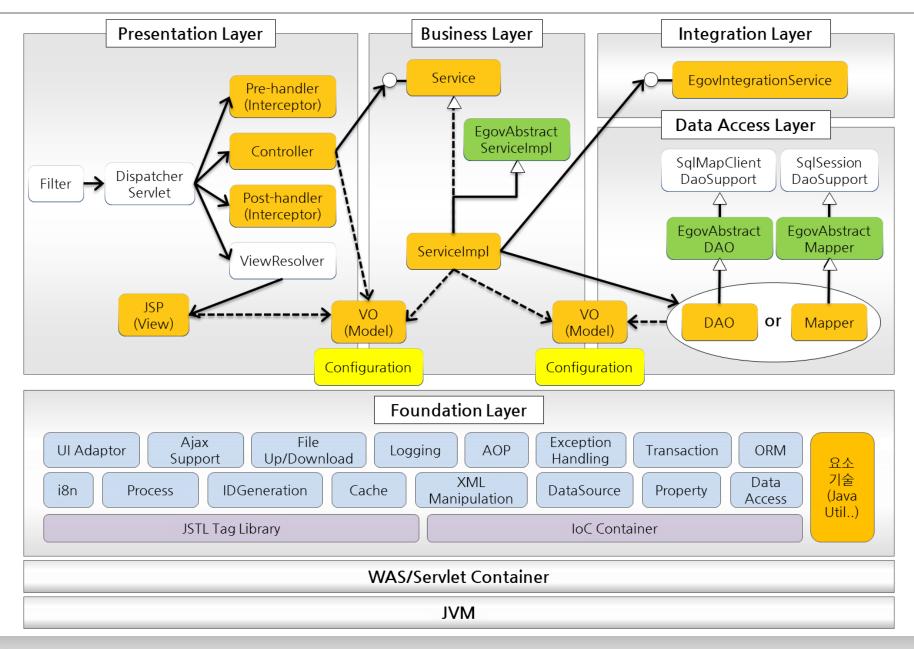
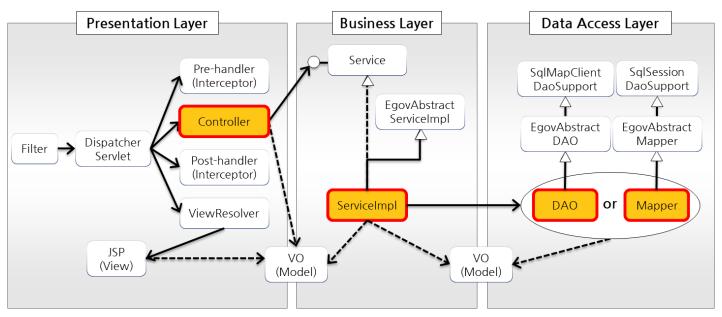


1.



2. (1/2)

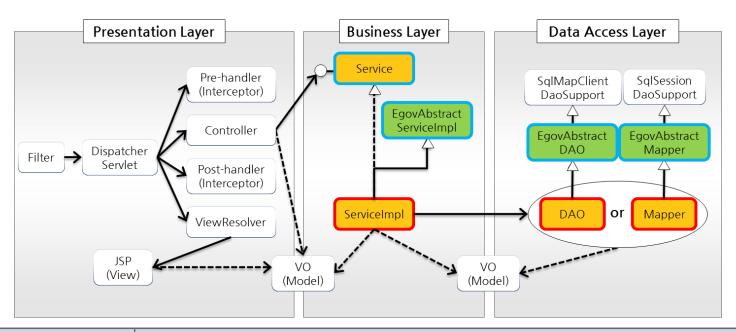
q Annotation Spring MVC Layered architecture



Controller	@Controller
	URL Mapping @RequestMapping
	View Model(business logic data) Controller
ServiceImpl	@Service
DAO/Mapper	• @Repository
	, MyBatis Mapper Interface

2. (2/2)

q



ServiceImpl	• AbstractServiceImpl EgovAbstractServiceImpl(3.0) / ,
	Service
DAO/Mapper	• EgovAbstractDAO(iBatis) EgovAbstractMapper(MyBatis) /
	MyBatis Mapper Interface , @Mapper
	Hibernate/JPA
	• '

3. (1/3)

q iBatis

EgovAbstractDAO

```
@Repository("employeeDao")
public class EmployeeDao extends EgovAbstractDAO { ... }
```

public class EgovAbstractDAO extends SqlMapClientDaoSupport { ... }

- iBatis XML 3가
 - iBatis (<sqlMapConfig> ~ </sqlMapConfig>)
 - SQL (<sqlMap> ~ </sqlMap>)
 - SqlMapClientFactoryBean

3. (2/3)

q MyBatis (1/2)

1) EgovAbstractMapper /

```
@Repository("employeeMapper")
public class EmployeeMapper extends EgovAbstractMapper { ... }
```

public abstract class EgovAbstractMapper extends SqlSessionDaoSupport {

- MyBatis XML 3가

- MyBatis (<configuration> ~ </configuration>)
- SQL (<mapper> ~ </ mapper >)
- SqlSessionFactoryBean

3. (2/3)

q MyBatis (2/2)

2) Mapper Interface

```
@Mapper("employeeMapper")
public interface EmployeeMapper { ... }
```

- MyBatis Mapper Interface XML 4가

```
• MyBatis ( <configuration> ~ </configuration> )
```

- SQL (<mapper> ~ </mapper >)
- SqlSessionFactoryBean
- MapperConfigurer

```
<!-- MapperConfigurer setup for MyBatis Database Layer -->
<bean class="egovframework.rte.psl.dataaccess.mapper.MapperConfigurer">
cproperty name="basePackage" value=""" Mapper Interface7|" "/>
</bean>
```

3. (3/3)

${f q}$ Spring Data JPA

- persistence store(Big Data, NoSQL
- CrudRepository PagingAndSortingRepository interface Repository

```
public interface DepartmentRepository extends CrudRepository<Department, Long> { ... }

public interface EmployeeRepository extends PagingAndSortingRepository<Employee, Long> { ... }
```

q Hibe rnate/JPA

- DAO SessionFactory(low level) HibernateTemplate/JpaTemplate
 HibernateDaoSupport/JpaDaoSupport LocalContatinerEntityManagerFactoryBean
- LocalContatinerEntityManagerFactoryBean
 EntityManager

```
public class UserDAO {
...
@PersistenceContext
private EntityManager entityManager;

public void createUser(User user) throws Exception {
    entityManager.persist(user);
  }
...
}
```

UI Adaptor

RESTful

UI

RIA(Rich Internet Application)가