

I-Room: a Virtual Space for Intelligent Interaction

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



Austin Tate
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 brain storming 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

I-Room Integration

- 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

Austin Tate

- Home
- Messages
- ▷ Blogs
- Forums
- Wiki
- ▷ Events
- ▷ Files
- Images
- Videos
- ▷ More content
- ▷ Create content
- FAQ
- Links
- My profile
- Log out

3D space

teleport now

Access: Chat, Wave, HW, QT
[Setup/Help, Register avatar]
[Terminals, Presenter, Blogger]

Event calendar

April						
S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	



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 erapisardi 4 weeks ago



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

[more](#)

What are you doing?

Austin Tate Meeting Ken Anderson of Project EPIC - see <http://sn.im/tweakt> max 140 characters



Austin Tate Meeting Ken Anderson of Project EPIC - see <http://sn.im/tweakt> 1 day ago [Edit](#) [Delete](#)



Austin Tate Writing paper on OpenVCE support to WoSCR for KSCO-2010 <http://ksco.info/ksco-2010.html> 2 days ago [Edit](#) [Delete](#)



Ifuentes Preparing a presentation to the Virginia Local Government IT Executives (VALGITE) for Apr 26 on VOICCE 3 days ago

Search this site:

Search the Wiki:

I-Room
Concept Maps Second Life
QOC Shared Media I-
Zone QOCTale Lounge

Who's online

There are currently 1 user and 6 guests online.



Austin Tate

Latest wiki updates

- PMESII-Tools 3 weeks 6 days ago
- PMESII-Tools 3 weeks 6 days ago
- PMESII-Tools 4 weeks 1 day ago
- VOICCE 6 weeks 2 days ago
- Main Page 6 weeks 3 days ago

[more](#)

What's happening



Ifuentes has updated group VOICCE Group 14 hours ago



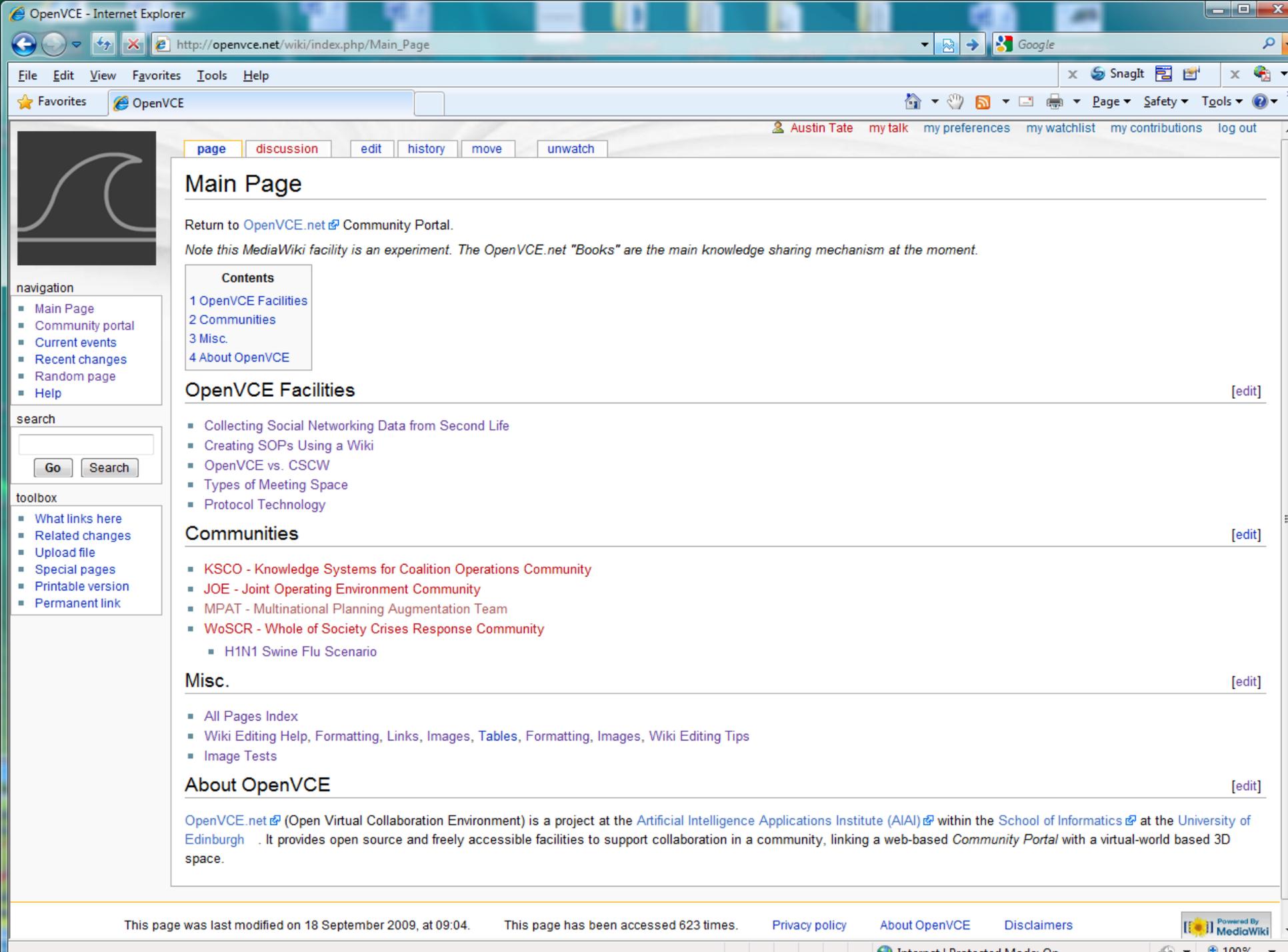
Ifuentes has updated VOICCE Resources and VOICCE 14 hours ago



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



page discussion edit history move unwatch

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

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 - [Current events](#)
 - [Recent changes](#)
 - [Random page](#)
 - [Help](#)

search

- toolbox
- [What links here](#)
 - [Related changes](#)
 - [Upload file](#)
 - [Special pages](#)
 - [Printable version](#)
 - [Permanent link](#)

OpenVCE Facilities [edit]

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

Communities [edit]

- [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. [edit]

- [All Pages Index](#)
- [Wiki Editing Help, Formatting, Links, Images, Tables, Formatting, Images, Wiki Editing Tips](#)
- [Image Tests](#)

About OpenVCE [edit]

[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.







Sandbox

Venue
Amphitheatre

I-Zone B

Expo Pavilion

Project
and
Team
Suites

Project
Space

Orientation Area

Central Plaza

Hill Top
Meeting Spaces

I-Zone A

OpenVCE

... open virtual collaboration environment

Info: Information on
Info: Information on
Info: Information on
Info: Information on

"Whole of Society" Crisis Response
Community of Interest

open
COMMUNITY OF INTEREST
ASSISTANCE



Small black sign with white text, likely providing event details or contact information.

Small black sign with white text, likely providing event details or contact information.



Links between Web Collaboration Portal and 3D Space



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

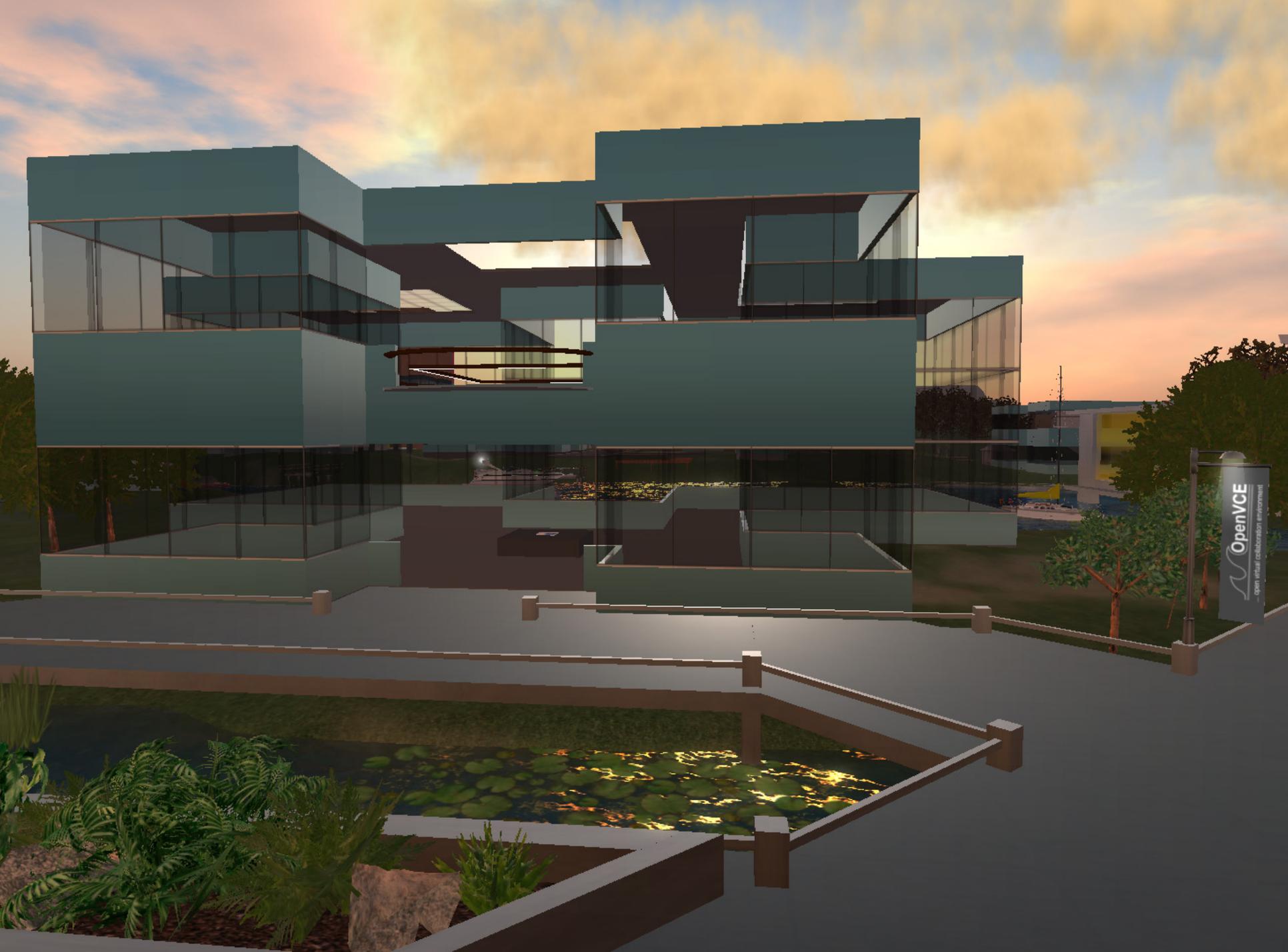
OpenVCE – Community Tools

- 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



OpenVCE

open virtual collaboration environment



I-Room: A Virtual Space for Intelligent Interaction
An intelligent environment which acts as a knowledge-driven support, collaborative teleconferences and meetings.



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President, VCE
AAA, University of Edinburgh

Diana Grizot
Frery Broome

WorkingRelationships
Deb Quintessa

OpenVCE
AI Austin

Tonito Alderson
Sato Michinaga

RL <-> SL Scripter
AI Supercharge

Vue Associate
SP Pizzicato

Honda SL Design Team
JohnFrej Herzfeld

Light Sequent

Academy of HRD
Rachelle Munro

"Relay for Hire"

Member
Pamela Varthader

Member
Joelle Yalin

Member
Joelle Yalin

isi help desk
shamblesguru V

Innovator
Serious Starsider

Open University UK
Gardy Flux

OpenVCE Event Reception

Acknowledged

Chat Relay

Anders Wildcat

Anders Wildcat

Member
ED Czavicevic

Team A

Clear Clickers

I-Room Helper (off)

Team A

Anders Cronstam

Anders Cronstam

AD OFF

AD OFF

aiiaustin (Ai Austin): #openvce I-Room Helper and I-Chat linkup now work to I-Zone rather than previous I-Room

aiiaustin (Ai Austin): #OpenVCE MEET-4 strats at 2:30pm EDT for event reception - noSL Voice in Use - Text Only

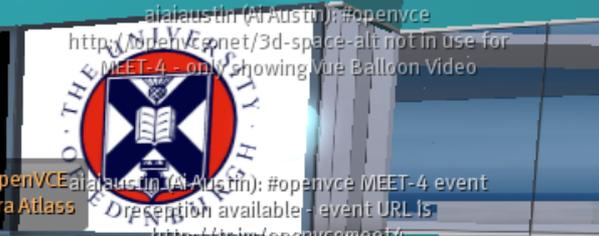
aiiaustin (Ai Austin): #openvce http://trim.ly/3d-space-alt not in use for MEET-4 - on showing Vue Balloon Video

aiiaustin (Ai Austin): #openvce MEET-4 event presentation available - event URL is http://trim.ly/openvcemeet4

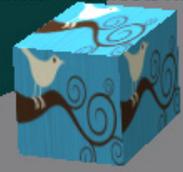
aiiaustin (Ai Austin): #openvce 3d-space-alt feed will be switched off to allow use of servers for harmonie Web tests for MEET-4

aiiaustin (Ai Austin): #openvce MEET-4 now starting at http://trim.ly/openvcemeet4

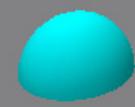
- OpenVCE Ai Austin
- Vue Associate SP Pizzicato
- OpenVCE Brooks Appletor
- OpenVCE Karma Luckstone
- OpenVCE Jeff D Arida
- OpenVCE Skye Gears
- OpenVCE Aura Atlas
- OpenVCE Keg Runner



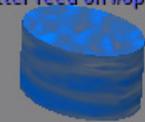
Twitter - SLTweets HUD



Twitter Status - #openvce



Twitter feed on #openvce



Skye Gears: Austin, your voice is noisy and not clear

Stand Up

Planning, Evaluation
Option Argumentation

Briefing and
Decision Making

Central
Meeting
Area

Sensing and
Situation Analysis

Acting, Reacting
and Communication

Second Life File Edit Window Team A | OpenVCE

http://easdale.aii.ed.ac.uk/teamA

Search this site: Search
 Search the wiki: Search

OpenVCE
open virtual collaboration environment

Virtual Collaboration Environment Experiment Team A

Home My Profile Content Wiki Log Out

About OpenVCE Privacy Policy Contact us

Team A

View Edit Revisions

No public posts in this group.

Collaboration Facilities

- Team E-mail: Send an e-mail to the team
- Current team member roles
- Team protocol: the Virtual Collaboration Protocol (VCP)
- Team protocol: video introduction (IM4V and WMV) - download [backup 1] [backup 2] [hampton.gov users local link]
- Team 3D Space: I-Zone located at: <http://slurl.com/secondlife/VCE/128/80/22> [Chat Applet]
- Doodle Polls [none]
- Post personal blog entry
- Team Wiki

Attachment Size

categorized dimensions.jpg 934.5 KB

VCP Progress: Overview

Case: Reindeer Flu

[Help: SOP]

VCP Task	Help	Completed
Before Meeting 1:		
Process coordinator: introduce yourself; communicate case to team; introduce individual problem map	SOP	✓ done
Team members: complete individual problem maps	SOP	✓ done
Process coordinator: organize team meeting; create draft integrated problem map	SOP	✓ done
Meeting 1:		
Process coordinator: welcome	SOP	✓ done
Team: introductions; discuss and agree integrated problem map	SOP	✓ done
Process coordinator: lay out timeline; reference process norms	SOP	✓ done
Team: agree project roles	SOP	✓ done
Before Meeting 2:		
Team members: complete individual experience matrix	SOP	✓ done
Process coordinator: organize team meeting; generate experience slides (from accountability matrix)	SOP	✓ done
Meeting 2:		
Process coordinator: reference discussion norms; introduce the problem dimension solution template	-	□ done
Team: discuss individual experiences (by dimension)	-	□ done
Team: discuss and agree subteams	SOP	□ done
Case planner: complete accountability matrix	SOP	□ done
Case planner: generate empty solution pages (from accountability matrix)	SOP	□ done
Before Meeting 3:		
Gatekeeper: monitor progress	-	□ done

3D space

Teleport now

Access: Chat, Wave, HW, QT [Setup/Help], Register avatar]
 [Terminals, Presenter, Blogger]

Team A

- This is a closed group. The group administrators add/remove members as needed.

My groups

Not a member of any groups.

Who's online

There are currently 7 users and 1 guest online.

- admin
- gwicker
- ebohiman
- acusson
- jhsanberger
- and 2 others

Second Life

VCE: L31, 55, 22 (PG) - I-Zone

face & Phone

reach face-to-face or phone when it's related to experiment

face-to-face or phone you contacted enough time estimate of existence of why communication

Problem Dimension #1

- COMMUNICATIONS - Public communication about the new status of the flu -> Check with all major entities in the state to see what plans they have in place to deal with potential flu. How do teams understand the PR/ET for their own plans to deal with potential flu in the event of a potential pandemic? -> Identify common themes back to the PR/ET for their own plans to deal with potential flu in the event of a pandemic. -> If the pandemic comes to what are the communication protocols and processes about the potential pandemic? -> Identify the best case public approach. -> How communication could improve, structure, process, etc.

Knowledge/Skills

OpenVCE Skye Gears
 OpenVCE Jeff Reanimator
 KarenM Elman
 OpenVCE ac Eberhardt
 DJ Edenflower
 OpenVCE PerigenTechnologies Cowbeam
 We Associate Frog Zanzibar
 I-Room Helper (off)

OpenVCE Presenter v2.1: Now showing http://easdale.aii.ed.ac.uk/tmp/ac_Eberhardt/VCP-Team-Experience/slide0.html

Local Chat Say Gestures

Communicate Fly Snapshot Search Build Map Mini-Map

Issues

Description	Annotations	Priority	Action
Consider how to handle newcomers		▼ Normal	▼

Activities

Description	Annotations	Priority	Action
▼ hold-meeting I-Room-Demo		▼ Normal	▼ Refine using hold-meeting
▼ start-meeting I-Room-Demo		▼ Normal	▼ Refine using start-meeting
welcome-participants I-Room-Demo		▼ Normal	▼ Done
note-apologies I-Room-Demo		▼ Normal	▼ Done
agree-end I-Room-Demo		▼ Normal	▼ Done
agree-previous-minutes I-Room-Demo		▼ Normal	▼ Done
▼ address-action-items I-Room-Demo		▼ Normal	▼ Refine using address-action-items
discuss-action "Davie Munro" "Obtain Security Service Input"		▼ Normal	▼
discuss-action "Ai Austin" "Read Ops Pineapple Briefing"		▼ Normal	▼
address-agenda-items I-Room-Demo		▼ Normal	▼
discuss-any-other-business I-Room-Demo		▼ Normal	▼
finish-meeting I-Room-Demo		▼ Normal	▼
setup-next-meeting		▼ Normal	▼



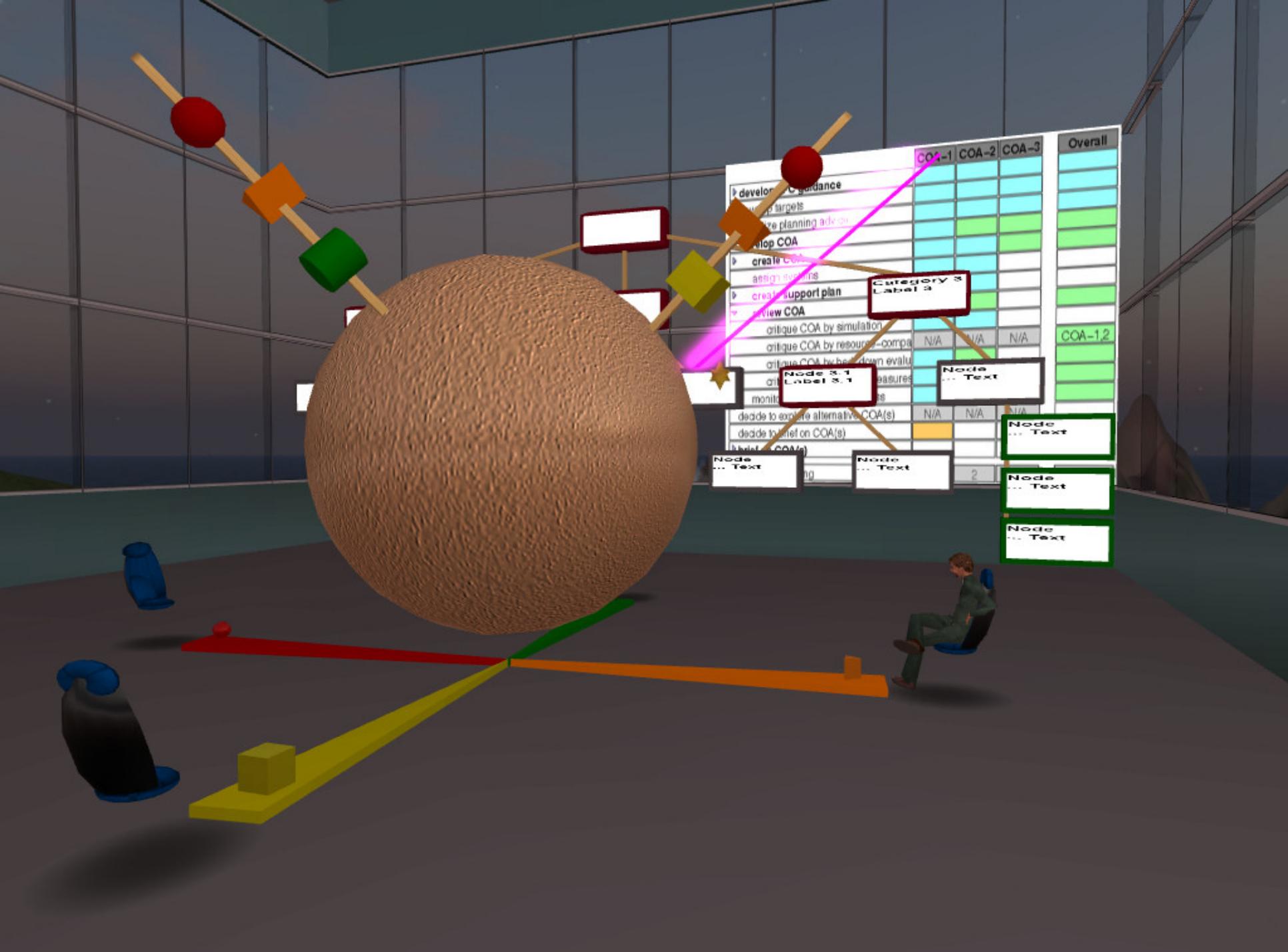
Issues

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discuss-any-other-business I-Room-Demo		▼ Normal	
finish-meeting I-Room-Demo		▼ Normal	
setup-next-meeting		▼ Normal	

- Done
- N/A
- Escalate to Cabinet Office
- Pass to MoD
- Pass to OGD
- Delegate to Local Government
- Delegate to Emergency Services
- Delegate to Security Service
- Carry to next meeting



	COA-1	COA-2	COA-3	Overall
development guidance				
define targets				
define planning actions				
stop COA				
create COA				
assign resources				
create support plan				
view COA				
critique COA by simulation				
critique COA by resource-compare	N/A	N/A	N/A	COA-1,2
critique COA by breakdown evaluation				
critique COA by resource measures				
monitor COA				
decide to explore alternative COA(s)	N/A	N/A	N/A	
decide to implement COA(s)				
implement COA(s)				

Category 3
Label 3

Node 3.1
Label 3.1

Node
... Text

Node
... Text

Node
... Text

Node
... Text



... open virtual collaboration environment

<http://openvce.net>

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