

# *Open Architecture Overview*



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# *Purpose*

*To Brief Our Integrated Plan for  
Introducing Open Architecture (OA)  
Across the Navy Enterprise*



# *Why Open Architecture*

## *Business*

- ◆ Today's In-Service Computing Architectures are Unaffordable
- ◆ Each Ship Class Addressing the Problem Uniquely
- ◆ Replacement of Obsolete Hardware Fact of Life
- ◆ Commercial Industry has Already Embraced Open Architecture Approach

## *Technical*

- ◆ Current Surface Ship Computing Systems Have Been at Performance Capacity for Years
- ◆ Current Computing Architectures Limit Capability Increase
- ◆ Warfighting Concepts to Warfighting Capability Takes on the Order of 5 Years to IOC
- ◆ Computer Throughput and Speed Requirements Dictate use of Commercial Computing Technologies and Modern Software Languages

*Improved Warfighting Capability Depends on Open Architecture*



# Open Architecture

## *What Does It Mean...*

### *Operationally*

- ✓ Provides Joint Interoperability
- ✓ Enables Sea Power 21 and FORCEnet
- ✓ Enables Effective Employment of Global Information Grid
- ✓ Increased Capabilities and Performance

### *Programmatically*

- ✓ Streamlined Software Development / Maintenance
- ✓ Faster "Time to Market"
- ✓ Facilitates COTS Refresh / Technology Insertions
- ✓ Broader Industrial Base

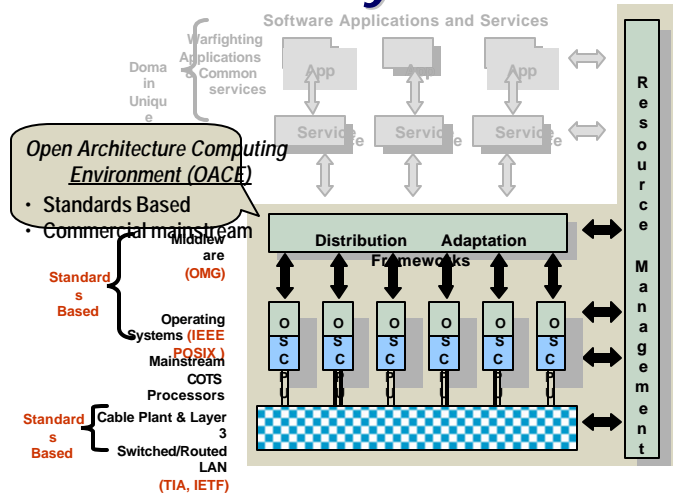
### *Affordability*

- ✓ Potential for 4-to-1 Reduction in Common Software Development and Maintenance Efforts
- ✓ Reduces Costs for Testing / Certification
- ✓ Enables Manning Reductions

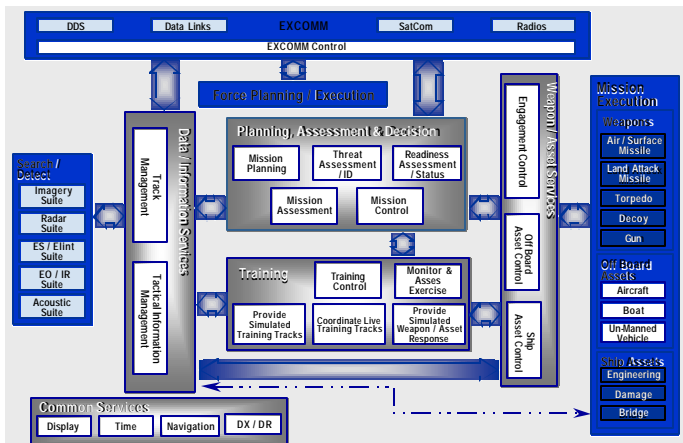


# Underpinning of the Enterprise Approach

## Common Navy Technical



## Common Functional

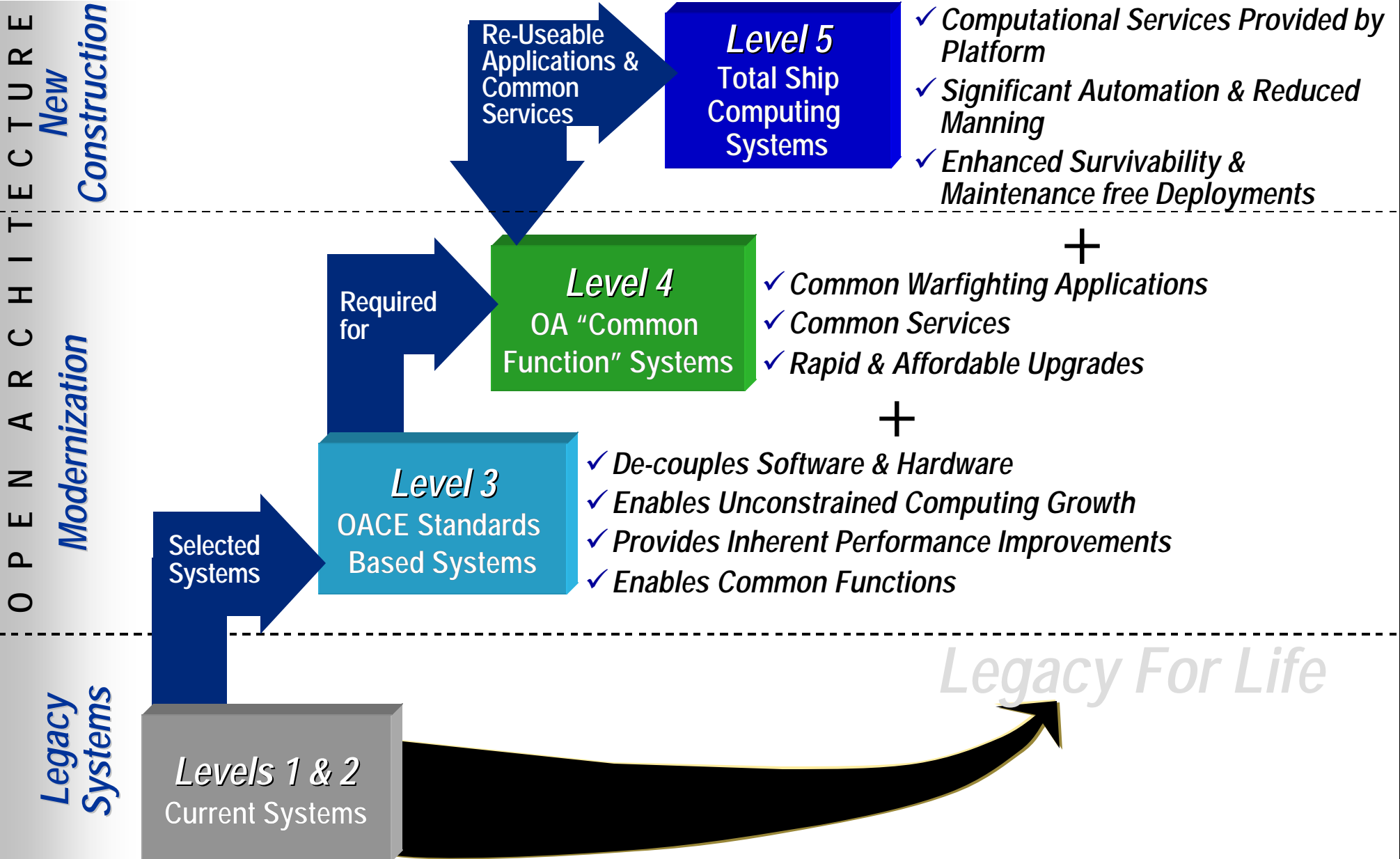


- ◆ International Standards Based Computing Environment
- ◆ Decouples Computing Environment from Software Applications
- ◆ Enables Common and Reusable Software Applications
- ◆ Affordable Technology Refresh
- ◆ Accelerated Deliveries of "Software Based" Warfighting Improvements

**Significant Savings in Development & Life Cycle Costs**

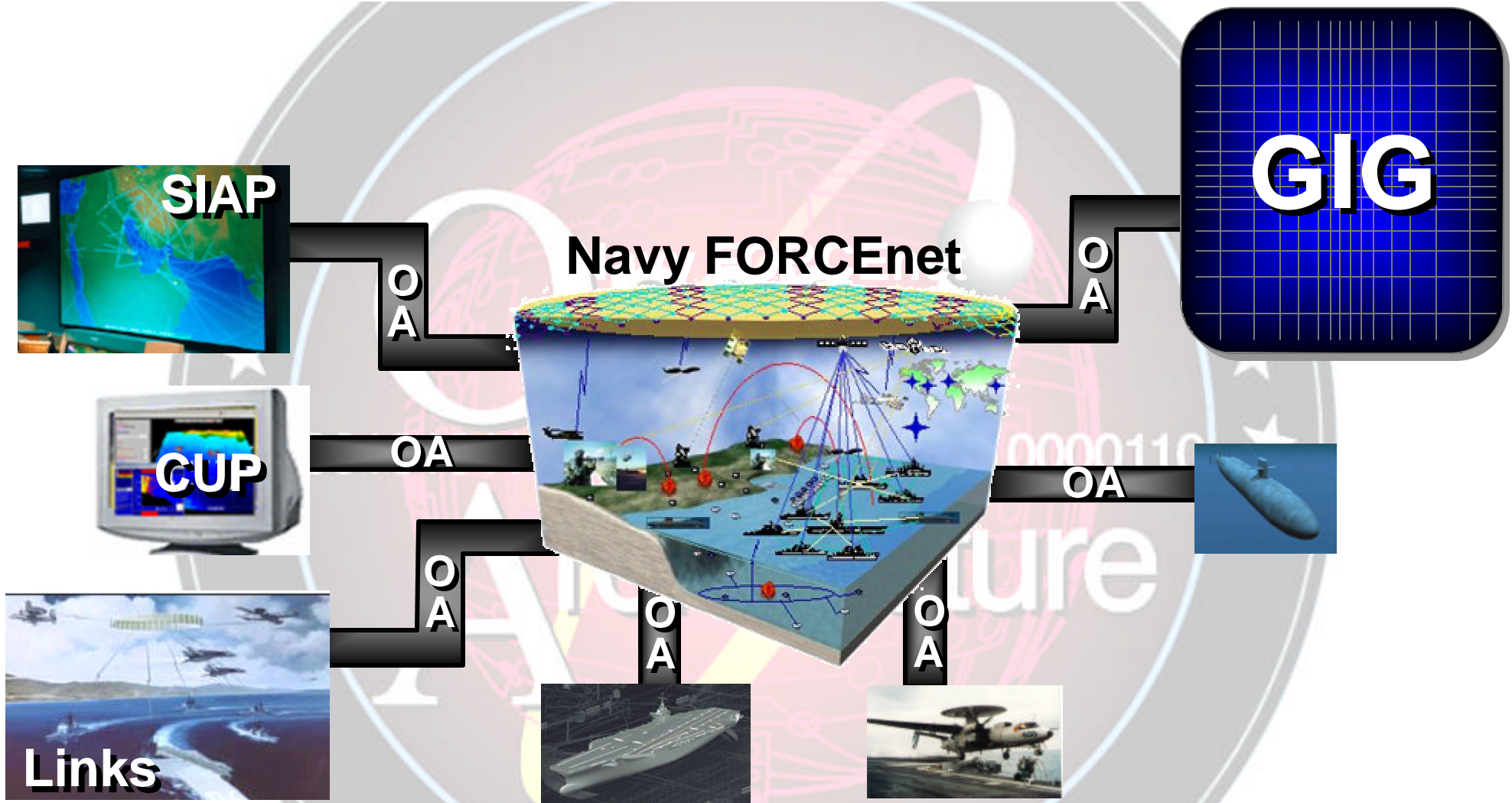


# OA Strategy





# OA is required for the Future.....



*Open Architecture is Fundamental Enabler to Future Warfighting*