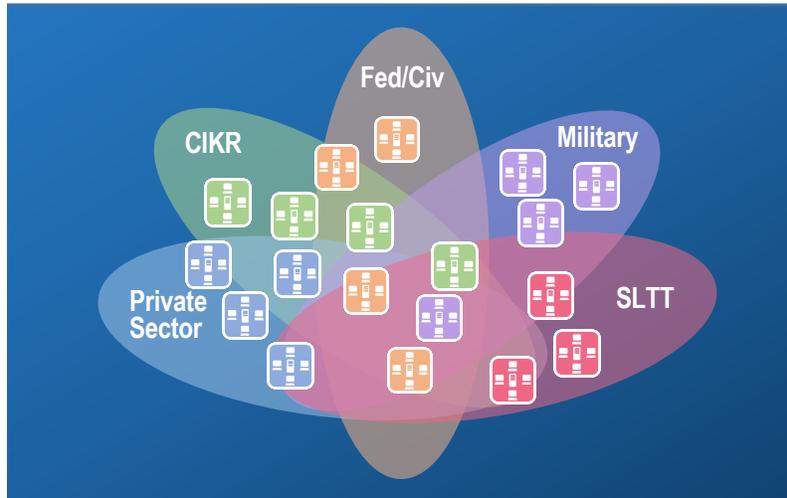


# IACD

## INTEGRATED ADAPTIVE CYBER DEFENSE



***Matching*** the speed and scale of malicious attacks through integration and automation of cyber defenses.

Malicious actors are targeting networks with sophisticated attacks at ever-increasing speed while remaining undetected. Hackers are leveraging automation to overwhelm human-led cyber defenses and seize the initiative. Countering these attacks requires ***rapid detection*** and ***response*** to reduce the risk of unrecoverable loss or damage to the nation's intellectual property, private information, national security, and corporate reputations.



## OVERCOMING the CHALLENGE

To overcome these challenges in the new cyber era, the **Department of Homeland Security (DHS), National Security Agency (NSA), and Johns Hopkins University Applied Physics Laboratory (JHU-APL)** have formed a partnership to conduct jointly-sponsored research — in collaboration with the private sector — resulting in a strategy for increasing the speed and scale of cyber defenses by leveraging automation to enhance the effectiveness of human defenders, **moving them outside the response loop into a response planning and approval role “on the loop”** of cyber defense.

## ESSENTIAL elements of IACD



The rapid detection and mitigation of cyber threats requires the **integration, synchronization, and automation** of sensing, sense-making, decision-making, and acting capabilities across all network security layers and among network tiers. The IACD initiative has published a capabilities-based architecture to guide this integration and has a number of supporting specifications and standards in development.

## PROCESS and PARTNERSHIPS

The **commitment to open sharing and transfer of knowledge** gained from these activities will ensure the nation as a whole benefits from these efforts. Because public and private sector partnerships that form the core of the IACD Community of Interest are essential to its success, new members interested in collaboration on these state-of-the art cyber defense capabilities are always welcome to join.

### For more information

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