

# Sysadministrivia

## Linux, Lagers, and Late Nights

---

### S6E0: "Fat Access"

Posted 2021-02-14 23:59

Modified 2021-02-28 00:39

Comments 0

#### Navigation

Previous Episode	Next Episode
S5E22: "Shitshow VI: Shitshow Island"	S6E1: "A FreSSH View"

#### Log

Recorded (UTC)	Aired (UTC)	Editor
2021-02-04 04:27:50	2021-02-14 07:35:17	"Edita"

#### Verification

Format	SHA256	GPG	Audio File
MP3	46a6fdc0edd8422ba36c3924de913c3525ea1bfab6ee23e8d4748ba4860dec08	click	click
OGG	1c6b9200629c77795ef0d656f17f1ee0a1d1db24014190272a4f9f2429803e19	click	click

Quicklisten:

WE'RE BACK, BABY! We talk about chown/chmod and dig deeper into what exactly the standard access security model is for Linux.

- Just the Tip
- Notes
- 15 Clams
- Errata
- Music

## Just the Tip

- Paden tells us about the Department of Energy and FERC compromise due to the Solarwinds compromise.

## Notes

Starts at **38m40s**. (I know.)

I was drinking coconut water and black tea. Paden was drinking water. Jthan was drinking F O R B I D D E N Yuengling.

- **chown** and **chmod**, **UID** and **GID**, **octal** permissions
  - **chown**, **UID** and **GIDs**/usernames and groupnames
    - In a traditional \*NIX system, users are listed in `/etc/passwd` "database". It maps usernames to UIDs, specifies the preferred shell, etc. See **man 5 passwd** for more information.
      - Passwords used to be kept in the `/etc/passwd` file, but now are not - they're typically in a separate "database", `/etc/shadow`. See **man 5 shadow**.
    - (Groups are kept in respective `/etc/group` and `/etc/gshadow`. You can `man` both of those files too for explanations on what the columns are.)
    - If you're using LDAP auth, that complicates these things but know two things: 1.) user/group mappings are usually cached, and 2.) you absolutely should be using `sssd`.
  - **chmod**, modal permission system
    - Take this example `ls -l` output: `drwxr-x--x 50 bar baz 4096 Feb 8 16:58 foo`
      - This means it is a **directory** that allows **read**, **write**, and **execute** permissions for the **bar** user.
      - Only **read** and **execute** (traversal) permissions for the **baz** group, and
      - Only the **execute** (traversal) permissions for everyone else ("other").
    - Sticky bits, SUID, and SGID are... sort of obsolete, more or less (SUID is still fairly useful). You can read more about them here. (It turns out, the sticky bit for files has been ignored in the BSDs as well. Originally it was to be used as a special flag for the kernel.)
    - Octal modes are **extremely** hard to describe in speech without diagrams, but here are some useful resources to get you started:
      - An octal permissions calculator
      - Understanding Octal File Permissions
      - UNIX File Permissions
  - BONUS! Bookmark `endoflife.date` !

# 15 Clams

In this segment, Jthan shares with you a little slice of life. The title is a reference to this video. (2m16s in)

Starts at **1h14m08s**.

Jthan talks about CentOS 6. You can purchase extended support “at a reasonable price” for CentOS 6 from Cloudlinux.

## Errata

- We had some weird audio issues with this one. I sound tinny (I didn't optimize my input levels) and Jthan dropped a couple minutes in, so we had to use his Mumble track for the first several minutes.
- Also Jthan “mostly” fixed his laptop.
- Also also, Jthan has brought to my attention that GrubHub now apparently has an API. I'm not sure if this is accessible to just restaurants or if customers can use it too.
- **amayer** let us know:

Hey, In the last episode, S6E0 at 1:11:08, r00t^2 mentioned that you can change individual permissions with the letter form but not with the octal form. I believe this is incorrect. Reading the man page doesn't make it extremely clear if the example below is an intended behavior or some backward compatibility thing but I've used chmod like this a few times thinking I was clever.

Thanks, amayer! I remember that not working when I last tried it but it seems that is either possible now or my test wasn't accurate.

## Music

### Music Credits

Track	Title	Artist	Link	Copyright/License
Intro	Words	Cosmic Kingsnake	click	CC-BY-NC-ND 4.0
Outro	Follow	Viktor Van River	click	CC-BY-SA 4.0

(All music is royalty-free, properly licensed for use, used under fair use, or public domain.)

**Author** r00t^2

**Categories** Season Six

## Comments

There are currently no comments on this article.