

**NAME**

**rio** – full-duplex network adapter

**SYNOPSIS**

**rio** [*OPTION*]... [*FILE*]*PROGRAM*...

**DESCRIPTION**

**rio** copies simultaneously its standard input and standard output to and from a stream socket. A stream socket can be established passively or actively. In passive mode **rio** functions as an iterative server listening for connections.

Optionally one or more files passed as additional parameters are injected into the socket before copying standard input. In passive mode each connection gets served a single file iterating through the *FILE* list. Each file may also be executed (**-x**). In this case the standard input and output of the *PROGRAM* in execution will be copied to the connected socket.

By default **rio** operates in binary mode, but it can also transfer bytes line-vise (**-a**). In canonical mode **rio** will read and write data line-vise and will automatically convert line endings from the local line ending style (\012) to a chosen network line ending style (\015\012 by default).

If operating in canonical mode without a pipe connected to its standard input, **rio** will start a line editor (**rio\_rl** by default) to edit each line before transmission. This allows chatting with services like FTP or SMTP in a comfortable manner.

**OPTIONS**

**--server, -s**  
Server mode

**--client, -c**  
Client mode

**--host, -t**  
Host name or address

**--port, -p**  
Port number

**--inet6, -6**  
Prefer IPv6

**--backlog, -b**  
Backlog length of listening socket

**--canon, -b**  
Line-vise I/O mode

**--editor, -e**  
Line editor

**--eol, -n**  
Line ending style ('crlf' or 'nl')

**--io\_unit, -u**  
I/O buffer size

**--quiet, -q**  
Do not output any status messages

**--logging, -g**  
Logging flags (connect,recv,send,merged)

**--log\_dir, -d**  
Target directory for log files

`--exec, -x`  
Execute each [PROGRAM]  
`--loop, -l`  
Endless repeat serving connections  
`--repeat=N, -r=N`  
Repeat serving exactly *N* connections  
`--help, -h`  
Print help

## EXAMPLES

Piping a file from one host to another:

Host A: `rio --server < some_file`

Host B: `rio --client --host=A > some_file`

Running a HTTP logging proxy:

Service definition (/etc/inetd.conf) on host A:

`www stream tcpnowait user /full/path/rio rio -c -t=B -p=80 -q -g=send,recv -d=/home/user/www`

Remotely working on another hosts:

Host A: `rio -sax bash`

Host B: `rio -c -t=A`

## SEE ALSO

`hd(1)`, `inetd(8)`, `tcpdump(1)`, `rget(1)`

## AUTHOR

Frank Mertens, [frank@cyblogic.de](mailto:frank@cyblogic.de)