Connecting ACT-R to off-the-shelf software

Frank E. Ritter and Rob St. Amant
ritter@ist.psu.edu / stamant@cs.ncsu.edu
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A cognitive model in a box

- User interface evaluation is often ad hoc, difficult, and time-consuming.
- Cognitive modeling within a UTC answers one of these complaints—what about the others?
- We need easier ways to connect cognitive models to existing systems, and more comprehensive tools for model development and analysis.
One vision of the future

The GOMSerciser
(Ritter, St. Amant, & Cornwell, 2001)

(Currently, not available in stores -- or anywhere else)
ACT-R Displays (R. Jones) Belavkin Councill Harrison Bothell

Models: Anderson/Young/Howes/Taatgen/Fleetwood/Gunzelmann/RPI/Salvucci/Peebles/…

BehMod Belavkin Quigley Klein (PSI)

ACT-R/PM - Segman - (Hornof)

Task Descr. ACT-R Tut. 9 iGen

Ind. Diffs. MHP/Scholles Lovett
Doing our part

- We are building ACT-R models that interact with off-the-shelf-applications
- We are designing integrated tools for model development, model execution, and analysis of model execution traces
Interfaces we have known
Analysis of model execution traces
Where do we go from here?

- More sharing
  - Language for ACT-R/EPIC + tasks + environment + . . .
  - Help from authors, keep models as theories public
  - Help from ACT-R central?
  - More sharing with us!

- Steal our Zeitgeist!