

The security implications of Ansible scared me

Mark Jenkins

```
1DEE 93CC DA25 F8A3 F9E3  
57A9 A8F8 6493 AA4D B1FB
```

Q&A in hallway track

In your mind



you have capacities you know



To telepath messages



through the vast unknown..



Calling occupants of interplanetary craft





ANSIBLE

Controller



Control

ALL
THE THINGS



Push model



Agentless



“Agentless”



Implication of the push model

- Credentials on the controller could be safe....
- But as long as pushed code can be altered...
- Bad things can happen
- To all the things

Possible points of compromise

1. Web interface



1. Web interface



2. Supply chain



Core – ansible.builtin



pip install ansible



community.general



galaxy



Insider attack



“Insider” attack



3. Backwards communication



4. System flaws (e.g. ssh/kernel)



Risk Mitigation



Why the
**PRINCIPLE of
LEAST PRIVILEGE**
Matters

PoLP

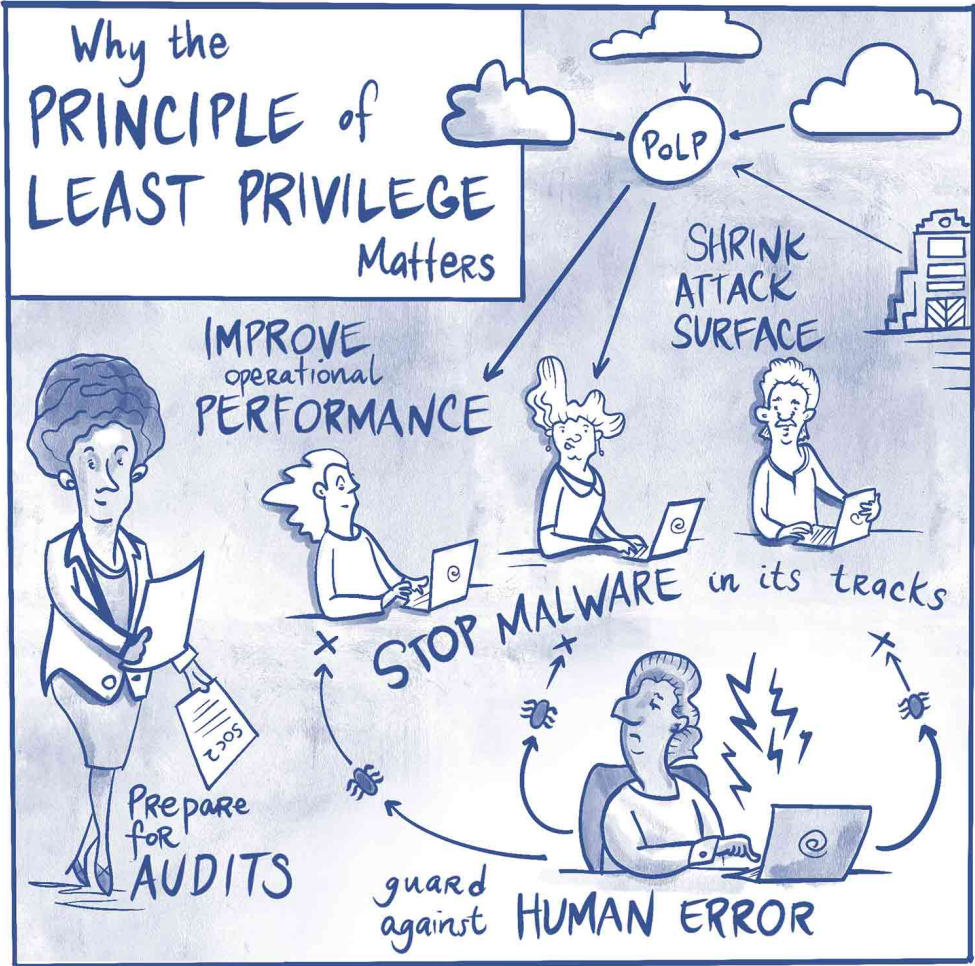
SHRINK
ATTACK
SURFACE

IMPROVE
operational
PERFORMANCE

Prepare
for
AUDITS

STOP MALWARE in its tracks

guard
against
HUMAN ERROR



Demo 1 – Provisioning workstation



Don't put web interface on public internet



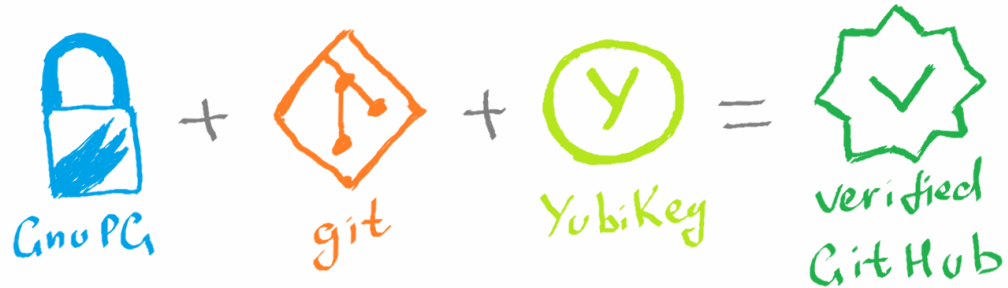
Demo 2 – client certificate





Code signing and verification

SIGN COMMITS WITH GPG, GIT AND YUBIKEY



ansible-pull



Ansible-pull and signature verification



“agentless”



In conclusion..

With your mind you
have ability to form

And transmit thought energy
far beyond the norm

You close your eyes,
you concentrate

Together that's the way

To send the message

We declare world contact day



Happy Hacking