Mandos

Disk encryption without passwords

Teddy Hogeborn, Björn Påhlsson

2020-01-29

When to use Mandos?

- 1. Physical/bare metal hardware?
- 2. More than just one physical machine?
- 3. Want to use full-disk encryption?

You should use Mandos!

Don't already use full-disk encryption?

You should!

What is Mandos?

One running machine sends password to other rebooting machine

Two (or more) machines can keep each other up

No interactivity needed

- ► Reboot while you sleep
 - Kernel upgrade
 - Kernel panic
 - Power glitch
 - Watchdog
 - etc.

Noninteractivity

Vital feature! Set it and forget it; reboot normally

Mandos Features

Supports major initramfs image builders:

- initramfs-tools
- dracut, both with and without systemd

Server controllable by D-Bus

- ► D-Bus API fully documented
- Command-line utilities provided

But anyone could just...

No they couldn't.

- ► TLS-encrypted communication (with PFS)
- OpenPGP-encrypted payload

But what if...

Threat model?

► Smash & grab

Fails safe!

Threat models (continued)

What is your realistic threat model?

Mandos will always be better than no encryption!

OK, but in theory, you could...

Yes, OK, you could.

▶ But again, what is your threat model?

Sophisticated attackers?

Could just as well do a cold-boot attack

Mandos can ask for manual approval for every boot

Installing Mandos

```
apt install mandos-client
Then, read
/usr/share/doc/mandos-client/README.Debian.gz
apt install mandos
```

Latest version (recommended):

Instructions at https://www.recompile.se/mandos