

Service Description Document

Experimental Instant Messaging (IM) for NWS (NWSChat)

Part I - Mission Connection

a. Service Description

This Experimental service supersedes entry “EXPERIMENTAL Instant Messaging (IM) During Significant Weather and Hydrologic Events”. This Service Description Document describes a different approach to providing Instant Messaging capability, with policies, terms of use and IT requirements required for a government run and operated system. The IM capability described herein is called NWSChat.

NWSChat Instant Messaging (IM) is a real-time, Internet-based method of electronic communication. Utilizing a software device known as a “chat client”, multiple users can send messages to each other in forums known as “chat rooms.” NWS operational personnel use this technology to instantaneously send and receive hazardous hydrometeorological information to and from their core partners in the media and emergency response communities. Because of its real-time nature and ease of use, IM lends itself extremely well to significant weather and hydrologic.

IM is utilized by NWS operational personnel to share critical warning decision expertise and other types of significant weather information essential to the NWS’ mission of saving lives and property. This information is exchanged in real-time with the media and emergency response community, who in turn play a key role in communicating the NWS’ hazardous weather messages to the public. IM also provides media and emergency response partners with the ability to communicate significant event reports *back* to NWS operational personnel, who in turn utilize the information to make effective warning decisions. NWS partners can also use IM as an efficient means of seeking clarifications and enhancements to the communication stream originating from the NWS during a fast-paced significant weather or hydrologic event. Feedback processes such as these are crucial to maintain and improve our agency’s warning performance.

The National Oceanic and Atmospheric Administration (NOAA) Policy on Partnerships in the Provision of Environmental Information commits NOAA and NOAA’s National Weather Service (NWS) to the use of Internet-accessible, vendor-neutral forms for the provision of data and products, as follows:

“To advance the environmental information enterprise, NOAA will provide information in forms accessible to the public as well as underlying data in forms convenient to additional processing, to the extent practicable and within resource constraints. NOAA will make its data and products available in internet-accessible, vendor-neutral form and will use other dissemination technologies, e.g. satellite broadcast, NOAA Weather Radio, and wireless, as appropriate. Information will comply with recognized standards, formats, and metadata descriptions to ensure data from different observing platforms, databases, and models can be integrated and used by all interested parties.”

NWSChat as a communication medium complies with the policies outlined above.

b. Product Type – Experimental Service.

c. Purpose

NWSChat provides NWS operational personnel with a quick, efficient means of exchanging hydrometeorological information with media partners, emergency management officials, and other members of the hazard response community. NWSChat fosters an effective two-way flow of time-sensitive information between the NWS and its partners during periods of hazardous weather, as well as during other significant natural and human-induced events.

d. Audience

The target audience for this experimental service includes other government entities, electronic media partners, emergency managers and other members of the hazards response community, and Amateur Radio Emergency Services (ARES)/Radio Amateur Civil Emergency Services (RACES) Skywarn Net Ham Operators. These constituents play a critical role in helping the NWS achieve its mission of protecting life and property.

e. Presentation Format

Information exchanged between NWS forecasters and partners is displayed as text via an IM client.

f. Feedback Method

User feedback is extremely important in our effort to improve the quality and usefulness of products and services. Comments on significant weather collaboration using IM will be collected using web survey forms. During the experimental evaluation period, the NWS will collect comments of the utility of the service, workload for using the service, and on the policy and terms of use of the service. Web addresses of these forms is detailed in Part II, section b.

Part II – Technical Description

a. Format and Science Basis

IM is a synchronous real-time method of communication. Multiple users can send messages to each other via a server in what is called a "chat room". The messages are composed and sent via software called a chat client. This client also displays the responses from the other users in the chat group. Because of its real-time nature, this form of communication lends itself well to the sharing of significant weather reports and information on both natural and man-made disasters between the NWS and members of the hazards community. Such communication between the groups will facilitate enhanced documentation of hazardous weather events, in turn directly improving the NWS' tornado, severe thunderstorm, flash flood and winter storm performance (GPRA) goals. Beyond instant

communications, the chat room medium provides the capability of archiving all transcript logs, thus helping to improve the quality of data input into Storm Data.

b. Availability

The NWSChat system is available at: <http://nwschat.weather.gov>

The site includes documentation, training materials, and account request capability. In order to use NWSChat, client software must be installed on the user's computer. The NWSChat site includes links and information related to installing client software.

NWSChat will be made available to any NWS Office and Center, initial account set-up for NWS will start November 12th.

The decision to evaluate and use NWSChat will be left up to the Directors and MIC or HIC for each particular location.

Each NWS participating office or center may invite qualified partners to participate. Access to NWSChat for qualified partners will start on December 1, 2008. Non-NWS participants must meet one of the following criteria:

- Be a member of the Emergency Management Community

Defined as encompassing public safety officials who serve as employees or contract agents of a government agency at any level (federal, state, local, tribal, etc.) charged with protecting the public from hazards of whatever type influenced by weather conditions and Skywarn Net Control Operators such as Amateur Radio Emergency Services (ARES)/Radio Amateur Civil Emergency Services (RACES).

- Be a Government Partner of a specific NWS office

Defined as encompassing specific government partners that are necessary participants in NWSChat for specific NWS offices that have missions that require close coordination with these partners, e.g. FAA officials (for NWS Center Weather Service Units) and water management officials (for NWS River Forecast Centers).

- Be a member of the Electronic Media

Defined as encompassing parties who operate systems that routinely provide weather and water warning information rapidly to a significant part of the population served by the NWS office offering the IM service, and identified contract agents of these parties. Electronic media may include radio stations, broadcast television (TV) stations, cable TV stations, and providers of weather content for these and other means of electronic information distribution such as internet, wireless devices, etc.

Please submit your comments on the appropriateness of this form of information exchange using the survey posted at: <http://www.weather.gov/survey/nws-survey.php?code=nwschat>

Participants of NWSChat must agree to follow the Terms of Use (TOU) available on the NWSChat website. Agreement to the TOU is a pre-requisite to obtaining an account.

c. Additional Information

NWSChat sessions are stored in log formats. These chat logs are considered official NWS documents and are subject to Freedom of Information Act (FOIA) requests. Chat sessions are public records and participants agree that their comments may be posted on NWS web sites and used in post-event surveys and assessments.