

# Evolveum

What's New in MidPoint 4.7

# Agenda

- What's new in 4.7
- Deprecations, Removals
- Platforms
- Plans for 4.8



# MidPoint - News

- Feature release (1 year support)
- Major features
  - Simulations
  - Object Marks
  - IGA Reporting
  - Password Reset
- A lot of small features and improvements
  - Different UX Improvements, Role wizard, Delta viewer, Security policy merging...

The collage features the following screenshots:

- SCALABILITY:** A table with columns 'Name' and 'Identifiers'. A red banner indicates 'USERS 10,000,000 enabled' and 'no total'.
- IDENTITY GOVERNANCE AND ADMINISTRATION:** A user profile for John Smith (jsmith), Programmer, with fields for Full name and Position (Trainee).
- SIMULATIONS:** A list of simulation results with progress bars and status indicators (green, blue, red).
- LICENSE MANAGEMENT:** A table with columns 'License Name' and 'Type'. Rows include AD Azure (ES Developer Pack) and Google Workspace (Business Plus).
- MULTIPLE IDENTITY SYNCHRONIZATION WITH SMART CORRELATION:** A table with columns 'Name' and 'Resource'. Rows include jobe (HR), 00001 (LDAP), jobe01 (Canteen Card), and johndoe01 (Working group 1).
- ADDRESSING REGULATIONS AND COMPLIANCE:** A dashboard showing compliance metrics: 84.24% compliant (data protection policy), 0 objects in violation (security policies), 1 violation (organizational governance policies), and 2 orphaned accounts (5498 accounts in total).
- USER SELF-SERVICE:** Three buttons for adding users from different providers: Outlook, Open, and OLEDB.

# Simulations

- Predict what would happen if ...
  - ... the full reconciliation run.
- Avoid unnecessary data corruption.
- Analyze quality of data.
- Understand processes better.
- See the impact of the single change.
- Build a trust with customer.



# Simulating Correlation

- Simple correlation rule
- using employee number

uid=jsmith1,ou=People,dc=example,dc=com (Simulation result: ldap-import (shadow management simulation), 2023-04-14T12:23:18.741+02:00)

Processed object details
Changes

Type: Shadow

Resource object: Object on ldap

State: Modified

Mark: Shadow correlation state changed

Projections: 0

Item	Old value	New value
Resource	ldap (Default)	
Kind	Account	
Intent	default	
Situation		Unlinked
synchronizationSituationDescription		(a value of type SynchronizationSituationDescriptionType)
Synchronization timestamp		14 April 2023 at 12:23:18 CEST

Item	Old value	New value
correlationStartTimestamp		14 April 2023 at 12:23:18 CEST
situation		EXISTING_OWNER
resultingOwner		empNo:1 (Default)
correlationEndTimestamp		14 April 2023 at 12:23:18 CEST

Item	Value
identifier	existing-ed152c05-409d-4fae-b8c1-d6b23b712e4
confidence	1.0
candidateOwnerRef	empNo:1 (Default)

Processed objects

Name	Type	State	Changes
uid=admin,ou=People,dc=example,dc=com (Account uid=admin,ou=People,dc=example,dc=com (default) on ldap)	Shadow	Modified	1 Additions / 5 Edits of total 6
uid=agreen3,ou=People,dc=example,dc=com (Account uid=agreen3,ou=People,dc=example,dc=com (default) on ldap)	Shadow	Modified	1 Additions / 5 Edits of total 6
uid=bob,ou=People,dc=example,dc=com (Account uid=bob,ou=People,dc=example,dc=com (default) on ldap)	Shadow	Modified	1 Additions / 5 Edits of total 6
uid=hacker,ou=People,dc=example,dc=com (Account uid=hacker,ou=People,dc=example,dc=com (default) on ldap)	Shadow	Modified	1 Additions / 5 Edits of total 6
uid=jsmith1,ou=People,dc=example,dc=com (Account uid=jsmith1,ou=People,dc=example,dc=com (default) on ldap)	Shadow	Modified	1 Additions / 7 Edits of total 8
uid=jsmith2,ou=People,dc=example,dc=com (Account uid=jsmith2,ou=People,dc=example,dc=com (default) on ldap)	Shadow	Modified	1 Additions / 5 Edits of total 6
uid=junior1,ou=People,dc=example,dc=com (Account uid=junior1,ou=People,dc=example,dc=com (default) on ldap)	Shadow	Modified	1 Additions / 5 Edits of total 6
uid=rblack,ou=People,dc=example,dc=com (Account uid=rblack,ou=People,dc=example,dc=com (default) on ldap)	Shadow	Modified	1 Additions / 5 Edits of total 6
uid=tesla,ou=People,dc=example,dc=com (Account uid=tesla,ou=People,dc=example,dc=com (default) on ldap)	Shadow	Modified	1 Additions / 5 Edits of total 6

ID	Name	Resource	Kind	Intent	Tag	State	Event mark	Kind before	Kind after	Intent before	Intent after	Correlation situation before	Correlation situation after	Synchronization situation before	Synchronization situation after	Correlated owner before	Correlated owner after
1	uid=jsmith1,ou=People,dc=example,dc=com	ldap	Account	default		Modified	Shadow correlation state changed	Account	Account	default	default		EXISTING_OWNER		EXISTING_OWNER		empNo:1
3	uid=jsmith2,ou=People,dc=example,dc=com	ldap	Account	default		Modified	Shadow correlation state changed	Account	Account	default	default		NO_OWNER		NO_OWNER		
4	uid=agreen3,ou=People,dc=example,dc=com	ldap	Account	default		Modified	Shadow correlation state changed	Account	Account	default	default		NO_OWNER		NO_OWNER		
5	uid=rblack,ou=People,dc=example,dc=com	ldap	Account	default		Modified	Shadow correlation state changed	Account	Account	default	default		NO_OWNER		NO_OWNER		
6	uid=bob,ou=People,dc=example,dc=com	ldap	Account	default		Modified	Shadow correlation state changed	Account	Account	default	default		NO_OWNER		NO_OWNER		
7	uid=tesla,ou=People,dc=example,dc=com	ldap	Account	default		Modified	Shadow correlation state changed	Account	Account	default	default		NO_OWNER		NO_OWNER		
8	uid=hacker,ou=People,dc=example,dc=com	ldap	Account	default		Modified	Shadow correlation state changed	Account	Account	default	default		NO_OWNER		NO_OWNER		
9	uid=admin,ou=People,dc=example,dc=com	ldap	Account	default		Modified	Shadow correlation state changed	Account	Account	default	default		NO_OWNER		NO_OWNER		
10	uid=junior1,ou=People,dc=example,dc=com	ldap	Account	default		Modified	Shadow correlation state changed	Account	Account	default	default		NO_OWNER		NO_OWNER		

# Simulating Correlation

- Improving correlation
  - matching by emailAddress
  - matching by name

← Back Processed objects

Event mark Shadow correlation state changed State Undefined More... Basic

<input type="checkbox"/>	Name	Type	State	Changes
<input type="checkbox"/>	uid=agreen3,ou=People,dc=example,dc=com (Account uid=agreen3,ou=People,dc=example,dc=com (default) on ldap) Shadow correlation state changed	Shadow	Modified	1 Additions / 6 Edits of total 7
<input type="checkbox"/>	uid=jsmith2,ou=People,dc=example,dc=com (Account uid=jsmith2,ou=People,dc=example,dc=com (default) on ldap) Shadow correlation state changed	Shadow	Modified	1 Additions / 7 Edits of total 8
<input type="checkbox"/>	uid=rblack,ou=People,dc=example,dc=com (Account uid=rblack,ou=People,dc=example,dc=com (default) on ldap) Shadow correlation state changed	Shadow	Modified	1 Additions / 6 Edits of total 7

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← Back uid=agreen3,ou=People,dc=example,dc=com (Simulation result: ldap-import (shadow management simulation), 2023-04-05T17:18:36.453+02:00)

Processed object details

Type Shadow

Resource object Object on ldap

State Modified

Marks Shadow correlation state changed

Projections 0

Changes

Account uid=agreen3,ou=People,dc=example,dc=com (default) modified on ldap.

Item	Old value	New value
Resource	ldap [Member]	
Kind	Account	
Intent	default	
Situation	Unmatched	Disputed
synchronizationSituationDescription	(a value of type SynchronizationSituationDescriptionType)	(a value of type SynchronizationSituationDescriptionType)
SynchronizationTimestamp	5 April 2023 at 17:17:34 CEST	5 April 2023 at 17:18:36 CEST

Modify correlation

Item	Old value	New value
correlationStartTimestamp	5 April 2023 at 17:17:34 CEST	5 April 2023 at 17:18:36 CEST
situation	NO_OWNER	UNCERTAIN
correlationEndTimestamp	5 April 2023 at 17:17:34 CEST	

Add correlation/ownerOptions

Add option

Item	Value
identifier	existing-dec6177-a21f-4601-b0f1-0314976748db
confidence	0.8
candidateOwnerRef	empNo:3 [Member]

Add option

Item	Value
identifier	none

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
ID	Name	Resource	Kind	Intent	Tag	State	Event mark	Kind before	Kind after	Intent before	Intent after	Correlation situation before	Correlation situation after	Synchronization situation before	Synchronization situation after	Correlated owner before	Correlated owner after	
7	uid=jsmith1,ou=People,dc=example,dc=com	ldap	Account	default		Modified		Account	Account	default	default	EXISTING_OWNER	EXISTING_OWNER	EXISTING_OWNER	EXISTING_OWNER	empNo:1	empNo:1	
8	uid=jsmith2,ou=People,dc=example,dc=com	ldap	Account	default		Modified	Shadow correlation state changed	Account	Account	default	default	NO_OWNER	EXISTING_OWNER	NO_OWNER	EXISTING_OWNER			
10	uid=agreen3,ou=People,dc=example,dc=com	ldap	Account	default		Modified	Shadow correlation state changed	Account	Account	default	default	NO_OWNER	UNCERTAIN	NO_OWNER	UNCERTAIN			
13	uid=rblack,ou=People,dc=example,dc=com	ldap	Account	default		Modified	Shadow correlation state changed	Account	Account	default	default	NO_OWNER	UNCERTAIN	NO_OWNER	UNCERTAIN			
17	uid=bob,ou=People,dc=example,dc=com	ldap	Account	default		Modified		Account	Account	default	default	NO_OWNER	NO_OWNER	NO_OWNER	NO_OWNER			
18	uid=tesla,ou=People,dc=example,dc=com	ldap	Account	default		Modified		Account	Account	default	default	NO_OWNER	NO_OWNER	NO_OWNER	NO_OWNER			
19	uid=hacker,ou=People,dc=example,dc=com	ldap	Account	default		Modified		Account	Account	default	default	NO_OWNER	NO_OWNER	NO_OWNER	NO_OWNER			
20	uid=admin,ou=People,dc=example,dc=com	ldap	Account	default		Modified		Account	Account	default	default	NO_OWNER	NO_OWNER	NO_OWNER	NO_OWNER			
21	uid=junior1,ou=People,dc=example,dc=com	ldap	Account	default		Modified		Account	Account	default	default	NO_OWNER	NO_OWNER	NO_OWNER	NO_OWNER			

# Simulating Reconciliation

- How many users will be changed?
- How many users will be activated?

Simulation result: Import from LDAP - development simulation, 2023-04-20T11:00:16.087Z

Simulation task details		Event marks			
Start timestamp	April 20, 2023 at 11:00:16 AM UTC	Focus activated	Focus deactivated	Focus renamed	Focus assignments changed
End timestamp	April 20, 2023 at 11:00:21 AM UTC	0	0	39	0
Finished in	5 seconds	<a href="#">More info</a>			
Task	Import from LDAP - development simulation	Focus archetype changed	Focus parent organization refere...	Focus role membership changed	Projection activated
Status	Finished	0	0	0	0
Configuration	Development	<a href="#">More info</a>			
Added objects	0	Projection deactivated	Projection renamed	Projection identifier changed	Projection entitlement changed
Deleted objects	1	1	0	0	0
Modified objects	39	<a href="#">More info</a>			
Unmodified objects	78	Projection password changed	Resource object affected		
All processed objects	118	0	1		
Errors	0	<a href="#">More info</a>			

Name	Type	State	Changes
Herman Toothrot (ZiH)	User	Added	9 Additions of total 9
ZiH	Shadow	Modified	2 Edits of total 2
Zlmonhead	Shadow	Unmodified	No changes
Lemonhead Canibal (Zlmonhead)	User	Unmodified	No changes
2Monkey Island	Organization	Added	4 Additions of total 6
2Monkey Island	Organization	Added	6 Additions of total 6
Redskull Canibal (Zredskull)	User	Modified	1 Additions / 1 Edits / 3 Removals of total 3
Redskull Canibal (Zredskull)	User	Modified	2 Removals of total 2
Zredskull	Shadow	Unmodified	No changes
Sharpooth Canibal (Zsharpooth)	User	Unmodified	No changes

- How many accounts will be deactivated?
- How many accounts will be renamed?

# Simulations GUI and Reports

midPoint
All results 🇺🇸 🌙 🔌

SELF SERVICE ▾

- Home
- Profile
- Credentials
- Request access
- Consents

ADMINISTRATION ▾

- Dashboards <
- Users <
- Org. structure <
- Roles <
- Services <
- Resources <
- Cases 13
- Certification <
- Server tasks <
- Nodes <
- Reports <
- Simulations ▾

## All results

Name	Description	Started	Duration	State	Objects
Simulation result: 2023-03-21T16:27:38.996+01:00		March 21, 2023, 4:27:38 PM	0 seconds	Finished	1 Added
Simulation result: 2023-03-21T16:27:38.834+01:00		March 21, 2023, 4:27:38 PM	0 seconds	Finished	1 Added
Simulation result: import, 2023-03-21T16:27:36.360+01:00		March 21, 2023, 4:27:36 PM	0 seconds	Finished	2 Modified
Simulation result: import, 2023-03-21T16:27:35.526+01:00		March 21, 2023, 4:27:35 PM	0 seconds	Finished	1 Added / 1 Modified
Simulation result: import, 2023-03-21T16:27:34.688+01:00		March 21, 2023, 4:27:34 PM	0 seconds	Finished	2 Modified
Simulation result: import, 2023-03-21T16:27:33.841+01:00		March 21, 2023, 4:27:33 PM	0 seconds	Finished	1 Modified
Simulation result: import, 2023-03-21T16:27:33.006+01:00		March 21, 2023, 4:27:33 PM	0 seconds	Finished	1 Added / 1 Modified
Simulation result: import, 2023-03-21T16:27:32.036+01:00		March 21, 2023, 4:27:32 PM	0 seconds	Finished	2 Modified
Simulation result: import, 2023-03-21T16:27:30.705+01:00		March 21, 2023, 4:27:30 PM	0 seconds	Finished	1 Added / 1 Modified
Simulation result: 2023-03-21T16:27:29.534+01:00		March 21, 2023, 4:27:29 PM	0 seconds	Finished	1 Added / 1 Modified
Simulation result: 2023-03-21T16:27:29.366+01:00		March 21, 2023, 4:27:29 PM	0 seconds	Finished	1 Modified
Simulation result: 2023-03-21T16:27:29.034+01:00		March 21, 2023, 4:27:29 PM	0 seconds	Finished	1 Added / 1 Modified

### Simulation task details

Start timestamp: April 20, 2023 at 11:00:16 AM UTC

End timestamp: April 20, 2023 at 11:00:21 AM UTC

Finished in: 5 seconds

Task: Import from LDAP - development simulation

Status: Finished

Configuration: Development

Added objects: 0

Deleted objects: 1

Modified objects: 39

Unmodified objects: 78

All processed objects: 118

Errors: 0

### Event marks

Focus activated 0	Focus deactivated 0	Focus renamed 39	Focus assignments changed 0
Focus archetype changed 0	Focus parent organization refere... 0	Focus role membership changed 0	Projection activated 0
Projection deactivated 1	Projection renamed 0	Projection identifier changed 0	Projection entitlement changed 0
Projection password changed 0	Resource object affected 1		

B	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U
Name	Started	Finished	Task	Predefined configuration	Built-in metric	Event mark	Explicit metric	Aggregation function	Scope: type	Scope: archetype	Scope: resource	Scope: kind	Scope: intent	Value	Selection size	Selection total value	Domain size	Domain total value
1	Simulation result(test160)	*07/03/2023, 18:17	07/03/2023, 18:17	PRODUCTION	Added			SELECTION_TOTAL_VALUE	ShadowType		resource-outbound		default	0	0	0	1	0
2	Simulation result(test160)	*07/03/2023, 18:17	07/03/2023, 18:17	PRODUCTION	Added			SELECTION_TOTAL_VALUE	UserType	blue				0	0	0	1	0
3	Simulation result(test160)	*07/03/2023, 18:17	07/03/2023, 18:17	PRODUCTION	Deleted			SELECTION_TOTAL_VALUE	ShadowType		resource-outbound	Account	default	0	0	0	1	0
4	Simulation result(test160)	*07/03/2023, 18:17	07/03/2023, 18:17	PRODUCTION	Deleted			SELECTION_TOTAL_VALUE	UserType	blue				0	0	0	1	0
5	Simulation result(test160)	*07/03/2023, 18:17	07/03/2023, 18:17	PRODUCTION	Deleted			SELECTION_TOTAL_VALUE	UserType	blue				0	0	0	1	0
6	Simulation result(test160)	*07/03/2023, 18:17	07/03/2023, 18:17	PRODUCTION	Modified			SELECTION_TOTAL_VALUE	ShadowType		resource-outbound	Account	default	1	1	1	1	1
7	Simulation result(test160)	*07/03/2023, 18:17	07/03/2023, 18:17	PRODUCTION	Modified			SELECTION_TOTAL_VALUE	UserType	blue				1	1	1	1	1
8	Simulation result(test160)	*07/03/2023, 18:17	07/03/2023, 18:17	PRODUCTION		Focus activated		SELECTION_TOTAL_VALUE	UserType	blue				0	0	0	1	0
9	Simulation result(test160)	*07/03/2023, 18:17	07/03/2023, 18:17	PRODUCTION		Focus archetype changed		SELECTION_TOTAL_VALUE	UserType	blue				0	0	0	1	0
10	Simulation result(test160)	*07/03/2023, 18:17	07/03/2023, 18:17	PRODUCTION		Focus assignments changed		SELECTION_TOTAL_VALUE	UserType	blue				1	1	1	1	1
11	Simulation result(test160)	*07/03/2023, 18:17	07/03/2023, 18:17	PRODUCTION		Focus deactivated		SELECTION_TOTAL_VALUE	UserType	blue				0	0	0	1	0
12	Simulation result(test160)	*07/03/2023, 18:17	07/03/2023, 18:17	PRODUCTION		Focus parent organization reference changed		SELECTION_TOTAL_VALUE	UserType	blue				0	0	0	1	0
13	Simulation result(test160)	*07/03/2023, 18:17	07/03/2023, 18:17	PRODUCTION		Focus renamed		SELECTION_TOTAL_VALUE	UserType	blue				0	0	0	1	0
14	Simulation result(test160)	*07/03/2023, 18:17	07/03/2023, 18:17	PRODUCTION		Focus role membership changed		SELECTION_TOTAL_VALUE	UserType	blue				1	1	1	1	1
15	Simulation result(test160)	*07/03/2023, 18:17	07/03/2023, 18:17	PRODUCTION		Projection activated		SELECTION_TOTAL_VALUE	ShadowType		resource-outbound	Account	default	0	0	0	1	0
16	Simulation result(test160)	*07/03/2023, 18:17	07/03/2023, 18:17	PRODUCTION		Projection deactivated		SELECTION_TOTAL_VALUE	ShadowType		resource-outbound	Account	default	0	0	0	1	0
17	Simulation result(test160)	*07/03/2023, 18:17	07/03/2023, 18:17	PRODUCTION		Projection entitlement changed		SELECTION_TOTAL_VALUE	ShadowType		resource-outbound	Account	default	1	1	1	1	1
18	Simulation result(test160)	*07/03/2023, 18:17	07/03/2023, 18:17	PRODUCTION		Projection identifier changed		SELECTION_TOTAL_VALUE	ShadowType		resource-outbound	Account	default	0	0	0	1	0
19	Simulation result(test160)	*07/03/2023, 18:17	07/03/2023, 18:17	PRODUCTION		Projection password changed		SELECTION_TOTAL_VALUE	ShadowType		resource-outbound	Account	default	0	0	0	1	0
20	Simulation result(test160)	*07/03/2023, 18:17	07/03/2023, 18:17	PRODUCTION		Projection renamed		SELECTION_TOTAL_VALUE	ShadowType		resource-outbound	Account	default	0	0	0	1	0
21	Simulation result(test160)	*07/03/2023, 18:17	07/03/2023, 18:17	PRODUCTION		Resource object affected		SELECTION_TOTAL_VALUE	ShadowType		resource-outbound	Account	default	1	1	1	1	1
22	Simulation result(test160)	*07/03/2023, 18:17	07/03/2023, 18:17	PRODUCTION			association-values-changed	SELECTION_TOTAL_VALUE	ShadowType		resource-outbound	Account	default	1	1	1	1	1
23	Simulation result(test160)	*07/03/2023, 18:17	07/03/2023, 18:17	PRODUCTION			attribute-modifications	SELECTION_TOTAL_VALUE	ShadowType		resource-outbound	Account	default	0	0	0	1	0
24	Simulation result(test160)	*07/03/2023, 18:17	07/03/2023, 18:17	PRODUCTION			modifications	SELECTION_TOTAL_VALUE	ShadowType		resource-outbound	Account	default	1	1	1	1	1
25	Simulation result(test160)	*07/03/2023, 18:17	07/03/2023, 18:17	PRODUCTION			modifications	SELECTION_TOTAL_VALUE	ShadowType		resource-outbound	Account	default	1	1	1	1	1
26	Simulation result(test160)	*07/03/2023, 18:17	07/03/2023, 18:17	PRODUCTION			special	SELECTION_TOTAL_VALUE	UserType	blue				3	1	3	1	3
27								SELECTION_TOTAL_VALUE	UserType	blue				0	0	0	1	1



# Single Import Preview

## Summary

State	Count	State	Count	State	Count	State	Count	State	Count	State	Count	Total
Deleted	0	Linked	0	Unmatched	0	Disputed	0	Unlinked	0	Nothing	6	6

Identifiers	Situation	Intent	Owner	Pending operations
<input type="checkbox"/> 2	Ident:2	person		
<input type="checkbox"/> 5	Ident:5	person		
<input type="checkbox"/> 3	Ident:3	person		
<input type="checkbox"/> 4	Ident:4	person		
<input type="checkbox"/> 6	Ident:6	person		
<input type="checkbox"/> 1	Ident:1	person		

More... **Basic**

- Enable
- Disable
- Delete
- Import preview**
- Import
- Remove owner
- Change owner
- Mark as Protected
- Add Marks
- Remove Marks

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### Processed object details

Type: User  
State: **Added**  
Marks: Focus activated  
Projections: 1

### Changes

Simple Advanced

Add User empNo:1

Item	Value
Name	empNo:1
Given name	John
Family name	Smith
Email	jsmith1@evolveum.com
Employee Number	1
Projections	1 [Member]

User was enabled.

## ← Back Processed objects

Name	Type	State	Changes
<input type="checkbox"/> 1 (Account 1 (person) on hr)	Shadow	<b>Modified</b>	2 Edits of total 2
<input type="checkbox"/> empNo:1 Focus activated	User	<b>Added</b>	7 Additions of total 7










Event mark Undefined State Undefined More... **Basic**




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# Object Marks

- Mechanism how to say that the objects
  - should not be touched
  - will be decommissioned later
  - are protected
  - should be correlated later
  - have invalid data















Intent  (Object Class: AccountObjectClass)

<input type="checkbox"/>	Identifiers	Situation
<input type="checkbox"/>	 uid=jsmith1,ou=People,dc=example,dc=com	dn: uid=jsmith1,ou=People,dc=example,dc=com UNLINKED
<input type="checkbox"/>	 uid=jsmith2,ou=People,dc=example,dc=com	dn: uid=jsmith2,ou=People,dc=example,dc=com UNLINKED
<input type="checkbox"/>	 uid=agreen3,ou=People,dc=example,dc=com	dn: uid=agreen3,ou=People,dc=example,dc=com DISPUTED
<input type="checkbox"/>	 uid=rblack,ou=People,dc=example,dc=com	dn: uid=rblack,ou=People,dc=example,dc=com DISPUTED
<input type="checkbox"/>	 uid=bob,ou=People,dc=example,dc=com	dn: uid=bob,ou=People,dc=example,dc=com UNMATCHED
<input type="checkbox"/>	 uid=tesla,ou=People,dc=example,dc=com Do not touch	dn: uid=tesla,ou=People,dc=example,dc=com UNMATCHED
<input type="checkbox"/>	 uid=hacker,ou=People,dc=example,dc=com Decommission later	dn: uid=hacker,ou=People,dc=example,dc=com UNMATCHED
<input type="checkbox"/>	 uid=admin,ou=People,dc=example,dc=com Protected	dn: uid=admin,ou=People,dc=example,dc=com UNMATCHED
<input type="checkbox"/>	 uid=junior1,ou=People,dc=example,dc=com Correlate later	dn: uid=junior1,ou=People,dc=example,dc=com UNMATCHED

Reclassify    Rows per page 20  Display

# IGA Reporting

- Who has access to What and Why?
- All Accesses panel in user's details

Access	Source	Why	Since
 Sculpting Corner	Direct	Created by: null	Thursday, 4. May 2023 00:01:24
 Approver	 War Machines Section 		Thursday, 4. May 2023 00:01:24
 Patron	Direct	Created by: null	Thursday, 4. May 2023 00:01:24
Full time employee	Direct	Created by: HR import	Thursday, 4. May 2023 00:01:31
 Full Time Employee	 Full time employee  Direct	Created by: null	Thursday, 4. May 2023 00:01:31
 End user	 Full time employee   Full Time Employee 		Thursday, 4. May 2023 00:01:31
 War Machines Section	Direct	Created by: null	Thursday, 4. May 2023 00:01:24

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# IGA Reporting

- Who has access to What and Why?
- Configurable report

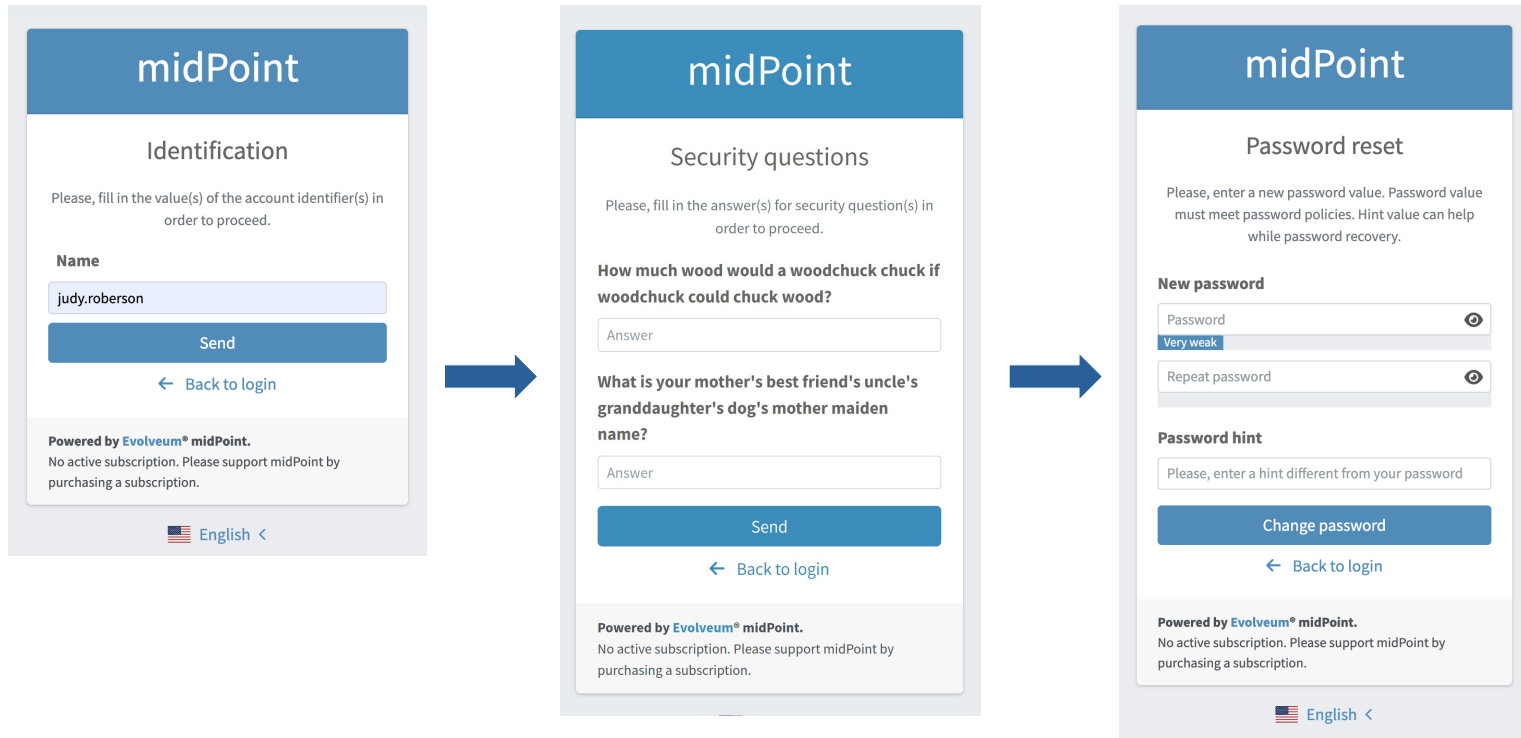
User	Name	Type	Relation	Path	Parent	Valid to	Since	Source
administrator	Superuser	System role	default	Superuser	Direct		5/4/23, 12:01 AM	Initialization
borgia	End user		default	End user	Direct		5/4/23, 12:01 AM	Initialization
borgia	End user		default	Council of Patrons -> End user	Council of Patrons		5/4/23, 12:01 AM	Initialization
borgia	Approver	System role	default	Council of Patrons -> Approver	Council of Patrons		5/4/23, 12:01 AM	Initialization
borgia	Reviewer	System role	default	Council of Patrons -> Reviewer	Council of Patrons		5/4/23, 12:01 AM	Initialization
borgia	Council of Patrons		default	Council of Patrons	Direct		5/4/23, 12:01 AM	Initialization
donatello	RETIRED		default	RETIRED	Direct		5/4/23, 12:01 AM	Import
francis	End user		default	Council of Patrons -> End user	Council of Patrons		5/4/23, 12:01 AM	Initialization
francis	Approver	System role	default	Council of Patrons -> Approver	Council of Patrons		5/4/23, 12:01 AM	Initialization
francis	Reviewer	System role	default	Council of Patrons -> Reviewer	Council of Patrons		5/4/23, 12:01 AM	Initialization
francis	Council of Patrons		default	Council of Patrons	Direct		5/4/23, 12:01 AM	Initialization
francis	P0002		default	P0002	Direct		5/4/23, 12:01 AM	Initialization
leonardo	End user		default	Full Time Employee -> End user	Full Time Employee		5/4/23, 12:01 AM	Initialization
leonardo	End user		default	FTE -> Full Time Employee -> End user	Full Time Employee		5/4/23, 12:01 AM	Import
leonardo	Approver	System role	default	F0110 -> F0100 -> F0000 -> Approver	F0000		5/4/23, 12:01 AM	Initialization
leonardo	Patron		default	Patron	Direct		5/4/23, 12:01 AM	Initialization
leonardo	Full Time Employee		default	Full Time Employee	Direct		5/4/23, 12:01 AM	Initialization
leonardo	Full Time Employee		default	FTE -> Full Time Employee	FTE		5/4/23, 12:01 AM	Import
leonardo	F0200		default	F0200	Direct		5/4/23, 12:01 AM	Initialization
leonardo	P0001		default	P0001	Direct		5/4/23, 12:01 AM	Initialization
leonardo	FTE		default	FTE	Direct		5/4/23, 12:01 AM	Import
leonardo	F0000	manager		F0000	Direct		5/4/23, 12:01 AM	Initialization
leonardo	F0110	manager		F0110	Direct		5/4/23, 12:01 AM	Initialization
micelangelo	End user		default	FTE -> Full Time Employee -> End user	Full Time Employee		5/4/23, 12:01 AM	Import
micelangelo	End user		default	Full Time Employee -> End user	Full Time Employee		5/4/23, 12:01 AM	Initialization
micelangelo	Approver	System role	default	F0210 -> F0200 -> F0000 -> Approver	F0000		5/4/23, 12:01 AM	Initialization
micelangelo	Patron		default	Patron	Direct		5/4/23, 12:01 AM	Initialization
micelangelo	Full Time Employee		default	FTE -> Full Time Employee	FTE		5/4/23, 12:01 AM	Import
micelangelo	Full Time Employee		default	Full Time Employee	Direct		5/4/23, 12:01 AM	Initialization
micelangelo	F0120		default	F0120	Direct		5/4/23, 12:01 AM	Initialization
micelangelo	FTE		default	FTE	Direct		5/4/23, 12:01 AM	Import
micelangelo	F0210	manager		F0210	Direct		5/4/23, 12:01 AM	Initialization
raphael	CONTRACTOR		default	CONTRACTOR	Direct		5/4/23, 12:01 AM	Import
raphael	Contractor		default	CONTRACTOR -> Contractor	CONTRACTOR		5/4/23, 12:01 AM	Import
raphael	F0110		default	F0110	Direct		5/4/23, 12:01 AM	Initialization
raphael	P0001		default	P0001	Direct		5/4/23, 12:01 AM	Initialization

# Password Reset

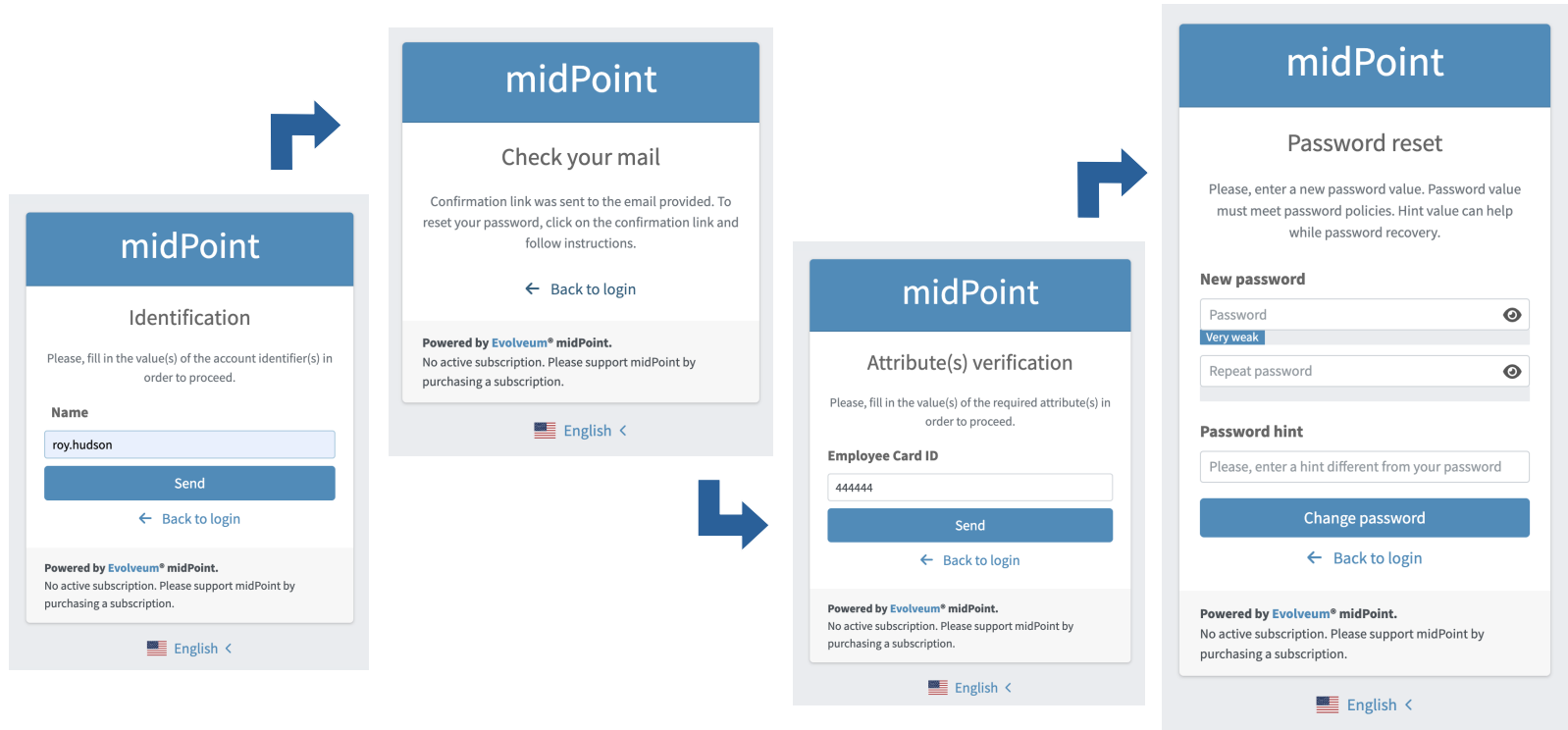
- Different password reset flows for different users
- 3 common steps:
  - Request reset password
  - Verify the user
  - Set the new password
- User verification
  - Guests use security questions
  - Employees use magic link together with the employee number validation



# Password Reset - Guest



# Password Reset - Guest



## Misc Improvements

- Sub-reports as separated rows
- Value metadata for roleMembershipRef
- Reference search
- New authentication modules
  - focusIdentification, attributeVerification, hint
- Automatic skip of modules if data not filled in
- Support for other necessity levels
  - requisite, required, sufficient, optional
- Security policy merging
- Different UX Improvements







# Role Wizard

## What type of role are you interested in?


Choose what type of role you are going to create and keep in mind that each type serves a specific purpose.



Application Role



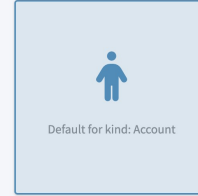
Business Role



All Roles

## Select resource object type

Select type of object your role will create or modify on the resource.



[← Back](#) [↔ Exit wizard](#) [Next: Entitlements →](#)

## Outbound mappings

appings for setting specific values when your role is assigned.

<input type="checkbox"/>	name	source	Expression	Ref *	Enabled	Mode	
<input type="checkbox"/>	name-to-uid	<input type="text" value="name"/>	As is	→	<input type="text" value="uid"/>	<input type="text" value="True"/>	Production <a href="#">Switch to Development</a>
<input type="checkbox"/>	familyName-to-sn	<input type="text" value="familyName"/>	As is	→	<input type="text" value="sn"/>	<input type="text" value="True"/>	Production <a href="#">Switch to Development</a>

[Add outbound](#) Rows per page:  1 to 2 of 2 << < 1 > >>

[← Back](#) [↔ Exit wizard](#) [✓ Save settings](#)

# Delta Viewer

Changes made by user: 1 object

Simple Advanced

Modify User Raffaello Sanzio da Urbino (raphael)

Role Patron assigned.

Changes computed according to policies: 1 object

Simple Advanced

Account raphael (default) modified on Addressbook.

Changes

Simple Advanced

Object name	raphael
Execution result	SUCCESS

Modify User Raffaello Sanzio da Urbino (raphael)

Item	Old value	New value
Projections	(unknown)	+ 3 [Default]
	(unknown)	+ raphael [Default]

User was enabled.

Archetype Contractor assigned.

Changes

Simple Advanced

Object name	P0002
Execution result	SUCCESS

Add Organization Kaboom (P0002)

Item	Value
Name	+ P0002
Display Name	+ Kaboom
Subtype	+ project
Identifier	+ 0002
Is Tenant	+ false
Requestable	+ false

Role LDAP Projects MetaRole assigned.

Organization Projects assigned.

Organization was enabled.

# Deprecations, Removals, Incompatible changes

- Incompatible changes
- ConnId result handlers disabled by default
  - Explicitly enable ConnId result handlers for connectors that need them
- New LDAP Connector
  - Refresh resource schema for AD and LDAP resources
- objectVariableMode set to prismReference now always returns real value (Referencable)
  - Adapt objectVariableMode in your scripts

# Platforms

- Linux
  - Production deployments in Windows environments supported only for LTS
- OpenJDK 11 & OpenJDK 17 (recommended)
- Stand-Alone deployment
- Native PostgreSQL (15 and 14) repository implementation recommended
  - Generic implementation (Oracle, MSSQL, PostgreSQL) deprecated



# Plans for MidPoint 4.8 “Curie”

- Security
  - Performance improvements
  - Work items and task authorization improvements
  - Expression profiles
  - Automatic scanning for vulnerabilities and security issues
- Role Mining
- Upgrade Tool
- UX improvements (Resource details, Resource Wizard, Role Wizard, ...)



# Thank you for attention

If any questions occur, feel free to ask at [info@evolveum.com](mailto:info@evolveum.com)

Also **follow us** on our social media for further information!



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