



ENCRYPTION WIZARD

FLWRAP W/FLDIGI FLAMP W/FLDIGI

By AFA4II With Thanks to NNNOASC



WHEN INSTALLING FLWRAP MAKE SURE THAT YOU DON'T SELECT

"RUN AS ADMINISTRATOR"

IF YOU DO IT WILL CAUSE THE WRAP FILE TO BE CORRUPTED

🗊 flwrap 1.3.4 Properties			
General Shortout Compatibility Security Details Previous Versions			
If you have problems with this program and it worked correctly on an			
earlier version of Windows, select the compatibility mode that matches			
that earlier version.			
Help me choose the settings	(WRAP:beg) (WRAP:1f) (WRAP:1f) 0221172 DEC 2014.txt.wzd) (b64:start)AUXaTUEAAAMUXQAAAAQAIpXHxllinGRdTbYtjICf73Ddc5J0WNGY128D)FDRICJgAe316JA4		
Compatibility mode	nt2CQocIdagecLFGiIKX6+ScBPeKAKoJELTgB51ymTMbQVxMRnthDgPRFKIm1YNE2yLcFxC NGOaDVqiuvTp9/dp+Ap7Uz1xGsQVxSVQz3cXA2TGCe8QR+CEH1U8td15GJYEC46Yy93hAgR		
Run this program in compatibility mode for:	CiqVVZeehKa8epdvmC8+01HiWWEnn8y2D0HHCxxp1q1AS1e2+x+0UN96YP00mFHL/MfXUz D5rz8Rinof6Envt/UVvosfKdn1D/zkzz633oeD10X5sbVWv11F1rz2uh8++9AXYF0+ou8M		
Window VD (Castion Dark 2)	INTET TYMUT7+1:b1L6EarTejBomotm+2IIE1+QB6GrLEME+11Vmd16o3a/mr64q2m6gP70TER		
Windows AP (Service Pack 5)	yxYzy1EW+uD3hEmBWWEBsegSWEEX10T53MEWZEKXvoZ151fxETc/n2yWjYq7nICWeXzERT Coxy1evTEMix2xWeEx0fmEUTIS1vyZnhif1010AMWXn4am7221xn0na1n15KU152FE44C		
	1Je22uFKUNRUTHESSSTCRLaF3T8qz/74k2peDCtuDtW/VQHBpYKVvFDxU/oj1KVVS4eHQY		
Settings	In Thiod Jrsh - Performance of the Antonia generation of the Antonia and Antonia an		
Run in 256 colors	Micro Lenning System Copy of Kenningen in Heart Constraint Copy and Micro Lin Califare ISSB 2008 MSB Let 421 WCS Sug RELAWLRING SpG 6C4 FDT Or Lin System III August Marine Strate That That The Annual Section 2018 Annual Annual Annual Annual Annual Annual Annual Annual A		
Run in 640 x 480 screen resolution	CZSYDDVPQ118tmDEESe654KPv268vTPlNnm5FLE7dgLpGFa4q516tn815tv1/Kly7j1/HEB		
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Disable visual themes	loon can'i luone carronne anno i luone cenn'i		
Disable desktop composition	[WRAP:beg] [WRAP:1f] [WRAP:fn 0221172 DEC 2014-2.txt.wzd]ENZDEEDR +! + +6 + +4 + +" + + + + + + + + + + + + + + + +		
Disable display scaling on high DPI settings			
	reit +::=vu[
Privilege Level	[1] [1] [1] [2] [2] [2] [2] [2] [2] [2] [2] [2] [2		
Run this program as an administrator	11 + KC + ZM [-, [_2] [] + 3 - V + C, 1] [] + + [] - K[] [] + + [] - [] + + [] - [] + - [] + + (] - [] + -]] + (] - [] + - [] + (] - [] + - [] + (] - [] + - [] - [] + (] - [] + - [] + (] - [] + - [] + (] - [] + - [] + (] - [] + - [] + (] - [] + - [] + (] + (] + - [] + - [] + (] + (] + - [] + - [] + (] + (] + - [] + - [] + (] + (] + - [] + - [] + (] + - [] + - [] + (] + - [] + - [] + (] + - [] + - [] + - [] + (] + - [] + - [] + (] + - [] + - [] + - [] + (] + - [] + [] + [] + [] + [] + [] +		
	<pre>bi+9i_[E1-^^i+2i-30i_1i_^^[+/m4ci+ i+2i_Ri+<1_rpci_80i_1'-E9i+0pi-(i_0)[LOKI-, (WRAP:chksum E1BA)(WRAP:end)] with run as admin checked</pre>		
😽 Change settings for all users	500 1000 1500 2000 2500 3000 4500 4500 5500 5500		
OK Cancel Apply			

How do I send an Encryption Wizard encrypted file by HF radio?

For now we have to use an INTERIM method, which can be done in one of two ways 1. FLWRAP W/FLDIGI 2. FLAMP W/FLDIGI



FLWRAP W/ FLDIGI

- Create message in a Text editor,
- (not a word processor) & save as a .txt
- Drag & drop into Encryption Wizard and Encrypt
- Drag & drop the .WZD file into FLWRAP,
- Ensure you check "Compress" in lower left



then drag & drop the WRAP file into FLDIGI & send your message

fldigi - NO CALLSIGN SET		
Eile Op Mode Configure View Logbook Help		
Hamlib FT-857	Off 1834 In Out	
0.000 🏷 Call Or	Az	
🔽 🗢 Qth	St Pr Loc	
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PeHGjvuCwwydWNn0a6khedCKzbu5jCyI1it/ThNgA669Dh6nT	30KDSshAp2hRLr6IOi41fbH	
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78ngVLR0WVt41L16DSzOGI4UKO+VnvkD5mx/SqGkvwCQ1HQxj	SGcKExBj0LmcMZBvBQpcWQe	
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hmRzaMFfZVmctkEtJZVLsAnVfIzzpPK164fkrxK2I3oYmt1/K uKpsLBndd4HVDrb6Mqu02mXrrvL6hN0bJ/kXJufy3px+JJvce	/pSjGd570094cMilvDpBhD2	
CQN ANSN QSON⊁ KNII	SK II Me/Qth Brag	T/R Tx 🕨 Rx 🛛 TX 🕅 1
500 1000	1500 2000 250	3000 3500
WF 4 -20 1 70 1 x1 4	NORM 4 1500 F	QSY Store (FLk FRV (FT/R -
MT63-2KL		



Reverse the process upon receive

In FLDIGI, select from [WRAP:beg] through [WRAP:end] Name & save the file & add .WRAP. Ie: Received.txt.wrap (use text editor not word processor) Drop .wrap file into FLWRAP Drop .wzd file into EW - decrypt Open .TXT file



FLAMP W/FLDIGI

FlAmp has the advantage of being able to send an encrypted file <u>as is</u> ie: a .wzd file. You can drag & drop to the red DnD or you can click ADD

and browse to the file you want to send. There is no wrapping or unwrapping involved

Carlot → MARS → EWizard →		FLA MP: 2.1.02 File Help
File Edit View Tools Help Organize ▼	New folder	Receive Transmit Events Configure Send to NNN0123 Image: Configure Image: Configure File 022114Z FEB 2014.txt.wzd Image: Configure Image: Configure
 Block_Terminal Bosons_Pipe com0com CrossBand EFTO_KL7 EWizard 3-4-3-gov Files FLMSG 	Name Image: Transec Image: AC2B JAN ATTENDANCE.xl: Image: O22114Z FEB 2014.txt Image: O22114Z FEB 2014.txt.wzd.x Image: O22114Z FEB 2014.txt Image: O22114Z FEB 2014.txt	Descrip Bik size 224 Xmt Rpt 1 Hdr Rpt 1 # Bks 6 blocks Comp base256 MT63-2KL 1549 bytes m 49 s Transmit Queue Xmit Xmt All Remove Add OnD I:MARS\EWizard\022114Z FEB 2014.bxt.wzd
022114Z FEB 2014.txt.wzd AFRL Encryption Wizard File 1 item selected	Date modified: 7/4/2014 5:17 PM Size: 1.02 KB	



FLAMP W/FLDIGI

First, configure FLAMP, fig 1

FLAMP has several key features.

1. Sends the file as blocks, with no stopping & restarting like block term no sync to lose.

2. You can change the block size to control the # of blocks

3. Sending station can fill a missing block to multiple stations at one time.

Put in your call sign,	Transmit Scroon
Then only check these boxes	
FLAMP: 2.1.02 Fig 1	FLAMP: 2.1.02
<u>File H</u> elp	<u>File H</u> elp
Receive Transmit Events Configure	Receive Transmit Events Configure
Callsign Your call	Send to TO: INNOIIC
Info	File 0221 4Z FEB 2014.txt.wzd.wrap
Auto sync fldigi to flamp mode selector	
Auto sync flamp to fldigi mode selector	Blk size (144) Xmt Rpt (1) Hdr Rpt (1) # Bks 10
Change fldigi mode just prior to transmit	blocks Fetch
Enable Tx on Report	Comp D base256 V MT63-2KL V 1791 bytes / 1 m 35 s
 Transmit unproto (plain text, 7bit ASCII) 	Transmit Queue Xmit Xmt All Remove Add OnD
Clear Missing Blocks on Non-Canceled Transmit(s)	I:\MARS\EWizard\022114Z FEB 2014.txt.wzd.wrap
Inhibit header modem on block fills	
Enable header modem (Sync flamp to fldigi ignored)	
MT63-2KL	
Enable TX/RX Interval	
Tx Duration Mins	
✓ 10 ▶ Rx Duration Secs	

When receiving a file you will see the # of blocks. As each block is received it will show on the blocks line. Any missing blocks will be shown on the missing line

Receive	Fransmit Events Configure	
F	ile: 022114Z FEB 2014.txt.wzd	
Date time: 20140704211734		Save
Description:		Remove
Call/	info	
# by	tes 1179 Nbr blks 6 Blk size 224	To TxQ
Miss	sing 2	Report
Blo	cks	
Data		
		ł
Receive Q	ueue	
	022114Z FEB 2014.txt.wzd	
86 %		



At the end of transmission any station missing a block or blocks will so state when it is their turn to rgr the msg, ie: de nni4ic missing block 2, over In turn, stations missing a block will click on Report, after all stations missing blocks have reported, the sending station clicks ON FETCH Flamp parses all of the received data from one or more reporting stations. It combines them, discards duplicates and sorts the missing blocks numerically. It then updates the "blocks" entry control with the requested blocks. Missing header information assigns '1' to the missing block list, triggering a retransmission of the header information.

The combined set of missing blocks will appear as shown below along with total file size and transmission time.

	0	
Missing 2,	4	Report
Blocks		
Fig 1		
<u>File</u> <u>H</u> elp		
Receive Transmit Events Configure	A	fter any missing blocks or header info has
File: 022114Z FEB 2014.txt.wzd	ĭ ł	peen resent your receive window will look
Date time: 20140704211734 Save		like thise (fig 1)
Description:	Remove	like this. (lig 1)
Call/info		
# bytes 1179 Nbr blks 6 E	lik size 224 To TxQ	
Missing	Report	
Blocks		
Data appears to be binary		he Data window tells you that you need
Save and view with appropriate softwa	re	to save and view with the appropiate
		program
Receive Queue		
100 % 022114Z FEB 2014.txt.wzd		

When you click SAVE the FLAMP Rx folder opens, save the file, then drag & drop into Encryption Wizard and decrypt.



