

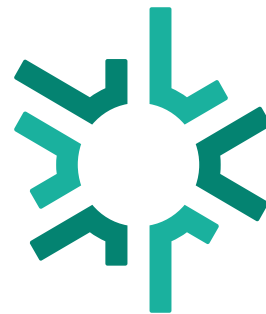
SESSION THREE

Persistence with Spring Data

Spring Data

Familiar. Consistent. Easy.

- Relational
- Abstract
- Map-Reduce
- Non-Relational
- Cloud



Spring Data



Features

- Powerful
Object-Mapping
Abstraction
- Dynamic Query
Derivation
- Transparent Auditing
- Spring MVC Integration
- Domain Base Class
- Experimental
Cross-Store Persistence



Primary

- Spring Data Commons
- Spring Data Gemfire
- Spring Data REST
- Spring Data JDBC
- Spring Data JPA
- ...



Community

- Spring Data DynamoDB
- Spring Data Vault
- Spring Data
Elasticsearch
- Spring Data Couchbase
- Spring Data Neo4j
- ...



Release Train

- Umbrella Project
- Curated
- Bill of Materials

Building Blocks

CRUD Repository

```
public interface CrudRepository<T, ID extends
Serializable>
    extends Repository<T, ID> {

    <S extends T> S save(S entity);

    Optional<T> findById(ID primaryKey);

    Iterable<T> findAll();

    long count();

    void delete(T entity);

    boolean existsById(ID primaryKey);

    // ... more functionality omitted.
}
```

Extensions

- Technology-Specific
- Paging & Sorting
- Derived Query Count
- Composability
 - @EntityGraph
 - @Lock
 - @Modifying
 - @Query
 - @Procedure

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Questions?

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Lab: Spring Data