EDC Architecture

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Overview

• Conceptual Framework
  – Action Space for construction activity
  – Reflection Space for contextualized information

• Architecture
  – Construction / simulation tools for Action Space
  – Dynamic Hypermedia for Reflection Space

• Implementation
Conceptual Overview
Conceptual Overview

- Action Space
  - Construction
  - Simulation
  - Visualization

- Reflection Space
  - Querying (surveys)
  - Documents
  - Discussions

- Prompting, Triggering

Specifying
Implementation

Action Space

- AgentSheets
- Visual AgenTalk
- SmartBoard

AppleEvents / CGIs

Reflection Space

- AgentSheets
- DynaSites and CGIs
- SmartBoard

AppleEvents / Web Pages
AgentSheets / Visual AgenTalk

- http://www.agentsheets.com
- Distributed agent-based computation using a grid metaphor
- Open environment—can make changes at all levels.
- Can output simulations as Java Applets
Visual AgenTalk
Coupling Action ➔ Reflection

- Simulation can open arbitrary Web page, including CGIs
- Context can be coded as part of CGI
- Coding arbitrary information is possible
Coupling Reflection → Action

- Simulations can read arbitrary web pages
  - Survey results are stored in structured web pages
  - Agents read results out of web pages

- Reflection space can trigger arbitrary activity in Action Space through “Remote Controls”
  - Load correct background image and worksheet