



What is JPA?

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- JPA stands for Java Persistence API
- JPA is the official API for working with relational data in Java
- JPA is only a specification
 - JPA is not a concrete implementation

What does JPA do?

- JPA is a bridge from Java's object world to how data is stored in relational databases
- ORM - Object Relational Mapping
- JPA offers Java developers database independence
- One API will support many relational databases

JPA 2.0

- Java Community Process as JSR 317
- Approved in December of 2009
- Added support for embedded objects and ordered lists
- Added criteria query API
- Added SQL Hints
- Added Validation

JPA 2.1

- Java Community Process as JSR 338
- Approved in December of 2013
- Added custom type converters
- Criteria Update/Delete for bulk updates & deletes
- Schema Generation
- Queries against stored procedures

JPA 2.1 Implementations

- Hibernate (72% of Marketshare)
- EclipseLink (13% of Marketshare)
- OpenJPA (2% of Marketshare)

Databases Supported by Hibernate

- Oracle 11g
- DB2 9.7
- Microsoft SQL Server 2008
- Sybase ASE 15.5
- MySQL 5.1, 5.5
- PostgreSQL 8.4, 9.1
- Others: Apache Derby, Informix, MS Access, H2, Oracle 12c

Hibernate 5

- Hibernate 5 released in September 2015
- Commercial support available from Red Hat
- Adopted by Spring Framework in version 4.2 (July 2015)
- Adopted by Spring Boot in version 1.4 (January 2016)

