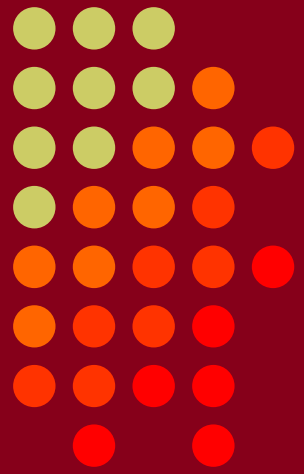
CTU Presents

Review of Contest Logging Programs

Pete Smith, N4ZR

Reformatted Version



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The Field is Crowded

CQWW 2009 CW (5523 logs)

Logger name	Logs	%	Total Score	%	Avg. Score
AATest	202	3.7	28,681,605	.9	141,988
CT	301	5.4	232,549,287	7.5	772,589
N1MM	1833	33.2	1,041,841,407	33.6	568,380
N3FJP's	186	3.4	17,107,299	.6	91,975
QARTest	66	1.2	22,325,085	.7	338,259
SD	226	4.1	35,733,109	1.2	158,111
TR4W	357	6.5	123,794,152	4.	346,762
UcxLog	148	2.7	24,042,273	.8	162,448
UNKNOWN	256	4.6	75,722,620	2.4	295,791
Win-Test	488	8.8	930,475,640	30.	1,906,712
WriteLog	473	8.6	313,622,388	10.1	663,049
Other	987	17.9	256,911,886	8.3	260,296

WPX 2010 CW (3450 logs)

Logger name	Logs	%	Total Score	%	Avg. Score
AATest	138	4.	42,463,771	1.7	307,708
CT	160	4.6	106,838,166	4.4	667,739
N1MM	1222	35.4	878,871,341	36.1	719,207
N3FJP's	83	2.4	9,817,423	.4	118,282
QARTest	34	1.	10,618,778	.4	312,317
SD	138	4.	34,178,109	1.4	247,667
TR4W	276	8.	158,636,035	6.5	574,768
UcxLog	88	2.6	28,983,392	1.2	329,357
UNKNOWN	128	3.7	28,782,413	1.2	224,863
Win-Test	350	10.1	781,121,218	32.1	2,231,775
WriteLog	244	7.1	228,828,565	9.4	937,822
Other	589	17.1	123,748,931	5.1	210,100

CQWW 2009 SSB (5707 logs)

Logger name	Logs	%	Total Score	%	Avg. Score
AATest	206	3.6	29,092,756	1.	141,227
CT	288	5.	201,860,460	6.9	700,904
N1MM	1855	32.5	931,724,202	31.8	502,277
N3FJP's	298	5.2	37,729,260	1.3	126,608
QARTest	163	2.9	57,840,362	2.	354,849
SD	249	4.4	37,090,158	1.3	148,956
TR4W	227	4.	82,363,265	2.8	362,834
UcxLog	186	3.3	31,062,123	1.1	167,001
UNKNOWN	269	4.7	53,088,091	1.8	197,353
Win-Test	465	8.1	962,409,722	32.8	2,069,698
WriteLog	447	7.8	265,337,499	9.	593,596
Other	1054	18.5	243,954,007	8.3	231,455

WPX 2010 SSB (4594 logs)

Logger name	Logs	%	Total Score	%	Avg. Score
AATest	160	3.5	55,183,907	1.3	344,899
CT	188	4.1	191,118,376	4.5	1,016,587
N1MM	1474	32.1	1,463,184,037	34.5	992,662
N3FJP's	291	6.3	52,962,168	1.3	182,001
QARTest	115	2.5	56,647,459	1.3	492,587
SD	198	4.3	46,739,511	1.1	236,058
TR4W	223	4.9	225,892,221	5.3	1,012,970
UcxLog	144	3.1	46,515,394	1.1	323,024
UNKNOWN	156	3.4	26,572,207	.6	170,335
Win-Test	415	9.	1,365,780,829	32.2	3,291,038
WriteLog	341	7.4	474,553,158	11.2	1,391,651
Other	889	19.4	229,977,138	5.4	258,692

Prepared by NA3M 4/7/2011

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And Time is Limited, So…

- I'll limit this review to three programs --
  - WriteLog, N1MM Logger, and Win-Test
- Why?
  - Most widely accepted by contesters today
  - Run on modern operating systems – Windows 2000, XP, Vista and Win 7
  - Cover all three main contest modes – CW, SSB and RTTY
  - Cover many contests
  - Development and/or support are likely to continue

What This is Not

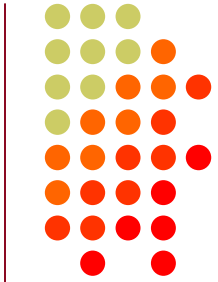
- A sales pitch, or a set of opinions about the relative merits of the programs

What It Is (I hope)

• Identification of what's important in a contest logging program

• Unbiased description of what each program has to offer

What's Important



- Real-Time User Needs
  - QSO entry
  - Dupe checking
  - Multiplier status
  - Bandmaps
- Other information resources
  - Tactical decision-making support
  - DX Cluster interface

What's Important - more

- Special Topics
  - ESM
  - RTTY
  - SO2R
  - Multi-Ops
  - VHF
  - Serial numbering – SO2R and Multi-ops
- "Infrastructure"
  - Contests Covered
  - Downloading and installation/setup
  - Support

ESM – a digression

- What it is
  - N6TR invented it, and, his TR Log contest software was the first to popularize it
- Ideally, how it works
  - After entering callsign, press [Enter] to send each next needed message, whether running or S&P
  - When all info logged, [Enter] to log QSO and (if running) send QRZ

Example

RUN

CQ	[Enter]
Enter caller	Keyboard
Send exchange	[Enter]
Copy exchange	Keyboard
Confirm/QRZ	[Enter]

Or…

S&P

Enter call	Keyboard
Call station	[Enter]
Copy exchange	Keyboard
Send exchange/log	[Enter]

In Brief

WriteLog	N1MM Logger	Win-Test
The first Windows contest logger - begun in 1994	First public release 2000	First public release 2003
CT-like user interface. Many features added since but basics unchanged	Unique user interface, full Windows environment	CT-like user interface, full Windows environment
Programmed by W5XD, N9OH	Programmed by N1MM, N2AMG, N2IC, K3CT, NA3M, others	Programmed by F5MZN, F6FVY

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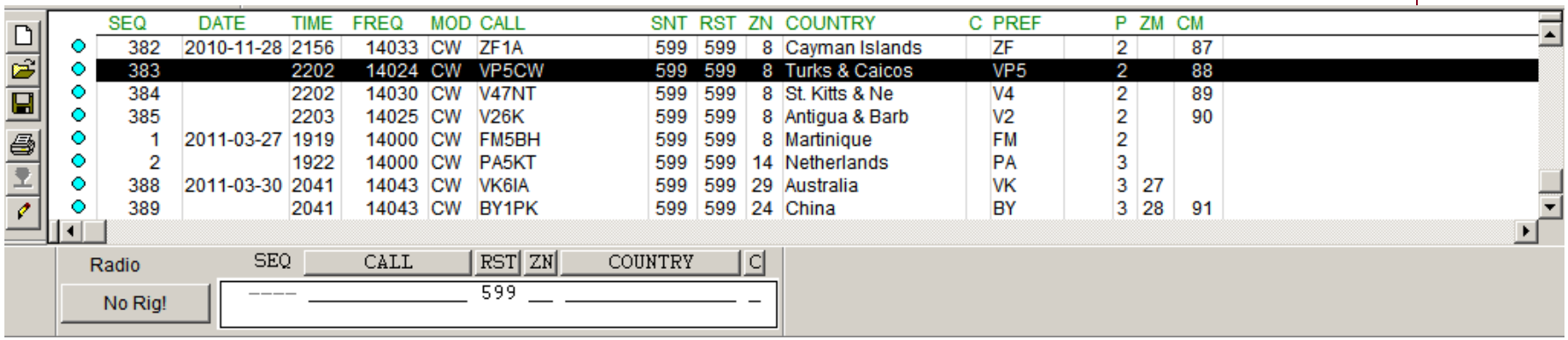
QSO Entry - Writelog



SEQ	DATE	TIME	FREQ	MOD	CALL	SNT	RST	ZN	COUNTRY	C	PREF	P	ZM	CM
382	2010-11-28	2156	14033	CW	ZF1A	599	599	8	Cayman Islands		ZF	2		87
383		2202	14024	CW	VP5CW	599	599	8	Turks & Caicos		VP5	2		88
384		2202	14030	CW	V47NT	599	599	8	St. Kitts & Ne		V4	2		89
385		2203	14025	CW	V26K	599	599	8	Antigua & Barb		V2	2		90
1	2011-03-27	1919	14000	CW	FM5BH	599	599	8	Martinique		FM	2		
2		1922	14000	CW	PA5KT	599	599	14	Netherlands		PA	3		
388	2011-03-30	2041	14043	CW	VK6IA	599	599	29	Australia		VK	3	27	
389		2041	14043	CW	BY1PK	599	599	24	China		BY	3	28	91

Radio | SEQ | CALL | RST | ZN | COUNTRY | C

No Rig!

599

- Works like CT – function keys, [INS], [+] for running, [Space] as smart tab
- Log separate, with separate editing function
- 10 stored messages per mode (CW/SSB/RTTY)

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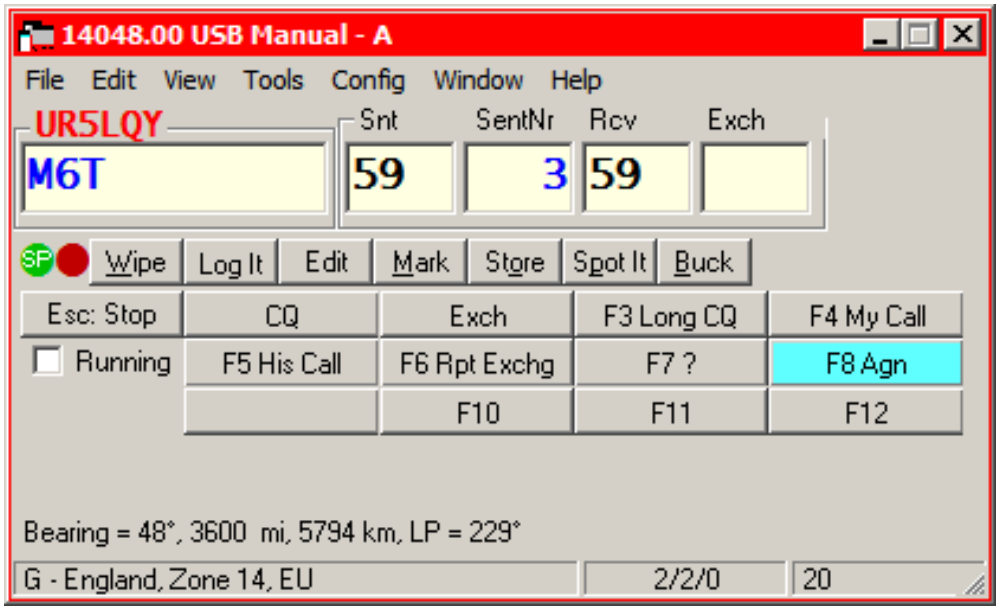
QSO Entry - N1MM Logger



- Choice of CT emulation, alternate keyboard characters, or ESM; mouse or hot-keys; 24 stored messages per mode; call frame

- Log appears in a separate window, edit last QSO in Entry window with Ctrl+Q

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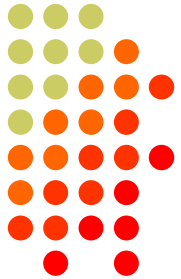
QSO Entry – Win-Test

QSO	Bd	Time	Callsign	Sent	N°	Rcvd		Mult	PtsStn
1	20	12:36	RT2M	599	001	599	YR	CO	10 R
2	15	14:33	RU1A	599	002	599	SP	CO	10 R
3	15	14:35	RN3F	599	003	599	MO	O	10 R
4	15	14:37	RU9WZ	599	004	599	BA	CO	10 R
5	20	20:59	DJ1CW	599	005	599	647	C	5 R
6	20	21:16	DM3MM	599	006	599	732		5 R
7	20	21:19	WA1Z	599	007	599	782	C	2 R
8	20	21:20	PA5WT	599	008	599	344	C	5 R
9	20		F5I	599	009	599			0 R

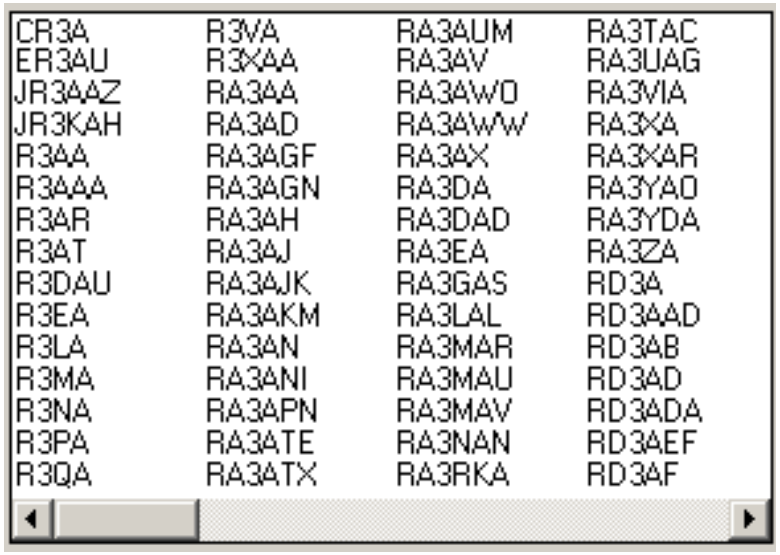
- Looks and works like CT – function keys, [INS], [+] for running, [Space] as smart tab
- Log above entry line, edit on-screen.

QSO Entry - Win-Test (more)



- Combination of text entry (like CT), mouse and hotkeys for real-time commands
- 7 automated keys per mode (CW/SSB/RTTY), plus 12 function keys each

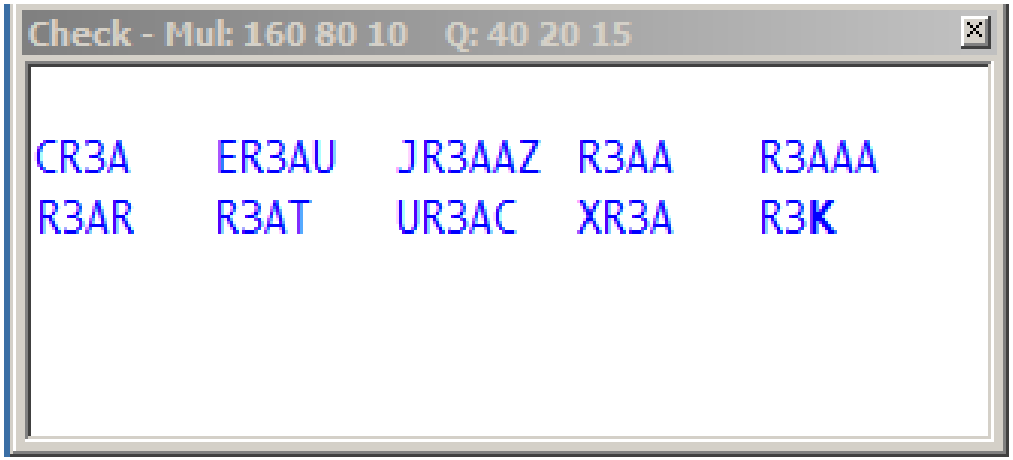
Dupe Checking - WriteLog



CR3A	R3VA	RA3AUM	RA3TAC
ER3AU	R3XAA	RA3AV	RA3UAG
JR3AAZ	RA3AA	RA3AWO	RA3VIA
JR3KAH	RA3AD	RA3AWW	RA3XA
R3AA	RA3AGF	RA3AX	RA3XAR
R3AAA	RA3AGN	RA3DA	RA3YAO
R3AR	RA3AH	RA3DAD	RA3YDA
R3AT	RA3AJ	RA3EA	RA3ZA
R3DAU	RA3AJK	RA3GAS	RD3A
R3EA	RA3AKM	RA3LAL	RD3AAD
R3LA	RA3AN	RA3MAR	RD3AB
R3MA	RA3ANI	RA3MAU	RD3AD
R3NA	RA3APN	RA3MAV	RD3ADA
R3PA	RA3ATE	RA3NAN	RD3AEF
R3QA	RA3ATX	RA3RKA	RD3AF

- Displays all possible calls

Dupe Checking - N1MM Logger



- Either N+1 or exact match
- Highlights exact match or 1-letter differences; also known callsign errors
- Dupes flagged in Check and Entry windows

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Dupe Checking - Win-Test

- Choice of Exact or N+1 match, or both – begins after 2 or 3 characters entered

- Result color-coded in Check Partial or N+1 windows

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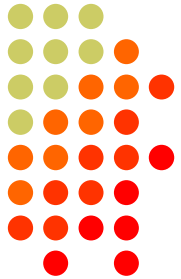
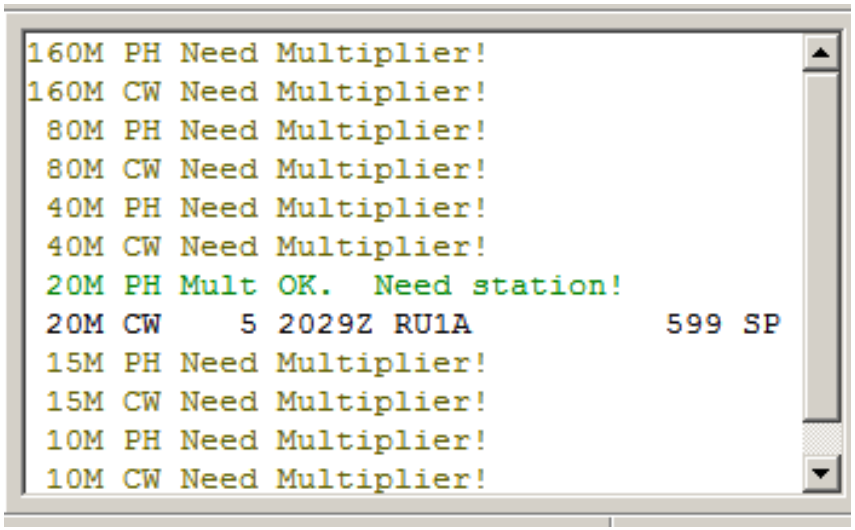
Why Multiplier Status



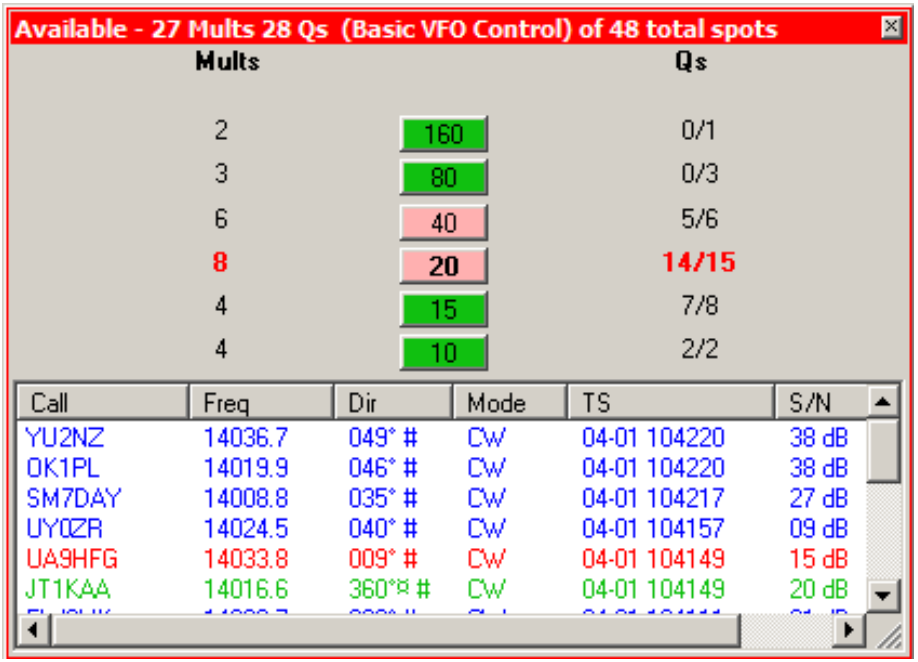
- Importance varies by contest, but in most it is essential to know quickly:
  - When you are S&P, helps decide how long to try to break a pileup
  - When running, SO2R or multi-op, you may want to move the station to another band or mode

Multiplier Status - WriteLog



- Mult window shows mult status, who was worked for that mult; no indication for double mult, as in CQWW

Multiplier Status – N1MM Logger



- Available Mults and Qs window uses color coding to display dupe and mult status when call entered or spot received

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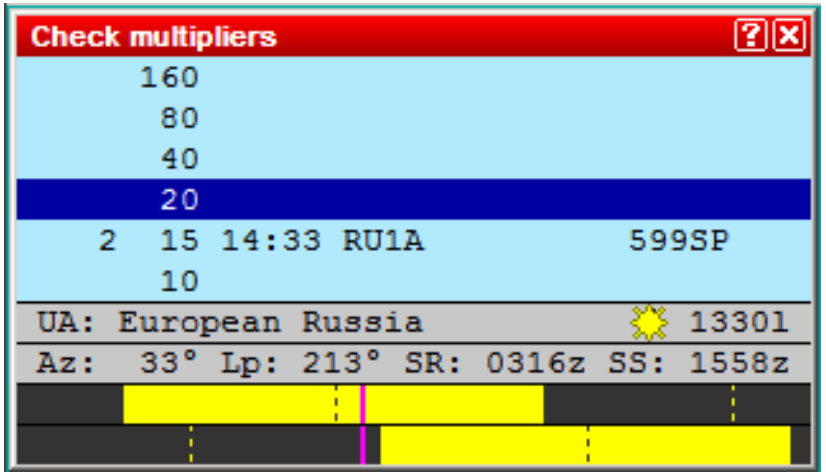
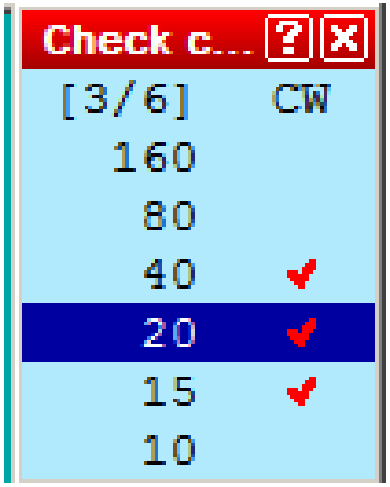
Multiplier Status – Win-Test





- Mult window shows mult status, who was worked for that mult, exchange
- Band/QSO info is in Check Call window - needed to decide whether to move station

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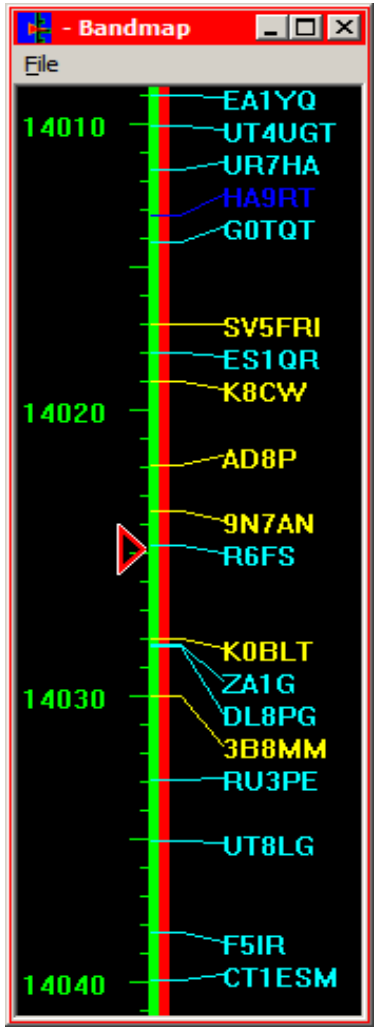
Bandmaps - WriteLog



- Floating windows, fixed frequency range, but can be resized and re-centered
- Color-coded, colors can be changed to taste
- Double-click to capture call to QSO entry area

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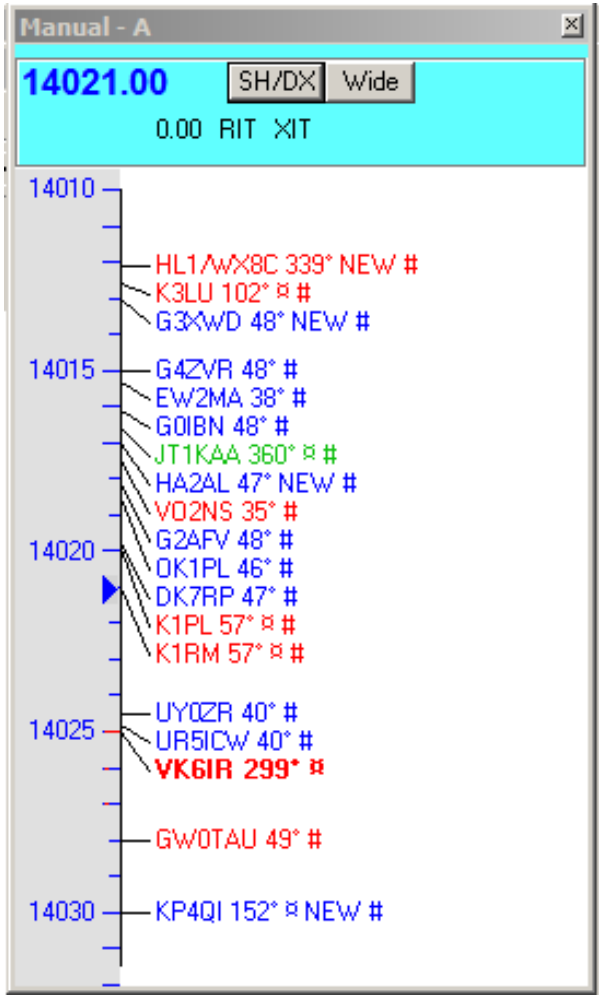
Bandmaps - N1MM Logger



- Resize-able, zoom-able with mouse wheel
- Same color codes as Available window
- QSY and enter call with single click, or navigate from keyboard

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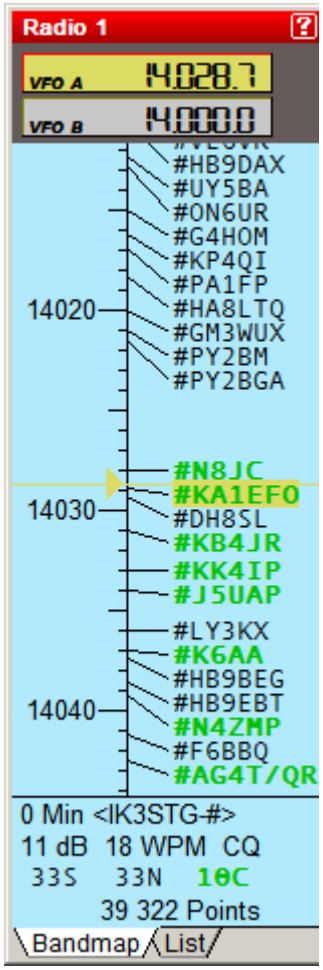
Bandmaps - Win-Test



- Choice of list or bandmap, with single/double mults color-coded
- One list/bandmap per radio
- Double-click captures call, QSYs radio
- Bandmap zoomable with mouse wheel
- List format sortable, clickable

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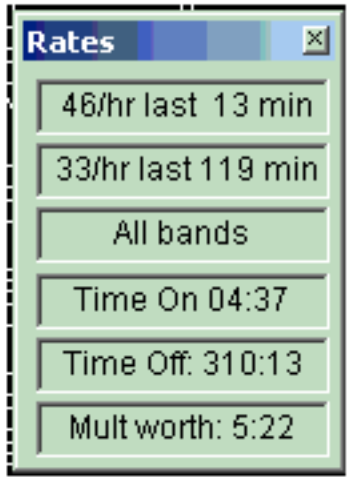
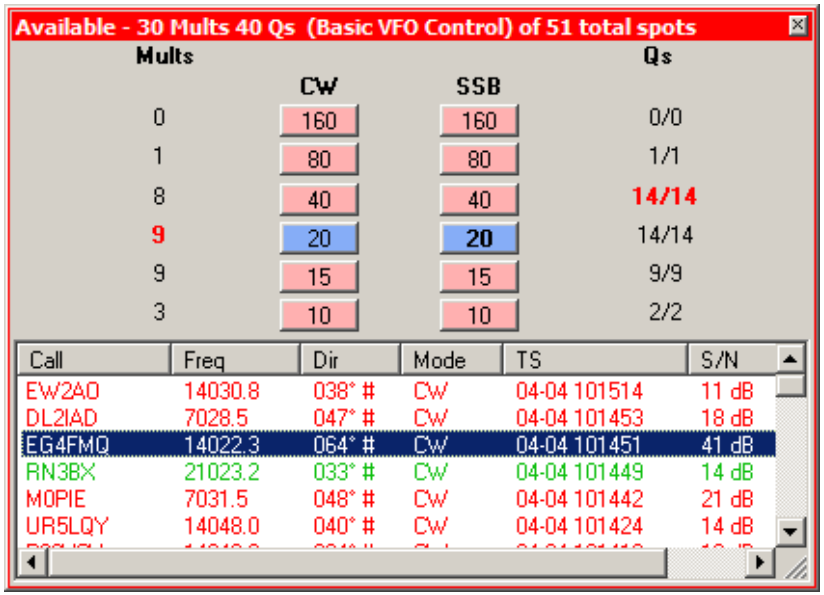
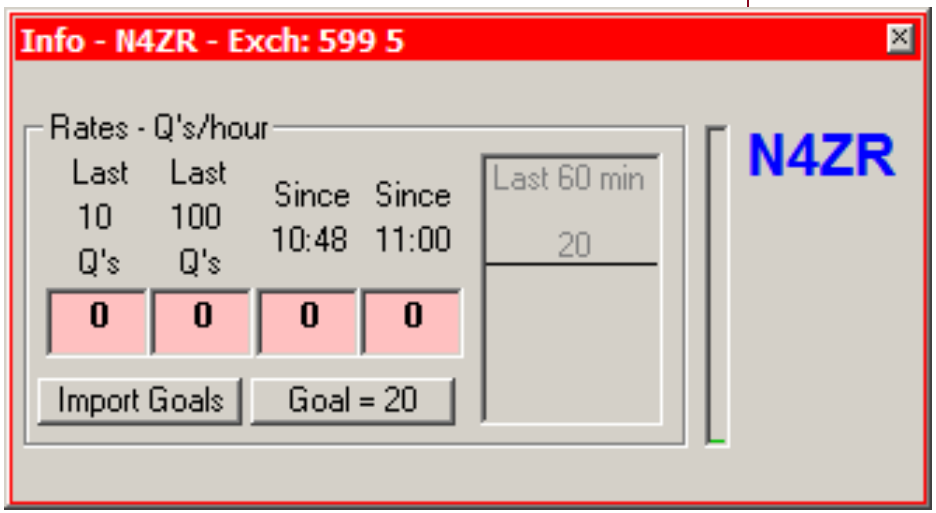
Decision-making Support - WriteLog



- Displays rate over time or rate over QSOs (last 10 min/last 10 QSOs, etc.)
- Running Time On/Off display assumes 30-min interval between QSOs
- "Mult worth" – QSO rate versus point value of chasing a mult

Decision-making Support N1MM Logger





- Available mults and Qs window displays number of Qs and mults available on each band; Info window displays rates versus goals.

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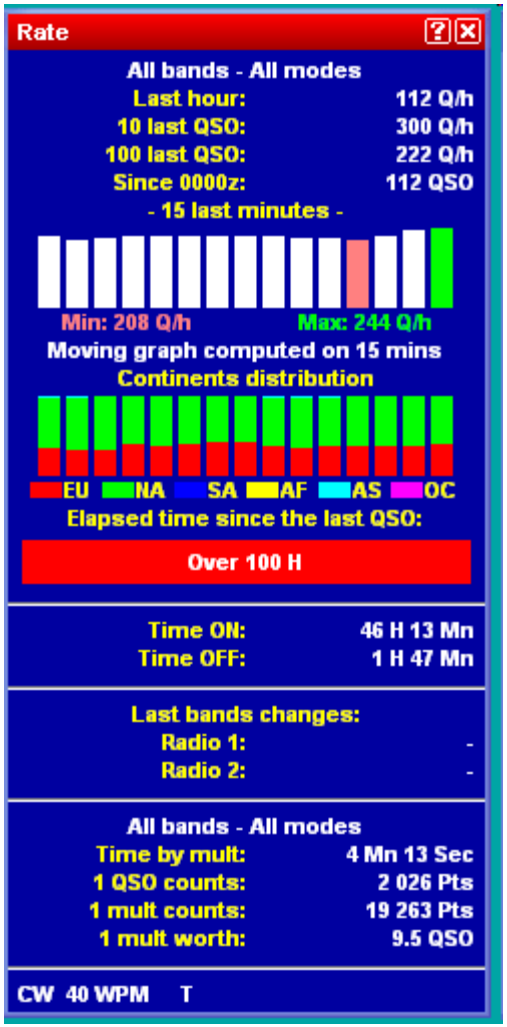
Decision-making Support - Win-Test



- Extensive rate/analytical displays

- Propagation prediction-based advice on QSY/sked decisions available through QSY Wizard (uses VE3NEA's Hamcap)

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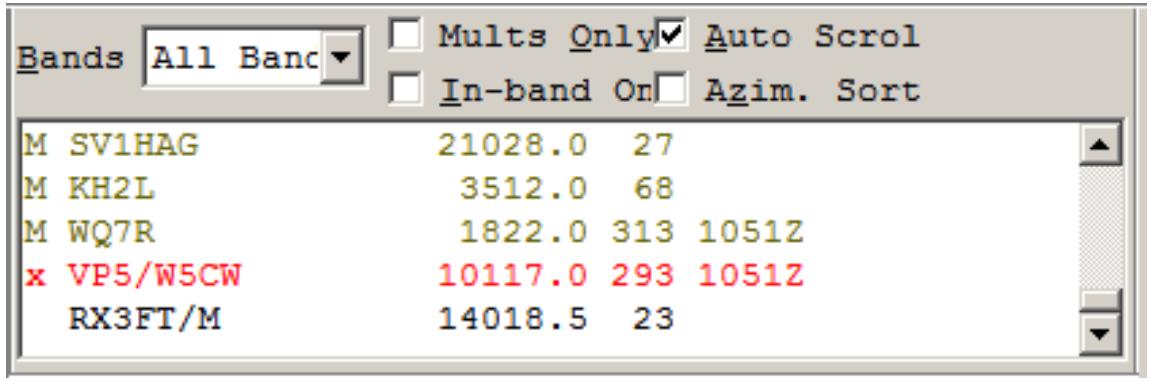
Cluster Interface - WriteLog



- Spot display color coded – double-click to capture call and QSY there
- All-band/single-band, other options
- Separate Packet Terminal window for commands to cluster

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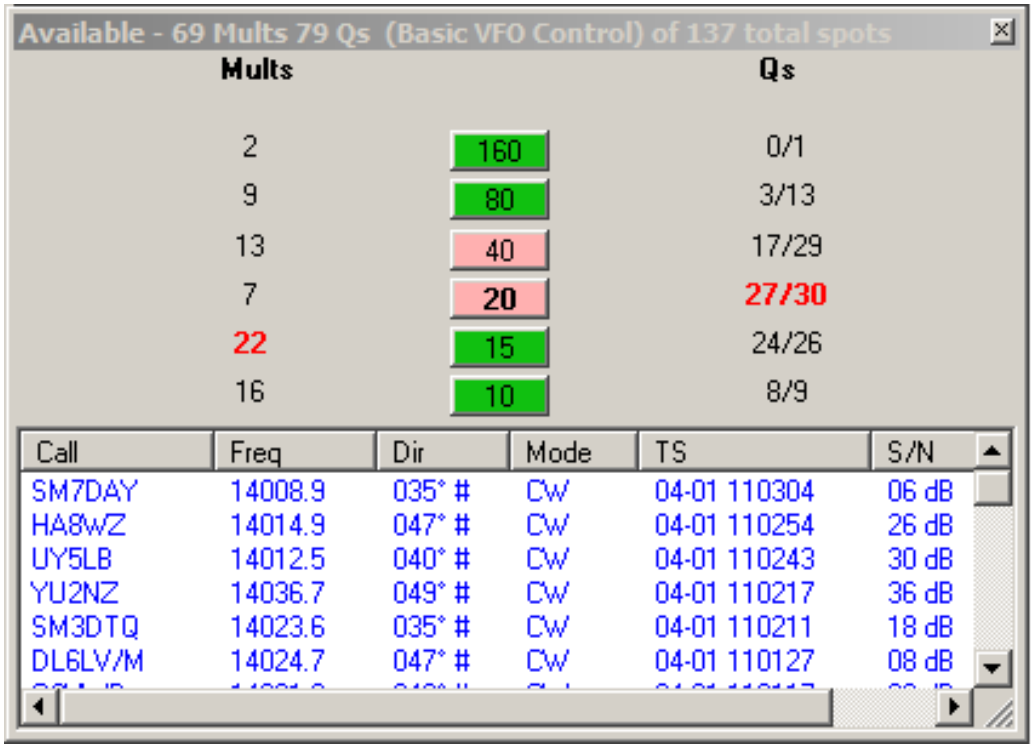
Cluster Interface – N1MM Logger



- Lower pane displays spots as received – clickable, sortable on all columns

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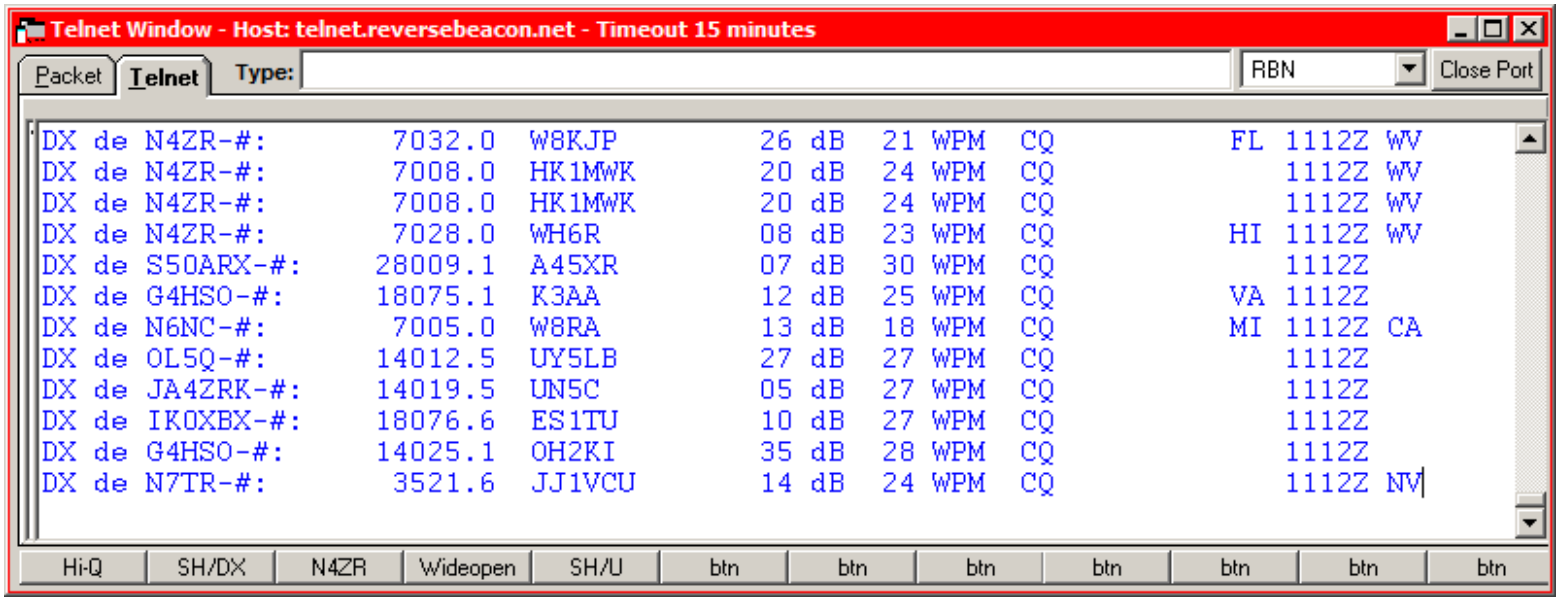
Cluster - N1MM Logger (more)



- Buttons for control of cluster, filtering
- Editable open-ended cluster list
- Info window reports when you're spotted

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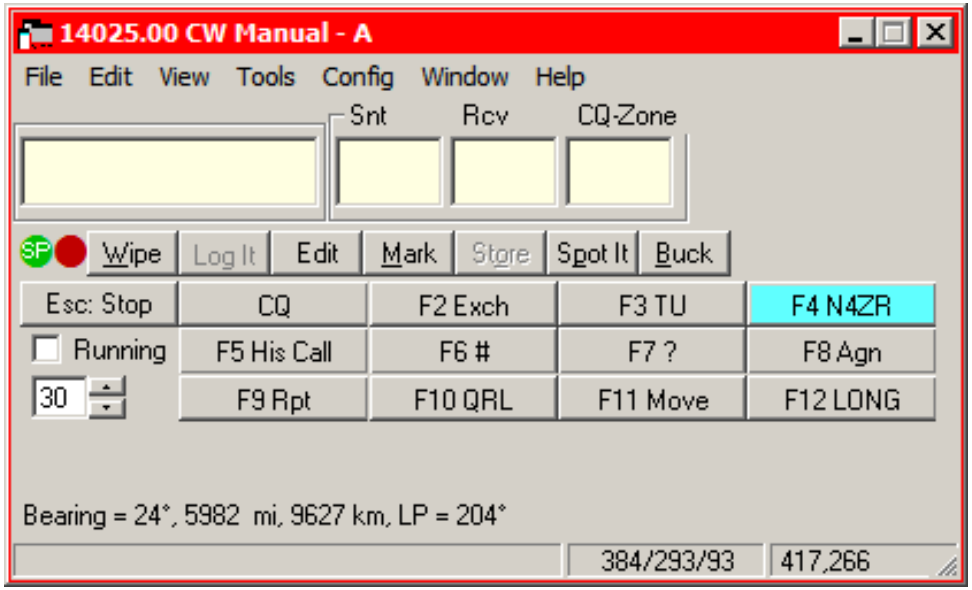
Cluster Interface - Win-Test

- Separate Telnet client, can run multiple, simultaneous instances for multiple spot sources
- Can set up to start with main program
- Up to 10 different servers can be pre-defined

ESM Option - WriteLog

- Run only
- [Enter] sends [INS] and [+] keys
- In “normal” mode, [Enter] is “silent logging” key, doesn’t send message

ESM Option – N1MM Logger



- Highlights next function key message to be sent when [Enter] is pressed
- Repeats and fills use function keys or [=]

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ESM Option - Win-Test

- ESM available for Run or S&P on either radio
- May be customized through Lua (programming language) scripts.

RTTY - WriteLog

- Uses MMTTY plug-in (as do the other two) for full-featured, sound-card-based RTTY
- Wide range of hardware terminal units supported
- See W0YK presentations for authoritative review of RTTY capabilities

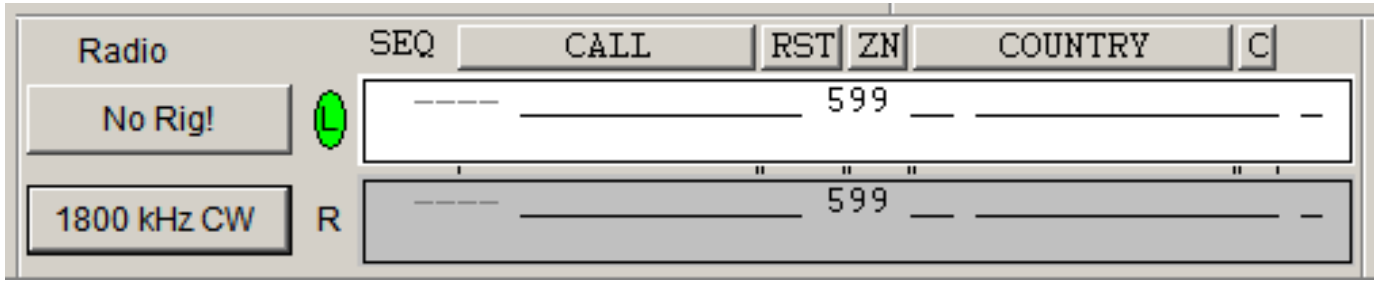
RTTY - N1MM Logger

- Uses MMTTY, MMVARI or FLDIGI for RTTY, other digital modes
- Supports some hardware terminal units
- See W0YK presentations

RTTY - Win-Test

- Uses MMTTY

SO2R - WriteLog



- Two identical QSO entry lines and bandmaps - Up/down arrow keys or mouse click switches entry focus

- Green highlight shows which radio's audio you will hear

- Stored messages sent by radio with the transmit focus

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SO2R - N1MM Logger

- Two identical Entry windows, two Bandmaps
- Switch with single keystroke or automated by function key macros
- Either window can be used for running or S&P, or for dueling CQs
- Advanced SO2R (and SO2V) modes
- Supports MicroHAM, OTRSP, or LPT port control of SO2R boxes

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SO2R - Win-Test

- Uses secondary radio window – Caps Lock to toggle, or hold [Shift] as temporary switch

- Multiple pre-programmed scenarios anticipate SO2R situations and modify behavior to suit.

- Supports MicroHAM, EZMaster, OTRSP, LPT

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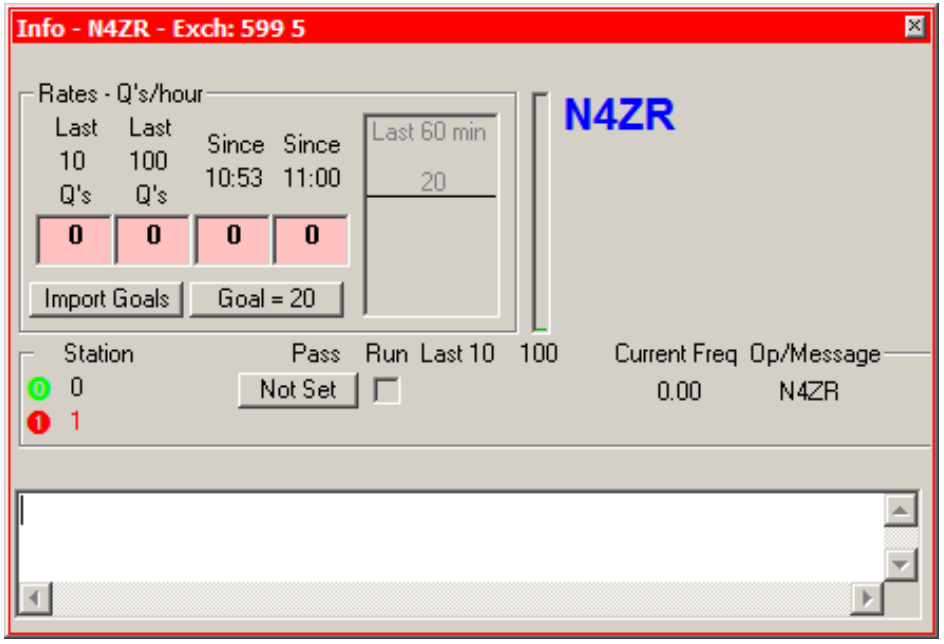
Multi-ops - WriteLog

- Uses Windows networking
- Distributes cluster spots across network
- Supports inter-station gab
- Supports lockouts, band change counters

Multi-Ops - N1MM Logger



- Uses Windows TCP/IP local/wide area networking
- Supports lockouts, band change counters, inter-station gab and reflects real-time status, rates of each station

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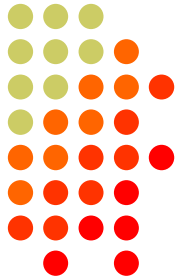
Multi-ops - Win-Test

- Distributes cluster spots across network
- Uses Windows networking
- Has band change counters, flags band-change violations
- Supports inter-station gab in lower pane

VHF - WriteLog



- Supports ARRL VHF SS, VHF QSO Parties, and UHF Contest
- Supports Rover operation and multiple fixed station QSOs with Rovers
- Worked grid display
- Transverter offsets

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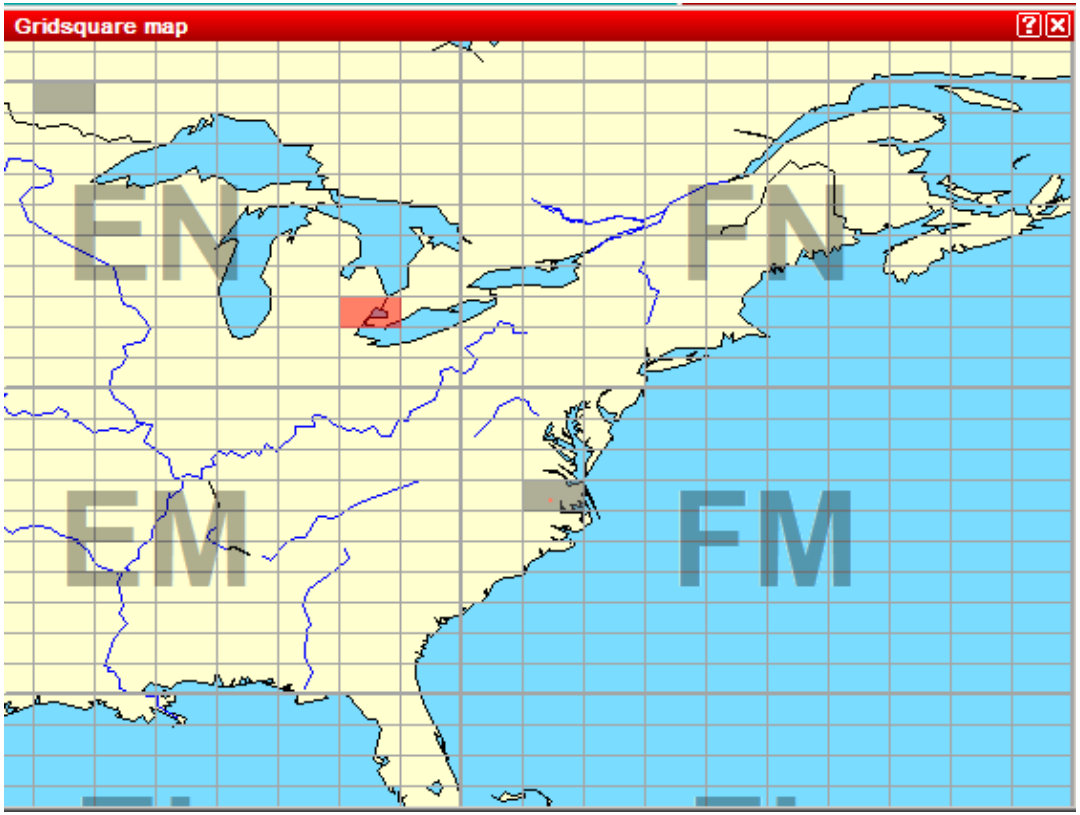
VHF - N1MM Logger

- Calculates bearing and distance from center of grid square
- Multiplier window shows grids worked
- Supports ARRL contests, 12 European VHF/UHF contests
- Support for rovers and QSOs with rovers

VHF – Win-Test



- Wide coverage of US and European VHF/UHF contests; detailed grid mapping

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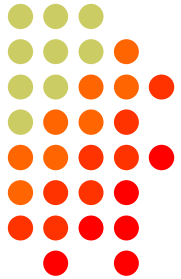
Serial Numbering - WriteLog



- Serial numbers reserved when op begins to enter a QSO. Cleared if QSO aborted.
- Possible for logged and sent serial numbers to differ through operator error.

Serial Numbering – N1MM Logger

- Not possible for logged and sent serial numbers to differ through operator error
- Serial numbers reserved when op begins to enter a QSO. Cleared if QSO aborted
- In SO2R, SO2V and multi-ops, serial numbers may be skipped or out of sequence, but contest sponsors don't care

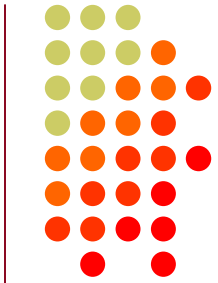
Serial Numbering - Win-Test

- No number reserving function
- Possible to send serial number different than what is logged
- But will not skip serial numbers or send them out of order
- Work-arounds needed for multi-singles and SO2R in serial number contests

Contests Covered - WriteLog

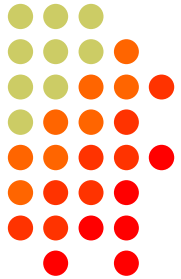
- Covers most major national and international contests
- Covers many US QSO parties, some for stations in-state and out
- Third-party authors with programming skills have written a number of additional modules, available for download

Contests Covered – N1MM Logger



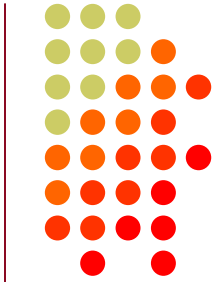
- Covers virtually all international contests and QSO parties, in and out of state
- User Defined Contest feature permits users to develop full-featured modules for contests without involving programmers

Contests Covered - Win-Test



- Quite wide coverage of international CW and SSB contests.
- One US QSO party so far, and one RTTY-only contest
- Generic contests defined, but no provision for user-defined contests

Downloading and Installation/Setup - WriteLog



- Download, pay, obtain and enter registration code – good for 12 months
- Setup via “Setup” menu
- Some advanced setup requires editing of well-documented “.ini” file
- Windows Help file 100+ pages

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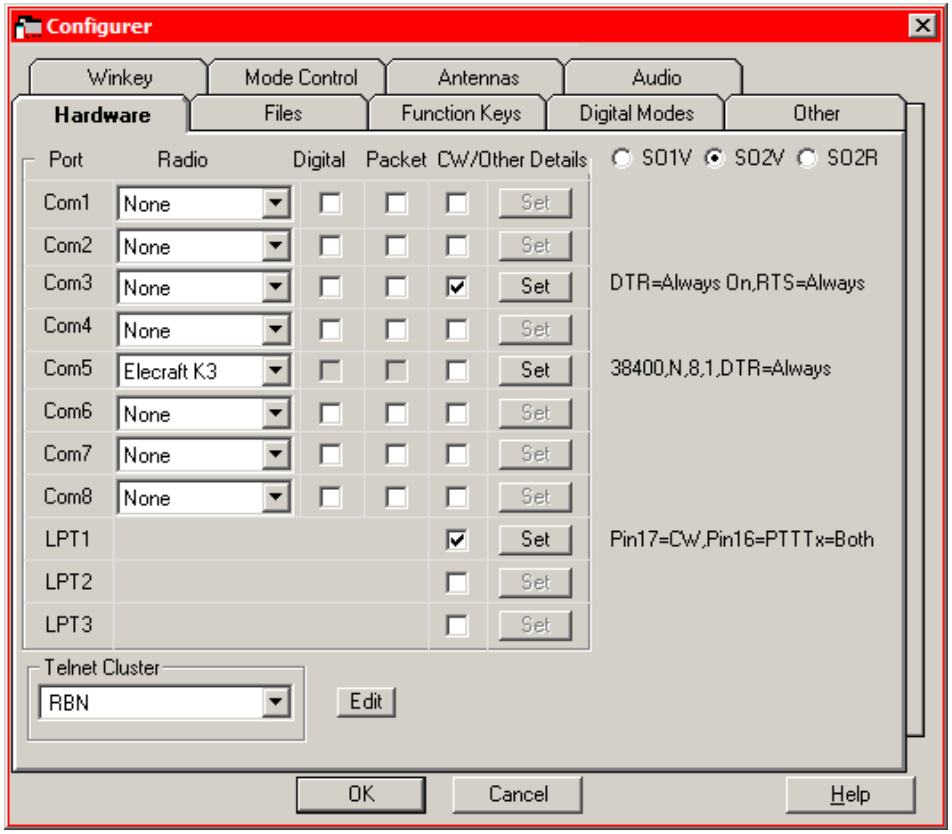
Downloading and Installation/ Setup – N1MM Logger



- Download Base Install and Latest Update
- All setup through Configurer/Menus
- MS Access database format used for all data, including logs

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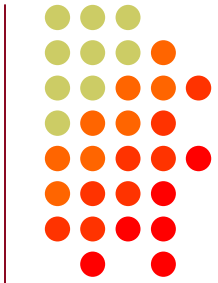
Downloading and Installation/Setup - Win-Test

- Download and activate with code
- Free updates for current version – minimum one year
- Installation and Setup menu-driven

Support and Upgrades - WriteLog



- Moderately-active reflector – WriteLog@contesting.com
- 4 releases since October 2010 – mostly bug fixes but a few new features

Support and Upgrades – N1MM Logger

- “Agile development” means frequent upgrades/bug fixes – 17 January - March 2011, over 50 in 2010
- Very active reflector, closely monitored by programmers – n1mmlogger@yahoogroups.com
- 400+ page wiki manual/references, updated daily

Support and Upgrades – Win-Test

- Active reflector
- Volunteer and developer support
- 500+ page manual and references, updated daily

And Finally…

For more information, see …

- WriteLog - http://WriteLog.com/
- N1MM Logger - http://www.n1mm.com/
- Win-Test - http://www.win-test.com/