

## Oracle ADF Interview Questions and Answers/Tips

*On January 14, 2011, in [Oracle ADF](#), by scott*

Here are a set of Interview Question and Answers/Tips for Oracle ADF :

### **Q : What is Oracle ADF?**

A : Oracle ADF is an commercial java/j2ee framework, which is used to build enterprise applications.

It is one of the most comprehensive and advanced framework in market for J2EE

### **Q : What are the advantages of using ADF?**

A : Following are the advantages of using :

- It supports Rapid Application Development.
- It is based on MVC architecture
- Declarative Approach (XML Driven)
- Secure
- Reduces maintenance cost and time
- SOA Enabled

### **Q : What are various components in ADF?**

A : Oracle ADF has following components

- ADF Business Components(Model)
- ADF Faces (View)
- ADF Taskflows(Controller)

### **Q : What is the return type of Service Methods?**

A : Service Methods can return Scalar or Primitive Data types.

### **Q : Can Service Methods return type Void?**

A : Yes, Service Methods can Return type Void

### **Q : Can Service Methods return Complex Data types?**

A : No, service methods can return only primitive/scalar data types.

**Q : Which component in ADF BC manages transaction ?**

A : Application Module, manages transaction.

**Q : Can an entity object be based on two Database Objects (tables/views) or two Webservices ?**

A : No entity objects will always have one to one relationship with a database object or web service.

**Q : Where is that we write business rules/validations in ADF and why?**

A : We should be writing validations at Entity Object level, because they provide highest degree of reuse.

**Q : What is Managed Bean?**

A : Managed bean is a java class, which is initialized by JSF framework. It is primarily used to hold view and controller logic. It is also used to execute java code to be executed on a user action like Button Click.

**Q : What are Backing Bean?**

A : Backing beans are those managed beans which have 1:1 mapping with a page. They have getters and setters for all the components in the related page.

**Q : What is difference between managed and backing beans?**

A : Backing bean has 1:1 relation with page whereas managed beans can be used in multiple pages.

Backing beans scope is limited to the page whereas managed beans can have other scopes too.

**Q : What is a Taskflow?**

A : Taskflow is the controller of an ADF application, it provides us an declarative approach to define the control flow. It is used to define the navigation between pages and various taskflow activities.

**Q : What are the different types/categories of Taskflows ?**

A : Taskflows are of two categories : Bounded and UnBounded.

**Q : What is the difference between Bounded and UnBounded taskflows?**

A : Differences between Bounded and UnBounded taskflows :

- Bounded taskflows can be secured but Unbounded can't.
- Bounded taskflows can accept parameter and return values but unbounded taskflows don't support parameters
- Bounded taskflows has a single entry point or a default activity but unbounded taskflows have multiple entry points.
- Bounded taskflows can be called from other bounded/unbounded taskflows but unbounded cannot be called or reused.
- Bounded taskflows support transactions unbounded don't

**Q : What are the various access scopes supported by ADF?**

A : ADF Faces supports the following scopes

- Application Scope
- Session Scope
- PageFlow Scope
- Request Scope
- BackingBean Scope.

**Q : Describe life cycle of a ADF Page?**

A : ADF page is an extension of JSF and has following phases in its lifecycle

1. **Initialize Context:** In this phase the adf page initializes the LifecycleContext with information that will be used during the Lifecycle.
2. **Prepare Model:** In this phase ui model is prepared and initialized. In this phase page parameters are set and methods in the executable section of the page definition of the ADF page are executed.
3. **Apply Input Values:** This phase handles the request parameters. The values from the HTML are sent to the server and applied to the page binding in page definitions.
4. **Validate Input Values:** This phase validates the values that were built in the Apply input values phase

5. **Update Model:** Validated values supplied from user are sent to ADF business components data model
6. **Validate Model Updates:** In this phase the business components will validate user supplied values.
7. **Invoke Application:** This phase will process the ui events stack built during the life cycle of page and also fire navigational events
8. **Prepare Render:** This is the final phase where HTML code is generated from the view tree.

**Q : What is PPR and how do you enable Partial Page Rendering(PPR)?**

A : PPR is a feature supported by ADF Faces, using which we can render a small portion of a HTML Page, without refreshing the complete page. It is enabled by.

- Setting **AutoSubmit** property to true on the triggering element.
- Setting the **PartialTriggers** property of target component to refer to component id of the triggering element.