A Password Cracking Tutorial Using John the Ripper

UNO CTF

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1 John Installation

If you haven't installed John before, you (on a Debian style distro such as Ubuntu) can run the command "sudo apt-get install john" to install the tool. You will probably need to provide your password in order to do so.

2 Unshadowing the Password File

- 1. On modern Linux systems, password hashes are no longer stored in the /etc/passwd file. Instead, these are stored in the /etc/shadow file, which is only readable by root, and the two files must first be combined in order to crack password hashes. John is provided with a tool used to do this, called "unshadow". To use unshadow, you simply provide the password and shadow files to it: unshadow [password-file] [shadow-file]. You'll probably need to run this command with sudo (sudo unshadow [password-file] [shadow-file]) for it to succeed due to the permissions of the shadow file.
- 2. The first step prints out the combined unshadowed file to the terminal, so you'll want to run the unshadow command again, this time running "sudo unshadow [password-file] [shadow-file] > unshadowed". This redirects the output of the unshadow command

to a file titled " ${\tt unshadowed}$ " in your current working directory, saving it that way.

3 Cracking Passwords

1. Finally, you can run "john unshadowed". This may take a minute, but when it finishes, if it succeeded, it will have printed the decrypted password of each user alongside the relevant username.