

Grid Computing for Biodiversity Conservation: Building an Image Database of Resident and Migratory Birds in Ateneo de Manila University

Rafael P. Saldaña, Ph.D.
Mathematics Department
Ateneo de Manila University
Quezon City, Philippines
rsaldana@ateneo.edu

Abstract

Biodiversity (or biological diversity) pertains to the variety of all species on earth -- the different plants, animals and microorganisms, their genes, and the ecosystem that they belong. The use of Information Technology to organize, manage and analyze biodiversity data from various collections and experiments, to allow a more coordinated and systematic approach to the sharing of biodiversity information, is called biodiversity informatics.

Data Grid technologies have proven to be beneficial in biodiversity informatics – in particular, in allowing a systematic approach to the process of discovering, accessing, analyzing and integrating huge amount of biodiversity data.

Because of deforestation and other forms of environmental degradation, the Philippines is now considered a biodiversity hotspot. This presentation focuses on bird biodiversity conservation as an application of Grid computing. In particular, the presentation centers on building an image database (photos and videos) of resident and migratory birds in Ateneo de Manila University and tapping existing Grid infrastructures such as the EUASIA Grid and the Philippine e-Science Grid

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