



December 2025 – Gartner IAM Summit

Revealing Critical Security Gaps in Active Directory and Entra ID Environments

Bryan Patton, Quest Software

Sean Metcalf, TrustedSec

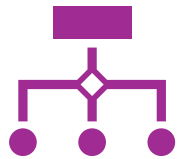


About Sean

- Identity Security Architect @ TrustedSec
- Microsoft Certified Master (MCM) Directory Services
- Speaker: Black Hat, Blue Hat, Blue Team Con, multiple BSides, DEF CON, DerbyCon, RSA, TEC, Troopers, etc.
- Former Microsoft MVP
- Security Consultant / Researcher
- Own & Operate [ADSecurity.org](https://adsecurity.org) (Microsoft identity security info)



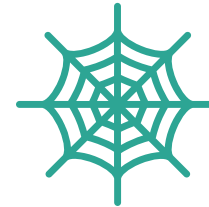
Agenda



Gap #1: Active
Directory



Gap #2: Hybrid
Cloud Security Gaps



Gap #3: AD & Entra
Control Plane



Wrap-up &
Conclusion

Gap #1: Active Directory



Permissions



Group nesting



Over-privileged
accounts

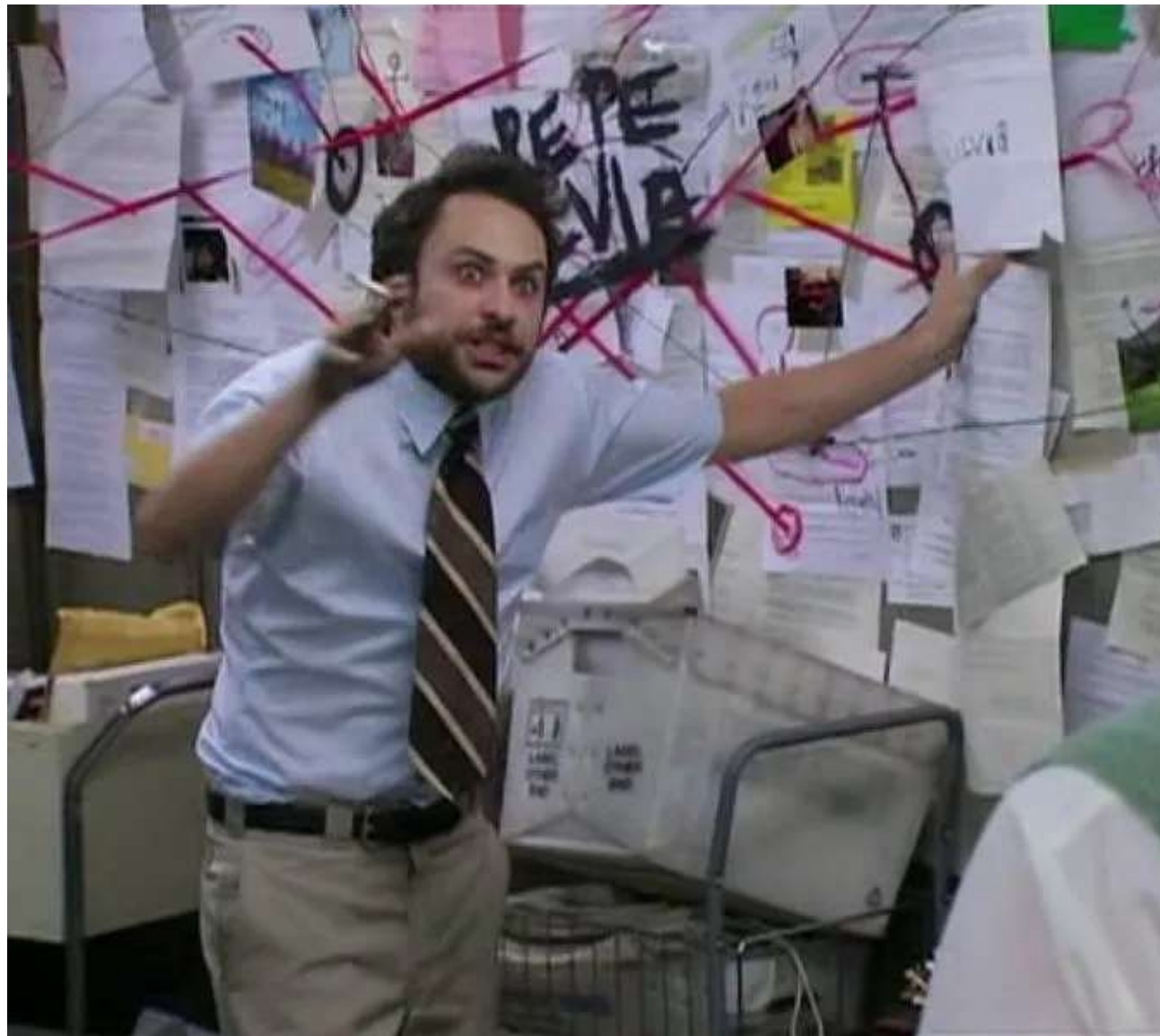


Service
account access



Backup
process

Permissions



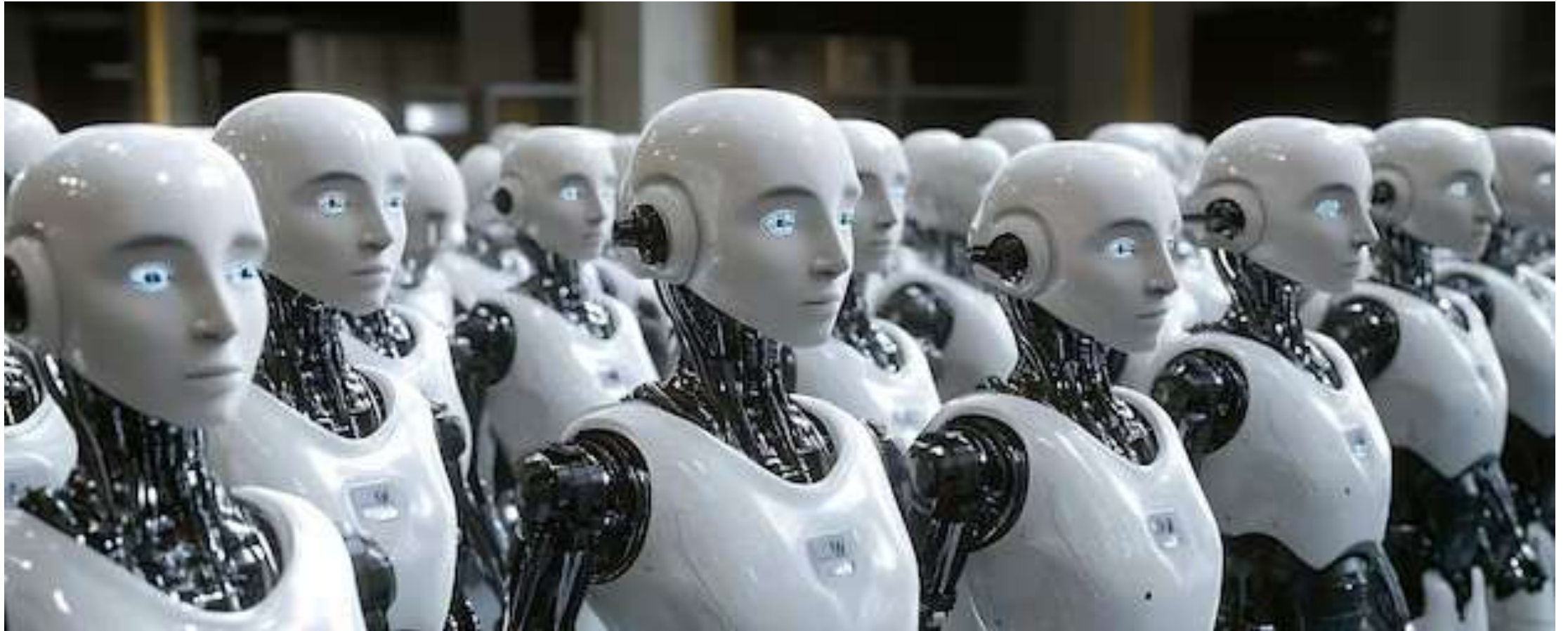
Group Nesting



Over- permissioned Accounts



Service Account Access



How often to you practice your disaster recovery plan?

24%

Every 6 months

44%

Once a year

8%

Every two years

24%

Never

Backup Process



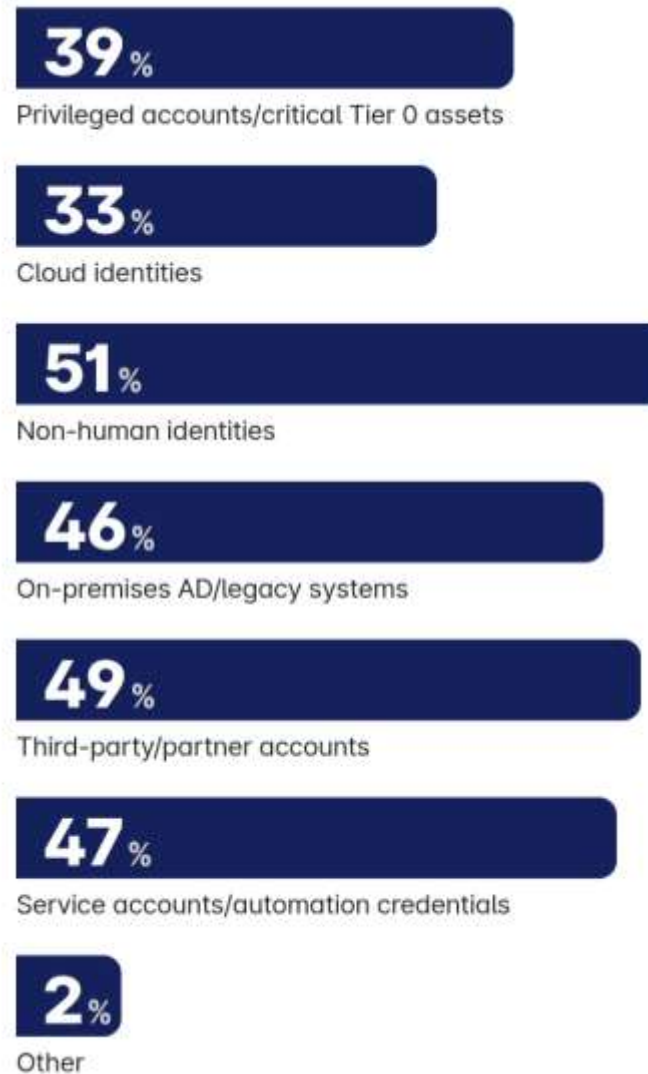
Gap #2: Hybrid Cloud Security Gaps

Entra Connect

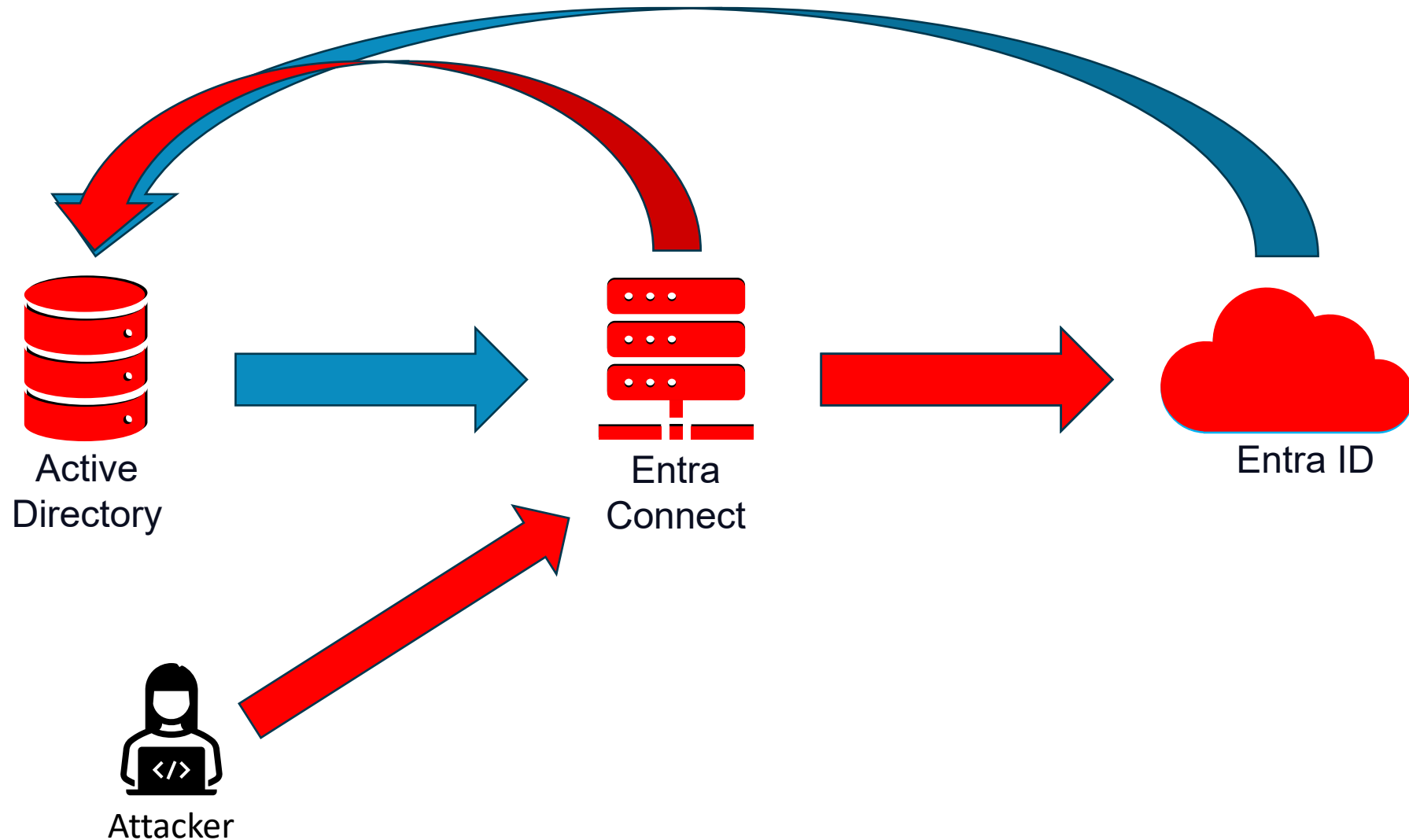
Pass Through
Authentication

Entra
Seamless
Single Sign-on

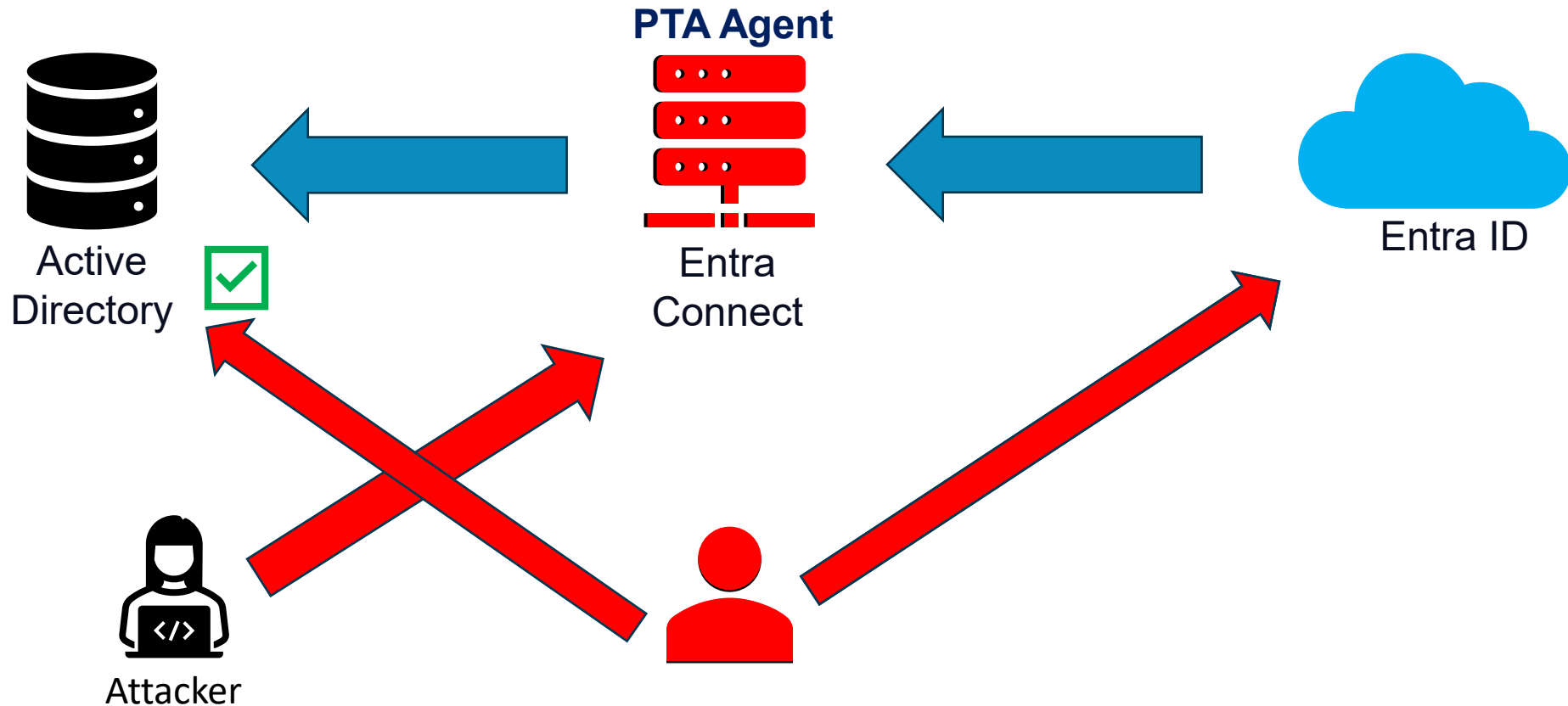
Which areas of your identity infrastructure are most difficult to secure?



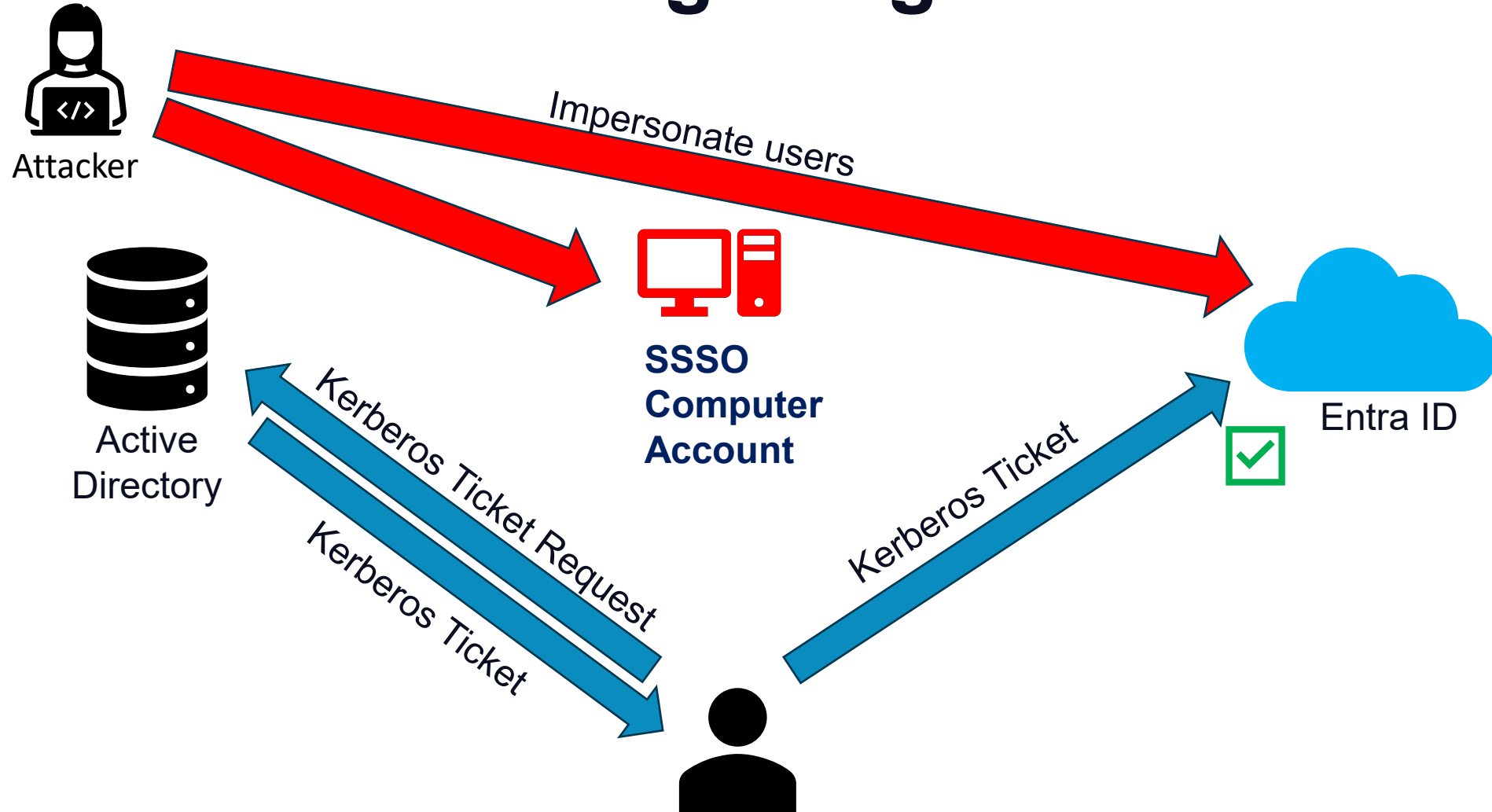
Entra Connect Sync



Pass Through Authentication



Entra Seamless Single Sign-On



Who in your org is primarily responsible for ITDR?

31%

CISO

30%

IAM infrastructure team

42%

IT leadership (CIO, CTO)

24%

Risk or compliance teams

34%

SecOps team

Gap #3: AD & Entra ID Control Plane

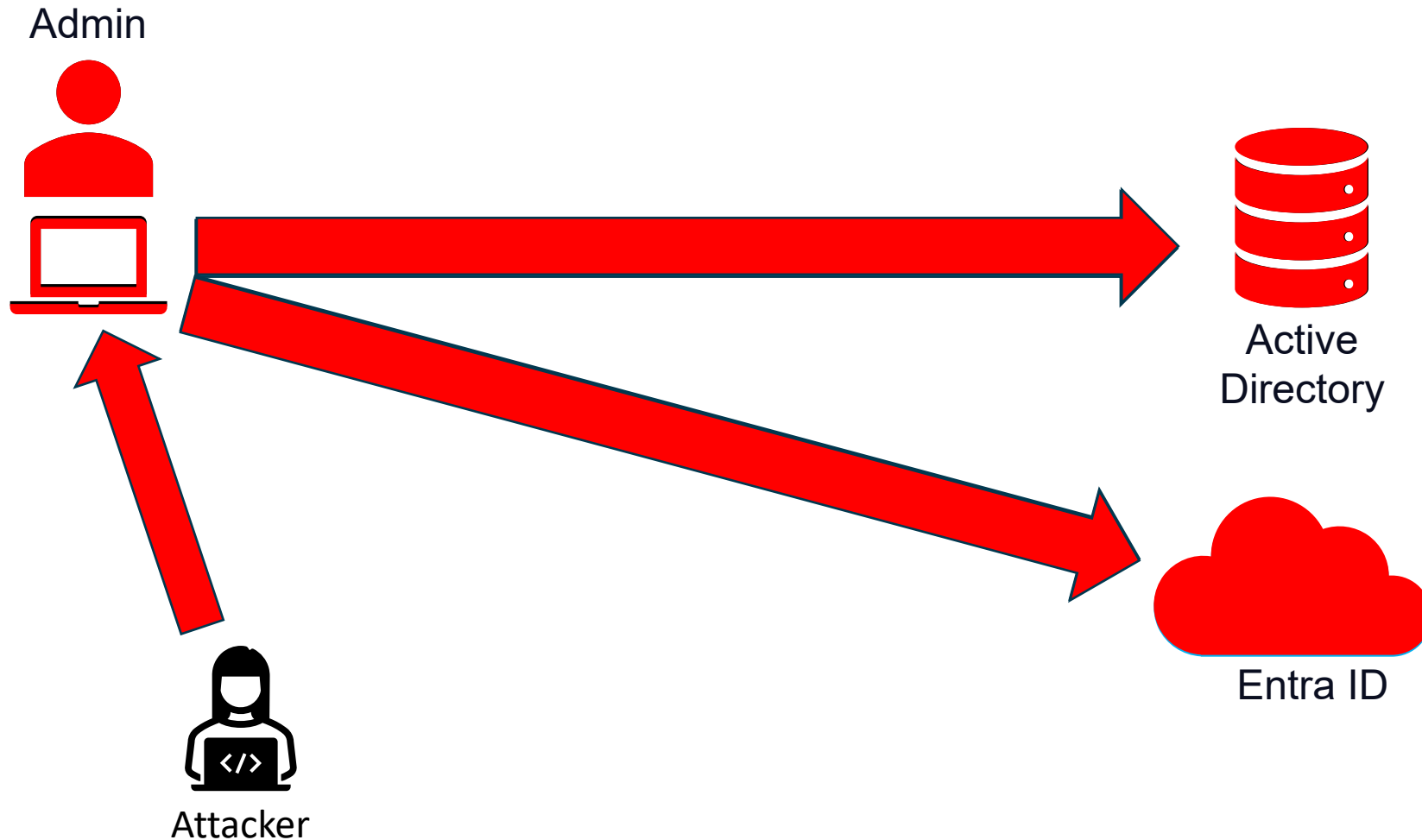
No admin
workstations

Too many
admins

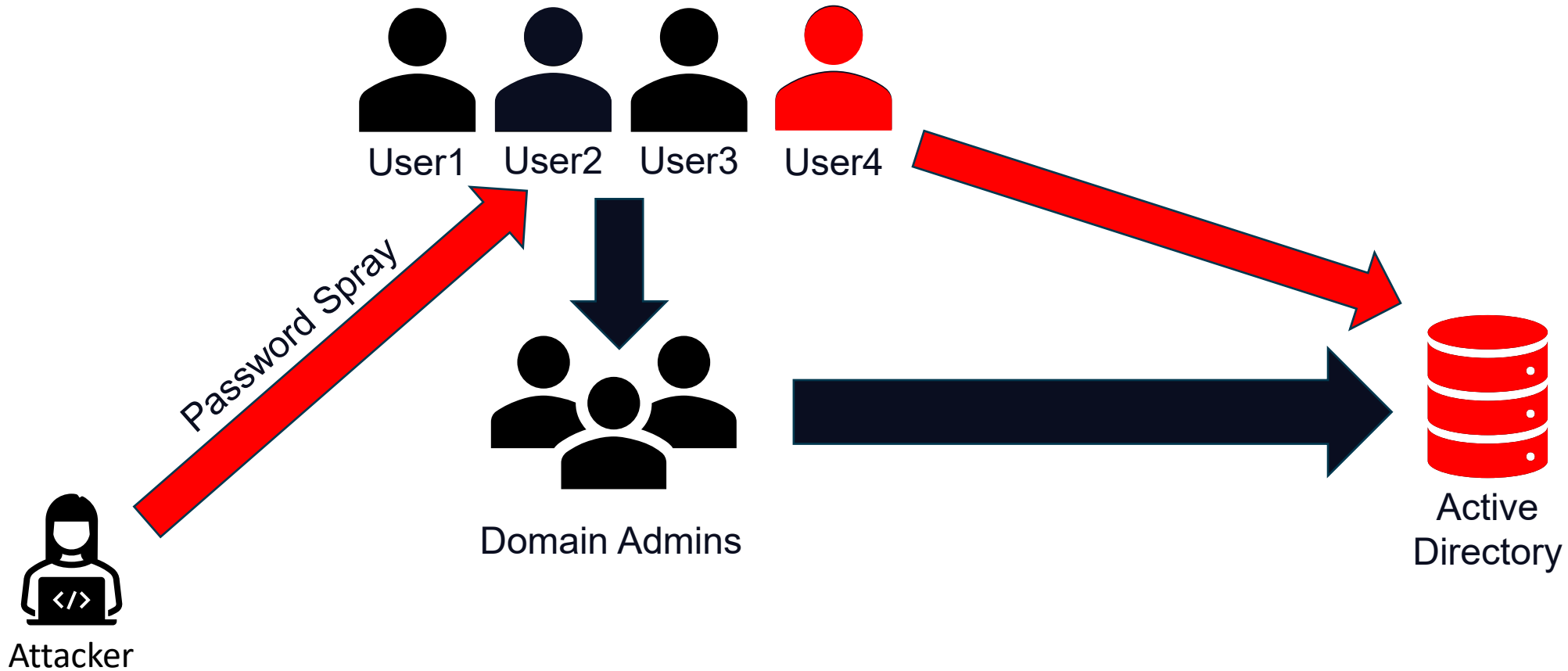
Not requiring
MFA

Overprivileged
service
accounts

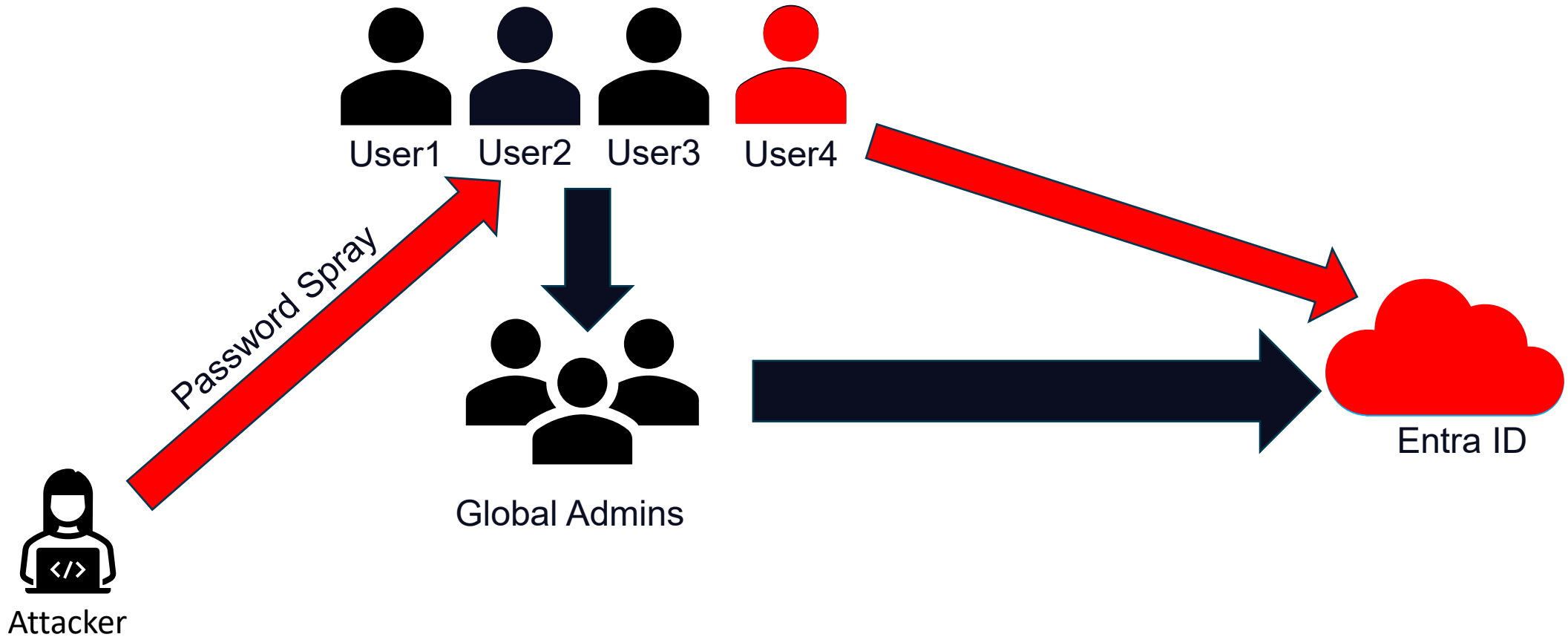
No Admin Workstations



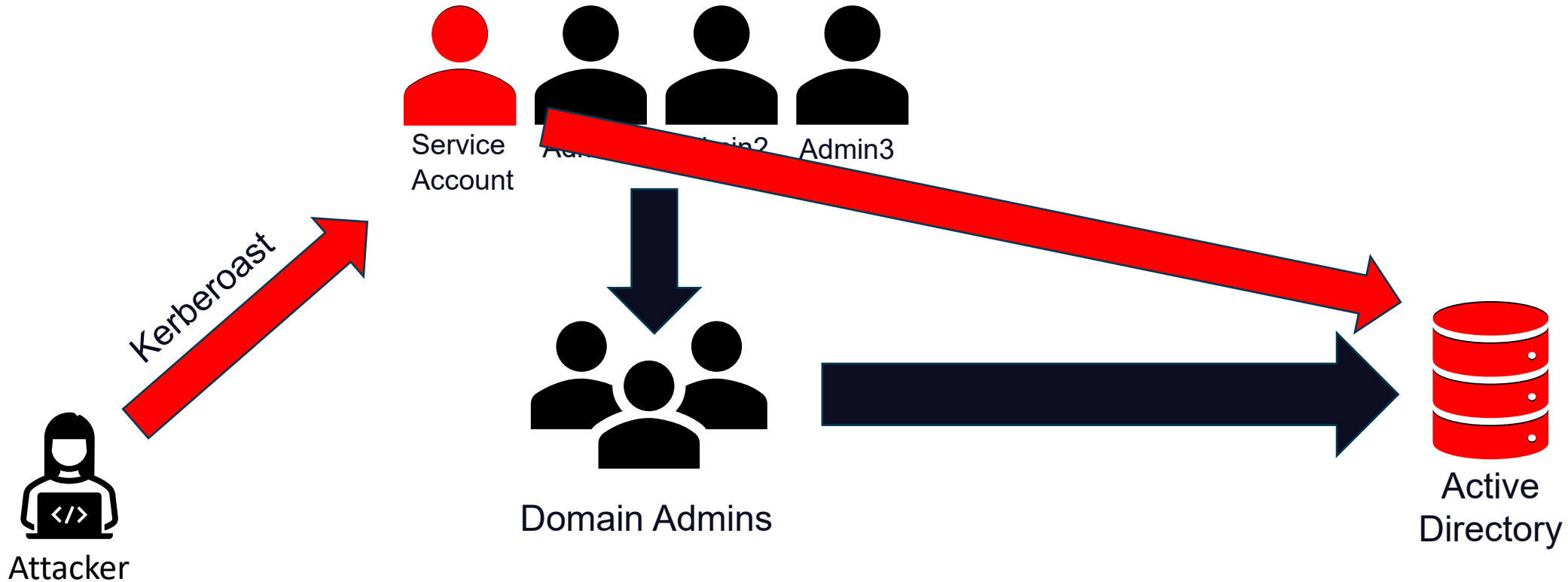
Too Many Admins



Not Requiring MFA



Overprivileged Service Accounts



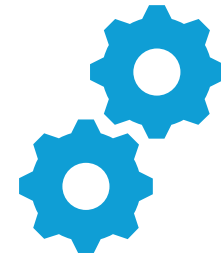
AI Challenges



AI is being integrated
into everything



Legacy technology
isn't prepared for it



AI governance is
required and hard

Wrapping Up



CLEANING UP ACTIVE
DIRECTORY MAKES IT
MORE RESILIENT



HYBRID CLOUD PROVIDES
ATTACKER OPPORTUNITY



PROTECTING PRIVILEGED
ACCOUNTS MITIGATES
ATTACKS



Visit booth #205



Q&A with Sean Metcalf and Bryan Patton

Today's Raffle: 5:15 pm

Happy Hour @ Crush It: 6:30-9:30pm