A start-up portal for the discovery of GBIF mediated data

ViBRANT report on deliverable 8.3

Deliverable D8.3:   A start-up portal for discovery of GBIF mediated data

Milestone M8.22:   Prototype version of a start-up portal for discovery of GBIF mediated data

Leading partners: Global Biodiversity Information Facility (GBIF)

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Language: English

Author's involvement in the project

The NPT Startup project was mostly led by Burke Chih-Jen Ko and Olaf Bánki, where Olaf was responsible for the overall coordination and Burke was responsible for the development. Both were actively involved in community engagement. Tim Robertson has been involved in every stage of the project since early 2012, and has provided technical advice for the development of the tool. Alberto González Talaván has been involved in setting up the early adoption program, and for organizing the training modules of the product.

Acknowledgements

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Executive Summary

During 2012 and 2013, the GBIF Secretariat collaborated closely with the Scratchpads team to develop a Nodes Portal Toolkit Startup. This tool is aimed especially at covering the needs of nearly half of the GBIF Participants that have no or limited web presence. The product supports GBIF Participants in establishing relatively quickly an initial biodiversity information website showing species occurrence data published through GBIF as well as content on species from the Encyclopedia of Life.

A prototype version was delivered in early 2013. A consultation among GBIF Participants based on this prototype produced overwhelmingly positive responses to what is on offer, and identified nodes interested in being users, advisers and developers for the project. This consultation steered additional development in getting to a stable version of the product.

The project has also benefited from the collaboration between the National Biodiversity Institute of Costa Rica (INBio) and GBIF Benin, funded by the JRS Biodiversity Foundation, to transfer experiences and technology developed by INBio in support of a national biodiversity information system for Benin. This collaboration has helped to add optional features to the tool.

An Early Adoption Programme is set up to promote the uptake of NPT Startup within the GBIF community. Ten GBIF Participants have shown interest in participating in this program. Several information resources have been produced to facilitate the uptake and deployment of the tool.

Introduction

This report constitutes a formal record of the deliverable D8.3 'a start-up portal for discovery of GBIF mediated data' of work package 8 (ecological & conservation data mobilization) of ViBRANT (Virtual Biodiversity Research and Access Network for Taxonomy), a European Union FP7 funded project supporting the development of virtual research communities involved in biodiversity science.

Deliverable D8.3 'a start-up portal for discovery of GBIF mediated data' contributes to the objectives of work package 8, especially objective iii: 'to boost GBIF network expansion at national and regional scales'. The deliverable D8.3 was stated as follows:

The Nodes Portal Toolkit (NPT) Startup enables countries to establish a web presence with relevant biodiversity information from GBIF and EOL. NPT Startup will be built on the Scratchpads platform, and will extend developments of ViBRANT to a broader context of the use of biodiversity data portals. The first version of NPT Startup will be available as a Drupal profile accompanied with relevant documentation for use and further development. The NPT will be deployed in several countries within and outside Europe. At the completion of this deliverable, there will also be some commitments from the GBIF network to further develop NPT Startup with more advanced functionalities.

D8.3 had the following associated milestone M8.22 'prototype version of a start-up portal for discovery of GBIF mediated data'. The milestone M8.22 was stated as follows:

Prototype of the Nodes Portal Toolkit Startup version 1.0 that will be available for countries to pick up as a Drupal profile to enable a web presence with relevant Biodiversity information mediated through GBIF.

This report describes what constitutes D8.3 and M8.22, and what are the plans to roll out the tool that was developed in the framework of the ViBRANT project. The report also highlights activities from the GBIF community that are contributing to the objectives of work package 8 of the ViBRANT project.
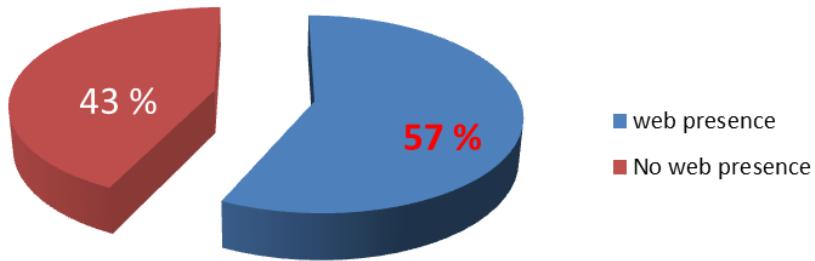
Figure 1. An assessment early in 2012 showed that 43% of the GBIF Participants did not have a web presence

Nodes Portal Toolkit project

The Nodes Portal Toolkit (NPT) project aims to facilitate the development and deployment of national, regional, and thematic biodiversity web portals within the GBIF community. Its aim is also to stimulate the transfer of technology, the reuse of biodiversity informatics components and knowledge of portal developments between GBIF Participant countries and organizations. See annex A for more information about GBIF and its Participant network.

Biodiversity web portals provide a gateway to biodiversity information within a country, institution or thematic area. They also help to engage local and global partners by demonstrating the relevance of GBIF-mediated data for science, policy and society. The NPT project enables GBIF Participants to develop and maintain their own portals cost-effectively through collaboration.

In the project, Participants exchange knowledge, share experiences of development and explore reusability of software components. This makes the portal development an increasingly collaborative process, maximizing the benefits of participating in GBIF.

The Nodes Portal Toolkit project has been formulated by the GBIF Participant community before 2010, and targets different groups of GBIF Participants (see Annex B). In the context of the ViBRANT project, special attention has been given to the GBIF Participants that have no or only a limited web presence. At the beginning of 2012 it was established that 43% of the Participants within GBIF did not have a web presence (Figure 1). The first version of NPT Startup is targeted towards helping to fill this gap as well as providing a solution for Participants that only have limited web presence.

NPT Startup

As mentioned before, NPT Startup targets GBIF Participants that have no or only limited web presence. The tool helps GBIF Participants to set up a biodiversity information website that includes an initial species country checklist and static maps of species occurrence data published through GBIF. It also provides species contents (descriptions, images and videos) from the Encyclopedia of Life (http://eol.org), as well as basic features to run the website as a communication portal. The product helps establish the Node's identity on the web, manage biodiversity information at the country/thematic level, and engage local and global communities in bringing up the relevance of biodiversity information.

NPT Startup was developed in Drupal (https://drupal.org), because this content management system has a very strong open-source community behind it. There are numerous biodiversity information related projects that make use of Drupal as a development framework. Therefore, extensive functionality relevant to biodiversity information is already available in Drupal and this is likely to be

maintained and extended in the future. In addition, Drupal is written in PHP and this programming language is widely used. Expertise in this language is likely to be present in most of the target countries of NPT Startup.

Furthermore, in the development of the tool the code of Scratchpads (http://scratchpads.eu/) was used that already packages 197 Drupal modules (186 were used in NPT Startup). Specifically, for NPT Startup 11 new modules were developed in the course of the ViBRANT project. In addition, a Drupal profile was developed that packages the 197 Drupal modules available in the product. This Drupal profile guides the installation of the tool through a set of instructions. These instructions include the required features, the layout, the initial contents and the initial settings of the website. With such a Drupal profile, the tool is relatively easy to setup in a reasonably short time. Once installed, it can be further customised to fit the specific requirements of the GBIF Participant Node. Because the tool is based on Scratchpads and the Drupal framework, it can be easily extended in functionality and customized to serve the specific needs of GBIF Participants.

NPT Startup is currently allows light content data management. The Integrated Publishing Toolkit (IPT) is more widely recognised as the main GBIF product for data publishing.

Towards milestone M8.22: prototype version of a start-up portal for the discovery of GBIF mediated data

The milestone 8.22, consisting of a prototype version of a start-up portal for the discovery of GBIF mediated data, was delivered in March 2013.

In the following section the relevant background, the available features and the specific target groups of the NPT Startup prototype version are summarized. Additional information can be found on the GBIF website at: http://www.gbif.org/infrastructure/tools.

Relevant background on M8.22

The following steps were crucial in getting to the milestone 8.22 (also see Annex B):
- ✓ Before 2010 the initial plans were already formulated around developing a start-up portal for the discovery of GBIF mediated data. A NPT advisory group was established consisting of representatives from the GBIF community. A community led project was run to capture the requirements for a Nodes Portal Toolkit within the GBIF network.
- ✓ A scoping within the GBIF network (October-December 2011) showed ample support for the development plans around NPT Startup and for choosing Drupal as the content management system (GBIF 2012 NPT survey report).
- ✓ At the beginning of 2012, a demonstration site was developed. Five Country Participant Nodes were involved in setting up NPT demo sites by providing content for these websites. The GBIF Participant Nodes were: Benin, Togo, Kenya, Madagascar, and Slovakia.
- ✓ Based on the positive results of the NPT survey in 2011, the plan for the tool was drafted in the NPT Development Plan (GBIF 2012). Over the course of 2012 and at the beginning of 2013, the GBIF Secretariat developed a prototype version in close cooperation with the Scratchpads team at the NHM in London.
- ✓ At the end of 2012, the GBIF Secretariat started to support the INBio – Benin project in deploying the prototype version as an initial biodiversity information web site for Benin. In this period, INBio started to extend the development done by the GBIF Secretariat on the tool (see section on contributions of the GBIF community).
- ✓ At the beginning of 2013 the GBIF Secretariat created the material to run a review amongst the GBIF community of the prototype version (see next section on the review).

The features of the NPT Startup prototype version

The NPT Startup prototype version delivered in March 2013 (M8.22) had the following features:
- ✓ A basic website to highlight the work of the GBIF Participant within a country;

- ✓ An initial country checklist that is assembled by using the scientific names extracted from species occurrence data published through GBIF.
- ✓ Static maps showing tiles of the available species occurrence data in GBIF (Figure 2);
- ✓ Available species contents from the Encyclopedia of Life (EOL), including species descriptions and media (e.g. photos and videos);
- ✓ Ability to author and manage biodiversity information content
- ✓ Common website features like news, forums, blogs, and RSS feeds (e.g. on the latest GBIF news) to allow a GBIF Participant to run the website as a communication portal.
- ✓ Basic facts about the country's participation in GBIF, and on its data publishing activities.
- ✓ Lists of scientific articles and reports using GBIF-mediated data, published by authors from the country and about the biodiversity of the country.

An example site of the milestone 8.22 can be found at: http://nptstartup.gbif.org/.

Further in the report developments are listed that have been added after the release of M8.22.
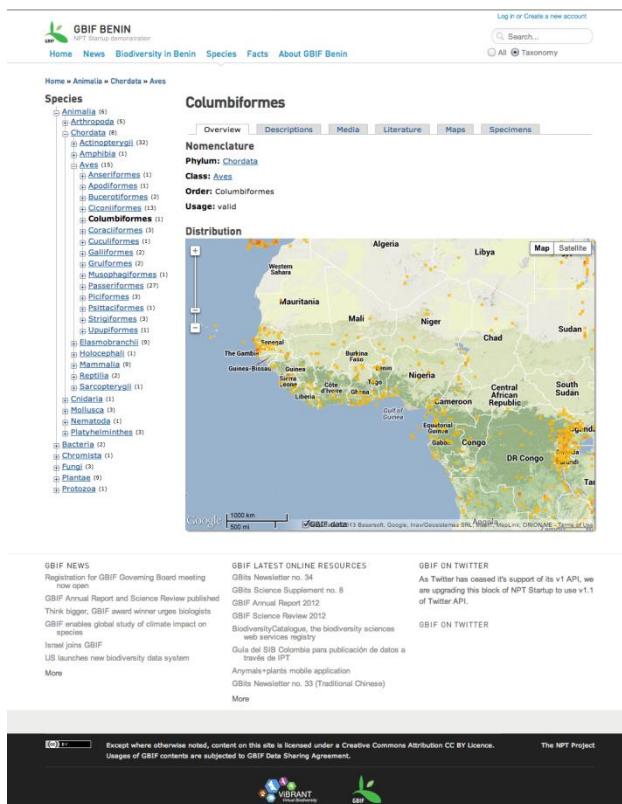
Figure 2. Screenshot of the species occurrence map of the prototype version of NPT Startup.

NPT Startup target groups

As a product, NPT Startup targets those GBIF Participants that currently have no or limited web presence. In the course of the project it proved more sensible to discern specific groups into users, advisers and developers. Therefore the following specific target groups were identified in the GBIF community:

1. GBIF Participant Nodes that are interested in using the tool to initiate a national biodiversity information website,
2. GBIF Participant Nodes that wish to serve as an adviser to others in setting up their biodiversity information web presence,
3. GBIF Participant Nodes that would like to plan development around the NPT Startup and Drupal or would like to contribute by installing and testing the tool.

During the rollout of the tool in the GBIF community these three groups of users, advisors and developers will be taken into account.

A review of the prototype version of NPT Startup

A review of the first version of NPT Startup was conducted from 9 April to 20 May 2013. A request for contributions to this review was sent out amongst all GBIF Node Managers and Nodes staff (the representatives who are implementing GBIF objectives nationally or through their respective organisations). With the review, the Secretariat intended to learn more about the extent to which the prototype version could meet the needs of its target groups (see above).

An overview of the results of the NPT Startup review

Overall, the results of the review are quite positive about the first version of the NPT Startup (GBIF 2013, NPT Startup Review: Summary report). Of the 40 GBIF Participant Nodes responding to the questionnaire 50% indicated an interest in using the first version. The majority of the responding Nodes considered the first version of the tool to be very useful to extremely useful. Additionally, respondents suggested some extra functionality to improve the product. Many Nodes indicated willingness to contribute to activities involving support to other Nodes, or to improve the development and uptake.

A second report summarizes the additional requirements voiced by the GBIF Participant Nodes during the review (GBIF 2013, NPT Startup Review: Suggested additional features). In many cases the requirements should be scoped further before developments could be implemented by GBIF Participants and/or the GBIF Secretariat. Based on these suggested additional features the GBIF Secretariat identified those development that were needed to come to a NPT version that can be seen as the Deliverable 8.3 (see next section).

Towards a NPT Startup 1.0 release candidate as D8.3

Half of the respondents (20 GBIF Participant Nodes) of the review indicated the desire to already use the tool even in its prototype form. Based on these positive results, the GBIF Secretariat identified the prototype version M8.22 as a Nodes Portal Toolkit Startup 1.0 release candidate. Subsequently, the GBIF Secretariat started promoting its uptake among the GBIF Participant Nodes (see also the next section on the early adoption programme).

Based on the additional suggested features proposed by the GBIF Participants, the GBIF Secretariat planned to develop improvements on the M8.22 prototype version to get to a stable release candidate (as Deliverable 8.3).

This section describes:
1. The additional developments planned by the GBIF Secretariat to get to a stable release candidate (Deliverable 8.3), and
2. The improvements made on the communication and collaboration platforms of the tool.

Additional development for a stable NPT Startup release candidate

Based on the review, the GBIF Secretariat implemented several improvements of the M8.22 prototype version. The improvements could be ordered in the following categories:

I. Adopting the new GBIF API

The GBIF Secretariat rolled out the new GBIF data portal in October 2013, including the v0.9 version of the new web service API. After the M8.22, improvements were made so the tool uses the new GBIF web services. This specifically refers to the web services involving retrieval of information on GBIF Participants.

II. Code quality

The software was checked against the Drupal coding standards to better meet portability requirements. This allows the software to be used more easily in other Drupal implementations. The code has also been refactored, making it more readable and logical, to allow for easier maintenance.

III. Branding and identity

Some development effort focused on improving the flexibility in representation of information:

1. The ability to customize and brand the tool by enabling a banner to show logos of the GBIF Participant Node and the hosting institution.
2. Rearranging some of the names of the NPT Startup site sections, such as the tabs on the 'species' page.

IV. Localization and languages

A localization site (localise-npt.gbif.org) was setup to enable GBIF Participants to contribute to the translation of the interface of NPT Startup in languages other than English. The instructions on how to contribute can be found at: https://github.com/gbif/npt-startup/wiki/Localisation

V. Mapping

New developments were focused on improving the presentation of the species occurrences on a map by providing the country boundary according to the website setting. With this improvement, visitors could see the species distribution within the country, and at the global scale.

NPT Startup, as deliverable 8.3 in ViBRANT, consists of a Drupal profile that combines the joint working of 197 Drupal modules. In total, 11 modules have been developed in the context of the deliverable 8.3.

NPT Startup information resources

To increase the engagement around NPT Startup of GBIF Participants, several information resources have been established and improved after the delivery of the M8.22.

These information resources include:

✓ Improved webpage on the Nodes Portal Toolkit project at
http://www.gbif.org/capacityenhancement/npt

✓ A webpage devoted to the online resources around the tool at
http://www.gbif.org/infrastructure/tools#npt

✓ A NPT Startup project site at: https://github.com/gbif/gbif-npt-startup On this site all the major developments of the product can be found:

~ All the (pre)releases of the tool at: https://github.com/gbif/gbif-npt-startup/releases
~ Access to the NPT Startup wiki at: https://github.com/gbif/gbif-npt-startup/wiki
including information about:

- o the product itself
- o system requirements and installation procedures
- o how to brand the tool
- o how to improve performance
- o the development environment
- o etc.
- ✓ An issue tracking and reporting system at: http://dev.gbif.org/issues/browse/NPTS This enables contributors to report issues and track joint collaboration on developments.

- ✓ A user mailing which can be found at: http://lists.gbif.org/mailman/listinfo/npt-users This mailing list is to enable collaboration and expertise sharing among the community of users, and make possible the distribution of information

- ✓ An improved NPT Startup demo-site at http://nptstartup.gbif.org/

- ✓ A discussion group on the GBIF's social platform (GBIF Community Site) at: http://community.gbif.org/pg/groups/3507/nodes-portal-toolkit-npt The discussion group is operated around the Nodes Portal Toolkit project and includes the NPT Startup.

Early Adoption Program

At the end of August 2013, the GBIF Secretariat started an Early Adoption Program to promote the uptake of NPT Startup. A call was sent to the GBIF Participants with the invitation to participate in the program.

In addition the following events have taken place:

- During the GBIF Participant Nodes training course on 4-5 October 2013 in Berlin (Germany) two parallel modules were run highlighting the tool. The training included information about the functionality of the product and how this tool could provide a GBIF Participant Node with an initial biodiversity information web presence for a country. There were approximately 55 GBIF Participant Nodes from across the globe present at this training event.

- At the 12th meeting of the GBIF Participant Nodes Committee on 6-7 October 2013 in Berlin (Germany) a plenary presentation on the NPT Startup was given by INBio (the GBIF Participant Node of Costa Rica). Around 60 GBIF Participant Nodes were present at the meeting. In addition, a break-out group was organized to discuss with a smaller group of Nodes on the requirements and uptake of the tool. See the result of the break-out group in Annex C.

Currently, a group of ten GBIF Participant Nodes have indicated the interest in becoming part of the Early Adoption Program. The following Participants have indicated interest: Argentina, ASEAN Centre for Biodiversity, Benin, Endangered Wildlife Trust, India, Indonesia, Kenya, Mauritania, Philippines, and Togo. In addition Andorra, ARCOS, Guinea, Madagascar, Portugal, Slovakia and Uganda are considering using or aligning to the tool. This program is starting its next phase in November 2013 and will run into 2014. These GBIF Participants will be installing NPT Startup, and start populating website instances with content. This program will serve to test the tool further, and issues will be reported so these can be addressed in future developments. For those GBIF Participants that do not currently have the capacity to install and populate a NPT Startup instance, other GBIF Participants will act as advisors. Several countries have indicated the willingness to act as advisers such as amongst others Belgium, Costa Rica, France, and The Netherlands. Together with these advisers, the Secretariat will run distributed helpdesk services.

Contributions by the GBIF community

During 2012 and 2013 there have been several contributions to the tool from the GBIF community.

Through a JRS foundation project, INBio and GBIF Benin are adding new functionalities to the first NPT Startup version to allow connections complying with GBIF adopted standards in publishing species occurrence data (e.g. through DarwinCore-Archive import). INBio is building on top of the efforts that have been achieved with the ViBRANT project. The initial Benin biodiversity information site that includes the added functionality of this collaboration can be found at: http://npt.inbio.ac.cr/. In the context of this project translations of the interface in French have been contributed. These translations will also be available for Scratchpads in the future. The NPT Startup project has also benefited greatly from this collaboration, while the GBIF Secretariat has provided technical support for this project.

GBIF has been running a mentoring program since 2003 that is aimed to foster technology and knowledge transfer between GBIF Participants. Through the GBIF 2013 mentoring program, a project will start to deploy the NPT Startup in two West African countries (Mauritania and Togo) involving Belgium as an advisor.

TaiBIF, the GBIF Participant Node of Chinese Taipei (the reference to Taiwan used in GBIF) has contributed by translating the installation procedure into Traditional Chinese (see https://github.com/gbif/gbif-npt-startup/wiki/zh_tw_Installation).

Up to November 2013, several GBIF Participant Nodes have tried installing the tool and have provided invaluable suggestions for the development and the documentation of the NPT Startup. These Nodes are: Argentina, ASEAN Centre for Biodiversity, Belgium, Chinese Taipei, Costa Rica, Indonesia, Kenya, Madagascar, Norway, Portugal, and South Africa.

New GBIF Portal and improvements to infrastructure

The GBIF Secretariat has launched the new GBIF portal (www.gbif.org) in October 2013. This new portal addresses the following items:

– Integration of communications and data portals into one GBIF portal
– Removal of arbitrary data limits for the download of data
– Improved country pages highlighting the biodiversity information about and from a country, as well as the country's participant status in GBIF
– Improved data publisher / metadata views
– Improved maps
– Real-time indexing of new / updated biodiversity data
– New public web services that the new GBIF portal is directly using

Some of these improvements will also benefit the ViBRANT objectives in general. The D8.3 is also benefitting from these achievements, because the NPT Startup is already using the improved GBIF web services.

In 2011 the GBIF Secretariat made improvements around implementing data cleaning algorithms to address taxonomic classification errors, improved linkages between scientific species names and common names, and improved geo-referencing processes that enable better matching of records to their intended country of origin. These improvements have addressed the M8.12 as originally stated in the ViBRANT project. Because the GBIF Secretariat made these improvements this milestone was already addressed without using any ViBRANT resources (see ViBRANT year 1 & 2 reports).

Sustainability

The need for a NPT Startup, such as described in the D8.3, has been established by the GBIF Participant Nodes (national representatives) themselves. The NPT has been part of the GBIF work programs from 2009 to 2013. GBIF has invested substantially in the NPT. However, the ViBRANT work package 8 resources have been instrumental and catalytic in developing the actual tool. ViBRANT provided the opportunity to develop the code, and by sharing the Scratchpad development environment and code library, the development cycle was kept short and focused.

With the continuation of the early adoption programme, some development improvements, and some new releases by GBIF after the end of the ViBRANT project, the sustainability of NPT Startup is ensured in the short term. Additional funding and developments are already leveraged through the GBIF community. The most substantial added functionalities are coming from the Benin-INBio project. In addition, GBIF has supported a mentoring project in which Belgium will be investigating the use of the product for two West African countries.

Risk assessment and mitigation

Potential risks	Proposed mitigations
Uptake of the tool During the early adoption program several GBIF Participants identify NPT Startup is not sufficient to run an initial biodiversity information website for a country.	The requirements to make the tool compliant to an initial biodiversity information website for these countries need to be captured. Subsequently addressing these requirements through developments in NPT Startup or by making relevant connections with other tools.
Lack of funds No funds are available to drive new developments for NPT Startup.	With a group of GBIF Participants, raise funds to ensure new developments are possible.
Dependency on Scratchpads NPT Startup relies on Scratchpads; therefore if the future of Scratchpads ever becomes uncertain this directly affects the sustainability of NPT Startup.	Ensure there is enough development capacity within the GBIF community, to continue with development and maintenance in such a case.
Maintenance of the tool At some point in the future the GBIF Secretariat would not be able to provide continued maintenance and support for the tool.	GBIF Secretariat should promote a GBIF Participant to take over the maintenance and support for this tool in the long run.

Glossary of terms

API	Application programming interface
DwC-A	Darwin Core Archive
GBIF	Global Biodiversity Information Facility
NPT	Nodes Portal Toolkit
ViBRANT	Virtual Biodiversity Research and Access Network for Taxonomy

Annex A: The Global Biodiversity Information Facility

The Global Biodiversity Information Facility (GBIF) is an international open data infrastructure, funded by governments. GBIF is an intergovernmental initiative, and its members (usually referred to as Participants) are countries, economies and international organizations collaborating to advance free and open access to biodiversity data. As of 18 November 2013, there are 37 Voting Country Participants, 15 Associate Country Participants, and 38 Other Associate Participants. These Participants span 6 regions, namely: Africa, Asia, Europe, Latin America, North America, and Oceania. A full Participant list can be found here: http://www.gbif.org/participation/list

It allows anyone, anywhere to access data about all types of life on Earth, shared across national boundaries via the Internet.

By encouraging and helping institutions to publish data according to common standards, GBIF enables research not possible before, and informs better decisions to conserve and sustainably use the biological resources of the planet.

GBIF operates through a network of nodes, coordinating the biodiversity information facilities of Participant countries and organizations, collaborating with each other and the Secretariat to share skills, experiences and technical capacity.

GBIF's vision is: *"A world in which biodiversity information is freely and universally available for science, society and a sustainable future."*

Some facts about GBIF
- It provides a single point of access (through this portal and its web services) to more than 400 million records, shared freely by hundreds of institutions worldwide, making it the biggest biodiversity database on the Internet.
- The data accessible through GBIF relate to evidence about more than one million species, collected over three centuries of natural history exploration and including current observations from citizen scientists, researchers and automated monitoring programmes
- More than 800 peer-reviewed research publications have cited GBIF as a source of data, in studies spanning the impacts of climate change, the spread of pests and diseases, priority areas for conservation and food security. About 20 such papers are published each month.
- Many GBIF Participant countries have set up national portals using tools, codes and data freely available through GBIF to better inform their citizens and policy makers about their own biodiversity.

Please find more information about GBIF at: www.gbif.org

Annex B: Additional information about the Nodes Portal Toolkit project

The GBIF Participants already expressed the desire for a Nodes Portal Toolkit project before 2010 (see the different phases of the project below).

The following objectives have been identified for the project:

1. Building a platform for technical exchange by and within the GBIF community;
2. Develop, deploy, extend and maintain biodiversity informatics components for national, thematic, regional uses;
3. Enhance the capacity of the GBIF community to address their priorities by extending the functionality of their biodiversity portals.

The project has identified three key groups of GBIF Participant Nodes:

1. GBIF Participant Nodes that are in need of a web presence;
2. GBIF Participant Nodes that have some ongoing biodiversity portal developments;
3. GBIF Participant Nodes that have developments ahead of the GBIF data portal.

For each of these three groups different questions can be formulated that need to be addressed in the context of the Nodes Portal Toolkit project, namely:

~ *For group 1*: is it possible to develop a generic solution to enable web presence?
~ *For group 2*: How can investments into biodiversity portal developments by other GBIF Participants or partners be efficiently reused?
~ *For group 3*: How can other GBIF Participants and partners make use of experiences?

The D8.3 has been targeting mostly group 1.

The Nodes Portal Toolkit (NPT) went through several phases so far, including:

Phase 0: Formulation of the NPT coordinated project (*Pre October 2010*)

Phase 1: A community coordinated project led by a coordinator from the GBIF community (*Started October 2010 & ended January 2012*)

Phase 2: Development by the GBIF Secretariat of core modules for a Nodes Portal Toolkit (NPT) Startup targeted at group 1 (2012-2013)

Phase 3: Engagement process around NPT Startup, and formulation of the process to address essential questions for group 2 & 3 (2013-2014)

Annex C: NPT Startup break-out group outcomes 12th meeting of the GBIF Participant Nodes Committee

Manuel Vargas, Node Manager of Costa Rica and vice-chair of the GBIF Participant Nodes Committee, provided presentations on the NPT Startup as well as the scope and the results of the break-out group 2 on NPT Startup.

The break-out group 2 had the following scope:
- ~ How to build a NPT Startup network of collaboration and development?
- ~ What kind of resources could be provided by the Nodes and which ones could be supplied by GBIFS?
- ~ Subjects to consider discussing:
    - o Hosting
    - o Internationalization
    - o Documentation
    - o Programming standards
    - o Performance
- ~ What kind of tool do Nodes want?
    - o A tool that only addresses web presence?
    - o Or, a more complex tool but may be more difficult to manage?
- ~ How can we combine NPT Startup with other related developments (e.g. the Integrated Publishing Toolkit)?

The break-out group at the 12th global Nodes meeting had the following results:
- ✓ Suggested tasks/features:
    - o Internationalization (software and documentation)
    - o Performance benchmarking
    - o Ability to host local datasets
    - o Improve documentation jointly:
        - ▪ In different languages
        - ▪ For different platforms
- ✓ How to build a NPT Startup network of collaboration and development?
    - o Peer to peer collaboration (e.g. Mentoring projects)
    - o Identifying funding sources to support capacity building (e.g. Drupal), complementing infrastructure, …
- ✓ From the break-out group there is consensus that NPT Startup is for lightweight content management and IPT for data publishing.

Proposed way forward
- - Working together with the 10-12 GBIF Participant Nodes that have indicated interest in the NPT Startup early adoption programme and set clear timelines and expectations (joint responsibility GBIFS and Nodes)
- - Start process to recommend priorities for development and how development capacity within the GBIF network could be further organized to drive the development and uptake of NPT Startup
- - Develop plan to find funding sources to guarantee sustainability in the uptake and development of the NPT Startup in the long run.

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Presentations on NPT Startup

The following presentations were provided about the NPT Startup at various events:

- 6 October 2013, 12th meeting of the GBIF Participant Nodes Committee, Berlin, Germany - Over view of NPT Startup: current status, planned developments, user requirements by Manuel Vargas
- 5 October 2013, GB20 training course for GBIF Nodes. Module 6A - New GBIF Tools I: 2013 Portal and NPT Startup by Nicolas Noe. http://community.gbif.org/pg/pages/view/36147/.
- 5 October 2013, GB20 training course for GBIF Nodes. Module 6B - New GBIF Tools II: 2013 Portal and NPT Startup by Daniel Amariles. http://community.gbif.org/pg/pages/view/36148/.
- 15 September 2013, the 3rd Conference on Biodiversity Informatics, Shanghai, China – Starting National Biodiversity Information Portal – NPT Startup by Burke Chih-Jen Ko
- 31 April 2013, GBIF mid-term meeting, Copenhagen – Nodes Portal Toolkit Startup by Olaf Bánki, Burke Chih-Jen Ko and Mélianie Raymond
- 18 April 2013, African Nodes meeting, Pretoria, South Africa – NPT Startup by Olaf Bánki
- 14 March 2013, Latin American Nodes meeting, San José, Costa Rica – NPT Startup by Olaf Bánki
- 6 March 2013, European Regional Nodes Meeting, Joensuu, Finland. Informatics Update by Burke Chih-Jen Ko and Olaf Bánki
- 26 September 2012, 19th meeting of the GBIF Governing Board, Lillehammer, Norway – Participating in GBIF – Building up a strong and capable network by Olaf Bánki
- 25 September 2012, Nodes Steering Group meeting, Lillehammer, Norway – Nodes Portal Toolkit project by Olaf Bánki
- 27 March 2012, European Nodes meeting, Belin (Germany) – Development of the GBIF Nodes Portal Toolkit (NPT) by Bruno Danis
- 2 October 2011, 11th meeting of the GBIF Participant Nodes Committee, Buenos Aires (Argentina) – Update of the Nodes Portal Toolkit project by Bruno Danis