. . . Too much of a good thing?
Architectural Framework

Accessible via Business and Warfare Operations

Replicated Data Bases Per Mission Requirements

Authoritative Data Sources and Data Consolidation

Common User Access Between Afloat and Shore

Navy Environment / WEN CONOP

TF Web

Navy Marine Corps Intranet

IT21 & OCONUS BLH Marine Corps Tactical Network

Industry Partners

Extranet

SYSCOM

HQ

Navy Research Learning Network .edu

Training Center

Pier Connections

Navy

Defense Information System Network (DISN)/Global Information Grid (GIG)

Fleet & USMC Deployed Forces

Teleport Network Operations Center (DISN Interface)

Navy Marine Corps Intranet

IT21 & OCONUS BLH Marine Corps Tactical Network

Replicated Data Bases Per Mission Requirements

Authoritative Data Sources and Data Consolidation

Common User Access Between Afloat and Shore

Navy Environment / WEN CONOP

TF Web
n-Tier Architecture

- **Presentation Layer**
  - Portal access to web services.
  - Display and user device independence.
- **Application Layer**
  - Component Based.
  - Registered Services.
- **Content**
  - Exposed Data.
- **Information Assurance**
  - SSO
  - PKI / CAC
Afloat Environment

- Bandwidth Constrained.
- Replication & Synchronization.
- Access Application Servers vice mobile units.
- Firewall
- Consolidated Services.

13 Nov 20 02
Navy Environment / WEN CONOP
Shore Architecture

- NMCI.
- OCONUS BLII
- Non-NMCI Environment
- Extranets.
- IT-21 Gateways.
Navy Enterprise Portal

- Content integration through the Portal.
- Global Directory Services.
- Common Look & Feel.
- User customizable.
- Subscribed Services.
- Single Sign-On.
• NMCI portal similar to Navy Enterprise Portal (NEP), with two significant differences:
  - Portal has NMCI "branding", not NEP "branding"
  - Only has access to NMCI services, not DON-wide apps/services.
• Anticipate NMCI portal rollout Nov/Dec 2002 with user seat deployment.
• Commander, Fleet Forces Command provides interim shore access to NEP until NMCI provides support to non-NMCI users.
BLII vs NMCI

- NMCI is a seat management contract (outsourcing).
- BLII OCONUS is an infrastructure installation contract.
- Overseas Commanders will continue to operate the network.
- Web Services currently included in contract are limited.
BLII Regional Structure

SUMMARY

| REGIONS | 3 |
| AREAS   | 16 |
| SITES   | 100 |
| ITSCs   | 3 |
| ITOCs   | 16 |

EUROPE

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An improved enterprise network design afloat that provides:
- Increased availability
- Improved supportability
- Improved performance and scalability
- Enterprise management capabilities
- Improved allied and coalition interoperability
- Combat survivability
Afloat Environment

Processes
- Failover
- Fault Management
- Resource Management
- Backup/Recovery
- IA

SPAWAR/Industry
- Services
- Operating System
- Hardware
- Network
- Baseband

Metrics
- High availability
- Usability
- Reliability
- Supportability
- Flexibility
- Accuracy
- Extendibility
- Security
- Survivability

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Navy Environment
SPAWAR / WEN CONOP
Network Focus Areas

1. Application Services
   - Establish common services and access as an enterprise utility.

2. Servers, Storage, and Networks
   - Provide a resilient, redundant, scalable, and integrated hardware infrastructure.

3. Resource Management
   - Provide tools for managing the enterprise to include bandwidth, network, hardware, and application management.

4. Allied Coalition Interoperability
   - Share various types of data seamlessly across multiple security enclaves.

5. Communications Services
   - Provide critical network services and improve capacity through tiers of connectivity.

6. Computer Network Defense
   - Provide a robust defense in depth computer network architecture.
NEP Evolution in progress

- UDDI (COTS)
- WSRP
- SAML/Interdomain SSO
- Portal User Profile Replication (Common look & feel)
- Improved Taxonomy Management
- Workplace Configuration Management
- Search Engine / Intelligent Agents
- Collaborative Tools