



WARNING

is a waste of my time

Schlomo Schapiro
Head of Product Workplace

06.10.2016

@schlomoschapiro



AGENDA

WARNING
is a waste of my time

Open Space 1

Open Space 2

Open Space 3

Schlomo

Lifting the Curse
of Static Credentials

Communication
& Collaboration
The Future of Email

Ask me anything

WARNING
is a waste of my time



WARNING - Datafile Has

Warnings And/Or Errors

Oct 17 07:54:09 brho kernel:

[292950.865647] EXT4-fs (sdb1): warning:
mounting fs with errors, running e2fsck
is recommended

dpkg: warning: ignoring
pre-dependency problem!

Oct 24 07:54:25 brho colord[1110]:

(colord:1110): Cd-WARNING **: failed to
get session [pid 5151]: Unknown error -2

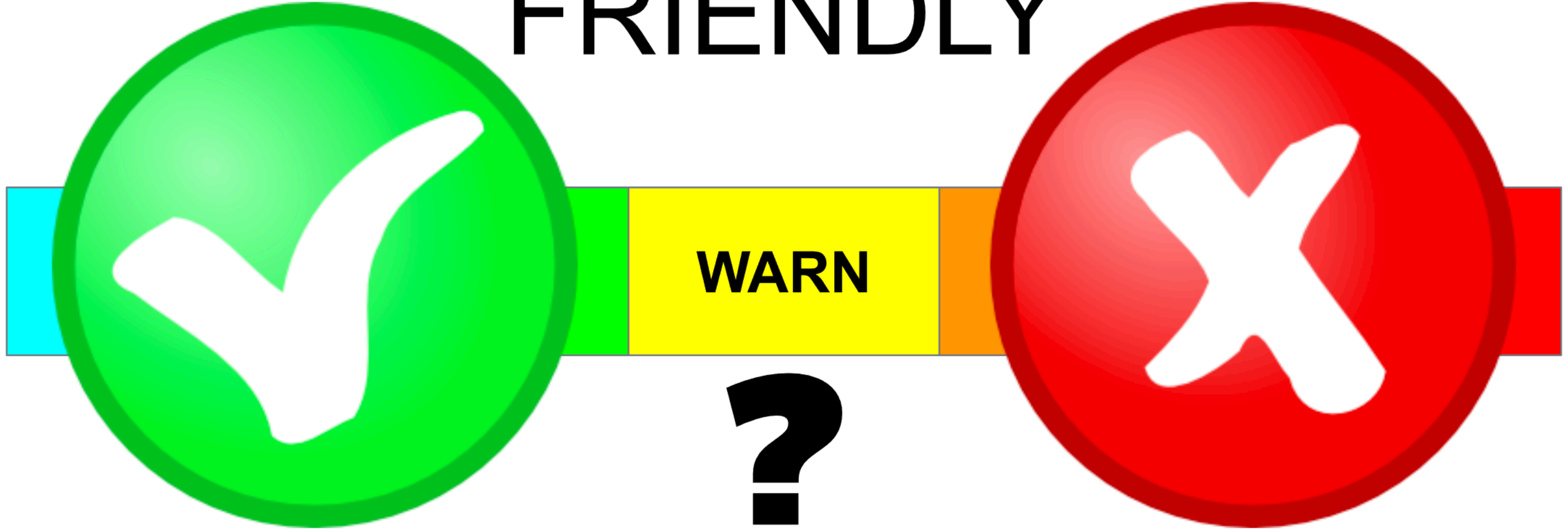
Analysis of /var/log* on my Ubuntu desktop:

DEBUG	INFO	WARN	ERROR	FATAL
3	95	171	97	0



AUTOMATION

FRIENDLY

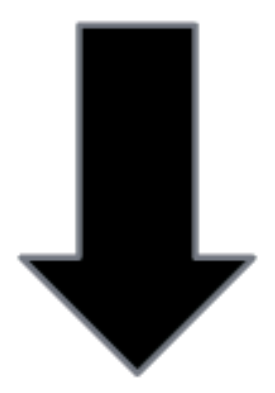


DEBUG	INFO	WARN	ERROR	FATAL
3	95	171	97	0

WARN

= Not

Responsible



Nothing
happened:
Keep
working

System
broken:
Replace
automatically

Take Away

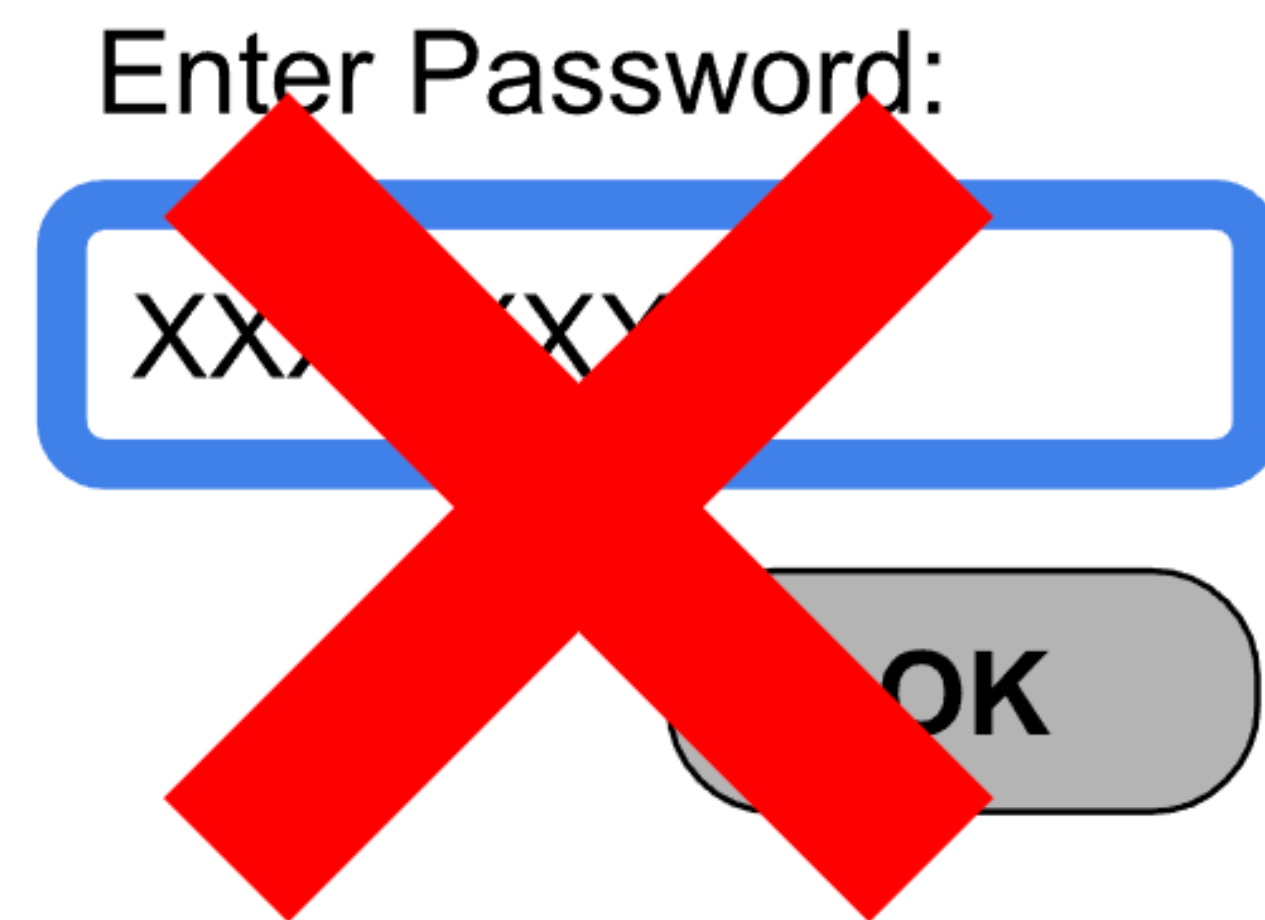
- Reduce Log Levels
- PLEASE: Actionable Error Messages
- Server Logs = Server Trouble
 - ERROR connection to DB
 - ERROR disk full
 - ...
- User Trouble = Customer Support
 - ERROR user tried 100 times wrong password
 - ERROR invalid user email, not sending order confirmation
 - ERROR user did not save shopping basket
 - ...



Lifting the Curse of Static Credentials

No More Passwords

PROBLEM



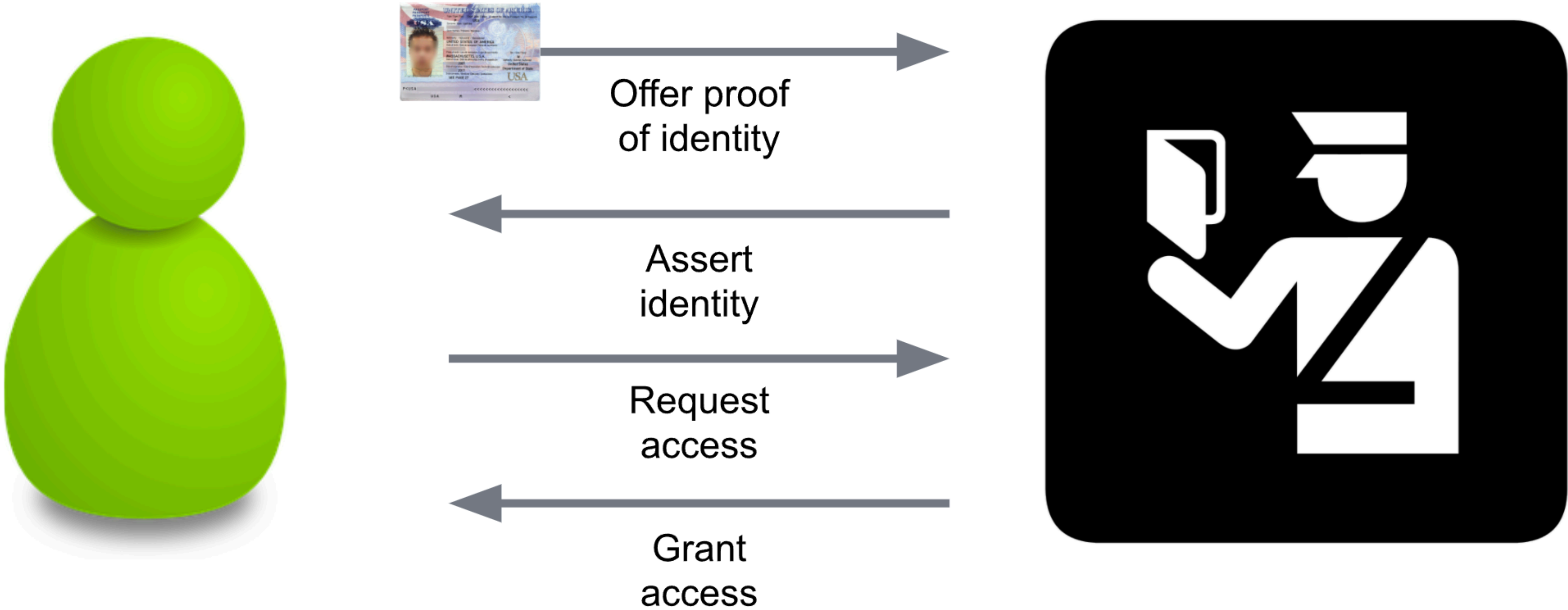
STATIC CREDENTIALS



Source: Dr. Pepper ad from 1963 / Johnny Hart

- can be used by anyone who has them - friend or foe
- are typically very short and can even be brute forced or guessed
- for machine or service users have to be stored in configuration files from where they can be leaked
- are hard to remember for humans so that they will write them down somewhere or store them in files
- typically stay the same over a long period of time
- don't include any information about the identity of the bearer or user
- are hard to rotate on a regular base because the change has to happen in several places at the same time

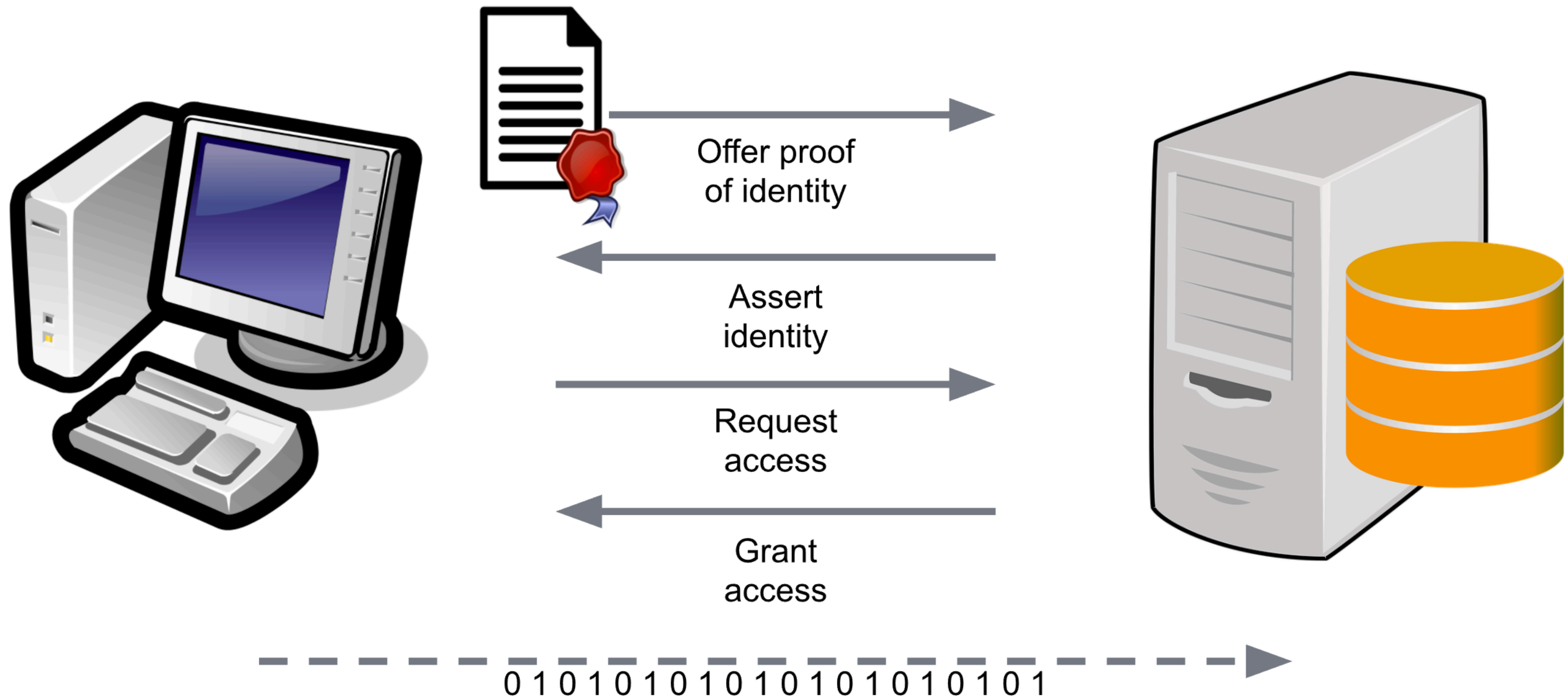
REAL WORLD EXAMPLE (SINCE 19th CENTURY)



IT is stuck in the Medieval Ages

- Quick Start = Production Best Practice
- Cloud = No physical security layer
- Example: [Instagram's Million Dollar Bug](#) (Internet Archive)

IDENTITY BASED ACCESS



Avoid Static Credentials

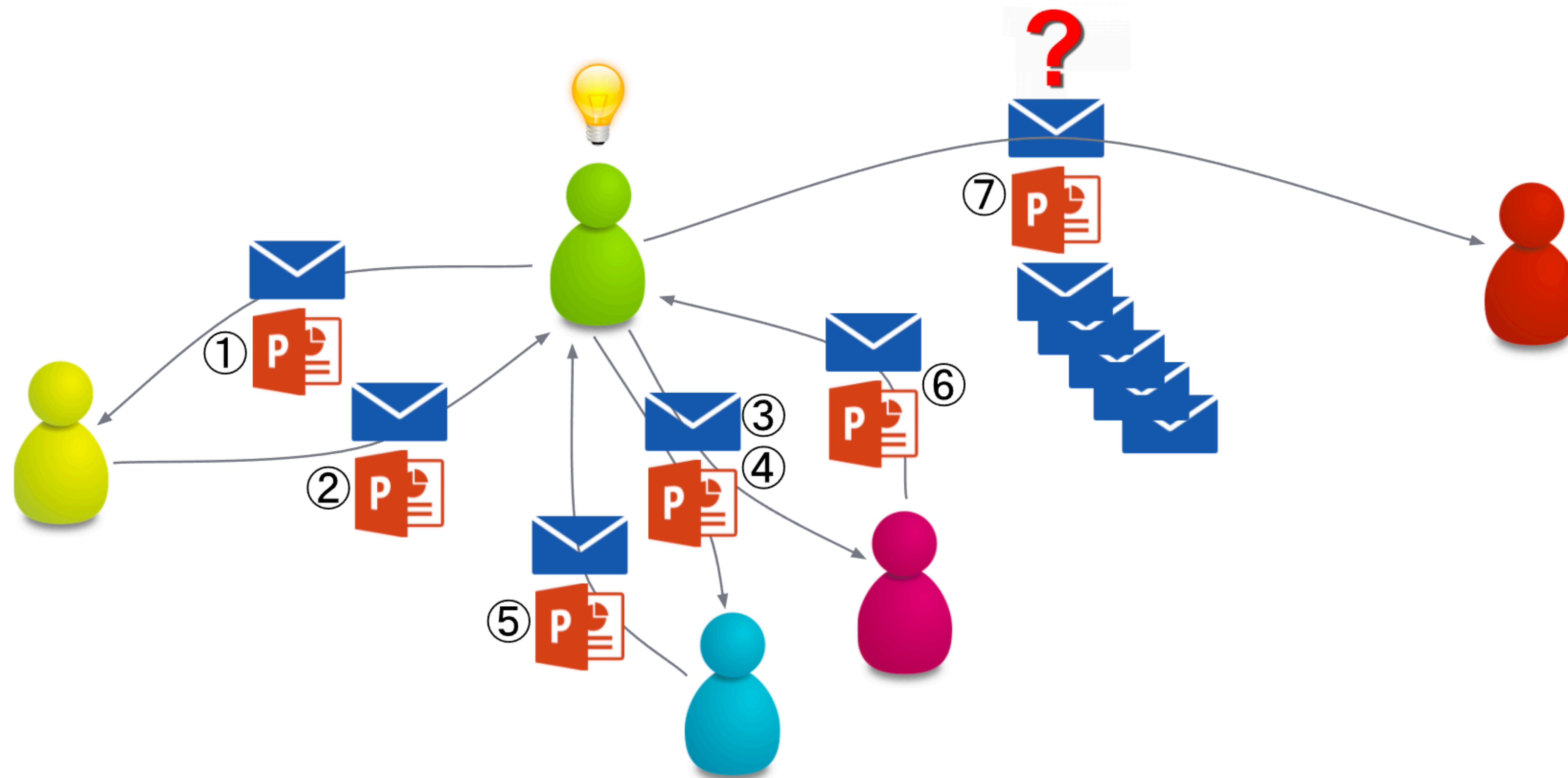
- Local: Use Kerberos
- AWS: Use IAM roles
- Websites: Federated Logins (OpenID Connect ...)

<http://blog.schlomo.schapiro.org/2016/05/lifting-curse-of-static-credentials.html>

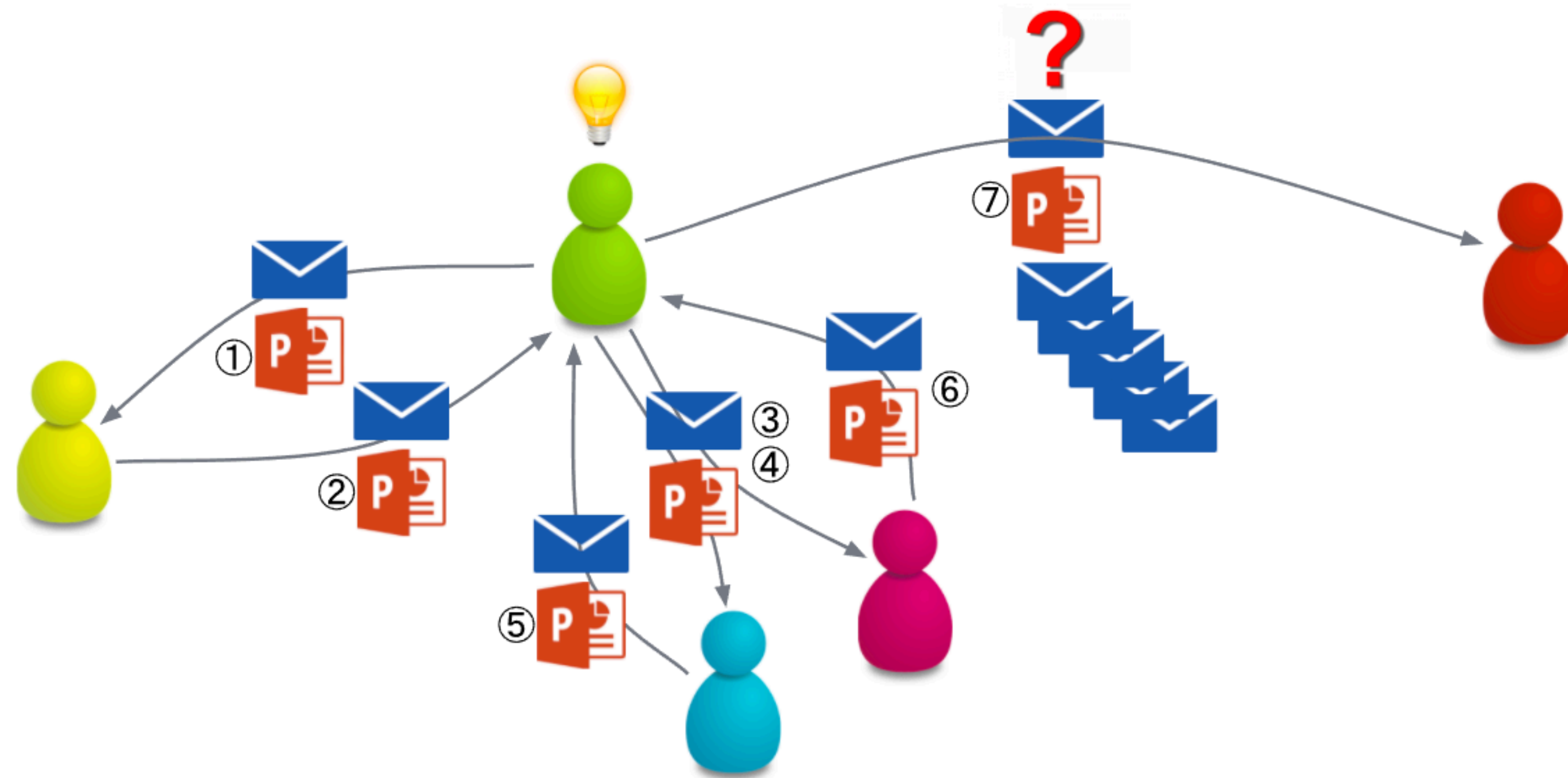
Communication & Collaboration

The Future of Email

EMAIL COLLABORATION



EFFECT: DATA GOES TO USER



- 7 copies of same content
- Data stored in user mailbox
- Data is duplicated in multiple locations.
Which is the right version?

- Email is optimised for offline

CLOUD COLLABORATION



- Only 1 copy of content
- Email for notification
- No data stored in mailbox

● **Effect:**
User goes to data

COMMUNICATION & COLLABORATION VISION

