



MidPoint Community Meetup 2025

Evolveum MidPoint Chatbot



Michal Abaffy

Senior DevOps Engineer at Evolveum

Agenda

- Objective
- Why This Initiative Matters
- Current State
- Problems
- Proposed Solution
- Solution
- Conclusion



Objective

- Create a **privacy-preserving tool** utilizing **open-source AI models**:
 - Supportive companion for open source communities
 - **Efficiently locate relevant information**
 - Answer related to Identity Management (IdM), with a particular focus on **Evolveum midPoint**.



Why This Initiative Matters

- **Seamless Integration:** Empower users and partners to integrate midPoint effortlessly.
- **Enhanced Usability:** Transform midPoint into a more user-friendly platform, making advanced features accessible for everyone.
- **Cost Efficiency:** Streamline low-level support while reducing operating costs, driving both productivity and profitability.
- **Bridging Skill Gaps:** Eliminate barriers by providing critical product insights to users.



Current State: Docs

Evolveum Docs

- Identity and Access Management
- Book
- MidPoint
- Identity Connectors
- Support
- Trainings
- Evolveum
- Community
- Library
- Case Studies
- Talks
- Glossary
- Frequently Asked Questions
- About

MidPointIAM IntroductionBookIdentity ConnectorsTalks

Search

Site Sections

- [MidPoint Book](#)
- [Identity and Access Management Introduction](#)
- [MidPoint](#)
 - [Configuration reference](#)
 - [MidPrivacy initiative](#)
 - [MidScale](#)
 - [MidPoint Studio](#)
 - [MidPoint developer zone](#)
 - [MidPoint-related tools](#)
 - [MidPoint Exercises](#)
- [Community and participation](#)
- [Identity Connectors](#)
- [Evolveum Talks](#)
- [Evolveum Library](#)
- [Frequently Asked Questions](#)

Other Information Sources

- [MidPoint Issue Tracking \(OpenProject\)](#)
- [MidPoint Mailing Lists](#)

Copyright

Content of this site is licensed under CC BY-NC-ND, which allows quite a broad use of the documentation. Please see our [copyright and licensing guidelines](#) for detailed explanation.

Current State: Book



Current State: Support

The screenshot shows the 'Overview' page of the Evolveum Support Portal. The page has a dark blue sidebar on the left with navigation links: Overview, Activity, Roadmap, and Work packages. The main content area is white with a blue header bar containing the 'Evolveum' logo and a search bar. The page title is 'Overview'. Below the title, there is a section titled 'WELCOME TO OUR NEW ISSUE TRACKING SYSTEM!' with a paragraph explaining the transition from Jira to OpenProject. A bulleted list provides instructions: 'Don't worry, all the issues are still here...', 'You can still log in with your existing username and password.', 'Use this link to register.', 'Check this video to see how to report an issue...', and 'There are some new terms you might need to get used to...'. A note mentions that 'issue' will now be a 'work package'. A warning section states 'Please, do not report security vulnerability here!' with a link to 'Read how to report security vulnerability responsibly.'. An 'Issue workflow' section lists five steps: 1. Create an issue with all necessary information; 2. If SLA applies, the issue will be responded to - ideally accepted as 'Confirmed', or moved to 'More info needed' if there is not enough information; 3. After fixing, the issue will be 'Resolved'; 4. It is advisable for the author to check the solution (using a snapshot build) and confirm the fix with the status change to 'Verified'; 5. If it ends up in any other final status it can be reopened if good reason is provided. Below the text is a flowchart showing the issue lifecycle: 'New' (light blue) leads to 'Confirmed' (purple) and 'More info needed' (yellow). 'More info needed' leads back to 'Confirmed'. 'Confirmed' leads to 'Resolved' (green) and 'Reopened' (orange). 'Resolved' leads to 'Verified' (green). 'Reopened' leads back to 'Confirmed'. A box labeled 'Closed states' contains 'Incomplete' (orange), 'Reviewed' (grey), 'Duplicate' (pink), 'Cannot reproduce' (blue), and 'Declined' (red). Arrows indicate transitions between these states.

midPoint

Evolveum

Search in Evolveum Support

Overview

EVOLVEUM SUPPORT PORTAL

Welcome to our new Issue Tracking System!

This site is powered by the open-source product [OpenProject](#) that has replaced our previous Jira solution. We can ensure all your data are stored locally with us.

- Don't worry, all the issues are still here, and an old link to a Jira issue will redirect you directly to the same issue in our new system. If the link doesn't match the issue exactly, it will at least bring you to this site.
- You can still [log in](#) with your existing username and password.
- Use [this link](#) to register.
- Check [this video](#) to see how to report an issue with our new support site. There is also [this document](#) on our docs.
- There are some new terms you might need to get used to. For example, what was previously referred to as an "issue" will now be a "work package". There are various types of work packages you are already familiar with such as bugs, features, etc.

If you encounter any technical problems with our new site, please contact us at: admin@evolveum.com

Please, do not report security vulnerability here!
[Read how to report security vulnerability responsibly.](#)

Issue workflow

1. Create an issue with all the necessary information (how to reproduce it, logs, screenshots, error messages), affected versions and subscriber information. Please, don't fill in Assignee and Fix version/s. If unsure, leave the fields empty.
2. If SLA applies, the issue will be responded to – ideally accepted as *Confirmed*, or moved to *More info needed* if there is not enough information to act upon it. In special cases, when more investigation is needed from Evolveum, Labels field might be set to "support".
3. After fixing, the issue will be *Resolved*.
4. It is advisable for the author to check the solution (using a snapshot build) and confirm the fix with the status change to *Verified*.
5. If it ends up in any other final status it can be reopened if good reason is provided.

Users can't modify the issue info, but comments and attachments can be added later as well.

```
graph TD
    Author((Author)) --> New
    New --> Confirmed
    New --> MoreInfo[More info needed]
    MoreInfo --> Confirmed
    Confirmed --> Resolved
    Confirmed --> Reopened
    Resolved --> Verified
    Reopened --> Confirmed
    subgraph ClosedStates [Closed states]
        Incomplete
        Reviewed
        Duplicate
        CannotReproduce[Cannot reproduce]
        Declined
    end
```


Current State: Mails

midPoint -- midPoint General Discussion											
About midPoint	English (USA)										
<p>Mailing list for a general discussion about midPoint, the leading open source identity governance and administration platform.</p> <p>The list is intended for a general discussion regarding all technological topics about midPoint. You can ask questions about midPoint, discuss ideas, share your experience or post general comments on midPoint. This list is a primary communication channel for midPoint community.</p> <p>Please follow community guidelines when using the list. Posting to the list is allowed only to list members. List archives are available publicly. Unsolicited advertising and similar "spam" content is not allowed. Discussing commercial services related to midPoint is allowed (even encouraged) as long as it is done in respectful and unobtrusive manner.</p> <p>MidPoint core developers and part of Evolveum staff is subscribed to the list, and participates in communication. However, the list is only a <i>best effort</i> service and there are no guarantees. Evolveum staff responds to the list whenever they have time to spare from their day-to-day work. Do not expect immediate answers (or any answer at all). This list is not a replacement for Evolveum commercial services. Our software is free, but our services are not. Please be respectful.</p> <p>To see the collection of prior postings to the list, visit the midPoint Archives.</p>											
Using midPoint											
<p>To post a message to all the list members, send email to midpoint@lists.evolveum.com.</p> <p>You can subscribe to the list, or change your existing subscription, in the sections below.</p>											
Subscribing to midPoint											
<p>Subscribe to midPoint by filling out the following form. You will be sent email requesting confirmation, to prevent others from gratuitously subscribing you. This is a hidden list, which means that the list of members is available only to the list administrator.</p> <table><tbody><tr><td>Your email address:</td><td><input type="text"/></td></tr><tr><td>Your name (optional):</td><td><input type="text"/></td></tr><tr><td colspan="2"><p>You may enter a privacy password below. This provides only mild security, but should prevent others from messing with your subscription. Do not use a valuable password as it will occasionally be emailed back to you in cleartext.</p><p>If you choose not to enter a password, one will be automatically generated for you, and it will be sent to you once you've confirmed your subscription. You can always request a mail-back of your password when you edit your personal options.</p></td></tr><tr><td>Pick a password:</td><td><input type="password"/></td></tr><tr><td>Reenter password to confirm:</td><td><input type="password"/></td></tr></tbody></table>		Your email address:	<input type="text"/>	Your name (optional):	<input type="text"/>	<p>You may enter a privacy password below. This provides only mild security, but should prevent others from messing with your subscription. Do not use a valuable password as it will occasionally be emailed back to you in cleartext.</p> <p>If you choose not to enter a password, one will be automatically generated for you, and it will be sent to you once you've confirmed your subscription. You can always request a mail-back of your password when you edit your personal options.</p>		Pick a password:	<input type="password"/>	Reenter password to confirm:	<input type="password"/>
Your email address:	<input type="text"/>										
Your name (optional):	<input type="text"/>										
<p>You may enter a privacy password below. This provides only mild security, but should prevent others from messing with your subscription. Do not use a valuable password as it will occasionally be emailed back to you in cleartext.</p> <p>If you choose not to enter a password, one will be automatically generated for you, and it will be sent to you once you've confirmed your subscription. You can always request a mail-back of your password when you edit your personal options.</p>											
Pick a password:	<input type="password"/>										
Reenter password to confirm:	<input type="password"/>										

Current State: GPT-4o

Generate midpoint query for users with enabled administrative status



To generate a query to find users with enabled administrative status, the specifics depend on the database type (e.g., SQL Server, MySQL, PostgreSQL). Here's an example for a typical SQL query:

Query:

sql

Copy Edit

```
SELECT
  user_id,
  username,
  email,
  admin_status,
  account_enabled
FROM
  users
WHERE
  admin_status = 'enabled' AND
  account_enabled = TRUE;
```

Problems

- Difficulty obtaining direct answers to questions in understandable language.
- Long wait times for quick responses.
- Existing chatbots possess extensive knowledge but lack depth in specific areas.
- While we have a vast knowledge base in Identity Management (IdM) and midPoint, we lack the resources to engage users in their native languages.

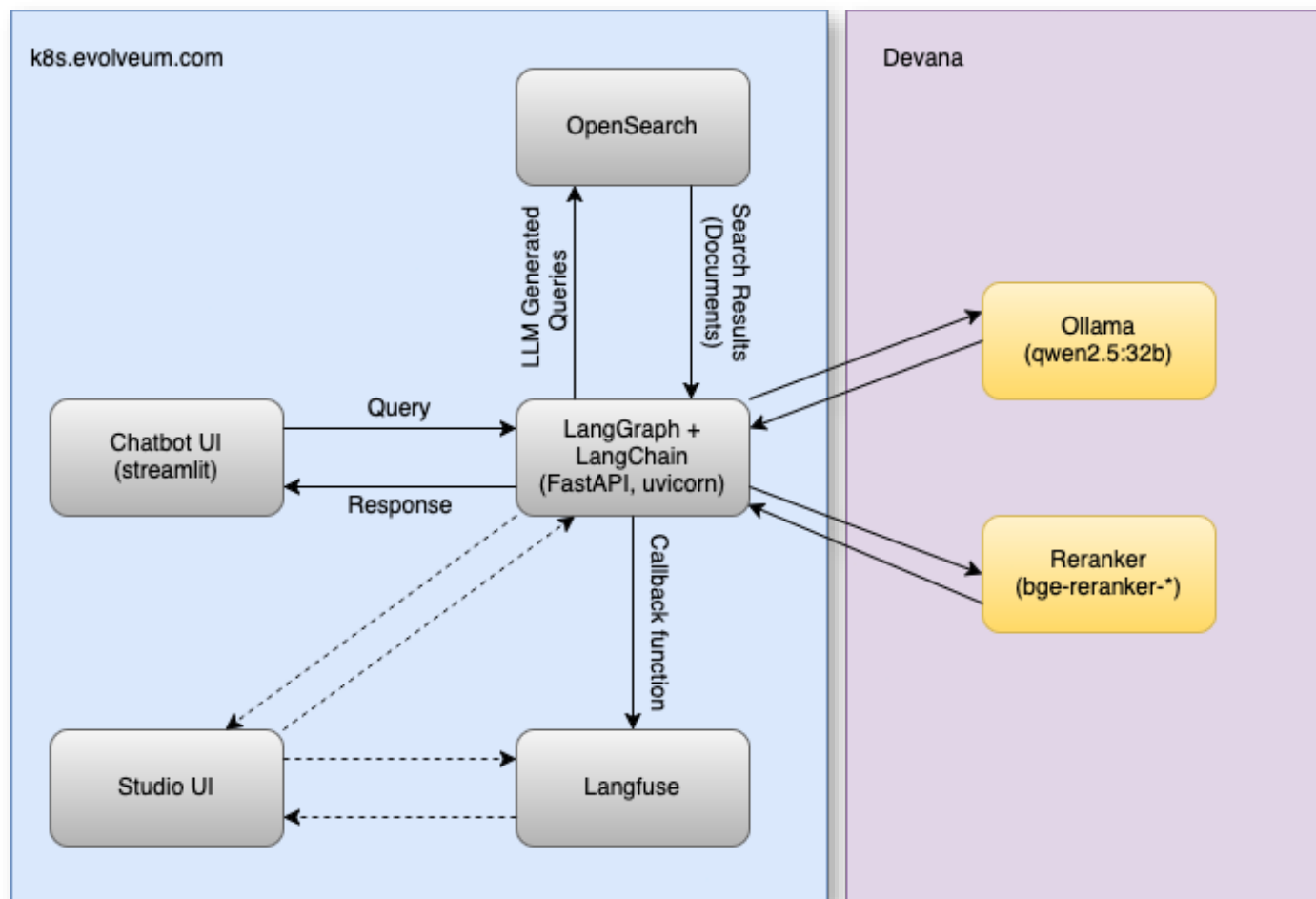


Proposed Solution

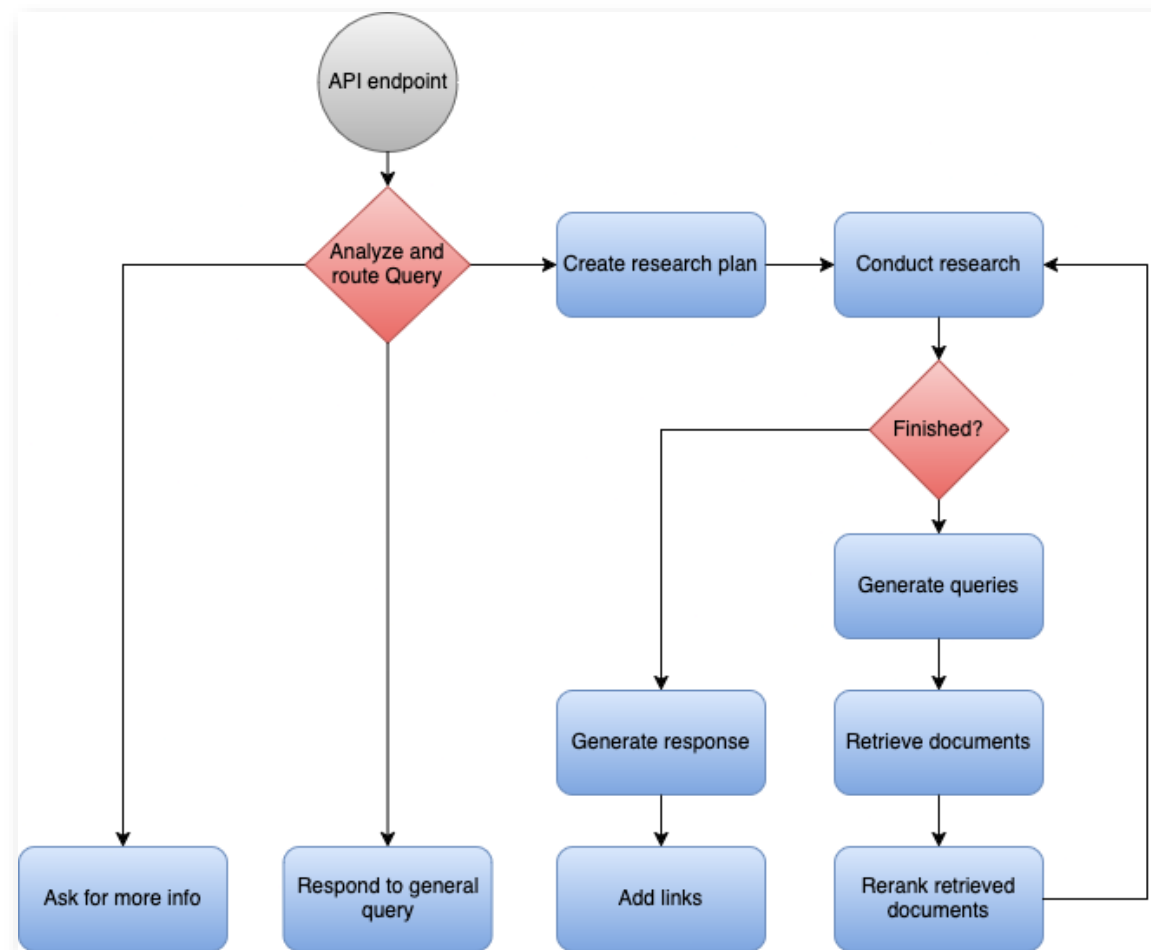
- 1. Implement semantic search to allow users to find relevant information even with vague or incorrect keywords.
- 2. Develop a user interface (UI) for seamless interactions with our knowledge base.
- 3. Integrate Retrieval-Augmented Generation (RAG) and chat functionalities for natural language interactions that provide answers from a knowledge base.
- 4. Design the solution as a frontend-backend application, distributed as a pre-configured containerized solution.
- 5. Ensure user privacy by utilizing self-hosted open-source software (OSS) models, avoiding third-party APIs.



Solution: Architecture



Solution: Pipeline



Solution: Target Users

- Our solution is designed with the vision to enhance midPoint's ecosystem for:
 - **Tech Newbies:** Simplifying the first steps and fostering early adoption.
 - **Seasoned Engineers:** Supporting technical consultants, integrators, and advanced users.
 - **Operators:** Interactive operational manual to resolve errors and problems.



Conclusion

Evolveum midPoint Chatbot (beta)



Générer une requête de point médian pour les utilisateurs avec le statut administratif activé



Pour générer une requête midPoint Query Language (MQL) qui sélectionne les utilisateurs dont le statut administratif est activé, vous pouvez utiliser la syntaxe suivante :

```
activation/administrativeStatus = "enabled"
```

Cette requête recherche tous les utilisateurs (`userType`) dont la propriété `administrativeStatus` dans l'élément `activation` a la valeur `"enabled"`.

Resources:

1. <https://docstest.evolveum.com/midpoint/reference/master/concepts/query/midpoint-query-language/query-language-in-groovy/>
2. <https://docstest.evolveum.com/midpoint/reference/master/concepts/query/midpoint-query-language/introduction/>
3. <https://docstest.evolveum.com/midpoint/devel/design/query-language-next-evolution/>

↺ Try again

👍 Good Answer

👎 Bad Answer

Ask me a question about Evolveum midPoint...



non-commercial use only

Evolveum

Thank you for your attention

Feel free to ask your questions now!



MidPoint Community Meetup 2025