



# NRL Coalition Agents Experimentation Participation

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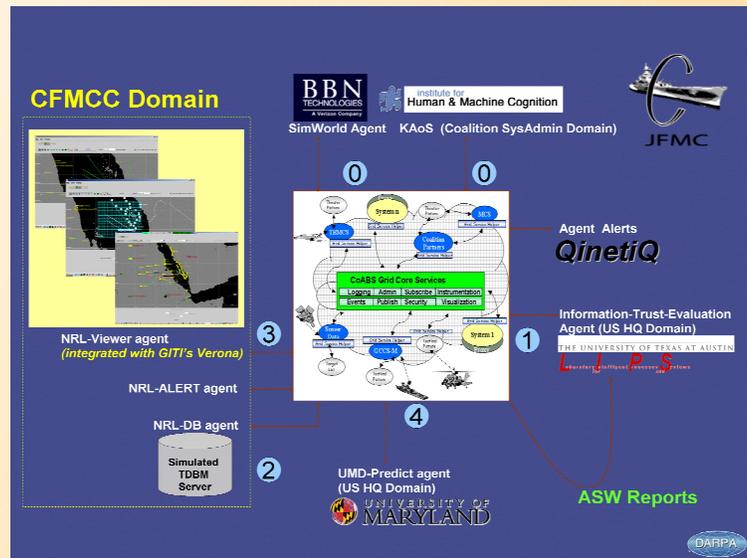


## Description:

- ❑ Part of CoAX – Coalition Agents Experiment.
- ❑ Demonstrate Command and Control system's ability to integrate coalition data from the CoABS grid in support of The Technical Cooperation Program's (TTCP) Binni scenario.
- ❑ Supporting the Maritime domain in the demonstration

## Results:

- ❑ Integration of Command and Control system "surrogate" via the CoABS grid with agents from:
  - ❑ BBN (Simworld agent)
  - ❑ Univ. of MD (Track Prediction agents)
  - ❑ Univ. of Texas (Fusion Agent)
  - ❑ Univ. of W. Fl. (KaOS Domain Registration)
  - ❑ QinetiQ (Alert Agents)



## Opportunities to build upon CoABS & CoAX Research

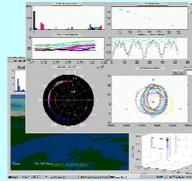
### C4I-To-Simulation Interoperability (DMSO)

Development of plan understanding and monitoring agents that decompose plans from GCCS-Ambassador via the RTI, and monitor events in the Integrated Theatre Engagement Model (ITEM) simulation. Research includes bridge agents and dynamic ontology agents



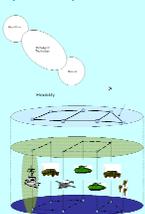
### NRL MASAM (Electronic Warfare Division)

Application of software agents for information and data processing to airborne platforms operating in the high-connectivity battlefield environment. Platforms have access to full, real-time access to data.



### Distributed Resource Management in MANET-Enabled Networks using MAS (NRL RAC)

MANET is an autonomous system of mobile routers (and associated hosts) connected by wireless links. The routers may move randomly and re-organize; thus, the network's wireless topology may change rapidly and unpredictably. Examining the application and possible extensions of agent teamwork models and mixed-initiative theories.



### Consistent Networked Information Stream (ONR Past Program)



Investigate MAS for enhancing the COP

## Future:

- ❑ Building upon CoAX and CoABS research in support of
  - ❑ DMSO: Intelligently monitoring simulations from GCCS.
  - ❑ NRL MASAM: Software agents to process data/information and provide to airborne platforms in operating in high-connectivity battlefield.
  - ❑ Mobile Ad-Hoc Networking (MANET): Application of mixed-initiative and teamwork models.
  - ❑ Consistent Network Information Stream: MAS for enhancing the COP

