



# E-mail Service Overview

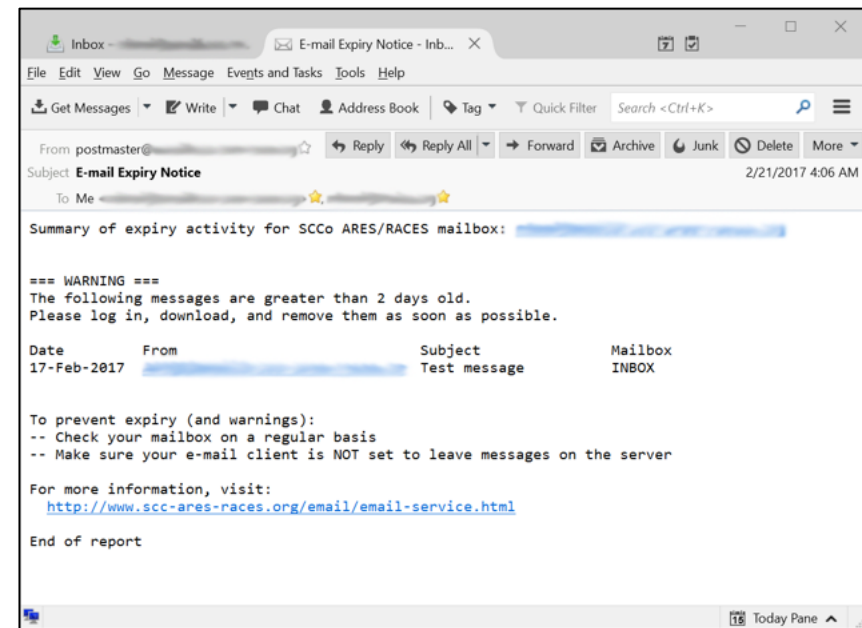
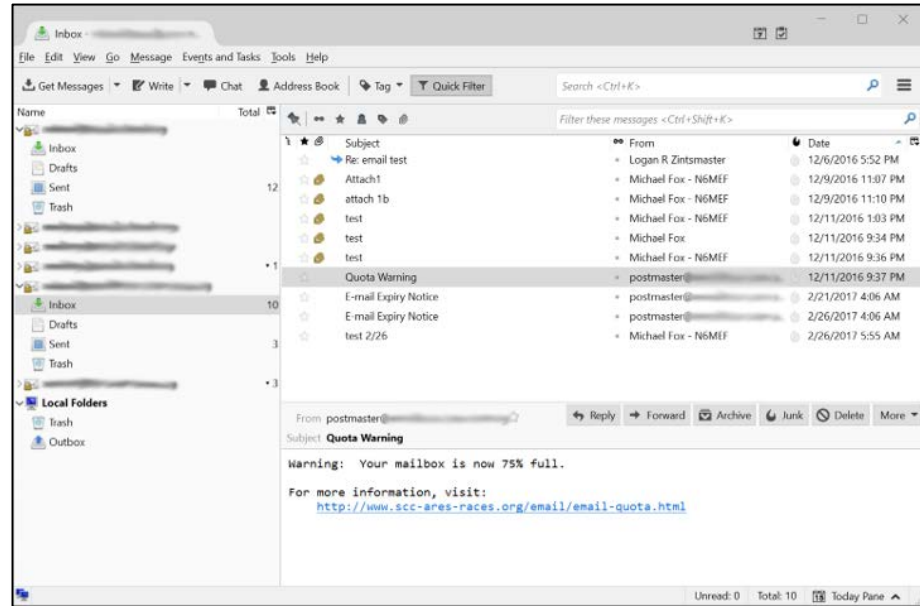


Santa Clara County ARES/RACES/ACS

Revised: 11-Jan-2018

# E-mail Service

- Standard e-mail service
- Capabilities:
  - Standard server software
  - Standard e-mail client software
    - Recommended: Thunderbird
  - Standard features
    - Rich text formatting, attachments
  - Standard e-mail protocols
    - POP3, SMTP, TLS, SPF, DKIM, ...
  - Anti-X measures
  - Internet gateway
    - But Internet is not required

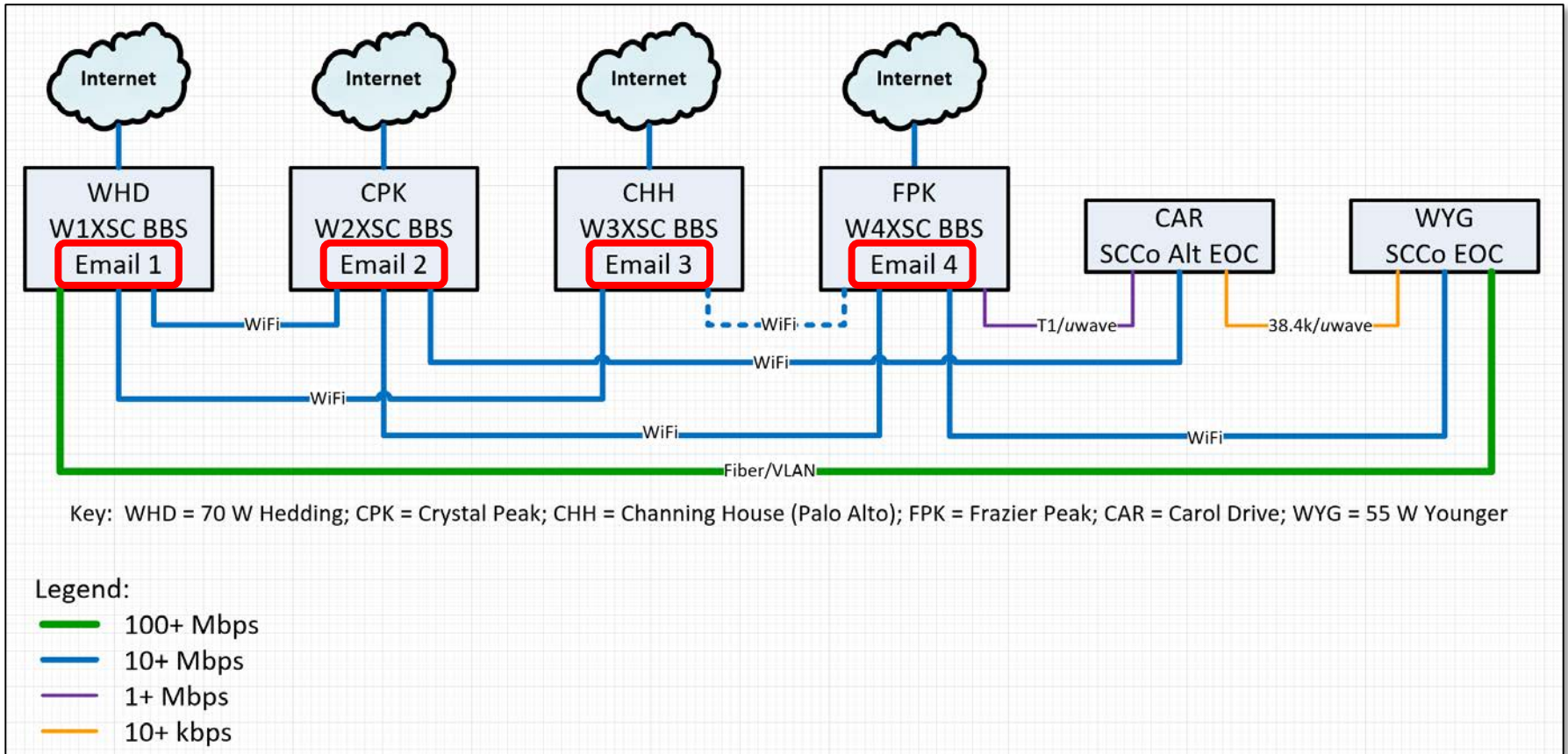


# E-mail and BBS Servers are Co-Located

- Multiple servers, just like with packet
- Numbered 1-5, just like with packet
- Each city has primary and secondary, just like with packet
- Failure of one doesn't affect the others, just like with packet

E-mail Domain	Location	Co-located Packet BBS
<b>email1.scc-ares-races.net</b>	San Jose (Santa Clara Co office bldg)	W1XSC
<b>email2.scc-ares-races.net</b>	Crystal Peak (South County)	W2XSC
<b>email3.scc-ares-races.net</b>	Palo Alto	W3XSC
<b>email4.scc-ares-races.net</b>	Frazier Peak (above Milpitas)	W4XSC
<b>email5.scc-ares-races.net</b>	varies (drills, events, incidents)	W5XSC

# 2017 High-speed Redundant Backbone Status

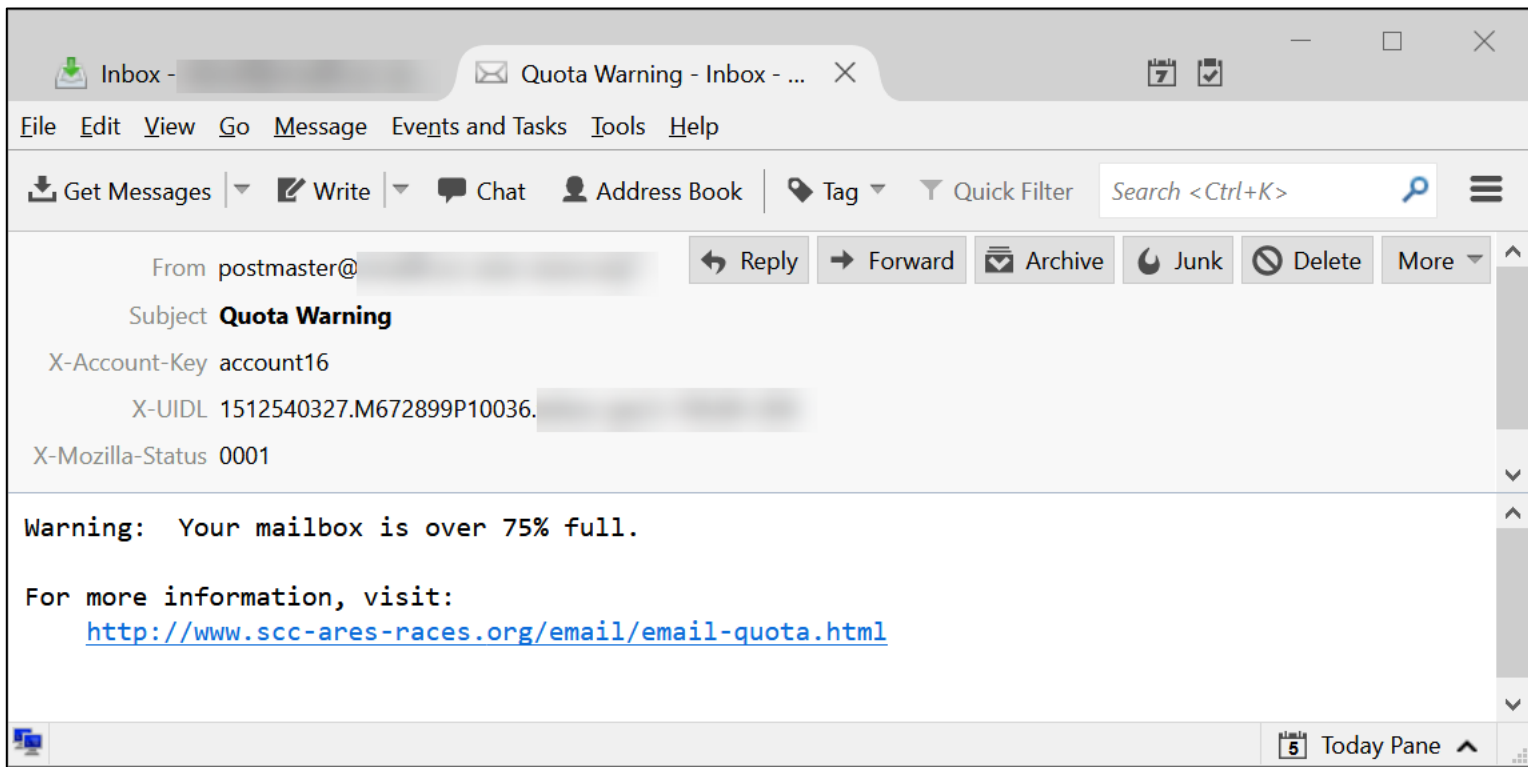


When completed, no single site or link outage can interrupt the network

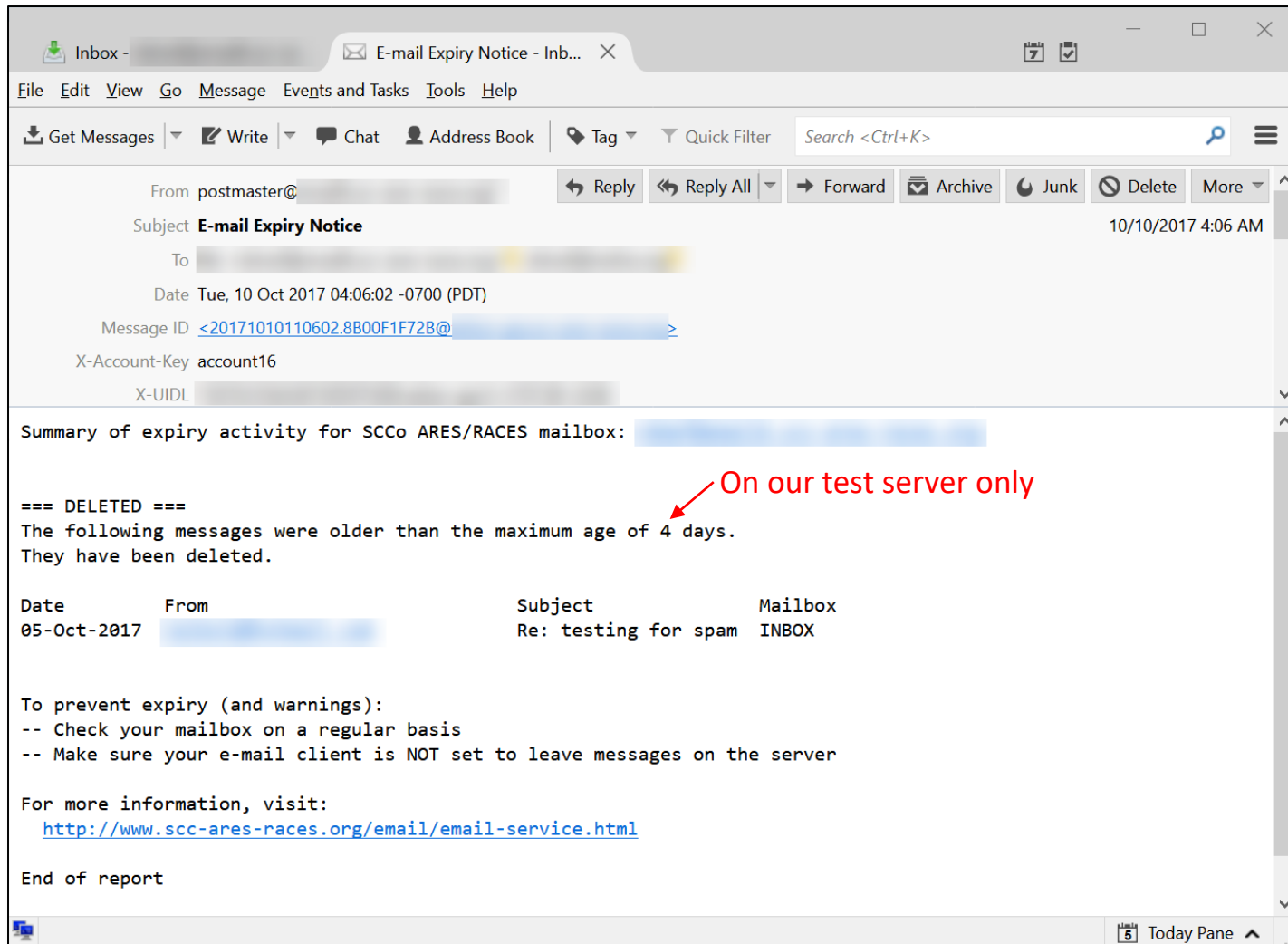
# Account Details

Maximum Message Size	10 MB
Mailbox quota <ul style="list-style-type: none"><li>Warnings at 75% and 90%</li></ul>	50 MB
Old message expiry and removal <ul style="list-style-type: none"><li>Warnings at 7 days</li></ul>	92 days

# Example: Mailbox Quota Warning



# Example: Old Mail Expiry Notice



# Accessing the E-mail Service

- E-mail needs MUCH more bandwidth than packet
  - Larger packets, chattier protocols, attachments, rich text formatting
- To get more bandwidth, we have to use higher frequencies
- Higher frequencies mean less RF coverage
- Options for our network (see infrastructure section)
  - TCP/IP at 56+ Kbps via UHF: soon, from most of the county
  - TCP/IP at n\* Mbps via WiFi: from locations with line of sight to hub



# & E-mail ~~vs.~~ Packet - Summary

E-mail		Packet	
GUI Interface	✓	GUI Interface	✓
Supports rich text	✓	Supports only plain text	
Supports attachments	✓	No attachments	
Requires higher bandwidth		Requires minimal bandwidth	✓
Reduced RF coverage		County-wide coverage	✓
No workflow support		Rich EmComm workflow (message numbering, delivery receipts, logging, ...)	✓

- Packet – still best for EmComm
  - Best RF coverage; best EmComm workflow
- E-mail – can help with some 3<sup>rd</sup> party communications
  - Complex encoding, attachments; but requires more BW; less coverage

End