Weatheradio Canada

Denis Paquette
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Environment Canada

- Providing weather warnings to Canadians
- Using web technology
- Providing automated telephone services
- Using Weatheradio
Our Network

• Automated telephone service
  – Provides service to 135 locations
  – Answers more than 20 million calls annually

• Weatheradio Canada
  – 230 transmitters
  – Covers 93% of the Canadian population
  – With 32 sites north of 60
Our current system

- Text-to-speech engines developed in the mid 90’s
- 54,000 phrases in three languages
- Over 50,000 voice files produced every day
- System is located in five offices
- Complete automated process
Current system

- Has fallen behind changes in the system
- Does not adapt to change quick enough in support of new products and alerting systems
New System

- Adoption of the iNOTiFY system
- Centralized delivery in one location plus one backup
- Will provide an all hazards solution
- More agencies will be able add warnings to the system
- Solution will also provide voice files to the media
System NWS Beginnings

- NWS Funded National, centralized solution to replace existing 122 systems
- 122 remote portals to manage 1,000+ FM transmitters
- General Public and Government dissemination
Capabilities

• Centralized Architecture with Local Management
• Standards Based One-to-Many Dissemination System:
  – CAP compliant throughout
  – Same message to all
• Low bandwidth “edge” solution: 64kbps
• Multi-Format alerts/warnings/forecasts:
  – Text, Recorded Audio, Text-to-Speech Audio
• Highly configurable broadcast rules:
  – Geography, Voice/Pronunciation, Periodicity, Interrupts, Tones
• Highly extensible and adaptable, making it a viable option for other First, Second and Third World nations
Deployment Throughout Canada

All-Hazards CAP Messages from Canadian Systems

Audio Broadcast Files Provided to Media and Local Phone Trees

Localized Management

Audio Broadcast via 230 Transmitters

* Lab/Staging system being deployed now; Operational assets to be deployed Fall 2015
ChatterBox

- The ChatterBox is a self-contained unit responsible for the broadcast of text and audio data to a co-located transmitter, speaker, public address system or other audio receiver for public notification.
  - 230+ units: one per transmitter
  - Environmentally ruggedized
  - Integrated text-to-speech engine (French & English)
  - Single configuration; upgradeable to dual configuration
  - Tool-less repairs
  - Remote diagnostics (incl. live audio monitoring) & software upgrades
  - Low bandwidth utilization: 64kbps
  - Complex broadcast rules plus tone generation
Suitability for Third World Nations

Remote Office Solution

- A foreign nation or territory can operate as a remote office off of the main Weatheradio system.

Standalone Solution

- System can collapse to a single box solution to be installed within the foreign nation (completely separate from Weatheradio system).
Suitability for Third World Nations
(Cont)

• Nuance text-to-speech engine supports 45 languages

• Non-commercial native language broadcast can be supported via local audio recording and phonetic text-to-speech
  – Canada will be using this approach for its Inuktitut population

Leading by example, Canada is exploring use of this new solution for Haiti.
Thank You

Environment Canada Contact:
Denis Paquette
Denis.Paquette@ec.gc.ca
819-938-4453

iNOTiFY Contact:
Kathy Nuckles
kn@commpower.com
805-208-7777