



Updates for the NWS_CHAT

Mike Graf/USA, National Weather Service

ICAO NACC Regional SIGMET workshop,
May 31, 2023

NWSChat Overview and History

- Began ~ 2008
- Need to quickly communicate between NWS offices and their partners
- NWS staff helped to create the original platform for NWSChat using existing Open Source code and libraries
- Became a critical tool over the years and exceeded the ability to support it in the existing form
 - Outages started happening more frequently

NWSChat Overview and History cont.

. 2019 - NWS commenced to stabilize and replace NWSChat

- Stage 2 is now in progress as Slack was selected to be the platform on which NWSChat 2.0 would reside
- Expected full implementation and replacement of the existing NWSChat system is planned for Summer 2023.



NWSChat 2.0 Benefits

- Increased Reliability
- Additional features:
 - Photo and Video Sharing
 - Video Calls
 - Digital Whiteboards
 - Cross-Platform Availability and Compatibility
- Secure cloud based system that is scalable to meet user demand



Implementation and Lessons Learned

- NWSChat has > 15 K users
- It is used daily in real-time significant events
- Expedited implementation
 - Need to ensure all users are trained and have the knowledge they need to use the new system
 - Need to ensure system is configured properly and supported

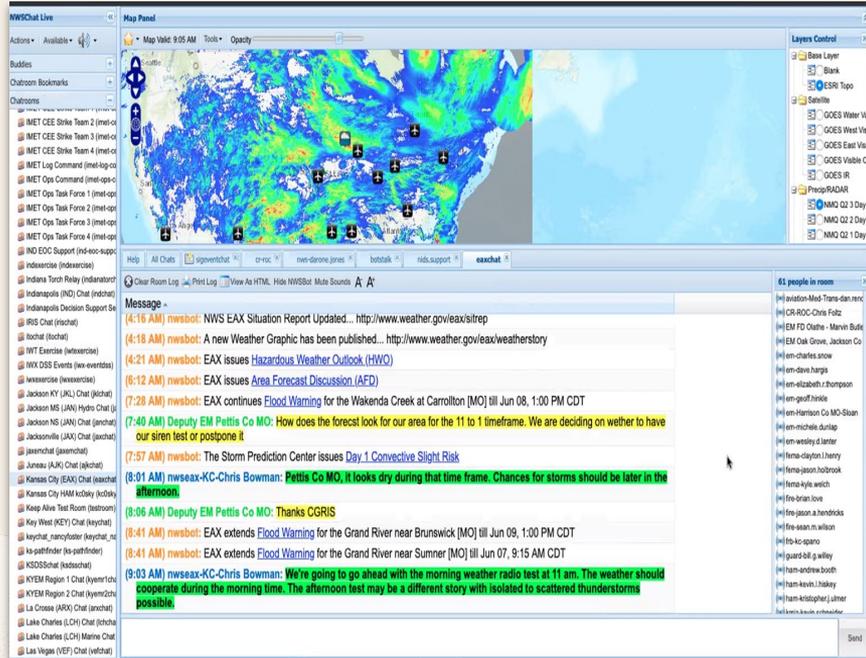




Implementation and Lessons Learned cont.

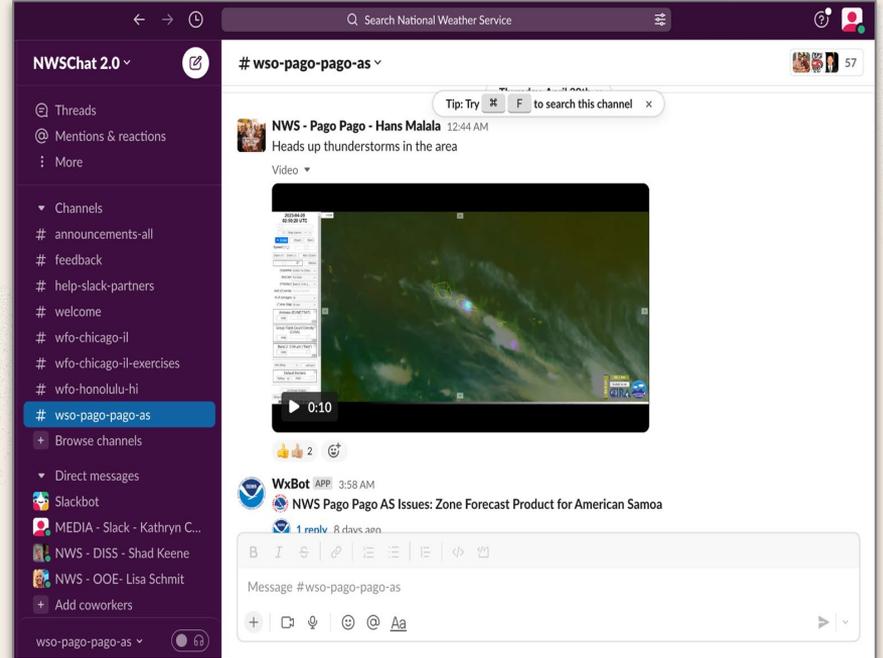
- Use of existing tools, contract vehicles, etc. helps to save a lot of time and effort
- Need a good team with wide ranging experience
- Has to be an effort that includes all parties working together with group ownership of all involved
 - E.g. Users of the new system need to be involved and active in the spin-up and need to have constant dialogue between different groups like Slack and NWS

NWSChat 1.0



The screenshot displays the NWSChat 1.0 interface. On the left is a sidebar with a list of chat rooms and users. The main area is split into three sections: a top map panel showing a weather map of the United States, a middle chat log with messages from users and bots, and a bottom layers control panel. The chat log contains several messages, including one from 'mwsbot' at 8:03 AM stating: "We're going to go ahead with the morning weather radio test at 11 am. The weather should cooperate during the morning time. The afternoon test may be a different story with isolated to scattered thunderstorms possible."

NWSChat 2.0



The screenshot displays the NWSChat 2.0 interface. On the left is a sidebar with a list of channels and users. The main area shows a channel page for '# wso-pago-pago-as'. It features a video player with a video titled "NWS - Pago Pago - Hans Malala Heads up thunderstorms in the area". Below the video is a message input field with a placeholder "Message #wso-pago-pago-as". The interface is modern and clean, with a dark purple header and a white main content area.

NWSChat 2.0 Timeline

FY22		FY23		FY23		FY23		FY23		FY24	
Q4		Q1		Q2		Q3		Q4		Q1	

Slack Contract Award

Complete

100% Complete

Pacific Region Operations Demo

Started March 2 and congress notified too!

Project Kickoff, Schedule Planning, Complete Roles & Resp., Policy, & Governance docs

IT Security Documentation and Approval for Authority to Operate

50% Complete

Cloud Architecture Established

100% Complete

Testing & Validation

Denotes critical path

Development, Configuration, Testing of NWS-related tools (BOTs) for use w/ Slack

100% Complete

Network connections between IDP and Cloud and Required dataflow

100% Complete

Dissemination 24x7 Cloud Support Services Contract awarded - staff hired and trained

100% Complete

Fix any remaining NWSChat issues

NWS Go - No Go

National Deployment

Comms Plan Development and Updates for Partners

Comms Initial Rollout

100% Complete

Comms Rollout update

Partner & Congressional Notification

Training Plan & Documentation

Training: System Admins & OT&E Users

Training: Remaining Internal Users

Training: Remaining External Users

Decommission IDP NWSChat



Next Steps





Final thoughts-

- Translation for the instructions will be needed. As with the original NWSCHAT, we'll need to work with ICAO NACC to put this in place
- POCs for questions etc will need to be established
- It has taken us 4-5 years to get where we are in the region with the current NWSCHAT, particularly with the Volcanic Ash program, we don't want this new implementation to take as long

Thank You

Mike Graf/USA, National Weather Service

Phone: +1301-427-9109

Email: Michael.graf@noaa.gov