

OIDL-0001 - HDS - Use PostgreSQL for HDS (DRAFT)

Harmonized Data Source - Use PostgreSQL for the HDS DBMS

status: {proposed | rejected | accepted | deprecated | ... | superseded by [ADR-0005](#)}

date: {YYYY-MM-DD when the decision was last updated}

deciders: entire TSC and AWG. Not controversial

Use PostgreSQL as the database management system for a relational Harmonized Data Store

Context and Problem Statement

The Harmonized Data Store should be implemented using well known technologies and utilize open source solutions if possible.

Decision Drivers

- open source for dbms
- experience and familiarity to the community of potential developers

Considered Options

- MongoDB
- PostgreSQL
- Oracle, SQL Server, MySQL

Decision Outcome

Chosen option: "PostgreSQL", because it is open source and relational technology is familiar to most development organizations.

Consequences

- Good, because learning curve is small
- Good, because no extra cost or setup complexity

Validation

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Pros and Cons of the Options

MongoDB

- Good, because easy to add data and extract data
- Good, because schema on write
- Bad, because experience limited in potential maintainers
- Bad, because proprietary system