HYBRID IDENTITY PROTECTION conf25

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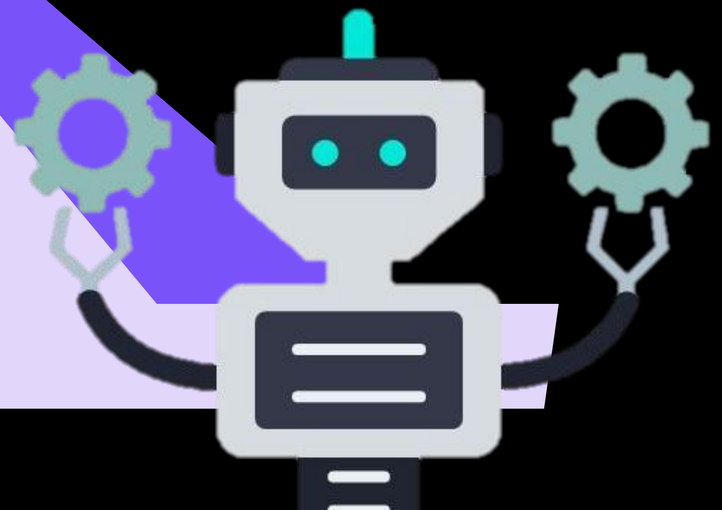
Almost Human: How to Protect Machine Identities



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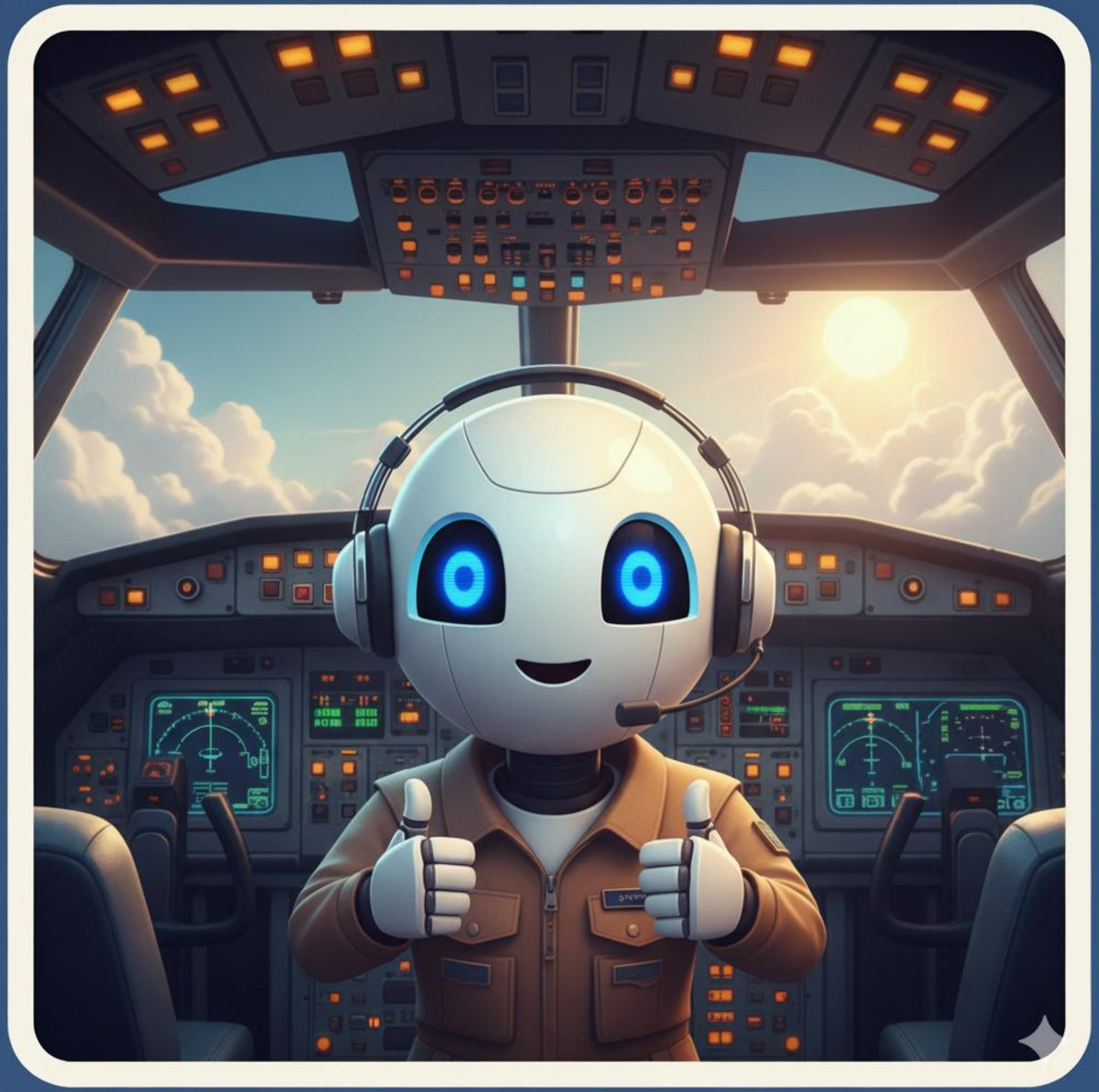
Tim Wolf

Semperis

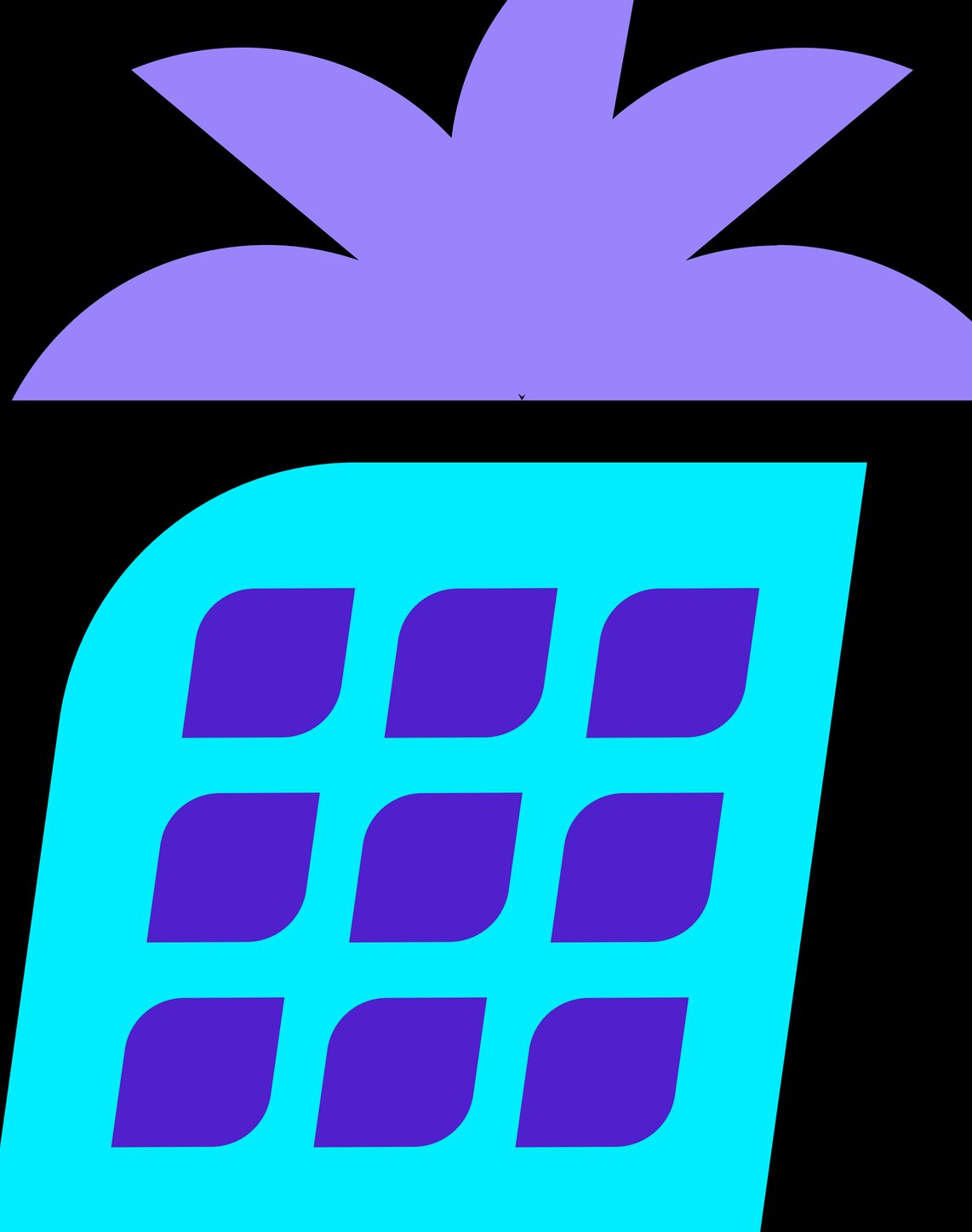
Senior Solution Architect

- Germany
- Ex-MSFT (PFE)
- LinkedIn
- www.azurehero.de



Agenda

- AI is outrunning us
- What is a non-human identity?
- How they attack
- How to detect them
- Takeaway



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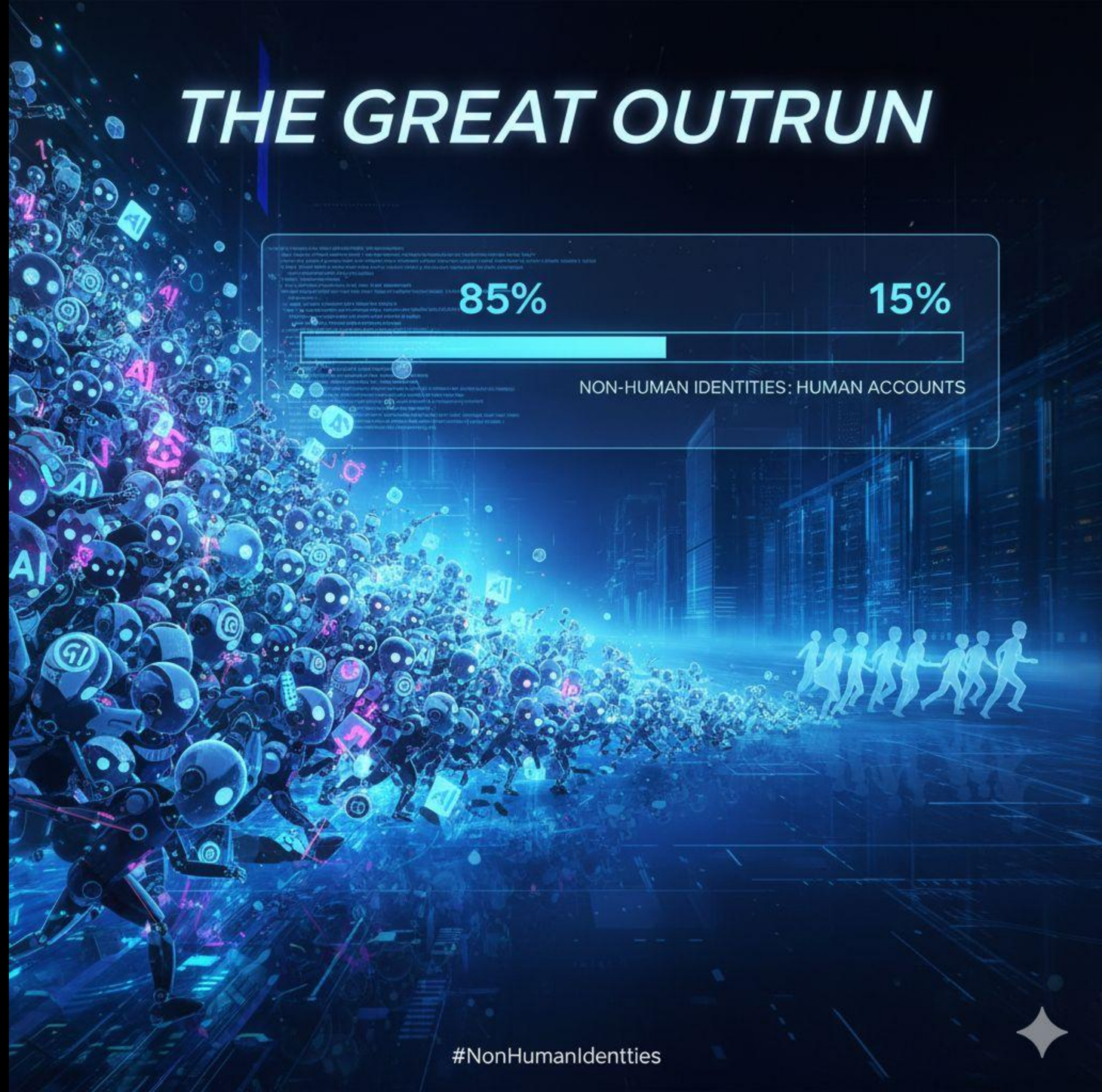
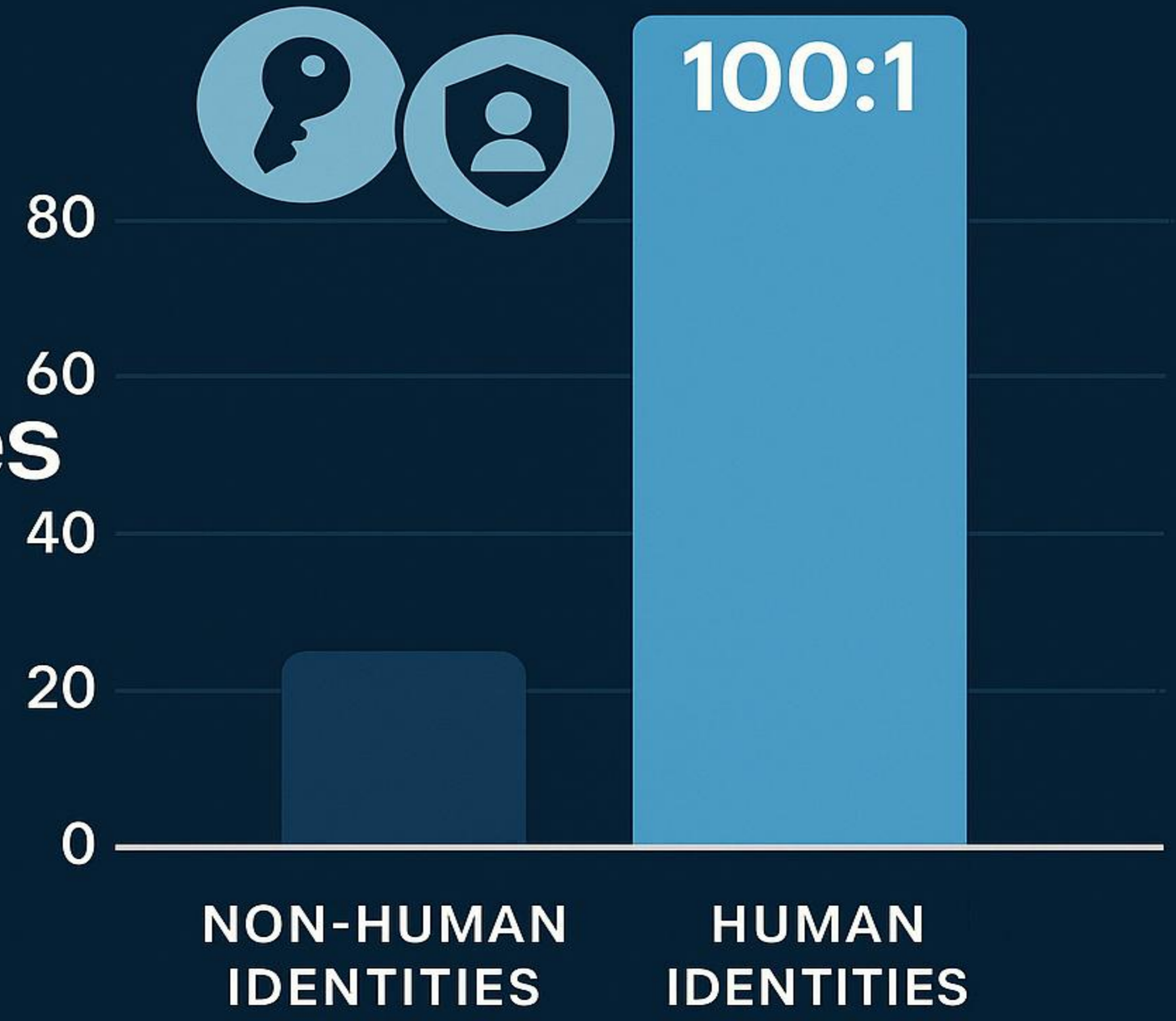
AI is outrunning us



Non-Human Identities Increasing as 2026 Approaches

API keys, service accounts, and cloud tokens expected to surpass human identities by a ratio of 100 to 1 in businesses



CyberArc Security Report 2025

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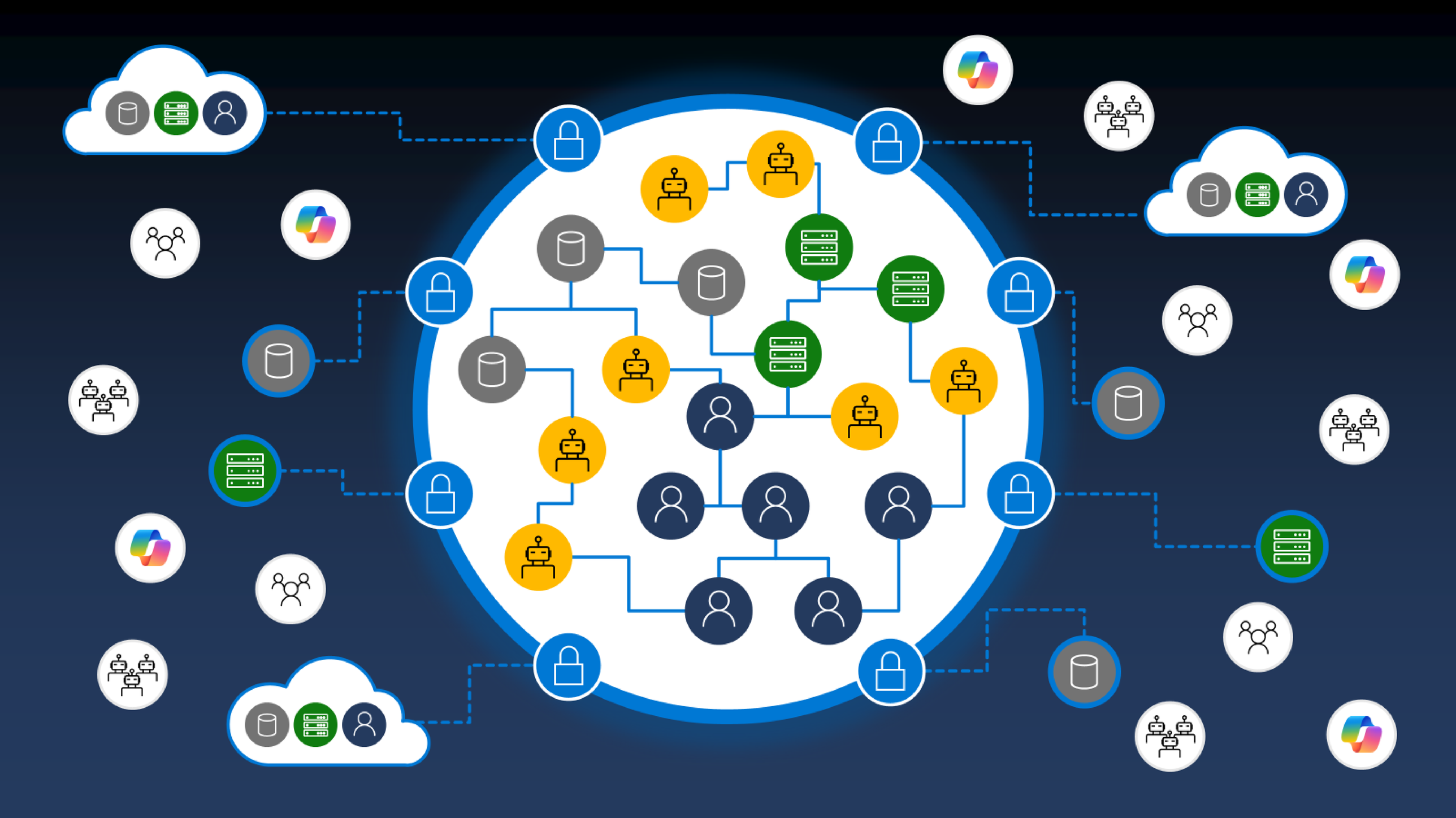
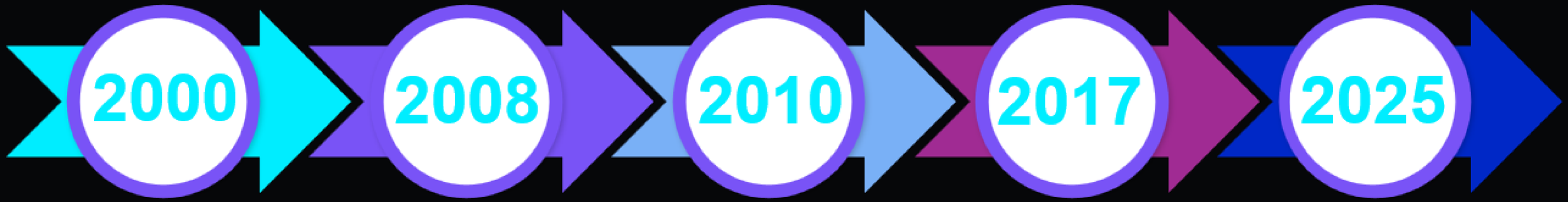
What is a Non-Human Identity



Different Types of Non-Human Identities



Tech User

MSA / gMSA

Enterprise Apps
App Registrations

Managed Identity

dMSA

User	NHI
MFA	Maybe a Trust Relationship?
Lifecycle	Maybe Exist Forever?
Least-Privilege	Maybe Directory.ReadWrite.ALL?
Governance	Maybe an Owner?

User	NHI
MFA	No Credentials
Lifecycle	Lifecycle
Least-Privilege	Least-Privilege
Governance	Governance

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How They Attack

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Attack 1: App Registration

Demo

Demo

```
# Through App
Connect-MgGraph –ClientId ”b9f849de-5fb2-49ca-9f57-42a13bd762c5”

#VIP User
Remove-MgUser -UserId $UserID
 #ERROR: 403 UNFORBIDDEN
-----------------------------------------------------------
# AS App
Connect-MgGraph –ClientId ”b9f849de-5fb2-49ca-9f57-42a13bd762c5”
–ClientSecret <XXXXX>

#VIP User Delete
Remove-MgUser -UserId $UserID
 # SUCESSFUL
```

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Attack 2: Service Account Lateral Movement

Demo

Demo

Adding WhiteBoard after Session with new Upload

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Attack 3: And AI?

Demo

Demo

Adding WhiteBoard after Session with new Upload

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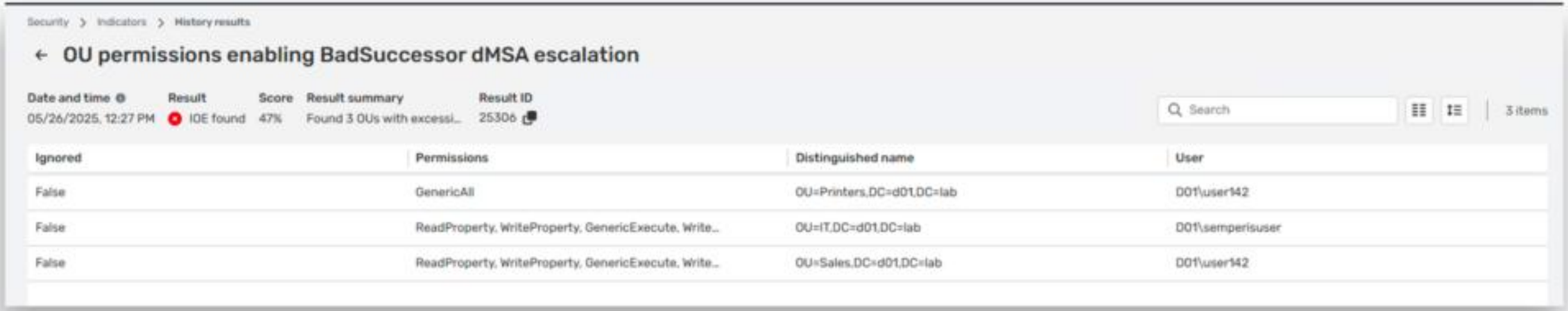
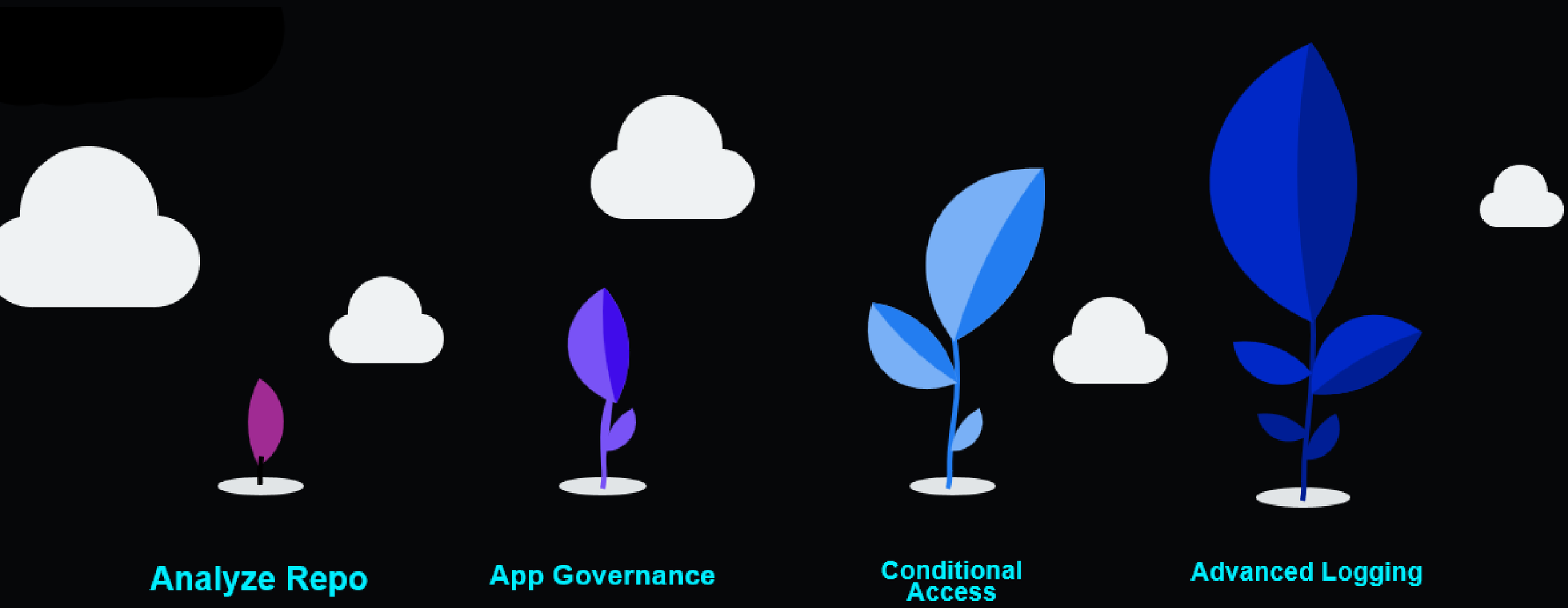
How to Detect Them


Security > Indicators > History results
OU permissions enabling BadSuccessor dMSA escalation
Date and time
05/26/2025, 12:27 PM
Result
IOE found
Score
47%
Result summary
Found 3 OUs with excessi...
Result ID
25306
Search
3 items
Ignored
Permissions
Distinguished name
User
False
GenericAll
OU=Printers,DC=d01,DC=lab
D01\user142
False
ReadProperty, WriteProperty, GenericExecute, Write...
OU=IT,DC=d01,DC=lab
D01\semperisuser
False
ReadProperty, WriteProperty, GenericExecute, Write...
OU=Sales,DC=d01,DC=lab
D01\user142


Analyze Repo
App Governance
Conditional Access
Advanced Logging

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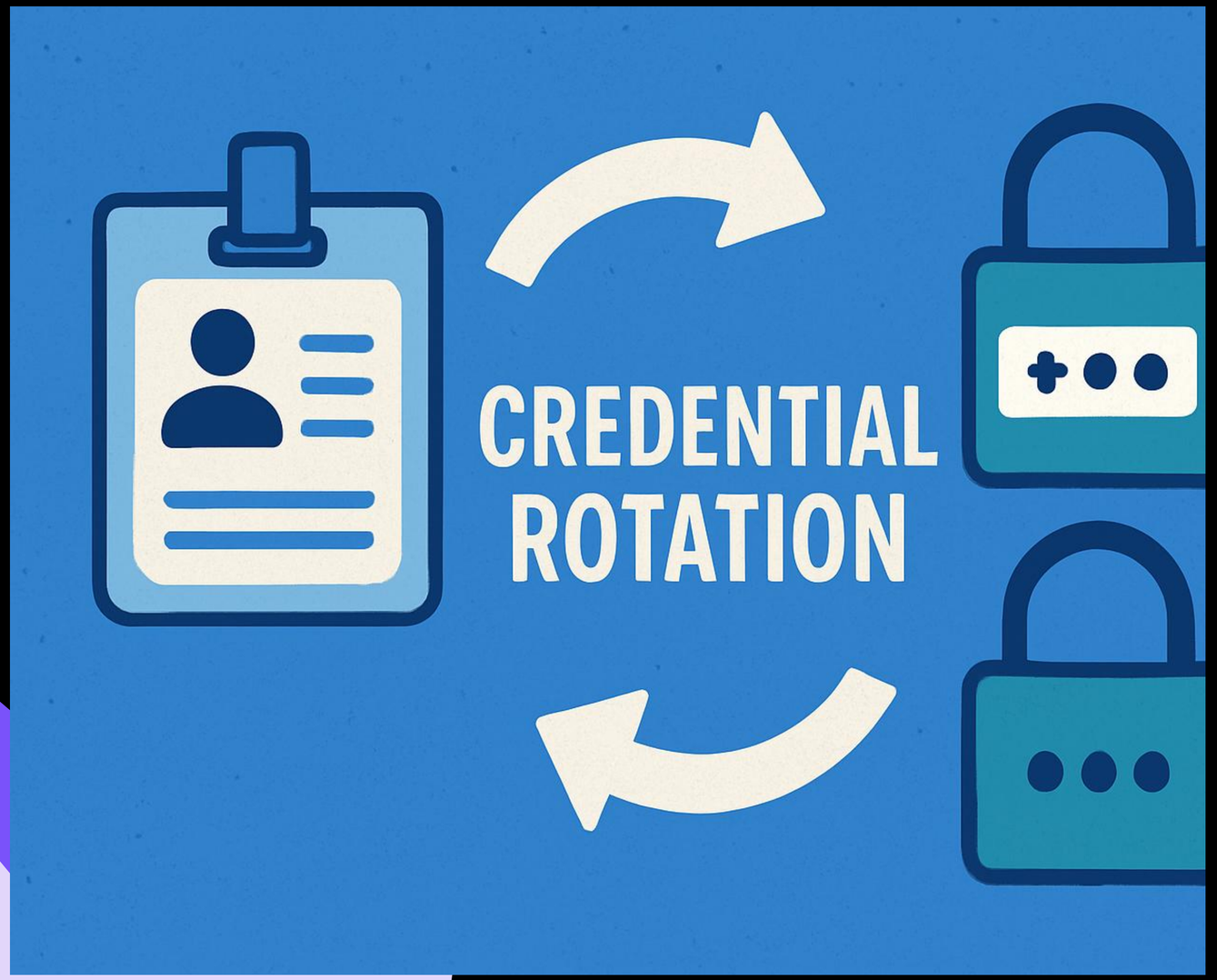

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Takeaway

No Secrets

Knowledge

Conditions

Ownership

Developer

Governance

Detection

Logging

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Thanks!

Enjoy HIP and happy to connect with you!

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