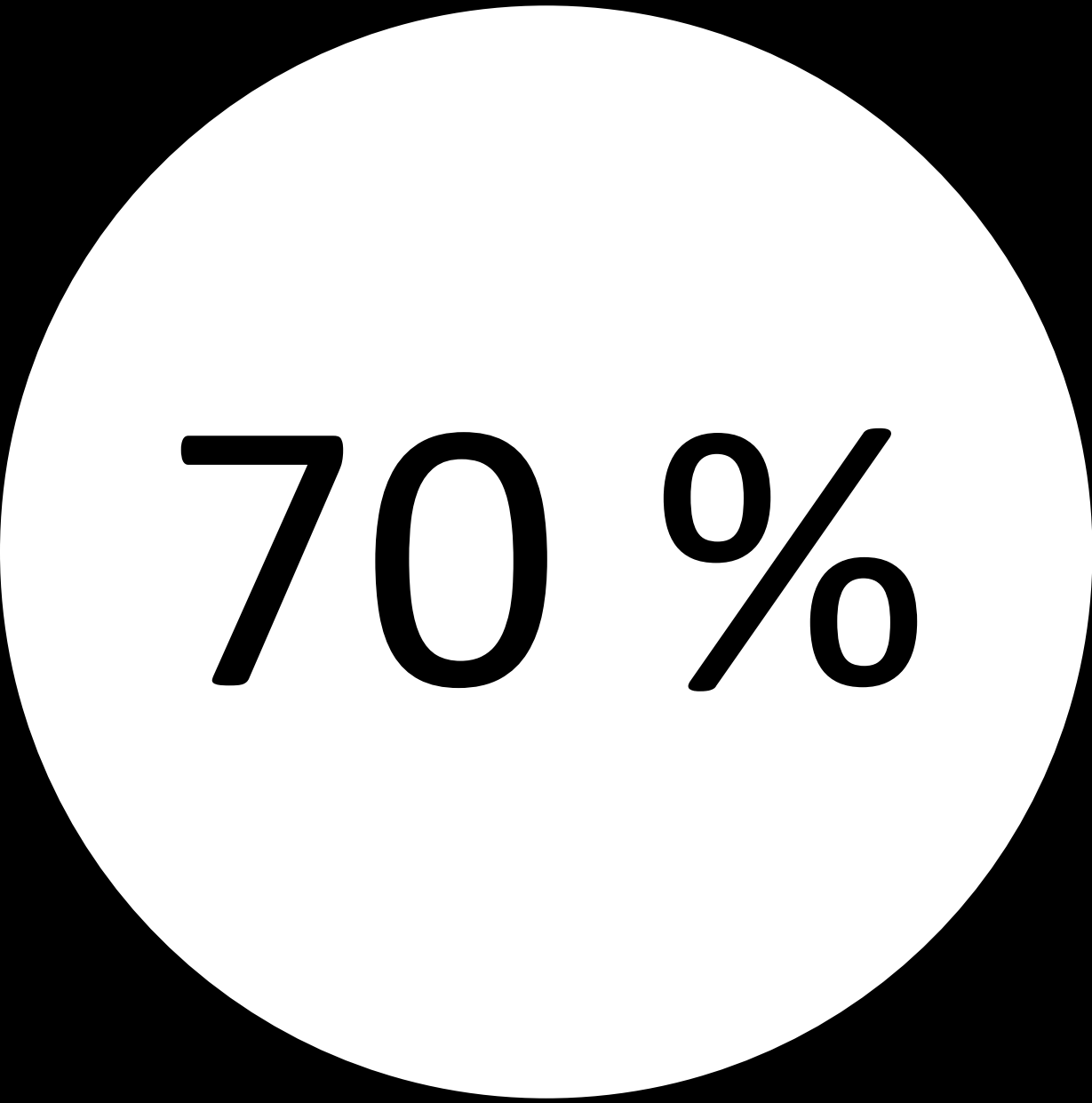


Design for Change: Active Directory für das Cloud-Zeitalter

Nils Kaczenski



Kunden mit Interesse
an „Cloud“



70 %

Kunden, die „Cloud“
produktiv nutzen

30 %

Kunden mit gutem
AD-Design

5 %

Design: Das Fundament für Identitäten

Name ist Schall und Rauch

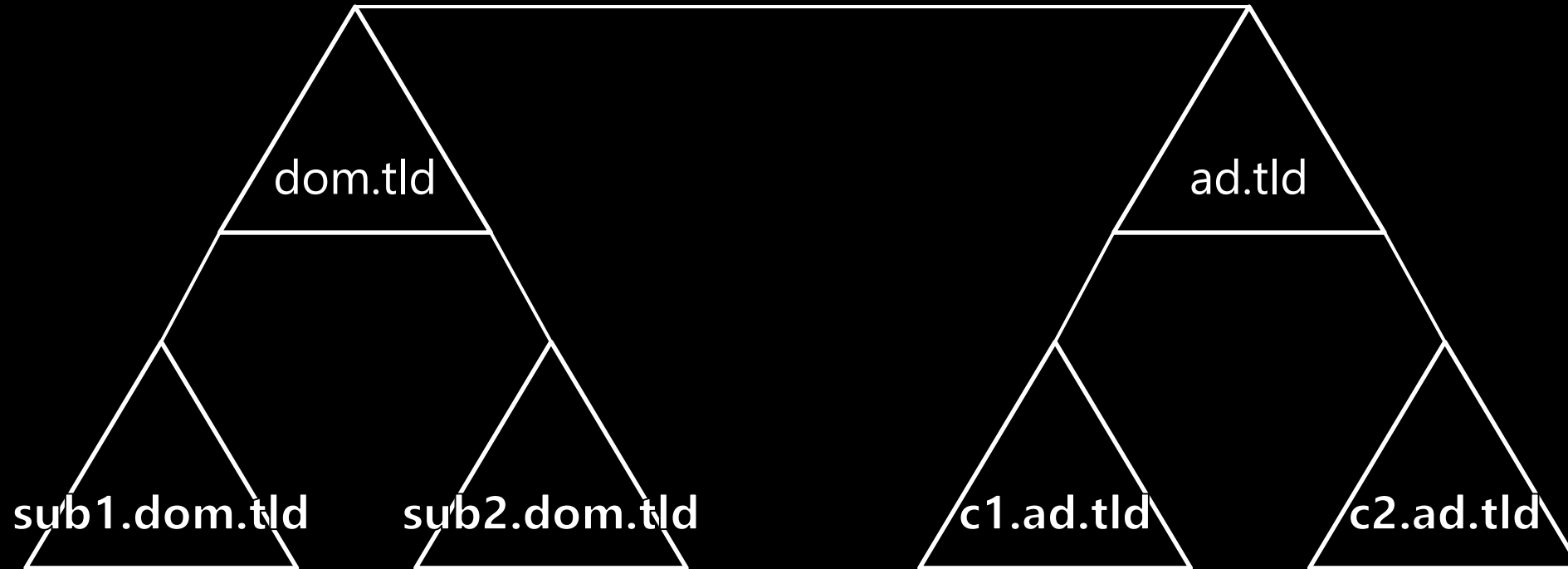
domainlocal

adfinade

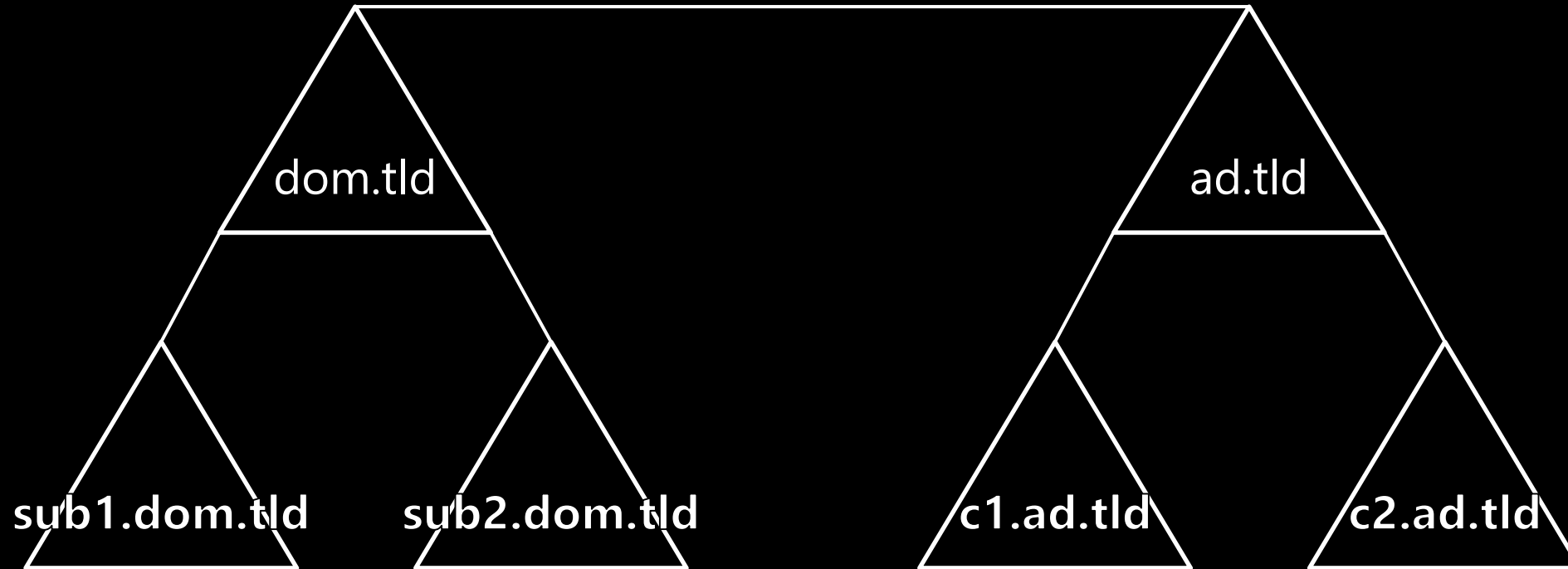
firmname

abstrakt.org

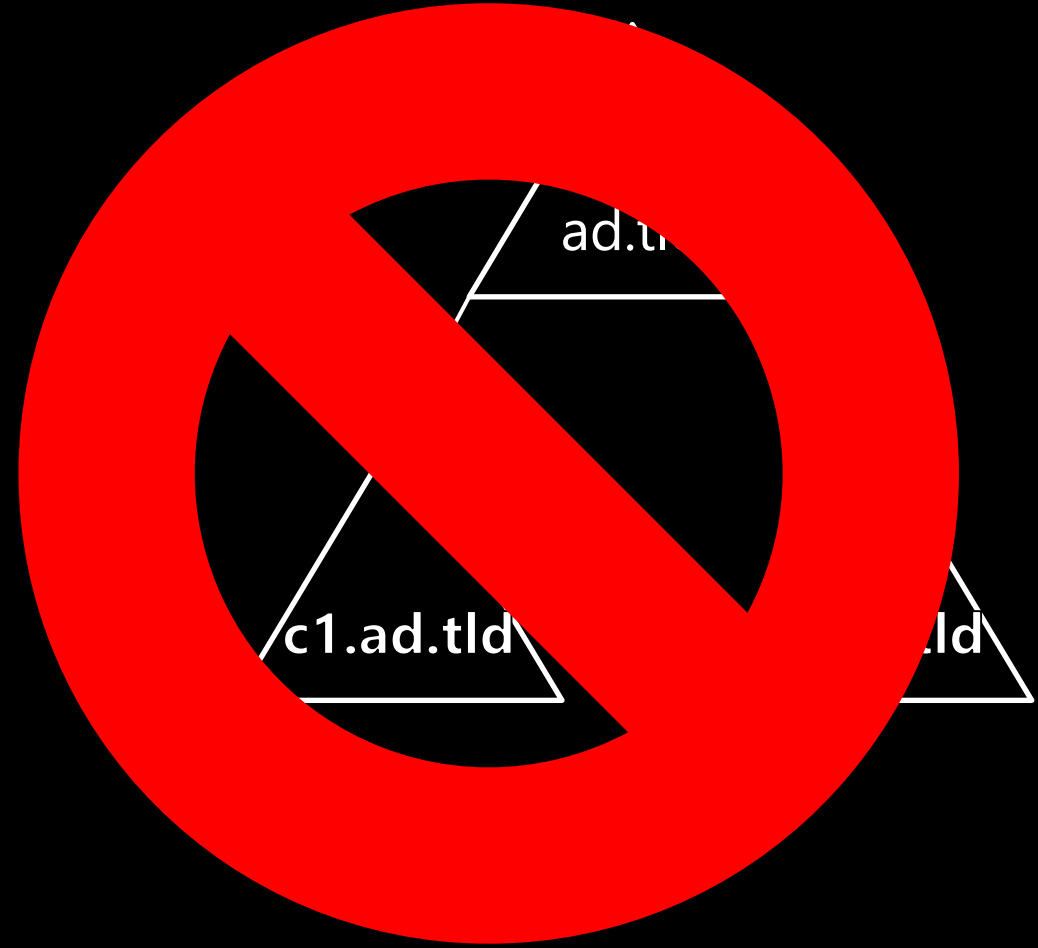
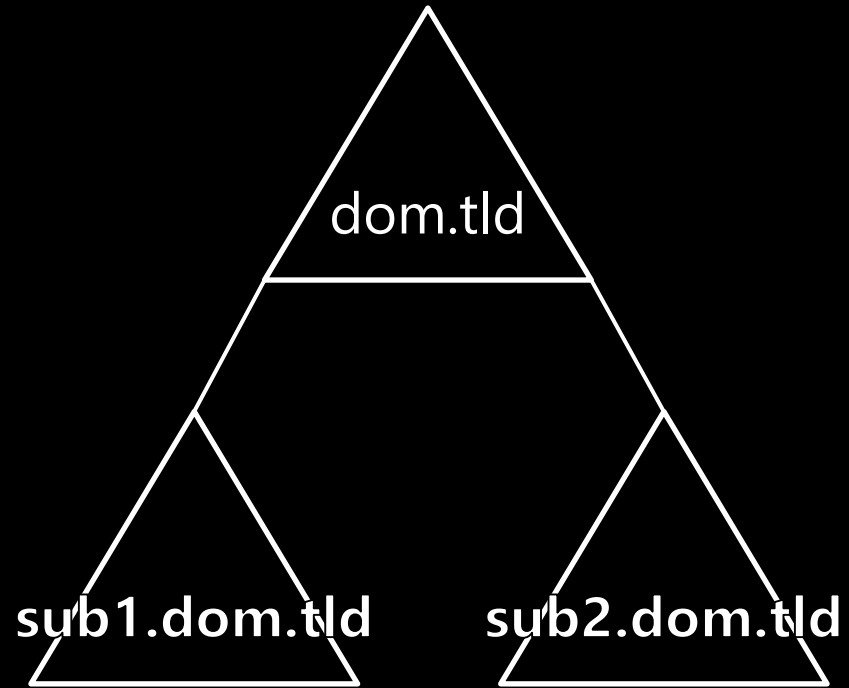
The Single Truth



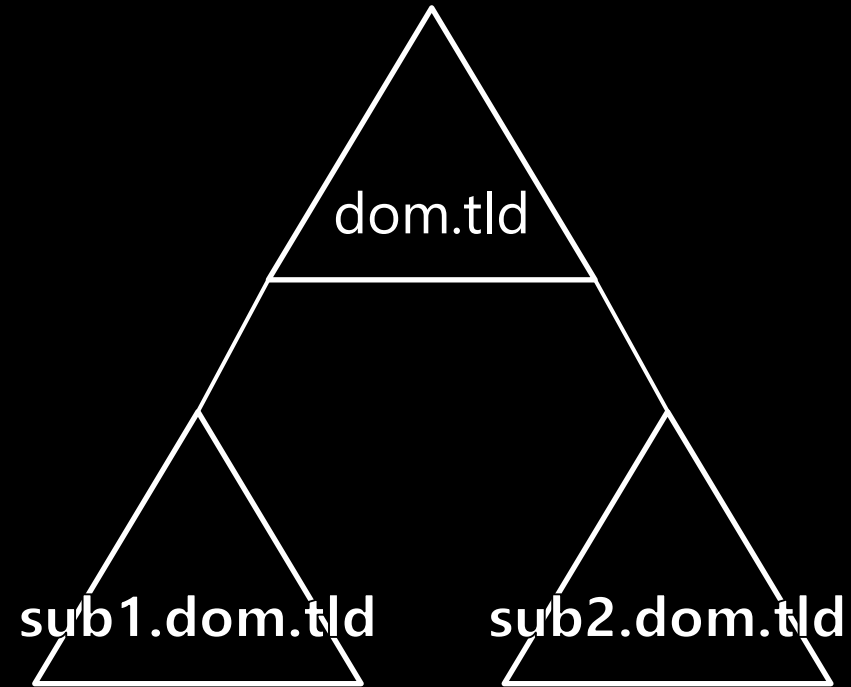
The Single Truth



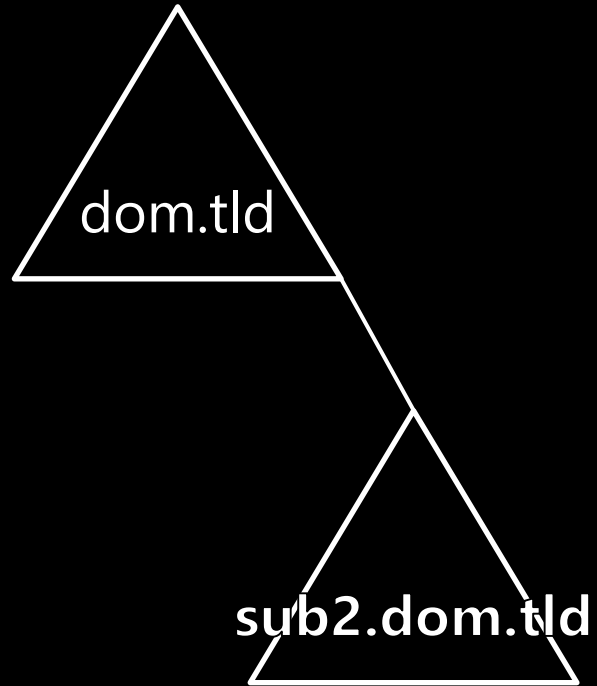
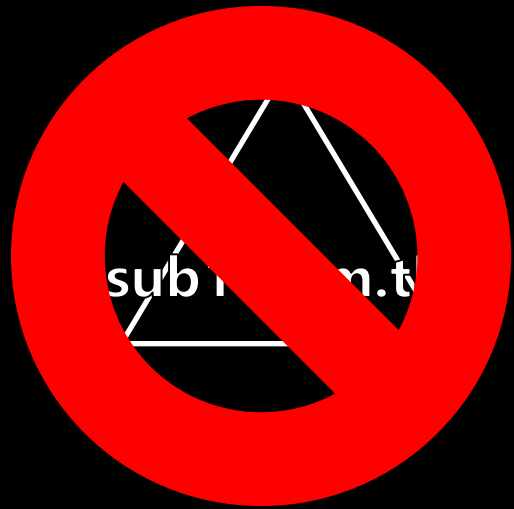
The Single Truth



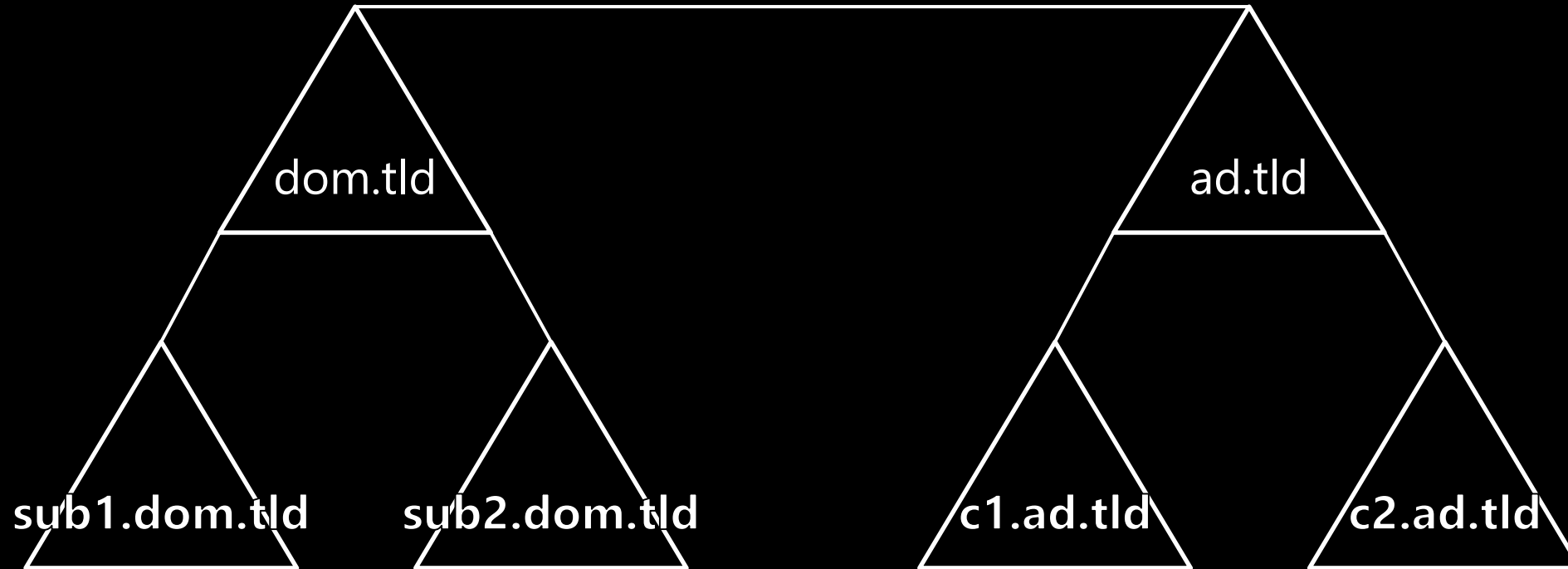
The Single Truth



The Single Truth



The Single Truth



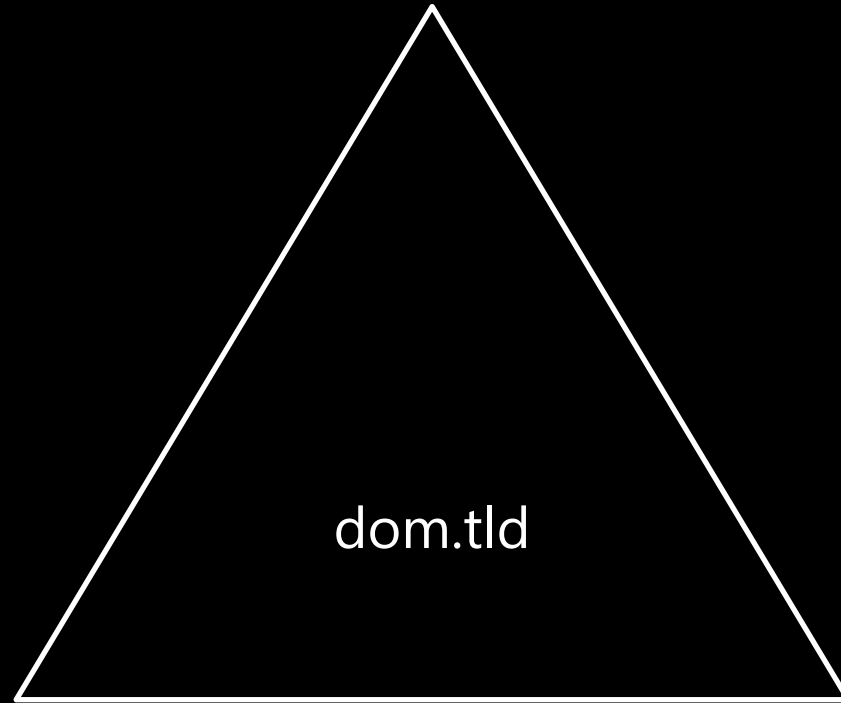
The Single Truth



The Single Truth



The Single Truth



OU-Struktur $\neq$ Organigramm



Administration



dezentral



zentral



Service-Konten



dezentral



zentral



Server



<Typ 1>



<Typ 2>



Benutzer



<Typ 1>



<Typ 2>



Gruppen



organisatorisch



Berechtigungen



Clients



<Typ 1>



<Typ 2>

- Administration
 - dezentral
 - zentral

- Service-Konten
 - dezentral
 - zentral

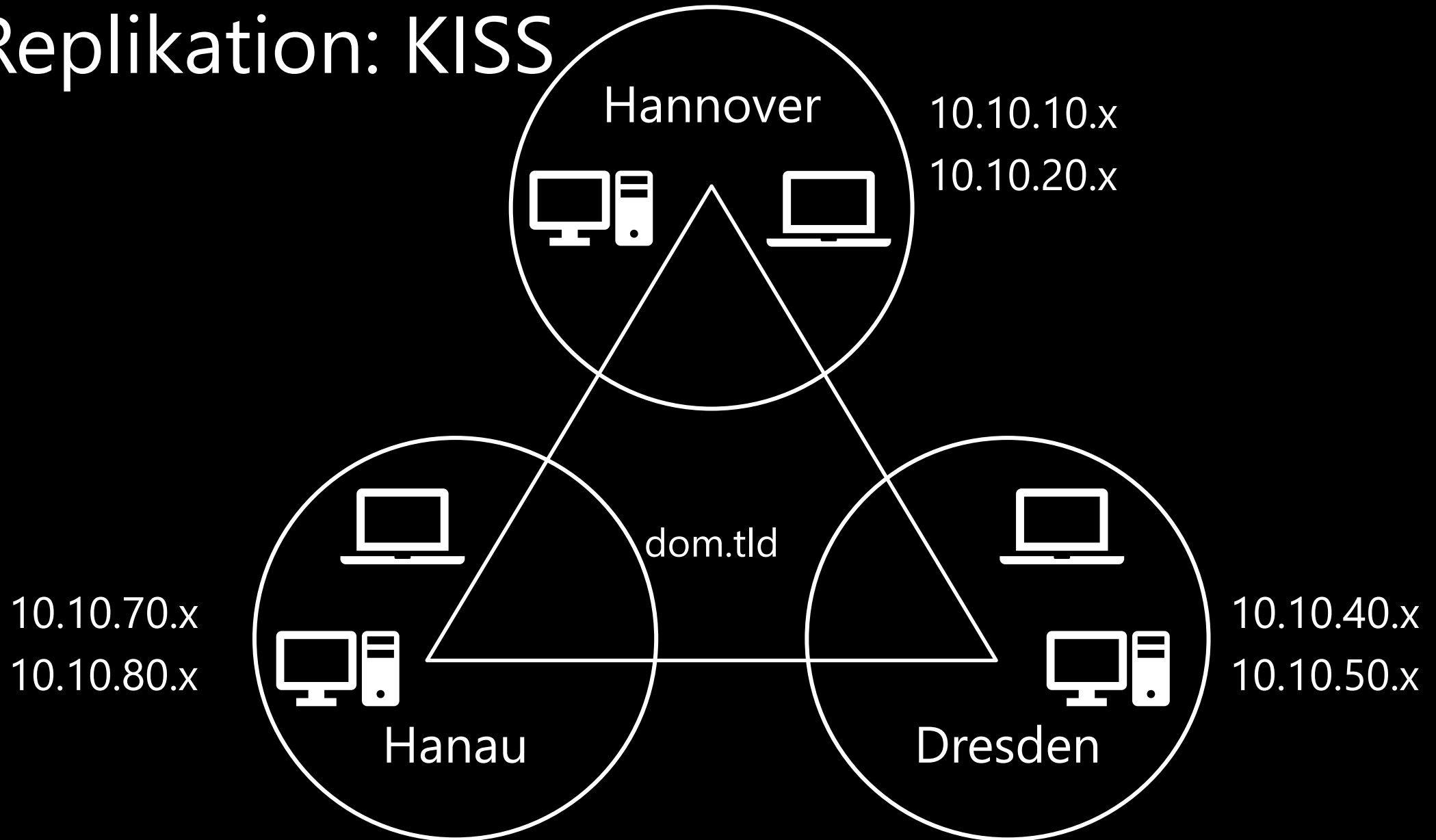
- Server
 -  <Typ 1>
 -  <Typ 2>

- Benutzer
 - <Typ 1> 
 - <Typ 2> 

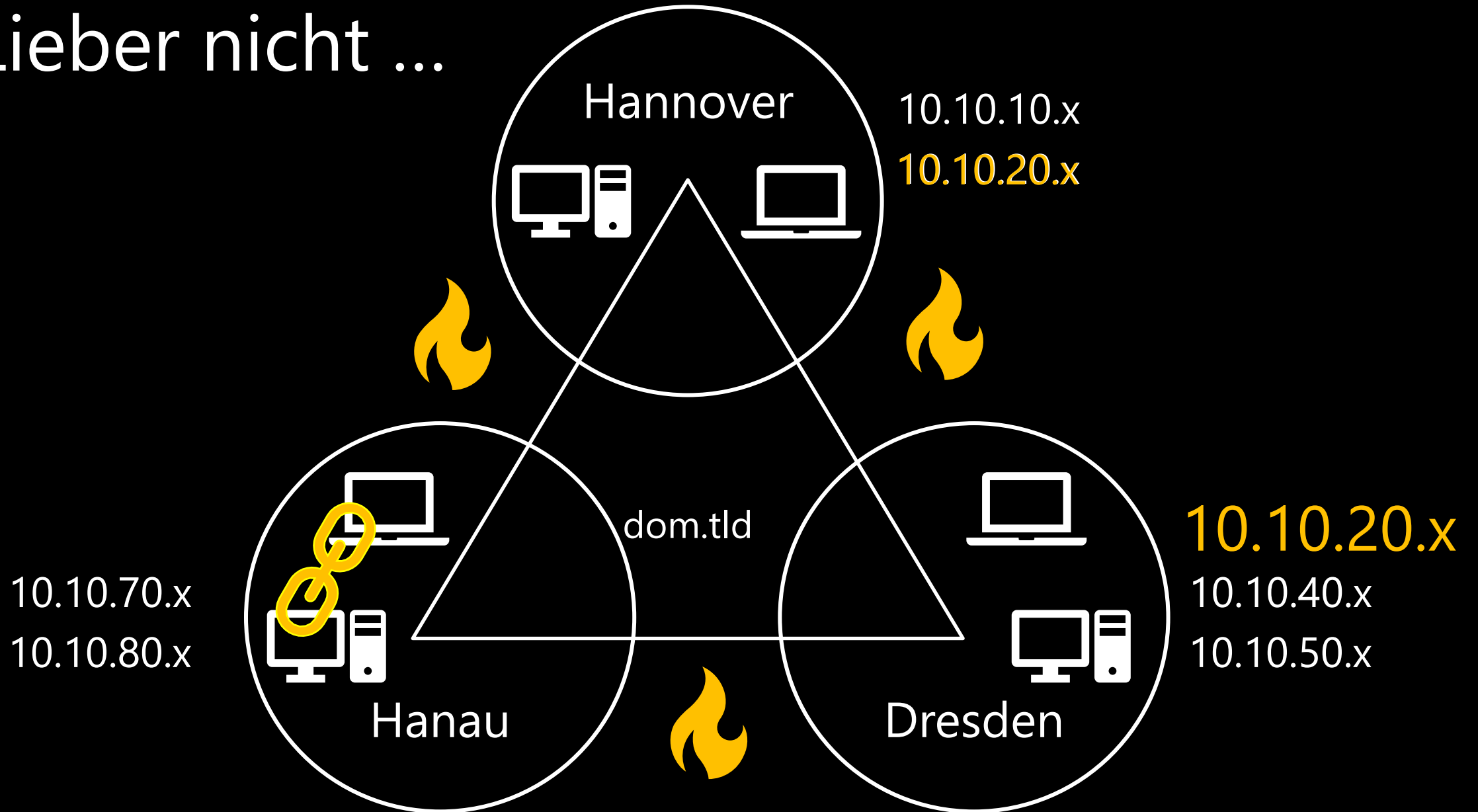
- Gruppen
 - organisatorisch 
 - Berechtigungen 

- Clients
 -  <Typ 1>
 -  <Typ 2>

Replikation: KISS

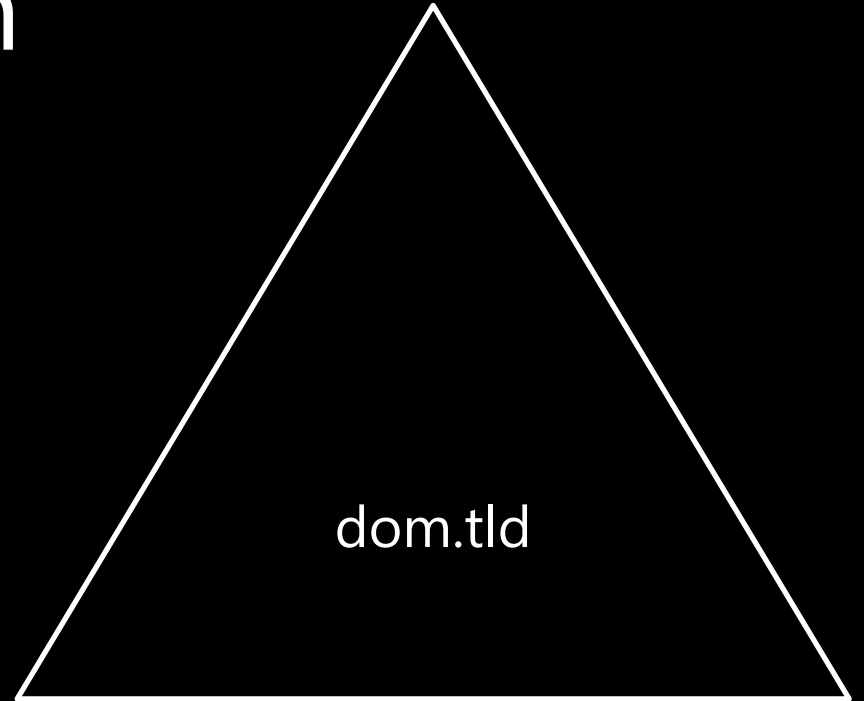
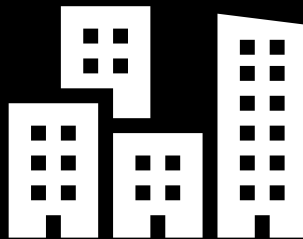
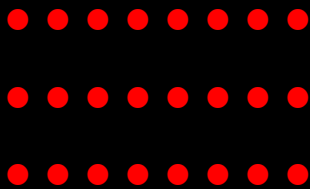
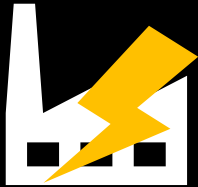


Lieber nicht ...



Sicherheit: Angriffe sind normal

Funktioniert seit 20 Jahren



 Administrator: C:\Windows\system32\cmd.exe

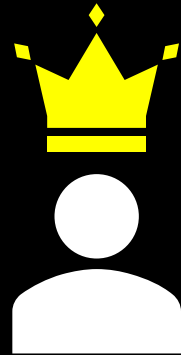
C:\Users\Administrator>net accounts /domain

Abmelden erzwingen nach:	Nie
Minimales Kennwortalter (Tage):	0
Maximales Kennwortalter (Tage):	Unbegrenzt
Minimale Kennwortlänge:	7
Länge der Kennwortchronik:	Keine
Sperrschwelle:	5
Sperrdauer (Minuten):	30
Sperrüberprüfungsfenster (Minuten):	30
Rolle des Computers:	PRIMÄR

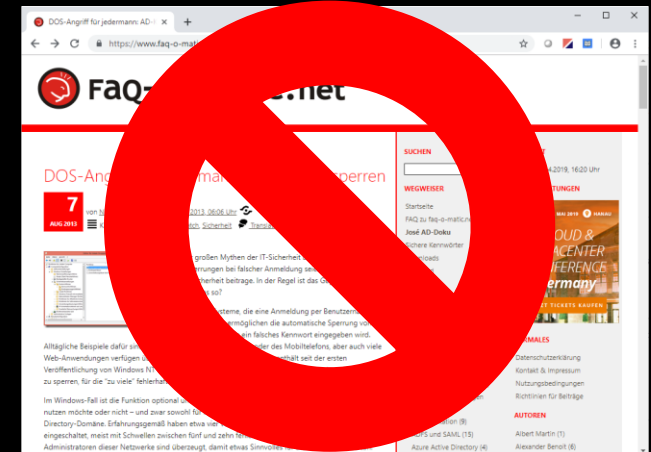
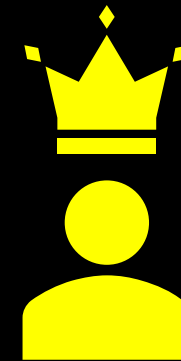
Der Befehl wurde erfolgreich ausgeführt.

C:\Users\Administrator>_

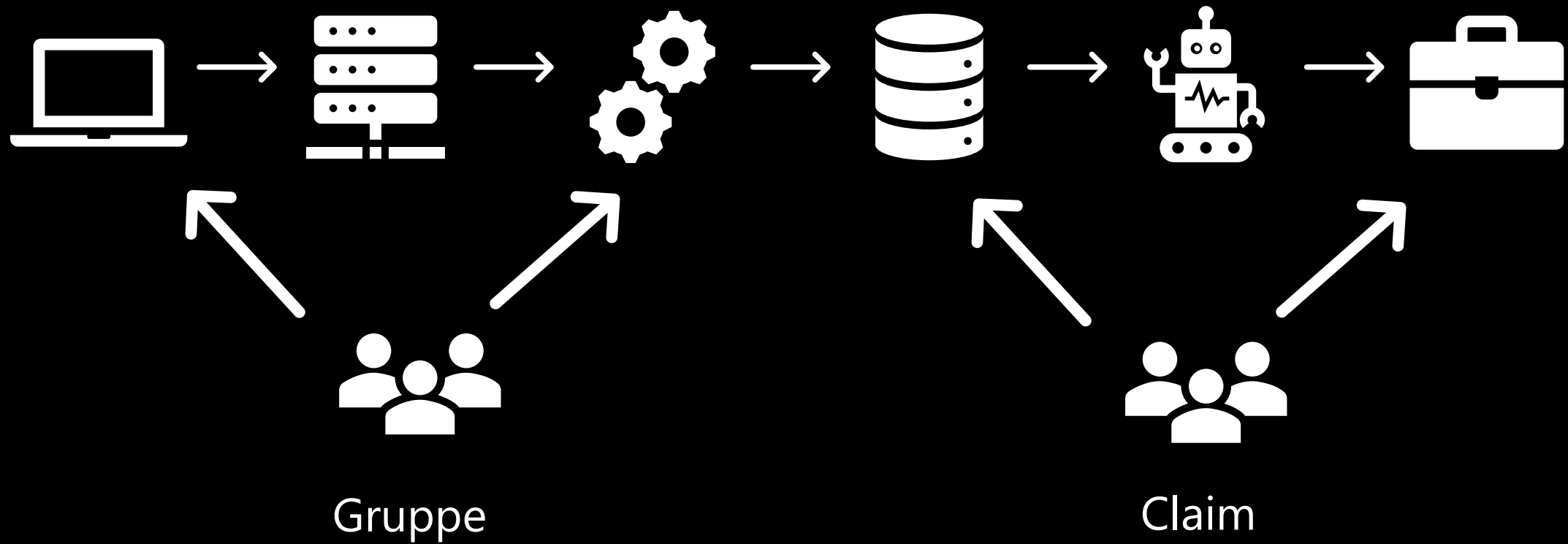
Rollen trennen



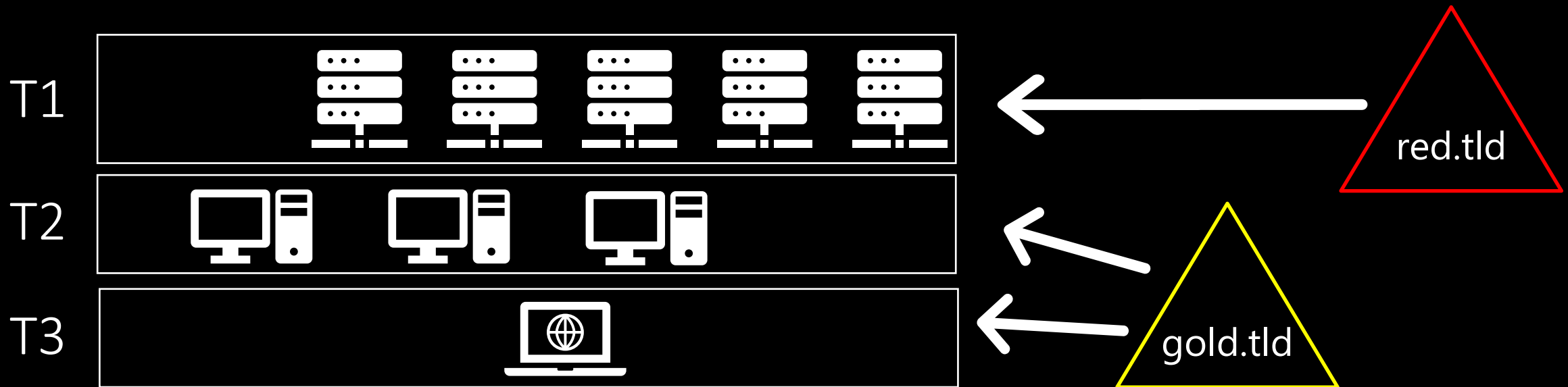
Rollen trennen



Rollen definieren



Admin Tiering: Rollen ernst gemeint

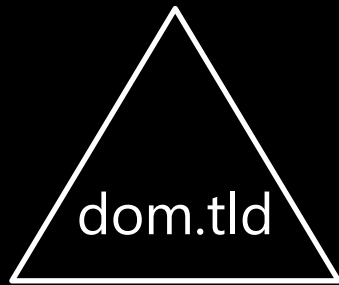


Suchbegriff: ESAE

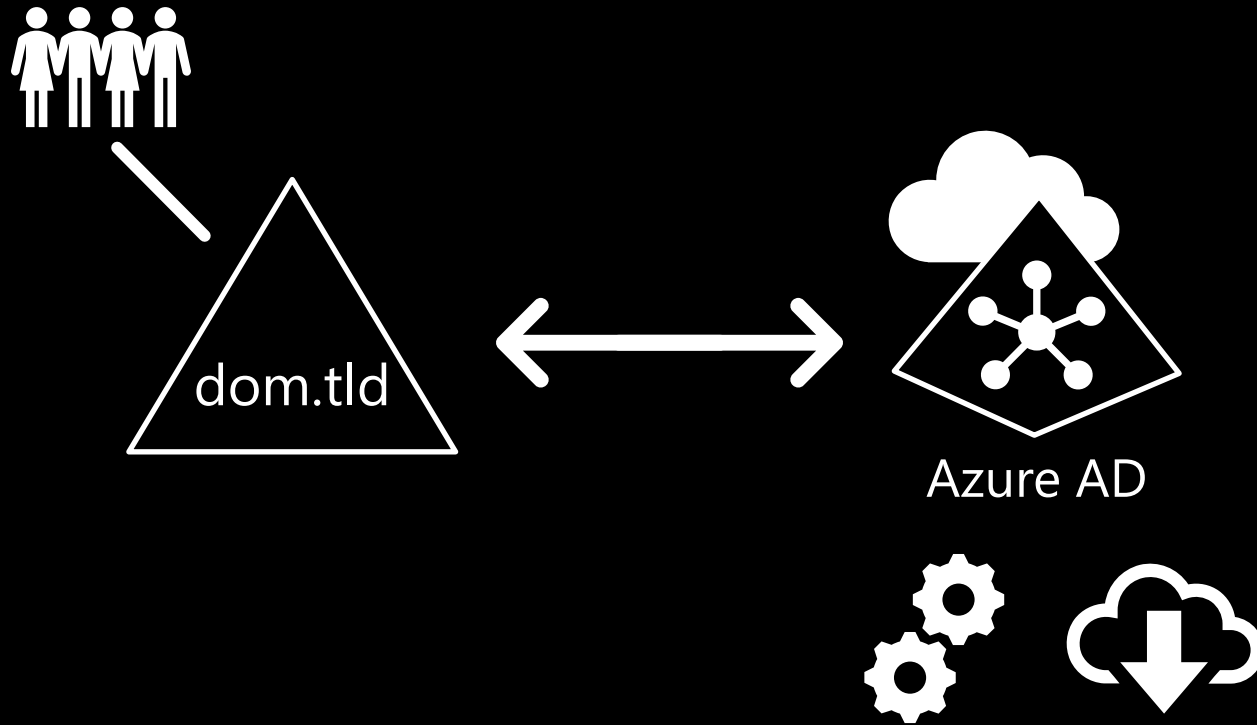
Hybrid-Design: Cloud und lokal

Identity is the new perimeter

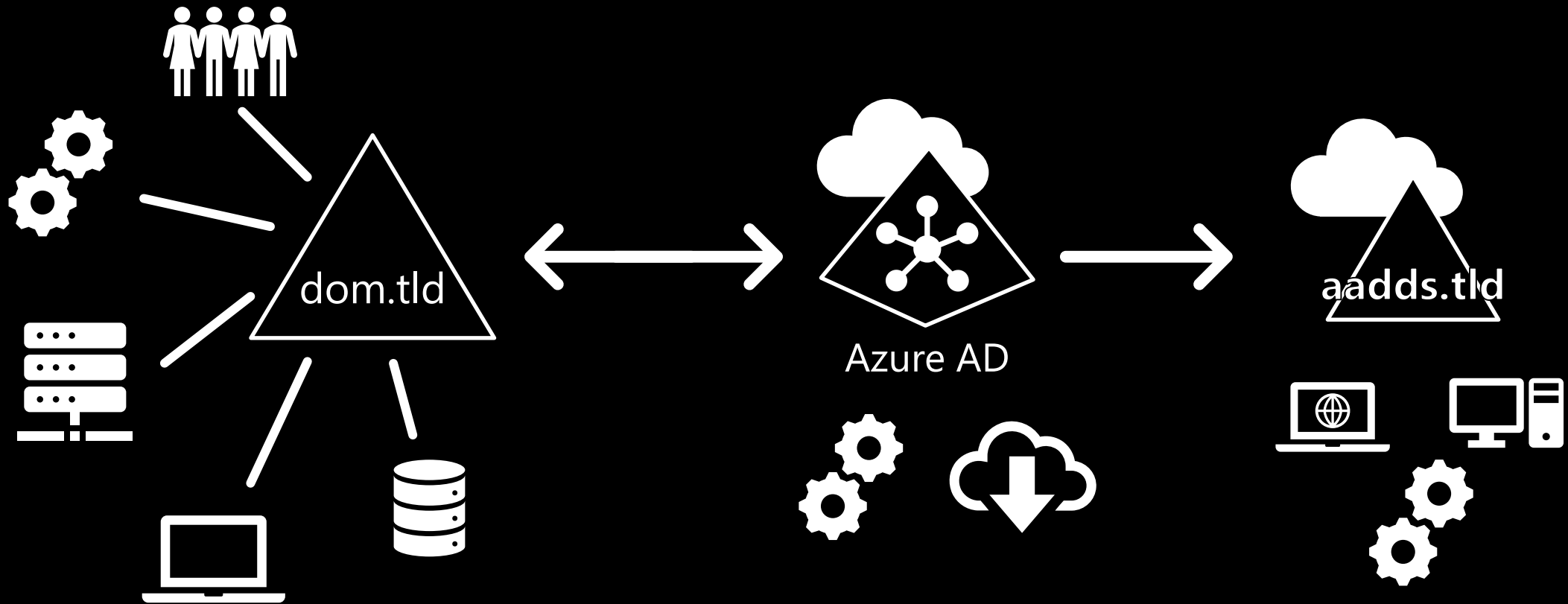
AD als lokaler Anker



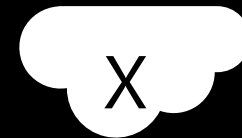
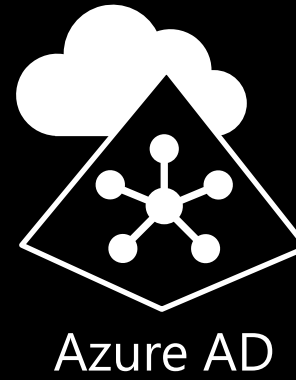
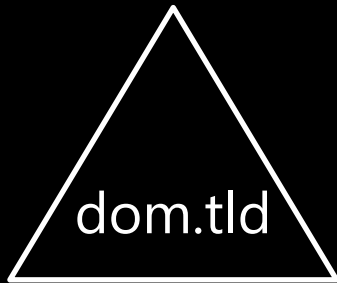
AD als lokaler Anker



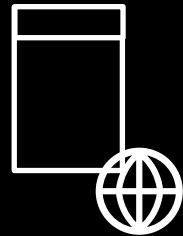
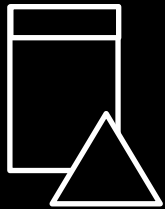
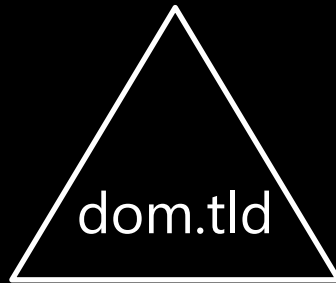
AD als lokaler Anker



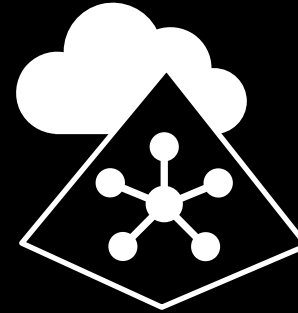
Federation



Federation

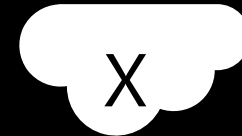


ADFS

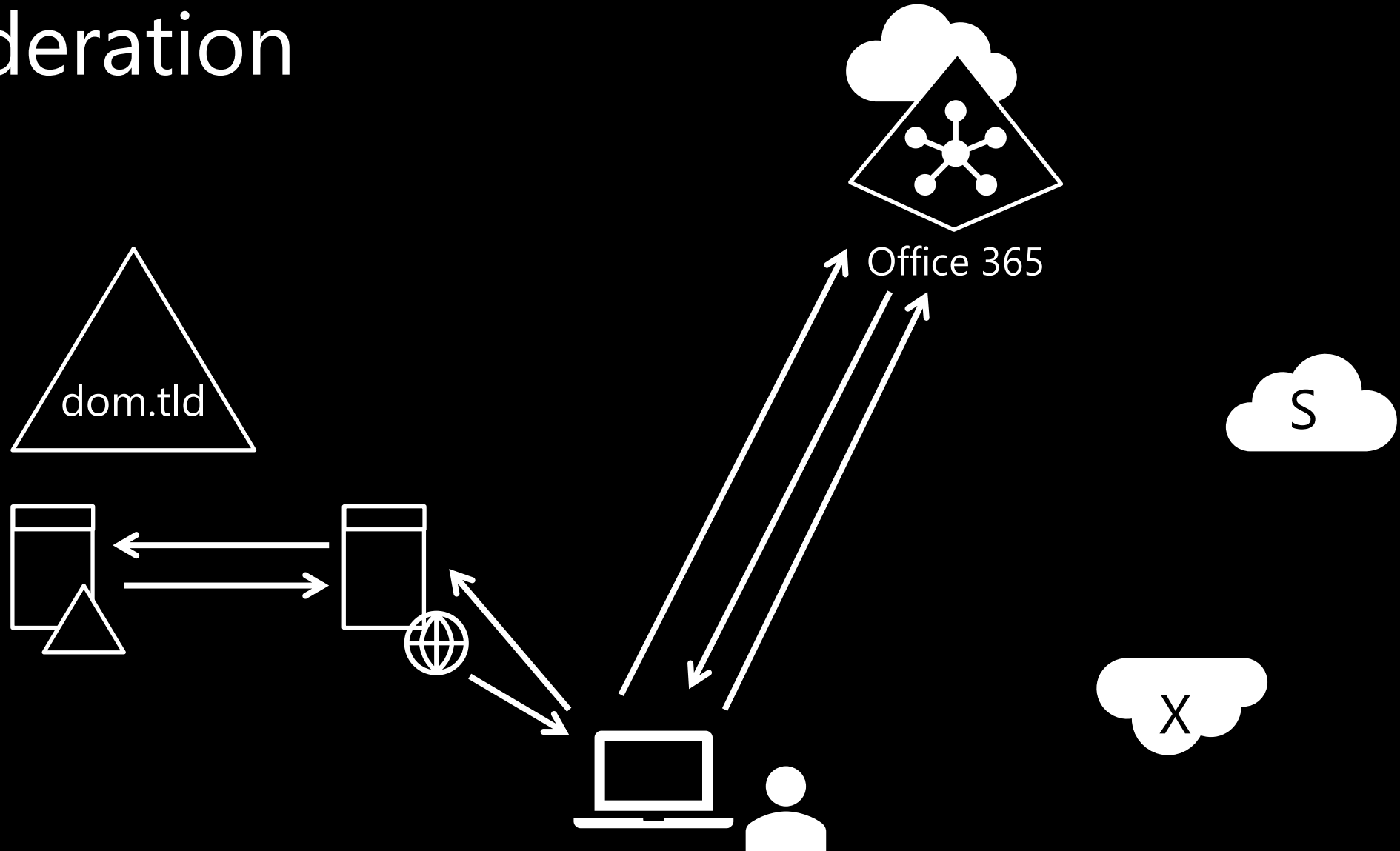


Azure AD

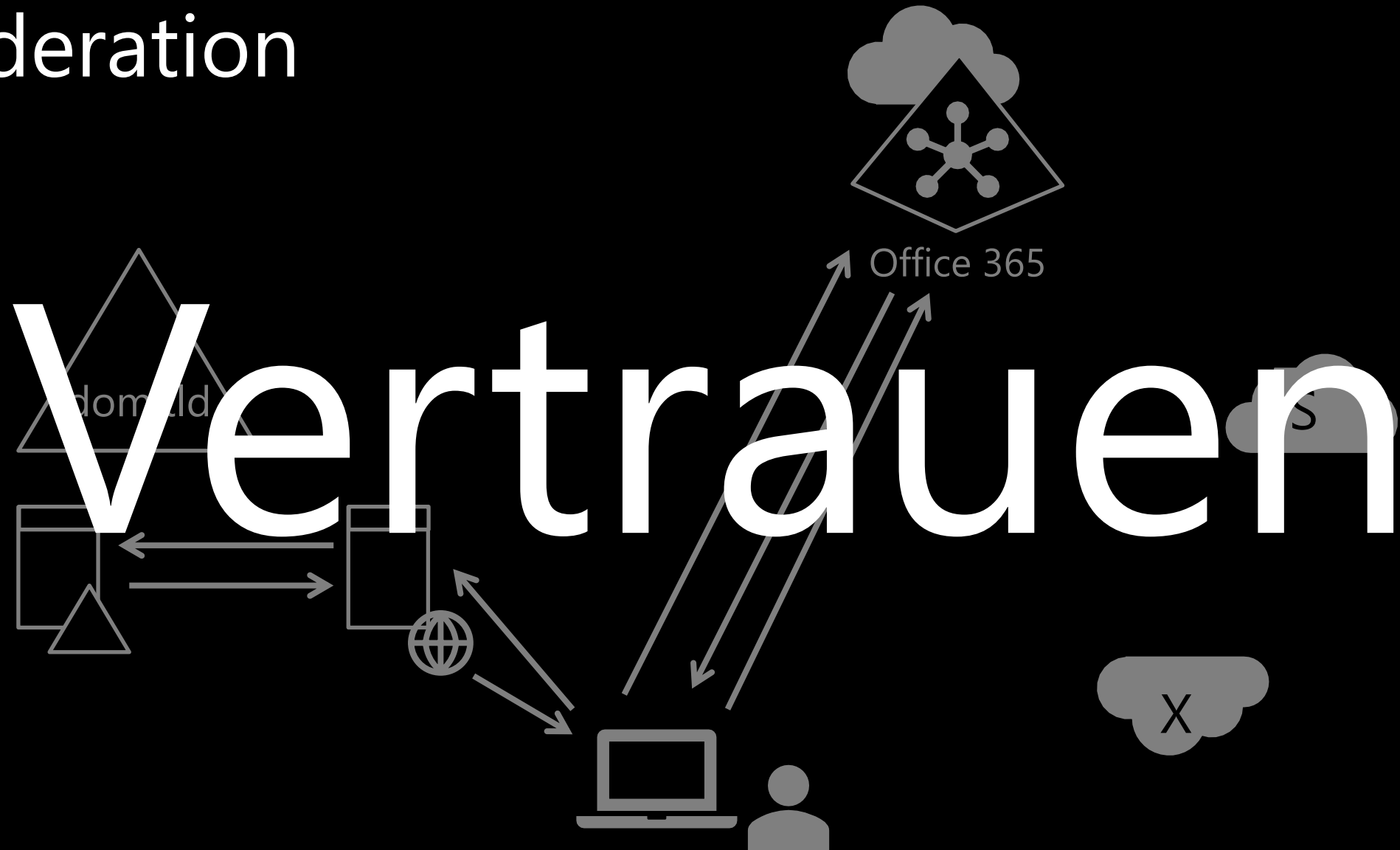
SAML
OAuth
OpenID



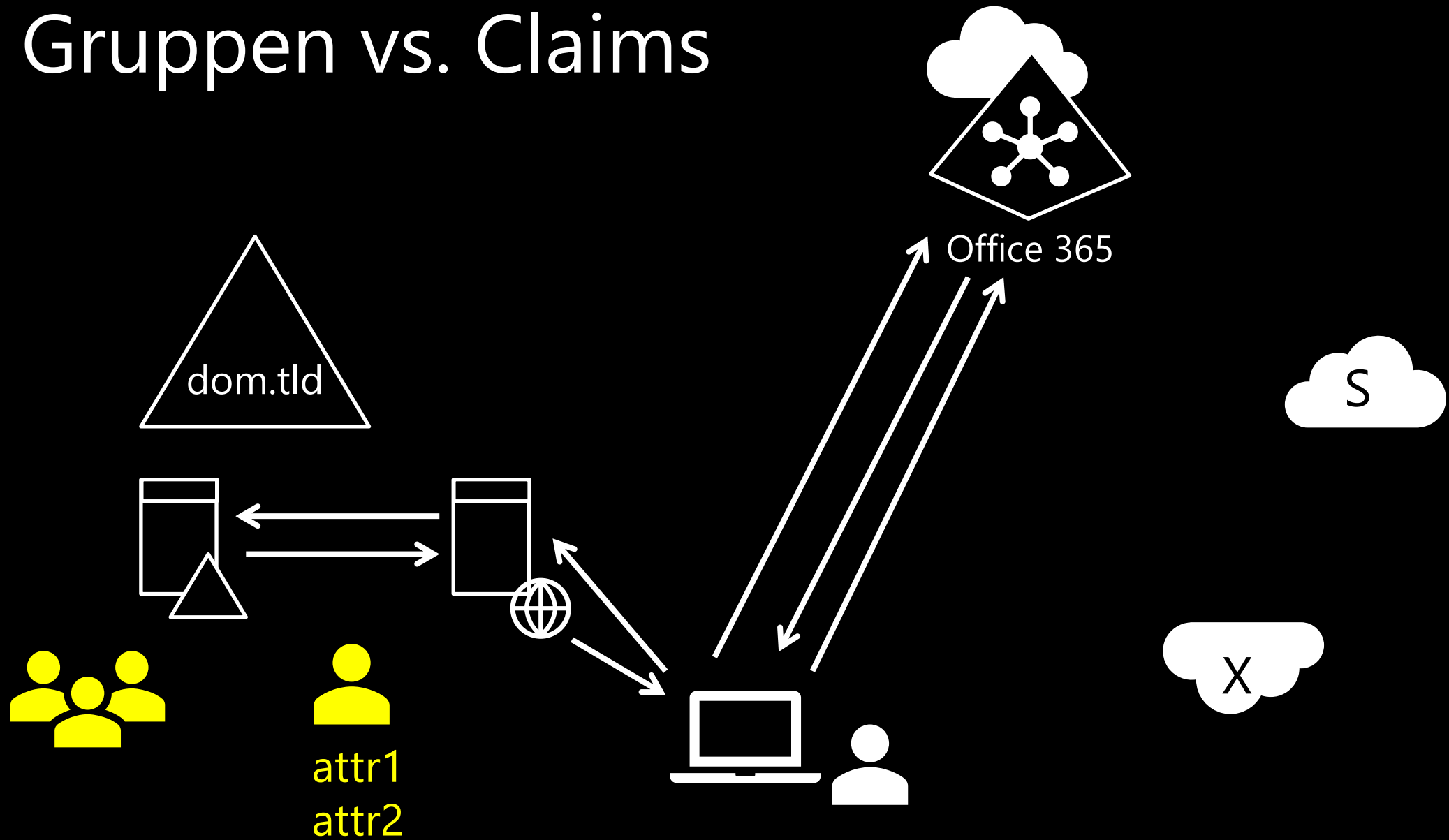
Federation



Federation



Gruppen vs. Claims



Design for change

Special: UPN für Azure-Auth

userPrincipalName

Benutzer

EllenBogen@mydomain.org

Kennwort

.....

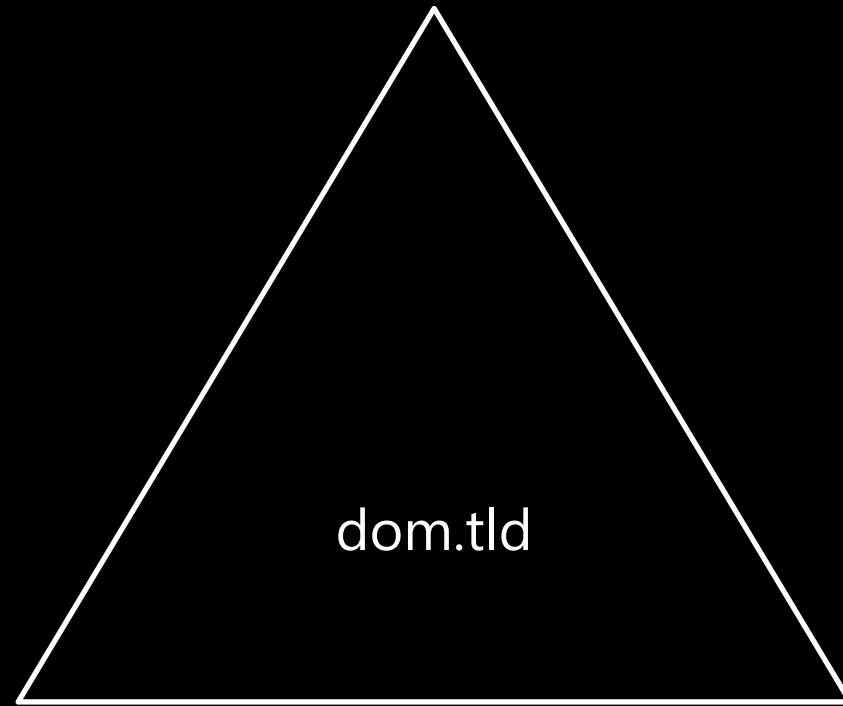


dom\EllenB

EllenB@dom.local

EllenBogen@mydomain.org

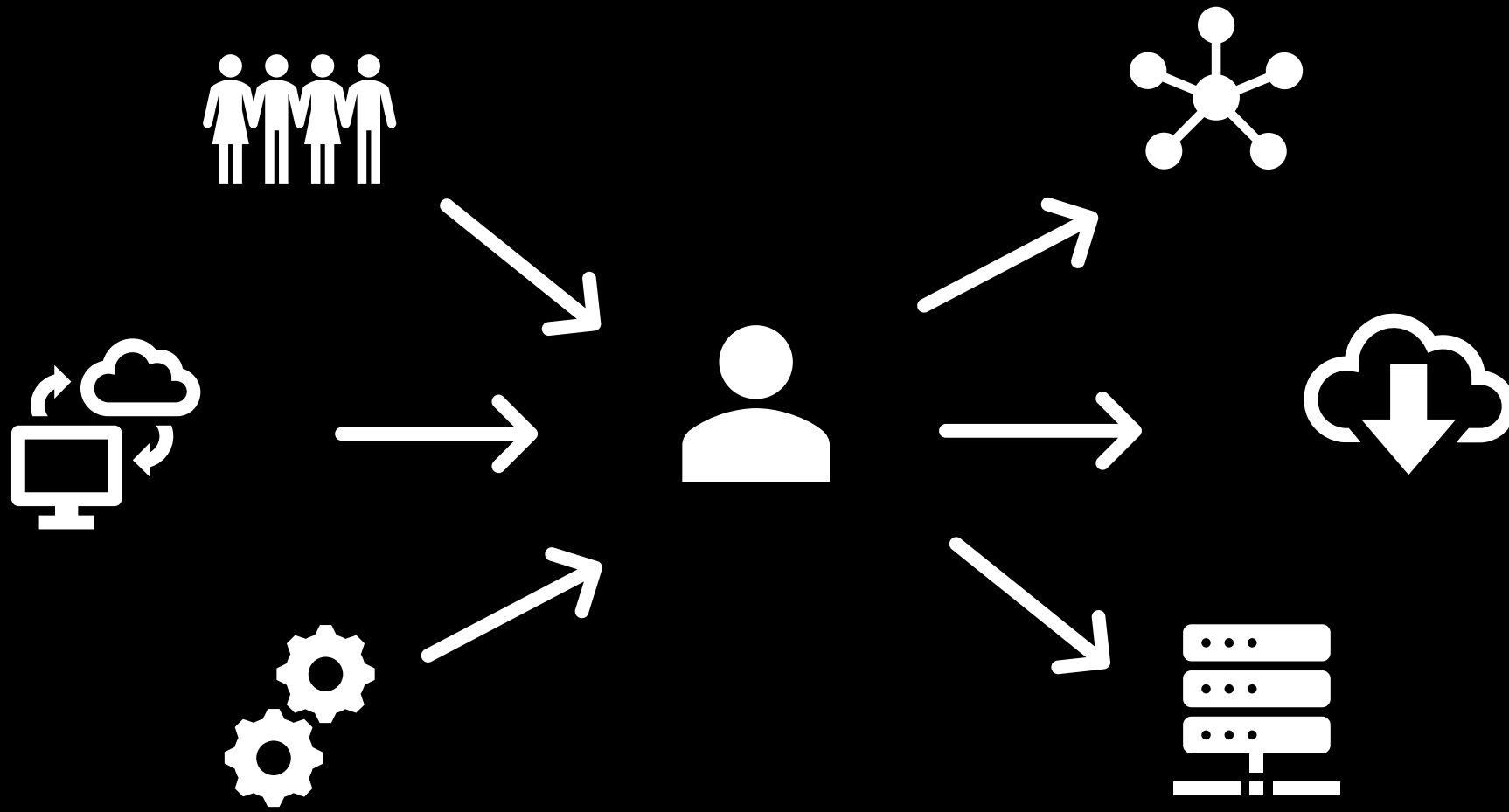
Datenpool: Teile und herrsche



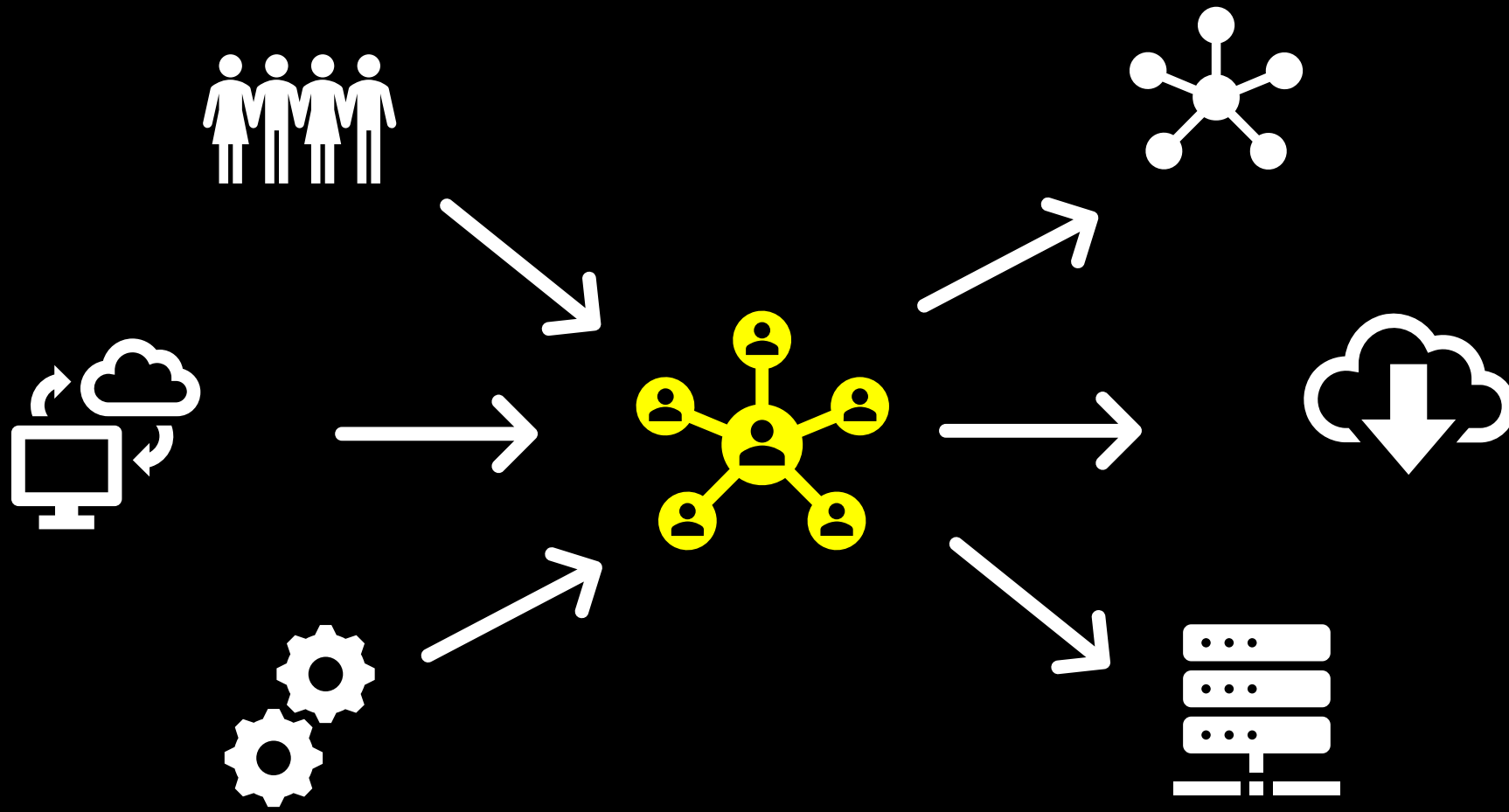
Zentraler Datenspeicher



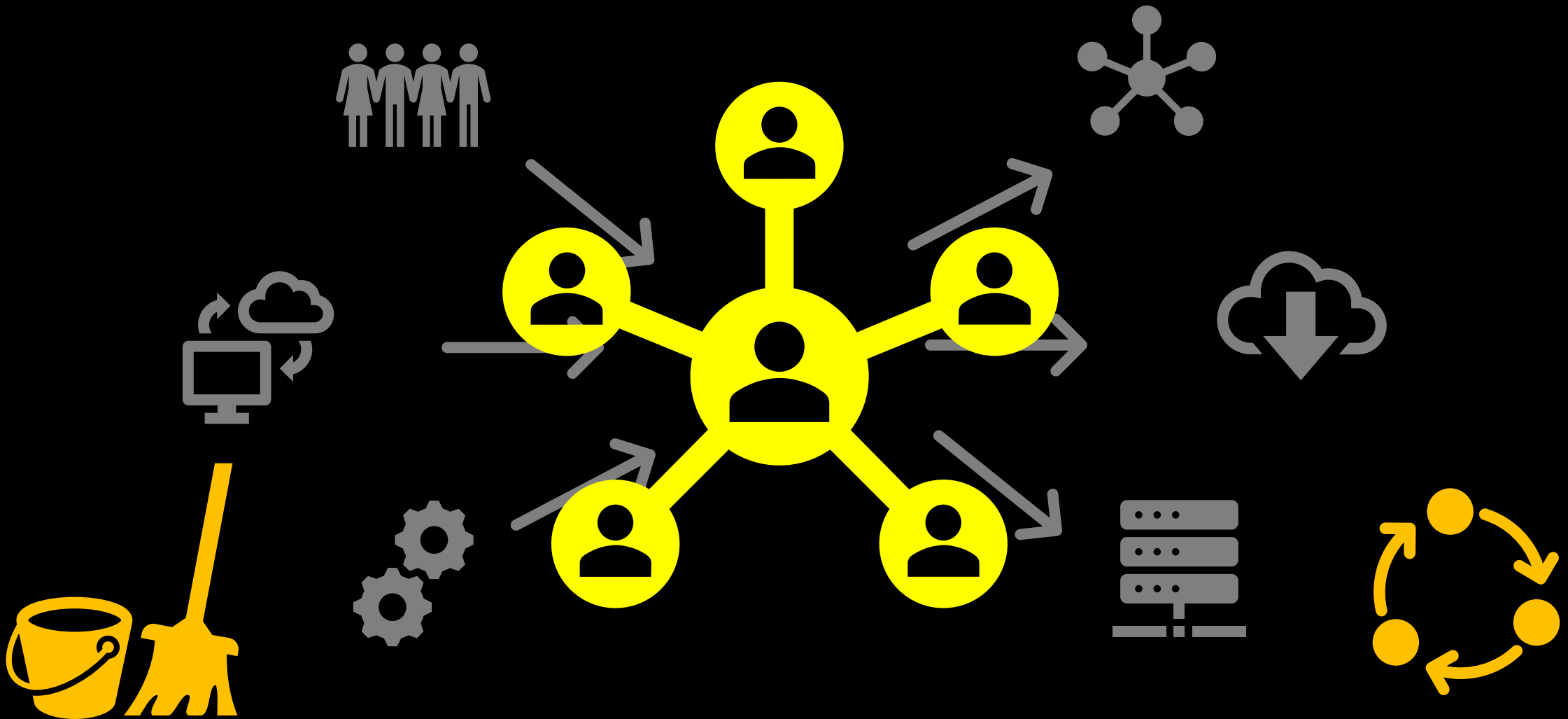
Identitätsdaten



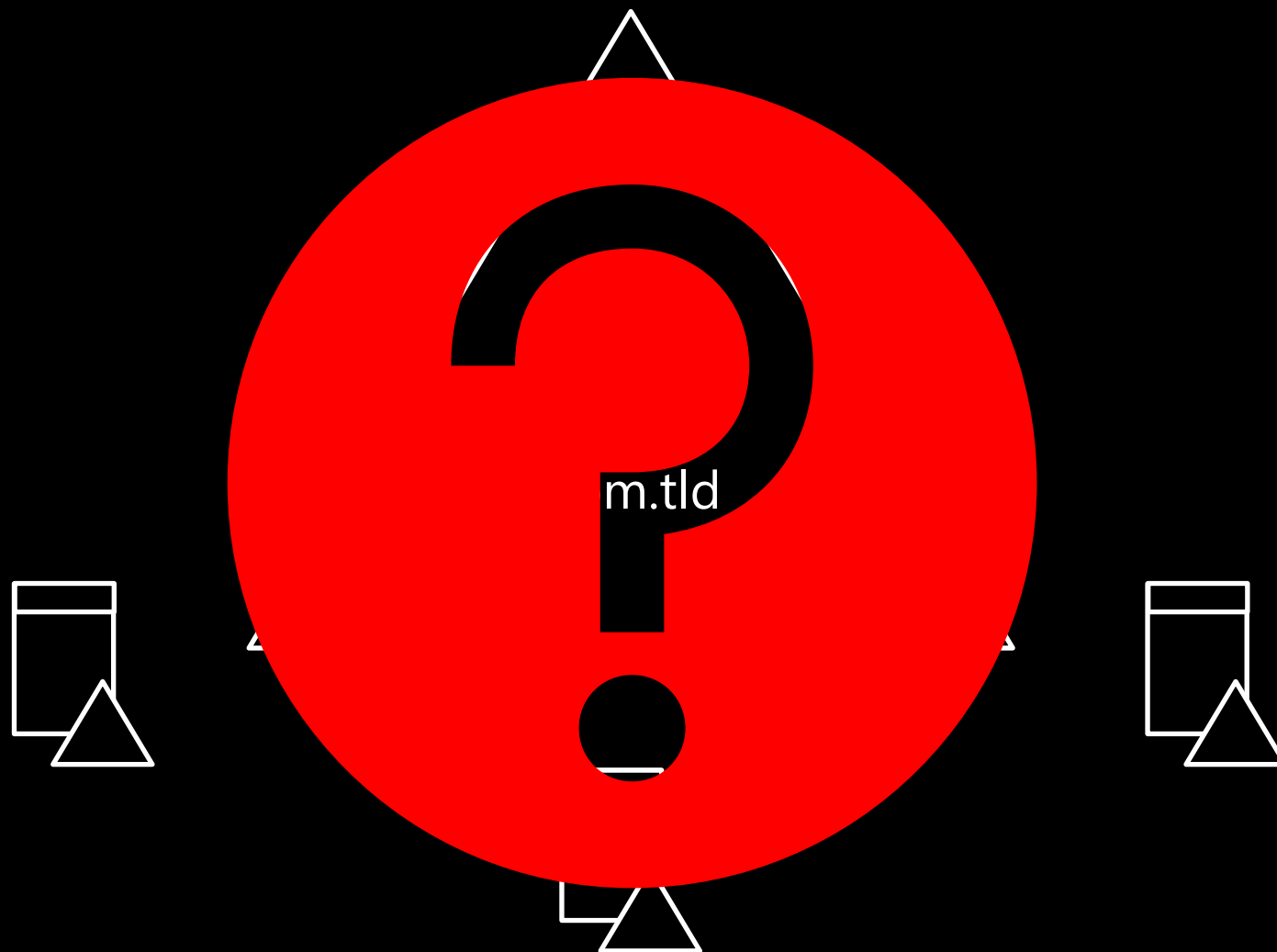
Daten-Drehscheibe

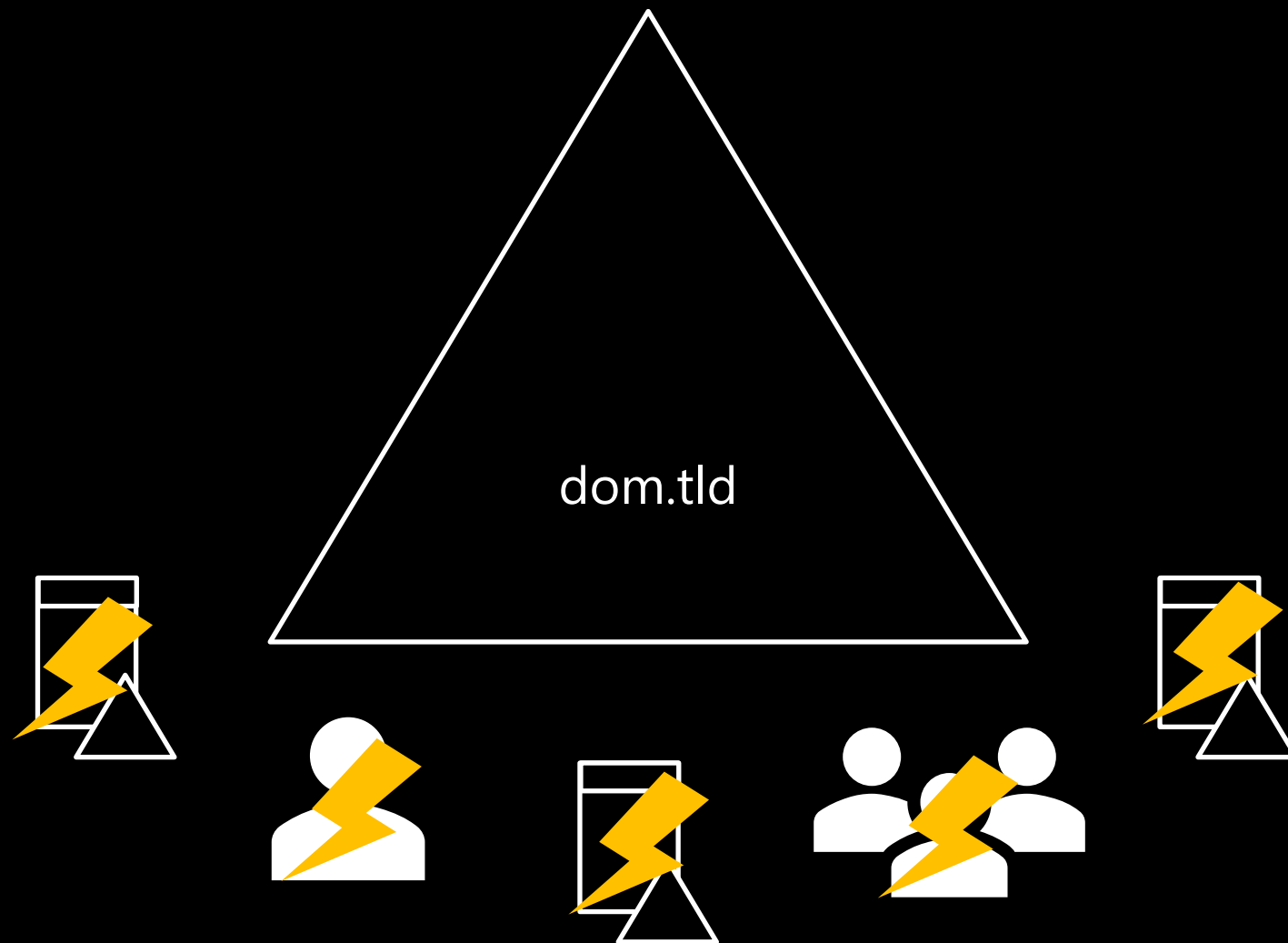


Daten-Drehscheibe

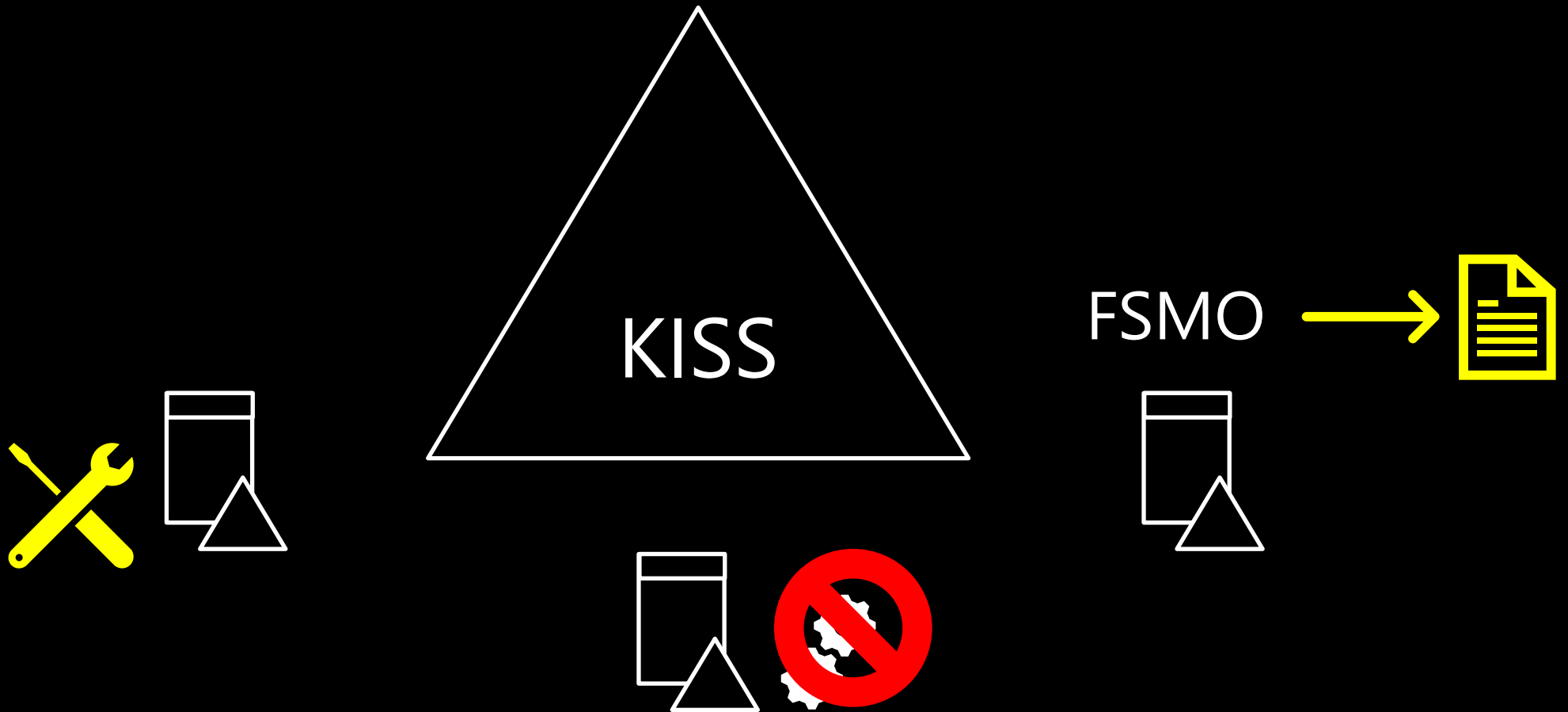


Notfall: Von hinten gedacht

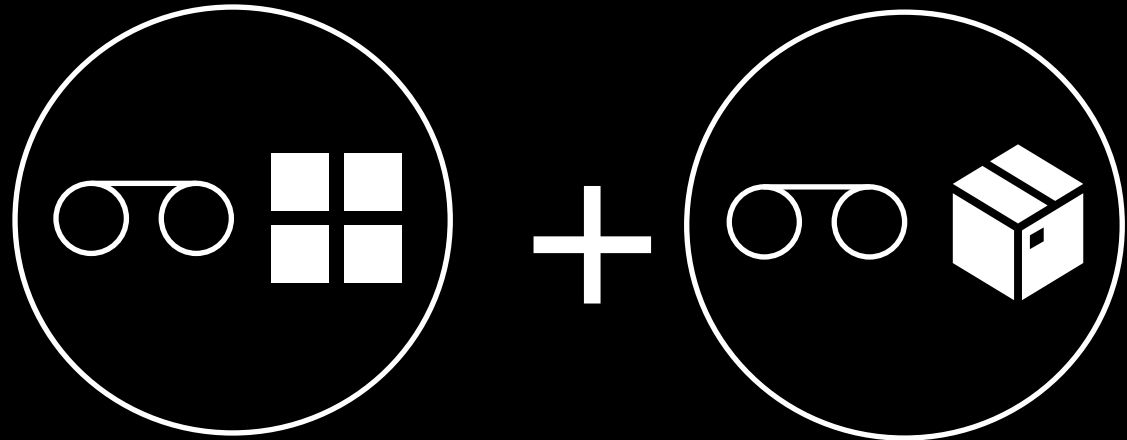
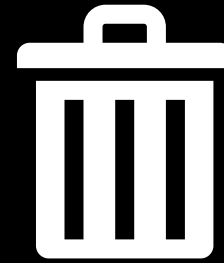
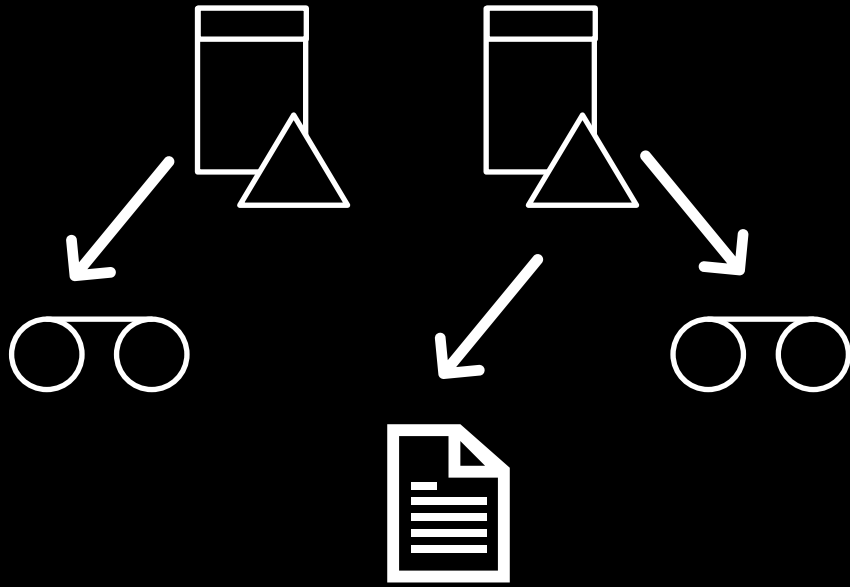




Das Design verhindert den Notfall



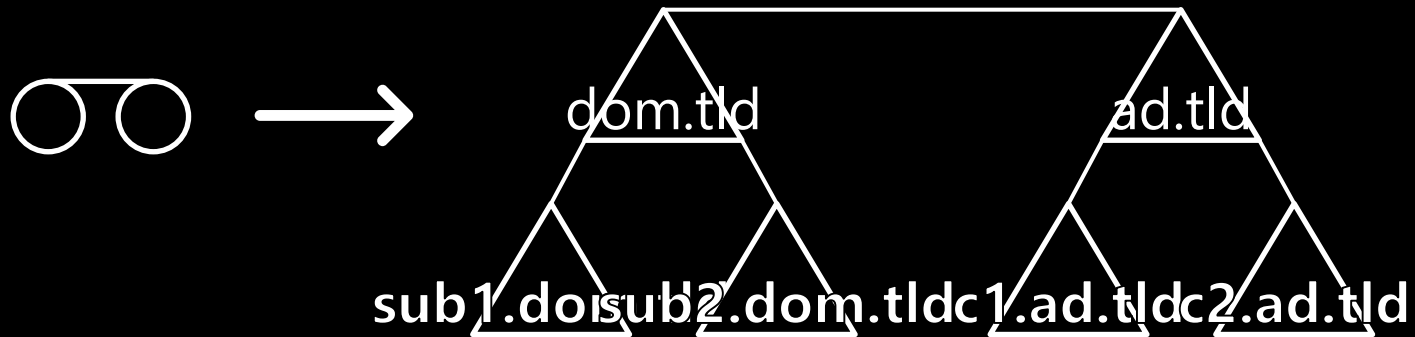
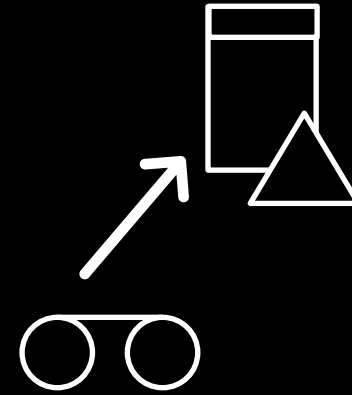
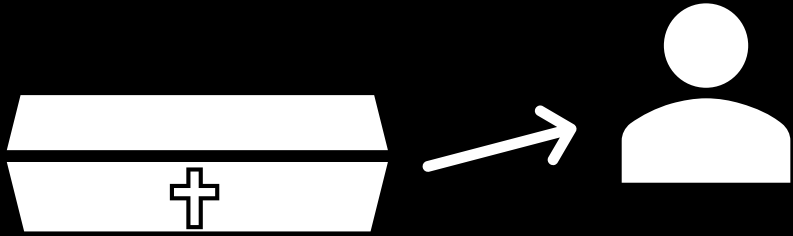
Cheat Sheet: AD-Backup



Cheat Sheet Cheat Sheet

- min. 2 DCs pro Domäne sichern
- Textexport aller Objekte bei jedem Backup
 - `csvde -f C:\AD\exp.txt -u -l sAMAccountName,objectClass,description`
- AD-Papierkorb aktivieren
- min. 1 Backup mit Windows Server Backup (Systemstate)
- Andere Produkte nur als Ergänzung

Üben. Ernsthaft.



Zum Mitnehmen

- 1 Design: Fundament für Identitäten
 - AD-Design prüfen: Einfach genug?
 - Objektorientiert aufbauen
- 2 Sicherheit: Angriffe sind normal
 - Rollen trennen
 - Red Forest Design
- 3 Hybrid-Design: Cloud und lokal
 - AD ist der Identitäts-Anker
 - Namensräume planen
- 4 Datenpool: Teile und herrsche
 - Alle Daten an ihrem Platz
 - Datenverteilung steuern
- 5 Notfall: Von hinten gedacht
 - Das Design verhindert den Notfall
 - Recovery üben