

Embodiments of the present invention can be used in relation to a wide range of multi-agent systems. For instance, it has been evaluated in particular in the following applications:

- 5 • a travel management application involving 17 agents, in which a travel manager agent negotiates with hotel, air-line, car, train and taxi reservation agents to generate an itinerary for a transatlantic trip for a user;
- 10 • a telecommunications network management application with 27 agents. Here agents controlling network links negotiate to provision virtual private networks for users. For this application the report tool was very easily customised to support a different display format for task decomposition graphs; and
- 15 • an electronic commerce application where agents buy and sell goods and services using different negotiation strategies. This application involved over 100 agents simultaneously performing many different tasks, and the colour-coding of messages by goal was essential in understanding the interactions between the agents.

Although different languages and hardware may well be found appropriate in various circumstances, embodiments of the present invention can be implemented entirely in the Java programming language and run on Unix, for instance Solaris, and Windows NT workstations.

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