

Virtual Worlds in Government: Uses, Challenges & a Prototype

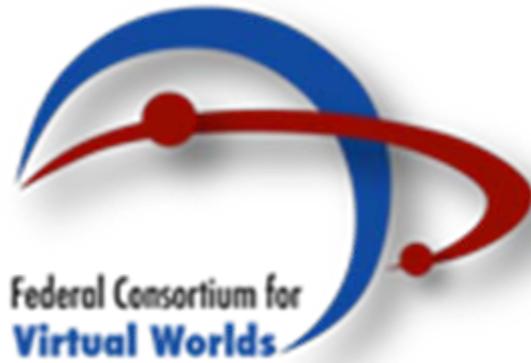
Paulette Robinson, PhD

FISSEA Conference



“A global learning community for government’s most promising information leaders.”



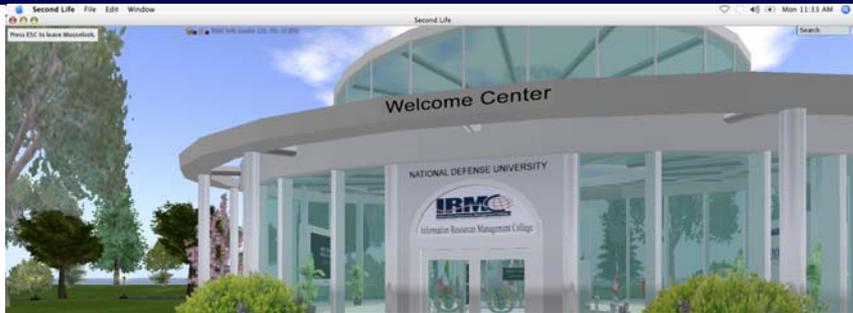


- **History**
- **Purpose**
- **Working groups**
- **Communication channels**
 - <http://www.ndu.edu/irmc/fedconsortium.html>
 - Brainkeeper wiki
 - IRMC Info Leader
- **Federal Virtual Worlds Events**
 - Annual April Conference (April 23-24)
 - Guest speakers

- 1. Information Delivery (e.g., NOAA, NASA, CDC)**
- 2. Meetings (IRM College Government Center)**
- 3. Education and Training**
- 4. Prototyping (facilities)**
- 5. Analytical work spaces (individual and group)**

- **Over 100 virtual worlds in existence**
- **Most common in the government**
 - Second Life
 - Forterra (built on Olive platform)
 - Protosphere
 - 3DXplorer
 - Active Worlds
 - Open Sim
 - Qwak (build on Open Source Croquet platform)
 - Nexus (National Guard)
 - Real World (DARPA)

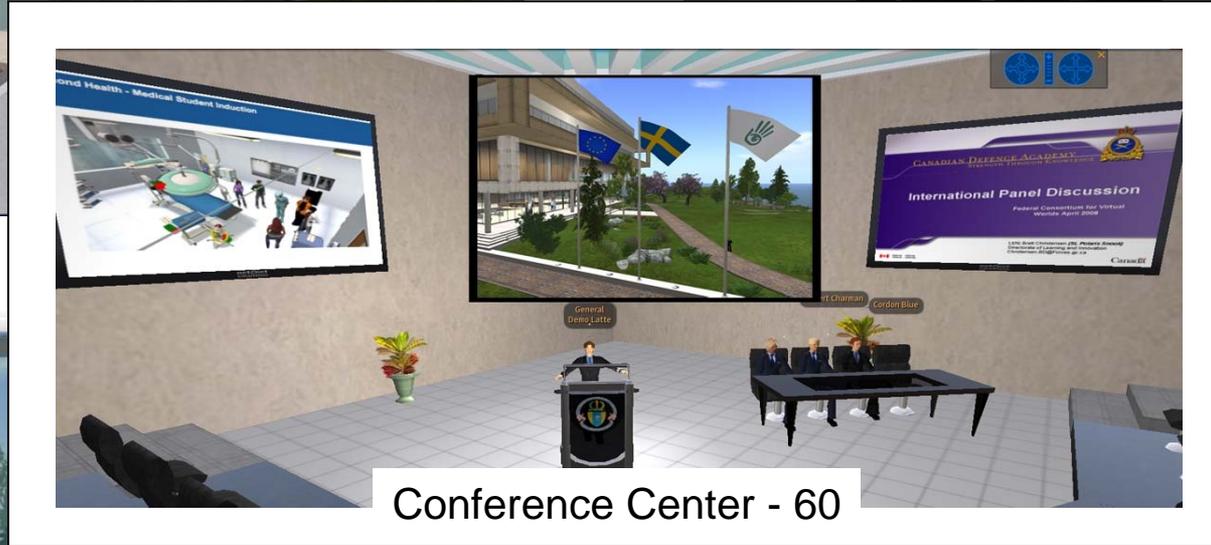
IRM College Second Life Government Center



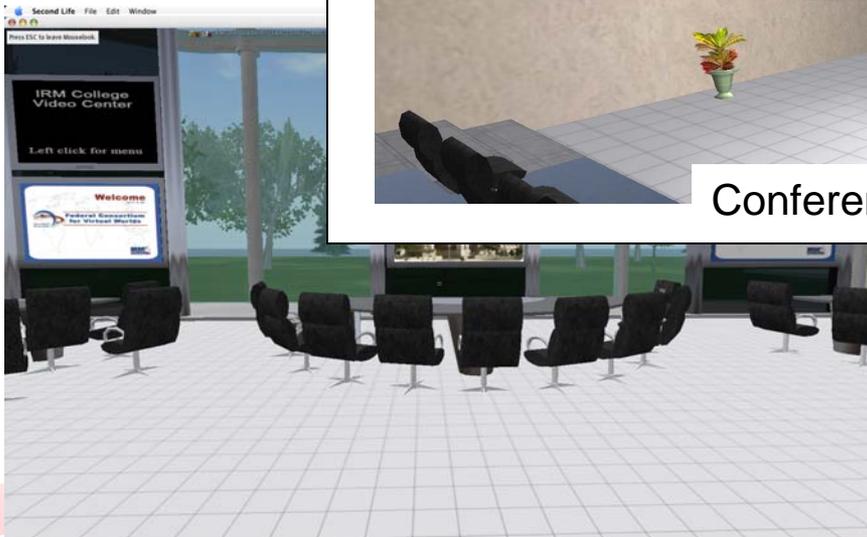
Welcome Center



Meeting Rooms
25



Conference Center - 60



Crisis Center



Auditorium for 220 (in June 08)

- **Collaboration across agencies**
- **Collaboration from anywhere**
 - Teleworking
 - Collaborative work projects
 - Education and training
 - Continuity of Operations
- **Synchronous Communication**
 - Text chat
 - Voice
 - Body movement
 - Desktop sharing
- **3-D representation of objects**
- **Intelligent agents and bots**
- **Avatar personalization**
- **Presence and Transference**
- **Can be fun**

- **Emerging Technology**
- **Learning Curve: Movement and actions are not intuitive**
- **Client on agency/organization desktop image**
- **Security (working across agencies)**
 - Avatar level
 - Network level
- **Content**
 - Cost of development
 - Ability to share content
- **Worlds are not interoperable**
- **Identity**
- **Privacy**

Problem: Need for secure multiagency access to virtual worlds

- **Need for government “trusted source” hosting of virtual worlds**
 - Secure government network (by government for government)
 - E-authentication level 2—identity of users controlled
 - Tested source of client software
 - Levels of access
- **Two virtual world vendors selected for prototype**
 - Protoshpere—IRMC CoP for CFO Community
 - Forterra---IRMC develop Education simulation and role play
- **Enables Collaborative Projects**
 - Shared 3D Content Repository
 - Software development pool

- **Provide a secure digital “place” for multi-agency work**
- **Establishes and controls identity of participants**
- **Takes advantage of economies of scale**
 - Cost of software
 - Avoids unnecessary duplication of resources
- **Can share 3-D content across government in a repository**
- **Can share costs in developing functionality for the benefit of all government.**
- **Reduce travel costs for meetings, training, education, etc.**
- **ETC.**

- **Vendor integrating e-authentication**
- **Creating policies and procedures that can be used across agencies**
- **Costing Model**
- **E-authenticating across government for projects**
- **Sharing content across agencies**
- **Facilitating joint funding across agencies**
- **Persuading CIOs of Security**
 - Open network ports for prototype virtual worlds
 - Load virtual world clients on desktop images
- **Etc.**

Paulette Robinson. PhD

Asst Dean for Teaching, Learning, and Technology

robinsonp@ndu.edu

202-685-3891

Information Resources Management College

National Defense University

Washington DC

Federal Consortium for Virtual Worlds:

<http://www.ndu.edu/irmc/fedconsortium.html>