EMRG-{xxx} Data Communications



# EMERGENCY MEASURES RADIO GROUP



**OTTAWA ARES** 

Two Names - One Group - One Purpose

## Amateur Radio Data Communications DEMO NETWORK

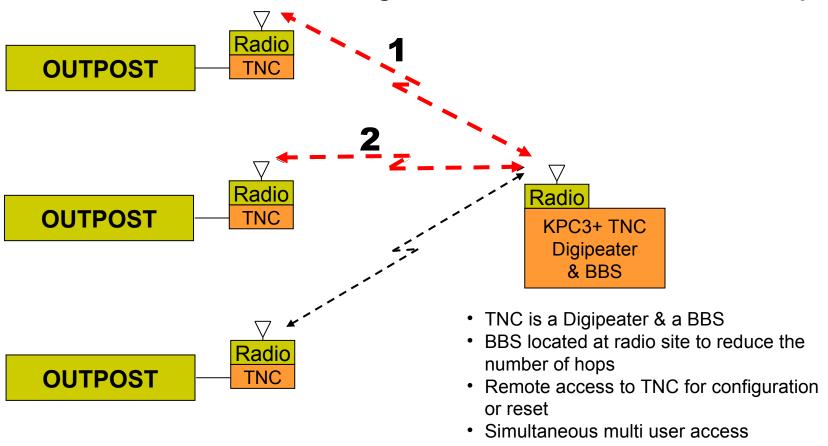
Date Of Last Change: 2008-01-11 Version: 1.1

#### **PURPOSE**

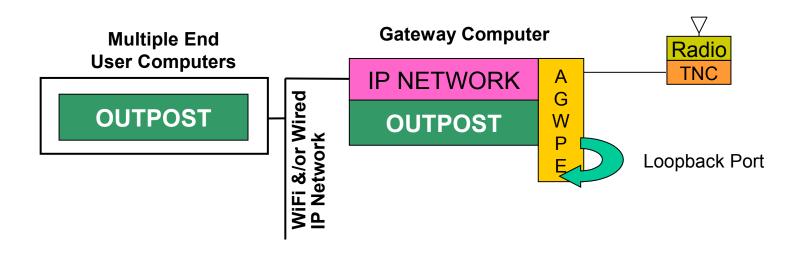
- The purpose of the Technology Demo is to show people some of the things that EMRG is working on, and some ideas that are possible based on available technology.
- Hopefully some people will take some of these ideas, or get ideas of their own, and experiment to find solutions that can be applied to EMRG problems.

# BASIC DATA COMMUNICATIONS Outpost & TNC BBS

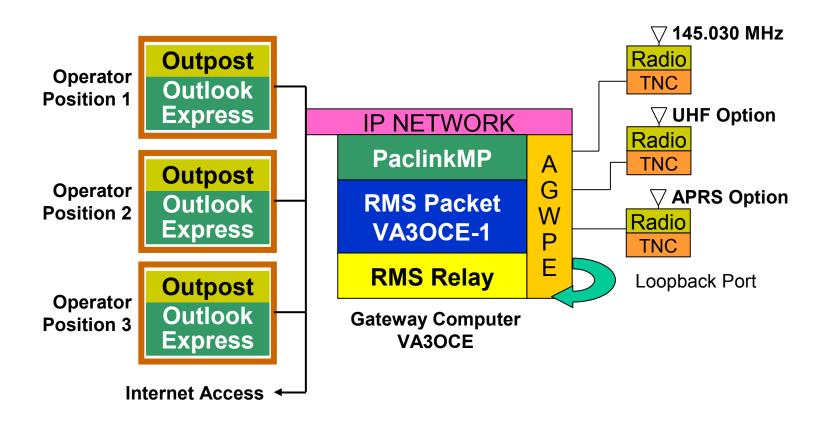
Message from source to destination in 2 hops



#### **OUTPOST WITH AGWPE**

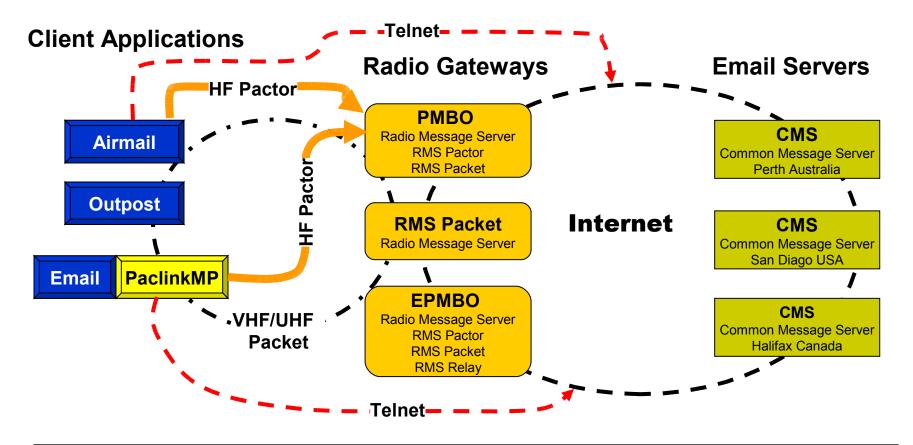


#### **AGWPE APPLICATIONS**

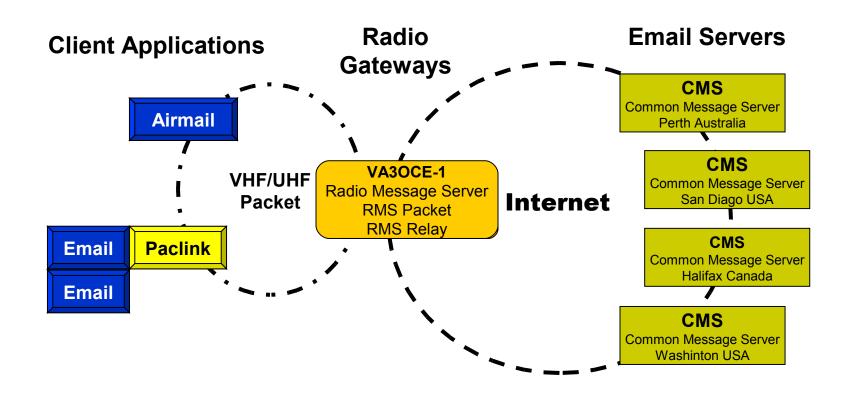


#### Winlink 2000

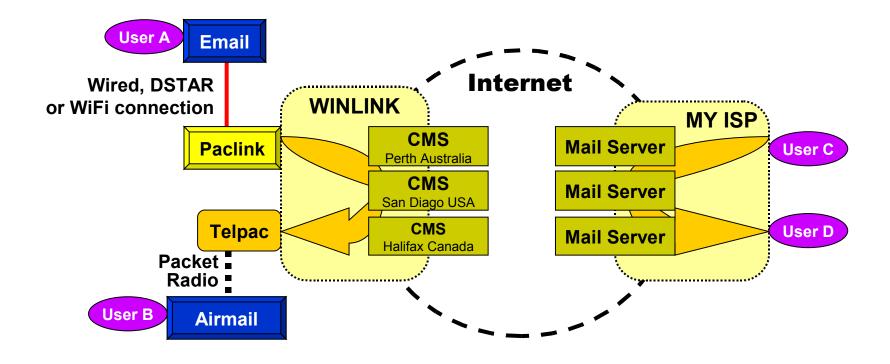
Winlink 2000 is an Email System made up of 3 components;



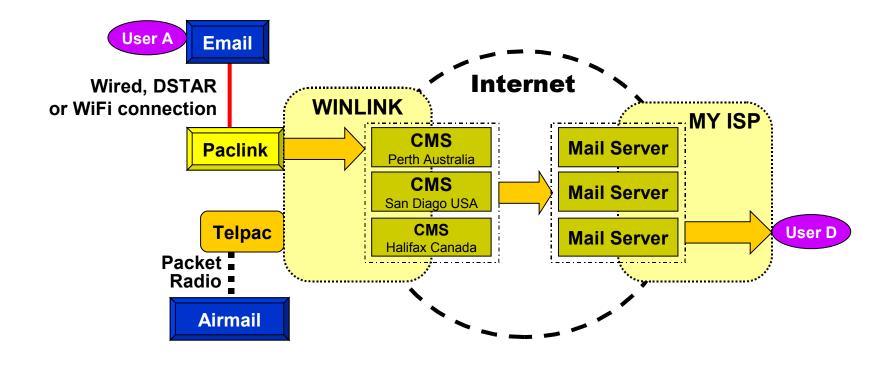
#### TYPICAL WINLINK SYSTEM



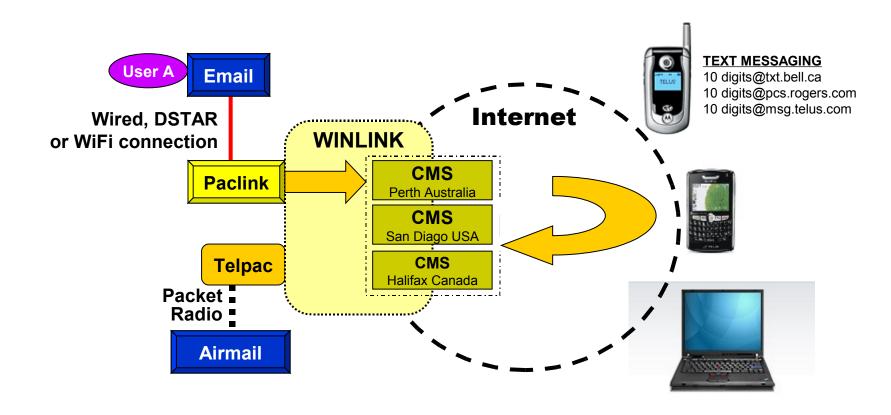
#### WINLINK LIKE AN ISP



#### WINLINK TO "MY ISP"

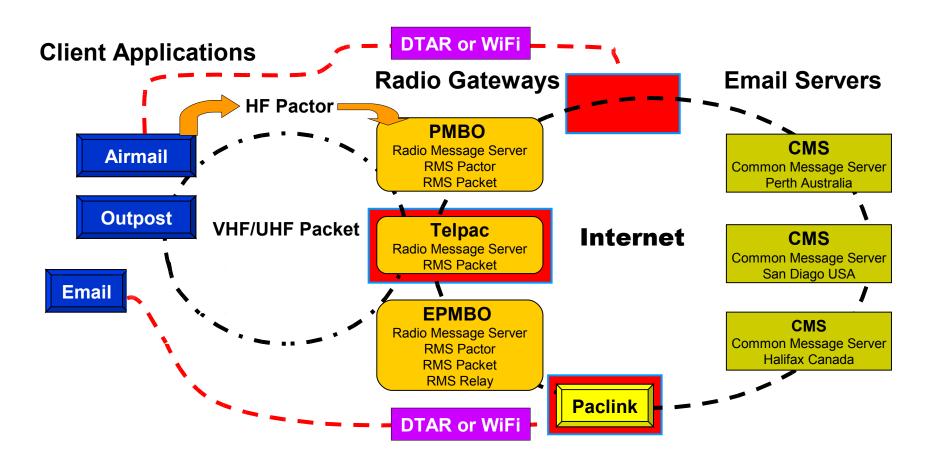


#### WINLINK TO ANY EMAIL



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#### **DSTAR & WiFi**



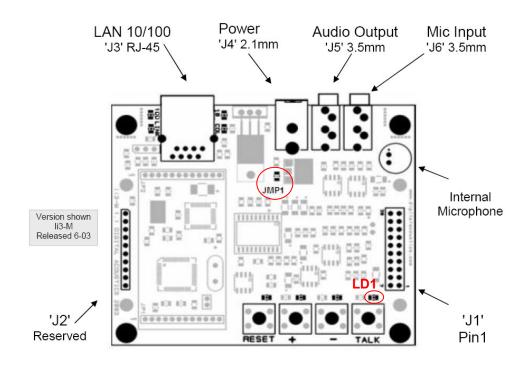
### Voice over IP (VoIP)



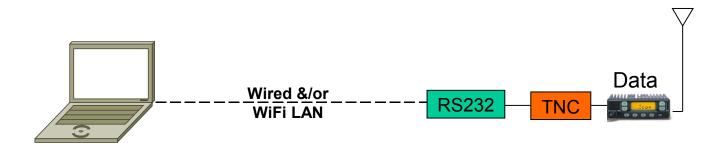
The system is made up of 2 ii 3 VoIP Intercom units, configured for Peer to Peer mode, with one as a Client and the other as a server.

### Voice over IP Standalone Audio Interface





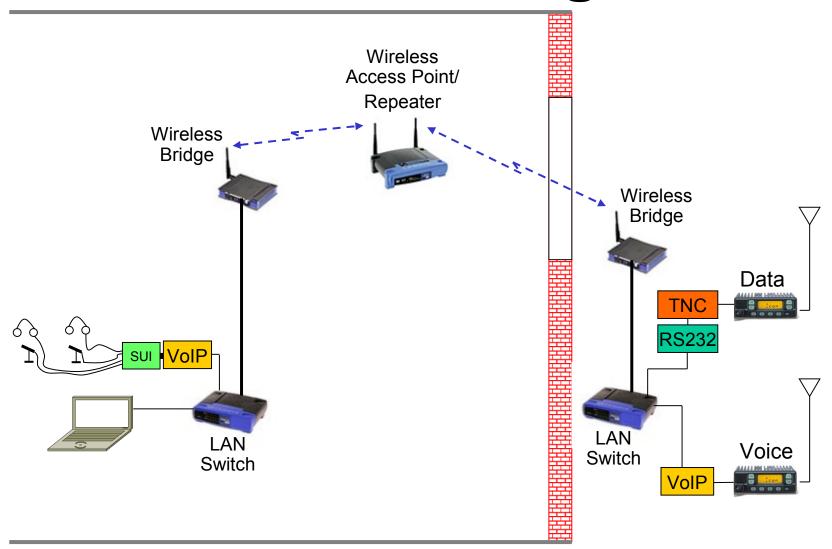
#### **RS232 Serial Extension**





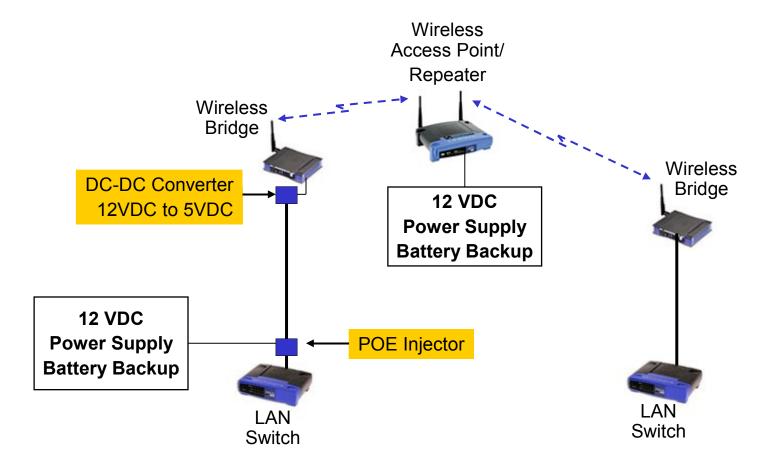
**Serial Communications RS232 Over Ethernet** 

## **Sealed Buildings**

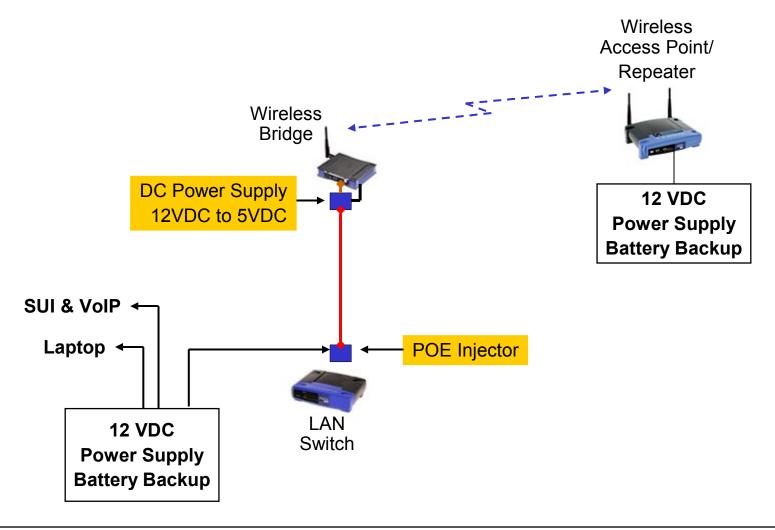


Computers Inside, while Radios & "Appliance" Devices are Outside

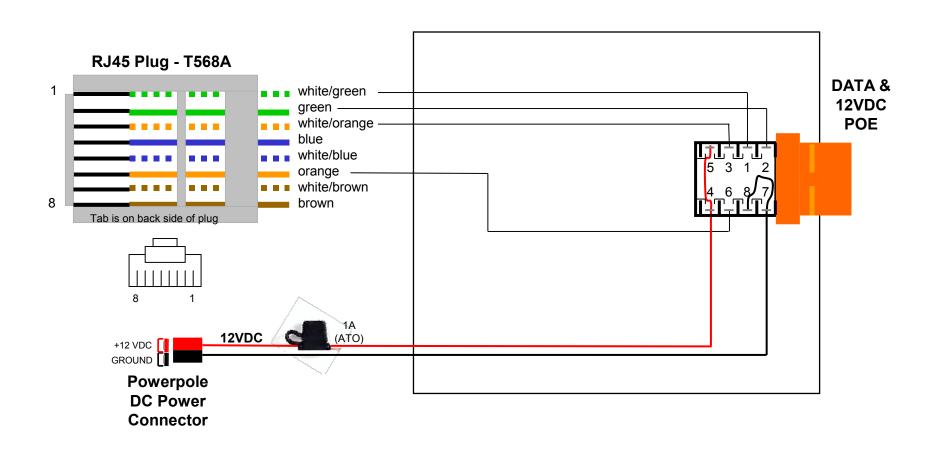
#### **POWERING THE LAN**



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# Power Over Ethernet (POE) 12 VDC Power Injector



# Power Over Ethernet (POE) 5 VDC Power Supply

