Session One: Tweaking Configuration File/Chat Page (rev 2)

I would like to acknowledge Dan Smith, KK7DS for this excellent D-RATS program. He has put a lot of thought into the creation of D-RATS so that we can use it in our EMCOMM groups and for personal use.

There are a lot of things going on under the hood of D-RATS that you should be aware of and I hope to accomplish that with this training.

Required Items:

D-RATS vdaily-02232012. <u>http://dev.d-rats.com/drats_daily/daily-02232012</u> Available for Windows, MAC OS, and Linux. Computer Connected to the AE5HE RATflector Click FILE>>Preferences>>Radio>>ADD Name: Whatever you want to name it. It's for your use only. Type: Select Network Host Address: ae5he.ham-radio-op.net Port: 9000 Password: Leave blank

Tweak Configuration file: Make the following changes to the following config settings.

Preferences

Click on Files>>Preferences

Enter your Callsign or Tactical Call.

Enter your name is optional if you use your name elsewhere such as I have done.

Sign on/off messages can be what you would like the rest of us to see when you sign on and off with D-RATS.

Units are normally Imperial.

If you like to use UTC time be sure to check the box.

The Ping reply is what we will see when we ping your station.

Take all other defaults.



Paths

I recommend taking the defaults on this. You will notice that when you installed D-RATS it put the D-RATS Shared Folder on your desktop. Do not delete it. If you move it be sure to change the File Transfer Path. This is where D-RATS is looking to find its shared files.



GPS

Enter your lat/longs in the decimal format. If you are using an external GPS then check the box. Remember we are located west of the prime meridian in the western hemisphere so our longitude is prefaced with a minus (-). Use the following link to find the latitude and longitude of an address, <u>http://stevemorse.org/jcal/latlon.php</u>. This link will be helpful later on in the training when map overlays are covered.

Click on the DPRS button and select the icon you want to display at your position on the map.

(Config							×
	Preferences	Latitude	31.916320					
	Paths	Longitude	-106.427390					
	GPS	Altitude	3993					* *
	Appearance	Use External GPS	Enabled					
	Chat	External GPS		-	480	0		Ψ.
	Sounds	GPS-A Symbol	Table: /	Sym	bol:	>		
	Messages	Freshen map after	720					hours
	🗏 Radio	Default GPS comment	LY LEW DM61SV*20					DPRS
	Transfers	Timestamp Positions	Enabled					
	Network							
	TCP Gateway							
	TCP Forwarding							
	Outgoing Email							
	Email Accounts							
	Email Access							
				<u>S</u> a	ave		<u>C</u> ar	ncel

Appearances

Enter "Your Callsign" in the Notice RegEx field. When your Callsign is detected in the message line the text will be highlighted with the color determined by Notice Color field. Use "?!" (no spaces) after your Callsign. If the sender uses upper or lower case for your Callsign either will be accepted i.e. KB5HPT?! = KB5HPT or kb5hpt. You can add other strings to this line by placing a pipe symbol {(|) (no spaces)} after the last character of the first string. Then add the new string i.e. LEW?! This way when someone addresses you by name (upper or lower case) the text will be highlighted.

Enter the" \[QST\]" (Regular Expression) in the Ignore RegEX to subdue any QST's that are received in the Chat Pane. This will correspond to the Ignore Color selected.

A new feature helps you keep the Stations list to a manageable size. "Expire stations after" lets you remove the inactive Callsign from the Stations list after "n" minutes. Zero disables this function.

🏶 Config		×
Preferences	Notice RegEx	KB5HPT?!
Paths	Ignore RegEx	\[QST\]
GPS	Incoming Color	
Appearance	Outgoing Color	
Chat	outgoing color	
Sounds	Notice Color	
Messages	Ignore Color	
🗆 Radio	Callsign Color	
Transfers	Broken Color	
TCD Cataway	Toolbar buttons	Default
TCP Gateway	Check spelling	Enabled
Outering Email	Confirm exit	Enabled
Outgoing Email	Expire stations after	60 ninutes
Email Access		
]	Save <u>C</u> ancel

Chat

Enable "log chat traffic and Load log tail"

Set the Chat Font to your preference.

Note: If "Show status updates in chat" is disabled your .WAV tones that are selected in the SOUNDS page below will not be heard when an update is received. This feature is handy if you monitor busy RATflectors with a lot of messages and you don't want to be notified each time.

Change the QST Size Limit to 4096 to allow larger file sizes of QST's. Take all other defaults.

🔞 Config		×
Preferences	Log chat traffic	Enabled
Paths	Load log tail	Enabled
GPS	Chat font	Times New Roman Normal 12
Appearance	Scrollback Lines	1024
Chat	Show status updates in chat	Enabled
Sounds	Timestamp chat messages	Enabled
Messages	QST Size Limit	4096
🖃 Radio		
Transfers		
Network		
TCP Gateway		
TCP Forwarding		
Outgoing Email		
Email Accounts		
Email Access		
	,	Save Cancel

Sound

You can enter .WAV files here to alert you when there is activity on the pages when you are not in front of the computer. Enter files of your own choosing, or check out the many files already available with the Windows OS (C://Windows/Media/). Press Play to listen to the .WAV file. Be sure to enable them.

🕫 Config							X
Preferences	Chat activity	C://windows/media/chord]	<u>P</u> lay	V 6	Enabled
Paths	Message activity	C://windows/media/chimes			<u>P</u> lay	V 6	Enabled
GPS	File activity	C://windows/media/Tada			Play	V 6	Enabled
Appearance							
Chat							
Sounds							
Messages							
🗏 Radio							
Transfers							
Network							
TCP Gateway							
TCP Forwarding							
Outgoing Email							
Email Accounts							
Email Access							
			<u>S</u> ave			<u>C</u> an	cel

Messages

Be sure to check automatically forward messages. Someone may have to send messages through your station.

Queue flash interval: Sets the length of the Queue flush interval in seconds.

Station TTL: If a station has not been heard longer than this interval, D-RATS will send out a ping before attempting to transfer a message.

Take the defaults for the rest.

🏶 Config			X
 Config Preferences Paths GPS Appearance Chat Sounds Messages Radio Transfers Network TCP Gateway 	Automatically forward messages Queue flush interval Station TTL Include original in reply Allow POP3 Gateway Allow WL2K Gateway WL2K Connection WL2K Network Server WL2K RMS Station My Winlink SSID POP3 Server		seconds seconds
TCP Forwarding Outgoing Email Email Accounts Email Access	SMTP Server	Enabled on port 9025	mcel

The Main Window:

🛞 D-RATS: KB5HPT-1	
<u>File View Help</u>	
Messages Chat Files Event Log	Stations (27)
	WB0IZO
New Forward Reply Delete Mark Read Mark Unread Send/Receive	KF5SMH (1m)
🛅 Drafts Sender 4 Recipient 4 Subject 4 Type 4 Date 🕶	PE1KZU (1m)
Inbox Inbox	KB5HPT (2m)
Outbox	K2TJW (3m)
Sent Sent	AB9FT (3m)
Trash	IZ3ALU (4m)
	N5JEP (6m)
	N3TSZ-2 (7m)
	N0JY (19m)
	W7BPD (19m)
	KD2EAE (24m)
	DB0ZAV (24m)
	KC2PED (24m)
	AD4MC (24m)
	9Z4RG (24m)
	ON3LA (24m)
	KB9JRC (24m)
	AB9FT-1 (24m)
	W1WAB (24m)
	WA0NUU (24m)
	KB5EDB (24m)
	KE5APX-C (26m)
	W5MPZ-R (33m)
	F4DKF (44m)
	DO1CQ (1h 16m)
	KE5APX (2h 25m)
	My Status
	Unattended 💌
	KB5HPT, El Paso, TX I
	KB5HPT-1

The Main Window is the first screen you will see when you start D-RATS. D-RATS will also notify all stations that your station is now online and your call sign will appear in their Stations Pane on the right hand side. Your Callsign will not appear in <u>your</u> Stations Pane. Any stations that have messages in their Outboxes addressed to you, will now deliver them to your Inbox.

Each of D-RATS different Modes are accessed from the Tabs at the top of the window.

- Message: Selects and creates a preformatted message.
- Chat: Exchange real time text with other stations.
- Files: Upload/download file between stations.
- Event Log: A list of transactions that has taken place on the port(s).

Stations Pane:

This area on the right side of the window displays Callsign heard and the time since last heard in parentheses.

Exercise: Hover your mouse over a Callsign to display their status and status message. Right click your mouse on a Callsign to display a context sensitive menu of additional operations.

- Ping: Check the status of a station.
- Test Connectivity: Test the quality of the path to an RF station.
- Request Position: Get the location of a station to be displayed on the map.
- Get Version: Request version of D-RATS
- Request mail check: Check if a station is holding mail for you.
- Clear All: Clears all Call signs from the Stations Pane.
- Ping All Stations: Same as Ping above except to all stations connected to the Ratflector.
- Request All Positions: Same as Request Positions above except for all stations connected to the Ratflector.

Stations with an Online status will be displayed in Blue.

Stations with an Unattended status will be displayed in Brown.

Stations with an Unknown status will be displayed in Black. Right click on the Callsign and Ping the station. If it is still connected it will change to either Blue or Brown.

Status Pane:

Use the drop-down arrow to set your status as "Online" or "Unattended". Type a short message to be displayed with your status on the second line. This is what other users will see when they hover their mouse over your Callsign in parentheses in the Stations pane.

The F9 key is used to show or hide the Stations and Status panes.

Chat Tab

🖇 D-RATS: KB5HPT-1				
Eile View Help				
Messages Chat Files Event Log		Stations (27)		
4 🗑 🙆 🙆		DB0ZAV		
Add Filter Remove Filter Join Channel Open Private Chat		KC2PED (1m)		
D-RATS v0.3.3		WB0IZO (2m)		
Copyright 2010 Dan Smith (KK7DS)		KF5SMH (3m)		
		PE1KZU (3m)		
[2013-09-15 08:41:00] KB5HP1: Now Unattended: KB5HP1, Lew, El Paso, TX DM61sv (Port Doug)	KB5HPT (5m)			
108:41:001 N5JEP: Now Unsttended: Online (D_RATS) (Port Doug)	-	K2TJW (5m)		
[08:44:27] KE5APX: Now Online: Online (D-RATS) (Port Doug)	-	AB9FT (6m)		
[09:08:25] KE5APX-C: Now Unattended: Warren, CubieBoard2, El Paso, Tx (Port Doug)		IZ3ALU (7m)		
[09:14:48] K2TJW: Now Unattended: Online (D-RATS) (Port RAT)		N5JEP (9m)		
[09:15:14] AB9FT: Now Unattended: D-RATS Station & Ratflector - Sheboygan, WI (Port RAT)		N3T57-2 (9m)		
[09:16:07] PE1KZU: Now Unattended: Online (D-RATS) (Port RAT)	NO IV (21 m)			
[09:22:01] IZ3ALU: Now Online: CQ DE WALTER, IZ3ALU (Port RAT)				
[09:50:44] N3TSZ-2: Now Online: Online (D-RATS) (Port RAT)	W/BPD (21m)			
[09:51:07] KB9JKC: Now Unattended: Unline (D-KA15) (Port KA1)		KD2EAE (26m)		
[09:51:07] ONSLA: Now Onine: Onine (D-RATS) (Port RAT) [00:51:09] KD5EDD, New Unstanded, Online (D. PATS) (Dest PAT)		AD4MC (27m)		
[09:51:08] KBSEDB: Now Unattended: Online (D-KATS) (Port KAT)		9Z4RG (27m)		
[09:51:08] AD4MC: Now Online: Online (D-RATS) (Port RAT)		ON3LA (27m)		
[09:51:08] F4DKF: Now Online: Online (D-RATS) (Port RAT)		KB9JRC (27m)		
[09:51:08] N0JY: Now Unattended: Jerry, Texas State R.A.C.E.S Hood CLO (Port RAT)		AB0ET-1 (27m)		
[09:51:08] 9Z4RG: Now Online: Online (D-RATS) (Port RAT)		A0311-1 (2711)		
[09:51:08] DB0ZAV: Now Unattended: [QRA DB0ZAV WinMor/PacTor WinLink RMS - QTH		WIWAB (27m)		
Karben JO40if QRV] (Port RAT)		WA0NUU (27m)		
[09:51:08] KC2PED: Now Unattended: Charlie, Times Square, NYC (Port RAT)		KB5EDB (27m)		
09:51:17] KD2EAE: Now Online: Online (D-RATS) (Port RAT)		KE5APX-C (29m)		
09:56:42] AB9FT-1: Now Online: Josh - Sheboygan, WI (Port RAT)		W5MPZ-R (35m)		
[09:57:02] N3TSZ-2: Now Online: Patrick in Cheltenham, PA (Port RAT)		F4DKF (46m)		
[09:58:42] W7BPD: Now Unattended: Online (D-RATS) (Port RAT)	-	DO1CQ (1h 19m)		
Main QST #EOC #HOSP		KE5APX (2h 27m)		
Doug 👻	Send	My Status		
Quick Messages	uick Messages			
₩ QSTs	KB5HPT, El Paso, TX I			
		KB5HPT-1		

Main Area (Chat Tab):

This is where real time text is exchanged with all stations. Received and transmitted text is displayed in different colors and includes the port name and time stamp. The colors can be adjusted in Preferences > Appearance. Text can be selected, copied and pasted into other applications. Likewise, text can be pasted into the typing box from other applications.

Port Selection:

Use the drop down arrow to select the port where text and QST's are sent. All enabled ports are monitored and can receive messages and file transfers, but text and QST's only go out the selected port. You will go to File>Preferences > Radio to create the ports. D-RATS support serial connections to D-STAR radios, IP Networks, KISS TNCs, AGW and the DV Dongle.

Note: The ports are listed alphabetically by name. When you start D-RATS, or click "Save" in the preferences window, the selected port reverts to the first one on the list.

Exercise: Go to File>>Preferences>>Radio and put a check in the box for net:ref.drats.com:9000. Click Save. Click on the PORT drop-down Box. You should see the name you gave your main screen and RAT. Whichever one you have selected will be the ratflector you will transmit to. Uncheck net:ref.d-rats.com:9000

Quick Messages:

D-RATS allows the storage of commonly used phrases when communicating via text. To add a quick message click on the "+" button then ADD. Enter the text for the new Quick Message and click OK. Point and double-click on a message to send it. Use the buttons at the right to add or remove Quick Messages. Drag and drop the messages to change their order.

QST's:

Various types of bulletins can be sent periodically. These may contain:

- 1. a string of text, the contents of a text file
- 2. your current position
- 3. position of a station or static location in the map window
- 4. the current temperature at an airport
- 5. an RSS
- 6. CAP feed

Click on the "+" button then ADD to create a new QST. Select the type and interval between bulletins from the drop down lists. You may enter the number of minutes directly. Additionally, a colon may be placed before the number to make the time absolute. (:56 = 56 minutes past the hour). The GPS-A and GPS QST's will not display in the Chat window. They will show in the Event Log at the receiving station. The other QST's will display in your Chat window. You can now choose whether to send QSTs on the currently selected port or all ports. The ports depends on how many ports are enabled in the Port Selection dropdown box. Select the CURRENT port or select ALL enabled ports.

🔞 d-rats.exe
Text vevery 10 vminutes on port All v
Enter a message:
THE EL PASO D-STAR NET WILL BEGIN AT 19:15 (MDT) ON REFLECTOR 055
OK Cancel

Additional Functions:

A few utilities are available by clicking on the File Menu:

Send D*Query: Sends a request compatible with Pete Loveall's (AE5PL) D*Query application.

Broadcast Text File (Ctrl+B): Sends the contents text file as if it was typed in the Chat screen.

Ping Station (Ctrl+P): Prompts you to enter a Callsign to ping.

Preferences (Alt+P): Opens the Config window.

Quit (Ctrl+Q): Close D-RATS.

Using Filters:

Incoming chat text from all active ports goes to the Main area in the chat window. If there is a large amount of activity, it may be desirable to sort incoming Chat text using filters. Filter strings can be used to route incoming text and divert it into other areas in the chat window. The filters appear as Tabs at the bottom of the Chat window. The filter tabs may be dragged and dropped to change their order.

Add Filter:

Exercise:

Note: Clear the regular expression "\[QST\]" that you entered in File>>Preferences>>Appearance before doing this exercise. This regular expression has an effect on this exercise. The tab letters will not turn red with this regular expression in place.

Click on ADD Filter. Enter [QST] then click OK. Now notice at the bottom of the Chat window you have another Tab called [QST]. Now all incoming QST messages will be diverted to this window and not your Main window. When new text is received on the unmonitored tab the text will turn Red. Everyone make sure you are looking at your Main page. I will force send a QST and the "QST" on the tab will turn red.

Note: Make a decision on how you want to handle the QST.

- 1. Leave the regular expression "\[QST\]" in the Appearance page and have the QST subdued (grey) on the Main Chat page, or
- 2. *Remove it and have the QST diverted to this Tab, and will not be seen on the Main Chat page. The QST text will be blue in this Tab.*

Join Channels:

A variation on the filter concept allows you to create "channels" within the Chat window. Multiple stations with a similar task may be grouped together or communications with a specific location can be separated from the Main traffic area. Example: Any station may communicate directly with the EOC or the Hospital during a Search & Rescue operation in these respective tabs.

Exercise: Click on Join Channel. Enter EOC in the box and click OK. Repeat the steps and create a channel for HOSP. You should now have two other Tabs showing at the bottom of the Chat window. The titles are case sensitive. Everyone go to the EOC Tab and standby and I will meet you on each tab.

Private Chat:

The third version allows you create a "private" channel with another station. It should be noted here that there is not any real privacy in D-RATS, the text is merely hidden from others in the Main Chat window. *Exercise: Click on Private Chat. In the box type the Callsign of the person you want a Private Chat with and click OK. You should now see another tab at the bottom of the Chat window. Now Drag and Drop one of those tabs to a new location in the row.*

Notice that a Filter has no special character associated with it. The Join Channel has a hash-tag (#), and the Private Chat has @ symbol associated with it.

To remove these tabs that we just created select each one-one at a time and click Remove Filter.

Log File

While in the Chat window, select View >>log and you will see a complete log since the first time you started D-RATS, not just the daily log but the complete log. That is because you enabled "Log chat traffic" and "Load log tail" in Preferences>>Chat.

If you have been operating in a "JOIN CHANNEL" or "PRIVATE CHANNEL" situation that text is also available. Go to C:\\Users\ (your computer name)\AppData\Roaming\D-RATS\logs and you will see a file with that name listed. Open it and retrieve the data that you need.

Note: To find other Ratflectors online go to <u>http://groups.yahoo.com/group/d-rats_group/</u> and click on "*Database*" then click on "*Ratflertor List*". You must be a member of this group.