

Mission Rehearsal Central

With Distributed Interactive Simulation & Crowd Simulation with Behavioral Animation

Custom Server and Client modules using the Raku DIS Component integrate MRC with Computer Generated Forces and Crowd Simulation. Display your CGF and our crowds in an online world and send Live (man in the loop) entities to a DIS scenario.

Mission Rehearsal Central is presently deployed across the US DoD and Canadian DND in both training and operational roles. The platform is maintained on both classified and unclassified networks.

Geospatial content can be created in Sextant or use your existing OpenFlight™ files. Simply convert them to VRML using translation software and import the scene to Sextant. MRC 3D scenes created in Sextant can include hot-links to:

- Applications (Word, PowerPoint, etc)
- Images (jpg, gif, tif)
- Network addresses

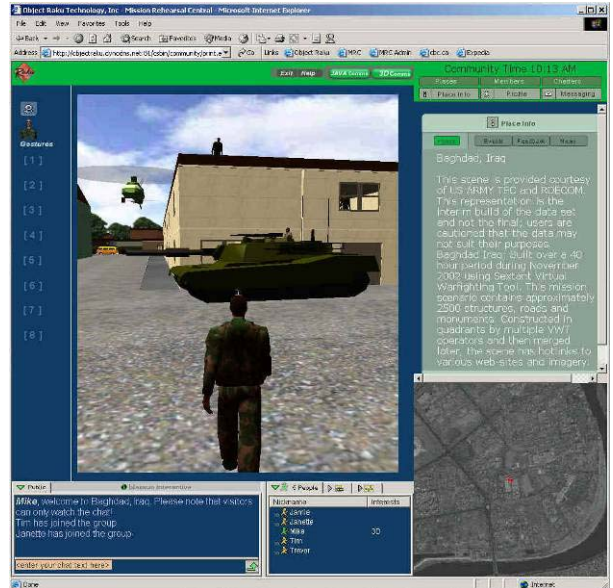
Hardware requirements for MRC are modest at Pentium 4 with 512 MB RAM recommended for configurations up to 500 concurrent users. MRC runs on top of Apache server or Windows 2003 Server. Up to 100 separate worlds can be loaded into the platform for user selection.

The MRC server engine is mature and has been run successfully with over 10,000 concurrent users. For heavy volume, sophisticated load-balancing mechanisms can be configured.

Mission Rehearsal Central allows web-based collaboration in 3D space from any internet or network access. With the addition of MRC-DIS, this reliable and comprehensive platform can be used effectively for training and simulation.

MRC-DIS is a web-based interactive display engine. MRC can be connected to any DIS controller or may be purchased with Raku DIS Component Package. The Raku MRC-DIS Component Package is DIS/HLA gateway ready.

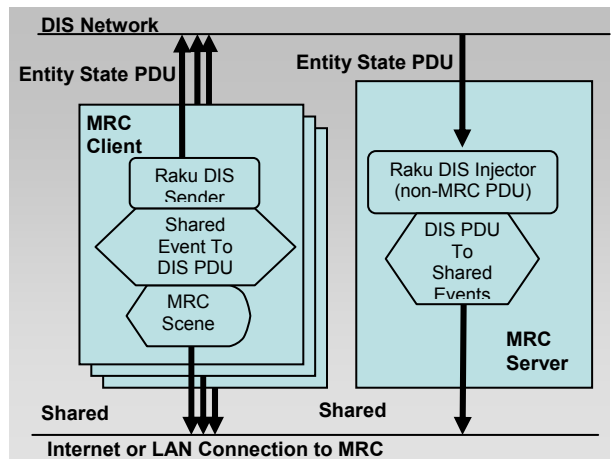
Place
Object Raku Technology
Object Raku Technology - 1
Shughart Gordon MOU site
Hohenfels CMTC
Cochise County, Arizona
WainwrightUOTV
Cityscape III
RakuVillageC
EducationalBuilding
RakuVillageJ
Harbour Scene
Live Fire Zone
Edison Field, Anaheim, CA.
Mountain Bunker Complex
JMR Tower - Subway
DRDC-Ottawa
Norfolk Harbor
WAB
Warminster, England
Camp Lejeune MOU
Camp Pendleton MOU
Huntsville Alabama
Qualcomm Stadium
Fort Drum MOU site



Above: Users interact and navigate in the 3D world.

At left: MRC can host up to 100 different 3D worlds. Administration options allow for different access levels to be granted to each individual user for each world. Scenarios that contain content unsuitable or too advanced for some users, students, or trainees can be blocked.

Below: The schematic shows the MRC and DIS component interaction.



Sextant Crowd Authoring Module

Use Sextant-created worlds in web-based distributed interactive simulation (DIS). Raku DIS runs in a web browser and can be easily customized for your application via the API.

Sextant is an authoring tool for scenes, models, damage levels, as well as - smoke and fire effects.

Sextant incorporates the AI.implant engine by **Bio|Graphic**

Sextant now offers full access to crowd animation and behaviour through the integration of BioGraphic Technologies' AI.implant. AI.implant is the industry leader in crowd animation and behaviours. Configured as a plug-in to the Sextant authoring tool, users can establish the crowd population, locations, paths and behaviours. Export your detailed geospatial terrain along with crowd features for use in the simulation. The AI.implant runtime brain - integrated with Raku DIS component - solves generating real-time crowd behaviours.. The Sextant-MRC-DIS-Crowd combination is tailor-made for your urban training requirements.

Sextant to Crowd to MRC-DIS

Top Left: Create Geospatial 3D database in Sextant's traditional 2D/3D split view.

Top Right: Scene with Sextant authored AI.implant crowd in MRC-DIS

Bottom Left: Output via Sextant Crowd Authoring Module export window

Bottom Right: Tweak Crowd Behaviours in AI.de

