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Supplementary Material for

bmm227: Using P-GENESIS for Parallel Simulation of GENESIS Models - a Brief Overview

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Reference: This supplementary material belongs to the BMM article:
Hood G (2005). Using P-GENESIS or Parallel Simulation of GENESIS Models - A Brief Overview. Brains, Minds and Media, Vol.1, bmm227 (urn:nbn:de:0009-3-2271).

Article Resources

GENESIS Resources

Datasheet

Article and P-GENESIS Resources

- View *Hello World* Example
- Download Example source code
- Download P-GENESIS 2.2.1
- View P-GENESIS Homepage
- View P-GENESIS Reference Manual

GENESIS Resources

- View GENESIS Homepage
- Download GENESIS 2.2.1 for Windows
- Download GENESIS 2.2.1 for Linux
- Download Modeling Tutorials for Windows
- Download Modeling Tutorials for Linux

- View Installation Guidelines
- View the GENESIS Reference Manual
- View or download The Book of GENESIS, second edition, free internet pdf-version.

Supplementary material datasheet

Overview

- Title: P-GENESIS (Parallel GEneral NEural SImulation System)
- Description: Simulation tools for realistic neural modeling with parallel processors
- Language: English
- Authors: Nigel Goddard and Greg Hood
- Contributors: -
- Affiliation: Pittsburgh Supercomputing Center, Carnegie Mellon University, United States
- Creator: Authors
- Publisher: Authors
- Source: Authors
- Rights: Authors

Application

- Application context: research and education
- Application setting: single-user, course
- Instructional use: tutorial help is recommended
- Time: no detailed specification possible
- Resource type: simulation tool, program, tutorial
- Application objective: realistic neural modeling

Technical

- Required applications: P-GENESIS 2.2.1 and GENESIS 2.2.1, or P-GENESIS 2.3 and GENESIS 2.3
- Required platform: Unix, Linux, or Mac OSX
- Requirements: 1 GHz Processor, 256 MB RAM, 150MB free disk space (rec.)
- Archive: pgenesis.2.2.1.tar.Z or pgenesis.2.2.1.tar.gz
- Target-type: Zip-File
- Target: pgenesis

Requirements and setup instructions

P-GENESIS requires a computing system with two or more processors that are supported by standard GENESIS 2.1 or 2.2 (the processors can be of different types). Before installing P-GENESIS, one must first install GENESIS (see the *GENESIS Tutorial* by David Beeman, this volume), and either an MPI or PVM message-passing library. In order to benefit from parallelization, one must modify a model's GENESIS scripts as described in the article.

For detailed installation instructions, please view the Retrieval & Installation Guide at the P-GENESIS Homepage

Application instructions

Please see the P-GENESIS homepage (http://www.psc.edu/general/software/packages/pgenesis).