enough to do things like recognize that a “Jennie Smith” born about 1867 is the same as a Jane Smith born on 4 Feb 1868. What the site does support is the export of information from almost all of the 56 tables that comprise the database of information in the portable eXtensible Markup Language (XML). XML is related to HTML, the language in which web pages are defined, and there is even a form of HTML, called XHTML, which conforms to the XML specification; normal HTML is designed for use by human beings and is tolerant of violations of the strict specification, for example allowing the omission of closing tags and for tags to overlap. XML is now used throughout the information processing industry to communicate the meaning of information. The .docx and so on file formats created by Microsoft Office use XML, as do the Open Document industry standards such as .odt. An example of information formatted in XML is the following, generated by entering

<http://localhost/FamilyTree/getRecordXml.php?>

[table=Pages&census=CA1881&district=163&subdistrict=B&division=1&page=17](http://localhost/FamilyTree/getRecordXml.php?table=Pages&census=CA1881&district=163&subdistrict=B&division=1&page=17) in your browser:

```
<Page>
  <census>CA1881</census>
  <distid>163</distid>
  <sdid>B</sdid>
  <div>1</div>
  <sched>1</sched>
  <page>17</page>
  <population>25</pt_population>
  <image>http://data2.collectionscanada.gc.ca/e/e000/e000000008.jpg</
  image>
  <transcriber/>
  <proofreader/>
</Page>
```

In an XML document each tag identifies by its name the meaning of the information it contains. The information itself is contained as text between the opening and closing tags. XML is intended for programs to communicate with each other.

The following tables are currently supported: Births, Census1851, Census1861, Census1871, Census1881, Census1891, Census1901, Census1906, Census1911, Census1916, Census1921, Counties, Deaths, Districts, Marriage, MarriageIndi, Pages, SubDistricts, tblAR, tblBP, tblBR, tblCP, tblCR, tblCS, tblDM, tblER, tblET, tblHB, tblHL, tblHR, tblIR, tblLR, tblMR, tblMS, tblNR, tblNX, tblRM, tblSR, tblST, tblSX, tblTC, tblTD, tblTL, tblTR, tblXI, tblXM, and Townships. If you just enter the Table parameter you are told the names of all of the required parameters. The most likely table you would be interested in is tblIR. It takes one identifier field, IDIR, the same key as the main page for an individual, so if you just replace the text 'legacyIndivid' with 'getRecordXml' you can see the internal details of how the information is recorded.

There is a lot of stuff happening under the covers that does not cause significant changes to the user interface, and a lot of bugs have been fixed this month. In particular there was a problem that new individuals that you added to the family tree were not added to the list of individuals that you have ownership of, and can therefore update or see the private details of. As a result I have significantly rewritten the ownership functionality of the site.