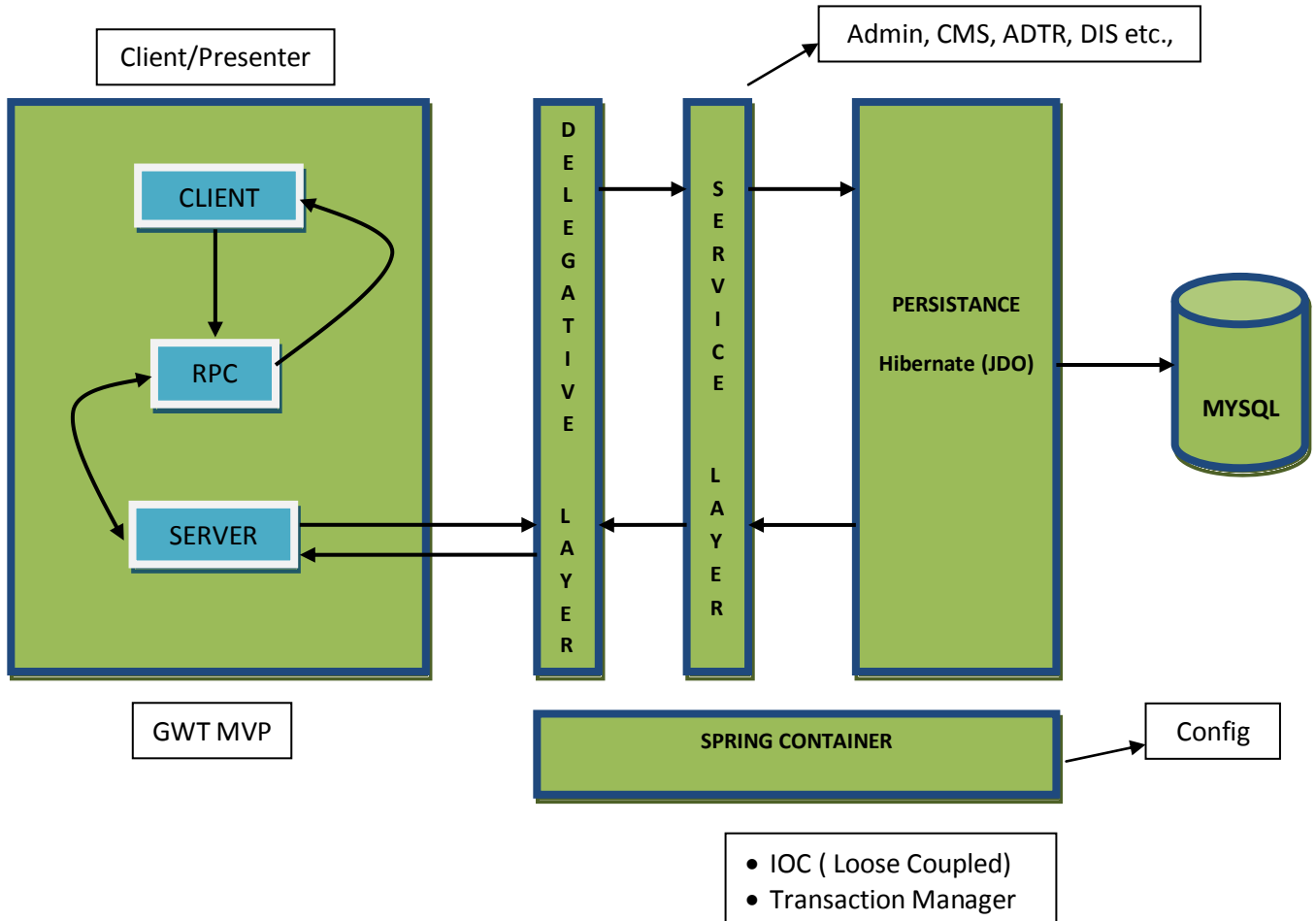# CyPERS Architecture

CyPERS architecture is a layered architecture. It defines interfaces between code that implements the various concerns, allowing a change to the way one concern is implemented without disrupting the code in the other layers. The layers are only aware of the adjacent layers.

1. When an action is performed on a GWT Client, the raw data is converted into a Client Model (POJO Class) and GWT RPC is invoked.

2. GWT Server converts Client Model into a Transfer Model (POJO Class) and invokes Delegative layer.

3. Service layer is an aggregation of module wise services like Admin, ADTR, CMS, DIS and NIS etc., which are loosely coupled. These services are in turn invoked by the Delegative layer (acts as a decision making layer) based on the request.

4. Business logic, functional requirements are performed in the service layer. It acts as a core layer. Here the Transfer Model is converted into Entity object and is used to persist into physical database.

5. Persistence layer takes care of any operation related to physical database like persisting data, retrieving, and other related operations. Hibernate is used as part of this layer.

6. When all the steps are performed successfully, a response is sent back to the GWT Client through the same process.

7. Spring is used to configure and manage java objects. It is responsible for creating objects, calling initialization methods, and configuring objects by wiring them together.