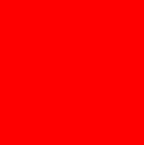





Learning the Nuts & Bolts of Java EE 6 in a code-intensive Tutorial

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The following is intended to outline our general product direction. It is intended for information purposes only, and may not be incorporated into any contract. It is not a commitment to deliver any material, code, or functionality, and should not be relied upon in making purchasing decisions.

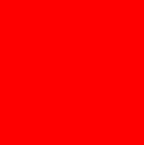
The development, release, and timing of any features or functionality described for Oracle's products remains at the sole discretion of Oracle.



Light-weight

- Java EE 6 Web Profile
- Pruning
 - Pruned today, means
 - Optional in the next release
 - Deleted in the subsequent releases
 - Technologies marked in Javadocs
 - EJB 2.x Entity Beans, JAX-RPC, JAXR, JSR 88





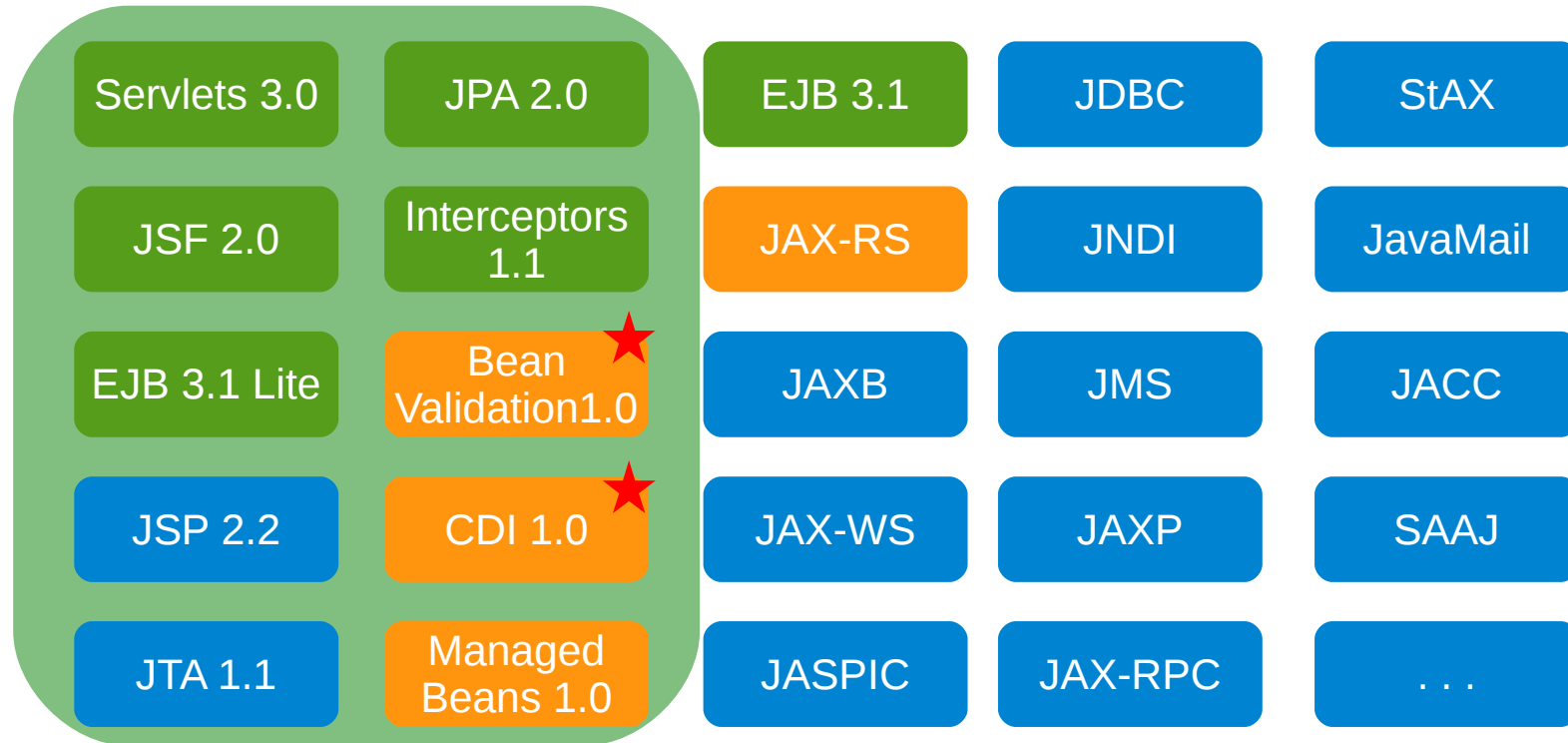
- EJB-in-WAR
- No-interface EJB
- Optional
“web.xml”/“faces-
config.xml”
- Annotation-driven
 - @Schedule
 - @Path
 - @Inject
 - . . .





```
<web-fragment>
  <filter>
    <filter-name>wicket.helloworld</filter-name>
    <filter-class>org.apache.wicket.protocol.http.WicketFilter</filter-class>
    <init-param>
      <param-name>applicationClassName</param-name>
      <param-value>...</param-value>
    </init-param>
  </filter>
  <filter-mapping>
    <filter-name>wicket.helloworld</filter-name>
    <url-pattern>/*</url-pattern>
  </filter-mapping>
</web-fragment>
```

The Java EE 6 Platform



★ Contributed by RedHat

New

Updated

Compatible Java EE 6 Impls

Today:



Tmax Soft



Web Profile Only

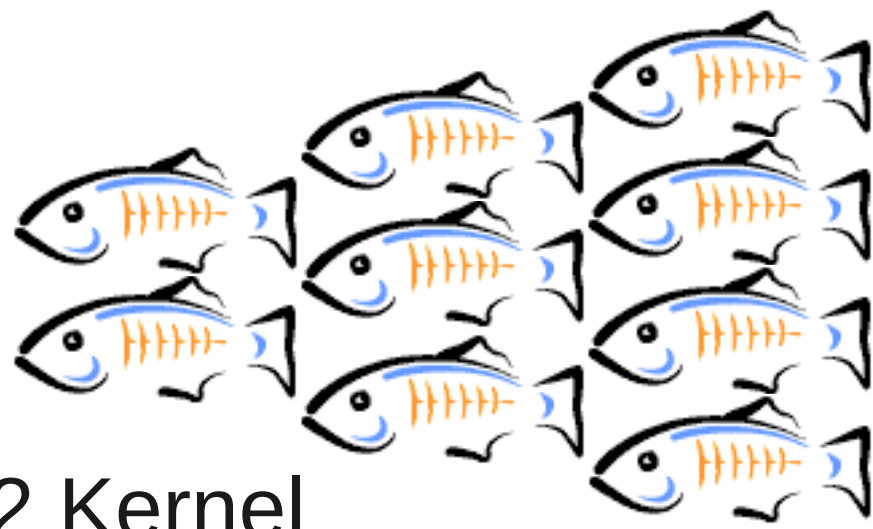


Oracle WebLogic Suite 11g

Announced:

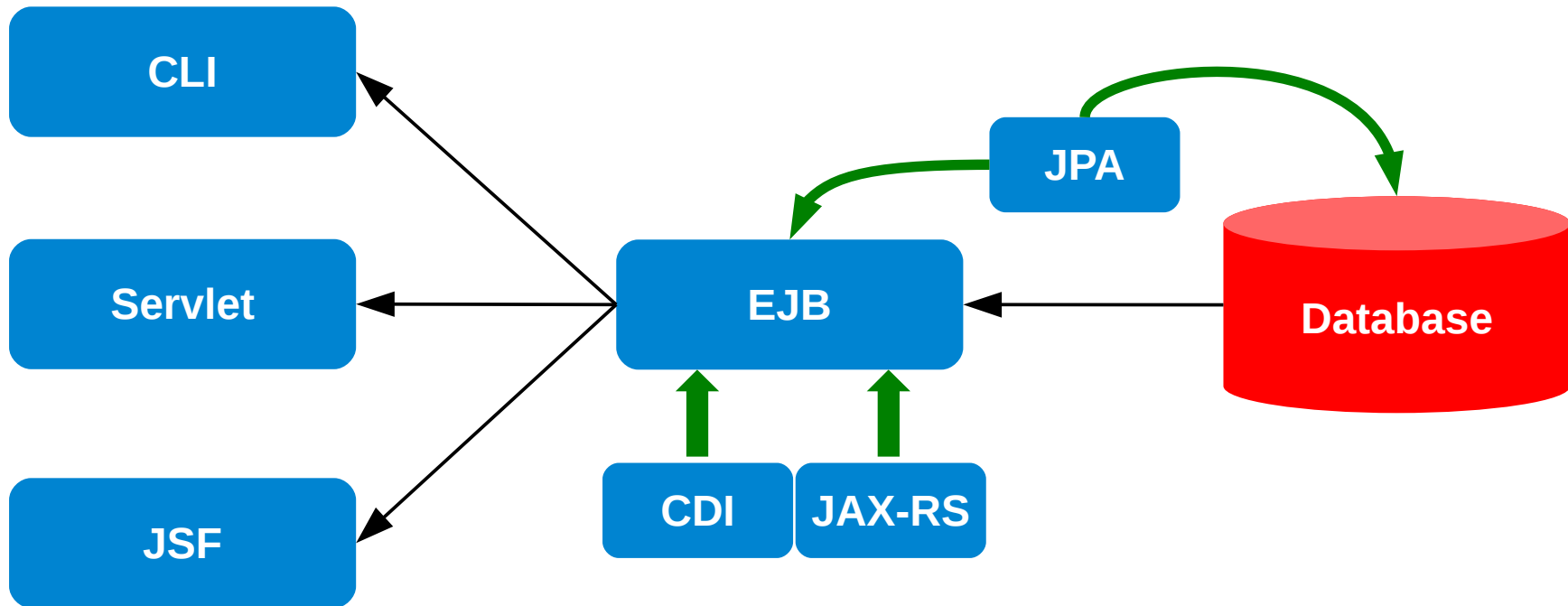


3.1 Overview



- Built on GlassFish 3
- Modular and Extensible HK2 Kernel
 - ~260+ modules
 - OSGi/Java EE Hybrid Apps
- Clustering and High Availability
 - HTTP, EJB, IIOP, SSO, Metro
- Containers start on demand
- End-to-end extensibility

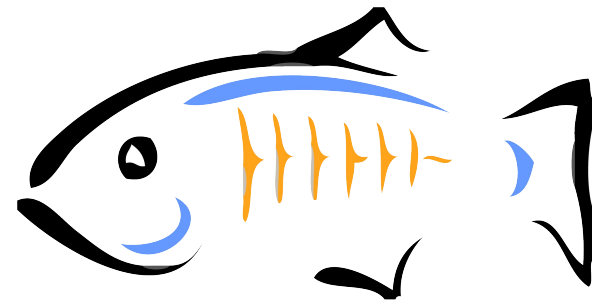
Sample App Overview



What will we do ?

1. Generate JPA Entities from the database table
2. Refactor generated entities for a more intuitive O/R mapping
3. Create an EJB for querying the database
4. Create a Servlet for testing the EJB and displaying values from the database table
5. Enable CDI and make the EJB EL-injectable
6. Display the values in JSF2/Facelets-based view
7. Expose JPA entities as a RESTful resource by using JAX-RS

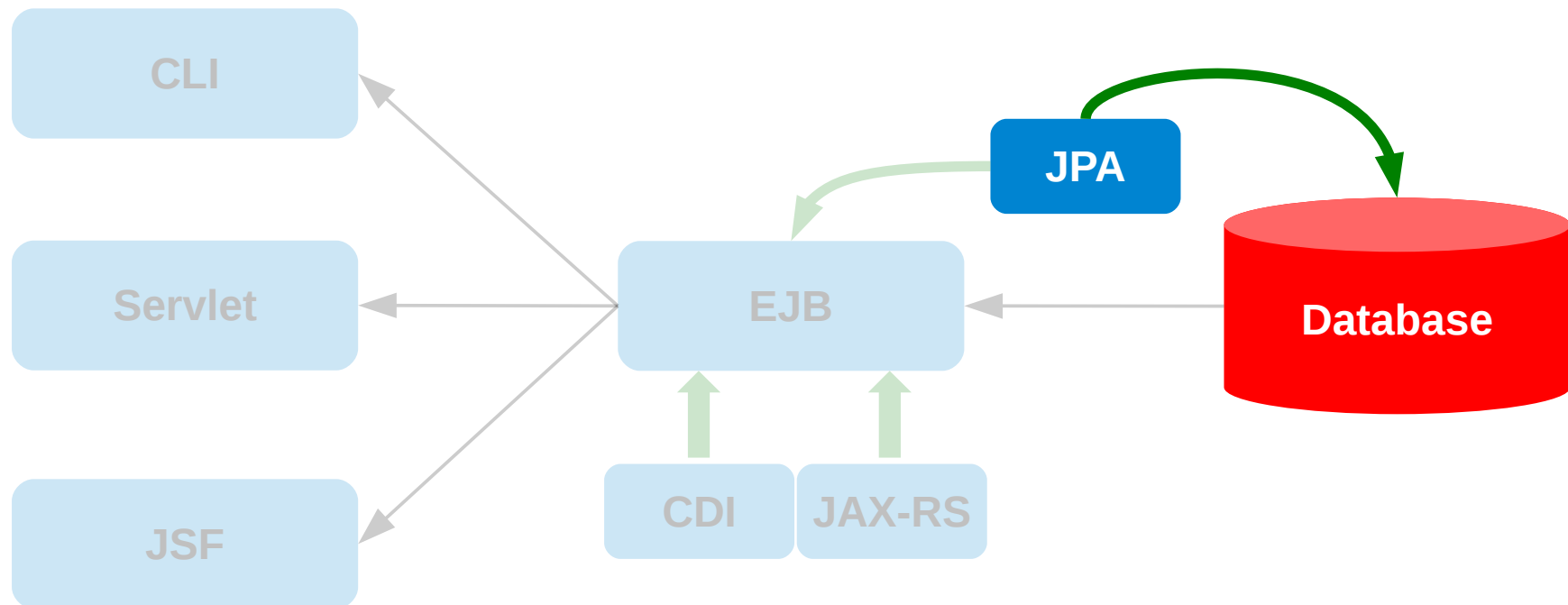
What will we use ?



Java DB

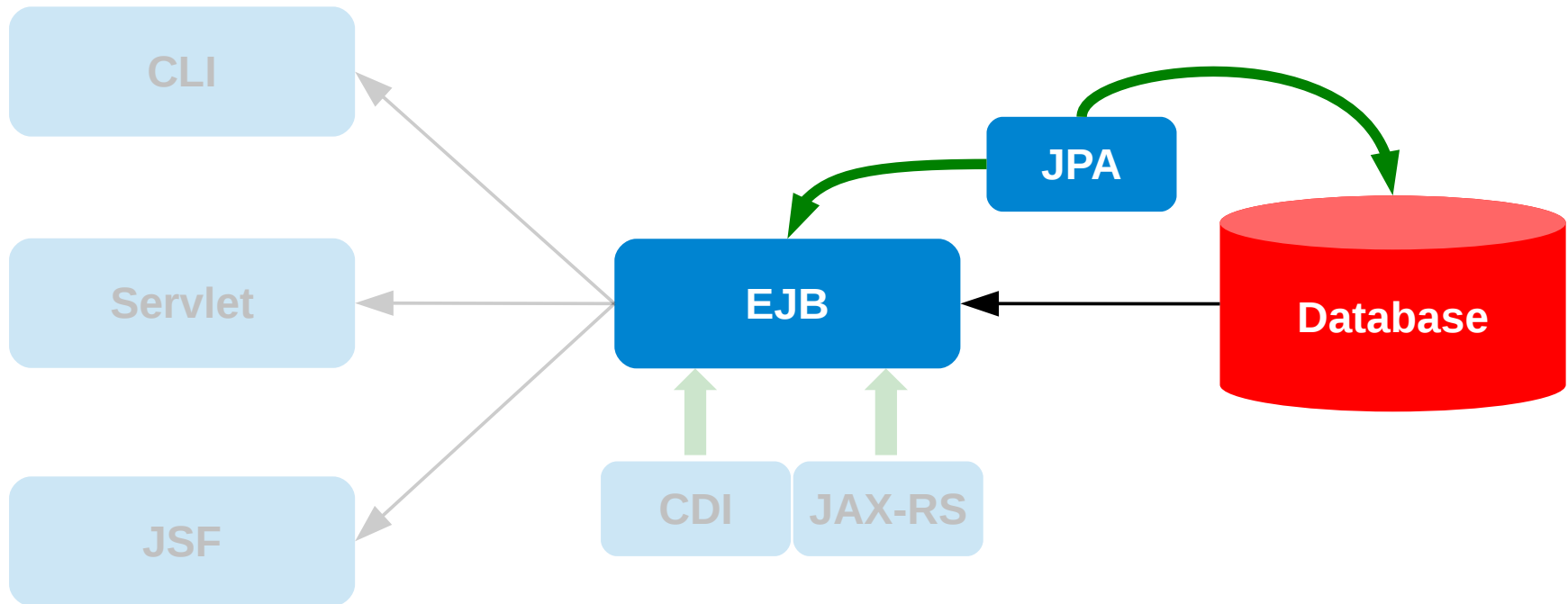
Generate JPA Entities

And customize them



Create an EJB

For querying the database



Create an EJB – Sample Code

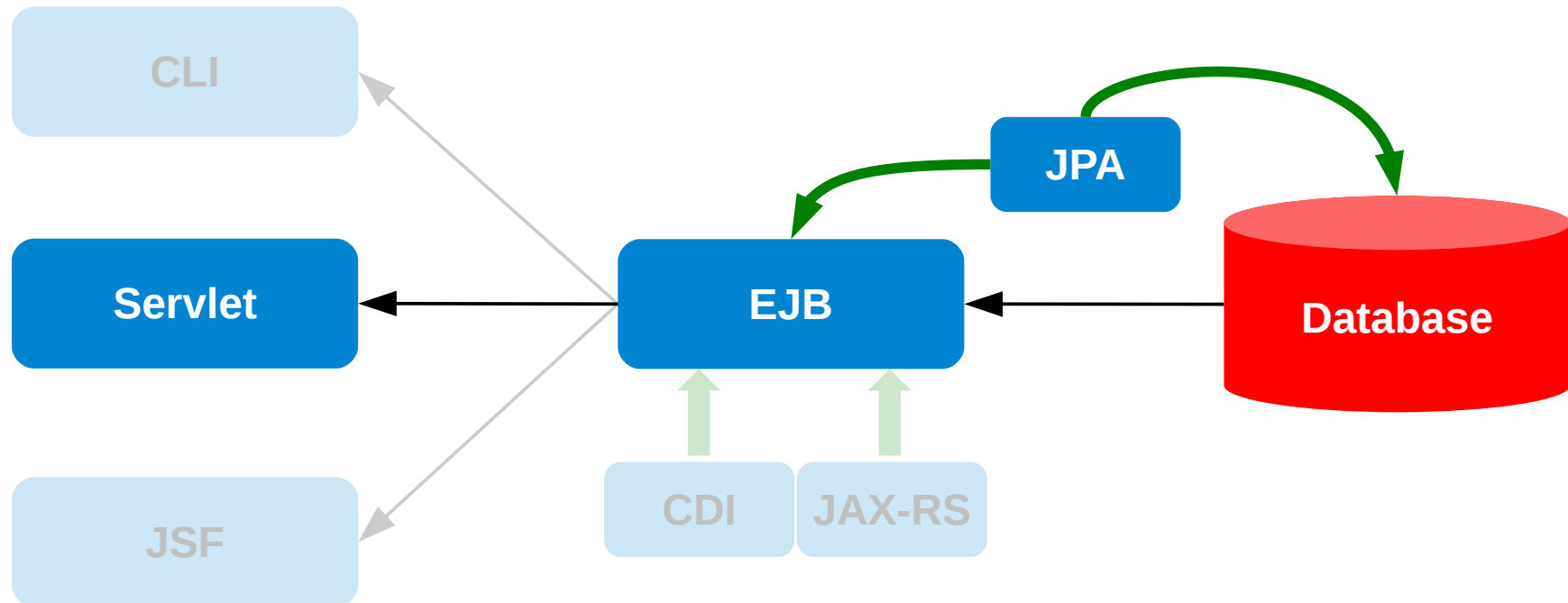
For querying the database

```
@PersistenceContext  
EntityManager em;
```

```
public List<Customer> getCustomers() {  
    return (List<Customer>)em.createNamedQuery("Customer.findAll").getResultList();  
}
```

Create a Servlet

For testing EJB and display values from the database



Create a Servlet – Sample Code

For testing EJB and display values from the database

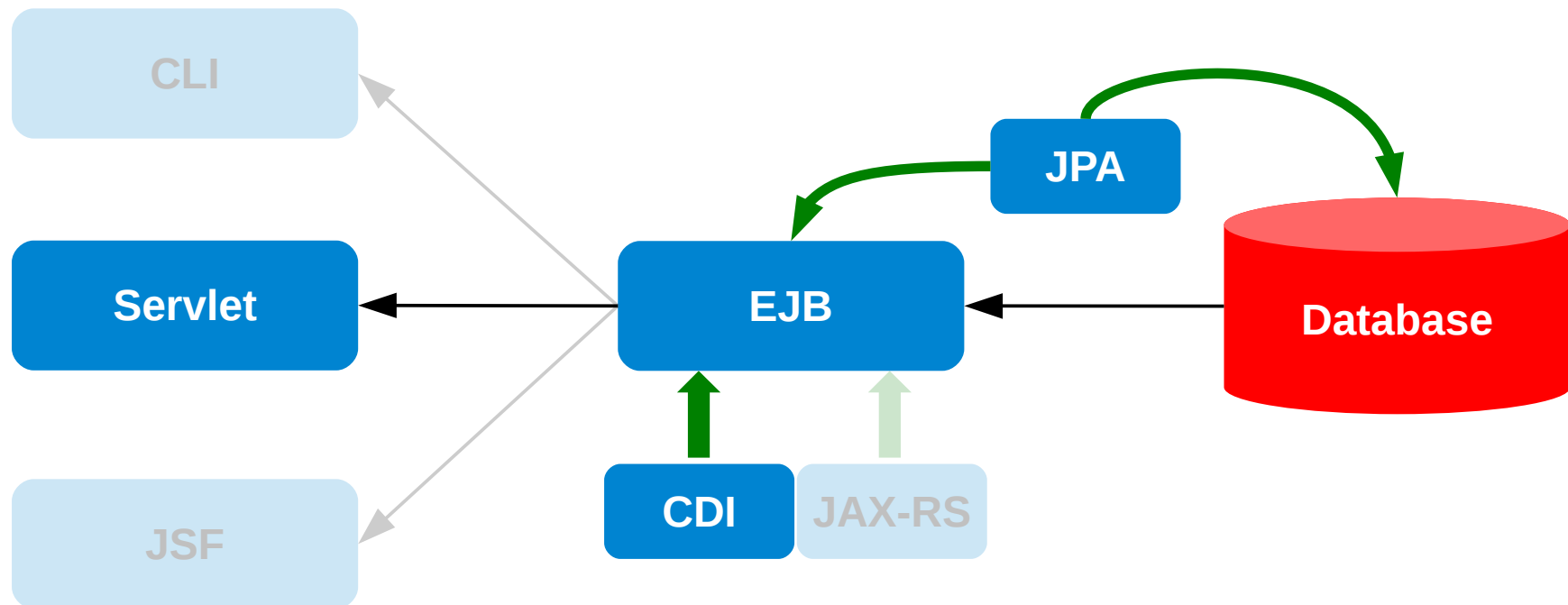
```
@EJB LoadDataBean ejb;
```

```
out.println(bean.getCustomers());
```

```
http://localhost:8080/JavaEE6SampleApp/TestServlet
```

Enable CDI

Make the EJB EL-injectable



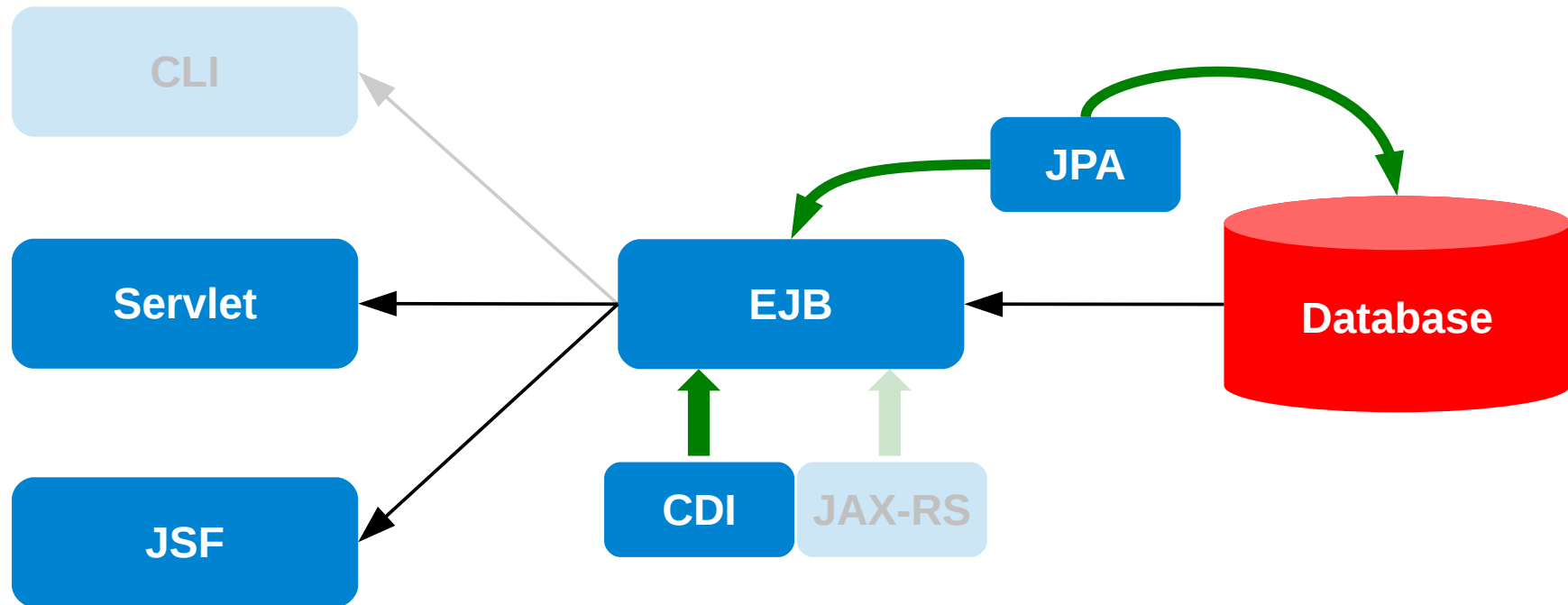
Enable CDI – Sample Code

Make the EJB EL-injectable

```
@javax.inject.Named
```

Display the values

In JSF2/Facelets-based view



Display the values – Sample Code

In JSF2/Facelets-based view

```
http://localhost:8080/JavaEE6SampleApp/faces/index.xhtml
```

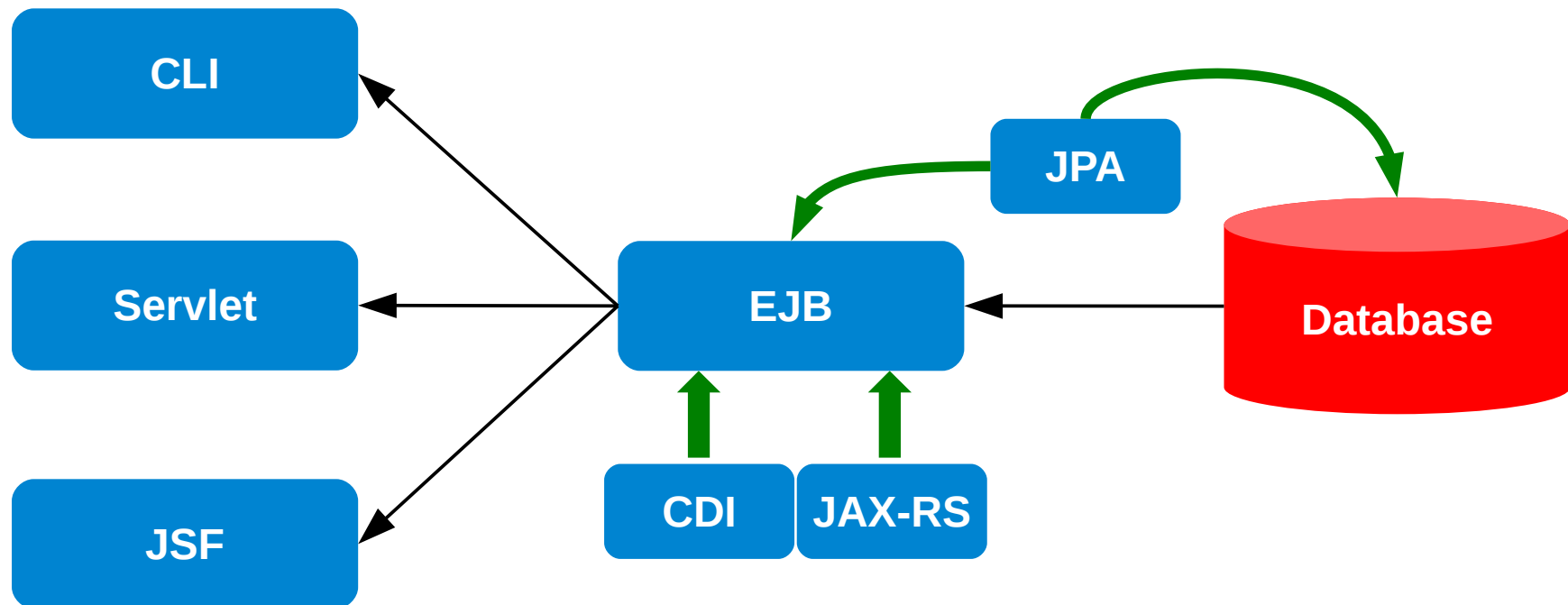
```
<h1>Java EE 6 Sample App</h1>
```

```
<center>Powered by GlassFish!</center>
```

```
<h:dataTable value="#{customerSessionBean.customers}" var="c">  
<h:column>#{c.name}</h:column>  
<h:column>#{c.id}</h:column>  
</h:dataTable>
```

RESTful resource

Using JAX-RS



RESTful resource – Sample Code

Using JAX-RS

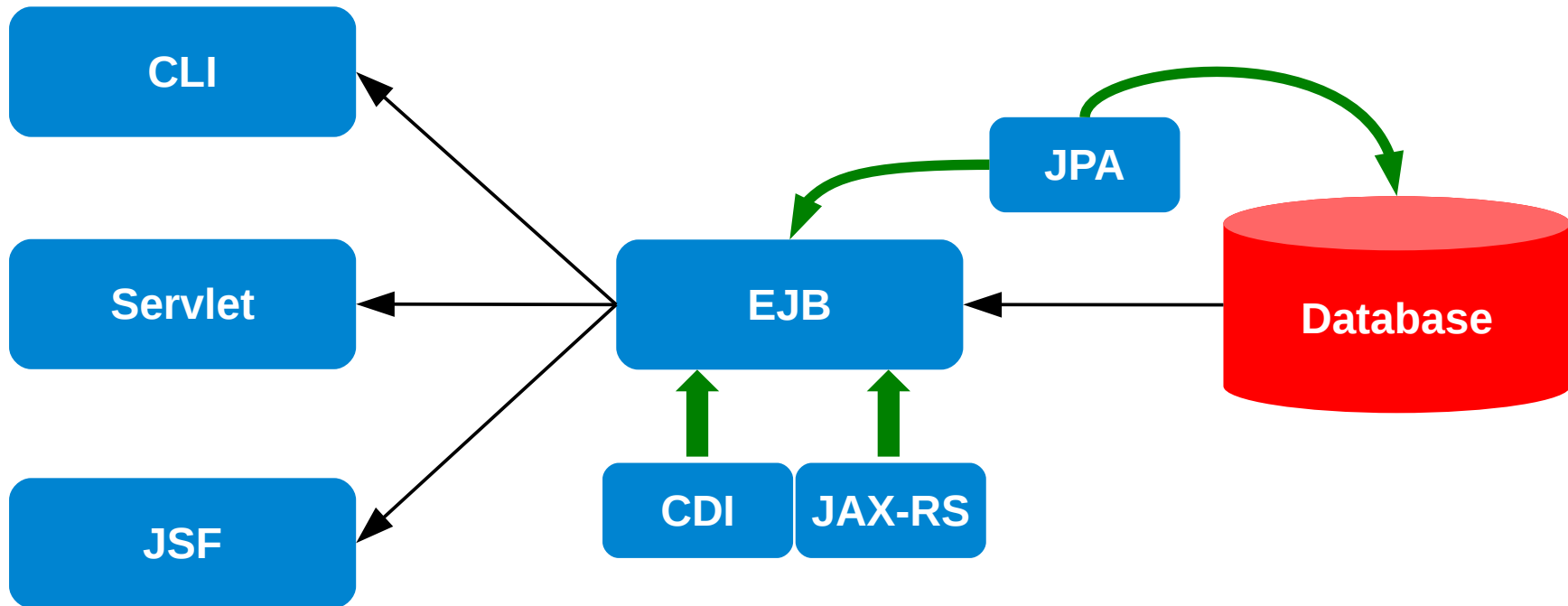
```
@Path("/customers")
```

```
@GET
@Path("/customer/{id}")
@Produces("application/xml")
public Customer getCustomer(@PathParam("id")Integer id) {
    return
    (Customer)em.createNamedQuery("Customer.findByCustomerId").
    setParameter("customerId
    ", id).getSingleResult();
}
```

```
http://localhost:8080/JavaEE6SampleApp/resources/customers/customer/1
```

```
@Produces({"application/xml", "application/json"})
```

Sample App Review





MOVING

JAVA

FORWARD

OCT 2-6 2011
SAN FRANCISCO

- Find out what's new with Java technology
- See new tools and techniques
- Learn how to create solutions
- Network with peers
- Meet with experts
- Influence the future of the Java platform
- 400+ sessions/BoFs/HOLs
- . . .

References

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- glassfish.org
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- blogs.oracle.com/theaquarium
- youtube.com/GlassFishVideos
- Follow @glassfish