



DefenseWeb Visualization Ideas

Federal Consortium for Virtual Worlds Conference 2010

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DefenseWeb Overview

Our mission is to improve the quality of life and well being of service members, veterans and their families through innovative technology solutions.

- **Founded:** 1998
- **Parent:** Part of Humana Military Services Group
- **Headquarters:** San Diego, CA
- **Offices:** Washington DC and San Antonio, TX
- **Staff:** 180 professionals
- **What We Do:** Build custom software for the DoD
- **Customers:** 50+ customers across Army, Navy, Air Force, OSD
- **Virtual Worlds:** Second Life, Forterra and Flash-based virtual world implementations for Army FMWRC and IMCOM



Army Gold Using Adobe Flash



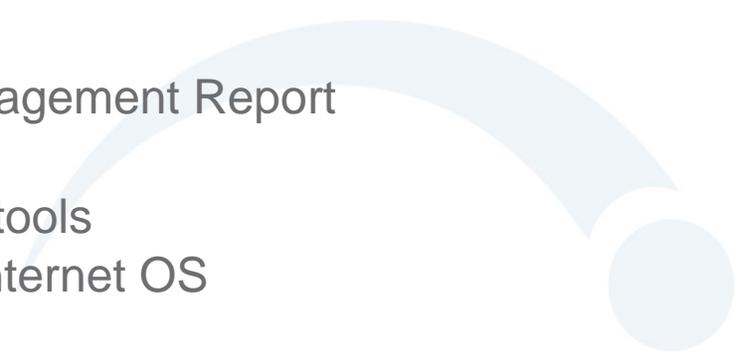
Army OneSource Using Second Life





Visualization Ideas With Glasshouse

- Web Analytics data
 - Advertising results
 - Usability trends
- Healthcare trend and prediction data
 - Suicide
 - Post Traumatic Stress Disorder
 - Depression
 - Traumatic Brain Injury
- Data mining tools
 - Family Advocacy
 - Army Community Service Management Report
- Next generation web development tools
 - Visualization web service for Internet OS





PTSD Prediction - Data Complexity

- R&D prototype done by DefenseWeb for a DoD healthcare customer
- Can an analytic system predict PTSD prior to a positive DSM IV diagnosis of PTSD given four data streams on DoD active duty beneficiaries?
 - Referral information
 - Claims information
 - Limited hospital encounter information
 - Pharmacy information
- Analytic model was able to predict at +90% accuracy
 - As assessed by similar analysis by behavioral health clinician
- But, two problems existing in taking the prototype to a developed system/tool:
 - How and what to tell the beneficiary?
 - How to prove to the non-analytic clinician that the prediction is accurate? **Visualization tools may help here**
- Now looking into formal medical R&D project around higher more problematic issues such as suicide and depression



DefenseWeb

On Time.
Within Budget.
Beyond Expectations.