

## Current Technology

The XBIS Laboratory is host to a variety of technologies that contribute to cross boundary sharing.\*

- **Cross-domain desktops**
  - DoDIIS Trusted Workstation
  - NSA High Assurance Platform
  - TCS SecureOffice Trusted Thin Client
- **Federated search and retrieval**
  - MDDS: Vivisimo with TCS SecureOffice WebShield
- **Cross-domain chat**
  - Naval Research Laboratory Multi-Level Chat
  - CDCIE Chat
- **Guard technologies**
  - BAE DataSync Guard
  - OwlCTI One-Way Transfer
  - Information Support Server Environment (ISSE) v3.6
  - Raytheon High Speed Guard
  - TCS SecureOffice Trusted Gateway Server
- **Label-based data management**
  - Oracle 10g with Oracle Label Security
- **Protected email**
  - Tumbleweed Mailgate
  - Voltage Secure Mail Gateway
- **Digital rights management**
  - Liquid Machines Enterprise Rights Management
- **MITRE XBIS research**
  - BICES Federated Metadata Repository

\*Inclusion in the MITRE XBIS Laboratory does not indicate an endorsement on the part of The MITRE Corporation.

## Future Plans

**Sponsor Projects:** MITRE will continue to use the XBIS Laboratory infrastructure to develop and implement sponsor-specific scenarios. Sponsors can also use the laboratory technologies for experimentation and software integration.

**MITRE Research:** The laboratory will incorporate the findings from research projects focused on information sharing. The additions may include new capabilities for using trusted intermediaries, controlled sharing, and risk management.

**Technology:** MITRE will constantly add approved and emerging information sharing technologies to the laboratory.

# XBIS

MITRE Cross Boundary  
Information Sharing Laboratory

*XBIS Scenario Demonstrations:*  
**Coalition Warfare**  
**Maritime Interdiction**

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MITRE's XBIS Laboratory presents a realistic vision of information sharing—today and for the future. The XBIS Laboratory's unclassified demonstration and integration facility models existing sponsor communities, including their computing and communication infrastructures, within the framework of the sponsors' organizational policies and operational procedures.

The XBIS Laboratory also serves as a collection point for the latest research on information sharing technologies. Research spans information assurance and information management as well as non-technical aspects that involve the social practices and organizational cultures of the communities of interest.

## XBIS Laboratory Scenarios

The XBIS Laboratory uses operational scenarios to demonstrate the results of integrating and experimenting with various technologies and settings. The scenarios model the complexity of sharing information across organizational, sensitivity level, and national boundaries. The scenario-based approach stimulates and encourages discussion to help researchers understand a range of sponsor challenges. It permits extraction and validation of sponsor requirements and provides a way for MITRE and its sponsors to explore innovative approaches in the context of realistic examples.

The two scenarios illustrated here represent the roles and procedures of real organizations, while demonstrating new ways of using and integrating cross boundary technology.

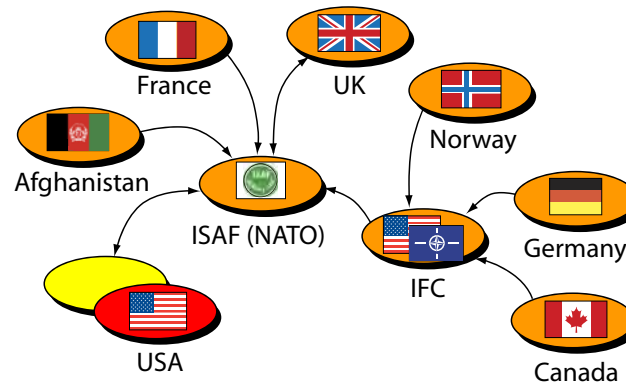
- The Coalition Warfare scenario explores the challenges of multinational intelligence gathering and sharing at the warfighter's operational tempo, using readily available cross boundary solutions.
- The Maritime Interdiction scenario showcases the value of recent developments in cross domain web services solutions and standards. It demonstrates how intelligence and homeland security agencies can discover and share relevant information using the UCore metadata standard.

*Afghan National Army patrols report suspicious activities in a Kandahar neighborhood.*



NATO photo by SGT Peter Szigeti

*NATO-led coalition troops respond to the threat in partnership with other coalition troops, the Afghan Army, US Intelligence, and NATO nations.*



*They nominate the target for action, increase patrols, and conduct operations against a suspected insurgent safe house.*



Photo by SGT David Foley

*A ship from Venezuela carrying a load of bananas is approaching the Charleston, SC harbor.*



Photo by Jonathan Lamb

*A US Coast Guard intelligence analyst reviews advance information and becomes suspicious that the ship may be carrying illicit cargo.*



*By fusing information from several military, intelligence, and law enforcement agencies, analysts piece together more information on the vessel crew and recent activity. As a result, the Coast Guard decides to intercept the vessel and conduct a dockside boarding.*