EMRG-{xxx} Data Communications



# EMERGENCY MEASURES RADIO GROUP



#### **OTTAWA ARES**

Two Names - One Group - One Purpose

## Amateur Radio Data Communications DEMO NETWORK

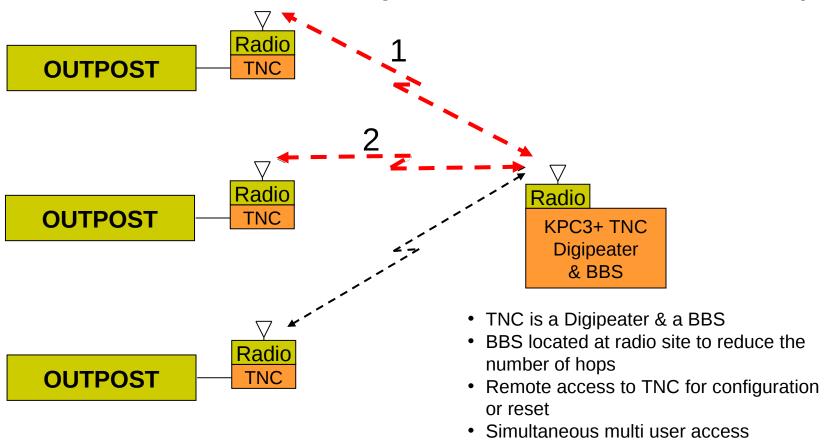
Date Of Last Change: 2008-01-11 Version: 1.1

### **PURPOSE**

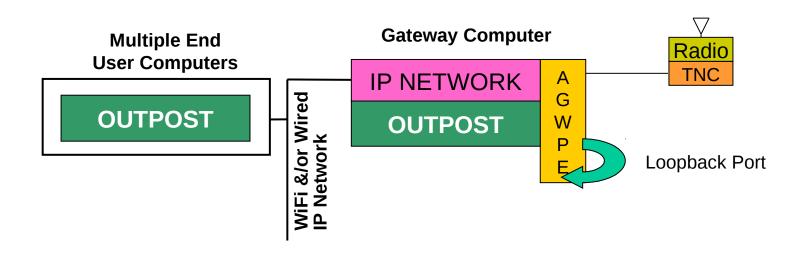
- The purpose of the Technology Demo is to show people some of the things that EMRG is working on, and some ideas that are possible based on available technology.
- Hopefully some people will take some of these ideas, or get ideas of their own, and experiment to find solutions that can be applied to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

# BASIC DATA COMMUNICATIONS Outpost & TNC BBS

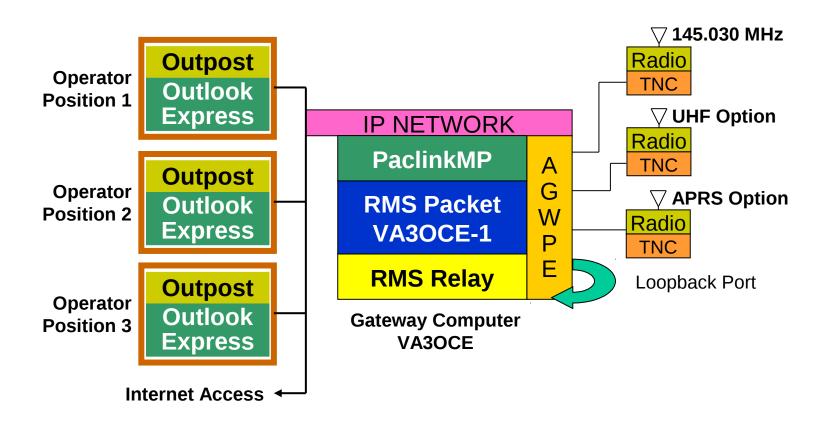
#### Message from source to destination in 2 hops



#### **OUTPOST WITH AGWPE**

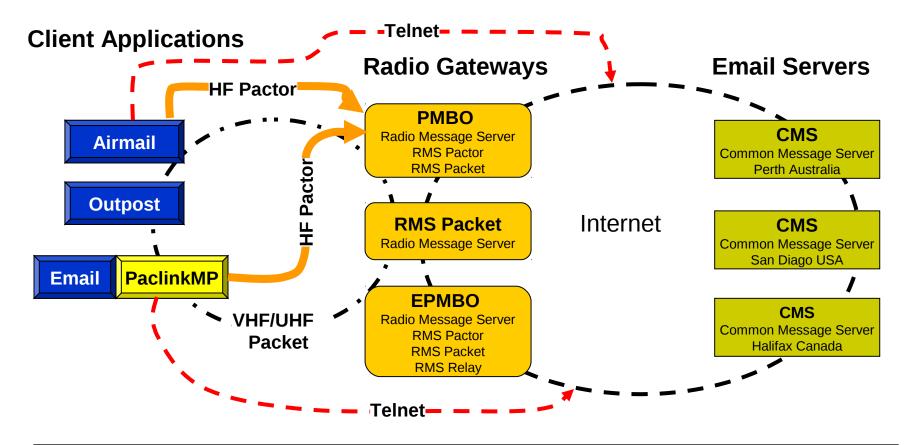


#### AGWPE APPLICATIONS

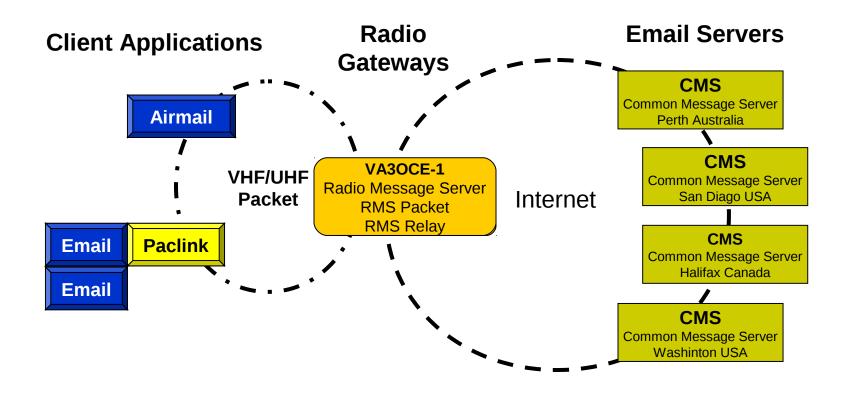


### Winlink 2000

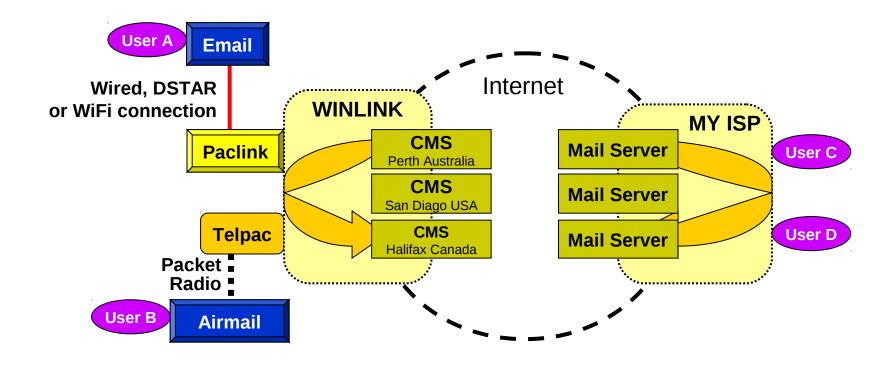
Winlink 2000 is an Email System made up of 3 components;



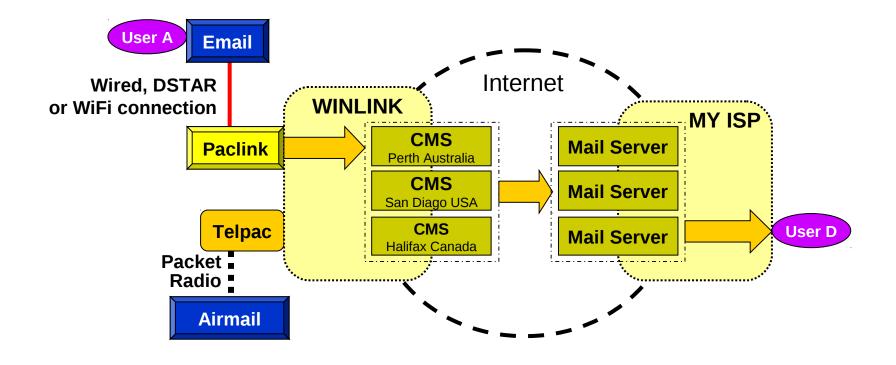
#### TYPICAL WINLINK SYSTEM



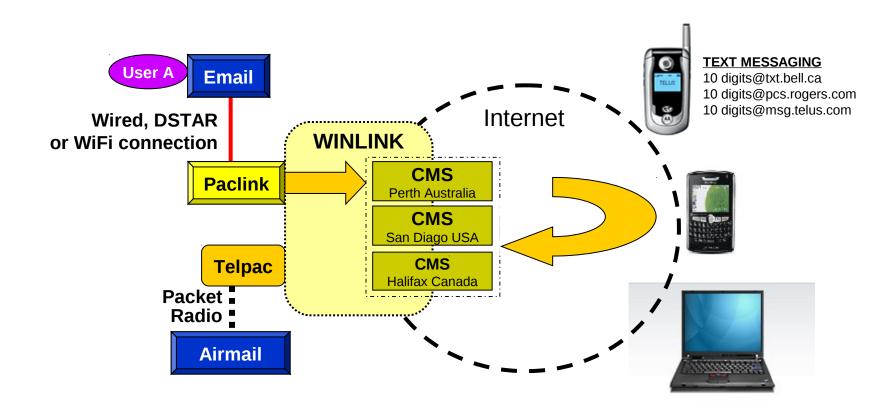
#### WINLINK LIKE AN ISP



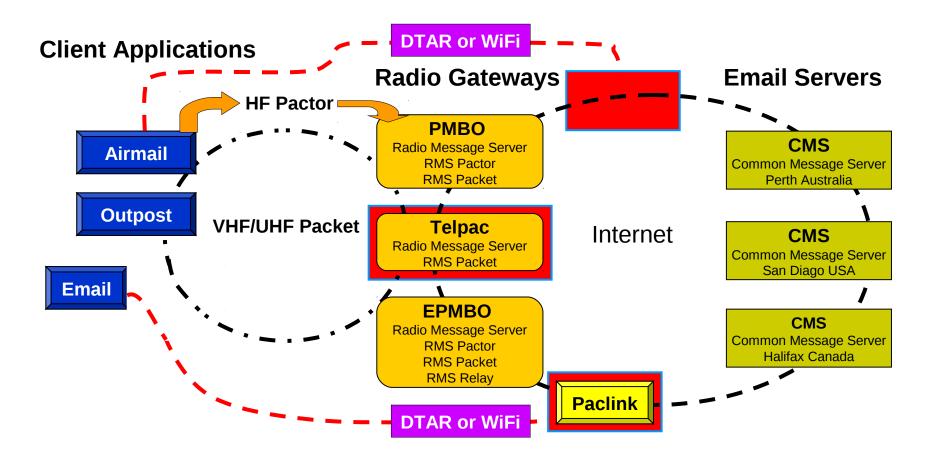
## WINLINK TO "MY ISP"



#### WINLINK TO ANY EMAIL



#### **DSTAR & WiFi**



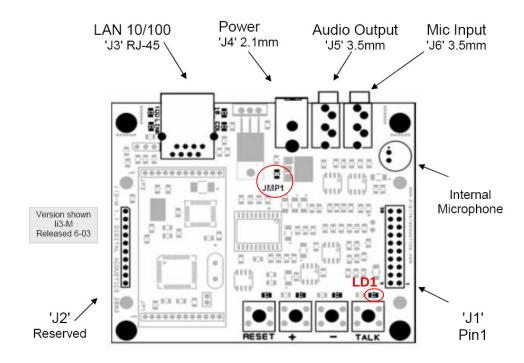
## Voice over IP (VoIP)



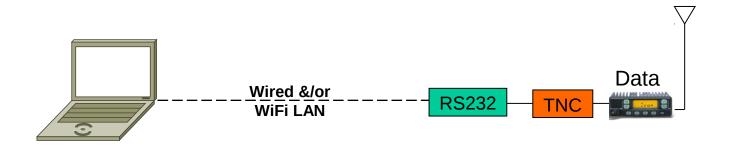
The system is made up of 2 ii 3 VoIP Intercom units, configured for Peer to Peer mode, with one as a Client and the other as a server.

#### Voice over IP Standalone Audio Interface





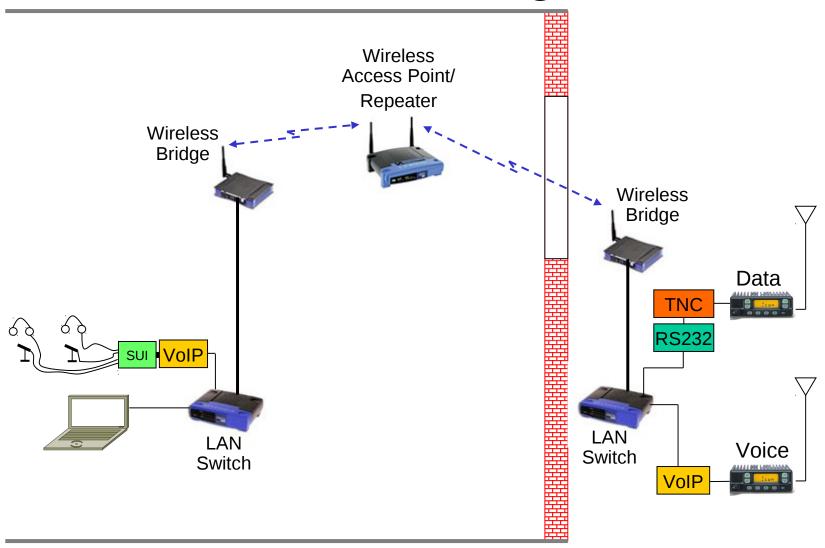
### **RS232 Serial Extension**





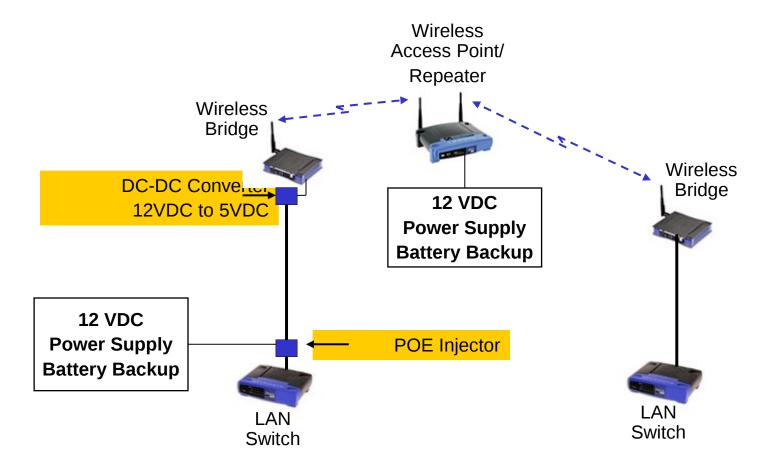
**Serial Communications RS232 Over Ethernet** 

## Sealed Buildings

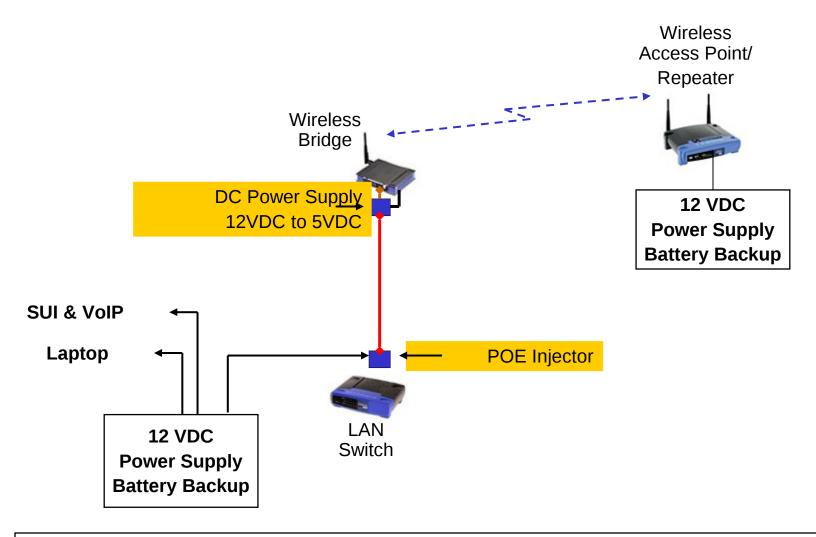


Computers Inside, while Radios & "Appliance" Devices are Outside

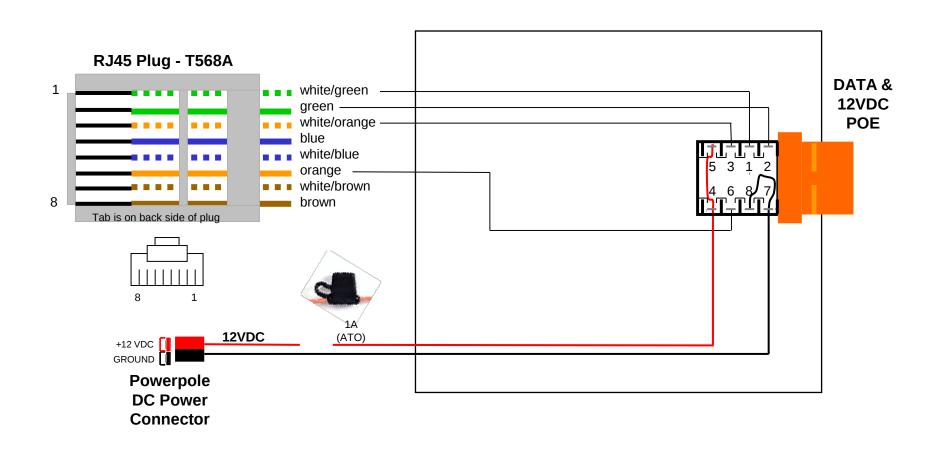
#### POWERING THE LAN



### POWERING THE LAN



# Power Over Ethernet (POE) 12 VDC Power Injector



# Power Over Ethernet (POE) 5 VDC Power Supply

