

12TH ICCRTS
“Adapting C2 to the 21st Century”

Supporting Chat Exploitation in DoD Enterprises

Network-Centric Experimentation and Applications, C2 Technologies and
Systems, Cognitive and Social Issues

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Abstract

The use of internet chat to support information exploitation in time-sensitive environments has been explosive in recent military conflicts. During Operation Iraqi Freedom, the widespread use of chat among operators and intelligence analysts provides increased information flow which, when properly managed, provides increased situational awareness in support of collaborative decision-making processes. However, while the use of chat in military environments has a positive operational effect, it is also difficult to effectively manage and exploit. Specifically, it has been noted among operators that it is often difficult to maintain awareness of what is going on in and across multiple chat rooms at the same time.

Our research focuses on the application of information extraction to the problem of providing automated “chat alerts” of pertinent events to operators monitoring multiple chat rooms. In particular, we demonstrate that information extraction allows accurate pinpointing of tactical entity class data (e.g., air mission) in military chat. We also demonstrate the effectiveness of relating chat events described in one or more chat rooms. Finally, we discuss a software prototype designed to support information extraction, and featuring graphics for user-specified chat profiles and views of extracted chat entity/event class data in real-time and retrospective processing.