

The origins of PacketCluster

By Tom Lewis, N4TL

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Packet Radio

- 1980 FCC allowed Amateurs to transmit ASCII codes via radio
- Digital radio communications mode
- The AX.25 (Amateur X.25)
- Terminal Node Controllers, TNC
- The TNCs allowed multiple stations to use the same frequency.
- Collisions, followed by retries
- Digipeaters

Kantronics KPC

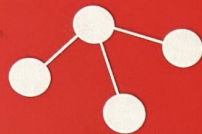


Digital Equipment VT05



Packet Radio

- HF 300 BAUD, VHF 1200 BAUD
- Ham to Ham with keyboard and monitors.
- Ham to computer, like dial up using modems on the phone
- I was not interested and did not buy a TNC
- Then this came along



PacketCluster[®]

Pavillion Software

PacketCluster

- Dick Newell, AK1A in the late 1980s
- DOS Software that ran on an IBM PC, Called a node
- Multiple stations can connect at the same time
- Users can share information
- DX/Contest multiplier spotting functions
- WWV Propagation logging.

PacketCluster

- Users would connect to the Packet Cluster
- Use DOS like commands to do everything.
- To announce, DX frequency dxcall comments
- DX BY1PK 14195 Wow China
- Everyone connected would receive
- DX de N4TL: 14195 BY1PK Wow China

Kantronic TNC

- The PC software would only work with a few TNCs
- Kantronics KPC series TNC
- Still in business
- DRSI TNC
- It allowed more than one connection.
- SET MAXUSERS to 26

DX Spotting

Before packet cluster nodes

1950s – 1960s

- Before the Internet and 2 meter FM repeaters
- When a rare station was heard
- Hams would call each other on the phone.
- Or have a frequency they would go to
- Paper list of what friends needed

1980

- I started Dxing around 1980 living in Lauderdale Lakes Florida.
- SFDXA repeater. 147.33 FM
- Hams would announce DX they heard on the repeater.
- And do the single ringers. If the phone ran once, get on the repeater and find out what station is on the air.
- I would get up about 30 minutes earlier then needed to go to work, I spent the time tuning the bands listening for DX.
- I did the same at night. Listen Listen Listen

Want lists & single rings

- The SFDXA had a want list for club members
- It was a list of uncommon countries followed by members' calls. Full calls were not used, only the suffix was listed
- When a needed country was heard, check the list and use the club roster to look up phone numbers, call and let the phone ring once.
- BY China, TL, ABC, MM, CIA
- P5 N. Korea TL, ABC, MM, CIA, XYZ, NE
- VKOM Macquarie TL, XYZ, NE

Want list computer program

- Wrote a Basic program to generate the want list
- Took members needs and combined them
- Generated the output file
- Ran on a home made Z80 computer with 8 inch floppy disks
- CP/M Operating system.
- It took 20 minutes to run with about 20 members data.
- Today it would take about .1 seconds.
- A Statistics program runs in 0.409 seconds.

PacketCluster

- Around 1988, Vant, WA4CTC, introduced PC to SFDXA
- SFDXA purchased the software and the TNC
- Used IBM radio club room, IBM computer on IBM property,
- Set up on IBM tower help from other IBM radio club members
- Had to have a 2 meter radio that would power up to the same frequency each time. Easy in 1980s.
- Software ran on DOS
- Second node at South Florida Medical Center, N4TL-1

PacketCluster (Wikipedia)

- A DX cluster is a network of computers, each running a software package dedicated to gathering, and disseminating, information on amateur radio DX (long-distance contact) activities.
- The computers comprising the network are called nodes, the network itself being termed a cluster of nodes. The nodes may be connected either via radio links or through the internet. Internet nodes generally connect using the telnet protocol.
- The system acts as an aggregator of information, accepting input from various sources, then making that data available to any user who is connected to the network.

Welcome to Microsoft Telnet Client

Escape Character is 'CTRL+']'

Microsoft Telnet> c ve7cc.net

Microsoft Telnet> ?

Commands may be abbreviated. Supported commands are:

c	- close	close current connection
d	- display	display operating parameters
o	- open hostname [port]	connect to hostname (default port 23).
q	- quit	exit telnet
set	- set	set options (type 'set ?' for a list)
sen	- send	send strings to server
st	- status	print status information
u	- unset	unset options (type 'unset ?' for a list)
?/h	- help	print help information

Microsoft Telnet> o ve7cc.net

Connecting To ve7cc.net...

Microsoft Telnet>

*** Connected to VE7CC-1:
Greetings from the VE7CC-1 cluster.
Located near Vancouver BC

To see FT8 spots you MUST enter SET/FT8
To see Skimmer spots you must SET/SKIMMER
To turn OFF RBN CW Spots enter SET/NOCW

Running CC Cluster software version 3.397

```
*****
*                                                                 *
*   Please login with a callsign indicating your correct country *
*                               Portable calls are ok.           *
*                                                                 *
*****
```

New commands:

set/skimmer turns on Skimmer spots.
set/noskimmer turns off Skimmer spots.

set/noft8 turns off FT8 spots.
set/ft8 turns on FT8 spots.

set/noft8 turns off FT8 spots.
set/ft4 turns on FT4 spots.

set/nobeacon turns off spots for beacons.
set/beacon turns them back on.

For information on CC Cluster software see:
http://bcdxc.org/ve7cc/ccc/CCC_Commands.htm

AR User program now at ver. 2.447
Please enter your call:

login:

For information on CC Cluster software see:
http://bcdxc.org/ve7cc/ccc/CCC_Commands.htm

AR User program now at ver. 2.447
Please enter your call:

login: n4tl
N4TL

Hello Thomas Lewis.

Cluster: 330 nodes 1339 Locals 7830 Total users Uptime 48 days 1:15

Date	Hour	SFI	A	K	Forecast	Logger
13-Mar-2025	15	160	32	5	Minor w/G1 -> Minor w/G1	<AE5E>
13-Mar-2025	18	160	32	4	Minor w/G1 -> No Storms	<AE5E>
N4TL de VE7CC-1	13-Mar-2025	2000Z			CCC >	
N4TL de VE7CC-1	13-Mar-2025	2000Z			CCC >	
DX de SM3XGV:	50314.7	ES0Z				2000Z
sh/dx						
50313.0	D68Z		13-Mar-2025	1952Z	FT8 RH91FV<>LH18 CQ Via L	<3D2AG>
5357.0	OE300G		13-Mar-2025	1952Z	K002MD<>JN87 my 5W	<SP5EBH>
7008.5	UT8ER		13-Mar-2025	1952Z	cq	<JA2DHX>
3611.0	ON/PC5A		13-Mar-2025	1953Z		<DM7XX>
7135.0	IW3BOV		13-Mar-2025	1953Z	award lagorai	<IW3BMW>
3620.0	IN3JHZ		13-Mar-2025	1953Z	Awrđ Lagorai 2025	<SP1AOL>
50167.0	M0RDX		13-Mar-2025	1953Z	CQ CQ from 83 square	<2E0VPF>
28076.2	PY2DPM		13-Mar-2025	1953Z		<NC30>
7065.0	IQ3VN		13-Mar-2025	1954Z	Lagorai award	<PD2ET>
50314.4	LU1WFO		13-Mar-2025	1954Z		<W1PR>
14255.0	EA2K		13-Mar-2025	1954Z	CQ	<HZ1ES>
14076.2	OE3KDC		13-Mar-2025	1954Z	FT8	<EA7LDW>
7095.0	II3LAG		13-Mar-2025	1954Z	LAGORAI Award special cal	<F1EST>
7165.0	JA0PI		13-Mar-2025	1954Z		<EA3BOX>
21075.5	4U1UN		13-Mar-2025	1955Z		<AD6HF>
5357.0	GJ0KYZ		13-Mar-2025	1955Z	K002MD<>IN89WF my 5W	<SP5EBH>
28370.0	XE1DEL		13-Mar-2025	1955Z	Special Activation.. Wome	<OA4BUO>
50313.0	PP5KR		13-Mar-2025	1956Z	I075PP<>GG42 HRD	<MM0CKK>

Lots of DX Clusters and RBNs

- [Telnet Access to DX Clusters and Reverse Beacon Network \(RBN\)](#)
- <https://www.ng3k.com/misc/cluster.html>

Telnet Access to DX Clusters and Reverse Beacon Network (RBN)

[\[AR-Cluster \(Ver. 4\) User Manual\]](#) [\[AR-Cluster \(Ver. 6\) User Manual\]](#) [\[DXSpider User Manual\]](#) [\[DXSpider User Filtering Primer\]](#)
[\[AR-Cluster 6 Quick Start/Connection and Filtering Guide\]](#)

NEW April 27, 2017: Telnet link-clicking works using the JuiceSSH Android client (<https://juicessh.com/>). This is very nice for use with newer Chromebooks that support Android apps. One need only click on a telnet link from within the Chrome browser and JuiceSSH is automatically invoked and the link followed.

This is not intended to be an exhaustive listing of cluster nodes and skimmer sites accessible by telnet. Rather, its goal is to list a representative selection of normally reliable and consistent nodes. If you operate a relatively problem free and open telnet accessible site and would like it added to the list, please send me an E-mail with the relevant details (including whether your IP is static or dynamic). **I am no longer listing nodes that require passwords to log in.** It may take me a while to add your data because updates to my DX pages are a higher priority than new entries to this list. Please be patient. Likewise, if users experience chronic problems with a node I list here, I'd like to hear about it too. Remember though, all telnet accessible nodes will experience problems from time to time; it's just the nature of the Internet; so don't be too quick to report a problem. All communication concerning this page may be sent to Bill@ng3k.com.

Although I have not used them myself, readers of this page have recommended [PuTTY](#) and [Tera-Term](#), both of which are available free. I have use industrial strength and not free [SecureCRT](#). Chromebook Android users may want to try the [JuiceSSH client](#)

#

Call	Domain Name/ IP address	login	comment	Software, Location, etc.
NC7J CW RTTY Skimmer	dxc.nc7j.com:7373 (dynamically assigned)	call		Telnet access to NC7J's CW RTTY Skimmer (Syracuse, UT, DN31xb)
NC7J FT Skimmer	dxc.nc7j.com:7200 (dynamically assigned)	call		Telnet access to NC7J's FT Skimmer (Syracuse, UT, DN31xb)
DL8LAS	telnet://dl8las.dyndns.org:7300 dynamically assigned	call		Skimmer Server (Kiel JO54ef); DL8LAS (Sysop)
K1EU	k1eu.ddns.net dynamically assigned	call		K1EU AR Cluster v6 (Scarborough, ME) ; e-mail: kcme31@gmail.com
W1NR	dx.w1nr.net 173.255.227.205	call		W1NR DXSpider (Marlborough, MA); Yankee Clipper Contest Club spotting network; also accessible through Java applet (close applet using "File" drop-down menu); NTP server also available: timelord.w1nr.net
W1NR-9	usdx.w1nr.net 45.79.193.215	call		W1NR DXSpider (Marlborough, MA); Yankee Clipper Contest Club spotting network; default filters set to only display spots from callsigns in zones 1-8; Sysop: W1NR
WW1R-9	dxc.ww1r.com:7300 (dynamically assigned)	call		Dx-Spider (Newton, NC); Sysop: WW1R

DX CLUSTER NODE SOFTWARE

Here is a list of current node software I found on the internet.

<http://www.dxcluster.info/dxcsoft.htm>

- [AR-Cluster](#) - AR-Technologies / AB5K
- [CC Cluster](#) - Lee Sawkins / VE7CC
- [CLX](#) - The CLX Team / DJ0ZY & DL6RAI
- [CW Skimmer](#) - Alex Shovkoplyas / VE3NEA
- [Clusse](#) - Heikki Hannikainen / OH7LZB
- [DX Spider](#) - Dirk Koopman / G1TLH
- [DxNet](#) - Oliver Le Cam / F5MZM
- [PacketCluster](#) - Dick Newell / AK1A
- [WinCluster Lite](#) - Jim Kehler / KH2D

- [WPXLOC.RAW](#) - Jim Reisert / AD1C (country database)

Telnet commands

- SH/CL

sh/cl
Cluster: 331 nodes 1487 Locals 8299 Total users Uptime 8 days 11:07
N4TL de VE7CC-1 10-Dec-2024 1802Z CCC >

- SH/WWV/5

SH/WWW/5						
Date	Hour	SFI	A	K	Forecast	Logger
10-Dec-2024	3	173	16	3	No Storms -> Minor w/R1	<AE5E>
10-Dec-2024	6	173	16	2	No Storms -> Minor w/R1	<AE5E>
10-Dec-2024	9	173	16	2	Moderate w/R2 -> Minor w/R1	<W0MU>
10-Dec-2024	12	173	16	2	Moderate w/R2 -> Minor w/R1	<AE5E>
10-Dec-2024	15	173	16	1	Moderate w/R2 -> Minor w/R1	<AE5E>
N4TL de VE7CC-1 10-Dec-2024 1804Z CCC >						

Telnet commands

- SH/C

SH/C					
Cluster Configuration:					
VE7CC-1	2E0ECD	2E0NAQ	2E0VZT	2E0YMT	4X1ZQ-21
4X6TT	4Z1TL	4Z1TL-0	4Z5CP	4Z5CP-0	
4Z5ML-16	5B4AIX	5B4AOF	5B4WVN	6K5UBS	
7Z1DN	7Z1DV	9A2G	9A3W	9A3PM	
9A3XV	9A3XV-0	9A4BA-1	9A4WW	9A8M	
9H1PI-0	9K2GR	9K2HN	9K2LT	9K2OD	
9K2OD-02	9K2OD-2	9K2WA	9K2WA-0	9Z4CT	
A92AA	AA0AW	AA0YY	AA2DD	AA5AM-0	
AA5AU	AA5UN-9	AA8SW	AB1AU-10	AB1AU-6	
AB2TC	AB3CV-16	AB6BR	AB6BR-0	AB7MP-1	
AB8DS	AB9V-2	AB9YC-1	AC0JX	AC1S-16	
AC9DX	AD0ND	AD1C-15	AD4ES	AD6HF	
AD6KH	AD7KG	AD7L-1	AE0MO	AE1P	
AE4CW	AE6PW-19	AE7I	AE8SP	AE9LL-8	
AF4T	AF7WH	AG2K	AI5EG	AI5I	
AI5IN	AI5ST	AJ4A	AJ4VE-02	AJ8MH-1	
AJ9C	AK7V-2	AK9PL	AL2F	AL7BA/8	
BV1EK	CE2SV	CE7JPA	CN8SG-1	CT1AKD	
CT1DKS	CT1FSG	CT1HX	CT1KNM	CT2IRY	
CT7BAQ	CT7BHW	CX3RAN	DB0BLB-2	DC8SG	
DF1DT	DF4PD	DF6PW-16	DF8V	DF9OX	
DG1CMZ	DG3BZ	DG5CST	DG8FBV	DJ3CQ	
DJ3KU	DJ3WE	DJ7WW	DJ7ZG	DJ9MH	
DK1YP	DK2DB	DK3BK	DK3DUA-9	DK5DQ	
DK7ZT	DK7ZT-0	DK9MI	DL1LQA	DL2JRM	
DL3DXX	DL4FAY	DL4UNY	DL5WS	DL6KVA	

Internet Cluster			
CMD5	QSY	ALERT	Messages
401	✗	DX	DX de WA6SCW: 21091.0 FJ/EA8DBM FT8 1512Z
402	✗	DX	DX de IZ1ELP: 18071.0 E21EIC 1512Z
403	✗	DX	DX de PC4Y: 14015.4 SD6M CW 1512Z
404	✗	DX	DX de UA4WAU: 3630.1 RC4P SSB CQ 1512Z
405	✗	DX	DX de K1HTV: 50313.0 HK3W FJ34<F2>FM18ap 1512Z
406	✗	DX	DX de G4VJL: 21295.0 LZ7B Strong Signal 1512Z
407	✗	DX	DX de R2HM: 3670.0 RK3IXB SSB CQ 1512Z
408	✗	DX	DX de PY3CQ: 28012.9 LZ1ND 1512Z
409	✗	DX	DX de DL1AMT: 14263.0 OH8RA USB 1512Z
410	✗	DX	DX de N4FZ: 14255.0 K5COL POTA, US-2282 IA 1512Z
411			WWV de AE5E <15>: SFI=149, A=13, K=2, Minor w/R1 -> No Storms
412			DX 7Q2MM 50313.00 FH
413			N4TL de VE7CC-1 16-Nov-2024 1512Z CCC >
414	✗	DX	DX de N4TL: 50313.0 7Q2MM FH 1512Z
415	✗	DX	DX de R2HM: 3660.2 UA3ZTY SSB CQ 1512Z
416	✗	DX	DX de DJ9YE: 28180.0 KD9ZCL JO43<F2>EN34 1512Z
417	✗	DX	DX de R9IR: 3657.2 R5RC 1512Z
418	✗	DX	DX de SP4GED: 7170.0 SP5XTY/P CORRECT COOLSIGN 1512Z
419	✗	DX	DX de KE1DX: 28017.3 EI5DI 1512Z
420	✗	DX	DX de UA4WAU: 3649.0 RK4FM SSB CQ 1512Z
421	✗	DX	DX de IK2IKW: 14034.9 MM4D LZ 1512Z
422	✗	DX	DX de YO4NT: 21012.3 4U30B LZ-DX CW 1512Z
423	✗	DX	DX de IW1RLC: 14258.0 IR1RVDB 15:12 100th Italian radio h 1512Z
424	✗	DX	DX de ON6LR-10: 21044.9 EW1TO CW 1513Z
425	✗	DX	DX de UA7G: 14022.6 LZ3QE CW 1513Z
426	✗	DX	DX de LZ6DX: 21280.0 LZ2YO USB 1513Z
427	✗	DX	DX de LU1EEP: 28074.0 DL9GCG 73 1513Z
428	✗	DX	DX de IZ0IMS: 7091.0 IW0FGX bellezze italia 1513Z
429	✗	DX	DX de PC4Y: 14020.6 EW8DX CW 1513Z
430	✗	DX	DX de IK8HBA: 7165.0 IR8RCAM 15:13 100th Italian radio h 1513Z
431	✗	DX	DX de W7SW: 21032.6 HA2VH CW 1513Z
432	✗	DX	DX de YC1JEL: 21074.0 3W9Z FT8 -07dB from OL20 1803Hz 1513Z
433	✗	DX	DX de IT9YHR: 18136.0 I9RCAL 15:13 100th Italian radio h 1513Z
434	✗	DX	DX de R2HM: 3649.1 RK4FM SSB CQ 1513Z
435	✗	DX	DX de LZ3RN: 14007.5 OM3CW CW 1513Z
436	✗	DX	DX de EA6VY: 21246.0 LZ7U LZ contest 1513Z
437	✗	DX	DX de LZ2YO: 21220.0 LZ2ZY USB 1513Z
438	✗	DX	DX de LZ1QV: 14030.7 W1KM CW 1513Z
439	✗	DX	DX de W1ARY: 28010.2 SN4K CW 1513Z
440	✗	DX	DX de R2HM: 3653.0 UA3S SSB CQ 1513Z



DX Info



	QSY	Need	KHz	DX Call	Time	Remarks		Origin	Date	SR
NET	✓	DX BAND	1871.0	R8WF	1456	SSB CQ	1456Z	de UA4PN	2024-11-16	I
NET	✓	DX BAND	1871.0	R9SXX	1458	SSB CQ	1458Z	de UA4PN	2024-11-16	I
NET	✓	DX BAND	50313.0	A71XX	1500	LL55RI<>LL55RW	1500Z	de A71AE	2024-11-16	I
NET	✓	DX BAND	7074.0	VR2VAZ	1500	tnx QSO	1500Z	de RV0AP	2024-11-16	I
NET	✓	DX BAND	50315.0	S9Z	1503	FT8 -18 dB 319 Hz	1503Z	de PH80LI	2024-11-16	I
NET	✓	DX BAND	1840.3	E51SGC	1507	FT8 -19	1507Z	de DL1RW	2024-11-16	I
NET	✗	B/M								I

446			sh/www/5						
447			Date	Hour	SFI	A	K	Forecast	Logger
448			16-Nov-2024	3	149	13	4	Minor w/R1 -> Minor w/R1	<AE5E>
449			16-Nov-2024	6	149	13	3	Minor w/R1 -> Minor w/R1	<W0MU>
450			16-Nov-2024	9	149	13	3	Minor w/R1 -> No Storms	<AE5E>
451			16-Nov-2024	12	149	13	2	Minor w/R1 -> No Storms	<AE5E>
452			16-Nov-2024	15	149	13	2	Minor w/R1 -> No Storms	<AE5E>
453			N4TL de VE7CC-1 16-Nov-2024 1517Z CCC >						



Record 456




SH/WWV/5





VHF Packet / **Internet Packet** / CW Line Out / CW Char Out /

The N3FJP log program supports DX spotting.

- To set it up go to Settings, DX Spotting, Configure. Use Telnet Host for the data source. The Telnet host is okay at dxspots.com, port 23, put your call sign in for the login. Put SHOW/DX for the Login Command.

DX Spotting Setup (Ctrl D)

Data Source ☒ Telnet Host ☐ LAN Relay	Telnet Host: dxspots.com Delete Host From List	Telnet Port: 23	Telnet Login (call sign): N4TL	Login Command (optional): SHOW/DX	☐ Enable DX Spotting ☒ Auto Reconnect ☐ Show Band Map on Startup (Ctrl E) ☐ Show Large Form on Startup (Ctrl+Shift D)	☐ 3 Min Keep Alive 12 % of Form
Display spots for these continents on the main form: ☒ AF ☒ AS ☒ EU ☒ NA ☒ OC ☒ SA			More Filtering		Audio Alerts: ☐ DX ☐ Needed Spot ☒ Beep When Spotted Speak Details: ☐ DX ☐ Needed Spot	

- Click on Enable DX Spotting. The blue area will fill in with needed spots. Now when a needed spot comes in it will be put in the window.
- You can do a search by typing in the box at the bottom.

The screenshot shows a software window with a dark blue background. The main area contains a list of text entries, each representing a spot. The entries are organized into columns: frequency, call sign, date, time, signal strength, and message. The messages include various QSO reports and QRP activity. At the bottom of the window, there is a search bar with the text 'SH/DX VU4A' entered. To the right of the search bar are four buttons: 'Send', 'Spot Last', 'Spot Me', and 'Done'. Above the search bar, there is a line of text: 'Please type text to send here and press enter:'. Below the search bar, there is a line of text: 'Press Ctrl E from the main form to display the band map! Click here to learn more!'. The list of spots is as follows:

Frequency	Call Sign	Date	Time	Signal Strength	Message
50313.0	VU4A	05-Dec-2024	1144Z	FT8 -11 dB 822 Hz	<UY2UA>
10131.0	VU4A	05-Dec-2024	1144Z	FT8	<VK3EW>
50313.0	VU4A	05-Dec-2024	1158Z	CQ -17	<SM7FJE>
1817.0	VU4A	05-Dec-2024	1234Z	599 73	<9A3AYW>
50313.0	VU4A	05-Dec-2024	1249Z	<F2> -10dB calling CQ	<LA3EQ>
21075.1	VU4A	05-Dec-2024	1257Z		<VK2WJ>
10131.0	VU4A	05-Dec-2024	1330Z	FT8	<VK6DU>
18095.0	VU4A	05-Dec-2024	1338Z	FT8 -7 dB 1170 Hz	<LZ3AD>
18095.0	VU4A	05-Dec-2024	1354Z	FT8 -12dB 1623Hz	<SQ8T>
18095.0	VU4A	05-Dec-2024	1401Z	FT8 -08dB 1613Hz	<SP6FEK>
18097.0	VU4A	05-Dec-2024	1407Z	tnx	<IV3IZU>
18095.0	VU4A	05-Dec-2024	1408Z	FT8 F/H Tnx 73s	<F8BON>
21074.0	VU4A	05-Dec-2024	1439Z	FT8 -22db 73,	<PY4PTO>
18097.7	VU4A	05-Dec-2024	1451Z	FT8	<DD6EX>
18096.0	VU4A	05-Dec-2024	1519Z	CCC VU4* DXCC 11 VUCC NK6	<EA3CU>
18096.0	VU4A	05-Dec-2024	1537Z	73 napoli	<IZ8MCG>
18095.0	VU4A	05-Dec-2024	1541Z	TNX QSO FT8	<IK0HTP>
10131.0	VU4A	05-Dec-2024	1544Z	-16	<G4ELJ>
14090.0	VU4A	05-Dec-2024	1607Z	FT8 986hz Andaman Nicobar	<F5MNV>
18095.0	VU4A	05-Dec-2024	1611Z		<I8YAV>
1800.0	VU4A	05-Dec-2024	1648Z	PSE 160 TNX 73	<SV8BHN>
18095.0	VU4A	05-Dec-2024	1653Z	Tks.	<CT1FIU>
18095.0	VU4A	05-Dec-2024	1702Z	TNX FT8	<IK0HTP>
10136.0	VU4A	05-Dec-2024	1726Z	-13 -8 GOOD.DX T3	<IS0BKS>
5357.0	VU4A	05-Dec-2024	1752Z		<ON4GG>

N4TL de AE5E 05-Dec-2024 1803Z CCC >

Press Ctrl E from the main form to display the band map! Click here to learn more!

Please type text to send here and press enter: SH/DX VU4A

Send Spot Last Spot Me Done

Various commands

- There are two formats for looking at DX
- SH/DX VU4A
- SH/FDX VU4A
- You can also limit the length of the list
- SH/DX/10 VU4A
- To see the latest solar flux index type
- SH/WWW
- Type HELP for help info.

N1MM Telnet

The screenshot shows the N1MM Telnet interface. At the top, there's a 'Type:' field and a 'Reconnect' button. Below this is a tabbed menu with 'VE7CC', 'Clusters', 'Bands/Modes', 'Filters', 'Spot Comment', and 'BandPlans'. The main window displays a login sequence: 'login: N4TL', 'Hello Thomas Lewis.', followed by a separator line. A message states: 'If you do not wish to see DX spots for your own call enter UNSET/OWN'. Another separator line follows. Then, cluster statistics are shown: 'Cluster: 334 nodes 1415 Locals 8187 Total users Uptime 3 days 12:03'. A table of recent activity follows, with columns for Date, Hour, SFI, A, K, Forecast, and Logger. The table shows two entries for 5-Dec-2024 at 15 and 18 hours. Below the table, a log entry for N4TL is shown: 'N4TL de VE7CC-1 05-Dec-2024 1858Z CCC >'. This is followed by a list of DX spots, each with a call sign, frequency, mode, and frequency. The spots are: DX de K5LJ: 18069.0 T09W sri crnt freq 1858Z; DX de F5PVX: 7124.0 II9RACI 1859Z; DX de IU8SDA: 7047.0 II8RCAS 1859Z; DX de F8BON: 14080.0 9M2RSI FT4 Tnx 73s IOTA AS-072 1859Z; DX de PA6I: 7074.0 DL7CX FT8 +20 dB 1784 Hz 1859Z; and DX de SM1TDE: 7026.0 AN46CE CW 1859Z. At the bottom, there's a grid of buttons: BYE, CONN, DI/N, SH/DX, USERS, WWW, Clear NE, Yes DX, NE only, No DX, No VHF, and N4TL.

Type: Reconnect

VE7CC Clusters Bands/Modes Filters Spot Comment BandPlans

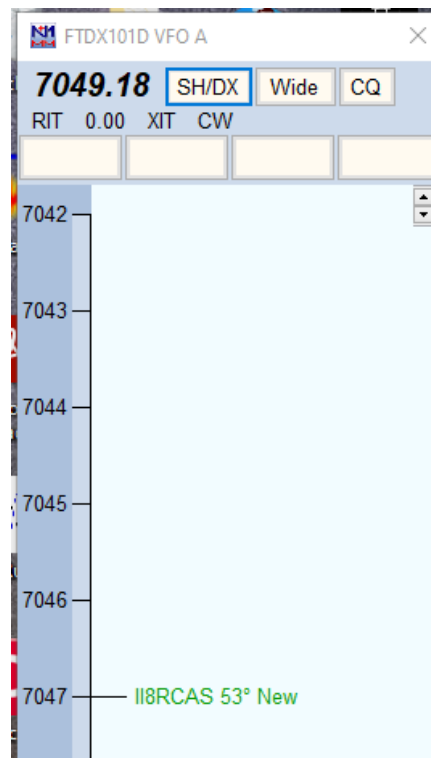
login:
N4TL
Hello Thomas Lewis.

If you do not wish to see DX spots for your own call enter UNSET/OWN

Cluster: 334 nodes 1415 Locals 8187 Total users Uptime 3 days 12:03
Date Hour SFI A K Forecast Logger
5-Dec-2024 15 175 6 1 Minor w/R1 -> No Storms <AE5E>
5-Dec-2024 18 175 6 1 Minor w/R1 -> No Storms <AE5E>
N4TL de VE7CC-1 05-Dec-2024 1858Z CCC >
N4TL de VE7CC-1 05-Dec-2024 1858Z CCC >
DX de K5LJ: 18069.0 T09W sri crnt freq 1858Z
DX de F5PVX: 7124.0 II9RACI 1859Z
DX de IU8SDA: 7047.0 II8RCAS 1859Z
DX de F8BON: 14080.0 9M2RSI FT4 Tnx 73s IOTA AS-072 1859Z
DX de PA6I: 7074.0 DL7CX FT8 +20 dB 1784 Hz 1859Z
DX de SM1TDE: 7026.0 AN46CE CW 1859Z

BYE CONN DI/N SH/DX USERS WWW
Clear NE Yes DX NE only No DX No VHF N4TL

N1MM Band window with SH/DX



https://pota.app/#/

Parks on the Air

Search for Callsigns & Parks

SPOTS

ACTIVATIONS

DOCS

SIGN UP

SIGN IN

Active Spots

Data will refresh in 17 seconds.

At a park now? Login to add your spot!

Band: All 67

Mode: All 67

Program: All 67

QRT: Show 67

Hunted: Show 67

Sort: Time

DK5CR @ DE-0540

DE-0540 Lemgoer Mark Provincial Recreation Area

DE-NW

21074.0 kHz (FT8)

CT1EYQ-#

RBN -12 dB via CT1EYQ-#

Last heard 1 sec ago at 15:16 UTC

RE-SPOT

1

KC1NDQ @ US-2877

US-2877 Haines Memorial State Park

US-RI

14262 kHz

KC9RED

57 in Michigan

Last heard 3 sec ago at 15:16 UTC

RE-SPOT

11

KG5FI @ US-3011

US-3011 Fort Richardson State Park

US-TX

14074.0 kHz (FT8)

NT6Q-#

RBN 11 dB via NT6Q-#

Last heard 9 sec ago at 15:16 UTC

RE-SPOT

7

N1BS @ US-7722

US-7722 Scarborough North State Beach

US-RI

14054.0 kHz (CW)

W3OA-#

RBN 18 dB 22 WPM via W3OA-#

Last heard 9 sec ago at 15:16 UTC

RE-SPOT

19

KB9KHT @ US-0285

US-0285 Meredosia National Wildlife Refuge

US-IL

14265 kHz

AB5HN

No spot information

Last heard 10 sec ago at 15:16 UTC

RE-SPOT

1

N5NR @ US-4422

US-4422 W. Goodrich Jones State Forest

US-TX

14059.0 kHz (CW)

WA2SCB

599 Inverness FL

Last heard 14 sec ago at 15:16 UTC

RE-SPOT

1

N4TRD @ US-1918

US-1918 St. Joseph Peninsula State Park

US-FL

18120 kHz

N3XLS

No spot information

Last heard 26 sec ago at 15:16 UTC

RE-SPOT

1

DF2GN @ DE-0597

DE-0597 Augsburg Jakobsweg National Historic Trail

DE-BY

28063.0 kHz (CW)

KI5GTR

[599 KI5GTR AR tnx]

Last heard 45 sec ago at 15:15 UTC

RE-SPOT

1

pskreporter.info/pskmap.html

Display Reception R... Your Logbook Awards Inbox (9) - n4tl2tom... Sign In - Coastal Google THE HISTORY OF RA... Real Time Lightning... Raleigh, NC Weathe...

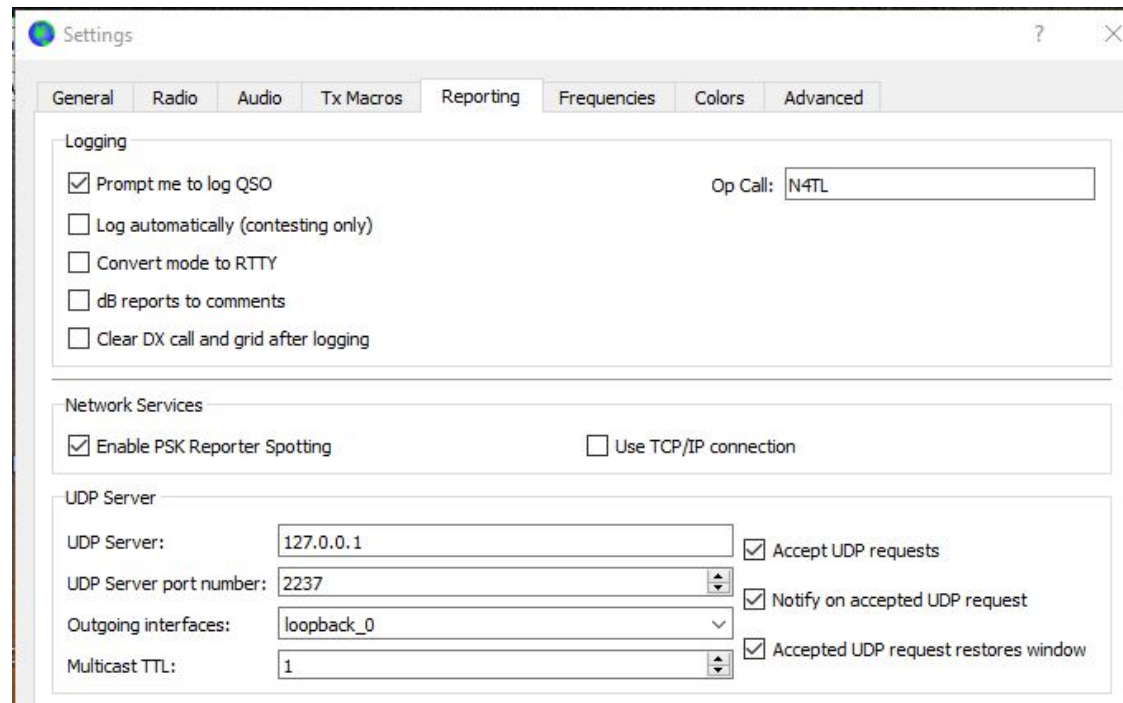
On show sent/rcvd by using over the last [Display options](#) [Permalink](#)

Automatic refresh in 3 minutes. Large markers are monitors. [Display all reports.](#)

There are **589 active monitors**: **562 on 6m**, **43 on 10m**, **40 on 20m**, **39 on 40m**, **38 on 30m**, **37 on 15m**, **31 on 17m**, **27 on 12m**, **24 on 80m**, **18 on 60m**, **10 on 160m**, **3 on 70cm**, **2 on 600m**.



WSJT-X Settings



The screenshot shows the 'Settings' window for WSJT-X, specifically the 'Reporting' tab. The window has a title bar with a question mark and a close button. The tabs at the top are General, Radio, Audio, Tx Macros, Reporting (selected), Frequencies, Colors, and Advanced. The 'Reporting' tab contains three sections: 'Logging', 'Network Services', and 'UDP Server'. The 'Logging' section has five checkboxes: 'Prompt me to log QSO' (checked), 'Log automatically (contesting only)' (unchecked), 'Convert mode to RTTY' (unchecked), 'dB reports to comments' (unchecked), and 'Clear DX call and grid after logging' (unchecked). There is also a text field for 'Op Call' with the value 'N4TL'. The 'Network Services' section has two checkboxes: 'Enable PSK Reporter Spotting' (checked) and 'Use TCP/IP connection' (unchecked). The 'UDP Server' section has four text fields: 'UDP Server' (127.0.0.1), 'UDP Server port number' (2237), 'Outgoing interfaces' (loopback_0), and 'Multicast TTL' (1). To the right of these fields are three checkboxes: 'Accept UDP requests' (checked), 'Notify on accepted UDP request' (checked), and 'Accepted UDP request restores window' (checked).

Settings

General Radio Audio Tx Macros Reporting Frequencies Colors Advanced

Logging

☒ Prompt me to log QSO Op Call: N4TL

☐ Log automatically (contesting only)

☐ Convert mode to RTTY

☐ dB reports to comments

☐ Clear DX call and grid after logging

Network Services

☒ Enable PSK Reporter Spotting ☐ Use TCP/IP connection

UDP Server

UDP Server: 127.0.0.1 ☒ Accept UDP requests

UDP Server port number: 2237 ☒ Notify on accepted UDP request

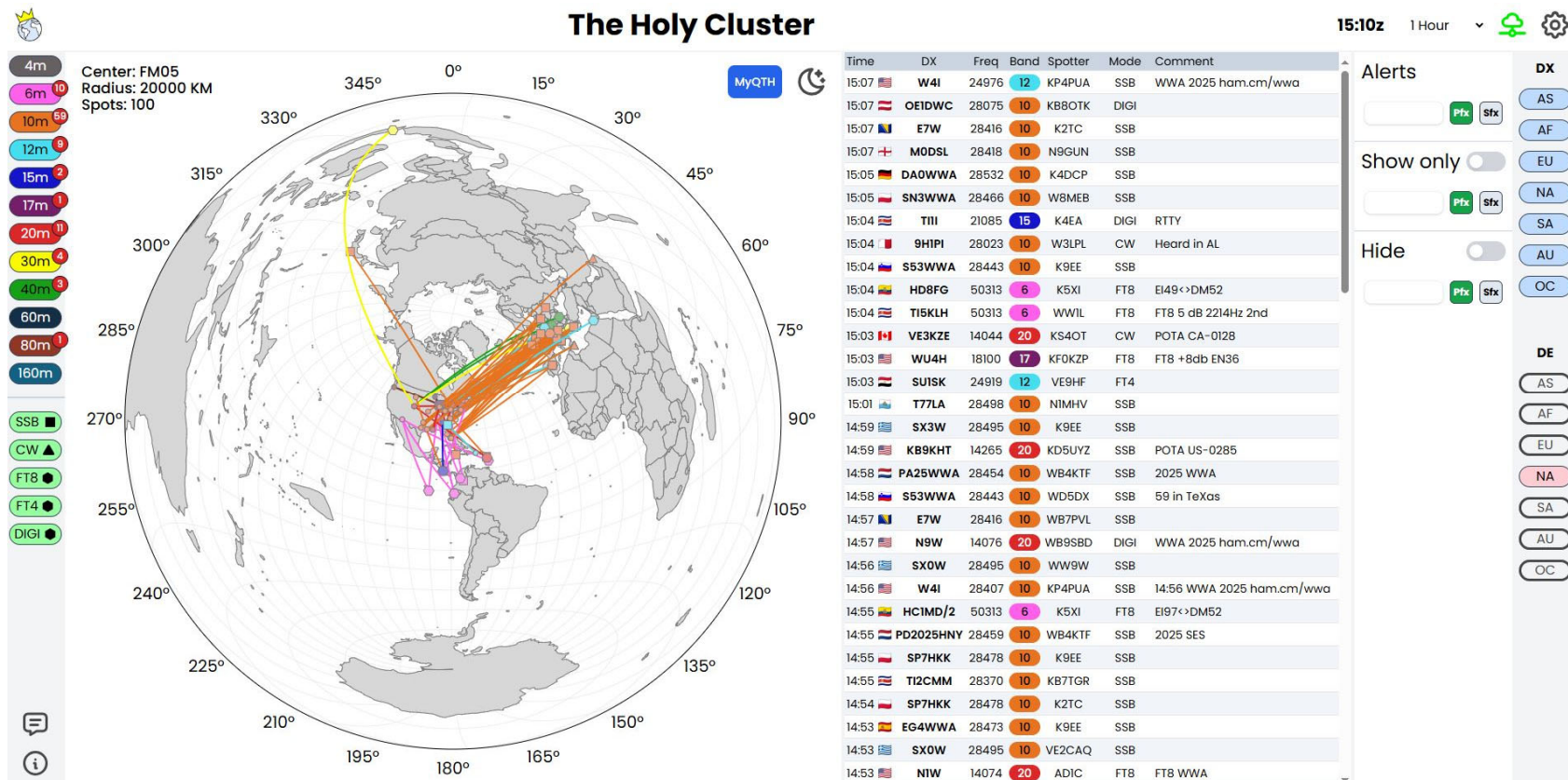
Outgoing interfaces: loopback_0 ☒ Accepted UDP request restores window

Multicast TTL: 1

The Holy Cluster

<https://holycluster.iarc.org>

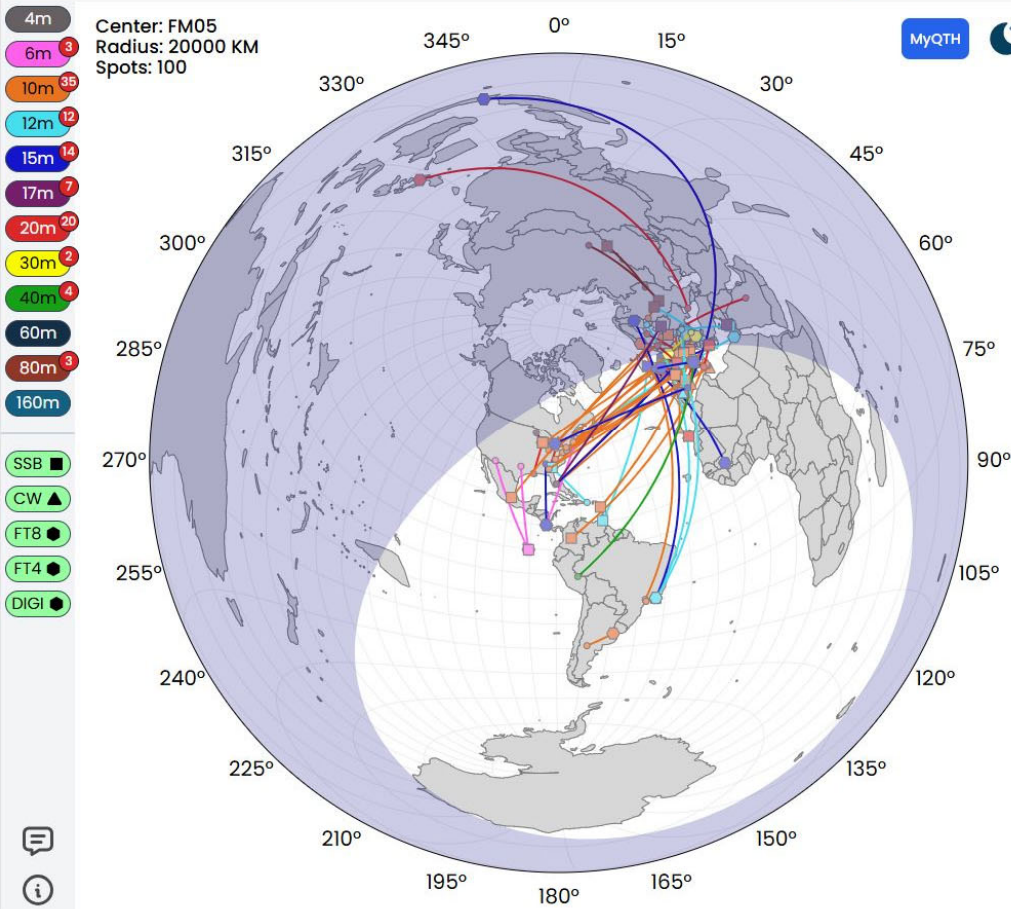
Initial release
Dec 24, 2024



The Holy Cluster

15:14z 1 Hour

Center: FM05
Radius: 20000 KM
Spots: 100



Time	DX	Freq	Band	Spotter	Mode	Comment
15:10	II5WWA	7125	40	IK5RLP	SSB	cq cq here
15:10	LZ1SJ	10136	30	YO2MD	FT8	FT8 +9 dB 2012 Hz
15:10	SX0W	14247	20	IT9IRP	SSB	TNX 73
15:10	IU4RXZ	14120	20	EA3HYJ	SSB	POTA IT- 0933 2 OPERATPRE
15:10	II5WWA	18072	17	IZ5ICH	CW	15:10 WWA 2025 ham.cm/wwa
15:10	HB9WWA	18078	17	HB9DQP	CW	WWA 2025 ham.cm/wwa
15:10	HB9WWA	21258	15	K9EE	SSB	
15:10	ZW5B	21074	15	G0VAX	FT8	FT8 -23dB 920Hz
15:10	HB9WWA	21258	15	PA3ECZ	SSB	73'...Tnx
15:10	YC1LDZ	21074	15	EA5RT	FT8	FT8 TNX 73
15:10	S51DX	28498	10	S59EIJ	SSB	CQn
15:10	EA6ACA	28005	10	W3LPL	CW	Heard in TX
15:10	XE1XR	28485	10	LB7VI	SSB	5/5 Tnx and HNY 73
15:10	I9WWA	28010	10	IT9IMJ	CW	
15:10	FG4SO	28402	10	IU5SFP	SSB	73 AND happy NEW YEAR
15:08	E7W	28416	10	EC2AHS	SSB	
15:07	HB9WWA	14283	20	IT9IRP	SSB	TNX 73
15:07	I10WWA	14090	20	IU0SAQ	DIGI	WWA 2025 ham.cm/wwa
15:07	M7RTB	14294	20	F5NZO	SSB	POTA GB-2503
15:07	OH6IH	21074	15	G0VAX	FT8	FT8 -07dB 592Hz
15:07	GB2WWA	24907	12	M0ORD	CW	15:07 WWA 2025 ham.cm/wwa
15:07	PY2IQ	24919	12	ES2IPA	FT4	FT4 HNY!
15:07	W4I	24976	12	KP4PUA	SSB	WWA 2025 ham.cm/wwa
15:07	OE1DWC	28075	10	KB8OTK	DIGI	
15:07	E7W	28416	10	K2TC	SSB	
15:07	I11WWA	28085	10	IK1ZFO	DIGI	WWA 2025 ham.cm/wwa
15:07	SN3WWA	28515	10	SQ2RAD	SSB	WWA 2025 ham.cm/wwa
15:07	RZ9YN	3647	80	RW4PAN	SSB	rw4pan
15:07	M0DSL	28418	10	N9GUN	SSB	
15:06	LU4FRN	28074	10	LU6YR	FT8	FT8 FF51 db-08 From FF51

Alerts

Show only

Hide

Contest station setup

- Filtering for stations that can be heard & worked
- SDR listening at the contest station
- CW Skimmer (Reverse beacon network)
- Software generating spots sent to the N1MM program
- Spots should be workable
- If you want to learn more, there is a YouTube video from DXEngineering about CW Skimmer, Reverse Beacon Network.

End