4D4Life Work Package 7: serving user needs with a new system architecture for the Catalogue of Life

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The Species 2000 & ITIS Catalogue of Life has a five-year 12 million euro Phase 2 development programme (2009 – 2014), including a Global multi-hub network encompassing projects in China, Australia, New Zealand, Brazil and North America, and 4D4Life (Distributed Dynamic Diversity Databases for Life) which is a new EC 7th Framework Programme Scientific Data Infrastructures project, from May 2009 to April 2012.

The 4D4Life project is to build a state-of-the-art service-oriented e-infrastructure that:
• facilitates structured information exchange within the project networks
• synthesises a globally significant resource for cataloguing and indexing taxa
• disseminates this in an array of modern web services and products to the biodiversityinformatics community.

Tasks in Work Package 7

The Cardiff team will, in consultation with the 4D4Life System Design Team, specify, design and build a new state-of-the-art “e-infrastructure” for the Catalogue of Life, which will:
• form the basis for a sustainable Catalogue of Life
• replace the current system at the end of the 4D4Life project.

The new architecture will:
• be service-oriented
• address issues of maintainability, manageability and extensibility of the system and the Catalogue
• use community standards.

Task 7.1: Gather requirements from data providers, system managers and users to draw up a specification.
Task 7.2: In consultation with partners and with advice from biodiversity informatics specialists, create a design for the system architecture which will be extensible, scalable, manageable, and sustainable.
Task 7.3: Seek to accommodate data formats and protocols in use in the species diversity community.
Task 7.4: Create a “proof of concept” demonstration system.
Task 7.5: Extend this to an implementation which can be tested and evaluated by project partners and other users.
Task 7.6: Create an enhanced prototype with full functionality, which will be handed over to our partner ETI in Work Package 6, who will create a robust maintainable system to carry the Catalogue of Life forward during its Phase 2 programme.

We are seeking your views: please fill in a questionnaire or email r.j.white@cs.cf.ac.uk