

**Evolveum**

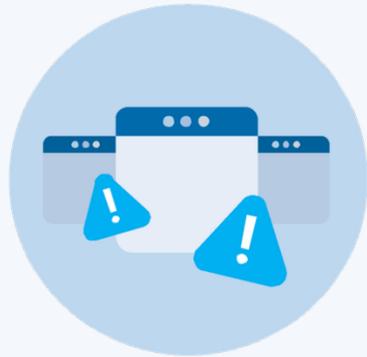
**THE HIDDEN COST OF SLOW  
APPLICATION ONBOARDING  
IN IGA**

**By Pavol Mederly, Evolveum's Chief Product Officer  
Presented at Gartner IAM Summit 2026**

80%

of cyberattacks are identity-related

# THE BOTTLENECK IN IGA



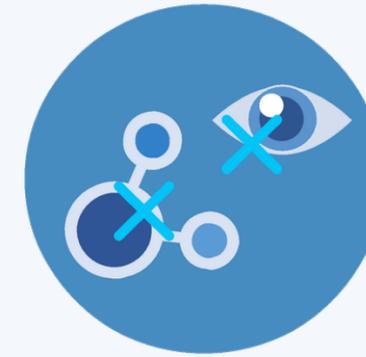
**100s to 1000s  
applications**

shadow IT



**Manual and slow  
app onboarding**

coverage often only  
10-30%



**Unconnected  
applications**

no visibility, no automation,  
no compliance

# WHO WE ARE



**Pavol Mederly**  
Chief Product Officer

**Evolveum is the company behind midPoint.**

**MidPoint** is the leading open source IGA platform. Engineered in the EU and supported globally, it is designed to automate and manage every digital identity. It helps organizations secure and scale their business by delivering the visibility needed to reduce identity risk and ensure compliance. With flexible deployments and no license fees, midPoint gives organizations maximum control and freedom over their identity security.



# APPLICATION ONBOARDING CHALLENGES

1

**Discovery**

find the app

2

**Technical  
connection**

make the app talk to  
the IGA engine

3

**Data  
connection**

make sense of the data

4

**Roles and  
policies**

fully govern the  
application

# APPLICATION ONBOARDING CHALLENGES

1

## Discovery

- reviewing documents
- interviewing stakeholders
- querying CMDB
- tracking IT expenses
- examining SSO and SSE platforms
- OAuth registrations and API token usage
- network traffic
- cloud control plane
- browser telemetry

# APPLICATION ONBOARDING CHALLENGES

2

## Technical connection

- SCIM
- REST
- database
- CSV files
- LDAP
- SDKs
- cloud APIs
- messaging
- connector catalogs
- integration templates
- low-code approach
- wizards
- SCIM-first
- OpenAPI introspection
- generative AI

# APPLICATION ONBOARDING CHALLENGES

3

## Data connection

- object classification
- identities correlation
- attribute mapping
- different kinds of objects
- integration templates
- questionnaires, guidelines
- wizards
- rules/patterns
- machine learning
- heuristics
- AI

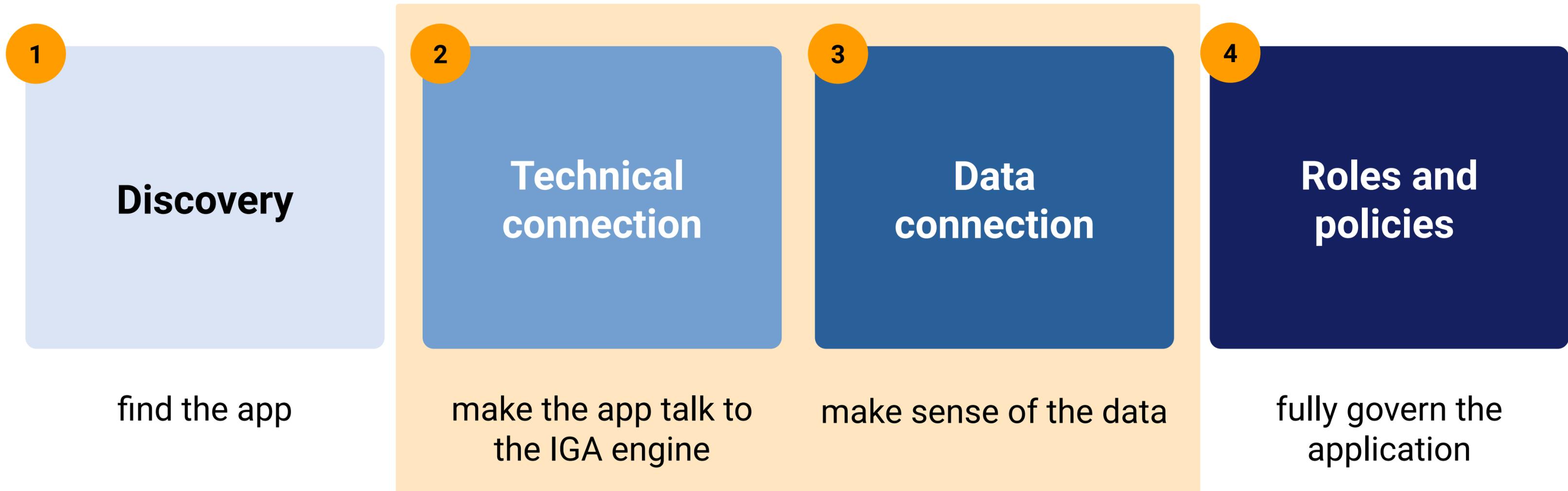
# APPLICATION ONBOARDING CHALLENGES

4

## Roles and policies

- roles
- classification
- approvals
- SoD
- owner
- manager
- templates
- guidelines
- methodologies

# APPLICATION ONBOARDING CHALLENGES



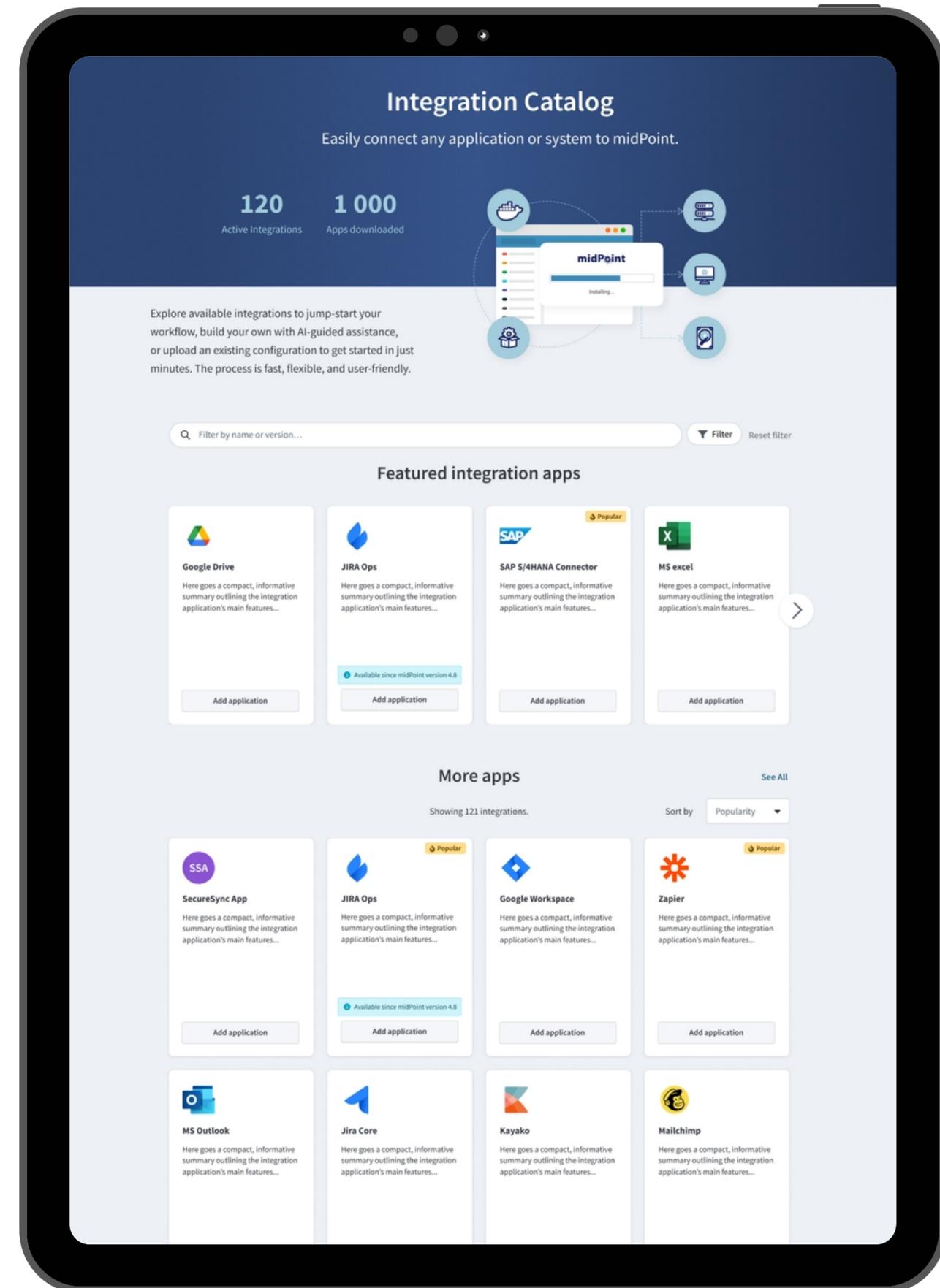
midPilot

# INTEGRATION CATALOG

**Share** integration knowledge and code

**Ready-to-use** open-source connectors with usage recipes

**Free to use,** free to publish with clear responsibility for the artifacts



# TECHNICAL CONNECTION: AI-POWERED CONNECTOR WIZARD



create ConnId  
connectors easily



REST, SCIM, DB connectors  
(including ITSM systems)



wizard guide powered  
by AI



no-code/low-code  
config-only or simple code  
fragments



every execution is  
human-approved



integrated right into  
midPoint and  
MidPoint Studio

# WHY THIS METHOD



**Easier code  
development,  
review, and  
maintenance**



**Safe to use**



**Usable even for  
less technically  
experienced  
people**

[☰ Summary](#)⋮ Basic settings

Application identification

**In progress**

## Identify the Target Application

Tell us which application you want to connect to. Based on this information, midPoint will identify the target system and locate the appropriate documentation to prepare everything needed for connector generation.

**Application name \*** ⓘ

OpenProject

**Description** ⓘ**Version of application** ⓘ**Integration type \*** ⓘ

Rest

**Deployment type** ⓘ

Undefined



Entering basic information about the application being connected

**Next** →

☰ Summary

Basic settings

Application identification

Complete

Documentation

In progress

## Provide Integration Documentation

Documentation helps the AI understand how your system communicates, which endpoints it exposes, and what data structures it uses. By analyzing this information, the AI can generate a more accurate and tailored connector for your integration.

**🔍 Documentation found** AI has found matching documentation or configurations. Please review them to ensure they fit your needs.

▾

+ Add URL    📁 Upload file    + Create new

**API documentation** 🔍 AI

Please note that we intend to keep this specification as accurate and stable as possible, however work on the API is still ongoing and not all resources and actions in OpenProject are yet accessible through the API. This document will be subject to changes as we add more endpoints and functionality ... 👁️ 🗑️

<https://www.openproject.org/docs/api/>

**OpenProject OpenAPI specification** 🔍 AI

**OpenAPI specification** 👁️ 🗑️

<https://www.openproject.org/docs/api/v3/spec.yml>

Approving or augmenting the documentation found by the wizard

☰ Summary

Basic settings  
**Complete**

Connection  
**Complete**

Object class  
**Complete**

Object class  
Object classes  
**In progress**

### Select Object Class to Be Configured

The midPilot analyzed your documentation and found object classes that might be available for integration. Select one to begin its configuration.

**Not seeing what you expected?** Try checking the list of other object classes using the 'More classes' button.

#### Recommended Object Classes

[More classes](#)

- User**  
Represents an individual who can interact with the syste...
- Group**  
Represents a group of users that can be used for...
- Role**  
Role represents a set of permissions that can be...
- Membership**  
Represents the association between a principal (user o...
- Principal**  
Generic representation of an identity that can be a user,...
- Workspace**  
Workspace is a container for resources and users with...
- Project**  
A workspace that contains work packages, wikis, and...
- Program**  
Represents a program, a container grouping projects...
- Portfolio**  
A workspace that groups projects, work packages, an...

Selecting what objects should the connector support

**Next** →

☰ Summary

Basic settings

Complete

Connection

Complete

Object class: User

Complete

🔄 Object class: User

Object classes

Complete

Schema scripts  
validation

Complete

Schema validation

In progress

## Review Schema Attributes

View the object schema attributes which were extracted from the schema script. Check if everything matches your expectations.

☰ Items 15

☰ Definition settings

Display name ⓘ

✕

Name ⓘ

✕

More... ▾

🔍 Basic ▾

👤 User

Name * ⓘ	Type * ⓘ	Display name ⓘ	Order ⓘ	Required ⓘ	Multivalue ⓘ	Indexed
language	String		120	False	False	
updatedAt	Date time		130	False	False	
firstName	String		140	False	False	
email	String		150	False	False	
identity_url	String		160	False	False	
name	String		170	False	False	
	String		180	False	False	
mail	String		190	True	False	

Validating that the wizard correctly understood the schema from the documentation

[☰ Summary](#)

Basic settings

Complete

Connection

Complete

Object class: User

Complete

[⋮](#) Object class: User

Object classes

Complete

Schema scripts validation

Complete

Schema validation

Complete

## Select and Adjust Search Operation Endpoints

Select endpoint to be used in search operation. The assistant may suggest default search endpoints or parameters based on available documentation. If no suggestion fits, you can specify a custom search endpoint manually.

 GET Retrieve a list of users /users GET Get user by ID /users/{id}[← Back](#)[Next →](#)

Selecting the endpoint that will provide the list of users

☰ Summary

Basic settings  
**Complete**

Connection  
**Complete**

Object class: User  
**Complete**

- ☰ Object class: User
  - Object classes  
**Complete**
  - Schema scripts validation  
**Complete**
  - Schema validation  
**Complete**

## Search All Script Validation

This step validates the Search All script to ensure it correctly retrieves and processes all available objects from the target system.

```
1 objectClass("User") {
2     search {
3         endpoint("/users") { // List endpoint as defined in extracted_endpoints
4             objectExtractor {
5                 // Extract the list of User objects from the HAL+JSON response
6                 return response.body().get("_embedded")?.get("elements")
7             }
8         pagingSupport {
9             // Pagination parameters as defined by the API
10            request.queryParameter("size", paging.pageSize)
11            .queryParameter("offset", paging.pageOffset)
12        }
13    }
14 }
15 }
```

Validating the code that will retrieve all users generated by the wizard

🔄 Regenerate **✓ Yes, this script is correct**

Search all script validation

## Summary

Basic settings

Complete

Connection

Complete

Object classes

Complete

Object class: User

Object classes

Complete

Schema scripts validation

Complete

Schema validation

Complete

## Connector summary

### Connector readiness

Essential requirements for a functional connector

1 step to Read-only

Basic information [Configure](#)

OpenProject

Version	1.1
Integration type	Rest
Deployment type	Unknown

Connection [Configure](#)

Connected

BaseUrl	http://localhost:8888/ap...
Test endpoint	my_preferences
Auth method	Basic auth

Documentation [Configure](#)

Good coverage

Files	0
Links	6

Object classes

1

[View all object classes](#)

Relationships

0

[View all relationships](#)

### Connector actions

Displaying current state of the connector, suggesting next actions



Upload connector

Uploading the prepared connector, adding its JAR file...



Add new object class

Start configuration for a different object class which...



Add relationship

Set up relation between object classes which is useful for...

# CONNECTING THE DATA: ASSISTED CLASSIFICATION, CORRELATION, AND MAPPING

1

**Classification**

how to classify  
identities

2

**Correlation**

how to match  
identities

3

**Mappings**

how to translate  
identity data

**AI + heuristics**

# WHAT ABOUT SAFETY?

Safety is achieved by **avoiding code generation** altogether or using **safe expression language** and limiting custom code to **little snippets**.

# CONNECTING AN LDAP DIRECTORY: OBJECT CLASSIFICATION

Administrator Accounts

Administrative accounts residing under the administrators OU. Show filter ▾ ⋮

Kind: account Intent: admin Object class: inetOrgPerson Focus type: UserType

Service Accounts

Service accounts residing under the service-accounts OU. Show filter ▾ ⋮

Kind: account Intent: service Object class: inetOrgPerson Focus type: UserType

Employee Accounts

Employee accounts within the users OU that have an employee number. Hide filter ▲ ⋮

Kind: account Intent: employee Object class: inetOrgPerson Focus type: UserType

Filter:  
 ✖ AI

Base context filter:  
 ✖ AI

Base context object class:

# IDENTITY CORRELATION

Suggestion ⋮  

### Name correlator

Suggested based on matching of attributes/empnum to name

+ name (Exact)

Stats

1.0 Weight	1 Tier	93.0 Efficiency
---------------	-----------	--------------------

Actions

X Discard ✓ Accept

[View rule](#)

Suggestion ⋮  

### PersonalNumber correlator

Suggested based on matching of attributes/empnum to personalNumber

+ personalNumber (Exact)

Stats

1.0 Weight	1 Tier	93.0 Efficiency
---------------	-----------	--------------------

Actions

X Discard ✓ Accept

[View rule](#)

# DATA MAPPINGS

## Suggestions generated

8 suggestions have been generated. Review and apply them.

 Re-generate

Last Refresh: Feb 11, 2026, 2:10:52 PM

 Inbound mappings (to MidPoint)

 Outbound mappings (to Resource)

ON   Suggestions Enabled

All mappings

<input type="checkbox"/>	Name 	From resource attribute 	Expression 	Target 	Lifecycle state 	...
<input type="checkbox"/>	  job-into-description	job	As is	description	Active (production) <input type="button" value="v"/>	<input type="button" value="✓ Accept"/> <input type="button" value="✗ Dismiss"/>
<input type="checkbox"/>	  emptytype-into-description	emptytype	As is	description	Active (production) <input type="button" value="v"/>	<input type="button" value="✓ Accept"/> <input type="button" value="✗ Dismiss"/>
<input type="checkbox"/>	  surname-into-familyName	surname	As is	familyName	Active (production) <input type="button" value="v"/>	<input type="button" value="✓ Accept"/> <input type="button" value="✗ Dismiss"/>
<input type="checkbox"/>	  firstname-into-givenName	firstname	As is	givenName	Active (production) <input type="button" value="v"/>	<input type="button" value="✓ Accept"/> <input type="button" value="✗ Dismiss"/>
<input type="checkbox"/>	  locality-into-locality	locality	As is	locality	Active (production) <input type="button" value="v"/>	<input type="button" value="✓ Accept"/> <input type="button" value="✗ Dismiss"/>
<input type="checkbox"/>	  empnum-into-name	empnum	As is	name	Active (production) <input type="button" value="v"/>	<input type="button" value="✓ Accept"/> <input type="button" value="✗ Dismiss"/>
<input type="checkbox"/>	  empnum-into-personalNumber	empnum	As is	personalNumber	Active (production) <input type="button" value="v"/>	<input type="button" value="✓ Accept"/> <input type="button" value="✗ Dismiss"/>
<input type="checkbox"/>	  job-into-title	job	As is	title	Active (production) <input type="button" value="v"/>	<input type="button" value="✓ Accept"/> <input type="button" value="✗ Dismiss"/>

# DASHBOARDS



Google Workspace  
Google Admin SDK resource

Status	Up
Ability	Read-Write
Connector	Google Admin SDK
Object types	3

### Lifecycle state

Active

- Overview
- Basic
- Objects
- Schema handling
- Configuration

Setup assistant

Recommended setup complete (100%)  
All recommended configuration steps have been completed

Review checklist

Accounts

1342

View all

Groups

52

View all

Roles

34

View all

Connector

Google Workspace Admin SDK  
Version 1.0.0

Operational

Author

Evolveum

Configured capabilities

- ACTIVATION
- ACTIVATION STATUS
- CREATE
- READ
- UPDATE
- DELETE
- TEST CONNECTION
- SCRIPT
- LIVE SYNC

Mappings

Configured

12  
Inbound

8  
Outbound

4  
Overrides

View all

Schema

Configured

3  
Object types

47  
Attributes

1  
Association types

View all

Correlation

Configured

3  
Rules

94.2%  
Match rate

18  
Unmatched accounts

View all

Synchronization

Live sync

Sync reactions 6

Last run 24-02-2025 07:00:00

Processed objects 1,247

Errors 0

View all

Account Breakdown

1,342 total

Linked 1280

Unmatched 44

Disputed 8

Unlinked 10

Protected 12

View all



## Google Workspace

Google Workspace integration for provisioning and managing users

Status	✓ Active
Version	1.0.0.1.93
Owner	JD John Doe
Manager	JS Jason Smith

### Lifecycle state

Active

- Overview
- Basic
- Objects
- Application roles
- Approvals
- Certification
- Segregation of duties
- Configuration

### Setup assistant

✓ Recommended setup complete (100%)  
All recommended configuration steps have been completed

[Review checklist](#)

### Connected resource

1 resource



#### Google Workspace

Version 3.8.1

Operational

Connector

Google Workspace Admin SDK

Version

1.0.0

#### Configured capabilities

- ACTIVATION
- ACTIVATION STATUS
- CREATE
- READ
- UPDATE
- DELETE
- TEST CONNECTION
- SCRIPT
- LIVE SYNC

### Governance definitions



#### Approvals

2 approval policies active



#### Certification

1 review scheduled



#### Segregation of Duties

No SoD constraints defined



### Users with access

342

[View all](#)

### Application roles

12

[View all](#)

### Privileged roles

3

[View all](#)

### Compliance violations

2 violations

[View all](#)

# DEPLOYMENT OPTIONS

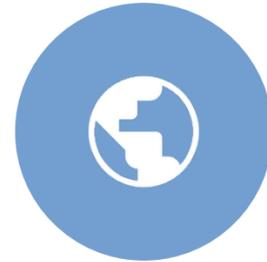
All components are **open source**,  
therefore you can utilize:



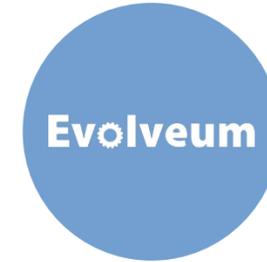
self-hosted



existing cloud services



public AI services



Evolveum AI services

Balancing **privacy, cost,**  
**and performance.**

# Explore midPoint & midPilot further.



[RECOVERY  
AND RESILIENCE]  
PLAN

MidPilot has received funding from the European Union through the Recovery and Resilience Plan of the Slovak Republic.

