Morpho - Bug #165

taxonomic search facility

10/31/2000 08:44 AM - Dan Higgins

Status:	Resolved		**Start date:**	10/31/2000
Priority:	Normal		**Due date:**	
Assignee:	Matt Jones		**% Done:**	0%
Category:	morpho - query		**Estimated time:**	0.00 hour
Target version:	Beta2		**Spent time:**	0.00 hour
Bugzilla-Id:	165			

Description		
Add at least simple taxonomic and spatial search capability		
Related issues:		
Blocked by Morpho - Bug #214: Redesign query plugin	**Resolved**	**04/09/2001**

History

#1 - 04/09/2001 03:58 PM - Matt Jones

Just handle taxonomic searches under this bug.

#2 - 04/11/2001 11:32 AM - Matt Jones

Reassigned to jones.

#3 - 05/31/2001 06:58 PM - Matt Jones

Basic taxonomic string matching implemented in the QueryDialog class. Need to
do term expansion and synonym lookup using ITIS (probably ITIS Canada because of
its XML interface).

#4 - 06/05/2001 02:49 PM - Matt Jones

Created the "itislib" module, which contains a Java library for doing ITIS
searches. itislib allows one to search for taxa, determine the parent of a
taxon, determine the children of a taxon, and determine any synonyms for a taxon
name. Some issues remain with the delivery of synonym data for "not accepted"
taxa according to the ITIS classification.

#5 - 07/12/2001 10:24 AM - Matt Jones

Considering blankman's comments on name expansion. I agree that expanding names
will be prohibitively costly at search time. Consider incorporating name
expansion into insert phase for Metacat. Still plan on doing ITIS synonym
lookup at search time. Reworded summary.

#6 - 07/12/2001 10:37 AM - Matt Jones

Most features are complete, lowering priority for synonym lookup feature that
remains.

#7 - 09/06/2001 02:29 PM - Matt Jones

Added support for looking up taxonomic synonyms using the ITIS system. This uses
the separate itislib library for doing the taxonomic query. Had to modify the
QueryDialog to support generting the proper XML query and repopulating it using
the new structure that supports synonyms. Now, taxon queries take one of two
basic forms:

No synonyms:
QueryGroup(QueryGroup(QueryGroup(QueryTerm,QueryTerm)))
With synonyms:
QueryGroup(QueryGroup(QueryGroup(QueryGroup(QueryTerm,QueryTerm))))

These are each handled in the QueryDialog methods for building and repopulating
taxon queries.

At this point in time, decided not to utilize the taxon expansion features that
are available in itislib because of the added cost to querying for groups that
have many subtaxa. For example, if someone queries on a genus that has a
thousand species, an expanded query would have a thousand additioanl terms to
match against. This is too high of a cost, and so I omitted this feature.

However, we could probably acheive the same effect by including the parent taxa
in the metadata either 1) when the metadata is created look it up in ITIS using
Morpho/itislib, or 2) when it is submitted to Metacat, generate a separate taxon
index in Metacat by looking up the taxa's parents in ITIS. In either case, the
query will still be fast. The cost of course is timeliness of the info -- as
the taxon names change or are added, the metadata will drift out of date, or be
incomplete.

#8 - 03/27/2013 02:13 PM - Redmine Admin

Original Bugzilla ID was 165