



Chat rooms and Instant Messaging (IM) have gained tremendous popularity and importance as communication systems. The **ChatTrack Technology** enhances today's chat systems, both client (IM) and server-based (chat room), by providing security features, including an archival system, an indexing system, and a retrieval system that supports a variety of queries.

ChatTrack archives the contents of chat room and IM discussions in XML format. Subsets of this data can be classified upon request to create profiles for particular sessions or users. The classifier is pretrained on 1500 concepts; however profiles can be easily adapted to specific domains by extending these concepts to include concepts of interest to a particular analyst.

ChatTrack enables the following monitoring:

- Homeland Security/Intelligence Agents can prevent/detect crimes by focusing their attention on people or discussions whose profiles intersect with domains of national security interest
- Parents can monitor their children's Internet chat activity to ensure that only safe conversations are taking place
- Employees benefit from automated recording of spontaneous instant messenger meetings
- Administrators can identify rogue chat participants that are abusing chat privileges

ChatTrack Products

ChatLog

The ChatLog XML DTD describes the schema for recording chat conversations. This schema and its definitions or the ChatLog library may be used as a template for designing a system. The ChatLog library integrates XML chat logging in almost any client- and server-based chat product.

ChatRetrieve

ChatRetrieve facilitates manual analysis for session retrieval by agents, administrators, parents, etc. It allows searches to be performed using keywords, listener/receiver name, date/time ranges and combinations of them. The incremental indexing system keeps data current.

ChatTrackBot

The Internet Relay Chat (IRC) bot silently collects and records multiple public chat sessions using the IRC protocol. It logs chat data from any public IRC chat room using the ChatTrack XML schema. The IRC Server bot collects both public and private data.

ChatProfile & ChatTrend

ChatProfile identifies chat topics through a web-based interface. It can archive and classify topics from both public and private chat rooms. The *ChatProfile* generator allows filtering by user profile, which focuses on one chat participant, session profile, which filters by a chat room name only, and date range.

ChatTrend offers a visual representation of the identified topics over time, or a broad overview of the topics from a single chat session. An analyst can see when interests and topics change suddenly, which may indicate odd behavior in a profiled listener/receiver or chat room.