I-Room: a Virtual Space for Intelligent Interaction

An intelligent environment which acts as a knowledge aid to support collaborative teleconferences and meetings

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AIAI, University of Edinburgh

Ai Austin
Virtual University of Edinburgh
I-Room: a Virtual Space for Intelligent Interaction

Low cost, simple setup, mixed-reality meetings spaces
I-Room: a Virtual Space for Intelligent Interaction

Distributed collaborative team support for production and review in the creative industries
I-Room: a Virtual Space for Intelligent Interaction

Operations Centres, Brainstorming Spaces, Team Meeting Rooms, Training and Review Areas
I-Room: a Virtual Space for Intelligent Interaction

Tutorial and commercial spaces
I-Room Introduction

• I-Room provides a 3D virtual space with multiple work zones, designed for collaborative and brainstorming style meetings.

• I-Rooms are used in the I-X research on intelligent collaborative and task support environments.

• The main feature of the I-Room is the link up with external web services, collaboration systems, and intelligent systems aids.
I-Room Applications

- Virtual collaboration centre
- Business teleconferencing
- Team Meetings for project and product reviews
- Product Help Desks
- Design to Product - product lifecycle support
- Environment, building and plant monitoring
- Health and safety at work, disability awareness
- Intelligent tutors, guides and greeters
- Active demonstration pavilions
The I-Room 3D virtual space is linked to a social networking and community knowledge management web portal in OpenVCE.net.

Recent experimental use of the I-Room and OpenVCE for the "Whole of Society Crises Response" (WoSCR) community in the conduct of emergency response and crisis management.

This is intended as a contribution to the wider notions of "The Helpful Environment".
VCE for WoSCR

• Whole of Society Crisis Response Community

• Cognitive Work Analysis of Requirements and Technologies

• Virtual Collaboration Environment:
  – Web-based portal
  – Virtual interaction space
  – Community tools including I-Room
  – Collaboration protocols

• OpenVCE.net
Open Virtual Collaboration Environment

- Web-based Collaboration Portal
  - Drupal CMS
  - Also explored Facebook, Google Groups, Yahoo Groups, Ning Groups, Grou.ps, Joomla CMS
  - Linkups to external web services and gadgets

- Virtual World 3D Space
  - Second Life
  - Opensim (potentially behind a firewall)

- Virtual Collaboration Protocol
  - Standard Operating Procedures
  - FAQ and Tips
  - Protocol (Rob Cross, University of Virginia)

- Community Tools
  - AIAI I-Room – a Room for Intelligent Interaction
  - CMU Catalyst Community Knowledge base
  - Concept Maps, and Experimental 3D Model Visualizations
Welcome to the OpenVCE community portal. All content is community-created, so become a registered user and start contributing!

Forthcoming events

- Federal Consortium for Virtual Worlds Conference 2010
  - 2 weeks 5 days from now
  - contact: Austin Tate

- WoSCR Community - Possible Virtual Iterative Workshop Series - VIWS-4
  - 5 weeks 2 days from now
  - contact: Austin Tate

Current discussions

- OpenVCE envisioned site structure started by Jeff Hansberger, last reply by Austin Tate 28 weeks ago

- The weakest link started by ac, last reply by erapiard 4 weeks ago

- Expt Case 0 H1N1 Forum started by Austin Tate, last reply by Jeff Hansberger 18 weeks ago

What are you doing?

- Austin Tate Meeting Ken Anderson of Project EPIC - see http://sn.im/tweakt

- Austin Tate Writing paper on OpenVCE support to WoSCR for KSCO-2010 http://kasco.info/kasco-2010.html

- Ifuentes Preparing a presentation to the Virginia Local Government IT Executives (VALGITE) for Apr 26 on VOICECE

- What’s happening

  - Ifuentes has updated group VOICECE Group 1d hours ago
  - Resources and VOICECE 2d hours ago
  - Austin Tate has updated I-Zone and I-Room - A Virtual Space for
OpenVCE Portal – Roles of Elements

• Blog – personal web log

• Forum – threaded discussion within community

• Wiki – community knowledge creation and refinement

• Book Pages – edited content and index pages (change by admins and group leaders only)

• Comment – can be added to most elements
Main Page

Return to OpenVCE.net & Community Portal.

Note this MediaWiki facility is an experiment. The OpenVCE.net "Books" are the main knowledge sharing mechanism at the moment.

Contents
1 OpenVCE Facilities
2 Communities
3 Misc.
4 About OpenVCE

OpenVCE Facilities

- Collecting Social Networking Data from Second Life
- Creating SOPs Using a Wiki
- OpenVCE vs. CSCW
- Types of Meeting Space
- Protocol Technology

Communities

- KSCO - Knowledge Systems for Coalition Operations Community
- JOE - Joint Operating Environment Community
- MPAT - Multinational Planning Augmentation Team
- WoSCR - Whole of Society Crises Response Community
  - H1N1 Swine Flu Scenario

Misc.

- All Pages Index
- Wiki Editing Help, Formatting, Links, Images, Tables, Formatting, Images, Wiki Editing Tips
- Image Tests

About OpenVCE

OpenVCE.net (Open Virtual Collaboration Environment) is a project at the Artificial Intelligence Applications Institute (AIAI) within the School of Informatics at the University of Edinburgh. It provides open source and freely accessible facilities to support collaboration in a community, linking a web-based Community Portal with a virtual-world based 3D space.
Links between Web Collaboration Portal and 3D Space

http://openvce.net

http://openvce.net/blog
or use in-world blog roster

http://twitter.com/tawe,#openvce
or use in-world Twitter ID
Virtual Collaboration Protocol

- 7 main phases of the VCP (Rob Cross):
  - identify problem dimensions (asynchronous)
  - agree problem dimensions (synchronous)
  - describe relevant experience per dimension (asynchronous)
  - discuss experience and decide on sub-teams addressing different problem dimensions (synchronous)
  - subgroup work on different dimensions (asynchronous)
  - presentation of solutions (synchronous)
  - solution integration (asynchronous)

- OpenVCE Web Portal supports asynchronous work
- OpenVCE I-Room supports synchronous work
OpenVCE – Community Tools

• I-Room – Space for Intelligent Interaction
• Catalyst – Community Knowledge Base
• Cmaps - Concept Mapping
• Modelling - Experimental 3D Visualizations
• Collaborative Shared Media
I-Room: Mixed-initiative Collaboration

Truly distributed mixed initiative collaboration and task support is the focus of the I-Room, allowing for the following tasks:

• situation monitoring
• sense-making
• analysis and simulation
• planning
• option analysis
• briefing
• decision making
• responsive enactment
Skye Gears: Austin, your voice is noisy and not clear
Sensing and Situation Analysis Planning, Evaluation Option Argumentation Briefing and Decision Making Acting, Reacting and Communication Central Meeting Area
### Issues

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### Activities

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OpenVCE

... open virtual collaboration environment

http://openvce.net

Slides at http://www.aiai.ed.ac.uk/~ai