

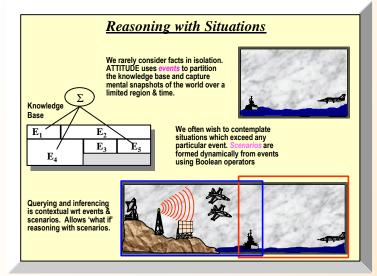
ATTITUDE



Steven Wark, Andrew Zschorn, Don Perugini, Dale Lambert
Command & Control Division

Defence Science and Technology Organisation, Australia



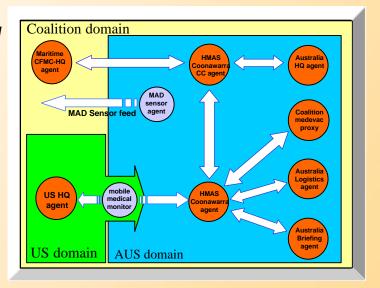


Description

- a multi-agent architecture developed for automated information fusion and C2 tasks.
- uses propositional attitudes as intuitive programming constructs.
- supports reasoning with uncertainty.
- supports reasoning with 'situations' for high-level fusion.
- models organisational entities and performed logistics planning for medevac operations on HMAS Coonawarra in CoAX 2002 scenario.

Logistics Planning

- HMAS Coonawarra agent requests medical monitoring support and invokes mobile agent infrastructure.
- medical crisis triggers medevac planning.
- logistics agent queries HMAS Coonawarra agent for available resources.
- HMAS Coonawarra agent queries CFMCC for available helicopters & medical facilities.
- logistics agent formulates medevac plan using available resources and sends plan to MCA for deconfliction and execution.
- casualties safely evacuated to USS Colin Powell.



Natural Language Processing Text console Maya™ 3D real-time rendering engine Mayarm generation Mayarm literface Ma

Virtual Advisers

- embodied agents can give situation reports, multimedia briefs, invoke applications, or interact conversationally with users.
- 'natural language' dialog builds trust through interaction, and conveys situation awareness to user through visual explanation.
- real-time character animation using Maya[™] animation engine, photorealistic textures using 3DMeNow[™], and voice generation using Rhetorical[™] speech synthesis system.

