Network Common Operational Picture (NetCOP)

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Counter Strike
Zelda
Final Fantasy X
NetCOP

• COP-Common Operational Picture
  – software that acquires data and displays it to provide **situational awareness**
    • Map information
    • Friendly force location and status
    • Hostile force location and status
    • Mission plans
    • Logistics/Material status
  – Used by warfighters to summarize the current state of a mission and to plan for future operations
  – Examples: Joint WebCOP, XCOP, Current Command and Control (C2) system

• NetCOP-Network Common Operational Picture
  – Additional layer of network information
  – Used by network operators and other warfighters
Requirements

1. Provide common situational awareness at all Army echelons
2. Support mobile operations

- Shall support wide range of hardware capability
  - Platform-independent
- Shall be easily deployed and updated
  - Lightweight client
- Shall provide network visualization
  - 3D visualization
- Shall access near-real time data from legacy systems and future systems
- Shall run in bandwidth-restricted environments
Straight forward Solution

- Client
- NetCOP
- Client

Air Force C2 System
Army C2 System
Marine C2 System
Navy C2 System
Comms Network
Solution with Battle Command Services (BCS)

- Client
- NetCOP
- Client

Web Service

Battle Command Services

- Cache

Adapter

- Adapter
- Adapter
- Adapter
- Adapter
- Adapter

- Air Force C2 System
- Army C2 System
- Marines C2 System
- Navy C2 System
- Comms Network
Solution with BCS, Java and STK/X
Solution

• **Battle Command Services (BCS)**
  – Single interface for display client
  – Caching to control access to legacy systems
  – Filter capability
  – Long term extensibility

• **Java Applet**
  – Interoperable with STK/X
  – Lightweight
  – Portable
  – Loosely-coupled components
STK’s Contribution

• What it added:
  – 3D visualization capability
  – 3D terrain
  – 2525b symbols

• How we used it:
  – STK/X - embedded into Applet using JIntegra
  – Connect module – simple way to control STK/X
  – 2525b Symbol Server
  – Globe Server

• How we will use it
  – 4DX for deployment and licensing