

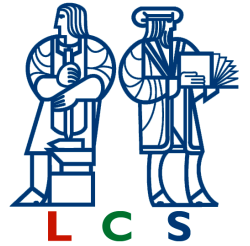


## Project #: Self Updating Software

Barbara Liskov & Daniel Jackson



# Project Overview

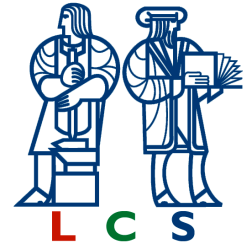


- why self updating?
  - installation: total cost of ownership
  - remote devices without interfaces
  - pervasive computing: mobility & change
- approach
  - automation: minimal user intervention
  - soundness: keep system safe & reliable
  - scalability: millions of objects



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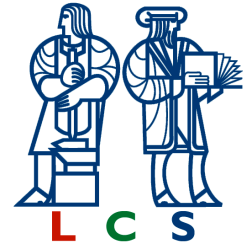
# Progress Through December 1999

- updating objects
  - just-in-time transformation in OODB
  - detailed design complete
- updating configurations
  - model-based autodetection & fix
  - implemented for Java, Windows exe



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## Research Plan for the Next Six Months

- implement object updating
  - for Thor OO database
  - millions of objects, no loss of availability
- develop component checker
  - recent breakthrough
  - abstract simulation of component
  - automatically detect mismatches