



Global Names Architecture

An infrastructure for unifying taxonomic databases and services for managers of biological information

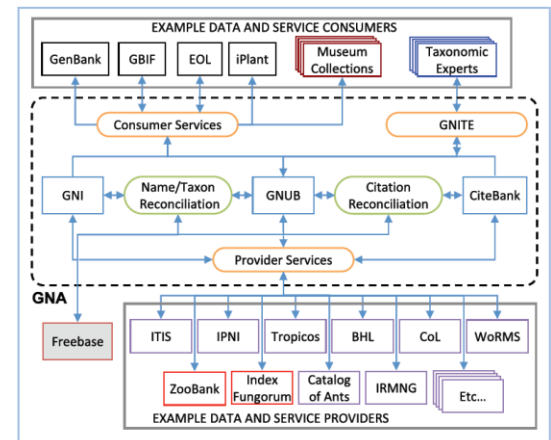
Abstract: The Global Names project (#1062441) has built components for the Global Names Architecture – itself conceived to provide an open and global names-based infrastructure to index, organize and manage biodiversity data.

The Global Names project has delivered new services and infrastructures for the cross-indexing and interlinking of natural history databases with corresponding monographs and journal articles in which nomenclatural acts were published. The development of these new indexing technologies and supporting web services and interfaces have resulted in a connected suite of online scientific databases that provide immediate access to students and scientists studying the world's biodiversity through nomenclature and systematics.

The Global Names project had the following objectives:

- Create a repository for community-vetted taxonomic bibliographies.
- Allow BHL to operate as an article repository.
- Ability to ingest, display, download, and index articles within the BHL corpus.
- Provide links to content published online through other trusted repositories.
- Deliver Services to support Citation Reconciliation.

For the Biodiversity Heritage Library (BHL), this project has enabled new data structures, services, and interfaces, providing new methods for the consultation, reconciliation, and analysis of open access scientific literature. These new services and datasets have been opened for integration and use by third-party application developers, facilitating the reuse of BHL content in new applications, and resulting in novel usages of the world's printed biodiversity record.



Timeline: Jun 2011 – May 2014

Deliverables:

The Global Names project has achieved the following milestones for BHL:

- **Name Discovery improvement.** Through collaboration with Marine Biological Laboratory, new name-finding tools have been incorporated into BHL. Now GNRD (Global Names Recognition & Discovery) identifies more than 150 million scientific names throughout the 42 million digitized pages of scientific literature in BHL and more information (1.5X increment) is provided to users interested in further details.
- **Extend BHL data model to operate as an article repository.** GN has allowed BHL to extend its data model to be able to operate as an article repository, storing article metadata.
- **Build and instantiate a process to ingest article metadata.** BHL now has a process to harvest data from trusted article information providers like Biostor.
- **Adapt the BHL Search and API to handle articles.** BHL has created the required user interfaces to manage article metadata and the associated information along with the books and journal contents it already contains. This has implied adapting the process flow and implementing changes to existing logic accordingly.
- **Allow for Article Content Display.** Through changes in the display of the book viewer and the inclusion of a Table of Contents (TOC), BHL users can now find articles by querying its metadata and accommodate article content display in a seamless fashion.
- **Link out to titles in other systems.** BHL has extended its data model to include references to other trusted repositories that serve information. User interfaces have also been created and modified to make it possible for the user of the Portal as well as the user of the API to be able to differentiate these new references to external content.
- **Better interconnection with other initiatives.** The GN project has developed better connections with existing initiatives like IPNI and ZooBank that now link their references directly with the corresponding content in BHL and it also provides more information about the taxonomic names found in much more sources.

Funder and Partners

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Public Webpage: <http://globalnames.org/>