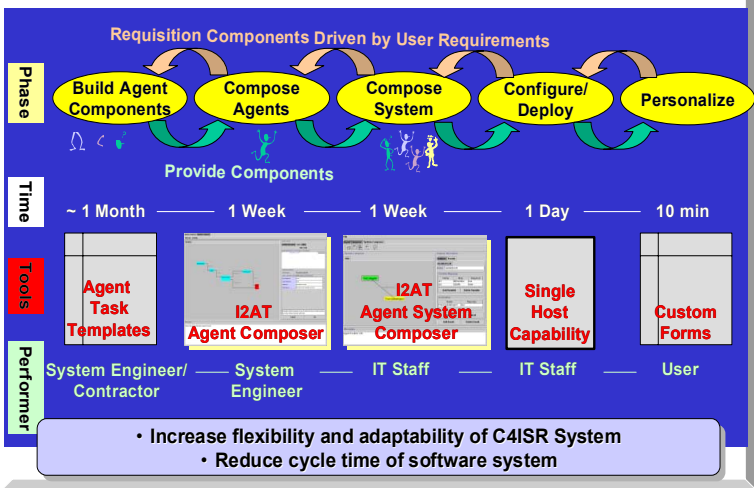
I2AT - Intelligent Interoperable Agent Toolkit

Lockheed Martin Advanced Technology Laboratories
http://www.atl.lmco.com

Agent-Oriented System Development



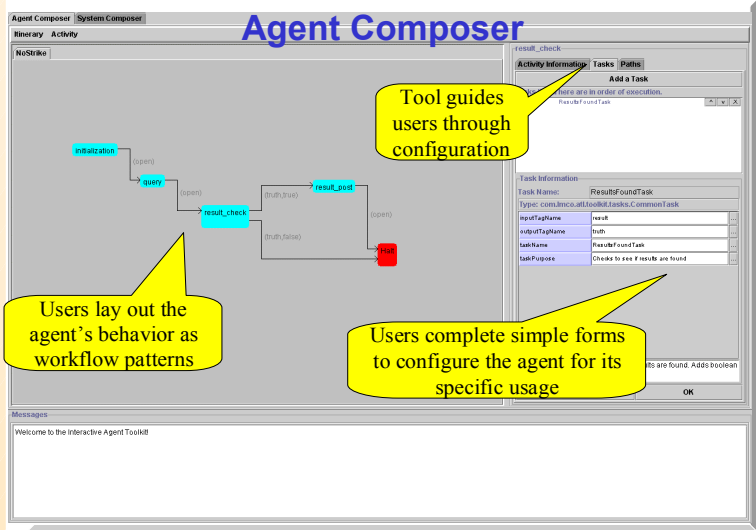
Vision:

- Cycle time for insertion of new capabilities and/or tailoring of systems is too slow.
- Invent a new system of systems life-cycle model based on agent-based
  - workflow automation
  - large-scale interoperability
  - rapid deployment
  - decision support
- Create tools that support the full spectrum from end users to developers

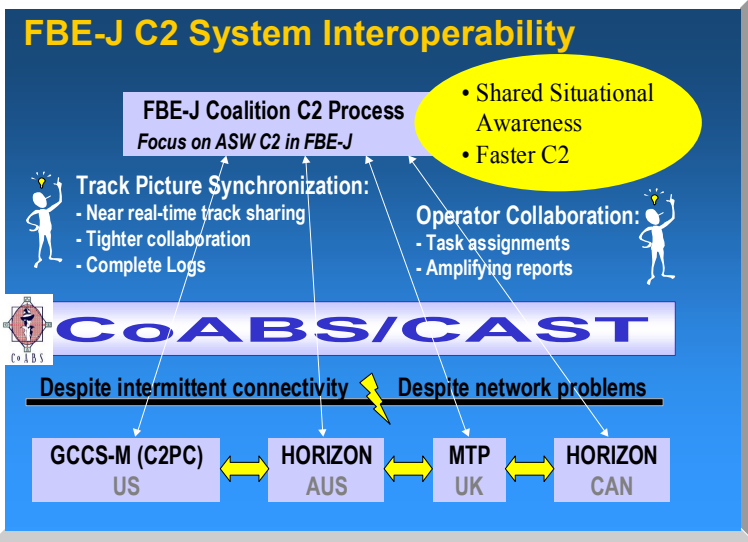
Capability:

- An agent-oriented system development paradigm that works "middle-out," starting with systems specification
- Agent System Composer orchestrates agent-agent and agent-C2 system interoperation
- Agent Composer graphical specification of agent workflow patterns
- Repository of reusable, configurable agent behavior components

Agent Composer



FBE-J C2 System Interoperability



Demonstrated Impact:

- After four hours of familiarization, NUWC and SPAWAR developers effectively built agent systems.
- Two days reduced to two hours for typical agent workflow development
- Greater than 50% reuse of agent components within a typical agent system
- Simplified, remote agent system deployment to distributed sites

CoAX 2002 Demonstration