

Announcement of Opportunity

Title: Pilot Project to Establish Web Services for Direct Access to NatureServe Member Program Data

Announcement Date: December 1, 2005

Proposal Due Date: January 6, 2006

Award Notification Date: February 15, 2006

Subaward Signature Date: March 15, 2006 (preferably via task order on an existing Data Sharing Agreement)

Project Start Date: Not later than April 2006

Project End Date: All project activities will be completed by April 30, 2007

Award Amount: \$15,000 fixed price per award

Match Requirement: None required

Number of Awards: 2

For additional information contact: Lori Scott, lori_scott@natureserve.org, (703) 908-1877

Submit Proposals electronically via e-mail to: Courtney Ravert, courtney_ravert@natureserve.org

Description of Project

This announcement is an invitation for eligible NatureServe member programs to submit an application for consideration as a pilot under NatureServe's NSF-funded project, "Developing a New Infrastructure for Dynamic Access to Multi-institutional Biodiversity Data". NatureServe will select two member programs to work closely with its staff to install, test, and deploy local Web services that conform to standards developed cooperatively with its network members under the NSF-funded project. Pilot sites will be selected based on their ability to meet minimum eligibility criteria, and preference may be given to programs based on their ability to provide training opportunities for underrepresented populations or to help build institutional capacity.

Responses to this solicitation must be received by January 6, 2006. Pilot programs will be selected and notified by mid-February. The timeline for the pilot project is March 2006 through April 2007. Pilot programs will receive a fixed-rate \$15,000 award as compensation for their participation in the project activities as outlined below.

Upon successful completion of the pilot phase, participating programs may anticipate having the following capabilities:

- Realtime or near-realtime data synchronization with the Central Databases
- Configurable, automated notification of NatureServe Central taxonomic changes (and locally approved application of changes to local database)
- Ability to serve data locally for inclusion in distributed, multi-jurisdictional queries (e.g., query originating from Central Node, but hitting Local Node for more up-to-date information)
- Ability to attract new and different data clients (via Web services offerings)

Criteria for Eligibility

- Must be a U.S. member program

- Must use Biotics 4
- Must be able to install java-based applications in your IT environment
- Must have staff with sufficient time and skills to commit to this project for the duration as listed in this announcement
- Must have a desire to implement Web services locally in order to:
 - share data with partners
 - exchange data with NatureServe
- Must have completed at least one data exchange since installing Biotics and prior to project start (preferably within the last 6 months)
- Must have an active Biotics dataset (making regular, frequent changes)
- Must have the necessary hardware and software infrastructure to host Web services, or be able to obtain them within the specified award amount. This includes:
 - An enterprise license for an RDBMS to use as your publishing database platform (e.g. Oracle or MS SQL Server)
 - Web server software (e.g. Apache or IIS)
 - Server hardware to run both the database and the Web server
- Should need funding in order to implement local Web services
- Preference will be given to programs that meet the NSF criteria for serving under-represented groups such as organizations or universities with significant participation of women, Native Americans, African Americans, Native Pacific Islanders, Hispanics, and Minority-serving institutions such as Historically Black Colleges and Universities, Tribal Colleges, Hispanic-serving Institutions, and community colleges. (See http://www.nsf.gov/od/opp/opp_advisory/oaccrit2.jsp)

Pilot Program Responsibilities

As indicated in the eligibility criteria above, the pilot program must have staff resources with the skill and time to commit to this project. In order to fulfill this project, the program staff will need to complete the following tasks. For each task, the corresponding staff skill/type is indicated below.

Task	Staff skill/type
Install underlying Web services software, e.g. Apache Tomcat, Apache AXIS	IT/Programmer
Install NatureServe Web services package	IT/Programmer
Install publishing database and publishing database schema	DBA/Biotics Administrator/SQL skills
Install Biotics Export Tool	Biotics Administrator/SQL skills
Transfer Biotics data into publishing database	Biotics Administrator/SQL skills

Install security Web services package	IT/Programmer
Install policy store database schema	DBA/Biotics Administrator/SQL skills
Create roles and users	DBA/Biotics Administrator/SQL skills
Establish security policies	Biotics Administrator (no technical skills, but need knowledge of program's security policies for data sharing)
Test connectivity to Web services	IT/Programmer
Test Taxonomic Change Application	Biotics user/Scientist (no technical skills, but need knowledge of program's taxonomic perspective specific to test example)
Install, create, or edit Data Synchronization Rules	Biotics Administrator/DBA/SQL skills (need knowledge of program's data sharing policies and data processing procedures related to Data Exchange with NatureServe)
Test and provide timely feedback on all automated and partially-automated Data Exchange services (Taxonomic Updates & Synchronization)	Biotics User/Biotics Administrator

NatureServe Responsibilities

The NatureServe Internet Data Delivery (IDD) project team will work with the pilot program throughout the project period to ensure that the program staff are able to carry out their responsibilities. This will include providing the necessary technical documentation to guide program staff through the installation and testing steps outlined under the pilot program responsibilities section above. NatureServe will also provide technical support and training via phone, email, and web conferencing as needed during the project period.

Application Requirements

Cover Sheet: 1 Page including...

- Proposal Title
- Member program name
- Proposed project manager
- Contact information including address, phone, and e-mail

Proposal: 5 Pages maximum, including...

- Introduction including reasons for applying for this pilot project, and anticipated member program benefits
 - How will participation in this pilot project help your program fulfill its mission?
 - Which of your partners, beyond NatureServe, do you anticipate will use your program's Web services, and how? (Think in terms of "user stories.")
- Eligibility of the program (address all eligibility criteria)
- Scope of work with timeline (based on Pilot Program Responsibilities above)

Project Resources: 1 page maximum including...

- Proposed budget - Although this is a fixed price award, provide enough detail about expected costs for NatureServe to evaluate the feasibility of your program's participation. If applicable, please document any additional matching resources beyond the fixed price award that your program intends to provide in order to fulfill the duties of this project.
- Proposed staff - A list of staff positions and/or names of staff to be involved in the project, and estimated time allotted to the project.

Additional Information:

- Additional information (such as maps, screen shots, or technical descriptions of existing Web activities) may be provided as appendices.
- Large numbers of appendices, or very long appendices are discouraged. The reviewers reserve the option not to read appendices exceeding 5 pages total.

Formatting and Submission:

- Typeface should be a standard type such as Times Roman, no smaller than 10 pt.
- Margins must be at least 1 inch.
- All proposals should be submitted electronically via e-mail attachment in either MS Word or PDF format. Be aware that sometimes graphics do not transmit well in MS Word format, so it is wise to test compatibility in advance. Images submitted as appendices may be in MS PowerPoint format.
- Hot-links in the text to Web pages for viewing are acceptable. However, NatureServe will not be responsible for downloading portions of the proposal from the Web or from FTP sites.