

4D4Life: Proposed Array of New Services**Defined by the Triage Meeting 17th March 2010**

Sara Oldfield and the team working for Work package 2 of the 4D4Life Project prepared both a novel classification of the types of usage of the Catalogue of Life, and polled users for their ideas on what additional services are required to support these types of usage. They presented a document that listed the complete set of suggestions, and another that prioritised these, showing the top three priorities in each group as obtained from the users.

Thierry Bourgoin and the team working for Work package 3 undertook a survey of the custodians of the GSD databases that supply the principal content of the Catalogue of Life, both to understand better the capabilities of the GSD databases, and to determine whether certain small changes to the Standard Data Set would be acceptable to the suppliers.

Wouter Addink and the team working for Work package 6 undertook a preliminary scoping of the requests for new services given priority, in order to provide preliminary comment on what might be involved in terms of software requirements and software costs. However, this was to be followed by a more detailed scoping once the Draft List had been agreed.

On March 17th 2010 a joint meeting of the Services Team and the Design Team was held (the so-called 'Triage Meeting') to review the proposals, to triage the differing priorities, and to agree a Draft List for the Array of new services that would be implemented by the project. The criteria for this selection were: i) Users demand, ii) Supplier availability, iii) Level of IT feasibility, and iv) Overall benefit versus risk.

This document constitutes List Version 3, and differs from an earlier draft in clarifying the structure of the list, and in inserting some items discussed and agreed towards the end of the meeting and accidentally omitted from the first draft. Numbers given in brackets refer to the numbered original suggestions in the complete set of suggestions, and the arrangement in groups was provided by Yuri Roskov to give structure to what was originally a heterogeneous set of suggestions.

The services listed here were those agreed at the Triage Meeting, except that one pressing case has been added, as indicated in the text. It should be noted that not all of the originally prioritised suggestions were agreed, and those rejected have been taken out of this list.

During the Design Team meeting on 19 July 2010 each service was analysed and allocated a batch number. The lists of services (as identified from surveys carried out in work package 2) are now planned for development in three batches. In the Description of Work just two batches of services are identified which run in Year 2. The third batch includes items that need further discussion and preparation before they can be implemented. The preparation of these will run in parallel with batch 2, but actual implementation may run over into Year 3.

Services Allocated to Batches

Batch 1:

- 1.1 Show points of attachment for GSD sections in the taxonomic hierarchy (18a)
- 1.3 Show number of child taxa in parent node in the taxonomic hierarchy (7)
- 2.1 Rudimentary only: Download Services (entire CoL, selection only, etc). Simplified to FTP download only. (13, 69, 59 & 119)
- 3.1 Species tally counter on website. To combine the CoL species numbers for “complete” taxa with Chapman style estimated numbers for incomplete and missing groups. (3 & 16b)
- 4.1 IUCN Red List Conservation Status,
- 4.2 CITES (find correct appendices for species forbidden in international trade),
- 4.3 GISP (Global Invasive Species Programme register listing status)
- 4.4 ARKive (Images)
- 5.4 Harvesting common names and distribution data through to GSDs from Regional Hubs developed in WP 4. (27 & 28)
- 6.1 Transparency and explanation of the steps of the CoL. (74) – Will be done via the website
- 6.2 Improve the Catalogue of Life Web Site. (85 & 57)
Make the Catalogue of Life website more user friendly and attractive to naive users, by providing more explanation and more entry routes. Note: in item (57) the term “search tips” is used in the general sense without specific technical implementation in mind

Batch 2:

- 1.2 Provide a ‘Fuzzy spelling’ search facility (9)
- 1.6 Multi- lingual system interface
- 2.2 Name status/synonymy /accepted name queries (14 & 120)
- 2.3 Taxon synonyms query (126)
- 2.4 Taxon common names query
- 2.9 List matching service (for names and for taxa) (61 & 62)
(often discussed in the past, and frequently requested by users writing in, but not prioritised and discussed at the Triage Meeting)
- 5.5a User comment & feedback facility – primarily to GSD custodians (unauthenticated feedback to GSDs). (54 & 123)
- 6.3 Promote the use of pre-designed CoL Snippets and plug-ins for installation in browsers and websites (5)

Batch 3:

- 1.4 Display distribution data as Distribution maps (79)
Provide distribution maps showing shaded land and marine areas (e.g. TDWG level 4 land areas and agreed marine areas)
- 2.6 Name change alert, using LSIDs. (25, 10 & 11)
- 2.7 Concept change alert, using LSIDs (10 & 11)
- 2.8. New name and new species alert (25, 12 & 118)

- 3.2** Thumbnail images of iconic species (and common names of higher taxa) in hierarchy– do as a trial with some images from ETI and some GSDs. (113 & 1)
- 5.1** Harvesting common names and distribution data through to GSDs from Regional Hubs developed in WP 4. (27 & 28)
- 5.2** First steps towards cross-checking taxonomic details between GSDs and Regional Hubs, and interpretation between checklists from Regional Hubs - a core task of WP 4. (26 & 86)
- 5.3** Consider in-fill with nomenclature detail for missing species. Put name lists in to fill the gaps (as suggested many times before). We would need to indicate the lower level quality of this data. Clear definition will need to be made
- 5.5b** User log in and public forum area for further feedback
- 6.4** Multi –lingual content for – website and publicity

Time table

Descriptions of each service

Batch 1 - Delivery 30th August to AC for collation to send around Services and Design Team

Batch 2 – End of September

Batch 3 – Preliminary “work” needs delivering before end of October in time for Design team meeting 9th and 10th November

Service Groups

To aid the process of service development and implementation a lead person has been assigned per group. This person with the support of others (named also) will provide accurate descriptions for each service in their group and assist with communication across both the Design Team and Services to implement each service.

Services Group 1. Enhance User Interface functionality:

Yuri Roskov (Wouter Addink and Viktor Didziulis)

- 1.1 Show points of attachment for GSD sections in the taxonomic hierarchy (18a)
- 1.2 Provide a 'Fuzzy spelling' search facility (9)
- 1.3 Show number of child taxa in parent node in the taxonomic hierarchy (7)
- 1.4 Display distribution data as Distribution maps (79)
Provide distribution maps showing shaded land and marine areas (e.g. TDWG level 4 land areas and agreed marine areas)
- 1.5 Provide map-based queries and tools (93) – But this has been earmarked as more long term.
Implement a mapping interface to Catalogue of Life for running queries and tools; e.g. select areas on the map, and supersets of these (e.g. continents etc) and get a list of species
- 1.6 Multi- Lingual system interface

Services Group 2. Enhance the CoL e-functionality:

Wouter Addink (Frank Bisby and Richard White)

A range of web services, e.g. synonymy, geographical subsets, track changes etc (120)

Download Services

- 2.1 Rudimentary only: Download Services (entire CoL, selection only, etc) (13, 69, 59 & 119)

Synonymic Indexing

- 2.2 Name status/synonymy /accepted name queries (14 & 120)
- 2.3 Taxon synonyms query (126)
- 2.4 Taxon common names query

Incremental cross-map between editions

- 2.5 Incremental cross-map between editions (using LSIDs)

Alert Services

- 2.6 Name change alert, using LSIDs. (25, 10 & 11)
- 2.7 Concept change alert, using LSIDs (10 & 11)
- 2.8 New name and new species alert (25, 12 & 118)

List Matching Services

- 2.9 List matching service (for names and for taxa) (61 & 62)
(often discussed in the past, and frequently requested by users writing in, but not prioritised and discussed at the Triage Meeting)

Services Group 3. Expand the Catalogue of Life Content:**Viktor Didziulis (Frank Bisby, Annie Carpenter, Wouter Addink and Thierry Bourgoin)**

- 3.1 Species tally counter on website. To combine the CoL species numbers for “complete” taxa with Chapman style estimated numbers for incomplete and missing groups. (3 & 16b)
- 3.2 Thumbnail images of iconic species (and common names of higher taxa) in hierarchy– do as a trial with some images from ETI and some GSDs. (113 & 1)
- 3.3 Alternative taxonomies in addition to Species 2000 “gold standard”– agreed on a limited basis through i) regional hubs and ii) alternative GSDs as in existing plans as planned elsewhere in 4D4Life. (78)

Services Group 4. Add external links from CoL to other resources:**Wouter Addink (Viktor Didziulis, Annie Carpenter and Sara Oldfield)**

Provide links to external sources of information. (77)

Particular priorities to link to:

- 4.1 IUCN Red List Conservation Status,
- 4.2 CITES (find correct appendices for species forbidden in international trade),
- 4.3 GISP (Global Invasive Species Programme register listing status)
- 4.4 ARKive (Images)

Services Group 5. Improve Internal Services:**Yuri Roskov (Viktor Didziulis and Thierry Bourgoïn)**

More complete catalogue: CoL should be as complete and comprehensive as possible. (81)

- 5.1** Harvesting common names and distribution data through to GSDs from Regional Hubs developed in WP 4. (27 & 28)
- 5.2** First steps towards cross-checking taxonomic details between GSDs and Regional Hubs, and interpretation between checklists from Regional Hubs - a core task of WP 4. (26 & 86)
- 5.3** Consider in-fill with nomenclature detail for missing species. Put name lists in to fill the gaps (as suggested many times before). We would need to indicate the lower level quality of this data. Clear definition will need to be made
- 5.4** Add indicators for data quality and completeness for each GSD sector (16b) (could also be in Group 3 or Group 1)
- 5.5a** User comment & feedback facility – primarily to GSD custodians. (54 & 123)
- 5.5b** User log in and public forum area for further feedback

Services Group 6. Catalogue of Life Publicity and Promotion – Miscellaneous:**Annie Carpenter (Sara Oldfield and Viktor Didziulis)**

- 6.1** Transparency and explanation of the steps of the CoL. (74) – Will be done via the website
- 6.2** Improve the Catalogue of Life Web Site. (85 & 57)
Make the Catalogue of Life website more user friendly and attractive to naive users, by providing more explanation and more entry routes. Note: in item (57) the term “search tips” is used in the general sense without specific technical implementation in mind
- 6.3** Promote the use of pre-designed CoL Snippets and plug-ins for installation in browsers and websites (5)
- 6.4** Multi –lingual content for – website and publicity