

Revised/Updated Version of  
Gearing Up: A Guide to  
Installing RePast

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CBRSS and the John M. Olin Institute for  
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by Lars-Erik Cederman

# Modeling in RePast

- “REcursive Porous Agent Simulation Toolkit”
- RePast is an open-source software framework for creating agent-based simulations using the Java programming language
- Developed by the Social Science Research Computing at the University of Chicago since January 2000: <http://repast.sourceforge.net>
- Modeled on Swarm but easier to use and better documented

# Why RePast?

- Alternatives: Swarm, Ascape, StarLogo...
- Wish list:
  - user-friendliness
  - flexibility
  - performance
  - cumulation
  - support

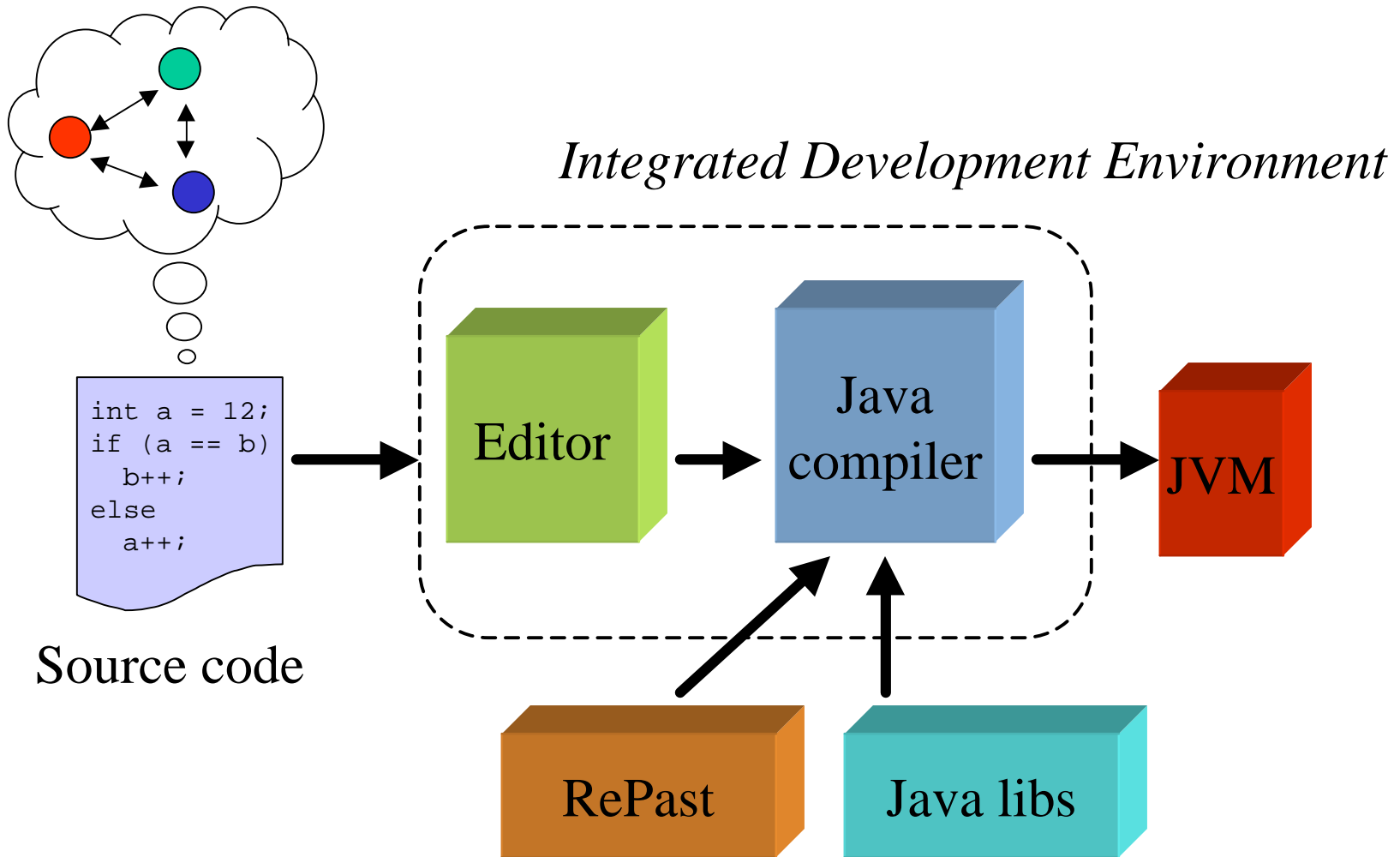
# What does RePast offer?

- RePast provides basic simulation tools:
  - Engine
  - Utilities: interaction spaces, random numbers
  - Graphical user interface including control panels, graphs, 2D-displays, probes and more
  - Routines for replication, data collection and some analysis
  - Sample models

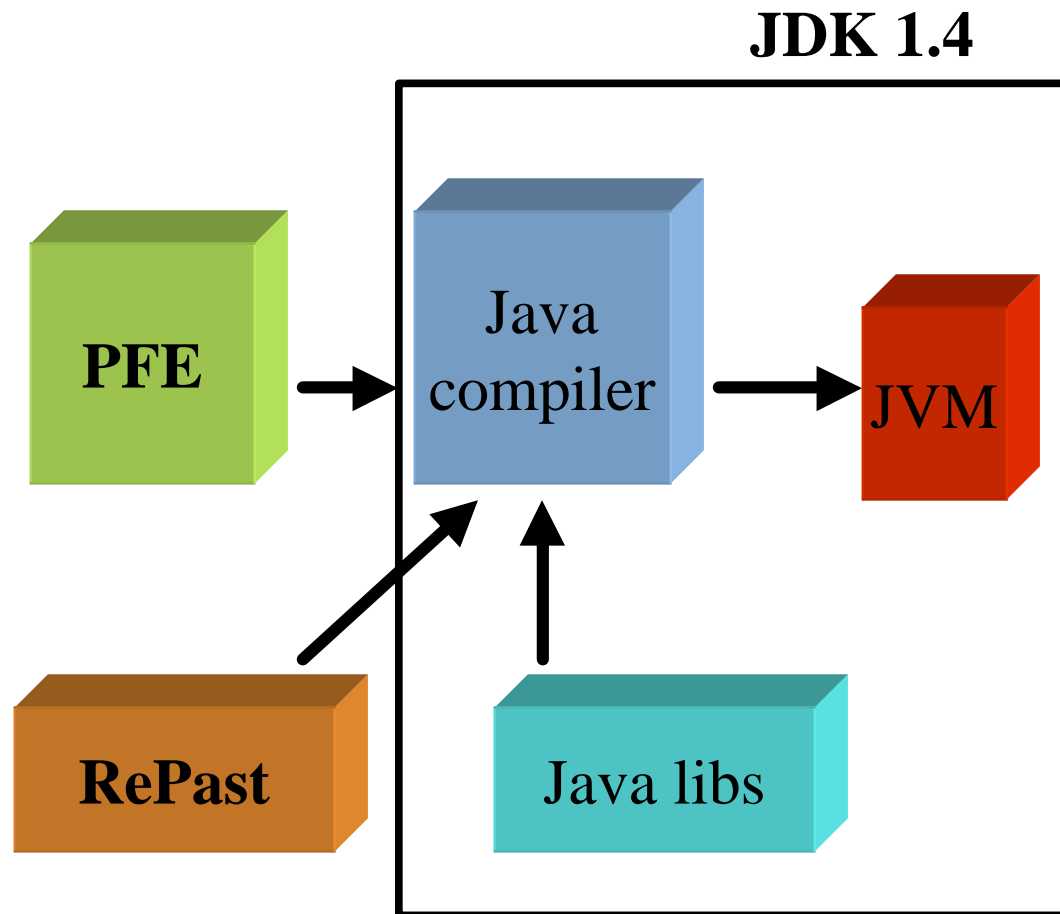
# Installation Procedure

1. Install Java Development Kit (1.4 or higher)
2. Install RePast
3. Minimum Development Environment
  - a) JDK 1.4 or higher
  - b) RePast
  - c) Some form of file editor
4. Can also use an Integrated Development Environment (e.g., Jbuilder)

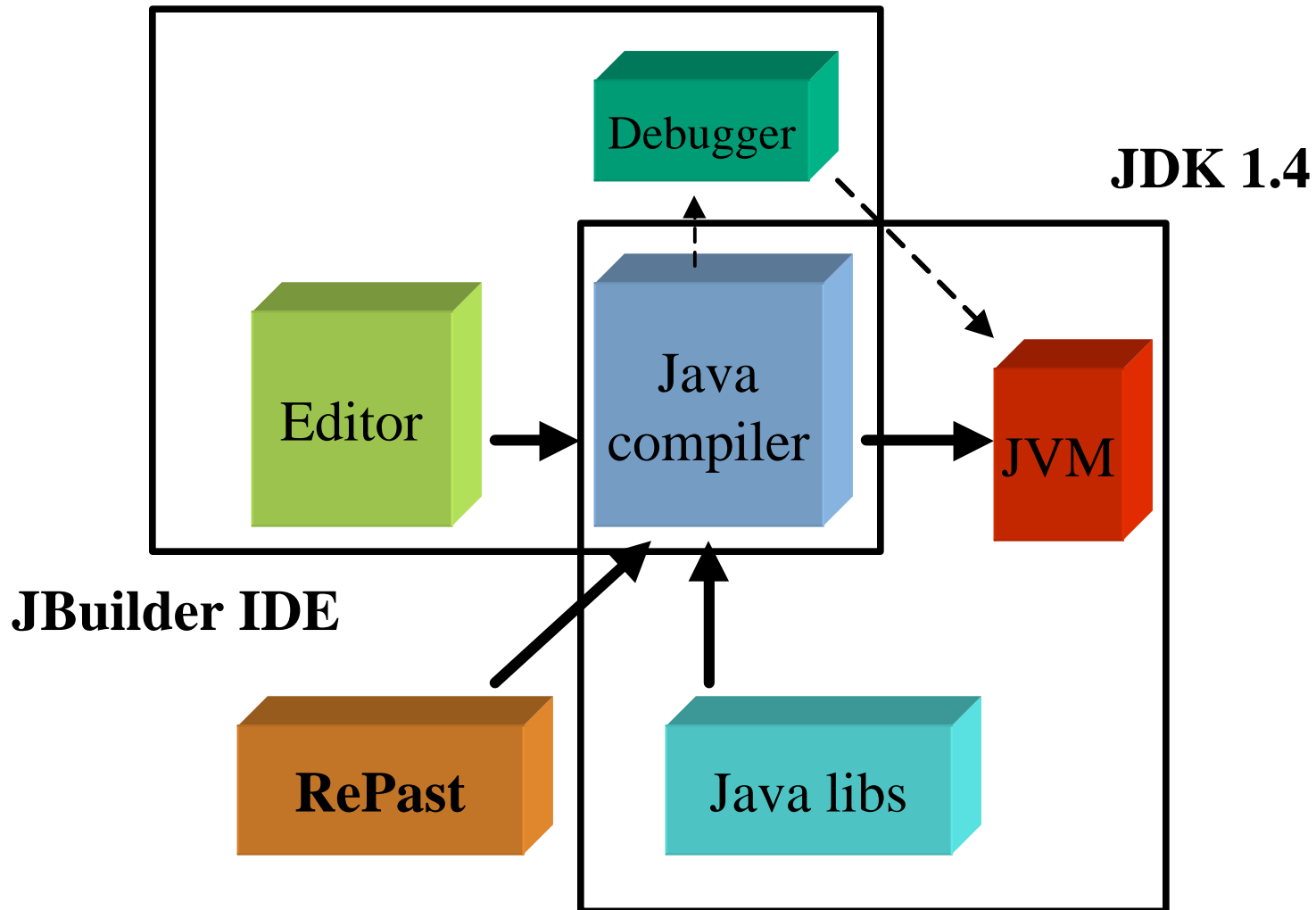
# RePast Modeling



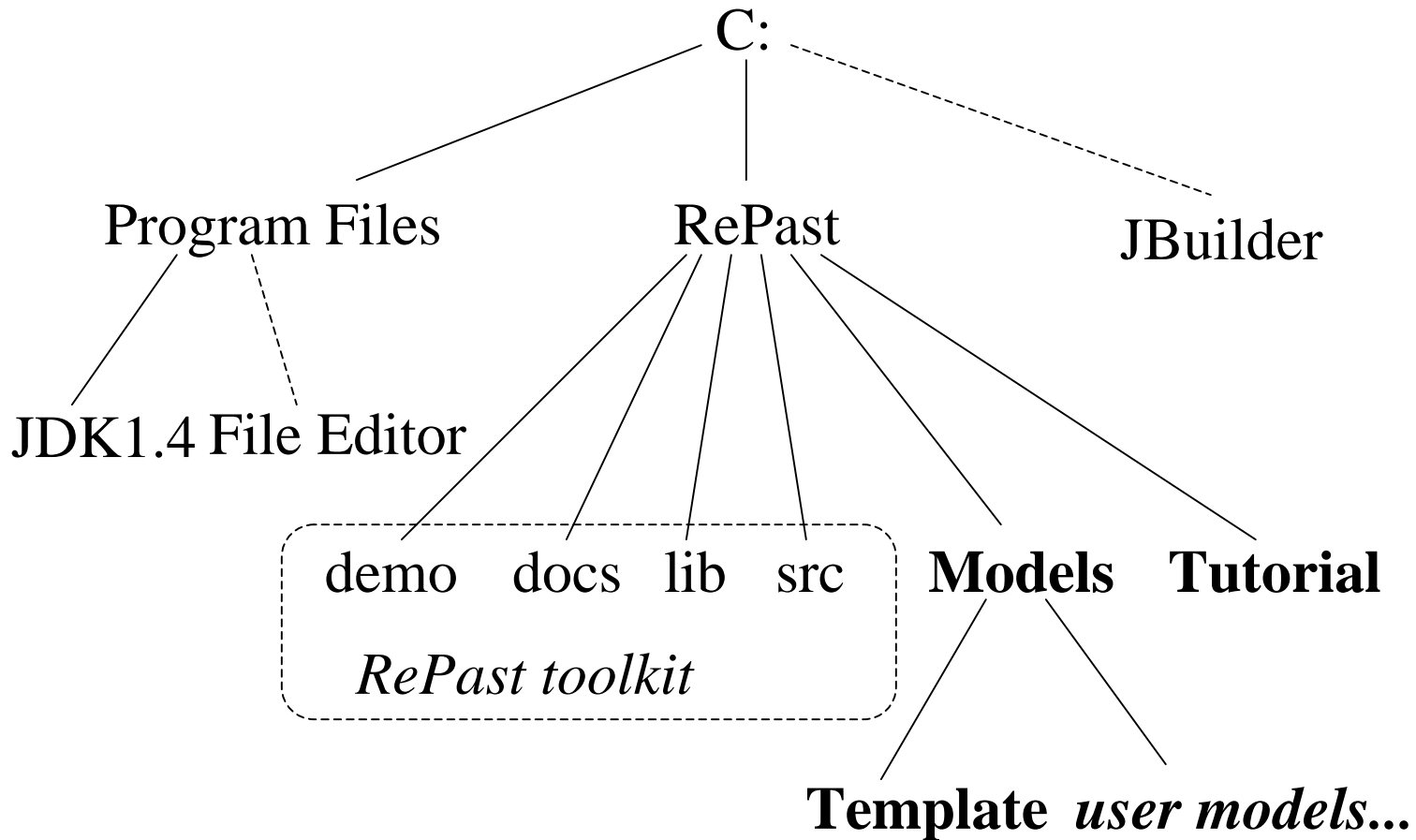
# Minimum Configuration



# Advanced Configuration



# Sample Directory Structure



# How to gear up to program?

- Look into a Java textbook (e.g., Bruce Eckel, *Thinking in Java*, Third Edition, free electronic version available online )
- Visit the RePast web page:  
<http://repast.sourceforge.net/>