

Simulation 2.0

Revolutionary Changes in Military Training and Beyond

Produced by

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Simulation 2.0: Revolutionary Changes in Military Training and Beyond

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Approved for Public Release.

Security and OPSEC Review Completed: No Issues.

Training Modes

LIVE

CONSTRUCTIVE



VIRTUAL



GAMING





One Million Soldiers

Regular Army: 507,082

Army Natl Guard: 333,177

Army Reserve: 189,005

Total: 1,029,264







Training One Million Soldiers

1,000 soldiers/event X 1,000 events/year or

100 soldiers/event X 10,000 events/year or

10 soldiers/event X 100,000 events/year

To provide a single training event in a year

Millions Served





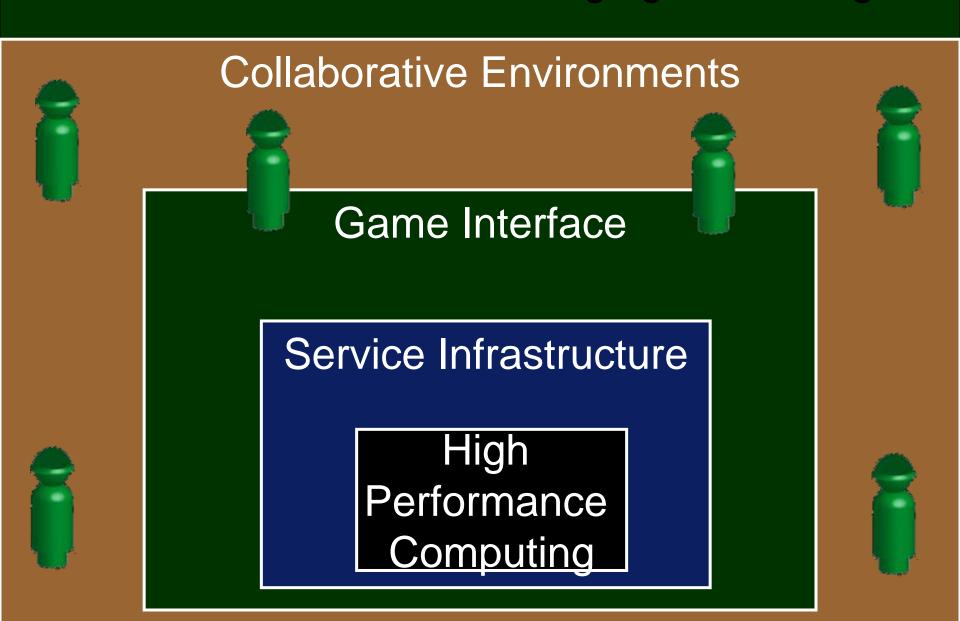


47 million/day

130 million/day

635,000/day

Leveraging Technologies



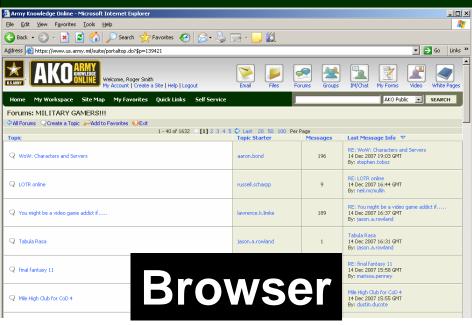
Simulation as a Service

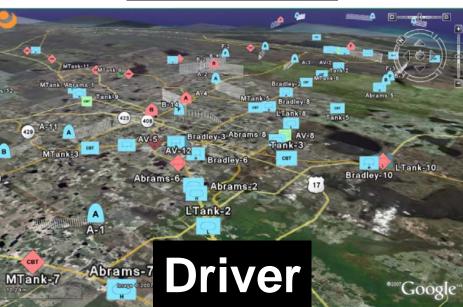
- Training is an event that is supported by technology
- The technology needs to become an accessible and extensible service
- Simulation systems and tools need to be accessible when the customer needs them, not when the provider can fit the customer in

Military Serious Games



Desktop Interface Options







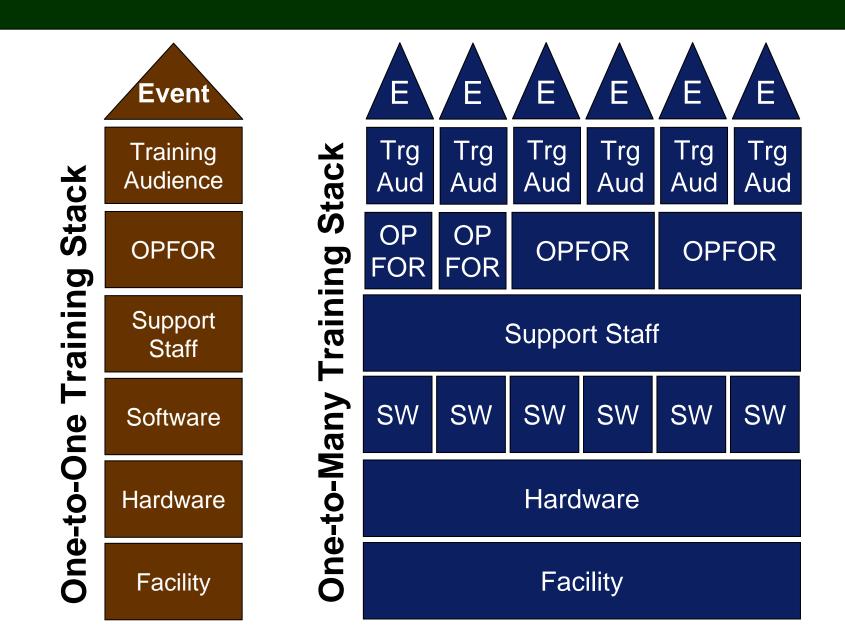


High Performance Computing

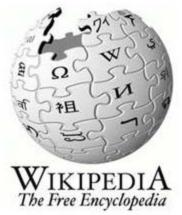
- Large Cluster Machines
 - Support multiple exercises and experiments simultaneously
 - Scale events to represent entire country populations
- Hardware-independent Simulation
 - Instant hot-swap when an error occurs or when load needs to be balanced
- Hardware available to all customers, not just local sim center schedule



Service-based Sim Center



My Web 2.0



facebook









You Tube"

Broadcast Yourself



Ewitter









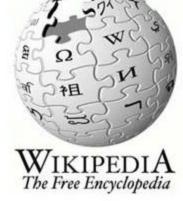














Collaborative Environments

Training Event Lifecycle

Plan



Social Nets

Shared Docs

Blog Progress

Prepare



Wiki Data

Tagging Sources

Machinima Tutorials

Execute



Game Engine

Flickr Maps

Twitter Status

Analyze



Wiki Results

YouTube Debrief

Archive



AWS Storage

Wiki Catalog

Digg Popular

Information Reuse

...not everyone lives in a castle



"But even here 80% of soldiers have access to a laptop computer and network" - SFC Richard Colon, US SOCOM, Iraqi Desert

Challenges

- Military IT Infrastructure
 - Security configurations vary by organization and by day
 - Apps cannot be guaranteed to work from any node in the IT network
- Ownership of Training Applications
 - Military apps have typically fallen into 3 major camps: Business, Mission, Training
 - Each have their own separate networks
 - Running a Training app across the Business infrastructure raises a number of supportability and contracting questions

Conclusion ... Advantages

- Reduced equipment ownership costs and obsolescence
- On-demand user access to the best applications
- Commercial IT architectures
- Centralized control of server applications
- Currency of client applications



Questions

