

## The eight listeners

Scenario	Listener interface	Event type
You want to know if an attribute in a web app context has been added, removed, or replaced.	javax.servlet. <b>ServletContextAttributeListener</b> <i>attributeAdded</i> <i>attributeRemoved</i> <i>attributeReplaced</i>	ServletContextAttributeEvent
You want to know how many concurrent users there are. In other words, you want to track the active sessions. (We cover sessions in detail in the next chapter).	javax.servlet.http. <b>HttpSessionListener</b> <i>sessionCreated</i> <i>sessionDestroyed</i>	HttpSessionEvent
You want to know each time a request comes in, so that you can log it.	javax.servlet. <b>ServletRequestListener</b> <i>requestInitialized</i> <i>requestDestroyed</i>	ServletRequestEvent
You want to know when a request attribute has been added, removed, or replaced.	javax.servlet. <b>ServletRequestAttributeListener</b> <i>attributeAdded</i> <i>attributeRemoved</i> <i>attributeReplaced</i>	ServletRequestAttributeEvent
You have an attribute class (a class for an object that will be stored as an attribute) and you want objects of this type to be notified when they are bound to or removed from a session.	javax.servlet.http. <b>HttpSessionBindingListener</b> <i>valueBound</i> <i>valueUnbound</i>	HttpSessionBindingEvent
You want to know when a session attribute has been added, removed, or replaced.	javax.servlet.http. <b>HttpSessionAttributeListener</b> <i>attributeAdded</i> <i>attributeRemoved</i> <i>attributeReplaced</i>	HttpSessionAttributeEvent <i>Watch out for this naming inconsistency! The Event for HttpSessionAttributeListener is NOT what you expect (you expect HttpSessionAttributeEvent).</i>
You want to know if a context has been created or destroyed.	javax.servlet. <b>ServletContextListener</b> <i>contextInitialized</i> <i>contextDestroyed</i>	ServletContextEvent
You have an attribute class, and you want objects of this type to be notified when the session to which they're bound is migrating to and from another JVM.	javax.servlet.http. <b>HttpSessionActivationListener</b> <i>sessionDidActivate</i> <i>sessionWillPassivate</i>	HttpSessionEvent <i>It's NOT "HttpSessionActivationEvent"</i>