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This briefing, on the Global Command and Control System (GCCS) presented at the STC Conference on 22 April 1998, describes the background, describes GCCS Users, GCCS functional capabilities, and supporting software technology in the context of the Joint System for Command and Control. It describes GCCS software in terms of the requirements process, the GCCS applications, and system architecture concluding with a look ahead to GCCS in the future.

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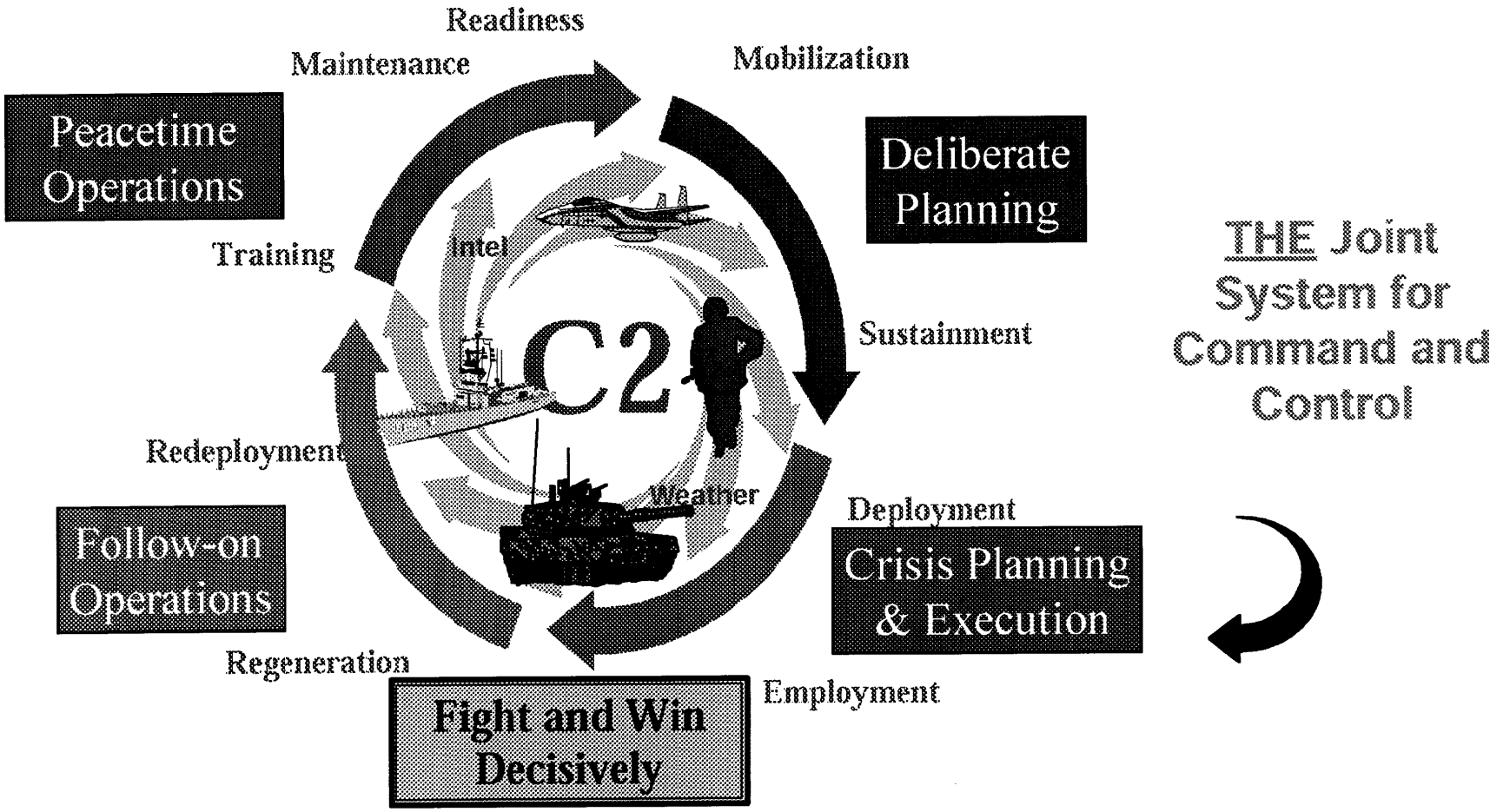
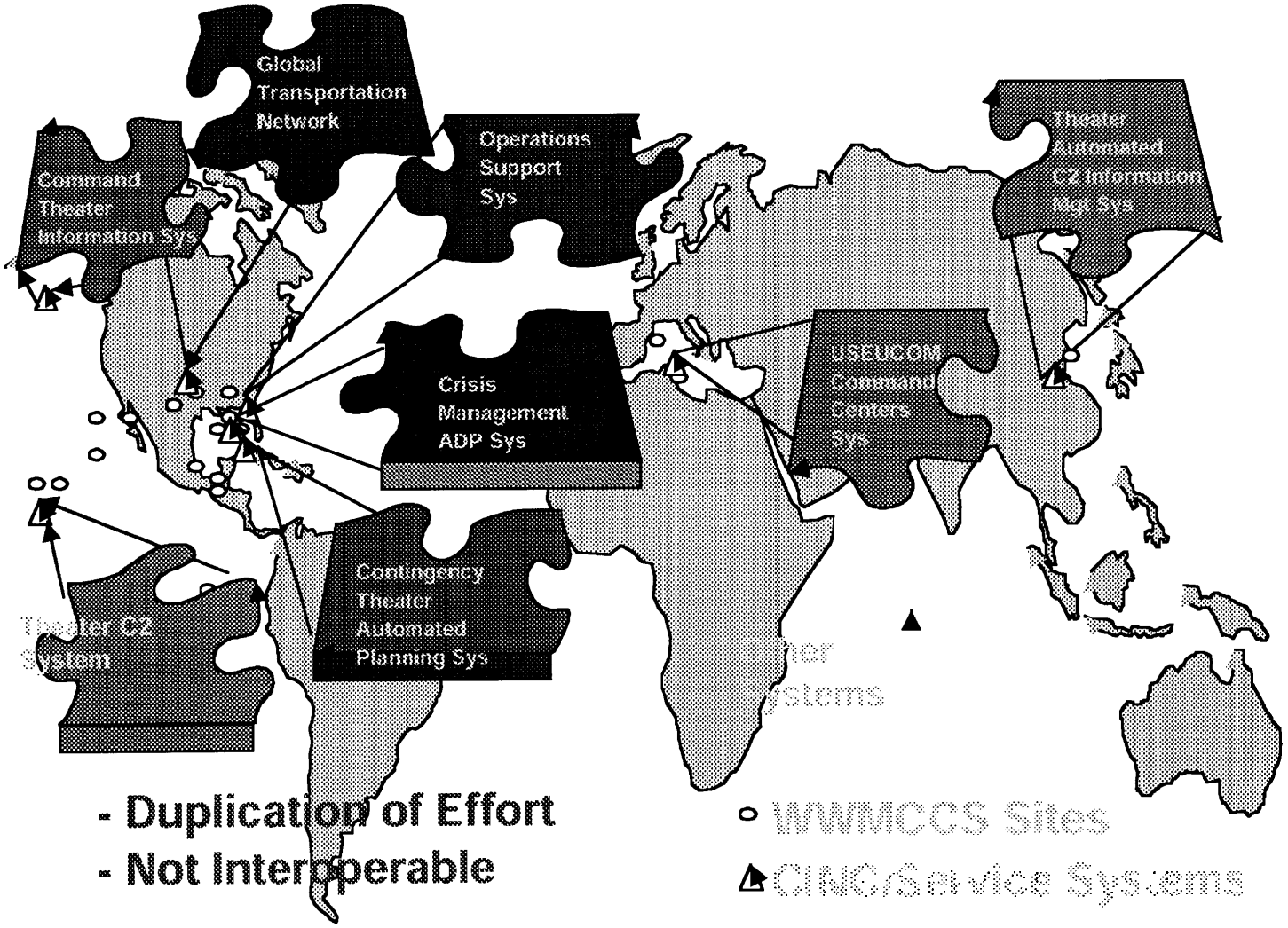
Overview

- Background
- GCCS Users
- Functional Capabilities
- Software Technology

Command & Control Cycle



Commanders Fielded Separate Systems



GCCS Users

- Commanders
- Command Centers
- Planners
- Tactical Execution
- Intelligence Analysts
- Transportation

Commanders Require a Fused View of the Battlespace

- Displayed on large screen display
- Integrated/correlated information
- Operations, Intelligence, Combat Support

A Multitude of Windows but no clear view of the world

A Single Integrated view of the world

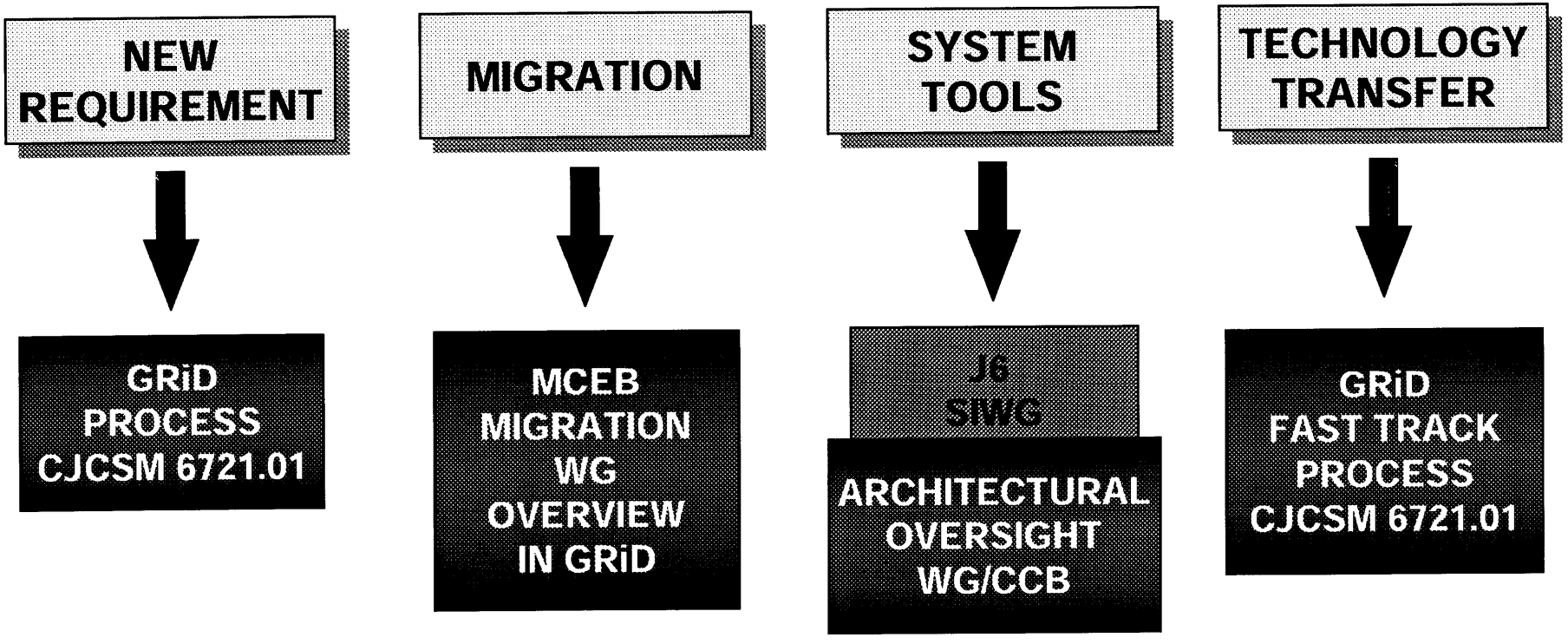
Information Integration Problem

Exercise/Operations Support

- GCCS involved in many activities & operational contingencies
  - CENTCOM AOR
  - Bosnia
  - Ulchi Focus Lens
  - Unified Endeavor
  - Vigilant Guardian '98
  - Showdown with IRAQ
- Combined interoperability with theater systems
  - Coalition allies and combined exercises (NORAD, Saudi Arabia)
- Foreign Military Sales to allies
  - Saudi Arabia, Japan, Canada, New Zealand, Australia
- Releasability of data, hardware and software

  Using C2 Guard and Radiant Mercury for data
  - Must follow appropriate technology transfer policy for hardware and software

Software Requirements Process



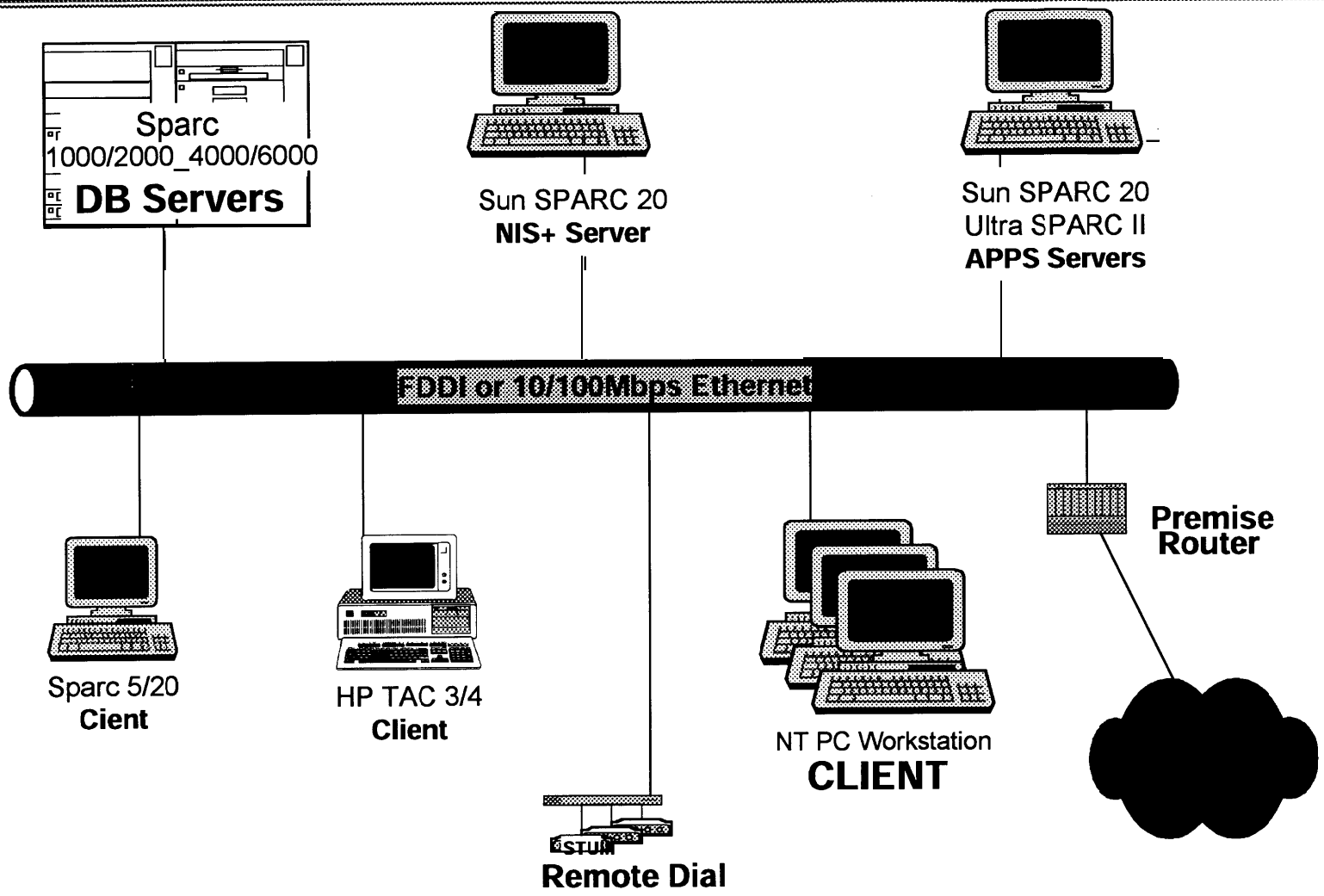
Functional Capabilities

- —NEWS GROUP
- —GLOBAL STATUS OF RESOURCES AND TRAINING
- —SENSITIVE RECON SCHEDULING
- —DELIBERATE PLANNING
- —CRISIS ACTION PLANNING & EXECUTION
- —COMMON OPERATIONAL PICTURE
- —INTELLIGENCE SUPPORT
- —AIR TASKING ORDER READ CAPABILITY
- —SECRET WEB (E-MAIL, HOME PAGES, ETC)
- —IMAGERY SUPPORT/INTELLIGENCE DATABASE
- —THEATER BALLISTIC MISSILE DEFENSE

Software Applications

- DII Operating System/Kernel
- DII Infrastructure/Common Support
- Database Applications
- Message Handling
- JOPES Applications
- GSORTS
- JMAS
- COP
- TBMWD
- Intelligence Applications
- Systems Support
- Security
- Office Automation
- Service/Site Applications

GCCS Systems Architecture



Software Technology

- GCCS following Commercial Industry
  - Hardware advances increase performance
  - Introducing thin client applications
  - COTS replacing proprietary & government software
  - Network enhancements (WANS, LANs being upgraded)
- Technology is changing the business process

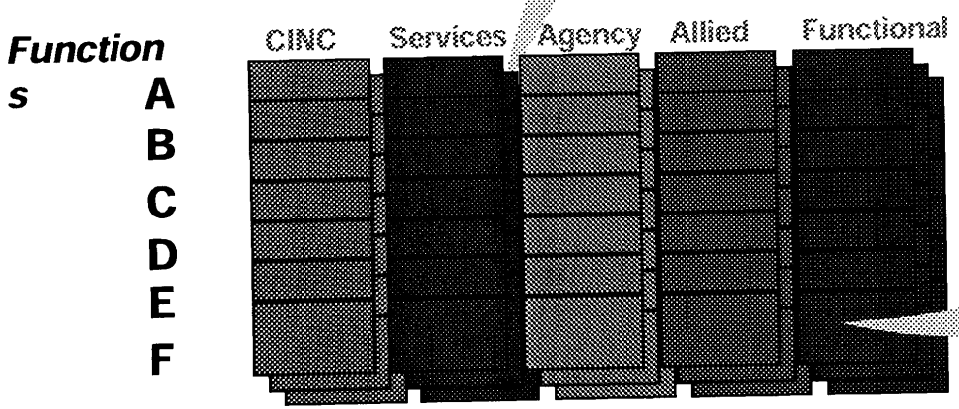
DII COE Migration

Functionality Migrates to GCCS with DII COE

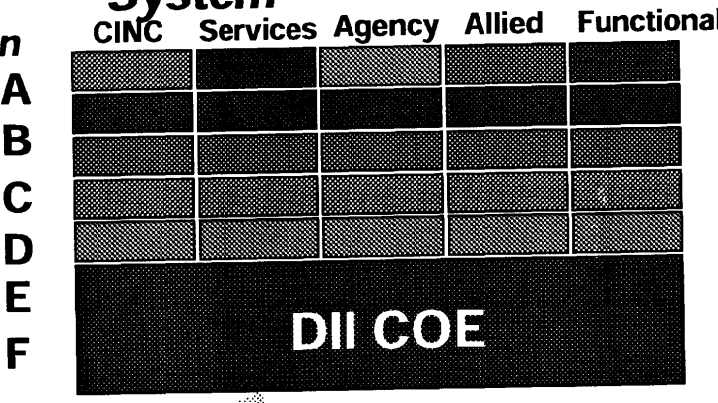
Fewer systems-All sharing DII COE compliant applications

Migration Selection

Today's Picture



DII COE Migration System



Mission Applications using one DII Common Operating Environment

Many Separate, Redundant Systems

Multiple Operating Environments

GCCS Tomorrow

- Periodically refresh "underpinnings" via COE releases
- Rapidly develop and electronically deploy applications
- Reduce sustainment and training tail
  - Centralize system administration
  - Consolidate data bases
  - "Single-up" on platforms
  - On-line training