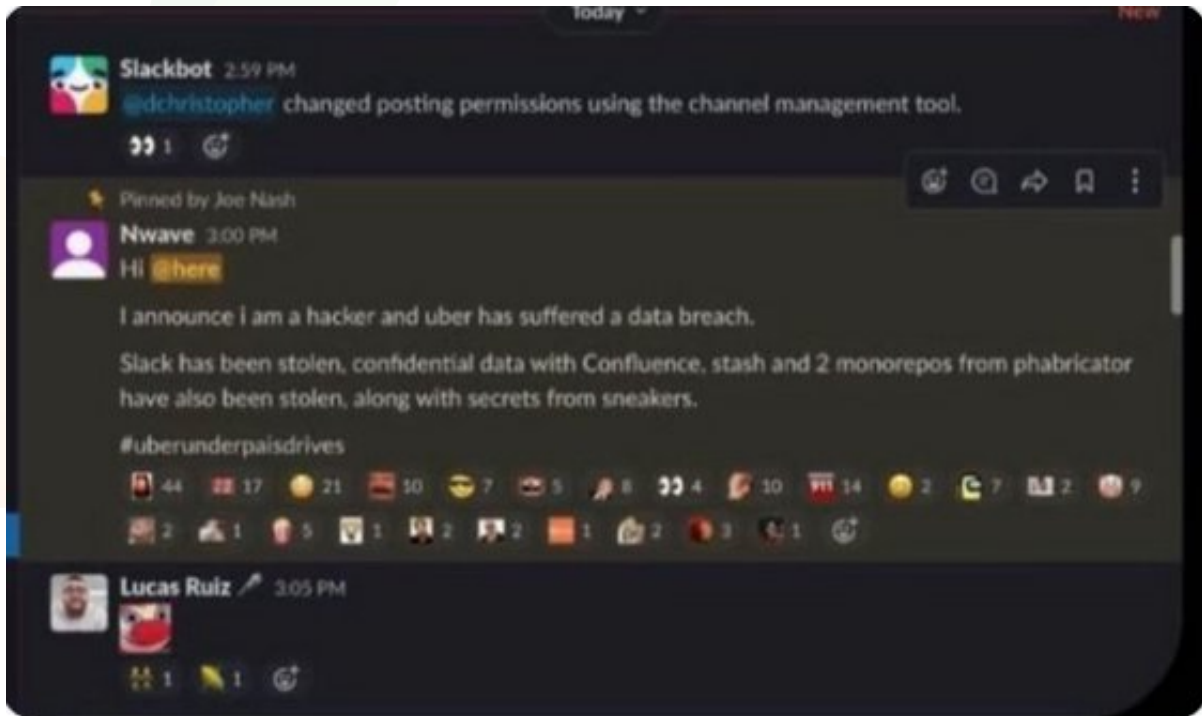


The Uber Story

Year: 2022



*"Hi @here,
I announce I am a hacker and
Uber has suffered a breach..."*



Lifecycle management for Robust Security Against Breaches

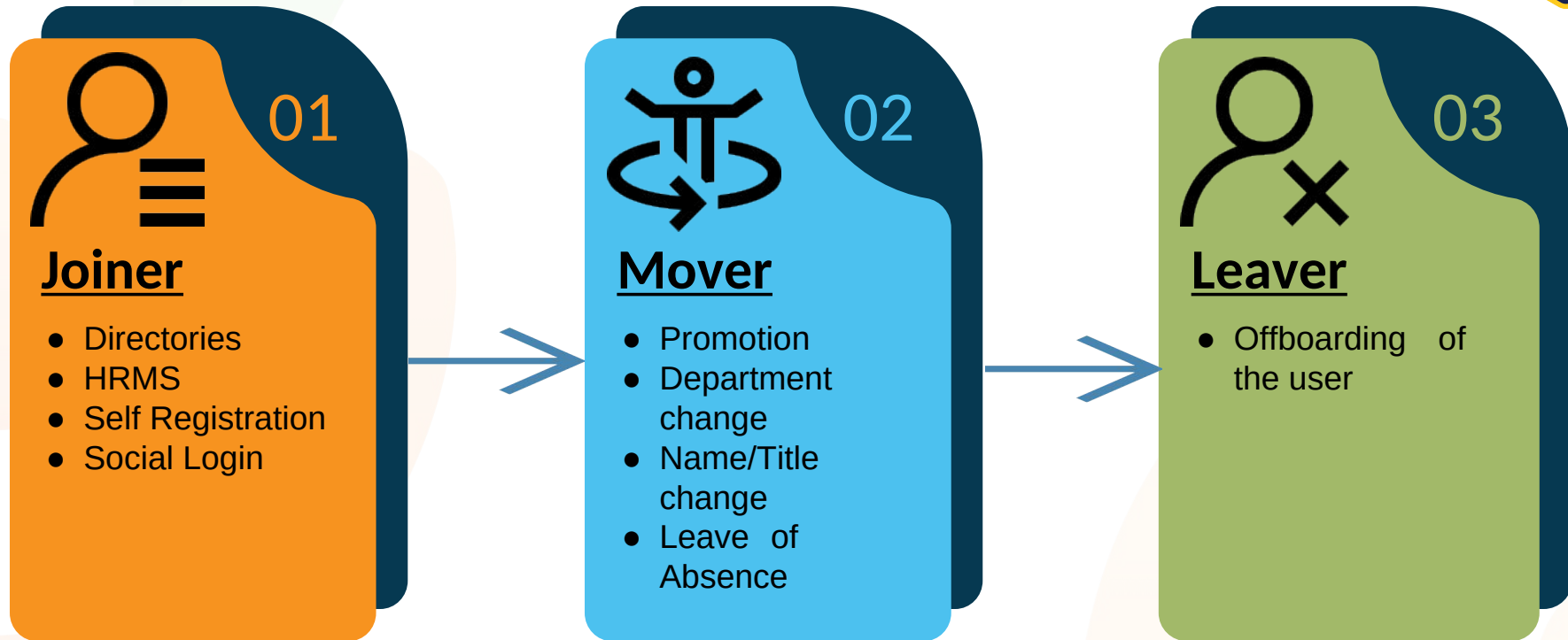
Abhay Yadav

User Lifecycle Management expert

7+ years of experience in IAM and Identity management



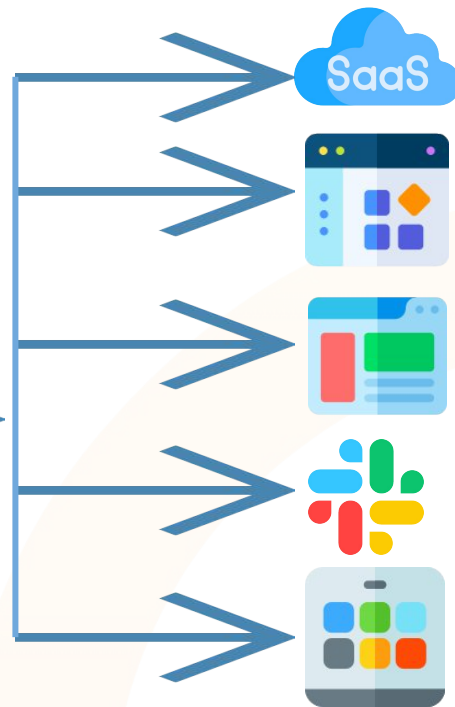
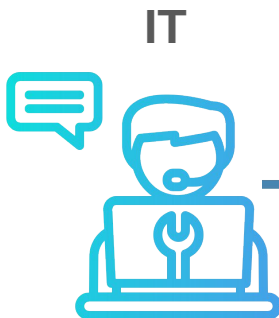
Major Stages of User Lifecycle





Challenges with current user Onboarding in Enterprises

- Manual
- Unsynchronized
- Disconnected





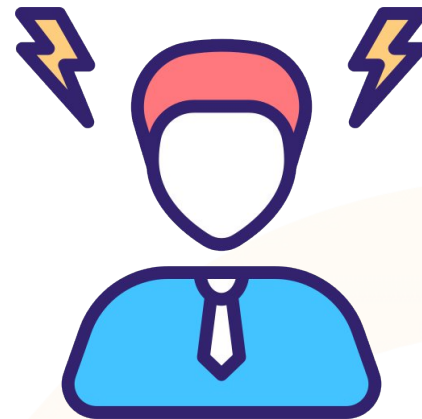
Issue with Manual Onboarding and Moving Processes



Prone To Human
Error



Scaling Problem
With Growing
Business



Burden On IT and
Loss of User
Productivity



Why Go Through All The Trouble?

Uber(2022)



Today

Slackbot 2:59 PM
@dchristopher changed posting permissions using the channel management tool.

🔊 1 🔄

📌 Pinned by Joe Nash

Nwave 3:00 PM
Hi @here

I announce i am a hacker and uber has suffered a data breach.
Slack has been stolen, confidential data with Confluence, stash and 2 monorepos from phabricator have also been stolen, along with secrets from sneakers.

#uberunderpaysdrives

👍 44 🗨️ 17 🌟 21 📄 10 🙄 7 😬 5 🦋 8 🔄 4 📄 10 📄 14 🌟 2 🗨️ 7 📄 2 📄 9

📄 2 🗨️ 1 🗑️ 5 📄 1 📄 2 📄 2 📄 1 🗨️ 2 📄 3 🗨️ 1 🔄

Lucas Ruiz 3:05 PM

👍 1 🗨️ 1 🔄



ok so basically uber had a network share \\[redacted]pts. the share contained some powershell scripts.

one of the powershell scripts contained the username and password for a admin user ([redacted]). Using this i was able to extract secrets for all services ([redacted]), AWS, GSuite

8:05 PM

on an uber IP range? or was this on like GCP or AWS (*.uberinternal)

edited 8:06 PM ✓

in Uber intranet 8:07 PM

*.corp.uber.com edited 8:07 PM

How'd you get access to the intranet then? 8:08 PM ✓

SE an employee -> access VPN -> scan intranet? 8:08 PM ✓

yes! 8:08 PM

exactly 8:08 PM



Uber(2022, 2016)

- Uber is lucky this hacker wasn't an actual cybercriminal.
- In 2016, the data of all Uber drivers and customers was stolen by hackers.
- The company paid the cybercriminals \$100,000 ransom in exchange for deleting their copy of the stolen data.
- The company signed a non-disclosure agreement with the hackers and made it appear like the ransom payment was a reward within the company's bug bounty program.

Source: <https://www.upguard.com/blog/what-caused-the-uber-data-breach>



Equifax(2017)

- In 2017, Equifax suffered a breach where sensitive information of 140 million users was compromised.
- Company suffered a loss of \$700 million.
- The major cause was found to be compromise of one of the accounts of users who were no longer working for the company.

Source: <https://www.csoonline.com/article/567833/equifax-data-breach-faq-what-happened-who-was-affected-what-was-the-impact.html>



Target(2013)

- The attackers backed their way into Target's corporate network by compromising a third-party vendor(Fazio Mechanical).
- The compromised account belonged to an employee who was recently terminated.
- The sources said the breach appears to have begun on or around Black Friday 2013
- Target informed about 110 million credit/debit-card wielding shoppers, who made purchases at one of the company's stores during the attack, that their personal and financial information had been compromised.
- *Recovery costs: \$250 million*
Legal Expenses: \$18.5million
Reputation Damages: Profit of Q4 2013 dropped by 46%

Source:

<https://redriver.com/security/target-data-breach>

<https://www.zdnet.com/article/anatomy-of-the-target-data-breach-missed-opportunities-and-lessons-learned/>



How This Could Have Been Prevented?

Think of simple questions:

1. Should this account be in the system?
1. If yes, does it have minimum privileges required for its role?



Modernize with Lifecycle Management

1



**Single
Source Of
Truth**

2



**Automated
User
Lifecycle**

3



**Connected
Resources**

4



**Auditing
And
Reporting**

Single Source Of Truth



Active Directory



User Registration Form

miniOrange



HR Management Systems



Existing Apps Database



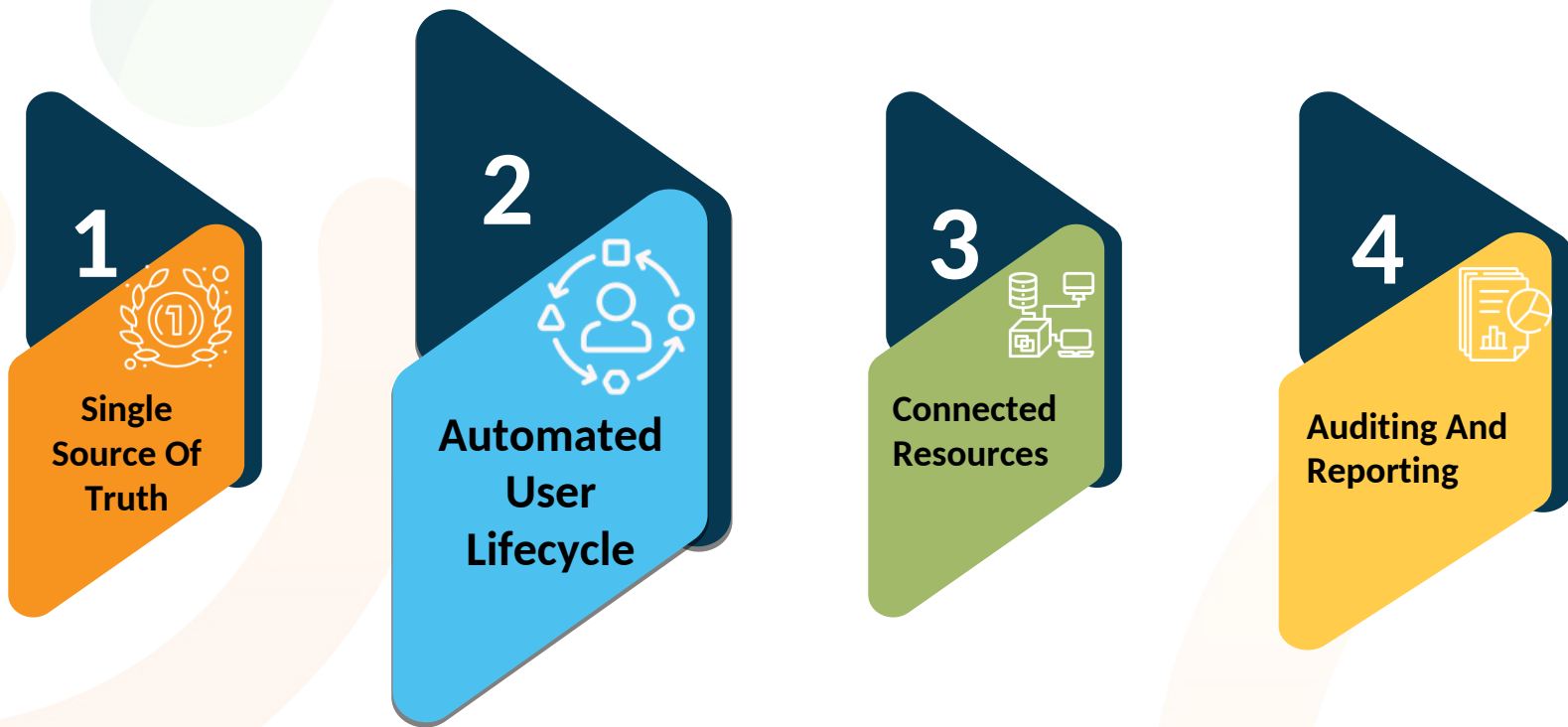
User Sync is more than just creating a user account with correct email:



- Attribute Mapping
- Attribute Transformation
- Group Sync
- Password Sync
- Attribute based group mapping



Automated User Lifecycle





User Onboarding with Lifecycle Management

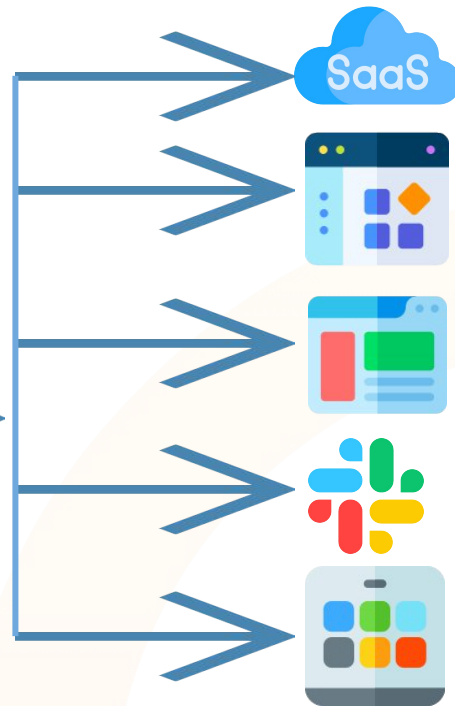
- Automated
- Streamlined
- Synchronized



HR



miniOrange



miniOrange

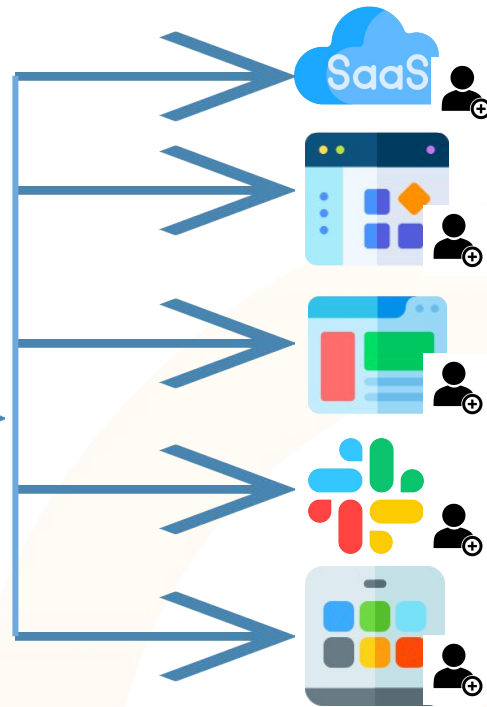
User Onboarding



HR



miniOrange



miniOrange

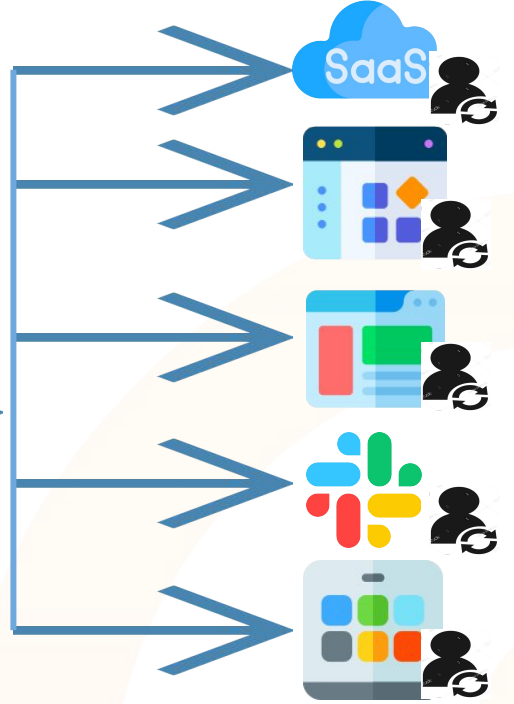
User Update



HR

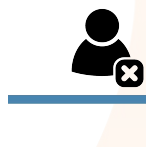


miniOrange

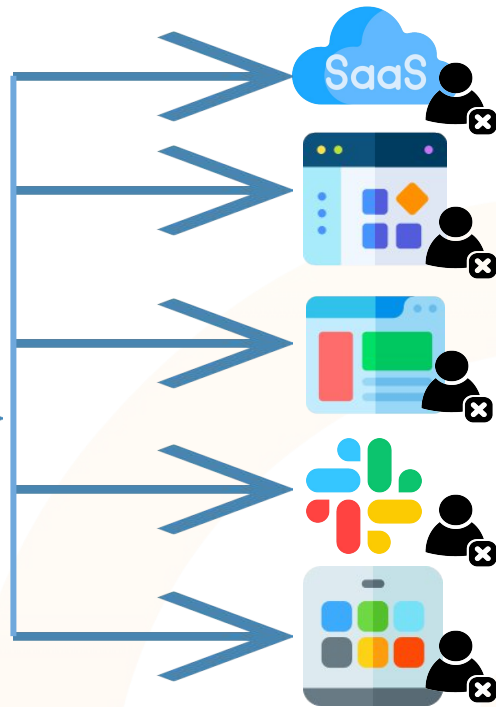


miniOrange

User Offboarding



miniOrange



miniOrange



Connected Resources

1



Single
Source Of
Truth

2



Automated
User Lifecycle

3



Connected
Resources

4



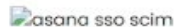
Auditing And
Reporting

miniOrange Provisioning App Integrations



Airtable

SSO, Provisioning



Asana

SSO, Provisioning



AWS

SSO, MFA, Provisioning



Azure AD

Provisioning



BambooHR

SSO, MFA, Provisioning



Bigcommerce

SSO, Provisioning



Bitbucket Cloud

SSO, Provisioning, Access Restriction



Bonusly

SSO, Provisioning



Calendly



Dayforce HCM



Dropbox



Auditing and Reporting

1



Single
Source Of
Truth

2



Automated
User Lifecycle

3



Connected
Resources

4



Auditing
And
Reporting

User Lifecycle Demo





Key Takeaways

- Manual onboarding and offboarding of users is prone to errors.
- User lifecycle management consists of 4 major parts:
 - Single Source of Truth
 - Automated User Lifecycle management
 - Connected Resources
 - Auditing and Reporting
- An efficient User Lifecycle management process is important to protect enterprises against breaches.

Questions/Feedback?

