

fiberglass (bash jail)

1. started the docker container
2. looked into the index.php file (saw all the commands that were blacklisted)
3. tried typing a bunch of commands at first, one of those commands was `ls` which worked.
4. then I went into a google search spree about what commands can I use to read a file and how other people bypass restricted shells. I also thought at one time that I was supposed to do a PHP injection into the form, but then I abandoned the idea. I started looking in the 42 cybersec livestreams as well, maybe you explained something there and I missed it.
5. then for some reason I noticed that if I type certain commands, it either says they are blacklisted or either says Input can only contain letters from fiberglass.
6. I did not notice the obvious hint at first, I thought that the fiberglass error message was something fancy implemented, and I started typing all the letters of the alphabet to see if I get command not found error (to see if my prompt passes or not)
7. then I noticed that I can only use letters that are in the fiberglass word and I started thinking about some gnu core utils that I can use with these letters.
8. I eventually stumbled upon `as` (the gnu assembler) and I noticed that If I pass a file to this command, under certain flags like `-al`, it lists the contents of that file. I tried to list the contents of `index.php` on my machine at first and I saw that it worked.
9. so In the end I did it on the flag and I ended up with the contents of the flag as `ctf{race_condition_symlink}` which is a total of 27 characters plus the newline (i think) and that is equivalent with the size of flags if you list it with the long listing format `ls -l`