WHAT'S NEW IN SOAR 9

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Soar Workshop 29

9.X Releases

- Soar 9.0: Soar-RL
  - Includes reinforcement learning module (Soar-RL)
  - Most stable
- Soar 9.1: Soar-RL + EpMem
  - Includes episodic memory module (EpMem)
  - Beta
- Soar 9.2: Soar-RL + EpMem + SMem
  - Includes semantic memory module (SMem)
  - Beta

New Features

- Over 50 bugs fixed
- Native 64-bit support
  - Focus: compatibility, not features
- Soar 7 mode removed
- Operator conflict semantics tweaked
- Changes ported to jSoar when possible

Build Tools

- Apache ant tool now used for Java projects
  - Faster, more reliable builds
- Visual Studio 2008 support
  - Optimizations updated
  - Dropping VS 2005 support soon
- Linux/Mac build much faster, cleaner
  - Almost no warnings!

Notable Fixes and Features

- :interrupt support re-enabled
- don't-learn, force-learn RHS actions fixed
- States now print a reason when they are removed with verbose enabled
- A number of chunking issues fixed, some involving negations
- Crash bugs, memory leaks fixed
- :template production issues fixed
- Direct input-link I/O functions (fully optimized, embedded kernel) were adding wmes in the wrong phase, corrected to work in input
- New random RHS function to draw random numbers
- Scheduler fixed to allow seamless agent creation during a run
- New SML method to launch a debugger
- Capture/Replay implemented

What to Expect Next

- A simple real-time system demo project
  - All the current ones are in lock-step with Soar
- SVS System, Appraisal
- Steps toward merging betas in to one version
- Robotics tools