

A Communications Tool for D-STAR And much more...



The Big Picture

D-RATS is a communications tool that allows stations to communicate via D-STAR radios using low speed data (DV data mode), Packet Radio and the Internet. D-RATS also provides for transferring of files and forwarding of messages from one user to another, automatically. D-RATS works as a message hub, allowing seamless transfers from one port to another.

Modes

Messages

D-RATS allows creating and forwarding of pre-formatted messages like Memos, Incident Command forms, Patient Information forms, Radiograms and custom built forms to suit your application using the form builder utility. It is intended to look and work as an E-mail client in order to be familiar to new users.

Chat

Real-time keyboard-to-keyboard chat with multiple stations. Many aspects of the Chat interface can be customized to fit your application. Commonly used phrases can be saved as Quick Messages.

Files

Transfer all types of files, including images, with file compression.

Setting up D-RATS

Prior to using D-RATS there are a number of preferences that must be configured. These can be accessed by selecting File > Preferences, or [ALT+P]:

Preferences

Preferences	Callsign	N3TSZ	
Paths	Name		
GPS	Sign-on Message	Enabled Patrick in Cheltenham, PA FN20kb	
Appearance	Sign-off Message	Enabled 73	
Chat	Units	Imperial	*
Sounds	Show time in UTC	Enabled	
Messages	Ping reply	Patrick in Cheltenham, PA FN20kb	
🗏 Radio	Radio Language Transfers Language Retwork TCP Gateway TCP Forwarding Outgoing Email Email Accounts Email Access	English	*
Transfers TCP Gateway TCP Forwarding Outgoing Email Email Access		Blink tray on Incoming Messages V Enabled New Chat Messages V Enabled Incoming Files V Enabled Received Events Enabled	
		Save Cancel	

- The options are:
- Callsign: This should be your exact callsign, nothing else. This is prefixed to outgoing messages for identification.
- Name: This is your familiar name (Not currently used).
- Sign-on Message: If enabled, the message in the box will be transmitted upon starting D-RATS.
- Sign-off Message: If enabled, the message in the box will be transmitted upon exiting D-RATS.
- Units: Select between Imperial (default) and Metric.
- Show time in UTC: If enabled, displays time in UTC, rather than local time.
- Ping Reply: This message will be sent to any D-RATS station that pings your callsign.
- Language: Select between English (default), Italian and Dutch.
- Blink tray on:
 - Incoming Messages: If enabled, this will cause the D-RATS icon, in the system tray, to blink on receipt of an incoming message.

- New Chat Messages: If enabled, this will cause the D-RATS icon, in the system tray, to blink on receipt of new chat messages.
- Incoming Files: If enabled, this will cause the D-RATS icon, in the system tray, to blink during receipt of an incoming file.
- Received Events: If enabled, this will cause the D-RATS icon, in the system tray to blink when an event is received.

Paths

🔲 Config			×
 Preferences Paths GPS Appearance Chat Sounds Messages Radio Transfers Network TCP Gateway TCP Forwarding Outgoing Email Email Accounts Email Access 	File Transfer Path Map Storage Path Form Logo Path	C:\Documents and Settings\Owner\Desktop\D-RATS Sh C:\Documents and Settings\Owner\Application Data\D-1 C:\Documents and Settings\Owner\Application Data\D-1	Revert Revert Revert
		<u>S</u> ave <u>C</u> ar	ncel

- File Transfer Path: Set to the desired location as to where downloaded files and files available for upload are to be stored.
- Map Storage Path: Set to the desired location as to where downloaded map files, from the internet, are to be stored. This can be a shared directory, if multiple computers running D-RATS wish to share map files.
- Form Logo Path: Set to the desired location as to where graphics for custom forms are to be stored.

GPS

🐣 Config				×
Preferences Lati Paths Lookup b Appearance Chat Sounds Extern	Latitude Longitude Lookup by address Altitude Use External GPS External GPS	40.062130 -75.090890 Lookup 120 Enabled COM3	√ 4800	
Messages Radio Transfers Network TCP Gateway TCP Forwarding Outgoing Email Email Access	Sounds External GPS Iessages GPS-A Symbol Iadio Freshen map after Transfers Default GPS comment Ietwork Timestamp Positions TCP Gateway TCP Forwarding Outgoing Email Email Accounts	Table: / 720 BN PATRICK*76 Enabled	Symbol: -	DPRS
	1		<u>S</u> ave	<u>C</u> ancel

- The options are:
- Latitude: This should be the latitude coordinates of your station. It should be in decimal degrees or Degrees-Minutes-Seconds format (use the space bar to substitute for the degree, minute, and second symbols). Use (-) for latitudes south of the equator.
- Longitude: This should be the longitude coordinates of your station. It must be in decimal degrees or Degrees-Minutes-Seconds. Use (-) for longitudes west of the Prime Meridian.
- Look up by address: This option allows you to determine your approximate coordinates from your street address if the computer is connected to the internet.
- Altitude: This should be your station's altitude above sea level.
- External GPS: If utilized select the Com port and port speed of an externally connected GPS receiver.
- Use External GPS: If enabled, instructs D-RATS to use coordinates provided by an external GPS receiver.
- GPS-A symbol: Defines the symbol sent as part of a GPS-A message.(Taken from the APRS Symbol chart).
- Freshen Map After: Determines how frequently D-RATS should check the internet for updated maps (default = 720 hours).
- Default GPS comment: Defines the symbol sent as part of a GPS message.
- DPRS: A utility to create the Default GPS Comment.
- Time stamp Positions: Enable or disable time stamping of position reports.

Appearance

Preferences	Notice RegEx				100
Paths	Ignore RegEx	\[QST\]			
GPS	Incoming Color				
Appearance	Outgoing Color				
Sounds	Notice Color				
Messages Radio	Ignore Color				
Transfers	Callsign Color				
Network TCP Gateway	Broken Color				
TCP Forwarding	Toolbar buttons	Large	_		*
Outgoing Email	Check spelling	Enabled			
Email Accounts	Confirm exit	Enabled			
Email Access					

- Notice Reg Ex: A regular expression describing strings to highlight (see explanation below).
- Ignore Reg Ex: A regular expression describing strings to "dim". (see explanation below).
- Incoming Color: This controls the color of the text received from other stations.
- Outgoing Color: This controls the color of messages you send.
- Notices Color: This is the highlight color for strings matching the Notice Reg Ex.
- Ignore Color: This is the dim color for strings matching the Ignore Reg Ex.
- Broken Color: This is the color used to highlight raw text received that can't be checked for validity (if enabled).
- Check spelling: Enables spell checker (if installed).
- Confirm exit: Enables a confirmation dialog box when closing D-RATS.

Chat

🔲 Config				
 Preferences Paths 	Log chat traffic 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				
			<u>S</u> ave	Cancel

- Log chat traffic: If enabled, a "drats.log" file will be generated in your download directory and will log all chat traffic.
- Load log tail: If enabled, loads the tail of the chat log from the last session.
- Chat font: The font for the main window chat display.
- Scroll back lines: Defines the number of lines available for scroll back in the chat display (default = 1024).
- Show status updates in chat: If enabled, displays any status updates in the chat display.
- Time stamp chat messages: Enables time stamping of inbound and outbound chat messages.
- QST size limit: Adjustable size limit to allow larger QST messages.

Sounds

FICICICICES	Chat activity	C:\Documents and Settings\Owner\Desktop\C	[]	Play	Ena	bled
Paths	Message activity		Ä	Play	E Ena	blod
GPS	File activity	C. WITHIN Predia Violity.wav	E	Dlaw		bled
Appearance	File activity	C: (WINN Media (chord. wav		Play	C Ena	bied
Chat						
Sounds						
Messages						
Radio						
Transfers						
Network						
TCP Gateway						
TCP Forwarding						
Outgoing Email						
Email Accounts						
Email Access						
		Save	-		Cancel	

- Chat activity: If enabled, the location and file name of sound to play if any chat messages are received.
- Message activity: If enabled, the location and file name of sound to play if any messages are received.
- File activity: If enabled, the location and file name of sound to play if any files are received.

Messages

Preferences	Automatically forward messages	Enabled					
Paths	Queue flush interval	30					seconds
GPS	Station TTL	600					seconds
Appearance	Include original in reply	Enabled					
Chat	Allow POP3 Gateway	Enabled					
Sounds	Allow WL2K Gateway	🗹 Enabled					
Messages	WL2K Connection	Network					*
🗏 Radio	WL2K Network Server	server.winlink.org	*	Port	8772		-
Transfers	WL2K RMS Station		on port	t 🗌			Y
🖃 Network	My Winlink SSID	10					*
TCP Gateway	POP3 Server	Enabled on port 9110					~
TCP Forwarding	SMTP Server	Enabled on port	t 9025			A	
Outgoing Email							100
Email Accounts							
Email Access							

- Automatically forward messages: Automatically empties the Outbox at the end of each Queue flush interval.
- Queue flush 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.
- Include original in reply: Enable or disable sending the original message with a reply.
- Allow POP3 Gateway: Enable or disable connections to Internet mail servers.
- Allow WL2K Gateway: Enable or disable connections to Winlink mail servers.
- WL2K Connection: Select Network or RMS connection to Winlink mail servers.
- WL2K Network Server: Select which Winlink mail server to connect to.
- WL2K RMS Station: Callsign of RMS station to connect to.
- My Winlink SSID: Your SSID (if required).
- POP3 Server: Emulate a POP3 server to an E-mail client.
- SMTP Server: Emulate an SMTP server an E-mail client.

Radio

🔲 Config							×
Preferences	Enabled 4	Port	•	Settings *	Sniff <	Raw Text 4	Name
Paths		net:ref.d-rats.com:9000			~		I RAT
GPS		net:ref.d-rats.com:9001					! RAT
Appearance		net:gtworks.dyndns.org:9000			~		Atlant
Chat		net:n1rcw.org:9000					Cape
Sounds		net:ir1cj-drats.radio.it:9000					Italy
Messages		net:wc7so.ham-radio-op.net:90	000				NW W
🗏 Radio		net:oh.d-rats.net:9000			 Image: A start of the start of		Ohio
Transfers		COM1		38400			Radio
🖃 Network		net:ratf.n0so.net:9000					St. Lo
TCP Gateway							
TCP Forwarding							
Outgoing Email							
Email Accounts							
Email Access							
		Add	Edit)		Delete	
	<						
					Caus	7	
					<u>5</u> ave		

- Enabled: If enabled, this port is active and available for use with D-RATS.
- Port: The device to open. Enter the desired port to operate across (i.e. "COM1", or "net:ref.drats.com:9000").
- Settings: The data speed used to connect D-RATS to your radio. This must match your radio, but has no bearing on "net:" type connections such as the Ratflector.
- Sniff: If enabled, log some information about packets seen that are destined for other stations.
- Receive raw text: If enabled, displays all text received in the chat window.
- Name: A descriptive name for this entry. It will be displayed in other parts of the program.

Transfers

🏎 Config				
 Preferences Paths GPS Appearance Chat Sounds Messages Radio 	Block size Pipeline blocks Remote file transfers Warmup Length Warmup timeout	512 4 ✓ Enabled 16 0 -2		Revert Revert Revert Revert Revert Revert Revert
Transfers Network TCP Gateway TCP Forwarding Outgoing Email Email Accounts Email Access				
1			<u>S</u> ave	Cancel

The options are:

- Block size: The largest amount of data that is covered by a single check-sum. The larger this is, the more efficient the transfer is on a good connection. On a bad connection, setting this to be smaller reduces the amount of data that must be re-sent in the event of a bit of corruption. Revert resets value to default settings.
- Pipeline blocks: The number of blocks (of Block size bytes) that are sent each round. Revert resets value to default settings.

Be aware that 'Block size' times 'Pipeline blocks' can cause a transmission time long enough to time out radios and/or repeaters. Larger is not always better.

- Remote file transfers: If enabled, allow remote users to retrieve files from this station's File Transfer Path directory.
- Warmup Length: The number of bytes to prefix to each packet after a period of idle time. This may help to "warm up" a hand-held radio on the receiving end that is in power save mode. Revert resets value to default settings.
- Warmup timeout: The number of seconds between transmissions that is considered to be "idle", thus causing the next transmission to include the prefix pad, as described above. Revert resets value to default settings.

• Force transmission delay: Always wait this many seconds before transmitting a packet. Setting this to a negative value generates a random time delay of between zero and the set time. This helps to reduce data collisions. Revert resets value to default settings.

 Preferences Paths GPS Appearance Chat Sounds Messages Radio Transfers Network TCP Gateway TCP Forwarding Outgoing Email Email Accounts Email Access 	🄲 Config		≥
Network TCP Gateway TCP Forwarding Outgoing Email Email Accounts Email Access	 Preferences Paths GPS Appearance Chat Sounds Messages Radio Transfers 	Port 4 Host	•
Add	 Network TCP Gateway TCP Forwarding Outgoing Email Email Accounts Email Access 		Dalata

TCP Gateway

- Port: Receive traffic on this port from stations over the radio link (i.e: port 25).
- Host: Send traffic to the designated port at the host address (i.e. mail.foo.com).

TCP Forwarding

🐣 Config		
 Preferences Paths GPS Appearance Chat Sounds Messages Radio Transfers Network 	Local 4 Remote 4 Station	•
TCP Gateway TCP Forwarding Outgoing Email Email Accounts Email Access	<u>A</u> dd	te
	<u>S</u> ave	<u>C</u> ancel

- Local Port: Listen for connections to a designated port on the local machine (i.e. port 2525).
- Remote Port: Send data received on that port (i.e port 2525) to the designated port on the remote machine (i.e: port 25).
- Station: Address this data to the callsign entered across the radio link.

Outgoing Email

🐣 Config		
Preferences	SMTP Gateway	Enabled
Paths	SMTP Server	outgoing.verizon.net
GPS.	Port and Mode	25 🗘 TLS
Appearance	Source Address	
Chat	SMTP Username	tech826@verizon.net
Sounds	SMTP Password	*****
Messages		i i i i i i i i i i i i i i i i i i i
🖻 Radio		
Transfers		
🖃 Network		
TCP Gateway		
TCP Forwarding		
Outgoing Email		
Email Accounts		
Email Access		
		Save Cancel

- SMTP Server: Address of the remote SMTP server to send outgoing email (i.e smtp.gmail.com).
- Port and Mode: Port that the remote SMTP server expects to receive email on (i.e gmail uses port 587 and TLS enabled).
- Source address: Default email address to use on outgoing email.
- SMTP User name: User name to log into the remote SMTP server.
- SMTP Password: Password to log into the remote SMTP server.
- Gateway: If enabled, allows email received from D-RATS to be sent to the internet.

Email Accounts

🄲 Config										×
Preferences	Server 🔺	Username 🖣	Password 4	Poll Interva		Use SSL	▲ Po	t 🖣	Action	 €na
Paths	incomin	tech826@	******	6			11	0	Form	
GPS										
Appearance										
Chat										
Sounds										
Messages										
🗏 Radio										
Transfers										
🖃 Network										
TCP Gateway										
TCP Forwarding										
Outgoing Email										
Email Accounts										
Email Access										
		Add		Edit]				Del	ete
	< (>
						Save	•		<u>C</u> anc	el

- Server: Address of the remote POP server to receive incoming email (i.e pop.gmail.com).
- ٠
- User name: User name to receive incoming email.
- Password: Password to receive incoming email.
- Poll Interval: Frequency (in minutes) to see if new email is waiting on the remote POP server.
- Port: Set to the port that the remote POP server expects to receive email on (i.e 110. pop.gmail.com uses port 995).

🄏 d-rats.exe	X
Server	incoming.verizon.net
Username	tech826@verizon.net
Password	*****
Poll Interval	6
Use SSL	Enabled
Port	110
Action	Form 💌
Enabled	Enabled
	<u>QK</u> <u>C</u> ancel

- Use SSL: If enabled, connect to the remote POP server with SSL.
- Action: Treat the email as a Form or as a Chat message (default = Form).
- Enabled: Enable or disable receiving incoming mail.

Email Access

🔲 Config		
Preferences	Callsign 🔺 Access 4 Email Filter	•
Paths	N3TSZ Both	
GPS.		
Appearance		
Chat		
Sounds		
Messages		
🗏 Radio		
Transfers		
Network		
TCP Gateway		
TCP Forwarding		
Outgoing Email		
Email Accounts		
Email Access		
	Add Edit Delete	
	Save Can	cel

- Callsign: Enter the callsign of a D-RATS user that you wish to process email for.
- Access: Determine how email will be handled for the nominated callsign, e.g. None, Both, Incoming, or Outgoing.
- Email filter: Looks for a string matching this field in the message, so that it can direct the message to the nominated callsign.

Using D-RATS

The Main Window

🛥 D-RATS: N3TSZ	
Eile <u>Vi</u> ew <u>H</u> elp	
Messages Chat Files Event Log	Stations (24)
	N1RCW
New Forward Reply Delete Mark Read Mark Unread Send/Receive	N1KXJ-LT (7m)
Drafts Sender 4 Recipient 4 Subject 4 Type 4 Date	 9A6AIB-5 (11m)
Inbox	NONKN (17m)
Outbox	N8PPX (19m)
The sent sent sent sent sent sent sent sen	N0SO-1 (21m)
Trash	VA7DEP (21m)
	W1VM (37m)
	N1KXJ (44m)
	ZS5PMB (45m)
	ON0THN (45m)
	ZR5S (45m)
	W5DRO (45m)
	W4HNK (45m)
	IW4EGP (45m)
	AB9FT (45m)
	W3ICF (45m)
	VK3JCT (49m)
	WC7X (56m)
	CH-EOC (56m)
	N9DN-H (56m)
	WC7SO (56m)
	KA4EOC (56m)
	NOXIA (56m)
	My Status
	Patrick in Cheltenham
	N3TSZ .:

This is the first screen you will see when you start D-RATS. D-RATS also notifies all stations that your station is now online and your call sign will appear in their 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. Instructions on setting up and operating each of these Modes are in the following sections.

The Stations Pane

This area on the right side of the window displays callsigns heard and the time since last heard in parentheses. Hover your mouse over a callsign to display their status and status message.

Stations (13) 9A6AIB

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.

The Status Pane

This is what other users will see when they hover their mouse over your callsign. 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 the text that appears in parentheses (as above).

My Stat	tus
Online	~
Patrick in Ch	eltenhar
N3TSZ	4

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

The Messages Tab

This is where all pre-formatted messages are sent and received. It looks like and functions as e-mail client software. You can exchange pre-formatted messages with other D-RATS users, internet e-mail servers and WinLink RMS stations or CMS servers. To send and receive internet e-mail, you must enter the incoming and outgoing server information in the preferences window. D-RATS only sends and receives plain text, and does not support HTML based e-mail. For this reason you may want to set up an e-mail account just for use with D-RATS.



have the "Automatically forward messages" box checked in Message preferences.

Additionally, if this is an e-mail message, the

third-party station must allow you to have access to the internet in the e-mail access preferences.

OK

Cancel

Form Manager

Access the Form Manager from the Menu bar: File > Message templates. Several preformatted message forms are included with D-RATS. Any of these forms may be edited to suit your needs or entirely new ones can be created. Click on New or Edit to open the Form Builder.

🐣 Form Manager	
ID 🔸	Title 🗸
chelt_twp	Township of Cheltenham
email	Email Message
hics260	HICS 260 - Patient Evacuation Tracking Form
ICS213_OR_WashCoARES	ICS-213 Form
ICS213_US_OS	ICS-213 Form
memo	Informal Memo Form
PA	Commonwealth of Pennsylvania
PDRA	Philadelphia Digital Radio Association
radiogram	Radiogram
skywarn	Skywarn Spotter Report
New E	dit Delete Close

Form Builder

Use the Form Builder to create or edit existing forms. Enter the title and ID names, a picture file can be specified as the Logo to appear on the form. Add as many form elements as necessary for your application.

Note: The logo is not transmitted with the form. Therefore, the recipient must have the form logo file in the directory specified in the form logo path, in preferences, for it to be seen in the received form.

🍝 Forn	n builder	
Form Pro	perties	
Title	Email Message	
ID	email	
Logo		~
Form Eler	nents Type 4 Caption 4 Initial Value 4	Move Up
subject	text Subject	Add
message	multiline Message	Edit
		Delete
		Move Down
	Save Cancel	Preview

🄏 Edit form element	X
Field Type	-
text	~
-Initial value:	
QK <u>C</u> ancel	

Select the type of field needed and set the initial value.

The Chat Tab

Main Area

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

Main	
RAT 1 🔽	
RAT 1	sages
RAT 2	eltenham, PA USA
RATSO	m Philadelphia
RF	releases at http:
	1

Use the drop down arrow to select the port where text and QSTs are sent. All enabled ports are monitored and can receive messages and file transfers, but text and QSTs only go out the selected port. Go to Preferences > Radio to create the ports you need. D-RATS supports 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.

Quick Messages

D-RATS allow the storage of commonly used phrases when communicating via text. Point and double-click on a message to send it. Use the buttons at the right to add or remove Quick Messages. With the latest release, you may use function keys to send quick messages. F1 sends the first message, F2 sends the second, etc. Drag and drop the messages to change their order.



Enter the text for the new Quick Message and click	Add Quick Message	
<u>o</u> k		

Add 🐣	Quick Message	×
	Enter text for the new quick message:	
What?		
	<u>C</u> ancel <u>O</u> K	

QSTs

Various types of bulletins can be sent periodically. These may contain: a string of text, the contents of a text file, your current position, the position of a station or static location in the map window, the current temperature at an airport, or an RSS or CAP feed.

QSTs					
/pe	Freq	Remaining	On	Content	
ext	:26			Patrick in Cheltenham, PA USA FN20kb	
PS	10	8 mins	~	BN PATRICK*76	
eather (WU)	:56			Airport/KPHL	
					Add
					Edit

Use the add button to create a new QST. This example shows a temperature report from an airport. 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).

🔲 d-rats.ex	e											×
Weather (WU)	~	:56	*									
TYPE	1	INTER\ Enter a \	VAL WeatherUnd	lerg	round	d stat	ion II	D:				
KPHL			Airport	8	*							
						<u>0</u> K			C	<u>C</u> an	cel	

Using Filters

ile <u>V</u> iew	Help			
Messages	Chat	Files	Event Log	

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 parse incoming text and divert it into other areas in the chat window. The filters appear as Tabs at the bottom of the Chat window.

Main	[QST]	#EOC	#Hospital	@K3VIT	
! RAT		*			
Qui Qui OS	ick Messi Ts	ages	-		

The filter tabs may be dragged and dropped to change their order.

Add Filter

Click on Add Filter and enter a string of text. Any incoming Chat messages containing text matching the filter, will be sent to the filter tab and not the main area. In the above example, any Chat message containing [QST] is sent to the filter Tab.

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.

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. All Chat traffic can be viewed in the Event Log Tab.

The Files Tab

D-RATS can transfer files from one station to another using D-STAR radio or the Internet. The left side of the screen shows the files in your local sharing folder. The right side of the screen displays the files in the remote stations sharing folder. Use the drop down arrows on the right side of the screen to select a station from the list, and the port to use for connecting to them. Click on the connect button. The remote stations file list will soon appear on the right side of the screen. To retrieve a file, highlight it and click on download. To send a file to the remote station, highlight a file in the local list and click upload. Be sure to click on the disconnect button when you are finished exchanging files with a station.

<u>File View H</u> elp			
Messages Chat Files Event Lo	g		
Refresh Delete Upload	Local	Connect Disconnect Down	nload
Filename	▲ Size ◀ Date	Station: KF4PWI	✓ RAT 1 ✓
DSTAR puzzle.doc	55.5 KB 18:24:27 2010-03-	Filename 🔺	Size Date
📄 10cat.gif	1.9 KB 22:35:32 2010-01-	Apollo tone.wav	4.0 KB 23:08:33 2010-03
43 uses for WD-40, txt	5.7 KB 18:00:17 2009-12-	DSTAR Nets.url	128 B 13:08:18 2010-03
6 meter Maxtrac.txt	1.7 KB 12:32:50 2010-01-	DVTool-2.0beta4.exe	9629.0 KB 17:10:04 2010-02
Alabama airport codes.txt	5.9 KB 18:39:37 2010-01-	Georgia Airport Codes.txt	10.0 KB 23:07:48 2010-03

The Event Log Tab

This is simply a list of all transactions that have taken place on the port or ports you are connected to. This is useful for troubleshooting and gaining knowledge about how D-RATS works behind the scenes. You can not edit or copy this screen.

Eile <u>V</u> iew <u>H</u> elp	
Messages Chat Files Event Log	Stations (22)
Show event type: All Containing text: Enter filter text	KA4UOA (4m)
Time Description	VK2SX (5m)
2010-05-09 15:35:13 Sniffer: VK2SX->N3TSZ (S:2L:15)	N0SO-1 (5m)
💡 2010-05-09 15:35:13 VK2SX Requested file list	NOPWZ (7m)
9 2010-05-09 15:35:42 Sniffer: VK2SX->N3TSZ (S:2L:26)	W3ICF (7m)
💡 2010-05-09 15:35:42 VK2SX Requested file Bonk.wav	N3PUG (7m)
2010-05-09 15:35:46 Sniffer: VK2SX->N3TSZ Control: ACK Local: 15 Remote: 18	N1GKE (7m)
9 2010-05-09 15:35:49 Sniffer: VK2SX->N3TSZ (S:15 L:2)	KB3ONM (9m)
9 2010-05-09 15:35:49 Sniffer: VK2SX->N3TSZ (S:15 L:1)	KK7DS-Z (9m)
2010-05-09 15:35:50 Sniffer: VK2SX->N3TSZ (S:15 L:1)	WB8NUT (11m)
9 2010-05-09 15:35:55 Sniffer: VK2SX->N3TSZ (S:15 L:3)	N8NOE (17m)
2010-05-09 15:36:00 Sniffer: VK2SX->N3TSZ (S:15 L:1)	IV3SRD (26m)
	IK2XDF-7 (33m)

The Map Window



The map utility allows you to view the location of D-RATS stations, track mobile stations and place markers for static locations.

Information displayed will include the Station name and its associated latitude and longitude coordinates, as well as the distance and direction to the station, from your location, for any positional information received across RF or an internet connection (i.e. through a Ratflector).

D-RATS can import ".csv" files containing static lists of positional information (i.e: Hospitals, Repeater Sites, EOCs, etc) that can be displayed on the D-RATS Map.

Printing / Saving the Map



D-RATS can print the current map screen, or save it as a "*.png" image.

Go to the Map menu and select Export, followed by the desired option.

D-RATS Map Downloader

The D-RATS Map Downloader is a separate application that is packaged with and installed as part of the normal D-RATS installation process. It allows a range of maps to be downloaded, across the internet, for later use by D-RATS. This is particularly useful if the computer is likely to be used away from internet connectivity.

D-RATS Repeater

The D-RATS Repeater is a separate application that is packaged with and installed as part of the normal D-RATS installation process. It allows multiple D-STAR radios (even on different frequencies), that are connected to the same computer, to interchange D-RATS information. It also allows gating of D-RATS traffic to be interchanged between RF and internet users. More detailed information and configuration information can be found in the Repeater guide.

Regular Expressions

The notice and ignore functions use regular expressions for matching strings. Regular expressions are very powerful,

Regular expression	Explanation	Will match	Will not match
[Tt]esting	Match any string with the word testing	Testing, testing	tesTing, besting
(banana apple)	Match any string with banana or apple in it	My banana is yellow, My apple is red	My kiwi is green
[0-9]11	Match any three digit number ending in 11	411, 911	421, 976
[0-9]{3}-[0-9]{3}-[0-9]{4}	Match a US phone number	800-555-1212	01-423-99456, apple

and are beyond the scope of this document. Here are a few examples to get you started: