

# Collaborative Visualization Project

Defense Sustainment Symposium

April 16-18, 2002

Jacksonville, FL.



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# Presentation Agenda

- Collaborative Visualization
- DOD Need
- Industry Need
- Project Objectives
- Target Participants
- Project Statement of Work
- Project Deliverables



# Collaborative Visualization

- The Collaborative Visualization Project is in essence a Phase II of the current Interactive Visualization Project:
  - Phase I: Interactive Visualization project focused on inserting VIS4D technology into select industry and DOD depot facilities with the objective of exploring interactive utility.
    - DaimlerChrysler – Interactive product development
    - Trident Refit Facility – Interactive remote diagnostics
    - United Technologies Corp. – Interactive analysis
    - US Army TACOM – Interactive training
    - Ethereal Technologies – Technology Development



# Collaborative Visualization

- Phase II: The Collaborative Visualization project leverages the successes and lessons-learned of the Interactive Visualization project and turns the focus to the development and insertion of a multi-viewer platform. This dynamic system will enable collaborative interactions between key team members within a full three-dimensional workspace.

# DOD Needs to be Addressed

- Many critical repair and overhaul activities depend upon the successful collaboration of cross-functional and global teams:
  - Remote Repair Operations
  - Critical Components and Assembly Repair
  - Failure-mode Analysis Visualization
  - Retrofit and Part Interference Analysis

# Industry Need

- Numerous industrial applications exist for multi-user collaborative 3D visualization systems:
  - Product Development Collaboration
  - Finite Element Analysis
  - Manufacturing Process Analysis
  - Global Logistics Visual Analysis
  - Dynamic Assembly Visualization

# Project Objective

- Enhance both DOD and Industry-based operations through the utilization of advanced three-dimensional collaborative visualization technology.

# Target Participants

## ■ Industry

- DaimlerChrysler
- United Technologies Corporation
- Sony
- Ethereal Technologies

## ■ DOD

- Trident Refit Facility
- US Army TACOM
- 1-2 new depots



# Project Statement of Work

- Develop and insert multi-user collaborative VIS4D systems into key industrial and depot facilities.
- Conduct collaborative trials and collect usage and benefit metrics.
- Hold periodic project meetings with participants to discuss project discoveries and status.

# Project Deliverables

- A minimum of three installed multi-user VIS4D systems.
- Mid-project report outlining the benefits of interactive and collaborative visualization for dissemination within industry and depot facilities.
- Final report outlining savings metrics for technology to be disseminated throughout all depot facilities.

# Next Steps

- Finalize concept paper and submit to Pentagon for approval.
- Finalize depot and industry participation.
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