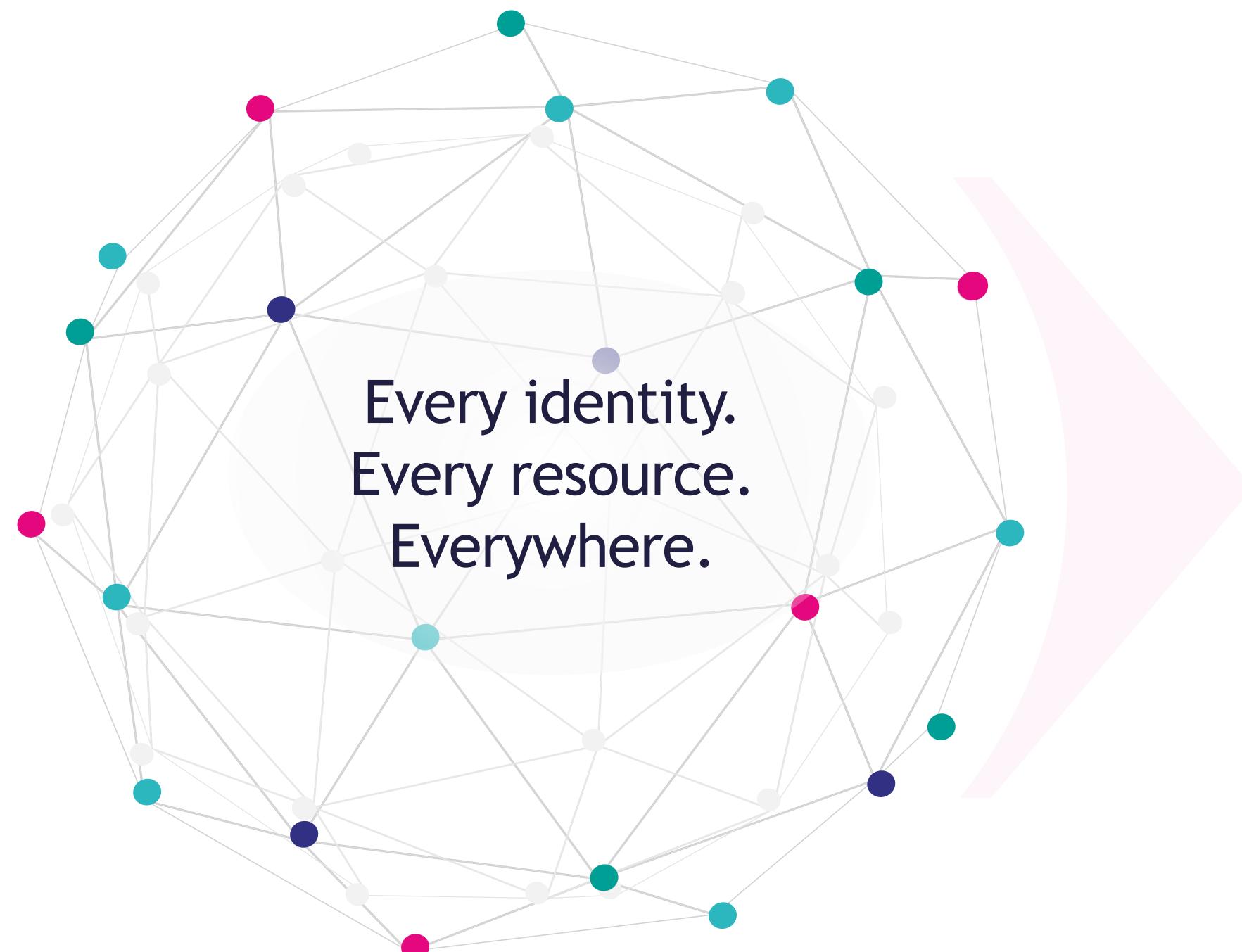


A black and white photograph of four people in an office setting. In the foreground, a man with glasses and a beard is looking down at a tablet held by another person. Behind them, two more men are looking on. A large, semi-transparent teal overlay covers the right side of the image. On the tablet screen, there is a digital representation of a physical key, consisting of a central padlock icon surrounded by smaller circular icons.

**Secure & govern
your applications
with Entra ID**

Identity has become the perimeter..



Accelerated growth of identities and apps, on and off the corporate network, requiring secure, user-friendly access



Massive rise in identity attacks—more than 4,000 password attacks per second—increasing risk of compromised accounts



Evolving regulations and compliance requirements for protecting identities and auditing access rights

- Guus van Berge
- Amsterdam is home
- Consultant at InSpark
- 20 years+ experience with Microsoft solutions
- Focus on Secure Identity
- Identity Governance connoisseur

“I help organizations embrace proactive security with Zero Trust Identity implementations”



“Automatically ensure that the right people have the right access to the right resources at the right time”

Identity lifecycle

Source of truth

JML

Access lifecycle

Delegate access

Review access

Privileged access lifecycle

Entra/Azure roles

Other scenarios

“Automatically ensure that the right people have the right access to the right resources at the right time”

Identity lifecycle

Source of truth

JML

Access lifecycle

Delegate access

Review access

Privileged access lifecycle

Entra/Azure roles

Other scenarios

What to expect today

App provisioning

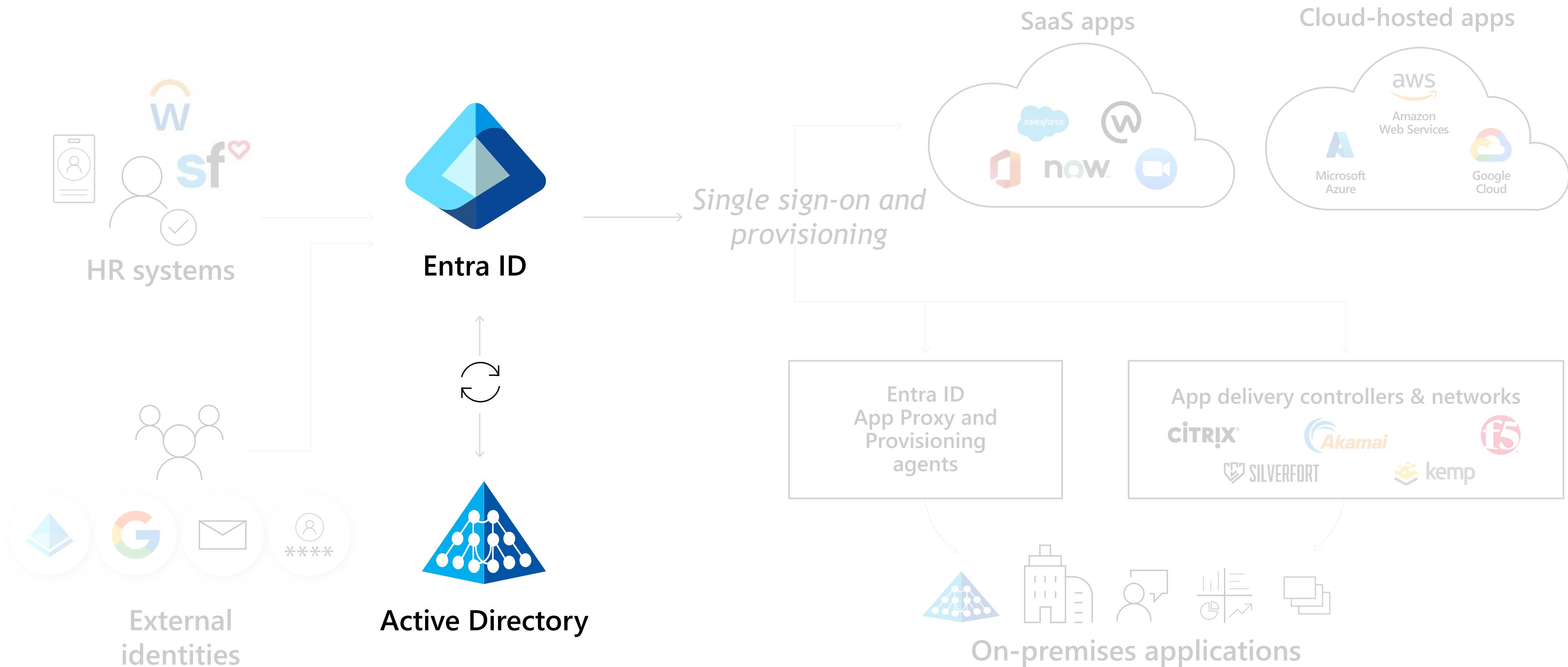
Access Packages

Access reviews

PIM

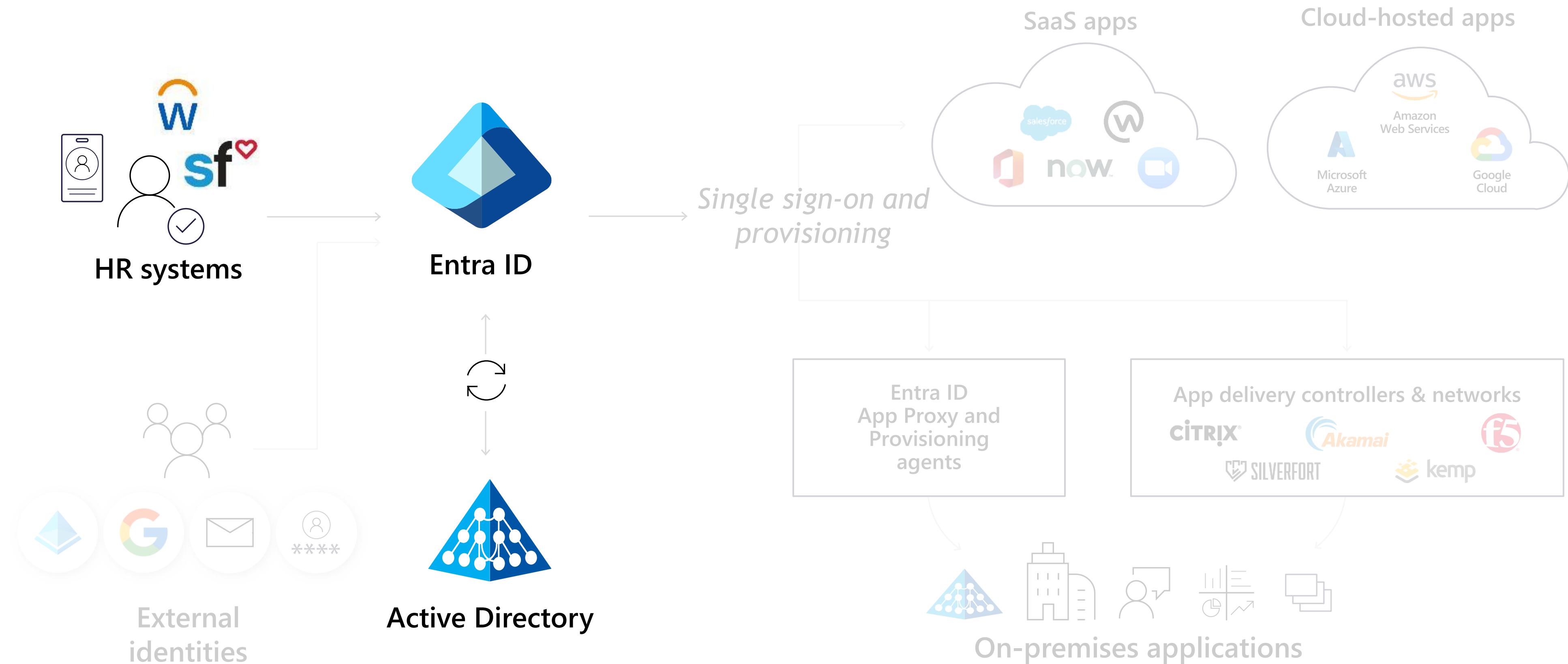
Provisioning

Provisioning



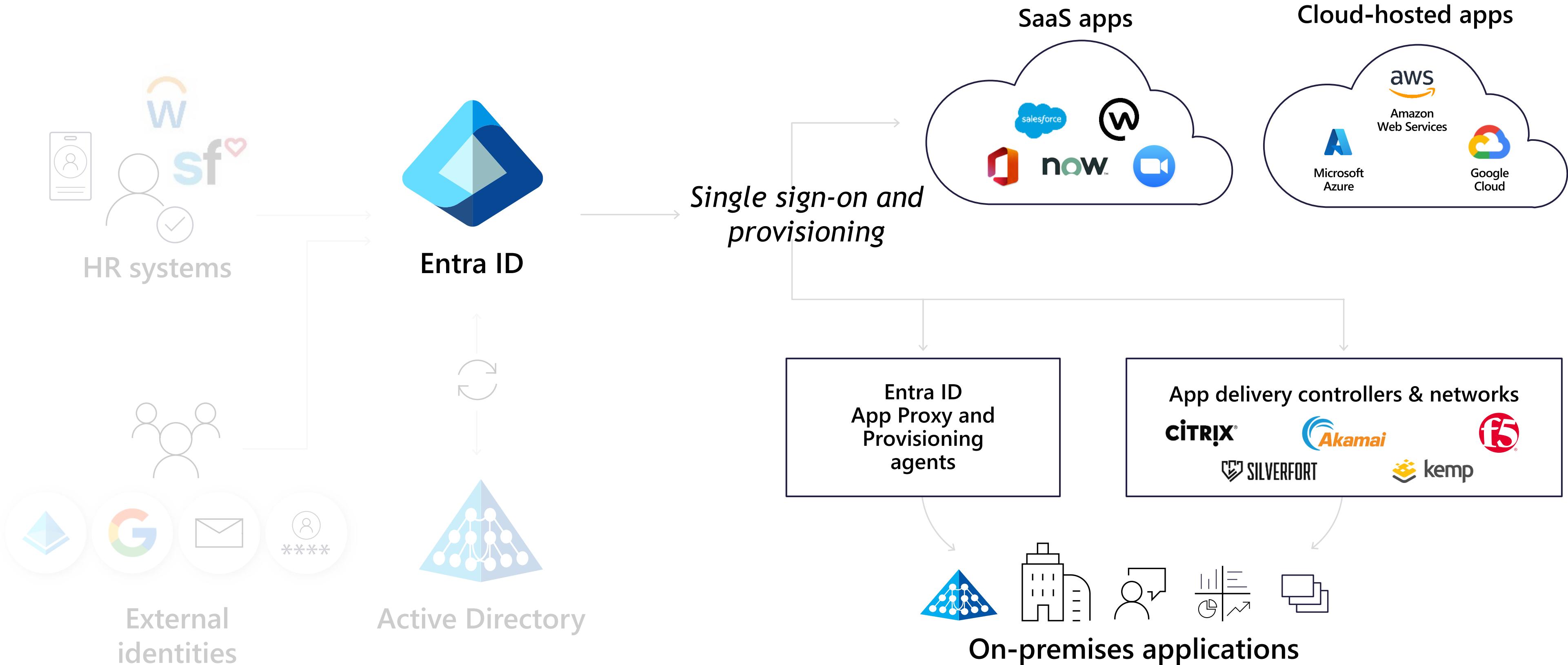
Provisioning

Inbound provisioning



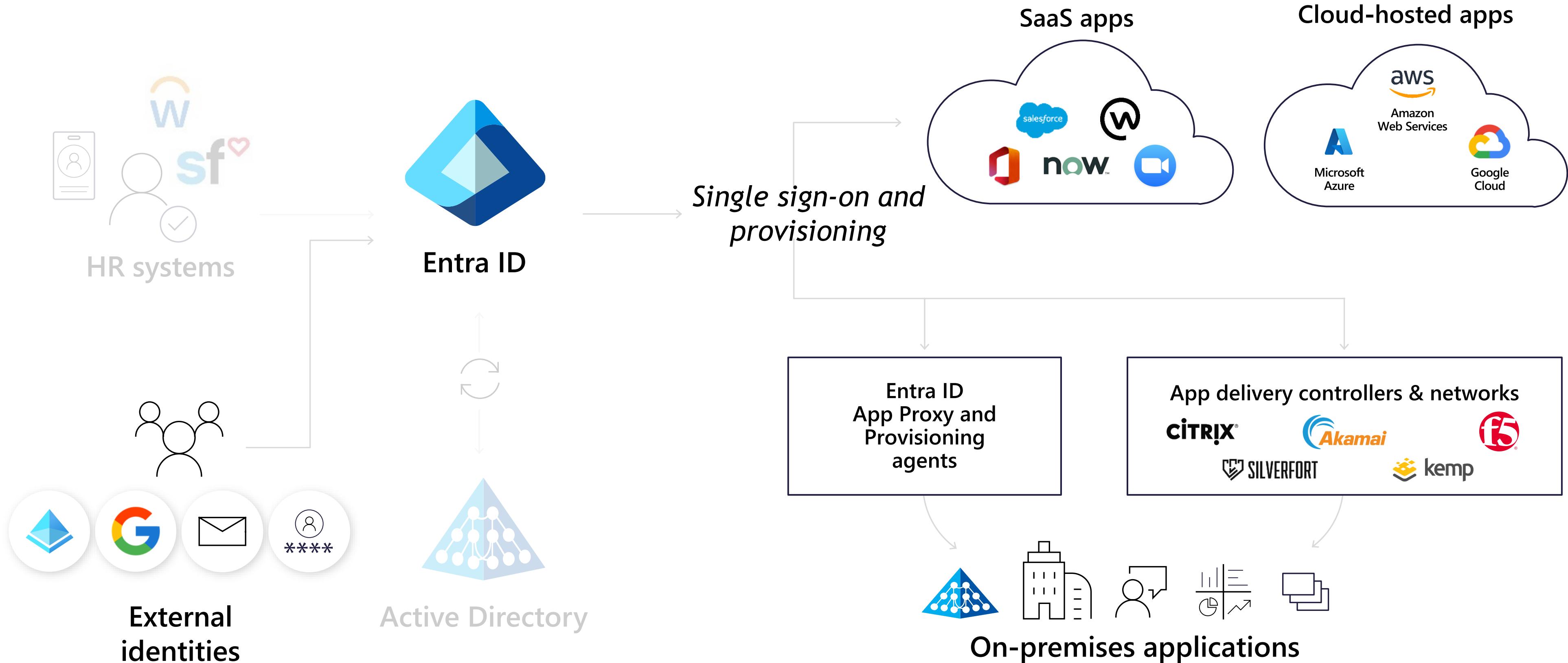
Provisioning

App provisioning



Provisioning

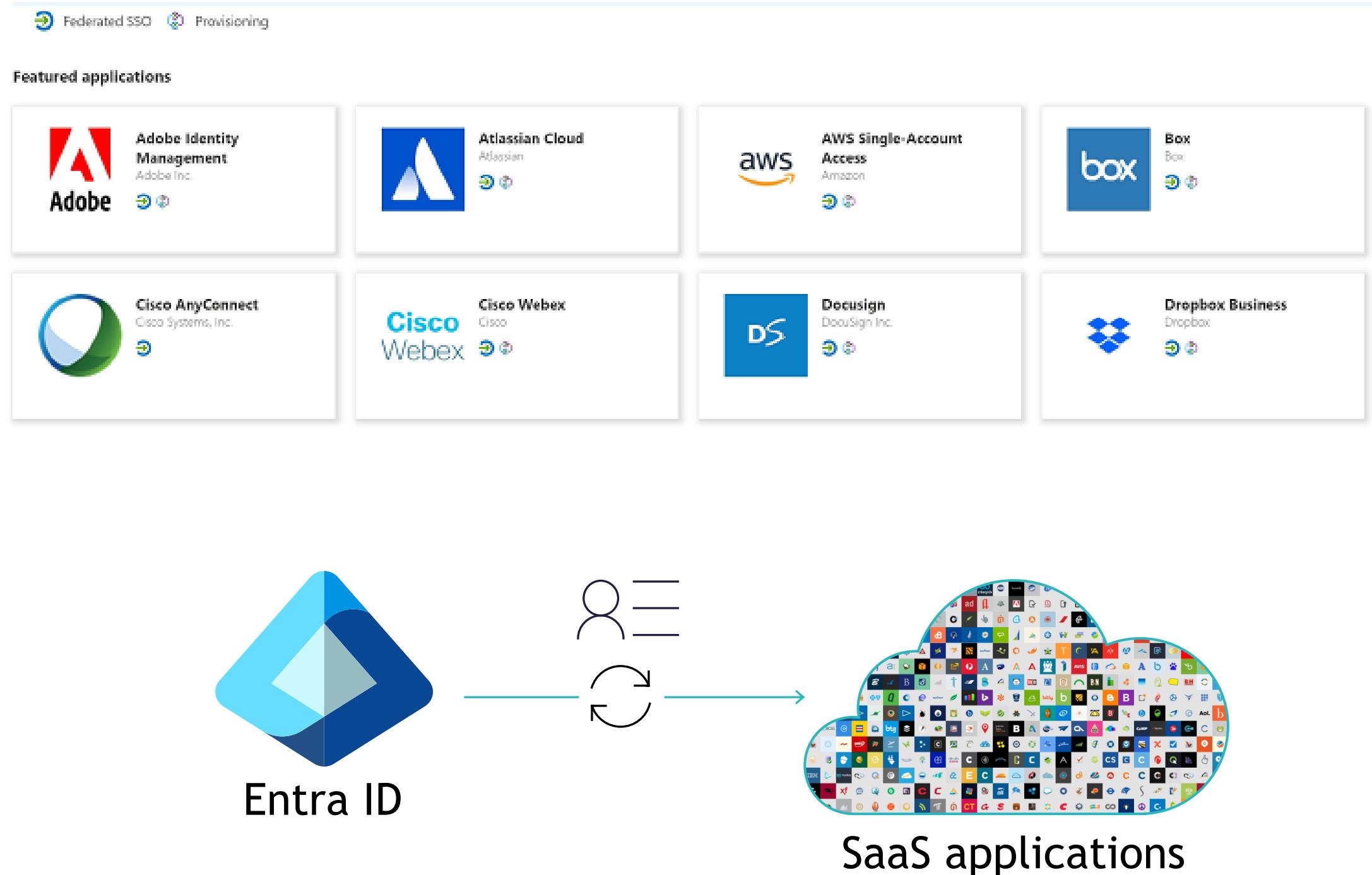
App provisioning



What Is SCM

Provisioning to SaaS Apps

- Selected apps support provisioning of groups.
- Customizable attribute mappings.
- Out of the box tools for monitoring and auditing.
- Custom alerts using Log Analytics.
- Easily implemented in a brown field scenario!



Microsoft Entra - Microsoft Entra | Users | IAM Identity Center | eu-north-1 | + https://entra.microsoft.com/#view/Microsoft_AAD_IAM/EntraLanding.ReactView Microsoft Entra admin center Search resources, services, and docs (G+) Copilot guus@vanberge.net VANBERGENET (VANBERGE.NET) Home < Back Home > Groups | All groups > Enterprise applications | All applications > Amazon Web Services (AWS) | Overview > Microsoft Entra ...

VanBergeNet

Tenant ID 4a9288fe-26be-49d7-b059-bed6de... Primary domain vanberge.net

23 View users 64 View groups

18 View devices 15 View apps

Users at high risk Unexpected error

Guus van Berge Global Administrator da42ea84-4685-40cc-902a-59d5b5567cd6

View user profile

My role assignments

High privileged role assignments Other role assignments

Manage my roles

Tenant status

Identity Secure Score 47.18%

This screenshot shows the Microsoft Entra admin center interface. On the left, a navigation sidebar lists categories like Home, Favorites, Identity, and Applications. The main content area displays tenant statistics for 'VanBergeNet' (Tenant ID: 4a9288fe-26be-49d7-b059-bed6de...) and its primary domain (vanberge.net). It shows counts for users (23), groups (64), devices (18), and applications (15). Below this, a section titled 'Users at high risk' shows an 'Unexpected error'. To the right, a user profile for 'Guus van Berge' (Global Administrator) is shown, along with a breakdown of role assignments. A 'Tenant status' card indicates an 'Identity Secure Score' of 47.18%.

Amazon Web Services (AWS) - Mi X Users | IAM Identity Center | eu-north-1 X +

https://entra.microsoft.com/#view/Microsoft_AAD_Connect_Provisioning/ProvisioningMenuBlade/~/Overview/objectId/f5733bbd-118e-4006-bf69-d2a0...

Microsoft Entra admin center Search resources, services, and docs (G+) Copilot 6 🔍 ⚙️ 🎯 guus@vanberge.net VANBERGENET (VANBERGE.NET)

Home > **Amazon Web Services (AWS) | Overview** X

Overview Start provisioning Stop provisioning Restart provisioning Edit provisioning ...

Current cycle status
Initial cycle not run.
0% complete

View provisioning logs

Statistics to date

Manage provisioning

- Update credentials
- Edit attribute mappings
- Add scoping filters
- Provision on demand

Home What's new Diagnose & solve problems

Favorites

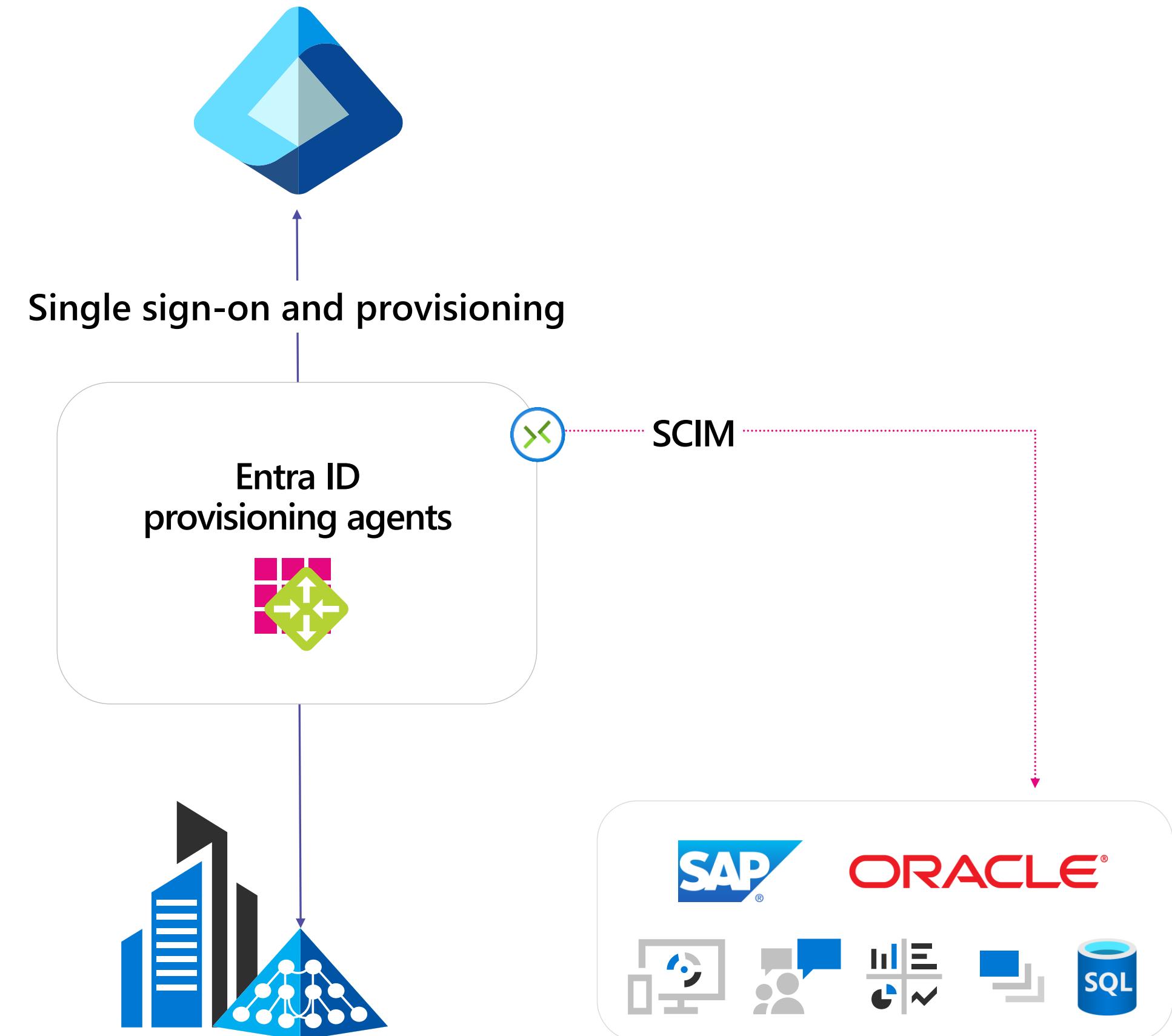
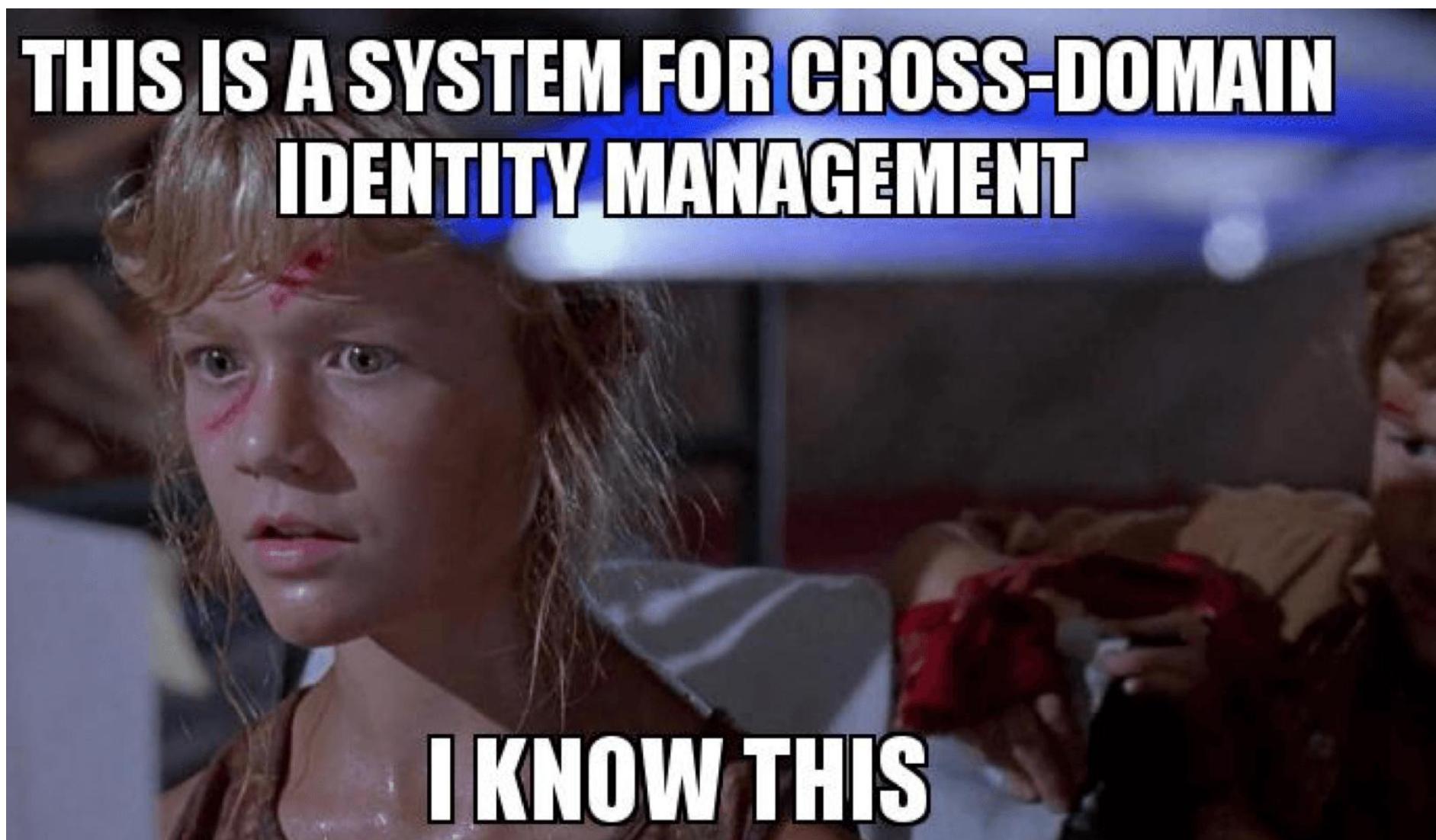
- Identity Overview
- Users Groups
- Devices Applications
- Protection Identity Governance
- External Identities Learn & support

https://entra.microsoft.com/#

Provisioning

On-premises Apps

The Entra provisioning service supports SCIM enabled apps to provision users into applications hosted on-premises or in a virtual machine.



Provisioning

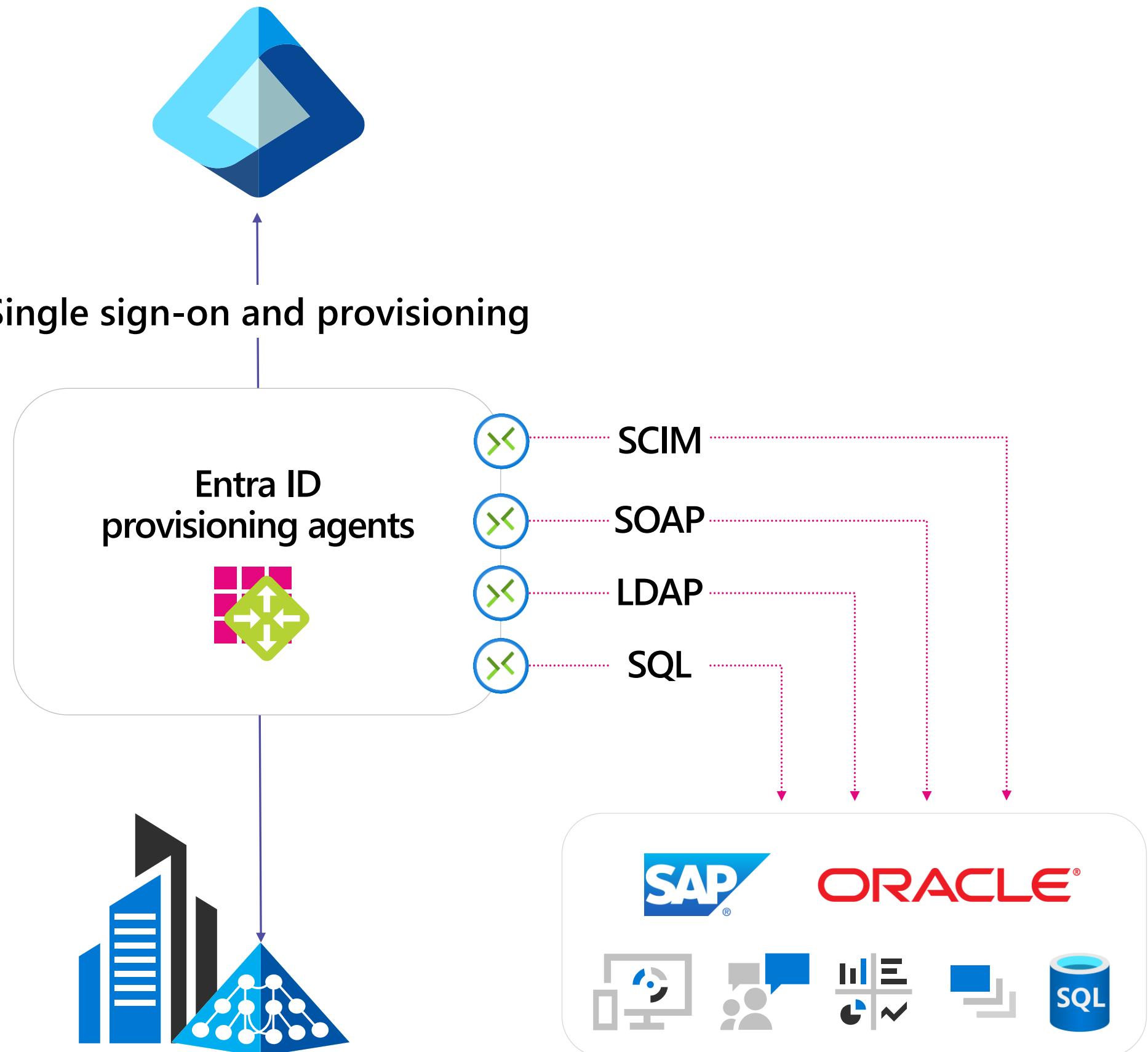
Legacy Apps

The **ECMA Connector** host converts provisioning requests from Entra ID to requests into legacy applications.

Microsoft-delivered connectors:

- **LDAP**
- **SQL** (MS SQL, Azure SQL, IBM DB2 9/10, Oracle 10g/11g/12c/18c, MsQL 5/8, Postgres)
- **Web** (REST/SOAP)
- **PowerShell** (Flat-file)

Re-use your existing MIM configuration!

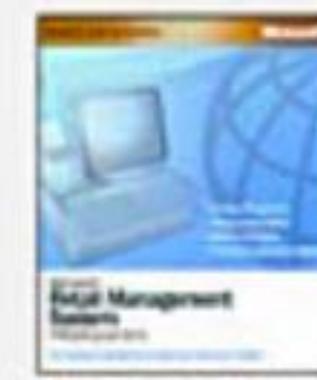




- Point of Sale
- Inventory Management
- Pricing and Promotions
- Reports and Analysis
- Financial Management Integration

Microsoft®
**Retail Management
System**
Store Operations

The complete Store Operations and POS solution for retailers



Use with HeadQuarters
for multiple stores

Browse Microsoft Entra Gallery

[+ Create your own application](#) | [Got feedback?](#)

The Microsoft Entra App Gallery is a catalog of thousands of apps that make it easy to deploy and configure single sign-on (SSO) and automated to connect your users more securely to their apps. Browse or create your own application here. If you are wanting to publish an application you can file a request using the process described in [this article](#).

 X

Single Sign-on : All

User Account Management : All

Categories : All

[Federated SSO](#) [Provisioning](#)**Showing 10 of 10 results**

**CMA**
William Raveis

**On-premises ECMA app**
Microsoft


**tesma**
CHG-MEI


**MCM**
ABa Quality Monitoring Ltd.


**Encompass**
Vox Mobile, Inc.


**Cleanm**
Alinto


**Clarity**
CA


**TeamsChamp**
ENCAMINA


On-premises ECMA app

[Got feedback?](#)Logo 

Name *	<input type="text" value="On-premises ECMA app"/>
Publisher	 Microsoft
Provisioning	 Automatic provisioning supported
Single Sign-On Mode	 Linked Sign-on
URL	 https://www.microsoft.com

OnPremises App (ECMA) - SQL | Provisioning

«



Save



Discard

Overview

Provision on demand

Manage

Provisioning

Users and groups

Expression builder

Monitor

Provisioning logs

Audit logs

Insights

Troubleshoot

New support request

Provisioning Mode

Automatic

Use Microsoft Entra to manage the creation and synchronization of user accounts in OnPremises App (ECMA) - SQL based on user and group assignment.

On-Premises Connectivity

On-Premises Connectivity

Step 1: [Download and install](#) the on-premises provisioning wizard and the provisioning agent.

Step 2: Assign agents and agent groups to your application.

Agent(s)

Assign Agent(s)

Step 3: Restart the provisioning agent service or wait 10 minutes before testing connection.

Admin Credentials

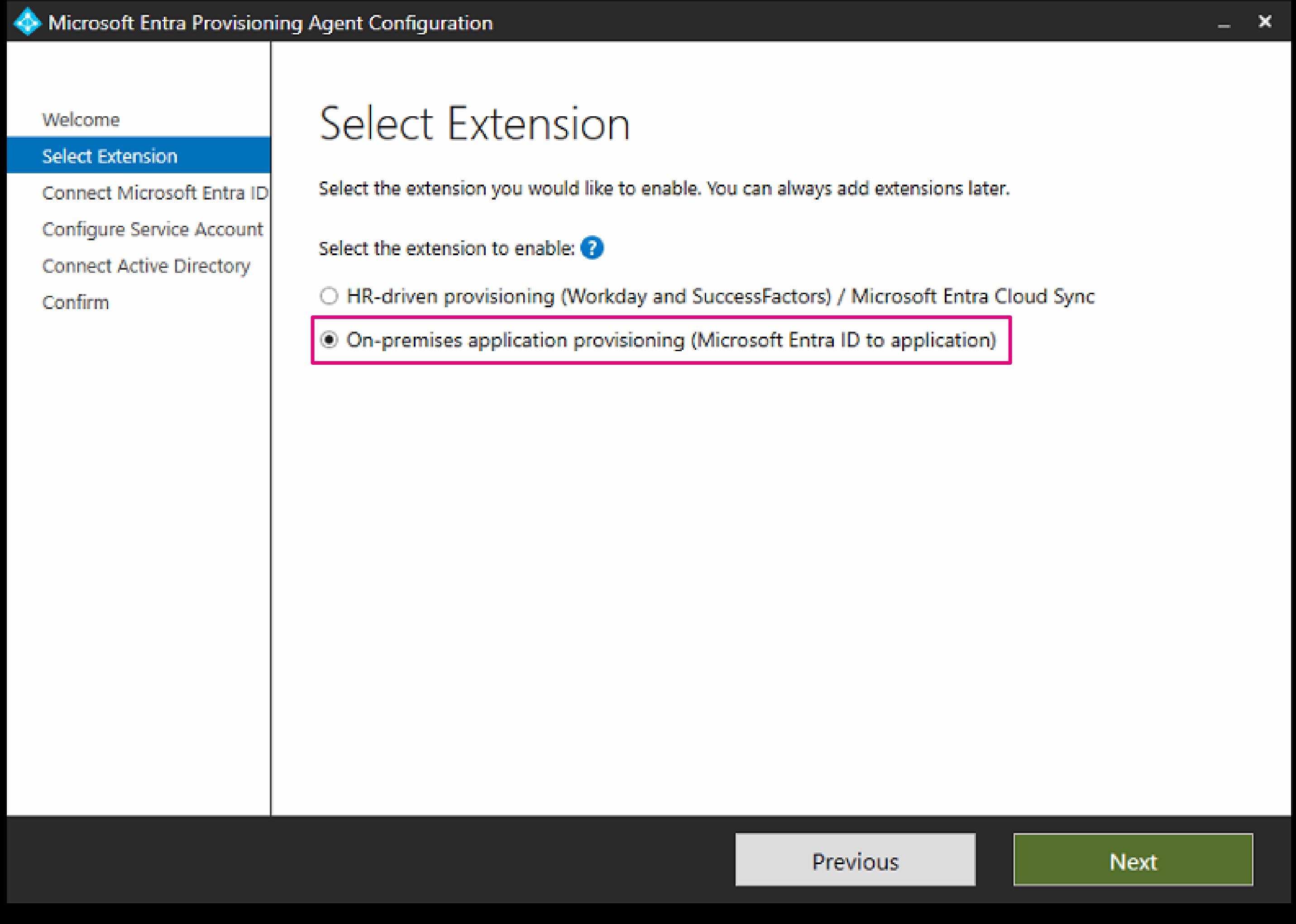
Mappings

Settings

Provisioning Status

On

Off



Microsoft ECMA Connector Host Configuration

Home Settings Help

Properties

Partitions
Run Profiles
Object Types
Select Attributes
Deprovisioning

Properties

Name * ⓘ SQL-App1

Creation time vrijdag 26 januari 2024 19:35:55

Last modified vrijdag 26 januari 2024 19:35:55

Autosync timer (minutes) * ⓘ 120

Secret token * ⓘ *****

Description

Import connector

Select Extension DLL

This field is mandatory

Extension DLL *

Microsoft.IAM.Connector.GenericLdap.dll
Microsoft.IAM.Connector.GenericSql.dll
Microsoft.IAM.Connector.PowerShell.dll
Microsoft.IdentityManagement.MA.LotusDomino.dll
Microsoft.IdentityManagement.MA.WebServices.dll

Previous Next Cancel

 Microsoft ECMA Connector Host Configuration

 Microsoft ECMA Connector Host Configuration

Home  Settings  Help

Properties

Connectivity

Schema 1

Schema 2

Schema 3

Schema 4

Global

Partitions

Run Profiles

Export

FullImport

Object Types

Select Attributes

Deprovisioning

Connectivity

To create a connector for ODBC connected SQL database, provide the DSN file and its credentials to connect to the database.

Connect to database:

DSN File [Browse](#) [Clear](#)

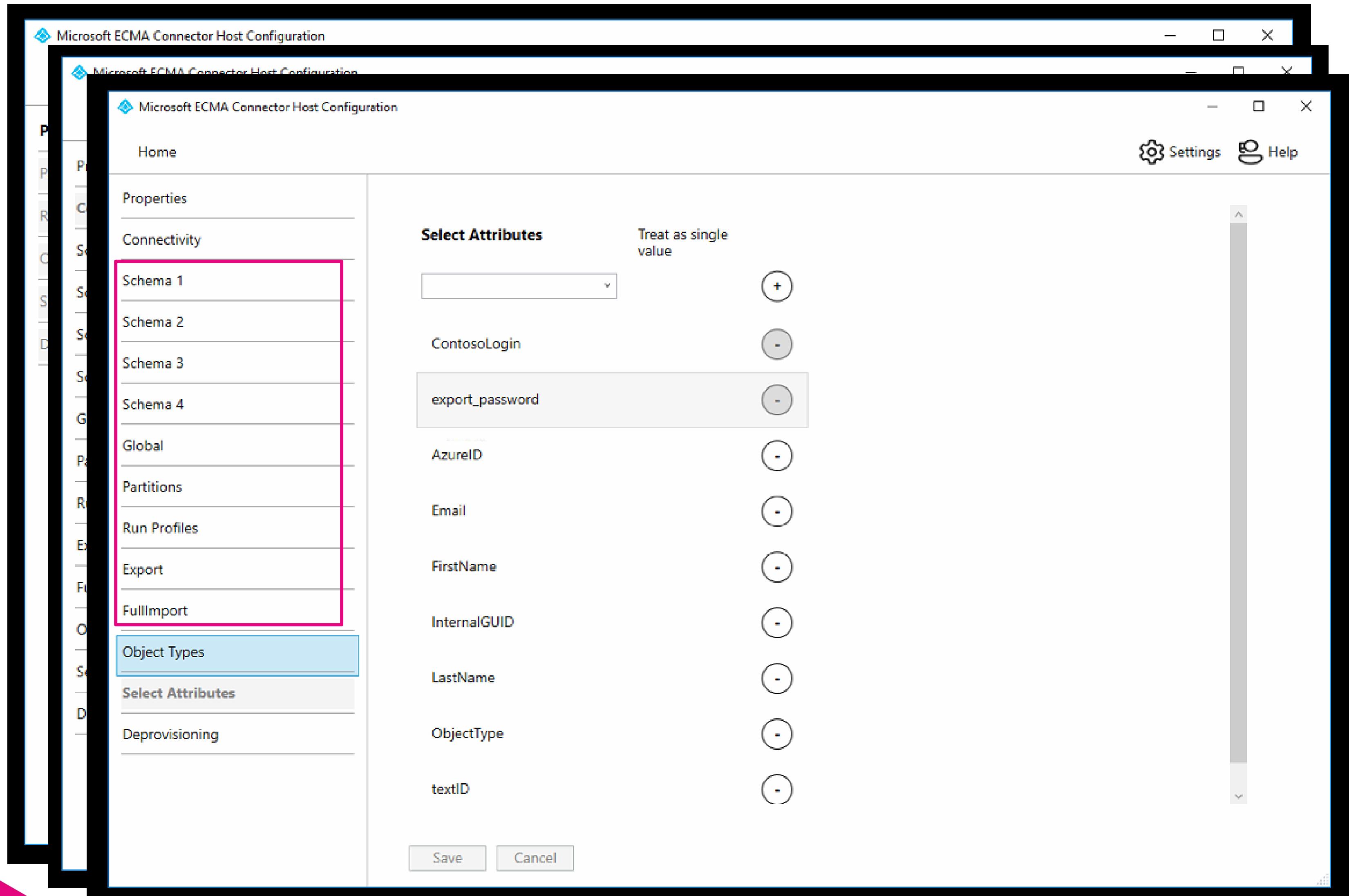
User Name

Password

DN is Anchor

Export Type:Object Replace

Command Timeout (Seconds)



OnPremises App (ECMA) - SQL | Provisioning

«  Save  Discard

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Provisioning Mode

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Use Microsoft Entra to manage the creation and synchronization of user accounts in OnPremises App (ECMA) - SQL based on user and group assignment.

On-Premises Connectivity

Admin Credentials

Admin Credentials

Microsoft Entra needs the following information to connect to OnPremises App (ECMA) - SQL's API and synchronize user data.

Tenant URL * 

Secret Token

Mappings

Mappings

Mappings allow you to define how data should flow between Microsoft Entra ID and ScimOnPremises.

Name	Enabled
Provision Azure Active Directory Users	Yes

Restore default mappings

Settings

Provisioning Status 

OnPremises App (ECMA) - SQL | Provisioning

«  Save  Discard

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Provisioning Mode

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Use Microsoft Entra to manage the creation and synchronization of user accounts in OnPremises App (ECMA) - SQL based on user and group assignment.

On-Premises Connectivity

Admin Credentials

Admin Credentials

Microsoft Entra needs the following information to connect to OnPremises App (ECMA) - SQL's API and synchronize user data.

Tenant URL * 

Secret Token

*

Mappings

Mappings

Mappings allow you to define how data should flow between Microsoft Entra ID and ScimOnPremises.

Name	Enabled
------	---------

Provision Azure Active Directory Users	Yes
--	-----

Restore default mappings

Settings

Provisioning Status 

 On  Off

Edit Attribute

...

A mapping lets you define how the attributes in one class of Microsoft Entra object (e.g. Users) should flow to and from this application.

Mapping type (i)

Direct

Source attribute * (i)

userPrincipalName

Default value if null (optional) (i)

Target attribute * (i)

urn:ietf:params:scim:schemas:extension:ECMA2Host:2.0:User:ContosoLogin

active

id

PLACEHOLDER

urn:ietf:params:scim:schemas:extension:ECMA2Host:2.0:User:AzureID

urn:ietf:params:scim:schemas:extension:ECMA2Host:2.0:User:ContosoLogin

urn:ietf:params:scim:schemas:extension:ECMA2Host:2.0:User:Email

urn:ietf:params:scim:schemas:extension:ECMA2Host:2.0:User:export_password

urn:ietf:params:scim:schemas:extension:ECMA2Host:2.0:User:FirstName

urn:ietf:params:scim:schemas:extension:ECMA2Host:2.0:User:InternalGUID

urn:ietf:params:scim:schemas:extension:ECMA2Host:2.0:User:LastName

urn:ietf:params:scim:schemas:extension:ECMA2Host:2.0:User:ObjectType

urn:ietf:params:scim:schemas:extension:ECMA2Host:2.0:User:textID

OnPremises App (ECMA) - SQL | Users and groups

«

[+ Add user/group](#) | [Edit assignment](#) | [Remove](#) | [Update credentials](#) | [Columns](#) | [Got feedback?](#)

[Overview](#)

[Provision on demand](#)

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i The application will appear for assigned users within My Apps. Set 'visible to users?' to no in properties to prevent this. →

Assign users and groups to app-roles for your application here. To create new app-roles for this application, use the [application registration](#).

[First 200 shown, to search all users & gro...](#)

Display Name	Object Type	Role assigned
<input type="checkbox"/> AG Ari Gold	User	User
<input type="checkbox"/> EM Eric Murphy	User	User
<input type="checkbox"/> GV Guus van Berge	User	User
<input type="checkbox"/> VC Vincent Chase	User	User
<input type="checkbox"/> TM Terrance McQuewick	User	User

OnPremises App (ECMA) - SQL | Provision on demand

«

[Learn More](#)

[Got feedback?](#)

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[Users and groups](#)

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[Insights](#)

[Troubleshoot](#)

[New support request](#)

Provision on-demand for a subset of users or groups before rolling it out broadly to your organization. When provisioning a group you can select 5 members at a time.

i No user or group will be provisioned on-demand that would not have been provisioned through the regular provisioning cycles.

Selected user

[Terrance McQuewick](#)

OnPremises App (ECMA) - SQL | Provision on demand

« [Learn More](#) [Technical details](#) [Got feedback?](#)

[Overview](#)

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[Troubleshoot](#)

[New support request](#)

User



Terrance McQuewick

1. Import user

This step shows the user retrieved from the source system and the properties of the user in the source system.

Success | [View details](#)

2. Determine if user is in scope

This step shows the scoping conditions that were evaluated and which ones the user passed or failed.

Success | [View details](#)

3. Match user between source and target system

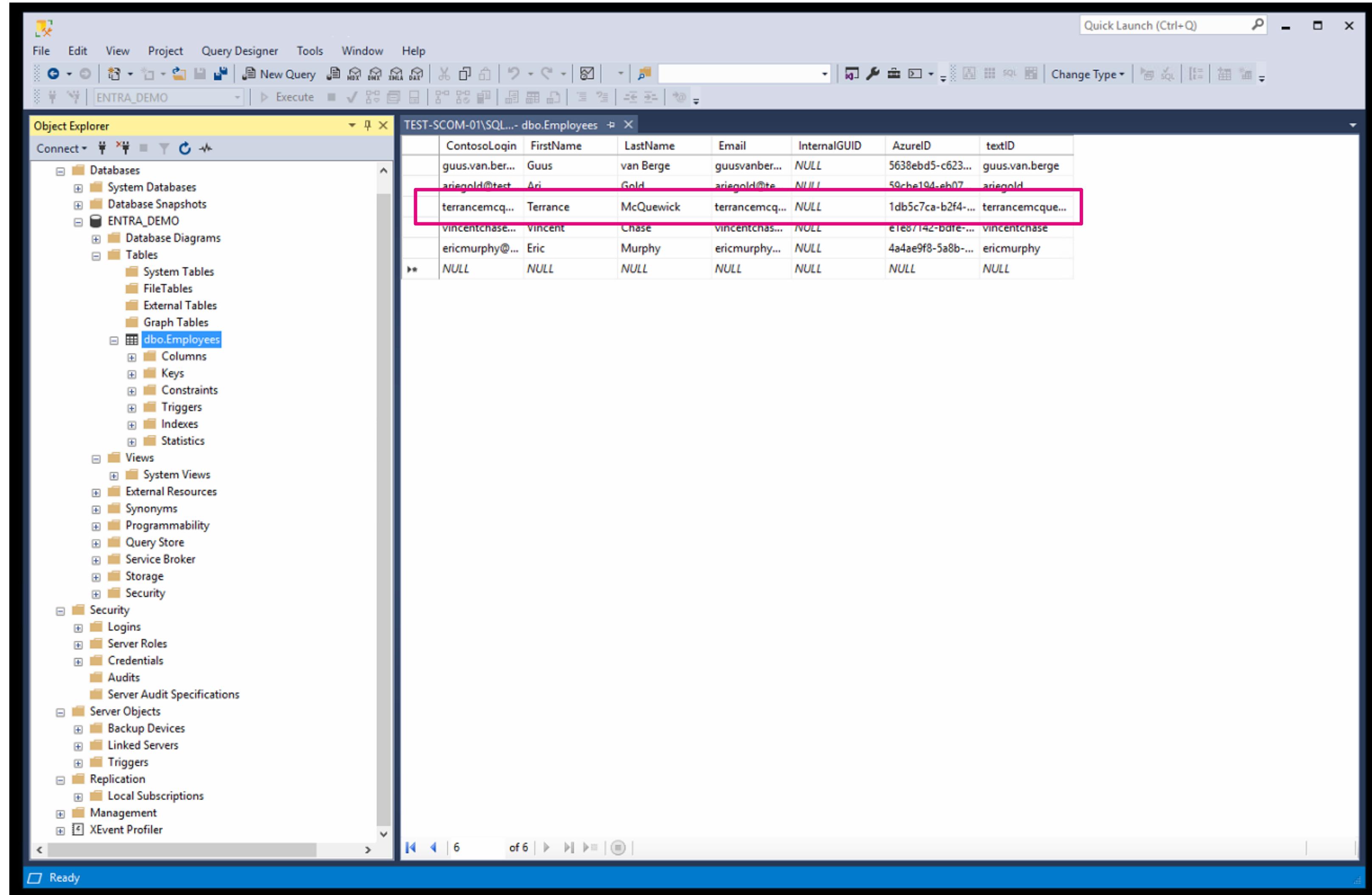
This step shows whether the user was found in the target system as well as the properties of the user in the target system.

Success | [View details](#)

4. Perform action

This step shows the action that was performed in the target application, such as creating a user or updating a user.

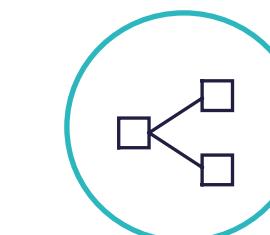
Success | [View details](#)



Access Packages



Let users **request access and automate** access assignments, approval, workflows, reviews for all human identity types.



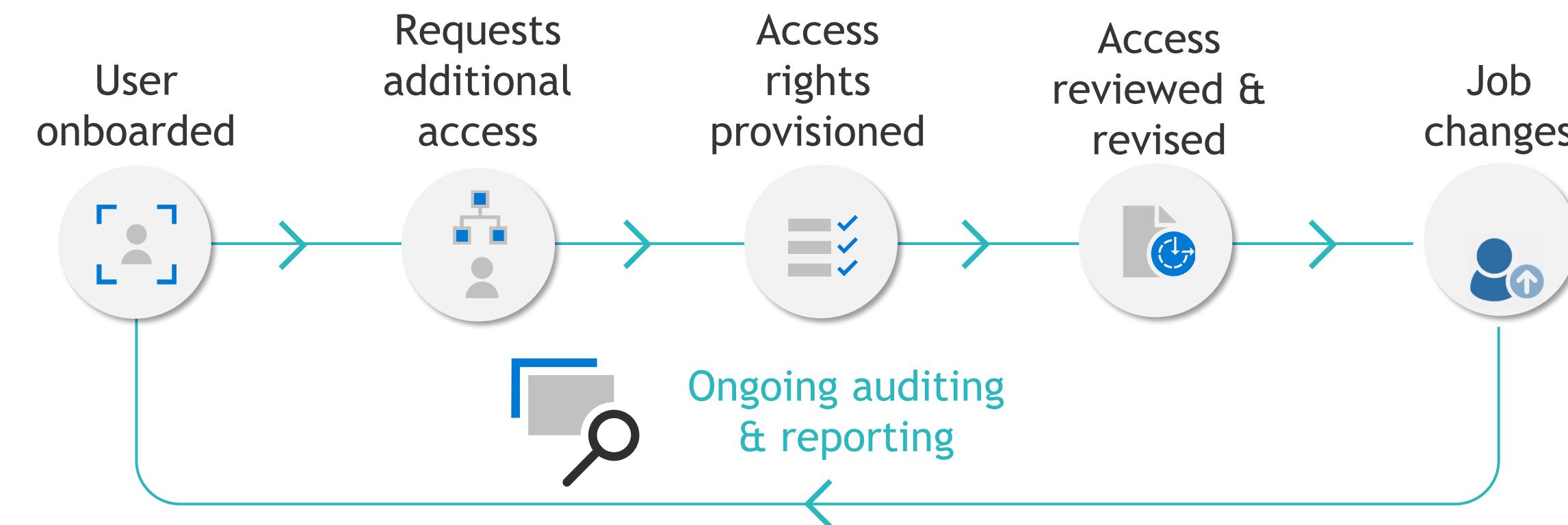
Multi-stage approval workflow, separation of duties and access recertification.



Self-service policy and workflow can be defined by app, group or site owners.



Supports custom workflows for access lifecycle (**through Logic Apps integration**)



Protect your Apps

PIM for Groups

- Just-in-time membership and ownership of groups through Privileged Identity Management
- Control access to connected applications and permissions or roles inside the apps.
- Require approval for activation, enforce MFA, require justification, limit the activation time and more.
- Apply on on-premises resources with Group Writeback.

Home > SG-UG-Test

SG-UG-Test | Privileged Identity Management Group

Overview Diagnose and solve problems

Add assignments Settings Refresh Export Got feedback?

Manage

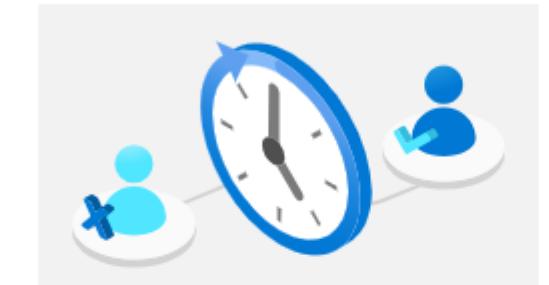
- Properties
- Members
- Owners
- Roles and administrators
- Administrative units
- Group memberships
- Applications
- Licenses
- Azure role assignments

Activity

- Privileged Identity Management
- Access reviews
- Audit logs
- Bulk operation results

Troubleshooting + Support

- New support request



PIM for groups

Microsoft Entra Privileged Identity Management (PIM) enables just-in-time (JIT) access to the ownership or membership of the group.

Enable PIM for this group

 Learn more about PIM

Enforce just-in-time access for owners and members of this group by requiring them to activate for a limited period of time. Create just-in-time access policies for these users like approval workflow, MFA challenge and much more.

 Activate more in less time

Assign multiple roles to a single group so that users only need to activate once to get all the permissions they need.

Amazon Web Services (AWS) - Mi Users | IAM Identity Center | eu-north-1

https://entra.microsoft.com/#view/Microsoft_AAD_IAM/ManagedAppMenuBlade/~/Overview/objectId/f5733bbd-118e-4006-bf69-d2a0e7edcc38/appId... Copilot 2 🔍 ⚙️ 🌐 ⚡

Microsoft Entra admin center Search resources, services, and docs (G+)

guus@vanberge.net VANBERGENET (VANBERGE.NET)

Favorites

Identity

- Overview
- Users
- Groups
 - Overview
 - All groups
 - Deleted groups
 - Group settings
- Devices
- Applications
 - Enterprise applications
 - App registrations
- Protection
- Learn & support

Home > Identity Governance | Access packages > Enterprise applications | All applications >

Amazon Web Services (AWS) | Overview

Enterprise Application

Overview Deployment Plan Diagnose and solve problems

Manage

- Properties
- Owners
- Roles and administrators
- Users and groups
- Single sign-on
- Provisioning
- Self-service
- Custom security attributes

Properties

Name: Amazon Web Services (AWS)

Application ID: 5585ff6a-d040-4bae-b8f7-5...

Object ID: f5733bbd-118e-4006-bf69-...

Getting Started

1. Assign users and groups
Provide specific users and groups access to the applications
[Assign users and groups](#)

2. Set up single sign on
Enable users to sign into their application using their Microsoft Entra credentials
[Get started](#)

How to move forward from here..

Source of
truth & JML

Low-hanging
Apps

Entitlement
& reviews

Keep doing
what you're
doing



How to move forward from here..

Source of
truth & JML

Low-hanging
Apps

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Keep doing
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How to move forward from here..

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doing



How to move forward from here..

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truth & JML

Low-hanging
Apps

Entitlement
& reviews

Keep doing
what you're
doing



**Thanks for comming to
my session!**

Time for Q&A

**Find me after for
feedback and more info**

