



E-mail Service Overview

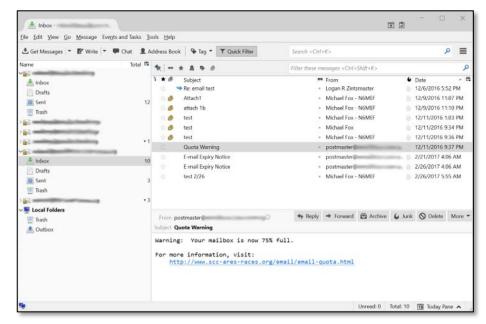


Santa Clara County ARES/RACES/ACS

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



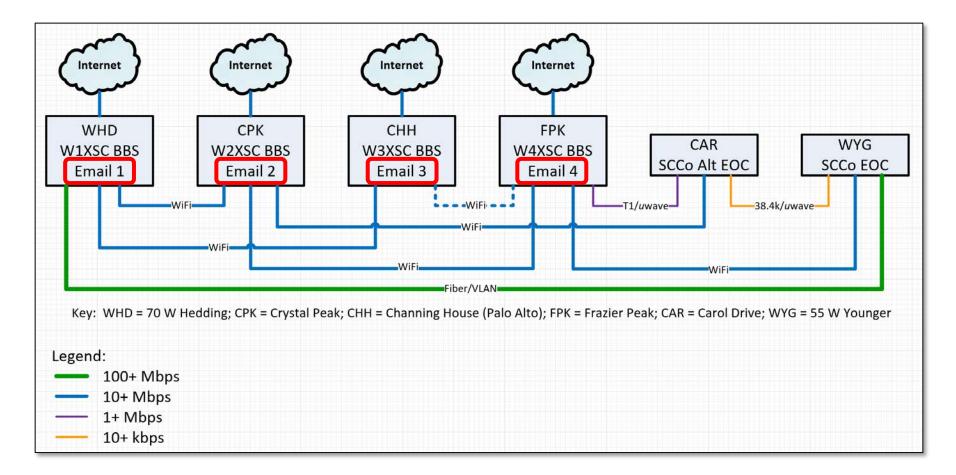
🚊 Inbox - 🖂 E-mail Expiry Notice - Inb 🗙 🛐 😨	-		×				
File Edit Yiew Go Message Events and Tasks Tools Help							
🛃 Get Messages 💌 😰 Write 💌 🗭 Chat 🔹 Address Book 🛛 🗞 Tag 👻 🝸 Quick Filter 🛛 Search <ctrl+k></ctrl+k>		۶	≡				
From postmaster	•						
Subject E-mail Expiry Notice	2/21/	/2017 4:06	AM				
Summary of expiry activity for SCCo ARES/RACES mailbox:							
=== WARNING ===							
The following messages are greater than 2 days old. Please log in, download, and remove them as soon as possible.							
Date From Subject Mailbox 17-Feb-2017 Test message INBOX							
To prevent expiry (and warnings): Check your mailbox on a regular basis Make sure your e-mail client is NOT set to leave messages on the server							
For more information, visit: http://www.scc-ares-races.org/email/email-service.html							
End of report							
Sec. 1997	15 Toda	ay Pane 🔺					

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	E-mail Domain Location	
email1.scc-ares-races.net	San Jose (Santa Clara Co office bldg)	W1XSC
email2.scc-ares-races.net	Crystal Peak (South County)	W2XSC
email3.scc-ares-races.net	Palo Alto	W3XSC
email4.scc-ares-races.net	Frazier Peak (above Milpitas)	W4XSC
email5.scc-ares-races.net	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 quotaWarnings at 75% and 90%	50 MB
Old message expiry and removalWarnings at 7 days	92 days

Example: Mailbox Quota Warning

📩 Inbox - 🖂 Quota Warning - Inbox 🗙 🚺 🛃	—		\times			
<u>File</u> <u>E</u> dit <u>V</u> iew <u>G</u> o <u>M</u> essage Events and Tasks <u>T</u> ools <u>H</u> elp						
L Get Messages ▼ Write ▼ ■ Chat L Address Book Tag ▼ ▼ Quick Filter Search < Ctrl+	К>	٩	≡			
From postmaster@	🛇 Delete	More	~ ^			
Subject Quota Warning						
X-Account-Key account16						
X-UIDL 1512540327.M672899P10036.						
X-Mozilla-Status 0001			~			
Warning: Your mailbox is over 75% full.			^			
For more information, visit: <u>http://www.scc-ares-races.org/email/email-quota.html</u>						
	5 Toda	y Pane	^			

Example: Old Mail Expiry Notice

📩 Inbox - 🖂 E-mail Expiry Notice -	- Inb ×				7	—		×
<u>File Edit View Go M</u> essage Eve <u>n</u> ts and Tasks <u>T</u> ools <u>H</u> elp								
📩 Get Messages 🔻 🕊 Write 💌 🗭 Chat 👤 Address Book	🂊 Tag ▼	Y Quick Filte	er Search < Ctr	l+K>			٩	■
From postmaster@	+ Reply		→ Forward	Archive	6 Junk	🛇 Delete	More	~ ^
Subject E-mail Expiry Notice						10/10/201	7 4:06 A	M
То								
Date Tue, 10 Oct 2017 04:06:02 -0700 (PDT)								
Message ID <20171010110602.8B00F1F72B@		2						
X-Account-Key account16								
X-UIDL								~
=== DELETED === The following messages were older than the maximum age of 4 days. They have been deleted.								
Date From Su	ubject	Ν	Mailbox					
05-Oct-2017 Re	e: testing	for spam]	INBOX					
To prevent expiry (and warnings): Check your mailbox on a regular basis Make sure your e-mail client is NOT set to leave messages on the server For more information, visit: http://www.scc-ares-races.org/email/email-service.html End of report								
For more information, visit: http://www.scc-ares-races.org/email/email-ser		iges on the	server					~

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	\checkmark	GUI Interface	\checkmark
Supports rich text	\checkmark	Supports only plain text	
Supports attachments	\checkmark	No attachments	
Requires higher bandwidth		Requires minimal bandwidth	\checkmark
Reduced RF coverage		County-wide coverage	\checkmark
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 3rd party communications
 - Complex encoding, attachments; but requires more BW; less coverage

End