

# Bringing a Titan to a New Organization

PRESENTER: **Ajit** Londhe



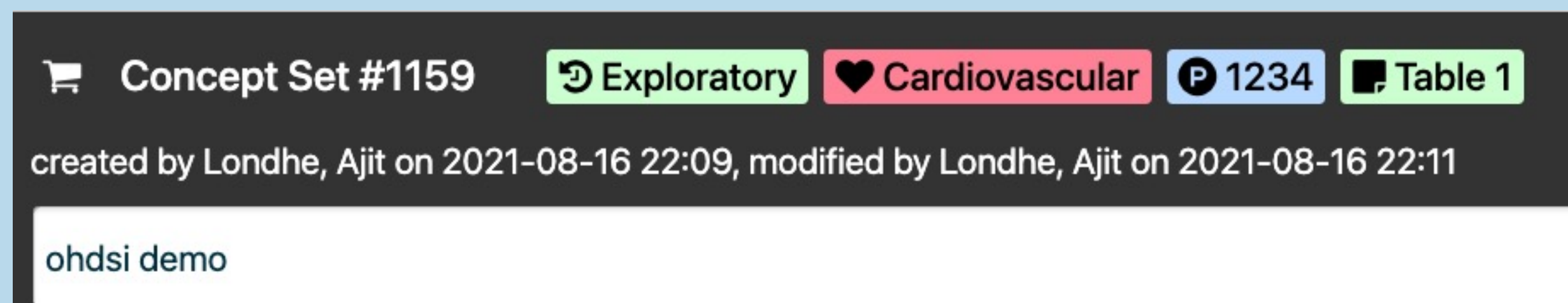
## INTRO

- Many organizations find OHDSI tools challenging to implement due to technical challenges, but more importantly, philosophy differences.
- Project TITAN is an effort to launch OHDSI tools to our organization, which, after adopting OMOP CDM v5.3.1, was primed for using Atlas.

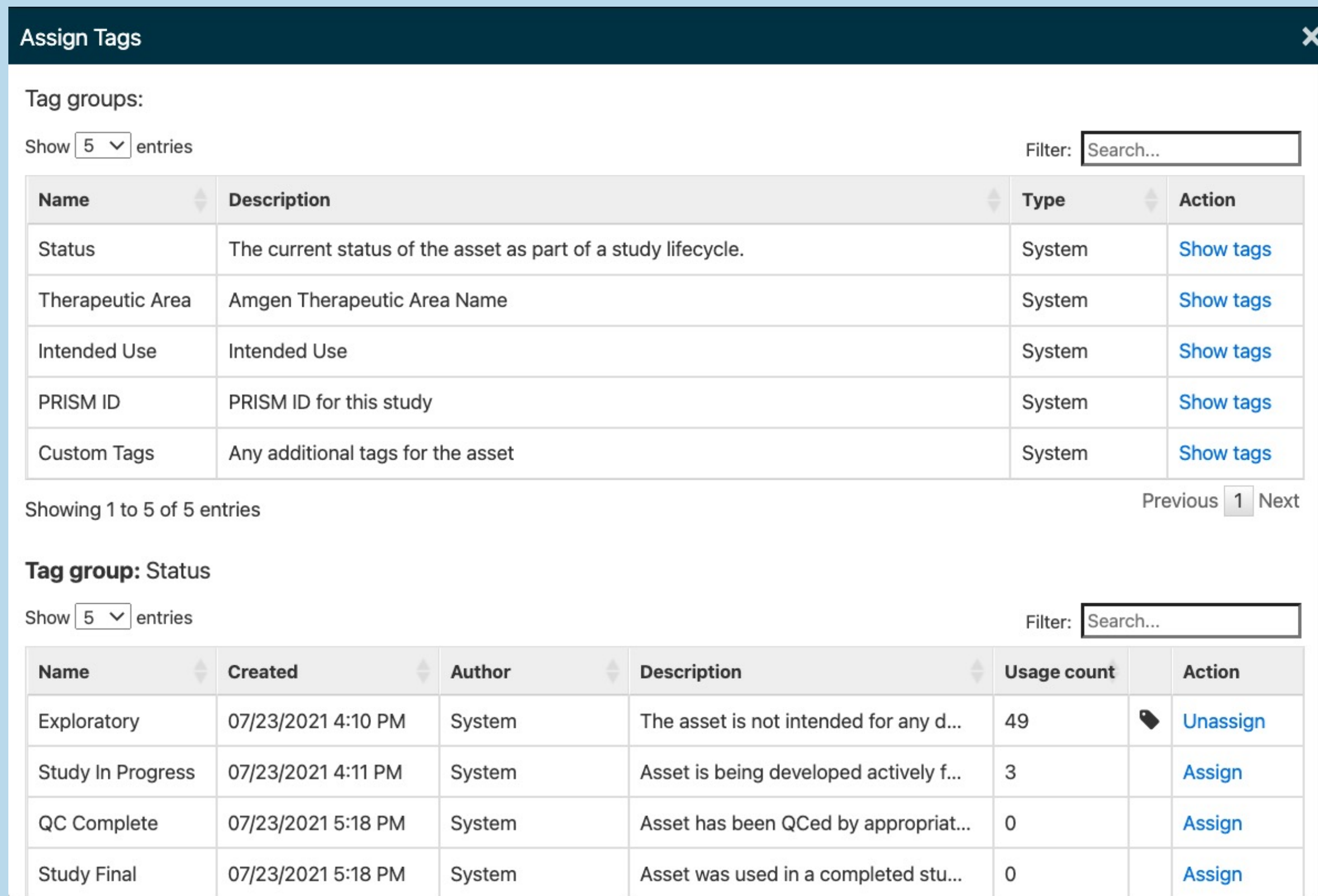
## METHODS

- 1. Databricks support:** we modified the SqlRender package to produce Spark SQL by studying the Databricks and Spark reference materials
  - Provisioned public Databricks cluster for the OHDSI testing environment to ensure continuous integration testing suite can be executed
- 2. Large user base:** we ran a focus group of 10 users to gather initial feedback on training materials and the usability of Atlas.
- 3. Enhancements to Atlas:** developed to address limitations found early in the pilot.
  - Tagging for better organization
  - Versioning to ensure no study asset iterations are lost
  - More direct prevalence of standard concepts in search results via person counts
- 4. OHDSI training materials:** The Book of OHDSI, YouTube, and EHDEN Academy courses provided the basis of a curated training curriculum.

# With the right user training and willingness to contribute open-source technical solutions, joining OHDSI does not have to be harder than the *Odyssey*



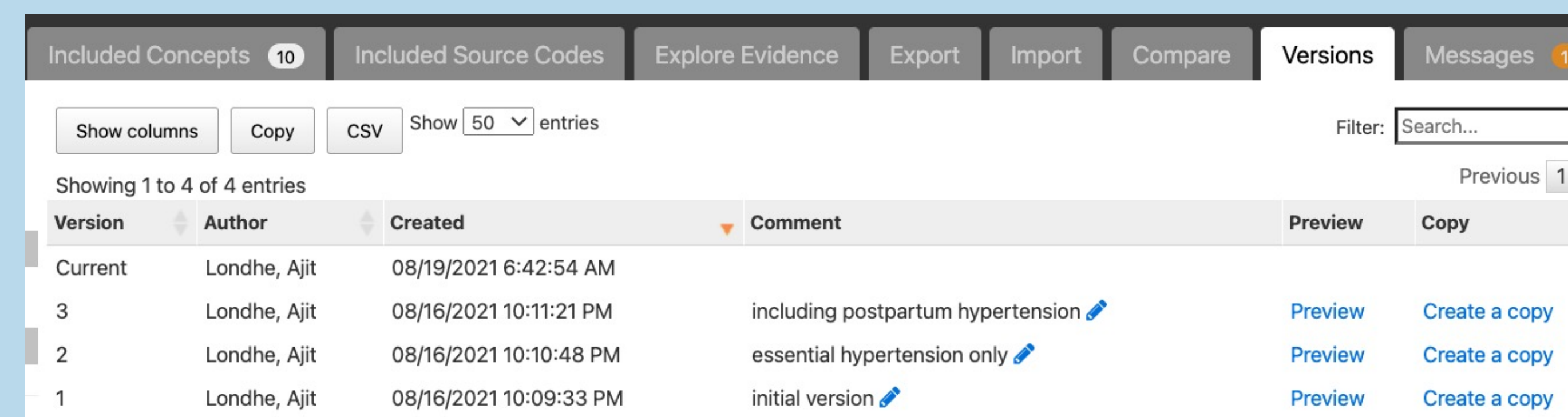
Tagging values visible in the header portion of a concept set, but available across all study assets.



Tagging assignment can be designated for any study asset type. Pre-defined tag groups and values can be configured, and free-form custom tags can be assigned by the user.

Id	Code	Name	Class	RC	DRC	PC	DPC
1112807	1191	aspirin	Ingredient	1,774,225	6,524,201	900,793	1,932,133
1113309	315431	aspirin 81 MG	Clinical Drug Comp	0	1,928,871	0	496,182
19082433	317300	aspirin 325 MG	Clinical Drug Comp	0	1,889,899	0	444,817
40009857	370939	aspirin Delayed Release Oral Tablet	Clinical Drug Form	0	1,829,479	0	497,478
19073712	308416	aspirin 81 MG Delayed Release Oral Tablet	Clinical Drug	1,472,175	1,607,761	347,580	397,470
1113350	329295	aspirin 25 MG	Clinical Drug Comp	0	860,724	0	70,208
1718407	1856538	aspirin / dipyridamole Extended Release Oral Capsule	Clinical Drug Form	0	860,724	0	70,208
1718409	1856542	aspirin 25 MG / dipyridamole 200 MG Extended Release Oral Capsule	Clinical Drug	0	860,724	0	70,208

Person counts from Achilles can be enabled in Atlas to show more direct measures of concept prevalence in the search results.



Versioning can be useful for keeping track of changes in a study asset's development over time. Past versions are annotatable, with the ability to preview them, promote as current version, or create a separate copy.

## RESULTS

- SqlRender modifications for Spark produced appropriate SQL commands and queries generated by Atlas/WebAPI, Achilles, and DataQualityDashboard
- Training of 10 focus group users was successful
  - Over 200 concept sets, 30 cohort definitions, and 15 cohort characterizations were authored by users over a 2-month period
- The Book of OHDSI was a useful overview of the entire ecosystem for users new to the space
- Comparison of reference code lists against newly authored concept sets was challenging, but increased practice reduced this need over time

## DISCUSSION

- Training a large group of users on Atlas is most efficient when utilizing a diverse set of training materials from OHDSI, customized for the organization's strategic needs
- By piloting with a representative user group, we developed enhancements to Atlas to address usability concerns that appear to be important additions for workflow management with a large user base
- Collaboration with key OHDSI stakeholders was useful in ensuring these new additions were a seamless fit with existing code bases and software philosophy for all Atlas users

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