Munchkins

A Shell for Distributed Multi-user Games

A Short Presentation

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Multi-User Dungeons

- text-based virtual worlds
- theme usually phantasy, science fiction, etc.
- extensive modification at run-time
- played over the net

Related Commercial Products

- Club Caribe, C 64, Q-Link
- Virtual Places, Ubique (AOL)
- Worlds Away, America Online
- Alphaworld, Worlds Inc.

Differences to Commercial Products

- text-based
- modification at run-time
- audience

MUD-Technology

- client/server architecture
- extremely small client side
- interpreted language running at server site
- limited persistence

Problems

- server often bottleneck
- client/server communication is low-level
- low-level implementation language at server site

Munchkins

- distribution removes bottleneck
- distributed objects allow a subset of Oz values to be transmitted over the net
- high-level implementation language Oz both on server and client side

Current Prototye

- objects become network transparent by inheriting from `Munchkins.object`
- values are network transparent with the following limitations:
  - ◇ no continuations
  - ◇ objects are transparently represented by proxies on the sender site of messages
- constraints are network transparent with the following limitations:
  - ◇ no cyclic graphs
  - ◇ no FD or open record constraints

Advanced Practical Munchkins

- 6 participants, 3 tutors
- start mid October 1995
- end mid April 1996
- two groups
  - distribution group
  - scenario group

Expected Results

- first running distributed MUD on the base of Oz by April 1996
- stable system for distributed computing
- fruitful interaction with PERDIO