ATLAS Survey 5:
Technical and Administrative Functions

OHDSI Community Call

01 July 2025

Agenda

- Atlas Review: What is Atlas?
- Development Status: 3.x and 4.x Planning
- What we need from you….
- Survey 4 Response Review
- Survey 5 Introduction - Konstantin Iaroshovets

Atlas Review: What is Atlas?

- Atlas is a web-based application enabling non-programmers to design and fully specify elements that can be used in observational studies
- It is our primary interface for developing and evaluating cohort definitions
- Functions include:
  - Vocabulary Search (vocabulary exploration)
  - Concept Sets (code lists)
  - Cohort Definitions (population identification)
  - Characterization (incidence, pathways, proportions of concepts)
  - Analytics (population level estimation, patient level prediction)

Development Status: 3.x and 4.x Planning

- The 2.x line of Atlas is at end of development
  - Maintained for current users, hotfixes will be accepted
- The 3.x is under development, based on community feedback
  - Surveys are used to identify what we will carry forward
  - Technical updates are required (JDK updates, dependency review)
- The 4.x will make changes to application design based on user interviews and data collection by Data4Life.

What we need from you….

We will be showing you a set of features in Atlas 2.x (2.14) and we need your input about frequency of use and importance of the features.

How frequently do you use this feature?

- Never used: you either did not know of, or never used this feature in Atlas
- Rarely used: you use this feature <25% of the time using atlas.
- Sometimes used: you use this feature 25% to 75% of time using Atlas.
- Often used: you use this feature most of the time in atlas (> 75%)

How important is this feature in your work?

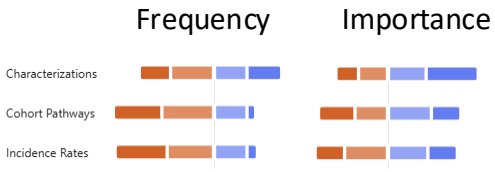
- Not Important: The item is of no significance.
- Slightly important: The item has little significance and is often overlooked.
- Moderately important: The item is somewhat significant and should be considered.
- Extremely important: The item or factor is critical and cannot be ignored.

Feedback from these surveys will determine which aspects of the application get priority.

Survey 4: Response Review

Link: https://forms.cloud.microsoft/r/azjcviTd65

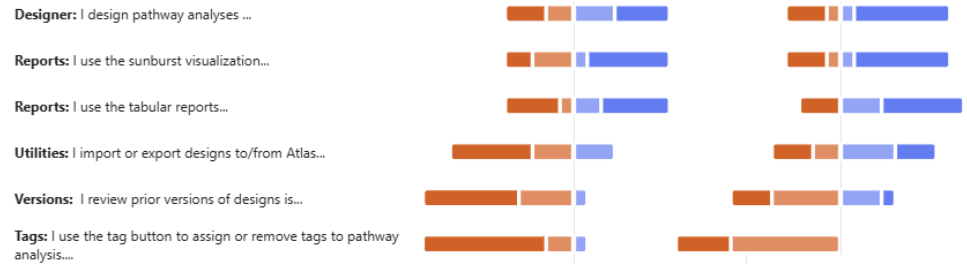
Total Responses: 15



From Survey 1

Characterizations

Cohort Pathways



Incidence Rates

Survey 5: Technical and Administrative Functions

This survey covers topics ranging from authentication methods, data source configuration, user and role administration, Active Directory Integration, Tag Management and Auditing.

Survey 5 Walkthrough and Demo

Konstantin Iaroshovets

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Introduction

Agenda

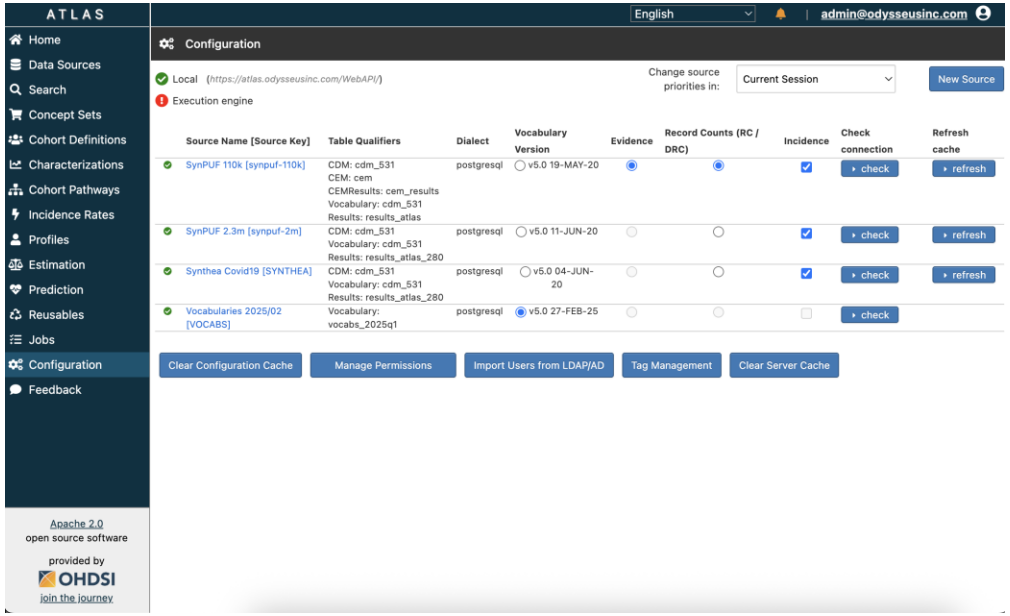
Authentication and security configuration

Data source management

User and role administration

LDAP/AD integration

Other tools: Audit trail log and Tags management



Authentication & Security Options

Supported Authentication Methods

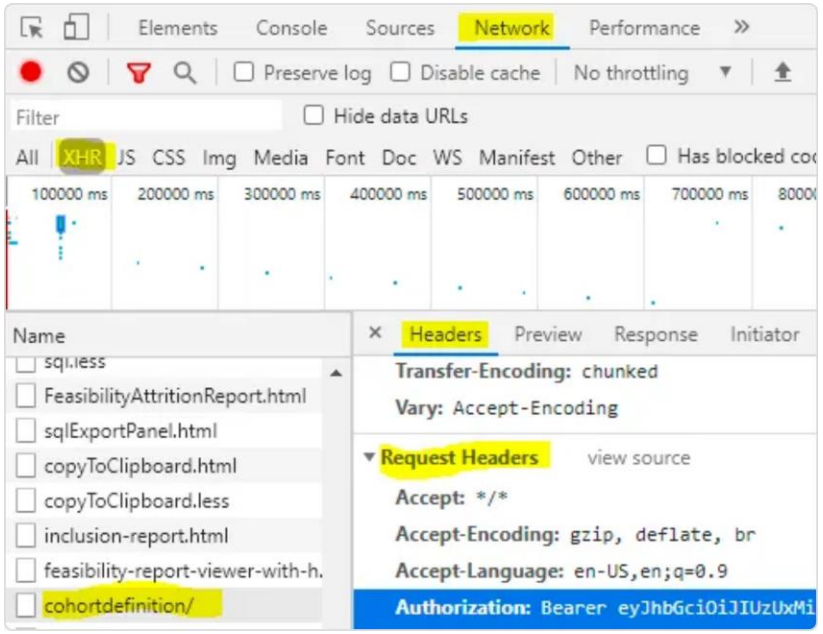
Local DB – Default built-in method

OAuth - Google, GitHub, etc.

SAML 2.0 – Enterprise SSO integration

LDAP/Active Directory – Enterprise directory services

Google Identity Aware Proxy (IAP)



Enabling Security

By default, WebAPI security is disabled. To enable:

```
<security.provider>AtlasRegularSecurity</security.provider>
```

Set in WEB-INF/settings.xml

Atlas Configuration

Create config-local.js in ATLAS (e.g., atlas/js/config-local.js)

Data Source Configuration

"New Source" Configuration

In ATLAS Configuration menu, you can define a new CDM source:

- Source Name (e.g., "MyCDM")
- Source Key (unique identifier)
- JDBC Connection URL
- Username/Password for the CDM database

Security Note

When adding sources via the ATLAS GUI, WebAPI will encrypt the password in the database.

Source Daimons

Each source requires four daimons:

Daimon	Purpose
CDM	Clinical data
Vocabulary	Standardized terminologies
Results	Analysis results storage
Temp	Temporary calculations

Access Control

By default, only users in the source's role (e.g., "Source user (cdm)") can see/use that source. WebAPI auto-creates a role "Source user (SourceKey)" for each source.

In Atlas Manage Roles, you can add users to that role to grant them access to the source.

User & Role Management

Roles Overview

Functional Roles

Control access to ATLAS features

Data Roles

Control access to data sources

Default Roles/Users

On first login, WebAPI creates:

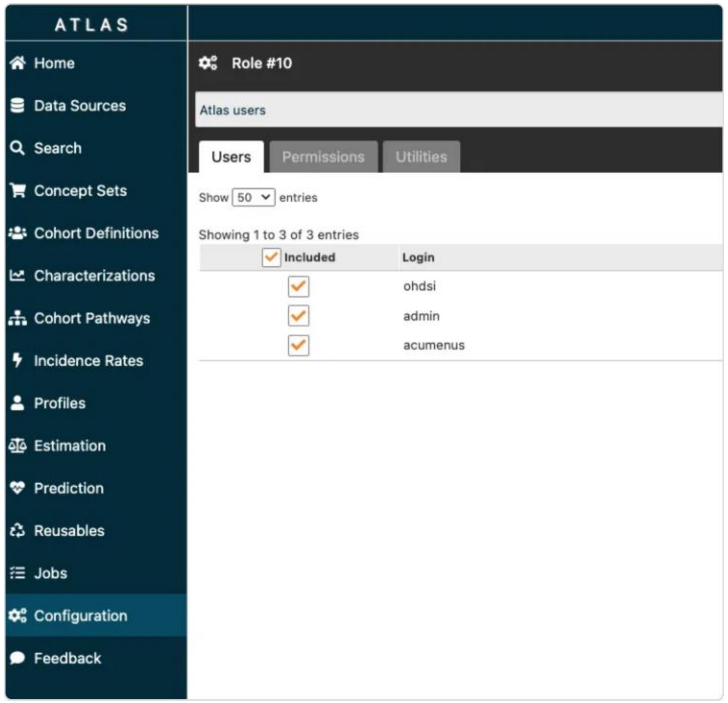
- A new SEC_USER record
- Assignment to "public" role
- A personal role (name = username)

Atlas Manage Roles UI

Access via:

- ATLAS Configuration
- Click Manage Permissions
- Select Roles tab

From here you can create roles, assign permissions, and add users to roles.



LDAP/AD User Import

Setup Requirements

Enable LDAP/AD authentication in settings.xml:

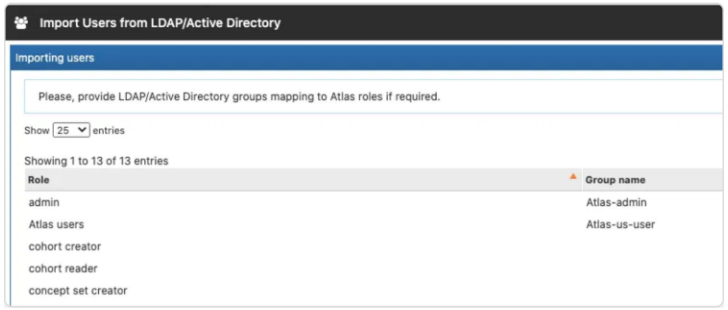
```
<security.auth.ldap.enabled>true</security.auth.ldap.enabled>
<security.ldap.url>ldap://ldap.example.org:389</security.ldap.url>
<security.ldap.dn>cn={0},dc=example,dc=org</security.ldap
urity.ldap.dn>
```

Import Process

1. Navigate to ATLAS Configuration
2. Click "Import Users from LDAP/AD" button
3. Select LDAP groups to import
4. Map each group to an Atlas role
5. Run the import process

Benefits

- Centralized user management
- Automatic role assignment
- Reduced administrative overhead
- Consistent access control



Group to Role Mapping Example

LDAP Group	Atlas Role
CN=atlas-admins	admin
CN=atlas-researchers	researcher
CN=atlas-viewers	viewer

After import, users appear in their assigned roles' Users list.

Other Administrative Tools

Tags Management

Create and manage tags to organize and categorize:

- Cohort definitions
- Concept sets
- Analyses
- Other ATLAS artifacts

Tags help users find and organize their work, especially in environments with many users.

Audit Trail and Logs

Monitor system activity and user actions:

- User login/logout events
- Resource creation and modification
- Permission changes
- Data source access

Useful for troubleshooting, security monitoring, and compliance requirements.

Administration Best Practices

- Regularly review user accounts and permissions
- Monitor system logs for unusual activity
- Create backup procedures for important configurations
- Document your specific environment setup
- Test configuration changes in a non-production environment first

Survey 5: Information

- Survey link: https://forms.cloud.microsoft/r/Q5z5WaYKsz
- Forum post: https://forums.ohdsi.org/t/atlas-3-0-user-surveys/23821

Please feel free to share the survey link to anyone who is an Atlas user.

All input is welcome!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Thank You!