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# Net-Centricity and Global NetOps

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# Net-Centricity



## Net-Centric Operations & Warfare (NCOW) is...

...the application of Net-Centricity to the activities of the Department of Defense, both day to day business and warfighting.

## Net-Centric Operational Environment (NCOE)...

...provides the Joint Force with pervasive knowledge through the full integration of 3 critical components: Knowledge Management (KM), Network Management (NM) and Information Assurance (IA).”

## Net-Centric Warfare (NCW) is...

... an information superiority-enabled concept of operations that generates increased combat power by networking sensors, decision makers, and shooters. In short, the application of Net-Centricity to warfighting is “Net-Centric Warfare.”

NCOW is the approach to operations and warfare by which DoD will achieve the goals and objectives of Joint Vision 2020.

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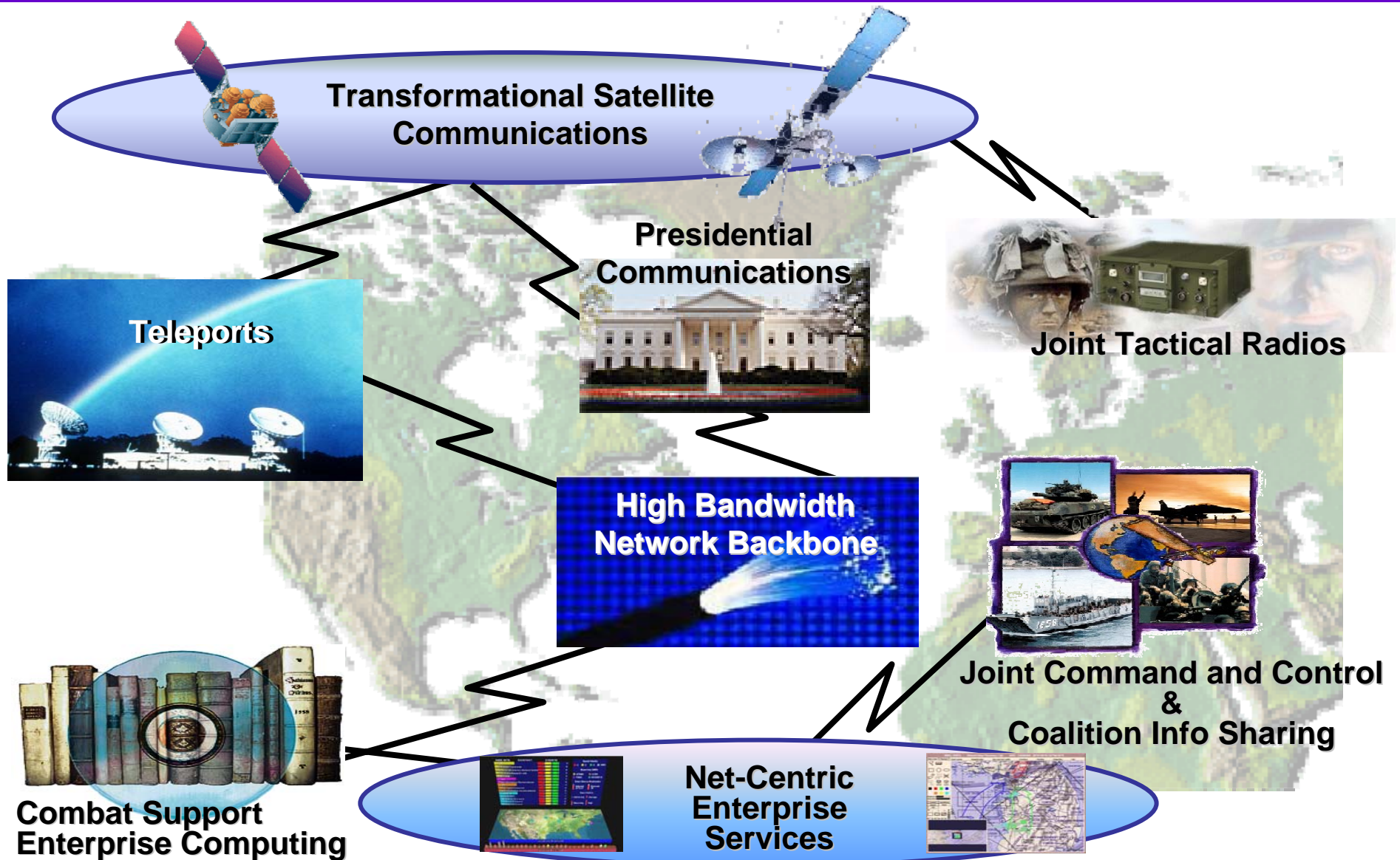




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# Transforming to Net-Centricity



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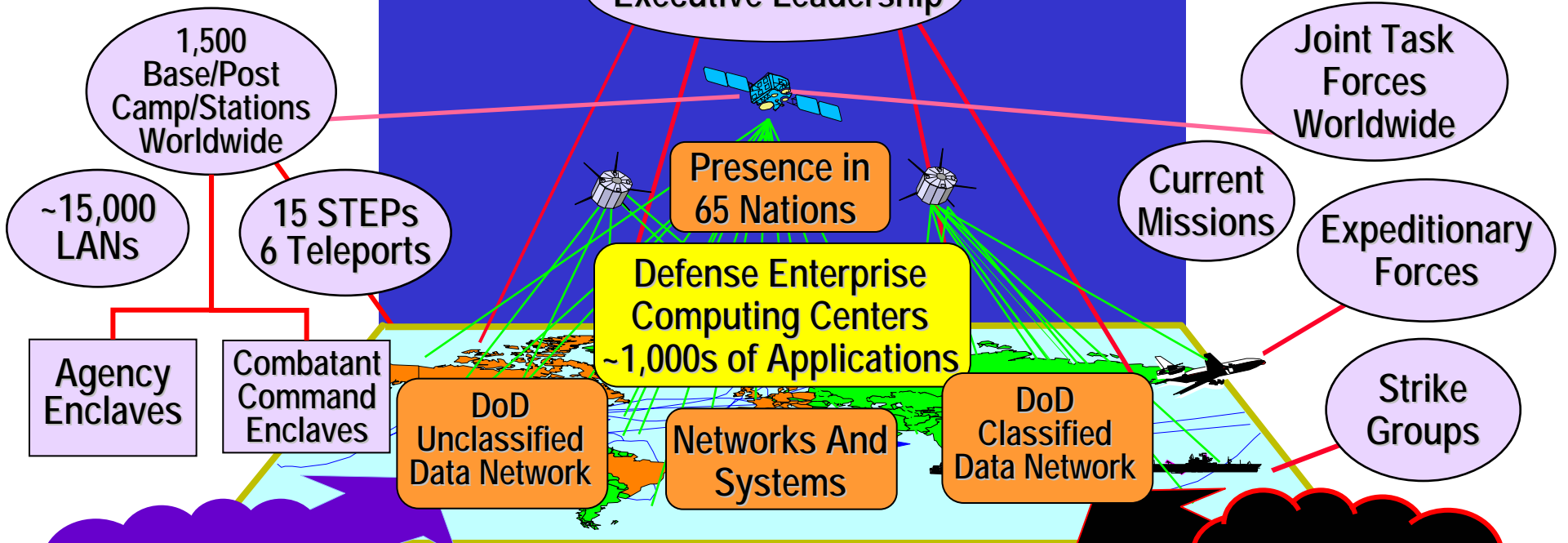
# The Operational Environment

5M DoD  
Computers Worldwide

USSTRATCOM AOR - JTF-GNO JOA  
120,000 Commercial Telecom Circuits

Fixed Locations

Deployed Forces



Globally interconnected end-to-end infrastructure supporting war-fighters, policy makers, and business processes.

DoD CIO Memo, 22 Sep 1999

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# The Threat: Growing; Sophisticated; and Organized

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## December 1998 – January 2003

*Most activity was from moderately skilled individuals*

- Hackers, Script kiddies
- Criminals
- Individual unfocused efforts

## February 2003 – Present

*Shift to a series of intrusion focused sets by skilled and organized actors (possibly nation state sponsored)*

- Titan Series Sets
- Organized crime, BotNets



**“Recent exploits have reduced operational capabilities on our networks. Failure to secure our networks will weaken our warfighting ability and potentially put lives at risk.”**

**DEPSECDEF Aug 04**



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# Global NetOps Defined

*“We must change the paradigm in which we talk and think about the network; we must ‘fight’ rather than ‘manage’ the network and operators must see themselves as engaged at all times, ensuring the health and operation of this critical weapons system.”*

~ Secretary of Defense Donald Rumsfeld

*“NetOps is the operational construct that the Commander, US Strategic Command (CDRUSSTRATCOM) will use to operate and defend the Global Information Grid (GIG)”*

~ USSTRATCOM, Joint CONOPS for GIG NetOps  
15 Aug 2005

**It is the mission that executes every day, worldwide, 24x7x365**

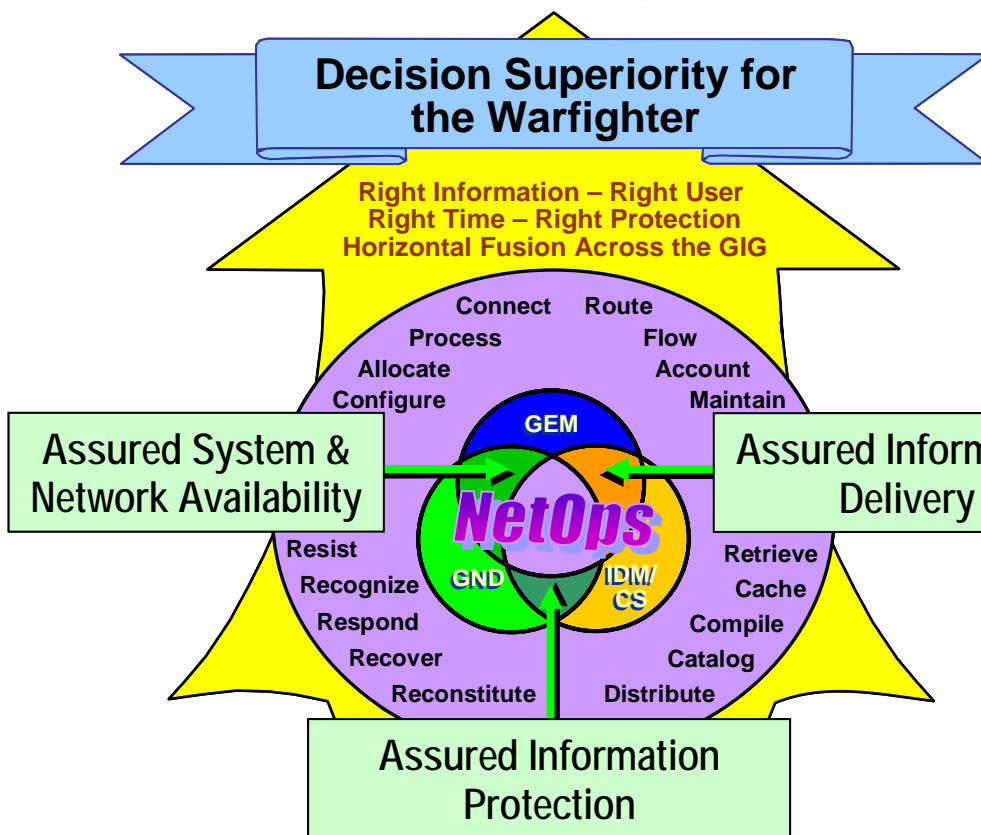


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# NetOps – The Construct

***NetOps is end-to-end across all GIG assets, in support of all Operational Environments***



***NetOps is the Operational Construct for operating and securing the GIG in support of Network Centric Operations and Warfare***

### Key Attributes

- Operational Commander in Charge
- Organizational Structure Established
- TTPs Defined, Established
- Integrates Net Management & Defense
- Shared Situational Awareness

***“The source of flexibility is the synergy of the core competencies of the individual Services, integrated into the joint team.” Joint Vision 2020***

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# A Changing Operational Environment

## NetOps & JTF-GNO are important

- Transformational Communications
- Increasing Complexity
- Increasing Threats to the GLG
- Unclear C2, Roles and Responsibilities for Operating & Defending the GLG

*“... Single-most transforming thing in our force will not be a Weapon System, but a set of interconnections...”*

*Secretary of Defense, Donald Rumsfeld, August 2001*

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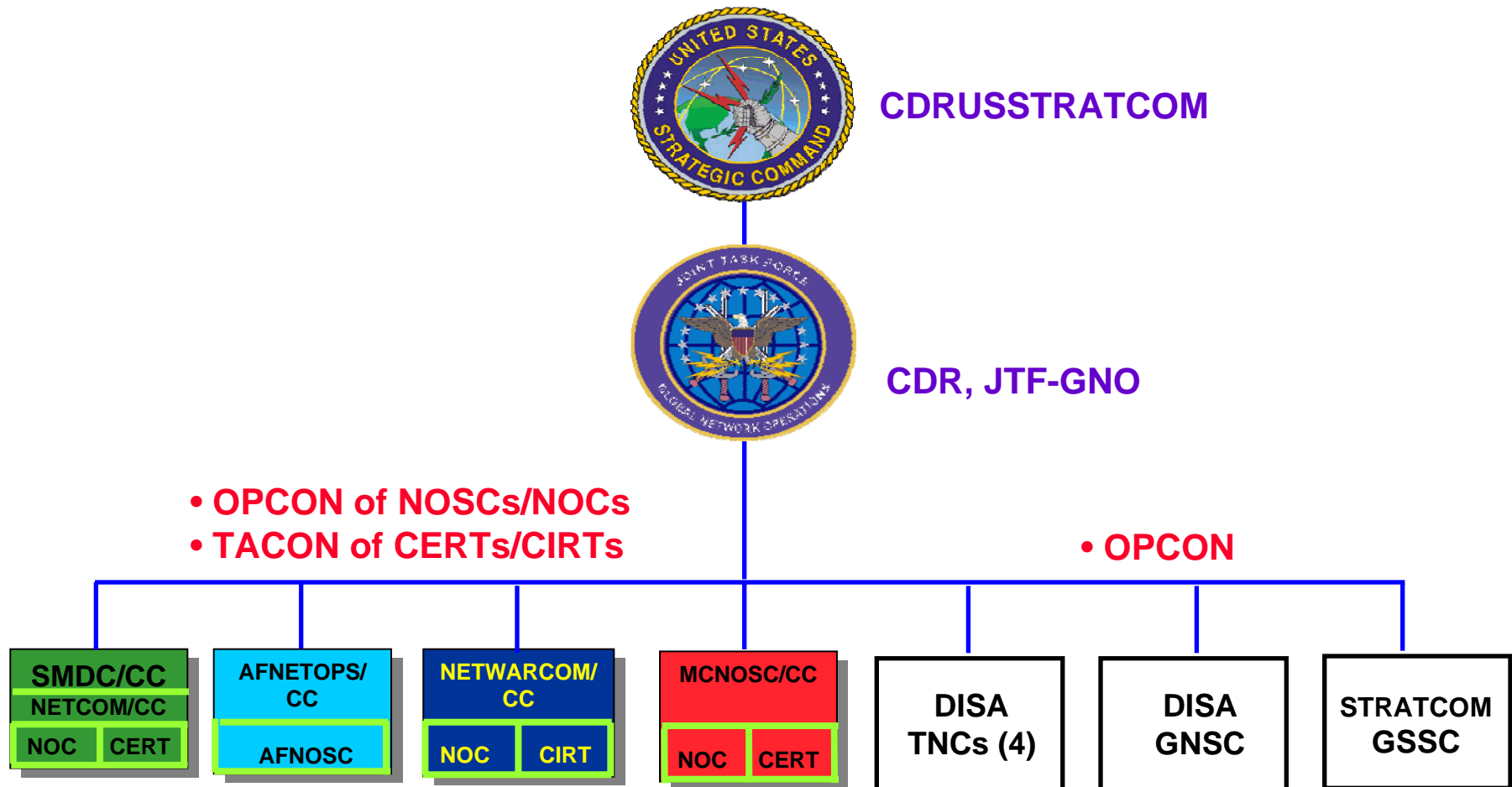




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# Assigned Component Forces

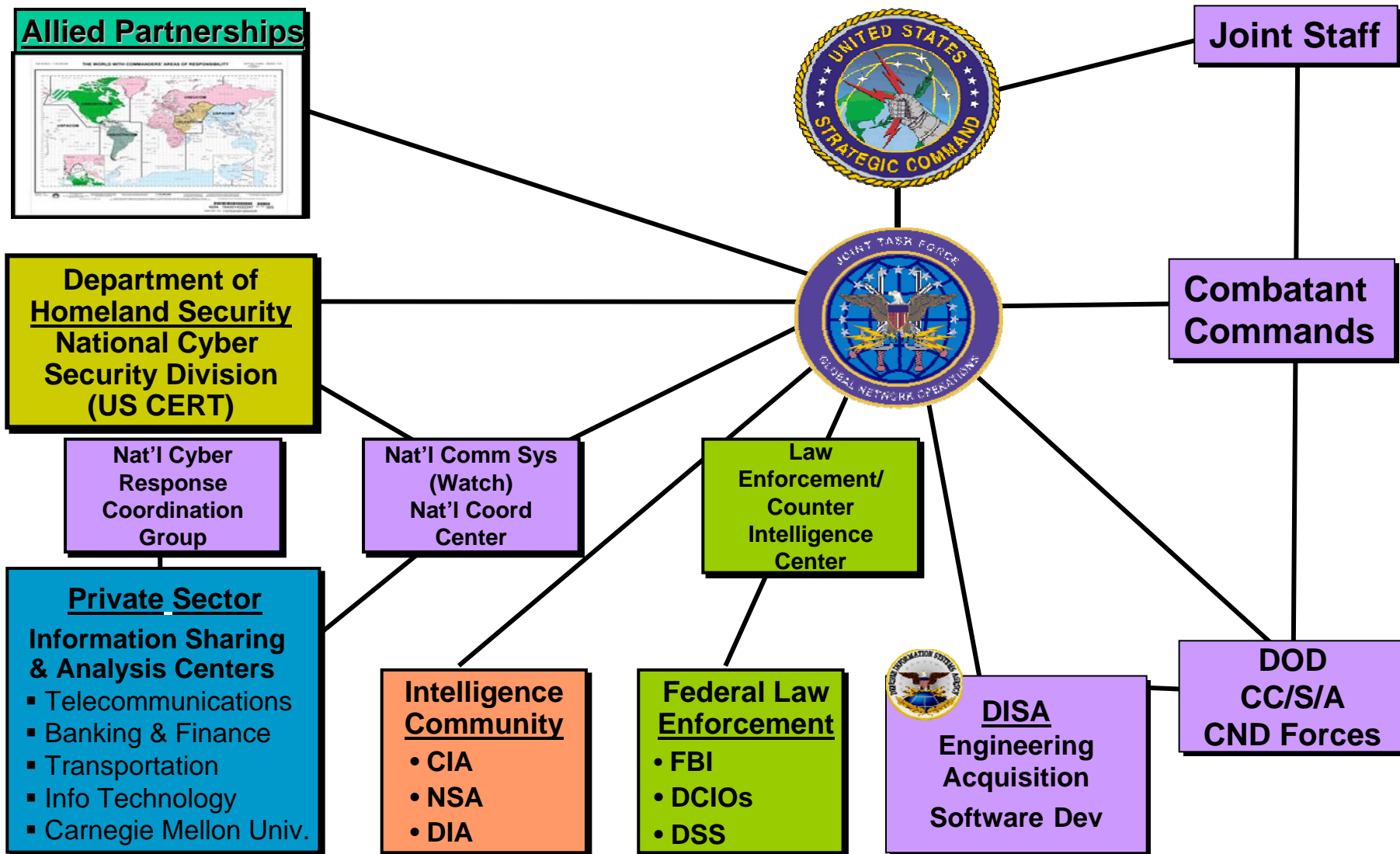


*“Commanders working with Commanders”*

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# NetOps Mission and Relationships





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# Questions?



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# Back-Up Slides

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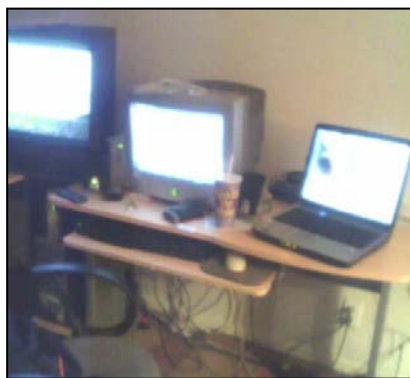
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# Cyber Crime – Threat to the GLG



- 26 Year-old Venezuelan, Rafael Nunez-Aponte, aka “RaFa” pleaded guilty to hacking DOD computers
- Time served 7 months, deported in Dec 05



Grand Jury  
No. CR DS-1

INDICTMENT  
v.  
JEANSON JAMES ANCHETA,  
[18 U.S.C. § 371: Co  
18 U.S.C. §§ 1030(a)  
(a)(5)(B)(i), and 10

- 20 Year-old American, Jeanson James Ancheta, aka “syzt3m” indicted by DOJ
- 17-count indictment, alleges he controlled 1000’s of computers remotely
- Pleaded guilty to 4 felonies - Jan 06, awaiting sentence

Indictments the result of groundbreaking inter-agency analysis

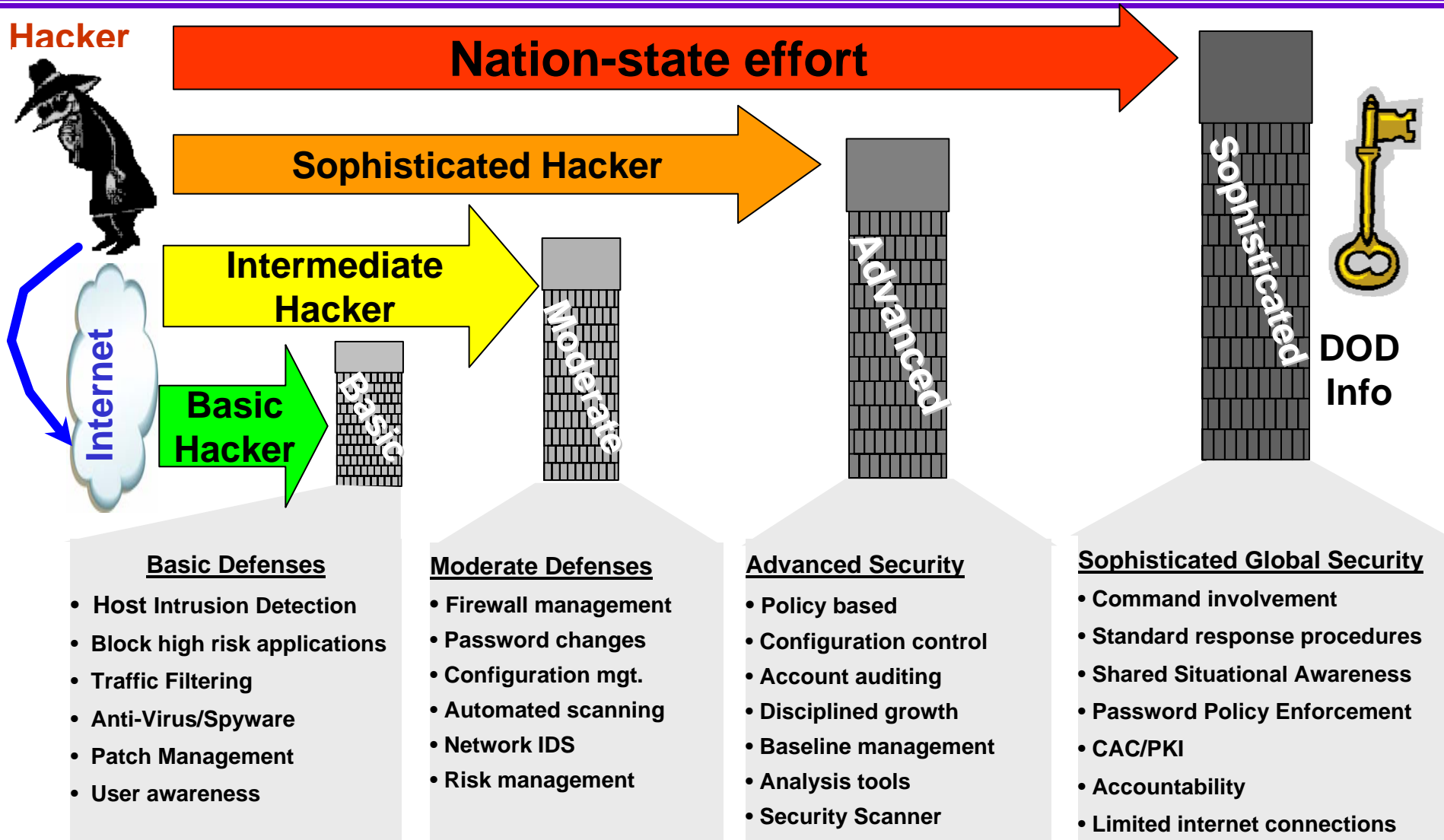
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# DOD Defense-in-Depth Strategy



**Aggressive CND Measures: No silver bullets!!!**