CTF Contests: Hands-On Experience of the IT Security Culture – UE 02: Communication

Clemens Hlauschek, Daniel Marth, Florian Fankhauser
Types of Communication

- Announcements from CTF organizers
- Communication between organizers and teams during the event
- Communication within a team
Announcement Platforms

- Event website
- Twitter
- CTFtime
- Telegram
- Discord
- ...

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Platforms for Event Communication

- Internet Relay Chat (IRC)
  - Created in 1988, but still in use
- Discord
  - Becoming more and more popular among the CTF community
- Slack
- ...

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Platforms for Team Communication

- Discord
- Mattermost
- Slack
- Rocket.Chat
- Telegram
- ...

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Exchanging Files Within the Team

- For smaller files: Every tool from the previous slide
- Network File System (NFS)
- Server Message Block (SMB) / Samba
- File Transfer Protocol (FTP)
- Git / Subversion
  - Pro: Version control
  - Con: Only useful if you adjust your workflow to the tool
- sshfs
  - Pro: Individual access can be automated nicely
  - Con: Proved to be rather unstable
Team Management

- A large number of tasks and participants requires some management
- Project management tools are too complex under time pressure
- Alternative: Tasks can be tracked in a shared online sheet (e.g., OnlyOffice, Google Drive)
- But: Only useful if maintained by everyone!
Team Organization Requirements

- Access control
- Useful structure with minimal overhead
- Local and remote access
- Minimal dependence on third-party services
Our Setup

■ For the upcoming PlaidCTF:
  ■ Team communication: Discord + fallback via IRC
  ■ File sharing: NFS + SMB / Samba + Git
  ■ High-level team management: Shared OnlyOffice sheet

■ Setup might change for future events
Exercises
Pearl’s U-Stor

- https://ctftime.org/task/15631
- PlaidCTF 2021
- Web, 240 points
hypercomputer 1

- https://ctftime.org/task/379
- PlaidCTF 2013
- Reversing, 100 points
docker

- https://ctftime.org/task/8234
- PlaidCTF 2019
- Misc, 10 points
Thank you!

https://security.inso.tuwien.ac.at/ctf-2022s/