MIST SYSTEMS

STAND-ALONE CLOUD INFRASTRUCTURE FOR ENVIRONMENTAL DISASTER RELIEF

- SOLUTION -

A Rugged Communication Hub, Giving Relief Workers a Centralized Platform to Collaborate and Share Information

- RESEARCH -

$143 Billion USD
Amount spent by the USA on Natural Disasters in 2012.

268 Million People
Average impacted by Natural Disasters worldwide.

80% Turnover
Rate faced by NGOs for field workers

> An effective information and communication system (ICS) is a central component of successful humanitarian relief efforts.
> — Mark Haselkorn
> *Professor and Disaster Researcher, University of Washington*

> Everybody was walking around up and down Long Beach with clipboards. Everything was paper...Why can't first responders or FEMA or emergency responders have electronic devices where they go and they log in, 'This house is destroyed.'?
> — Bill Wahlig
> *Executive Director, Long Island Forum For Technology*

> On 9/11, a lack of information probably resulted in more problems than all other factors combined.
> — Ronald J Simon, M.D.
> *Division Chief Trauma/Critical Care - NYU Medical Center*

MIST Central Hub

Features
- Field Medical Record Storage
- Secure Instant Messaging
- Centralized Printing
- File Sharing and Editors
- FEMA "X-Code" Archive

Technical Specifications
- Open Source Software Stack
- Impact Resistant to 250Gs
- Aircraft Grade Aluminum
- FAA Compliant Carry-On
- Accepts Worldwide Voltages

MIST Chat
- Scalable Communication
- Public or Private Conversation
- 2048bit RSA Encrypted

Zephyr - Android App
- Portable "X-Code" Archive
- Medical Data Storage
- Offline Storage on Phone
- Automatically Syncs with MIST

MIST Data
- Secure File Sharing
- Mobile and Desktop Support
- Document and Image Editor

- PROBLEM -

In the event of an environmental disaster, coordinating relief efforts requires communication between hundreds of stakeholders, and mistakes can mean the difference between life and death.
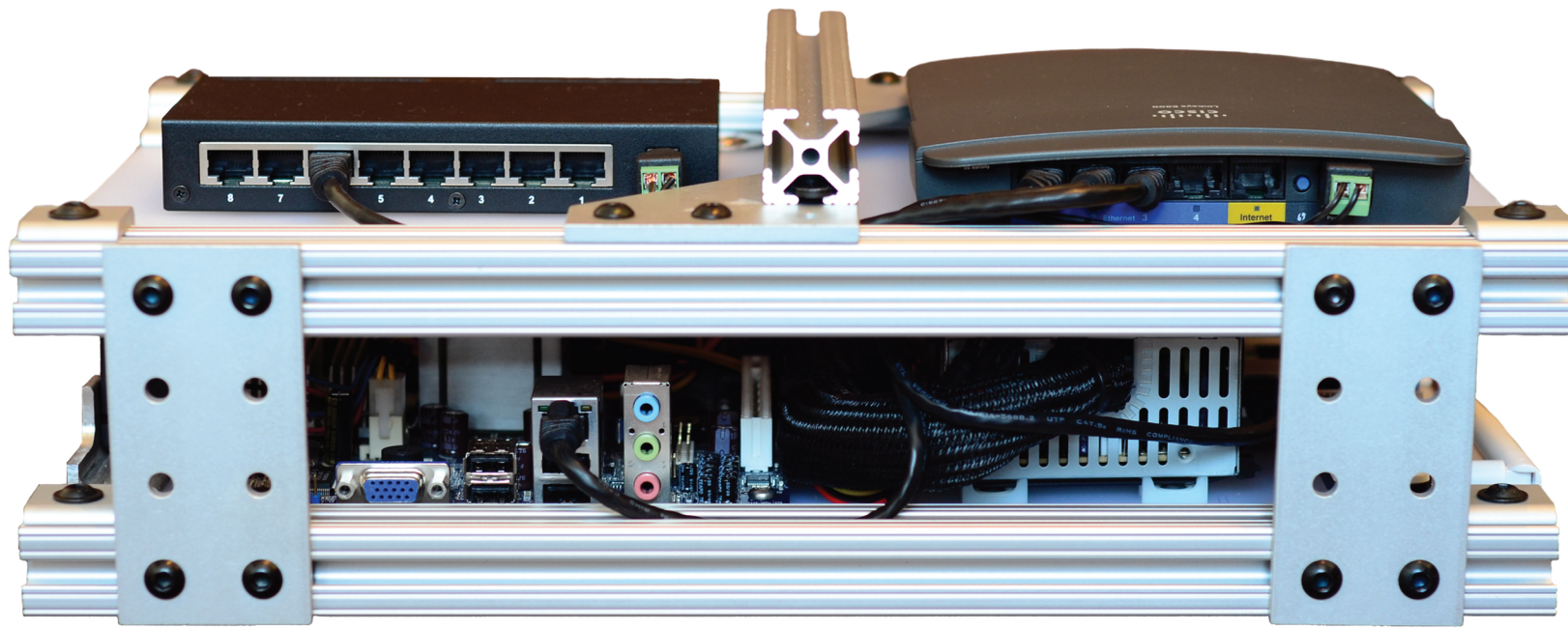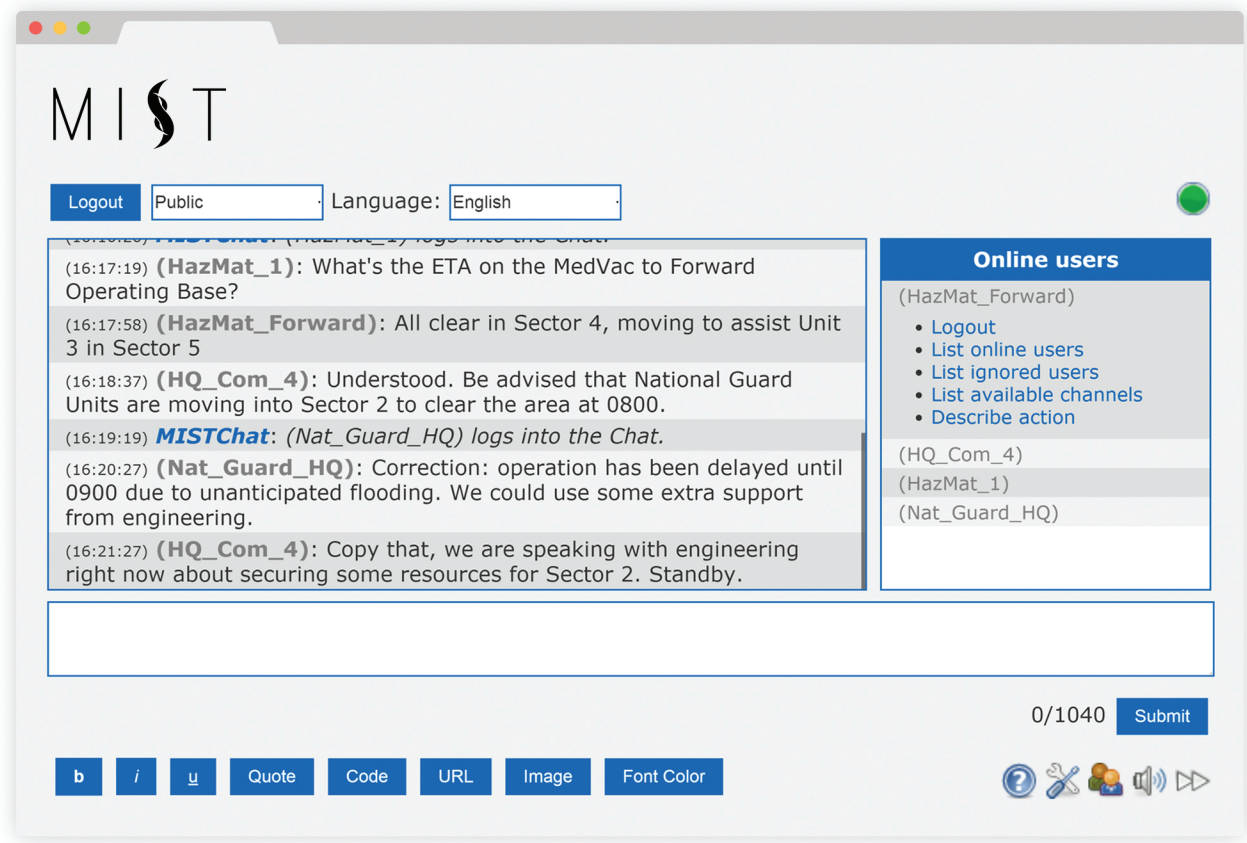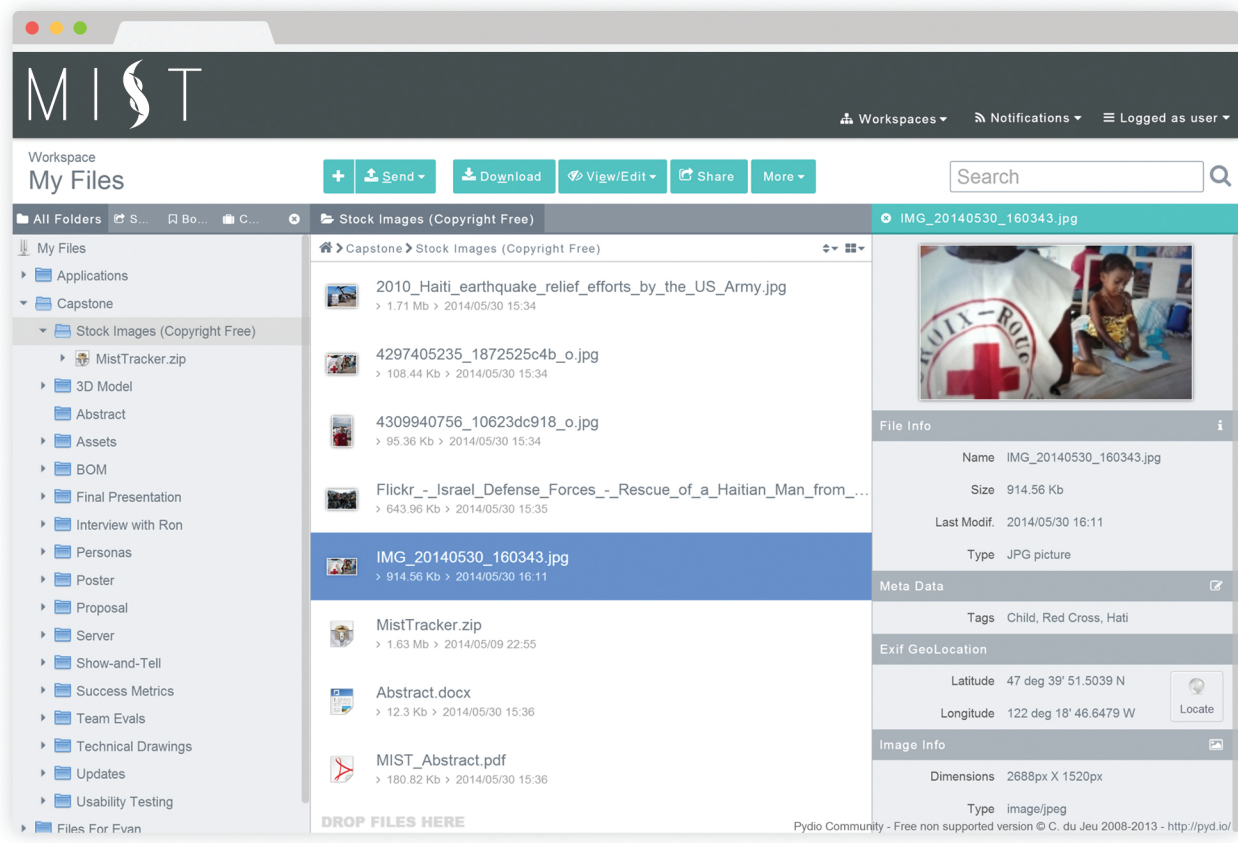
Infrastructure is often either incapacitated or unreliable, and relief workers are forced to use pen, paper, and limited radio frequencies to communicate.

This leads to a disjointed system where critical information is frequently outdated or isolated, resulting in unnecessary delays, confusion, and loss of life.

Chat Supports
~1000 Simultaneous Users

15 out of 15 People
Learned Zephyr In Less Than 5 Min.

MIST is Capable of Archiving
- 30 Days of HD Video
- 2,010,000 High-Res Photos
- 4,200,000 Audio Files
- 25,000,000 Documents

Why Not Satellite?

File Type	Size	Cost	Transfer Time
Document	250 KB	$1.42	16 seconds
Audio	3 MB	$32.07	3 minutes 21 seconds
Picture	8 MB	$54.50	8 minutes 57 seconds
Video	200 MB	$2,180	3 hours 44 minutes 9 seconds
HD Video	1 GB	$10,900	18 hours 40 minutes 47 seconds

Estimates based on Iridium OpenPort Service: $10.90/MB and 134 Kbps

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