# Extending the VIVO ontology

## Adding additional ontology files

*Dev list inquiry 5/13:*

### Question

We're new to VIVO, and we're trying to extend the VIVO ontologies to enable our application. I was wondering what the workflow of adding a new ontology is?

- If we add the new ontology via the web admin interface, where does the ontology file store? How do we update the added ontology file?
- If we want to put the ontology file into some directory under the VIVO source code folder so that it will be loaded when VIVO starts, where would that be?

### Answer

You can put it in the tbox folder: /vivo-rel-1.5.2/productMods/WEB-INF/filegraph/tbox/your_ontology.owl

Then run ant all to update your VIVO.

### Question

More questions ...

- If I make some assertion into that ontology file I put into the tbox folder via the web admin interface, where are those asserted statements going to be stored? in the original file?
- I was wondering if there is any documentation about the file structure in the WEB-INF folder? For example, what is difference between the "filegraph" folder and the "ontologies" folder?

### Answer

Any edits you make to any classes or properties through the web interface will be stored in the graph <http://vitro.mannlib.cornell.edu/default/asserted-tbox> in the quad store.  Any statements about individuals you make through the web interface will be put in <http://vitro.mannlib.cornell.edu/default/vitro-kb-2>.

The files you place in the WEB-INF/filegraph directories are never modified by the VIVO application.  Each file is loaded into its own separate named graph, and whenever you restart Tomcat the contents of each graph are updated to match the current state of its corresponding file.

The WEB-INF/ontologies directory has evolved over time and is a bit of a mixed bag at this point.  Most of its contents are only loaded when VIVO is started up with a completely empty database; the files are ignored on subsequent restarts.  The exception to this is the ontologies/app/loadedAtStartup directory.  This relatively recent addition allows you to make additions to the "display model"; these are updated whenever Tomcat is restarted.  The display model is for configuring aspects of the VIVO application itself, and not for normal ontology terminology or instance data.