BPQ User and SysOp Commands Cheat Sheet

by Bill PY2BIL - LU7ECX (gcremerius)via cheatography.com/118440/cs/21860/

Node User Level Commands

?	Displays a list of commonly used node commands, starting with all the sysop-defined applications first, then followed by the standard ones.

Attach	Get exclusive control of the port before connecting (for a single user, such as WINMOR or Pactor ports).
	`ATTACH [P]`
	`C [CALL]`

BBS	[sysop defined] Usual command to access the BBS and Mail system, but could be anything else defined by the SysOp.
Bye or **Q**uit	Disconnect from Node
CHAT	[sysop defined] Usual command to access the Chat system, but could be anything else defined by the SysOp.
Connect	Initiates a connection to another node, or to a normal AX.25 user. `C P C ALL |AL IAS [vi a di gi1 [di gi2 ...] ] [S]` **P** is the port number if you have more than 1 **S** for STAY to remain connected to the currrent node, when the connection to the next one is closed The system will make an L4 (NETROM) connect to a call that is in your NODES table. You can force a level 2 connect by specifying a port number and preceding the call with a **!**
CQ	Sends a beacon to address CQ. Can only be used in LISTEN mode and only if LISTENing on one port.
IDLEtime	Sets the Idle session timeout for this session.
Info	Display information about this Node from the text from the config file
L4T1	Displays or sets the Level 4 timeout used for the current session. Sets the Level 4 (Netrom) retry timer for this session

Node User Level Commands (cont)

Links	Lists the currently active AX.25 Sessions **S** is the link state: 2=connecting, 4=disconnecting, 5=connected. **P** is the port. **T** is the link type: 1=Uplink, 2=Downlink, 3=Node-Node link. **V** is the AX.25 Version (1 or 2). **Q** are the queued frames. To reset a link: `LINK RESET DESTCALL ORIGINCALL PORT`
LISten	Enters Listen mode on the specified port(s). `LIS P1... Pn` **P** port numbers While in Listen mode you can't connect to other stations, and if someone calls you Listen is cancelled. Type LISTEN OFF to exit listen mode.
MHeard	Lists stations heard recently on the specified port. `MHEARD P [CALL]` **P** port number Output can be filtered with a partial callsign, eg MH 2 G8 There are three variants: **MHV** which lists in a more structured (verbose) way ***MHU*** and MHL which display timestamps in clock time (UTC or Local) instead of the default of time since last heard.

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Node User Level Commands (cont)

Nodes	Lists all the other NETROM/THENET/BPQ Nodes known to your node. `N [VIA][ NOD ECA LL| NOD EAL IAS ][* ]|[ C][ T]` **N** on its own displays the whole table in alias order **NODECALL** or **NODEALIAS** you can list the routes that the system will use to access that node **NODECALL*** will display information for all SSID's of the specified call. **VIA NODECALL** will display all stations reachable via the specified neighbour. **C** Displays the whole table in callsign order. Can be placed before or after the pattern, eg N C GB7* or N GB7* C **T** The Round Trip Times and frame counts for all nodes with a non-zero count. Use of ? and * wildcards are allowed The information after the callsign are only shown if some frames have been send to that node. **RTT** stands for Round Trip Time, and is a rolling average of the time taken to get a response from that node (in seconds). **FR** means Frames, the number of info frames sent to the node. **B** if present, indicates the target is a BPQ node, and the number following the B is the number of hops to the target. Up to 3 possible routes to the node are listed. **1st number** displayed is the *quality*, the relative desirability of using this route rather than another. **2nd number** is the *obsolesance count*, an indication of how long it is since the system was last told about (or succes-sfully used) this route. The number starts at a value set in the config file (typically 5) and is decremented each time a *NODES* broadcast is sent (typically evey hour). **3rd number** is the port. **>** indicates the currently active route.

Node User Level Commands (cont)

NRR	Sends a Netrom Record Route message to the specified node. If the node is reachable and supports NRR, a message will be displayed showing the path that the message took to the target node and back. `NRR CALL`
PAClen	Displays and sets the PACLEN value used for messages generated by the node (eg command responses).
Ports	Lists available ports and shows the frequency and baud rate used as defined in the configurarion file.
RADio	Used by the Rig Control Interface.

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Node User Level Commands (cont)

Routes Lists the stations which this node can hear.

`r [r]`

> indicates that there is an active link to the node.

1st number is the port.

Call remote station call

2nd number is the *quality*, This may be derived from the 'default quality' parameter in the PORTS section of the config file, or may be specified explicitly in the ROUTES section. A value of zero will prevent the route from being used, and is normally used when you have a one-way or marginal path.

3rd number is is the number of NODES list entries which refer to this route. This isn't used by the software, it is just information for the user. .

! indicates a *locked route*, one entered in the CONFIG file or via SYSOPH. Other entries come and go as this node hears NODES broadcasts.

Additional information may be obtained by entering r r

The fields are:

* Info frames sent
* Info frames retransmitted
* Retry Rate: the ratio of the above 2, as a percentage (or * if both are zero)
* Non-standard maxframe (from Config file)
* Non-standard frack (from Config file)
* Time the last NODES broadcast was heard from this node.
* Number of frames queued to be sent.
* Remaining quality

Node User Level Commands (cont)

Stats Displays a number of counters.

Uptime (Days Hours Mins) Is the time since the system was loaded.

Semaphore Get-Rel/Clashes

Buffers:Max/Cur/Min/Out/Wait Out is the number of times a request to allocate a buffer failed because there were none available.

Known Nodes/Max Nodes

L4 Connects Sent/Rxed

L4 Frames TX/RX/Resent/Reseq Resent is the number retransmitted because an ACK wasn't received within the L4 timeout period. The Reseq is the number of frames received out of sequence, but subsequently used because the missing frame(s) eventually arrived.

REJ Frames Rxed A large number may indicate that your Maxframe is too high. Similarly a large number in 'RX out of sequence' may indicate the the station talking to you has too large a maxframe.

RX Overruns indicate characters lost because the software didn't process the interrupts fast enough.

Undrun/Poll T/o indicate a problem in responding to TX interrupts. Only used for HDLC cards.

Frames abandoned number of frames discarded because they have been waiting to be sent (for DCD to clear) for more than 60 secs. Only used for HDLC cards.

Link Active % The first is the % of time in the last minute that your station was transmitting, and the second the % the channel was active. Only used for HDLC cards.

There is one set of level 2 counters for each port.

If you have more than 7 ports the display starts to look a bit untidy, so there are now two options on the STATS command:

S S Displays just the system and L3/4 stats

S n Displays just the port stats, starting with port N, for a maximum of 7 ports.

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Node User Level Commands (cont)

SYSOP	[sysop defined] Usual command to Talk to the SysOp (if available) but could be anything else defined by the SysOp.
UNproto	Enters UNPROTO mode, where you can send UI messages. `UN P CALL [Digis]` When in Unproto Mode anything you type will be send as a UI frame to the port and destination you specified. This could be used in conjunction with the LISTEN command to have an multiuser conversation. Use Ctrl/Z to exit UNPROTO mode
Users	Lists the stations currently using the node. The Number on the end of the header line is the number of free buffers. **Host** is an internal (Normally BBS Port) **Circuit** is a link from/to another node. **Uplink** is a connection from a normal AX.25 station. **Downlink** is a connection to a normal user. **<-->** indicates an active session. **<~~>** indicates a session being set up.
Version	Displays the version number of the Node software

Only the **bolded** part of each command is required

Node SysOp Level Commands

PASSWORD	When accessed remotely, a password prompt is sent, containing 5 random numbers in the range 1 to the length of the PASSWORD string as defined in the configuration file. Enter PASSWORD followed by the corresponding five letters from the password string. If entered from a local terminal or via a Telnet session with SYSOP flag set you will go straight to SYSOP mode.

Node SysOp Level Commands (cont)

Supported commands:

Port Parameters
Display or update the corresponding parameter for a specified port

BBSALIAS	
DIGIFLAG	`DIGIFL AG= 0/1/255` Digipeat control flag for this port. 0 = dont digi, 1 = digi everything, 255 = digi UI frames only.
DIGIPORT	`DIGIPORT=N` Port to send digied frames on. Zero means the port it was received on, any other number means send on that port.
FRACK	`FRACK=nnnn` Level 2 timout in milliseconds
FULLDUP	`FULLDU P=0|1` Passed on to TNC if using KISS. Used to allow transmission whilst DCD is active on HDLC cards, and to allow connection of a NETROM cluster via a diode matrix.
L3ONLY	`L3ONLY=0|1` If set to 1 will stop users (but not HOST sessions) issuing downlink connects on this port.
MAXFRAME	`MAXFRAME=n` Maximum outstanding frames.
MAXUSERS	
PACLEN	`PACLEN=nnn` Default maximum packet length for this port
PERSIST	`PERSIS T=nnn` 'Probability to transmit' value (1-255)

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Node SysOp Level Commands (cont)

QUALITY	`QUALIT Y=nnn` Default quality for nodes heard on this port. Set to zero to suppress all level 3/4 activity (including NODES broadcasts) on this port.
RESPTIME	`RESPTI ME=nnnn` Level 2 delayed ack timer in milliseconds
RETRIES	`RETRIES=n` Level 2 maximum retry value
SOFTDCD	`SOFTDC D=0|1` If set to 1, system uses the detection of a valid frame to indicate that the channel is busy, rather than the DCD signal from the modem. Used only for HDLC cards.
TXDELAY	`TXDELA Y=nnn` TX Keyup delay in milliseconds
TXTAIL	`TXTAIL =nnnn` TXTAIL timer in ms. Used only by KISS TNCs.
VALIDCALLS	`VALIDC ALL S=CALLS` Up to about 40 callsigns, separated by single commas. If present, only stations in the list will be allowed to connect to you on this port. The SSID should not be specified. The total length of the list, including commas, is 256 bytes.
XMITOFF	Read or change the transmitter DISABLE flag for one port. `XMITOFF port#` to read. `XMITOFF port# 1` to disable a port. The default is 0, meaning the transmitter is not stopped.

Node SysOp Level Commands (cont)

System Parameters

Display or update the corresponding Node parameter.

BTINTERVAL	Time interval the beacon is sent by the Node
FULLCTEXT	
HIDENODES	Suppresses the display of NODES with an Alias that starts with a # sign.
IDINTERVAL	IDMSG is sent every IDINTERVAL minutes. It is sent from the PORT Callsign if one is defined, otherwise from NODECALL. The main purpose of this is to satisfy the requirements of those administr-ations that require a regular station identification in the same mode as used for communication.
L3TTL	Maximum Level 3 hops
L4DELAY	Level 4 Delayed ACK timer
L4TIMEOUT	Level 4 Timeout
L4RETRIES	Level 4 Retries
L4WINDOW	Level 4 Window
LINKEDFLAG	
*MH*eard	Clears list of recently heard stations `MH p CLEAR`
MINQUAL	`MINQUA L=NNN` Defines the minimum quality for a destination to be included in a 'Nodes' broadcast on this port.
NODEID-LETIME	If there is no traffic for IDLETIME seconds, the link will be closed.
NODESINT	Time between NODES broadcasts (seconds)
OBSINIT	Initial Obsolescence value
OBSMIN	Minimum Obsolescence value to be included in NODES broadcasts.

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Node SysOp Level Commands (cont)

REMDUMP	
T3	Link Validation Timer. If there is no activity for T3 seconds, an RR(P) command will be sent to make sure the other station is still there.
System Commands	
FINDBUFFS	Used to help track down missing buffers if the buffer count goes very low, normally should only be used if I request it
GETPOR-TCTEXT	Re-read your Port CTEXT files
KISS p c v	Send KISS command/value pair (eg for setting TXDELAY). Parameters are port, command and value (all in decimal)
REBOOT	Performs a shutdown -r -f in linux. This reboots the machine the node is running on.
RESTART	Instructs the node software to quit immediately by setting CLOSING
ROUTES	To update `ROUTES CALL P parms` Use **!** flag to toggle locked routes after parms
SAVEMH	Tells Node to save and restore MH lists when shut down and restarted
SAVENODES	Saves the NODES and ROUTES tables, so that they can be reloaded when the software is restarted, ; rather than having to wait for the tables to be rebuilt.
SENDNODES	
STARTCMS p	These can be used to simulate CMS or Internet outage
STOPCMS p	Disable CMS acess on Telnet Port p.

Node SysOp Level Commands (cont)

STOPPORT n STARTPORT n	Close or reopen Port n. Enables another program to use the port to allow the tnc to be reconfigured without closing the node

TELReconfig	Reconfigure Telnet Port p.
	`TELRec onfig p ALL`
	`TELRec onfig p USERS`
	ALL does a conmplete reconfig and disconnects users. This is equivalent to EXTRESTART p 1.
	USERS just re-reads the USER records from config file.

WL2KSYSOP WL2KSYSOP SET	Display information from your WINLINK 2000 SYSOP record, or create a basic record if you don't have one.

BBS User Level Commands

? or **Help**	Displays a list of commands.
A	Abort the BBS output while paging.
Bye	Disconnects from the BBS.
CMSPASS *password*	Sets *password* for access to Winlink COM Servers.
D *num*	Flag NTS Message(s) as Delivered
FILES or **LISTFILES**	List files available for download
Home	Enters or modifies the Home BBS. A point deletes the current Home BBS.
I	Displays information about this BBS.
I *callsign*	Gives the information on *callsign* taken from the white pages database. Callsign can include wildcards.
I@ *bbs*	Gives the users of *bbs* found in the WP database.
IH *route*	Gives the users of the hierarchical *route* area from the WP database.
IZ *zip*	Gives the users of the *zip* code area from WP database.
K-commands delete messages sent by you or to you.	

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BBS User Level Commands (cont)

K *msg#*	Deletes a message identified by its number.
KM	Deletes all the messages addressed to you, that you haven't yet read.
L-commands list message headers.	
L	Lists the new messages since the last usage of this command.
L< *callsign*	Lists message from *callsign*
L> *callsign*	Lists message to *callsign*
L@ *bbs*	Lists the messages via *bbs*.
L *msg#-*	Lists all messages, starting from *msg#*
L *msg#-msg#*	Lists messages between the given numbers.
L*x*	List messages with status *x* - x can be N Y H K F D $.
LB	Lists bulletins.
LC	Lists all Bulletin "categories" (TO Fields)
LL *n*	Lists the last *n* messages.
LM	Lists the messages to you.
LP	Lists personal messages
LR	Equivalent to L but the messages are listed in reverse order.
LT	List Traffic (NTS-messages).
N	Enters or modifies your name (max 12 characters allowed).
NODE	Exits BBS and returns to Node.
OP *num*	Enables or disables the paging of output by specifying the *num* of lines. 0 disables pagung

POLLRMS	nables or disables polling RMS for messages for you.
	`POLLRMS Enable |DI SABLE`
	`POLLRMS SSID1 SSID2 ... SSIDn`
	(for the base call, specify SSID of 0)
	eg POLLRMS 0 1 15 will look for messages to CALL, CALL-1, CALL-15

BBS User Level Commands (cont)

Q	Enters or modifies QTH.
R-commands read messages.	
R *msg# msg#*	Reads the messages by their numbers.
RM	Reads new messages to you.
RMR	Read my new messages in reverse order (oldest first)
READ *name*	Read File from Files area.
S-commands send messages.	
S	`S[P|B] callsign` Sends a message or a bulletin. `S call` Sends a message as private.
SP	Sends a message as private.
S @BBS	`S callsign @ BBSCAL LSIGN` Sends a message to a station AT another BBS. The message must be terminated by a Ctrl/Z or /EX followed by a return.
SC	`SC Msg# callsign @ BBSCAL LSIGN` Copies a message or bulletin to the specified callsign.
SR	`SR Msg#` Replies to a message.
V	Displays Version number of the BBS and Node software.
X	Toggles Expert Mode.
YAPP	`YAPP name` Download file from File area.
Z	Enters or modifies the Zip Code.

BBS SysOp Level Commands

AUTH	Authenticate for Remote SYSOP access. Use program BPQAUTH to generate passcode.
DOHOUSEKE-EPING	Run Housekeeping process
EDITUSER *callsign*	Display *callsign* falgs

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BBS SysOp Level Commands (cont)

EDITUSER set flags	Set: `EDITUSER CALLSIGN FLAG1 FLAG2 ..` . Clear: `EDITUSER CALLSIGN -FLAG1 -FLAG2 ...` Flags are: EXC(luded) EXP(ert) SYSOP BBS PMS EMAIL HOLD RMS(Express User)
EXPORT	`EXPORT nnn filename` Export Message *nnn* to file *filename*
FWD *bbscall*	Display settings
FWD interval	`FWD BBSCALL interval` Set forwarding interval
FWD rev	`FWD BBSCALL REV interval` Set reverse forwarding interval
FWD flags	`FWD BBSCALL +- flags` Flags are EN(able) RE(verse Poll) SE(Send Immediately)
FWD NOW	`FWD BBSCALL NOW` Start a forwarding cycle now. Can specify a Connect Script to use, overriding the configured script.
FWD QUEUE	List BBS's with queued messages
IMPORT *filename*	Import Messages from file *filename*
KH	Kills Held Messages.
K< *callsign*	Kills message from *callsign*
K> *callsign*	Kills message to *callsign*
LH	List HELD messages.
LK	List KILLED messages
POLLRMS	Sets the flags for other users. `POLLRMS CALL ENABLE |DI SABLE`
REROUT-EMSGS	Rerun message routing process
SETNEXTME-SSAGEN-UMBER	Sets next message number

UH	Unhold messages.
	`UH ALL`
	`UH msg# msg#...`

Chat User Commands

/A	Toggle Alert on user join.
/Auto	Toggle Automatic character set selection.
/B	Leave Chat and return to node.
/C	Toggle Colour Mode on or off (only works on Console or BPQTerminal)
/E	Toggle Echo
/F	Force all links to be made.
/J *name*	Join Topic or Create new Topic. Topic Names are not case sensitive.
/K	Show Known nodes.
/Keepalive	Toggle sending Keepalive messages every 10 minutes.
/N	Enter your Name
/P	Show Ports and Links
/Q	Enter your QTH
/QUIT	Leave Chat and disconnect from node
/S *call text*	Send Text to that station only.
/ShowNames	Toggle displaying name as well as call on each message.
/T	Show Topics
/Time	Toggle displaying timestamp on each message.
/U	Show users
/UTF-8	Toggle Character set Selection - UTF* or 8 bit.

Credits

BPQ/BPQ32 system and documentation © by John Wiseman, G8BPQ

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