



ATLAS: User Input For Community Development

OHDSI Community Call

13 June 2023

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OHDSI Community Call 13 June 2023

- What is ATLAS – Jack / Anthony
 - ATLAS Working Group & Recent Developments - Anthony
 - What is coming up (v2.14) – Chris
 - Breakouts: User Input For Community Development
-



What is ATLAS

Data source exploration

- Characterizing database
- High-level record counts

Building cohorts

- Concept mapping
- Concept set
- Cohort building

Descriptive statistics

- Cohort characterization
- Incidence rates
- Treatment pathways

Designing advanced analytics

- Population level estimation
- Patient level prediction

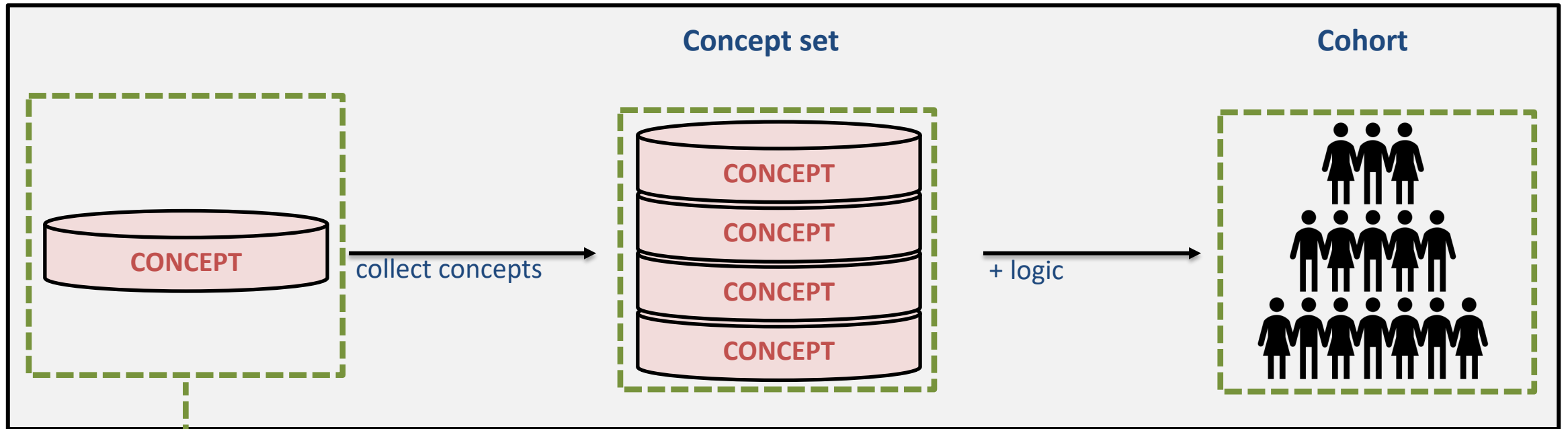




Example of ATLAS components

A concept is record of a clinical event

Cohort is a set of persons who satisfy an inclusion criteria for a period of time




Concept: Essential hypertension
Concept ID: 320128

Concept set: Hypertension
- Concept ID: 320128
- Concept ID: 4049389
- Concept ID: 4322024



Patients with a record of [hypertension concept set] between 1st January 2010 - 31st December 2020



ATLAS Educational Resources

 EHDEN Academy



<https://academy.ehden.eu/>



ATLAS

Tool

Design and execute analyses on observational data.



Infrastructure

Tool

Install and configure the OHDSI infrastructure.

EHDEN Academy has courses on ATLAS and setting up the ATLAS infrastructure in addition to other OHDSI / EHDEN courses.



ATLAS Educational Resources

- <https://atlas-demo.ohdsi.org/>

ATLAS

English

Home

Welcome to ATLAS.
ATLAS is an open source application developed as a part of OHDSI intended to provide a unified interface to patient level data and analytics.

Documentation
The ATLAS user guide can be found here.

Getting Started

Define a New Cohort
Begin performing research by defining the group of people you intend to study

Search the Vocabulary
Search the different ontologies used to describe patient level data around the world

Release Notes

ATLAS Version 2.12.1 Release Notes
WebAPI Version 2.12.1 Release Notes

This latest release contains **10** feature enhancements and issue resolutions:

- Executing a Cohort Pathway on an IBM Netezza Data Source fails while creating a temp table
- Heracles reports do not insert final results when using Spark
- /ddl/achilles endpoint is closed by authentication
- PLP package generated by WebAPI v2.12.0 fails on env
- 403 error when removing IR generation result not displaying properly
- Tags table rendering error
- Moderator cannot delete reusable despite reusable:*:delete permission
- Cannot delete a datasource if the source on the connection string does not exists
- Executing an Incidence Rate Analysis on an IBM Netezza Data Source fails while creating a temp table
- java.lang.reflect.UndeclaredThrowableException when download PLP

Apache 2.0
open source software

provided by
OHDSI
join the journey.

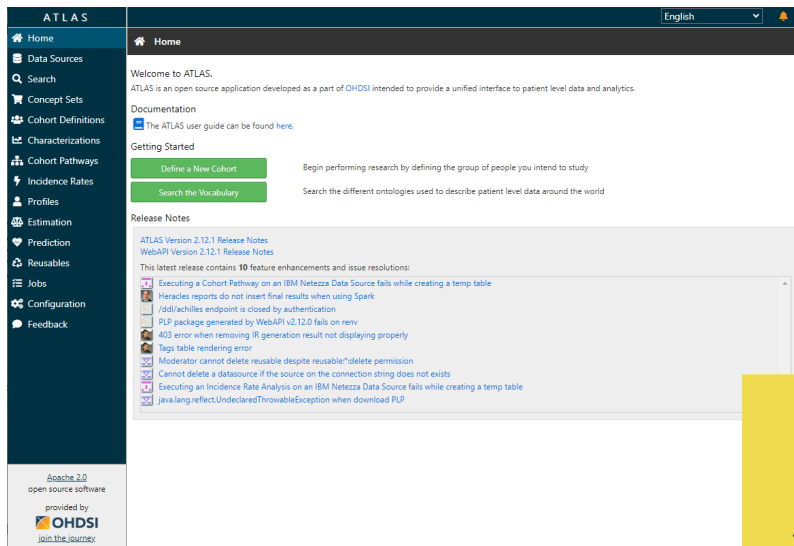
The ATLAS demonstration site is publicly available to the community.



ATLAS Technology Overview

ATLAS

Web application developed with **JavaScript**, CSS, HTML. Provides the visual elements in the browser.



WebAPI

Web services developed with **Java**. Provides the “plumbing” for Atlas.

```
{
  "version": "2.12.1",
  "buildInfo": {
    "artifactVersion": "WebAPI 2.12.1",
    "build": "NA",
    "timestamp": "Wed Feb 01 18:57:18 UTC 2023",
    "branch": "origin/released",
    "commitId": "985e872",
    "atlasRepositoryInfo": {
      "milestoneId": 45,
      "releaseTag": "*"
    },
    "webapiRepositoryInfo": {
      "milestoneId": 46,
      "releaseTag": "*"
    }
  }
}
```





Atlas Working Group Mission Statement

- The ATLAS workgroup will provide a forum for the OHDSI community of developers that are interested in improving the open-source software solutions: ATLAS &/WebAPI. These tools aim to provide capabilities to design standardized analytics to execute on the OMOP Common Data Model.



ATLAS Working Group Meeting Schedule

- Monthly ATLAS WG Meetings 1st **Tuesday** of the month at 9AM EST with the following aims
 - Highlight new features being built in the community
 - Provide updates on upcoming releases
 - Weekly Developer Meetings- **every Tuesday, 9AM EST**
 - Review open pull requests for Atlas/WebAPI
 - Triage/Review issues for upcoming releases
 - Next Monthly Meeting falls on **11 July 2023**
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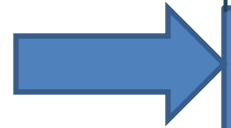


ATLAS Working Group 2023 Objectives & Key Results



1. Objective: Release ATLAS/WebAPI v2.13
 - Complete the development and testing of existing issues
 - Target delivery: 1Q2023

2. Objective: After v2.13 release, establish and maintain a robust software development plan for ATLAS moving forward



- Identify candidate features for future ATLAS releases through active solicitation from the OHDSI community and ATLAS users
- Candidate features for the next release (i.e ATLAS v2.14) will be prioritized and selected by product owners (Patrick Ryan/Greg Klebanov)
- Project Managers (Anthony Sena/Alexey Manoylenko) will identify developers to lead the design and implementation.
- Developers will produce design specification document for each feature and the Technical Lead (Chris Knoll) will review and approve prior to development.
- Once all features are implemented, Project Managers will coordinate testing across 3 independent sites: Odysseus, Janssen, and public OHDSI-test instance
- Once Product owners approve a release, Project Managers will then communicate release and documentation to the OHDSI community



Recent ATLAS Development Activities

- Examples from v2.13 release
 - Cohort SQL rendering
 - Generation user-interface standardization
 - Data source selection for concept counts
 - Concept Set Preview

- Release Notes: <https://github.com/OHDSI/Atlas/releases>, <https://github.com/OHDSI/WebAPI/releases>



What is coming up (ATLAS v2.14)

- Advanced Concept Set Search (via SOLR)
 - Better Spark support
 - Filter assets to those with READ permissions
 - OpenID configuration parameters
 - Person Counts for source concepts
 - Updated Java dependencies to prepare for JDK 17+
 - Lighter version of CIRCE for CRAN
 - Planning phase: extend Reusable functionality
-



Breakouts: User Input For Community Development

- Do you have Atlas installed and available in your environment?
 - Barriers to using Atlas?
 - Ideas & resources for improvement of the platform?
-



What comes next?

- Gather feedback from this session and define the scope of the next ATLAS release
 - Work on the design of new features and estimate the development timeline
 - Develop, Test, Release
-



Thank You!
