

CHIRP - Bug # 4687

Status:	Closed	Priority:	Normal
Author:	Takayoshi SASANO	Category:	
Created:	03/29/2017	Assignee:	
Updated:	04/18/2020	Due date:	
Chirp Version:	daily		
Model affected:	(all models)		
Platform:	All		
Subject:	icf.py: echoback causes overflow of OS's serial Rx buffer		
Description	<p>ICOM's cloning cable connects PC's TXD and RXD of UART. So PC always receives echoback when sending any data to rig.</p> <p>In icf.py code, data is sent by pipe.write() but its echo back is not received immediately. Received all echobacks and response from rig are processed after all clone data has sent.</p> <p>This means OS (or its device driver) needs enough receive buffer to store all echobacks and response. The size of the buffer is OS dependent, we should not expect it is always enough.</p> <p>So we have to call pipe.read() after pipe.write() to discard echoback immediately. I am testing CHIRP on OpenBSD-6.0/amd64 and ICOM's IC-P7, this fix is required to send clone data from PC to rig.</p>		

Associated revisions

Revision 2888:c4cf293122fe - 04/30/2017 08:25 pm - Takayoshi SASANO

previous patch for bug #4687 causes PEP8 regression problem, "E261 at least two spaces before inline comment".

Replace a tab character to two spaces to fix the problem.

Revision 2929:c31ea5cfe7d7 - 09/06/2017 04:16 am - Takayoshi SASANO

revert #4687

Different from OpenBSD-6.0, OpenBSD-6.1 is no longer required this modification.

And, this cause #5007 bug. Revert to 2715:d1bc2c917785.

History

#1 - 08/26/2017 08:59 pm - Andrew Jorgensen

This seems to have caused #5007, which could be a Windows-only bug. Thoughts on how to resolve?

#2 - 08/27/2017 04:47 am - Takayoshi SASANO

Andrew Jorgensen wrote:

| *This seems to have caused #5007, which could be a Windows-only bug. Thoughts on how to resolve?*

I sometimes have seen "Out of sync with radio" with my IC-P7/PL2303 family USB-clone cable/OpenBSD combination but there is no problem with same rig/cable and Windows10. So I thought this problem is only mine, not so serious.

I found "Out of sync" error has occurred by receiving single preamble character (0xfe) from rig, normally we receive two 0xfe(s). If #5007 has same reason, we have to know who discards the character.

#3 - 09/04/2017 11:46 pm - Neil Katin

I played with this a bit more, and can confirm the patch is causing #5007.

I replicated it on both window and linux, so it is not a windows only bug.

Either of the read commands (in `send_clone_frame()` or `start_hispeed_clone()`) would cause the error. The `pipe.flush()` in `send_clone_frame()` could be left enabled and the ID-51 would still clone.

Let me know if there is any more detail I can provide that would help.

#4 - 09/05/2017 08:53 am - Takayoshi SASANO

- *File icf.py.diff added*

I am testing new diff to solve this problem and at least works good on my environment (OpenBSD-6.1/amd64, IC-P7 with PL2303 based USB cable, IC-7200 with built-in USB interface).

I attach the diff, please test.

#5 - 09/05/2017 10:23 am - Neil Katin

I tried the patch; I still got an out of sync error.

Here's the relevant info from the log (let me know if you want the whole thing instead of just an excerpt):

```
DEBUG: User selected Icom ID-51 Plus on port /dev/ttyUSB0
```

```
DEBUG: Clone thread started
```

```
WARNING: Received echoback is different from sent frame
```

```
DEBUG: Sent frame (10):
```

```
000: fe fe ee ef e0 00 00 00 .....  
008: 00 fd 00 00 00 00 00 00 .....  
016: 00 00 00 00 00 00 00 00 .....  
024: 00 00 00 00 00 00 00 00 .....  
032: 00 00 00 00 00 00 00 00 .....  
040: 00 00 00 00 00 00 00 00 .....  
048: 00 00 00 00 00 00 00 00 .....  
056: 00 00 00 00 00 00 00 00 .....  
064: 00 00 00 00 00 00 00 00 .....  
072: 00 00 00 00 00 00 00 00 .....  
080: 00 00 00 00 00 00 00 00 .....  
088: 00 00 00 00 00 00 00 00 .....  
096: 00 00 00 00 00 00 00 00 .....  
104: 00 00 00 00 00 00 00 00 .....  
112: 00 00 00 00 00 00 00 00 .....  
120: 00 00 00 00 00 00 00 00 .....  
128: 00 00 00 00 00 00 00 00 .....  
136: 00 00 00 00 00 00 00 00 .....  
144: 00 00 00 00 00 00 00 00 .....  
152: 00 00 00 00 00 00 00 00 .....  
160: 00 00 00 00 00 00 00 00 .....  
168: 00 00 00 00 00 00 00 00 .....  
176: 00 00 00 00 00 00 00 00 .....  
184: 00 00 00 00 00 00 00 00 .....  
192: 00 00 00 00 00 00 00 00 .....  
200: 00 00 00 00 00 00 00 00 .....  
208: 00 00 00 00 00 00 00 00 .....  
216: 00 00 00 00 00 00 00 00 .....  
224: 00 00 00 00 00 00 00 00 .....  
232: 00 00 00 00 00 00 00 00 .....  
240: 00 00 00 00 00 00 00 00 .....  
248: 00 00 00 00 00 00 00 00 .....  
256: 00 00 00 00 00 00 00 00 .....  
264: 00 00 00 00 00 00 00 00 .....  
272: 00 00 00 00 00 00 00 00 .....  
280: 00 00 00 00 00 00 00 00 .....  
288: 00 00 00 00 00 00 00 00 .....  
296: 00 00 00 00 00 00 00 00 .....  
304: 00 00 00 00 00 00 00 00 .....  
312: 00 00 00 00 00 00 00 00 .....  
320: 00 00 00 00 00 00 00 00 .....  
328: 00 00 00 00 00 00 00 00 .....  
336: 00 00 00 00 00 00 00 00 .....  
344: 00 00 00 00 00 00 00 00 .....  
352: 00 00 00 00 00 00 00 00 .....  
360: 00 00 00 00 00 00 00 00 .....  
368: 00 00 00 00 00 00 00 00 .....  
376: 00 00 00 00 00 00 00 00 .....  
384: 00 00 00 00 00 00 00 00 .....  
392: 00 00 00 00 00 00 00 00 .....  
400: 00 00 00 00 00 00 00 00 .....  
408: 00 00 00 00 00 00 00 00 .....  
416: 00 00 00 00 00 00 00 00 .....  
424: 00 00 00 00 00 00 00 00 .....  
432: 00 00 00 00 00 00 00 00 .....  
440: 00 00 00 00 00 00 00 00 .....  
448: 00 00 00 00 00 00 00 00 .....  
456: 00 00 00 00 00 00 00 00 .....  
464: 00 00 00 00 00 00 00 00 .....  
472: 00 00 00 00 00 00 00 00 .....  
480: 00 00 00 00 00 00 00 00 .....  
488: 00 00 00 00 00 00 00 00 .....  
496: 00 00 00 00 00 00 00 00 .....  
504: 00 00 00 00 00 00 00 00 .....  
512: 00 00 00 00 00 00 00 00 .....  
520: 00 00 00 00 00 00 00 00 .....  
528: 00 00 00 00 00 00 00 00 .....  
536: 00 00 00 00 00 00 00 00 .....  
544: 00 00 00 00 00 00 00 00 .....  
552: 00 00 00 00 00 00 00 00 .....  
560: 00 00 00 00 00 00 00 00 .....  
568: 00 00 00 00 00 00 00 00 .....  
576: 00 00 00 00 00 00 00 00 .....  
584: 00 00 00 00 00 00 00 00 .....  
592: 00 00 00 00 00 00 00 00 .....  
600: 00 00 00 00 00 00 00 00 .....  
608: 00 00 00 00 00 00 00 00 .....  
616: 00 00 00 00 00 00 00 00 .....  
624: 00 00 00 00 00 00 00 00 .....  
632: 00 00 00 00 00 00 00 00 .....  
640: 00 00 00 00 00 00 00 00 .....  
648: 00 00 00 00 00 00 00 00 .....  
656: 00 00 00 00 00 00 00 00 .....  
664: 00 00 00 00 00 00 00 00 .....  
672: 00 00 00 00 00 00 00 00 .....  
680: 00 00 00 00 00 00 00 00 .....  
688: 00 00 00 00 00 00 00 00 .....  
696: 00 00 00 00 00 00 00 00 .....  
704: 00 00 00 00 00 00 00 00 .....  
712: 00 00 00 00 00 00 00 00 .....  
720: 00 00 00 00 00 00 00 00 .....  
728: 00 00 00 00 00 00 00 00 .....  
736: 00 00 00 00 00 00 00 00 .....  
744: 00 00 00 00 00 00 00 00 .....  
752: 00 00 00 00 00 00 00 00 .....  
760: 00 00 00 00 00 00 00 00 .....  
768: 00 00 00 00 00 00 00 00 .....  
776: 00 00 00 00 00 00 00 00 .....  
784: 00 00 00 00 00 00 00 00 .....  
792: 00 00 00 00 00 00 00 00 .....  
800: 00 00 00 00 00 00 00 00 .....  
808: 00 00 00 00 00 00 00 00 .....  
816: 00 00 00 00 00 00 00 00 .....  
824: 00 00 00 00 00 00 00 00 .....  
832: 00 00 00 00 00 00 00 00 .....  
840: 00 00 00 00 00 00 00 00 .....  
848: 00 00 00 00 00 00 00 00 .....  
856: 00 00 00 00 00 00 00 00 .....  
864: 00 00 00 00 00 00 00 00 .....  
872: 00 00 00 00 00 00 00 00 .....  
880: 00 00 00 00 00 00 00 00 .....  
888: 00 00 00 00 00 00 00 00 .....  
896: 00 00 00 00 00 00 00 00 .....  
904: 00 00 00 00 00 00 00 00 .....  
912: 00 00 00 00 00 00 00 00 .....  
920: 00 00 00 00 00 00 00 00 .....  
928: 00 00 00 00 00 00 00 00 .....  
936: 00 00 00 00 00 00 00 00 .....  
944: 00 00 00 00 00 00 00 00 .....  
952: 00 00 00 00 00 00 00 00 .....  
960: 00 00 00 00 00 00 00 00 .....  
968: 00 00 00 00 00 00 00 00 .....  
976: 00 00 00 00 00 00 00 00 .....  
984: 00 00 00 00 00 00 00 00 .....  
992: 00 00 00 00 00 00 00 00 .....  
1000: 00 00 00 00 00 00 00 00 .....  
1008: 00 00 00 00 00 00 00 00 .....  
1016: 00 00 00 00 00 00 00 00 .....  
1024: 00 00 00 00 00 00 00 00 .....  
1032: 00 00 00 00 00 00 00 00 .....  
1040: 00 00 00 00 00 00 00 00 .....  
1048: 00 00 00 00 00 00 00 00 .....  
1056: 00 00 00 00 00 00 00 00 .....  
1064: 00 00 00 00 00 00 00 00 .....  
1072: 00 00 00 00 00 00 00 00 .....  
1080: 00 00 00 00 00 00 00 00 .....  
1088: 00 00 00 00 00 00 00 00 .....  
1096: 00 00 00 00 00 00 00 00 .....  
1104: 00 00 00 00 00 00 00 00 .....  
1112: 00 00 00 00 00 00 00 00 .....  
1120: 00 00 00 00 00 00 00 00 .....  
1128: 00 00 00 00 00 00 00 00 .....  
1136: 00 00 00 00 00 00 00 00 .....  
1144: 00 00 00 00 00 00 00 00 .....  
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1160: 00 00 00 00 00 00 00 00 .....  
1168: 00 00 00 00 00 00 00 00 .....  
1176: 00 00 00 00 00 00 00 00 .....  
1184: 00 00 00 00 00 00 00 00 .....  
1192: 00 00 00 00 00 00 00 00 .....  
1200: 00 00 00 00 00 00 00 00 .....  
1208: 00 00 00 00 00 00 00 00 .....  
1216: 00 00 00 00 00 00 00 00 .....  
1224: 00 00 00 00 00 00 00 00 .....  
1232: 00 00 00 00 00 00 00 00 .....  
1240: 00 00 00 00 00 00 00 00 .....  
1248: 00 00 00 00 00 00 00 00 .....  
1256: 00 00 00 00 00 00 00 00 .....  
1264: 00 00 00 00 00 00 00 00 .....  
1272: 00 00 00 00 00 00 00 00 .....  
1280: 00 00 00 00 00 00 00 00 .....  
1288: 00 00 00 00 00 00 00 00 .....  
1296: 00 00 00 00 00 00 00 00 .....  
1304: 00 00 00 00 00 00 00 00 .....  
1312: 00 00 00 00 00 00 00 00 .....  
1320: 00 00 00 00 00 00 00 00 .....  
1328: 00 00 00 00 00 00 00 00 .....  
1336: 00 00 00 00 00 00 00 00 .....  
1344: 00 00 00 00 00 00 00 00 .....  
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1360: 00 00 00 00 00 00 00 00 .....  
1368: 00 00 00 00 00 00 00 00 .....  
1376: 00 00 00 00 00 00 00 00 .....  
1384: 00 00 00 00 00 00 00 00 .....  
1392: 00 00 00 00 00 00 00 00 .....  
1400: 00 00 00 00 00 00 00 00 .....  
1408: 00 00 00 00 00 00 00 00 .....  
1416: 00 00 00 00 00 00 00 00 .....  
1424: 00 00 00 00 00 00 00 00 .....  
1432: 00 00 00 00 00 00 00 00 .....  
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1448: 00 00 00 00 00 00 00 00 .....  
1456: 00 00 00 00 00 00 00 00 .....  
1464: 00 00 00 00 00 00 00 00 .....  
1472: 00 00 00 00 00 00 00 00 .....  
1480: 00 00 00 00 00 00 00 00 .....  
1488: 00 00 00 00 00 00 00 00 .....  
1496: 00 00 00 00 00 00 00 00 .....  
1504: 00 00 00 00 00 00 00 00 .....  
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1624: 00 00 00 00 00 00 00 00 .....  
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1688: 00 00 00 00 00 00 00 00 .....  
1696: 00 00 00 00 00 00 00 00 .....  
1704: 00 00 00 00 00 00 00 00 .....  
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1792: 00 00 00 00 00 00 00 00 .....  
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1808: 00 00 00 00 00 00 00 00 .....  
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1992: 00 00 00 00 00 00 00 00 .....  
2000: 00 00 00 00 00 00 00 00 .....  
2008: 00 00 00 00 00 00 00 00 .....  
2016: 00 00 00 00 00 00 00 00 .....  
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2256: 00 00 00 00 00 00 00 00 .....  
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2280: 00 00 00 00 00 00 00 00 .....  
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2304: 00 00 00 00 00 00 00 00 .....  
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2592: 00 00 00 00 00 00 00 00 .....  
2600: 00 00 00 00 00 00 00 00 .....  
2608: 00 00 00 00 00 00 00 00 .....  
2616: 00 00 00 00 00 00 00 00 .....  
2624: 00 00 00 00 00 00 00 00 .....  
2632: 00 00 00 00 00 00 00 00 .....  
2640: 00 00 00 00 00 00 00 00 .....  
2648: 00 00 00 00 00 00 00 00 .....  
2656: 00 00 00 00 00 00 00 00 .....  
2664: 00 00 00 00 00 00 00 00 .....  
2672: 00 00 00 00 00 00 00 00 .....  
2680: 00 00 00 00 00 00 00 00 .....  
2688: 00 00 00 00 00 00 00 00 .....  
2696: 00 00 00 00 00 00 00 00 .....  
2704: 00 00 00 00 00 00 00 00 .....  
2712: 00 00 00 00 00 00 00 00 .....  
2720: 00 00 00 00 00 00 00 00 .....  
2728: 00 00 00 00 00 00 00 00 .....  
2736: 00 00 00 00 00 00 00 00 .....  
2744: 00 00 00 00 00 00 00 00 .....  
275
```

ERROR: Traceback (most recent call last):

```
File "/home/neil/src/chirp/chirp.hg/chirp/ui/clone.py", line 249, in run
    self.__radio.sync_in()
File "/home/neil/src/chirp/chirp.hg/chirp/drivers/icf.py", line 646, in sync_in
    self._mmap = clone_from_radio(self)
File "/home/neil/src/chirp/chirp.hg/chirp/drivers/icf.py", line 352, in clone_from_radio
    raise errors.RadioError("Failed to communicate with the radio: %s" % e)
RadioError: Failed to communicate with the radio: Out of sync with radio
```

#6 - 09/05/2017 08:39 pm - Takayoshi SASANO

I tried previous revision (2715:d1bc2c917785) on OpenBSD-6.1/amd64.
Testing with this OpenBSD release is no problem.
So it's time to trash 2869:a6ecd7940d6b and 2888:c4cf293122fe.

But, does anyone who can describe what is happening?
Theoretically there should be no problem to read echoback immediately
after sending data and read frame should be same as sent frame.

#7 - 04/18/2020 01:24 pm - Bernhard Hailer

- Status changed from New to Closed
- Model affected changed from used *icf.py* to (all models)

This appears to be complete.

Files

icf.py.diff	1.4 kB	09/05/2017	Takayoshi SASANO
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