

Evolveum

What's New in MidPoint 4.1 “Pasteur”

Radovan Semančík
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Agenda



- What's new in 4.1
- Maintainability
- Plans for 4.2
- Plans for 4.4/5.0

MidPoint 4.1 “Pasteur” at a Glance

- First feature release after 4.0 LTS

Feature release => short support lifetime (1 year)

- Couple of major features

Flexible authentication (including service authentication)

Reworked *server tasks* part of GUI

- Plenty of smaller features and improvements

Audit log, archetypes, GUI, recompute tasks, cases, synchronization, diagnostics, PowerShell, async synchronization

- Internal improvements (code cleanup/speedup)
























Flexible Authentication







- Fully supported and configurable authentication mechanisms
 - Internal password authentication
 - SAML
 - LDAP
 - SecQ, HTTP Basic, HTTP Header, Mail Nonce (internal use)
- Authentication modules and sequences
- Service authentication (credentials in services)
- Note: Unofficial auth based on Spring Security no longer works


Server Tasks

- GUI code completely re-worked to match the rest of midPoint
 - Search controls
 - Configurable columns and tabs
 - Collections and views
- Special controls for tasks
 - E.g. suspend and resume
- Task archetypes

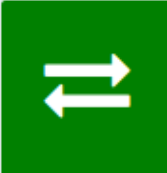
Server Tasks

<input type="checkbox"/>	^ Name	Category	Execution	Object reference	Executing at	Current run time	Scheduled to start again	Progress	Errors	Status	  
<input type="checkbox"/>	 Cleanup	Cleanup	Runnable				in 22 hours 28 minutes 13 seconds	0	0		  
<input type="checkbox"/>	 OpenLDAP Reconciliation	Reconciliation	Closed	 OpenLDAP		closed at 4/6/20, 3:07:28 PM		13	0		 
<input type="checkbox"/>	 Trigger Scanner	System	Runnable				in 3 minutes 14 seconds	0/0	0		  
<input type="checkbox"/>	 Validity Scanner	System	Runnable				in 13 minutes 14 seconds	0/0	0		  

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Server Tasks



OpenLDAP Reconciliation


Progress: 13 (closed)
Last object processed: uid=semancik,ou=People,dc=evolveum,dc=net
4/6/20, 3:07:21 PM - 4/6/20, 3:07:28 PM (00:00:07.178)

⏻ Closed
✅ Success
🔄 Reconciliation task

[Run now](#)     (no refreshing)

Basic | Schedule | Work management | Operation statistics | Environmental performance | Internal performance | Result | Errors

▼ Properties * 1/2

Name ⓘ	OpenLDAP Reconciliation 	⊖
Task identifier ⓘ	1586178420499-0-1	⊖
Owner ⓘ	Edit administrator: UserType	⊖
Channel	http://midpoint.evolveum.com/xml/ns/public/provisioning/channels-3#reconciliation	⊖
Execution status ⓘ	Closed	⊖
Category ⓘ	Reconciliation	⊖

Smaller Features and Improvements

- Archetypes: change archetype, hiding items, default assignmentRelation
- Async synchronization improvements (diagnostics)
- Configurable strictness for references
- *Recompute members* task reconfiguration
- Mapping chaining improvements
- Save in background
- Configurable columns for account tables
- Audit log viewer improvements
- Diagnostic improvements
- ...

Maintainability

- Java 11

Java 8 not supported any more

- Stand-alone deployment

Explicit deployment to Tomcat is deprecated

- PostgreSQL is **strongly** recommended

Support for MySQL and MariaDB is deprecated

- PowerShell support separated from AD connector

- Eclipse plugin deprecated

Future of MidPoint Database Support

- PostgreSQL is the future

PostgreSQL is **strongly recommended** for all new deployments.

MySQL/MariaDB support is deprecated.

Oracle and MS SQL support is likely to be deprecated later.

- Why are we doing this?

Provide better performance and (much) better scalability.

Ability to take advantage database-specific features.

Gain control of database schema (e.g. extension properties as native columns)

Keep maintenance cost reasonable.

(testing 5 database engines in 3 different versions is very expensive)

Active Directory and PowerShell

- AD Connector → AD Connector 3.0 + PowerShell Connector 1.0
PowerShell connector **not** bundled with midPoint 4.1
- Fully operational multi-connector resource support
Connectors must have the same schema
There must not be any capability overlap (disable overlapping capabilities)
- Interesting possibilities for future
AD + Local execution (on Windows server)
AD + SSH scripting
LDAP + SSH scripting

| Interesting Experimental Features in 4.1

- Connector read+write mode
- Internal diagnostic improvements
- midScribe: documentation generator
- MidPoint Studio (alpha coming soon)

*) Usual disclaimers apply. These are just plans, they can change any time.

Plan for MidPoint 4.2

- Feature release
- Planned release: autumn 2020
- Focus

Privacy and data protection: data provenance

Finishing and improving (authentication, archetypes)

Auditing and reporting

Simplifications (Jasper, SOAP, XSD)

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MidPoint 4.2 Features

- MidPrivacy: Data provenance prototype
- Reporting (Jasper-less)
- Archetypes: multiple archetypes, archetype authorizations
- Auditing and repo improvements
- Finishing: flexible authentication, multiaccounts, etc.
- Optional: Search UI, UX improvements (depends on funding)
- Removal: SOAP, Deprecation: JasperReports, XSD (probably)

MidPrivacy

- Privacy and Data Protection Initiative

- Long-term plan

 - Phase 0: Data protection experiments (2017-2018)

 - Phase 1: Data provenance prototype (2020)

 - More phases expected, but details depend on funding

- Data protection is needed, but it is difficult to “sell”

 - We know that those features are absolutely crucial for everybody

 - But getting paid for them *directly* is very hard

 - Long-term systematic approach is needed

MidPrivacy Phase 1: Data Provenance Prototype

- Maintaining meta-data for every *value*
- Visibility, accountability: foundation for data protection
- New schema language: Axiom
- Likely to improve diagnostics
- Prototype targeted for midPoint 4.2
- Funding: NGI_TRUST

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Future of MidPoint

- MidPoint 4.4 LTS (autumn 2021)

 - Supported (at least) until 2024

 - Scalable database (PostgreSQL)

 - Data protection (midPrivacy)

 - MidPoint Studio

 - JasperReports replaced with native implementation

- MidPoint 5.0 (after 2022, specific release date not known yet)

 - Data protection continues (midPrivacy)

 - Next generation schema support (XSD → Axiom)

 - ConnId 2.0

 - Plan is still quite fuzzy, gathering input*

MidPoint Studio

- Eclipse → IntelliJ IDEA

 - Eclipse was problematic all the time

 - IntelliJ IDEA is so much more convenient

 - IntelliJ IDEA Community Edition is an open source project (!)

- MidPoint Studio alpha-quality release to be available soon

 - Nice selection of interesting features

 - Very limited testing

 - Still not officially supported

 - Official support planned for midPoint 4.3-4.4

ConnId 2.0

- We know **what** we need to do

 - Discussed with ConnId community, got an agreement

 - Complex attribute support, schema/identifier improvements

 - Java remote connector server improvements

 - API/SPI operation improvements

 - Asynchronous operations

 - Remove result handlers

- We do not know **when** we will be doing that

 - The crisis makes things hard to predict, we have to prioritize

The Future?

- These are sad and difficult times
- Evolveum tries to operate normally
 - Working from home since the start of pandemics
 - Employees at full salaries, no layoffs planned
 - Some financial reserves
- Loyalty and patience are greatly appreciated
 - People are our priority (maintaining full midPoint team through the crisis)
 - Income from midPoint subscriptions is essential to sustain the team
 - Please, purchase/prolong midPoint subscription if you can

Discussion

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