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Redirect multiple UARTs in Qemu



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I am emulating a chip with multiple UARTs/USARTs. What I want to do is redirect UART3 to /dev/uart3 on the host, uart7 to /dev/uart7 on the host, e seem to find examples or guides that deal with more than one uart, and the examples I did find don't seem to even select which uart they are dumpi console/socket/whatever. (Some of them use "id=id" but I have no idea what that means and Qemu documentation didn't seem to cover it.)

[linux](#) [arm](#) [embedded](#) [qemu](#) [uart](#)

asked Sep 7 '16 at 14:5



[Seth](#)

138 2 14

1 Answer

man qemu says:

`-serial dev`

Redirect the virtual serial port to host character device dev. The default device is "vc" in graphical mode and "stdio" in non graphical mode. This option can be used **several times** to simulate **up to 4 serial** ports.

also, You could add virtual USB serial ports:

`-usbdevice serial:[vendorid=vendor_id][,productid=product_id]:dev`

For `dev` you substitute your host's serial ports in the form `/dev/ttyXXX` in both cases

you could omit vendor and product id specification. In that case `qemu` would create the generic serial usb device with Virto' IDs

answered Sep 7 '16 at 18:01



[Serge](#)

5,416 10 24

I used `"-serial /dev/tty5"` while also doing a cat or a tail-f on `/dev/tty5` and no text showed up. I also tried a cat and tail -f on `/dev/vcs5`, nothing. Did I do something wrong? That does seem to work with `"-serial dev/pts/18"` while pts 18 is open. but `"-serial dev/pts/18 -serial dev/pts/19"` didn't output uart2 There are 8 uarts, can I only output 4 of them in Qemu? What about the GPIOs and SPIs, can they be output? – [Seth](#) Sep 7 '16 at 19:04

And then how to do anything with them with the Linux kernel? E.g. if I try: `-serial tcp::45456,server,nowait -serial tcp::45457,server,nowait` I can only connect to the first one with `telnet localhost 45456` from host, but the second one stays blank. Maybe I'm missing some kernel config? – [Ciro Santilli](#) 包子露宪 六四事件 法轮功 Mar 13 at 16:39