

# EcomScs & GatewayScs

Packet Radio Meets Real E-Mail  
By John KB2SCS

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<http://www.qsl.net/kb2scs>

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EcomScs is an E-Mail client for AX25 packet Radio.

Anything that you can do with your internet E-Mail client you can do with EcomScs.

EcomScs can send and receive attachments.

Any file on your hard drive can be sent or received as an attachment.

EcomScs sends and receives attachments by encoding and decoding the file into BASE64

BASE64 is the same encoding and decoding that your internet E-Mail client does to send and receive attachments.

Once a file is encoded into BASE64 the BASE64 representation of the file is ASCII text.

The internet E-Mail system just like AX25 Packet Radio can only send and receive ASCII text.

EcomScs formats all its E-Mails using the MIME protocol. In other words EcomScs is sending and receiving true internet compliant E-Mails.

An EcomScs station consists of:  
Transceiver  
PC  
TNC or AGWPE

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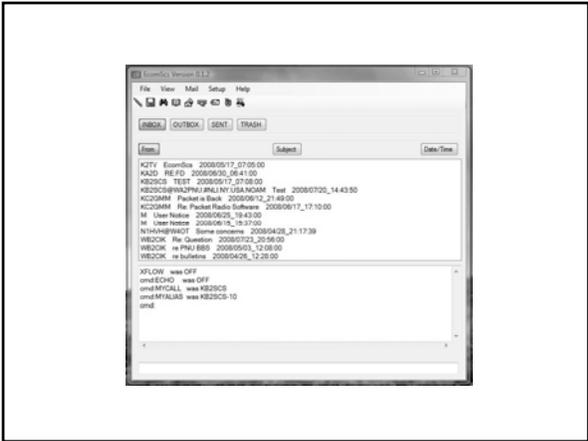
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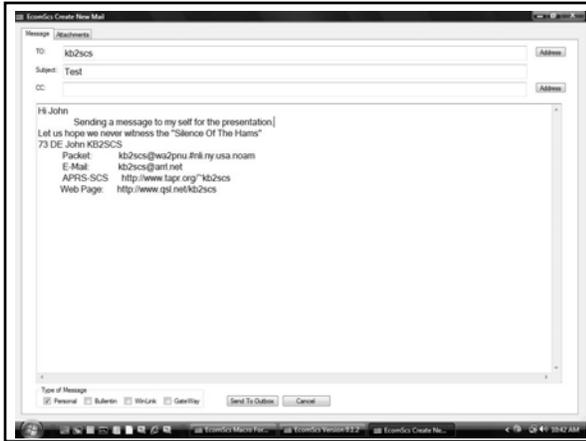
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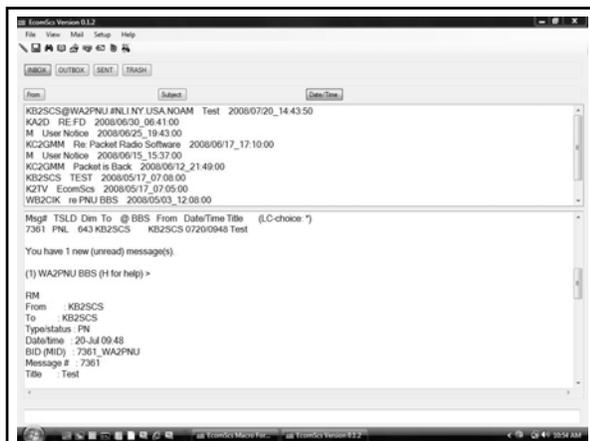
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Version 0.3.0 of EcomScs. Version 0.3.0 works with 32 and 64 bit XP, Vista and Windows 7 systems.  
 The only change the user will notice is the new display of the users E-Mail files.

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EcomScs has the ability to take large Image files and reduce their size to make them more realistic to send as attachments at 1200 Baud.  
 The above picture of Hortons Point Light House is almost 40K.  
 By Clicking on the Half Size button the size is reduced to a little more than 11K

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Note your original image file is not changed. You can now click on the save button which will save the image file to a different name or folder preserving the original file.

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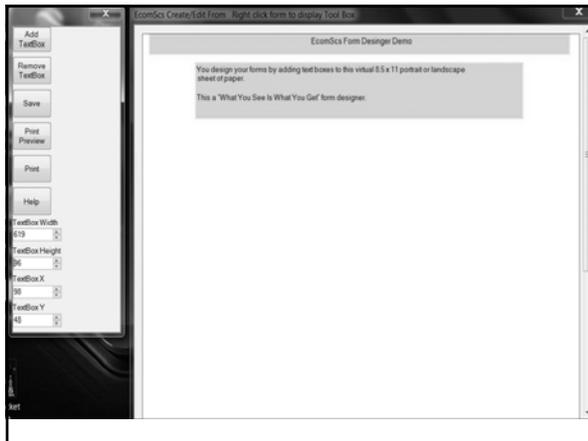
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GateWayScs is a POP3 SMTP Packet Radio to Internet gateway.  
 Hardware: Plain vanilla AX25 Packet radio station, Transceiver, TNC and PC with the addition of an Internet connection. Dial up or full time both will work.  
 The connection to your ISP has to allow you to do SMTP and POP3.  
 The sending and receiving of Internet E-Mails between the Internet and AX25 packet radio is transparent to the user. It is all done automatically without any user intervention.

**As Per FCC rules. Is GateWayScs Legal?**  
 The sending of Internet Emails via Amateur Packet Radio is no contest.  
 The Receiving of Internet Emails is a little "sticky".  
 GateWayScs would send an Email to EcomScs. It may have originated from a non HAM.  
 This in itself sounds illegal. But it is not since the way I have programed EcomScs and GateWayScs.  
 GateWayScs is set up to act just like a Packet BBS does.  
 All Packet traffic is initiated by the Ham operator at the EcomScs station.  
 Since the HAM operator at the EcomScs station is causing all transceivers in the system to transmit and never is a non HAM causing any transceivers to transmit then I feel that this system is legal under FCC rules.

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**Why was GateWayScs created?**

GateWayScs was created to allow EcomScs stations that are located inside the disaster area to send and receive Internet E-Mails.

Yes the Internet inside the disaster area is down but outside of the disaster area where the GateWayScs station is located the internet is working just fine.  
If the EcomScs station inside the disaster area can reach via RF the GateWayScs station that is outside the disaster area then this system will work very well.

Version 0.0.2 of GateWayScs has a new feature.

The ability to be used without an Internet connection.

So what good is an Internet Gateway station if it does not have an Internet connection?

What if in the beginning of a disaster all the Packet BBS are down. Before version 0.0.2 EcomScs would have had no way of sending and receiving local E-Mails. Those E-Mails that it would have normally sent and received via the Packet BBS system.

Now with GateWayScs version 0.0.2 you would set up a GateWayScs station inside the disaster area. This GateWayScs station would not have an Internet connection.

When operating in this non Internet mode GateWayScs instead of doing POP3 and SMTP any E-Mails it receives are stored on the PC hard drive.

GateWayScs in this mode is a packet mail box. EcomScs stations can connect and leave mail for other EcomScs stations.

Note in this mode there isn't any mail forwarding.

GateWayScs is not designed to replace the Packet BBS. Which is why there is no mail forwarding

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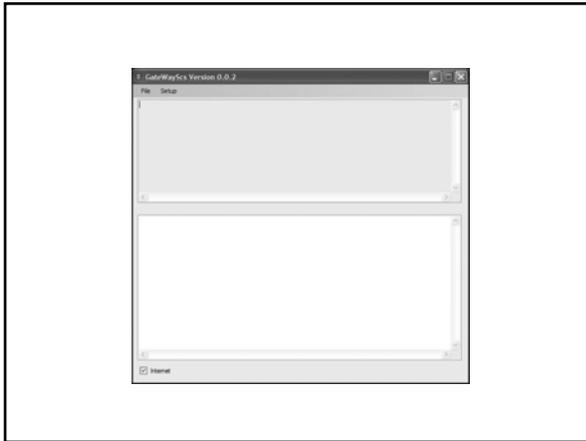
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Where Can I Obtain EcomScs And GateWayScs  
<http://www.gsl.net/kb2scs>

How can I E-Mail the author?  
kb2scs@arri.net

Thank you for your time and concentration.

**QUESTIONS?**

73 John KB2SCS

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