

Evo**l**veum



midPoint with Ninja

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Agenda

- Overview
- Demonstration
- Tips & tricks
- Future
- Q&A



Overview

- Main goal: simplify midPoint upgrade
- New commands added to ninja
- Better logging and reporting
- Native repository
- Ninja improvements available since 4.4.6, 4.7.2, 4.8
 - Fixes and improvements coming soon for
 - 4.4.7, 4.7.3, 4.8.1

Demo

Upgrade procedure

- Review release notes
- Review versioned configuration & relevant objects in midPoint
 - e.g. search for deprecations, schema changes, etc.
- Pre-upgrade configuration and data update
- Upgrade midPoint database schema
- Upgrade midPoint installation
- Post-upgrade configuration and data update
 - e.g. cleanup after upgrade



Ninja to the rescue

- Review release notes
- verify: Review versioned configuration & relevant objects in midPoint
 - e.g. search for deprecations, schema changes, etc.
- upgrade-objects: Pre-upgrade configuration and data update
- run-sql: Upgrade midPoint database schema
- upgrade-installation: Upgrade midPoint installation
- initial-objects: Initial objects change
- Post-upgrade configuration and data update
 - e.g. cleanup after upgrade



Ninja to the rescue

Review versioned configuration & live data

- Command: **verify**
- Review changes
 - On Filesystem or directly in midPoint
 - Look for deprecations, schema changes, etc.
- Dumps report in plain text or CSV format
- Can be executed while midPoint is still running
- Verification doesn't have to run on whole dataset
 - Type/query filter
 - Verification category (deprecated, removed, planned removal, incorrect oids)

Ninja to the rescue

Pre-upgrade configuration and data update

- Command: **upgrade-objects**
- Can be executed while midPoint is still running
 - Disclaimer: you should understand what changes are going to be applied
- Use input from verification
- Doesn't have to run on whole dataset
 - Type/query filter
 - Identifier, phase, priority, type

Ninja to the rescue

Upgrade midPoint database schema

- Command: **run-sql**
- Run:
 - Create/upgrade SQL scripts for repository/audit
 - Any other SQL script file passed as parameter
- Print results of SQL scripts (simple format)
- Connect using config.xml or JDBC url/username/pwd
- Mode (raw, repository, audit) with create/upgrade option



Ninja to the rescue

Upgrade midPoint installation

- Command: **download-distribution, upgrade-installation**
- Distribution from
<https://download.evolveum.com/midpoint/>
- Upgrade midpoint installation
 - Optional files backup
 - Midpoint home not touched
 - No changes to config.xml
- Command: **upgrade-distribution**
 - Download, run sql, upgrade installation in one step

Ninja to the rescue

Initial objects upgrade

- Command: **initial-objects**
- Complicated since they may have been modified
- Container identifiers doesn't have to match
- Merge algorithm is needed
 - Natural merge, e.g. based on <identifier>XXX</identifier> element
- Optional dry run, reports
- Minimal change needed: security policy

Demo

Poll

Tips & tricks

- Simplest local deployments can use upgrade-distribution command
- Use ninja to setup your local/demo midPoint with native PostgreSQL repository
 - ./bin/ninja.sh run-sql --mode repository –create
 - ./bin/ninja.sh run-sql --mode audit –create
 - Optional parameters JDBC url/username/password
- Ninja can be started in container environments
 - docker run -ti --rm [-env VARIABLE=VALUE] -w=/opt/midpoint evolveum/midpoint:\$CURRENT_VERSION /bin/bash

Future

- Handle resources with connector references (bundled) gracefully
- Interactive upgrade wizard to guide you through the process
- Improvements to the natural merge algorithm
- Cleaner schema versioning, new annotations were introduced
 - removed, removedSince
- Ninja REST support
- Improvements in handling of secrets in ninja/midpoint

Conclusion



- Ninja can help us with
 - midPoint setup
 - midPoint upgrades
- Review state of configuration & data
- Replace deprecated configuration

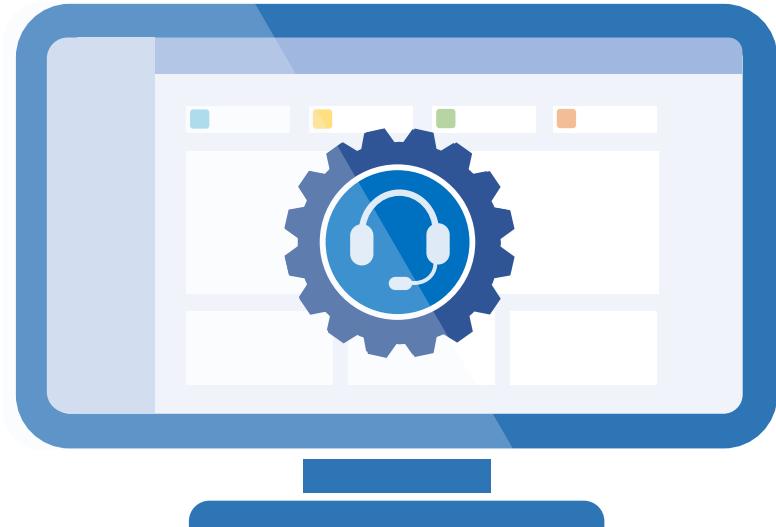
- For more information visit:
 - <https://docs.evolveum.com/midpoint/reference/support-4.8/deployment/ninja/upgrade-with-ninja/>

Poll

Q & A

Next webinars

- WCAG Webinar, February 08, 2024
- **More webinars coming**



Meet us at TIIME

- Jan 29 – Feb 01, 2024, Copenhagen, Denmark
- MidPoint Working Group (Jan 29 – 30)
 - 3 workshops and a lot of presentations
- See the [agenda](#)
- Register here: <https://time-unconference.eu>



Thank you for your attention

Do you have any **questions**? Feel free to contact us at info@evolveum.com

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