Gotta Escape 'Em All

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About me

- Senior Security Engineer at Everquote
- Sometimes I can code good!
- Not very sociable so I don't have social media apart from LinkedIn
- I like parrots



Emulators....





So why would you want to hack an emulator?

- Always been interested in video game glitches, especially those used in the speedrunning community for arbitrary code execution
- Got into emulator dev over lockdown... I'll finish it one day...?
- Generally easier to hack someone by phishing or making them download malware





So why would you want to hack an emulator?

- This is incredibly niche and I wouldn't recommend it
- Highly doubt that people are running any console emulators on their work machines
- I just wanted to see what would happen

So, who's broken an emulator before?

- TheZZAZGlitch old versions of VBA allowed the user to run arbitrary Lua code
- Project64 had a vuln that allowed arbitary execution
- ZSNES had a bug where the ROMs could escape the emulator
- Important to note that all of these examples are running on extremely old versions of those emulators

Are you ready for a demostration?



What did we learn?

- Emulators not the most practical attack vector, but certainty the most fun to break!
- Keep your software updated
- If you're an emulator dev give a think about security
- And don't download potentially dodgy ROMs;)



Thanks to!

- The SecEng and SecOps team at Everquote
- (Grant: he knows what he did)
- And you, for coming to my talk! You're the best:)