Nest – A Network Simulation Testbed

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Description

The NEST simulation package developed at Columbia provides a generic framework for simulating networks and prototyping distributed systems. The NEST simulation runs in a single UNIX process, and the NEST monitor runs in a separate process, which may be remote. Simulations are created using the NEST library, a C-language library which runs under the all UNIX variants on VAX and 680x0 processors (SPARC and RT soon). The library provides a simple, high-level message-passing facility among a set of concurrent light-weight processes which simulate a distributed system. Simulations can be interactively monitored and managed using the standard Nest monitor program, which permits dynamic reconfiguration of the simulation. It is possible to create/halt/continue/destroy simulated nodes and links, and to alter their function and parameters, while a simulation is in progress. Multiple monitors at different sites can monitor a single simulation. The monitor is a monochrome SUNView application (an X Windows implementation is under development).

Network access

Both documentation and full sources are available on the Columbia Vax [columbia.edu: 10.3.0.89].

There are four files in the ~ftp/pub directory:

221184 bytes	nest-25-doc.tar Lineprinter formatted documentation.
438272 bytes	nest-25-doc2.tar Scribe and PostScript formatted docs.
339968 bytes	nest-25-src.tar Source for Nest simulation library.
208896 bytes	nest-25-disp.tar Source for user interface display.

Who Can Use the Service

Nest is available without cost to non-profit research and educational organizations which have access to the Internet. Others may order a tape through mail for a cost of $100. by contacting Jed Schwartz at the above address. Nest is made available for research purposes only. No part of the Nest software may be redistributed by itself or as part of any software package, except by express arrangement. For-profit organizations and those without Internet access may order a Nest tape through mail for a cost of $100. by contacting Jed Schwartz at the above address.

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Miscellaneous Information

Please direct technical questions to Alex Dupuy: alex@columbia.edu, (212)854-4290