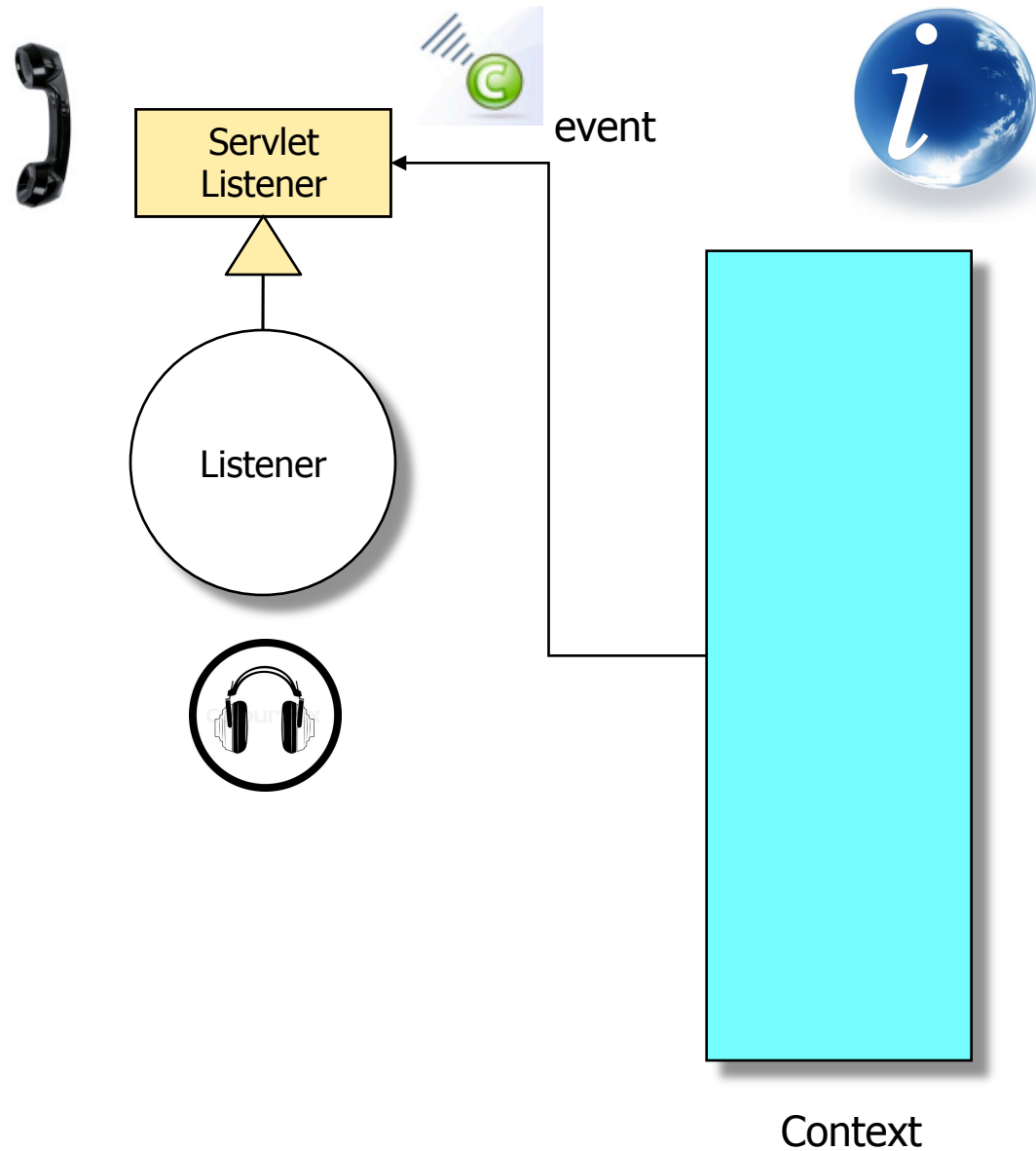
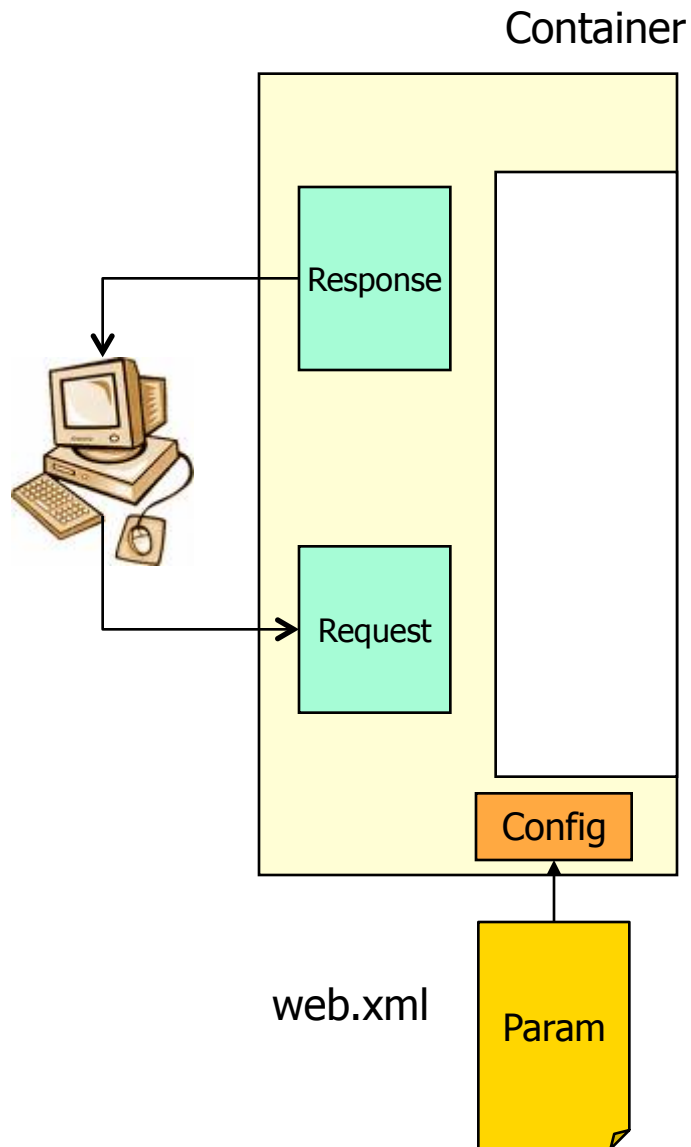


Architecture des Systèmes d' Information

Servlet Listener




Big Picture



Listeners



<<Java Interface>>

 ServletRequestListener

javax.servlet

- requestDestroyed()
- requestInitialized()


<<Java Interface>>

 ServletRequestAttributeListener

javax.servlet

- attributeAdded()
- attributeRemoved()
- attributeReplaced()


<<Java Interface>>

 ServletContextListener

javax.servlet

- contextInitialized()
- contextDestroyed()

<<Java Interface>>

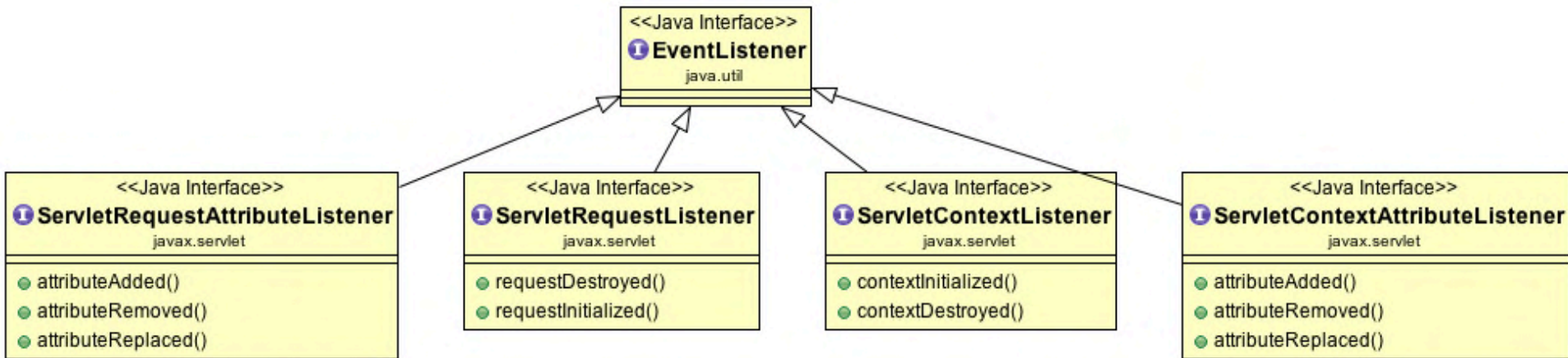
 ServletContextAttributeListener

javax.servlet

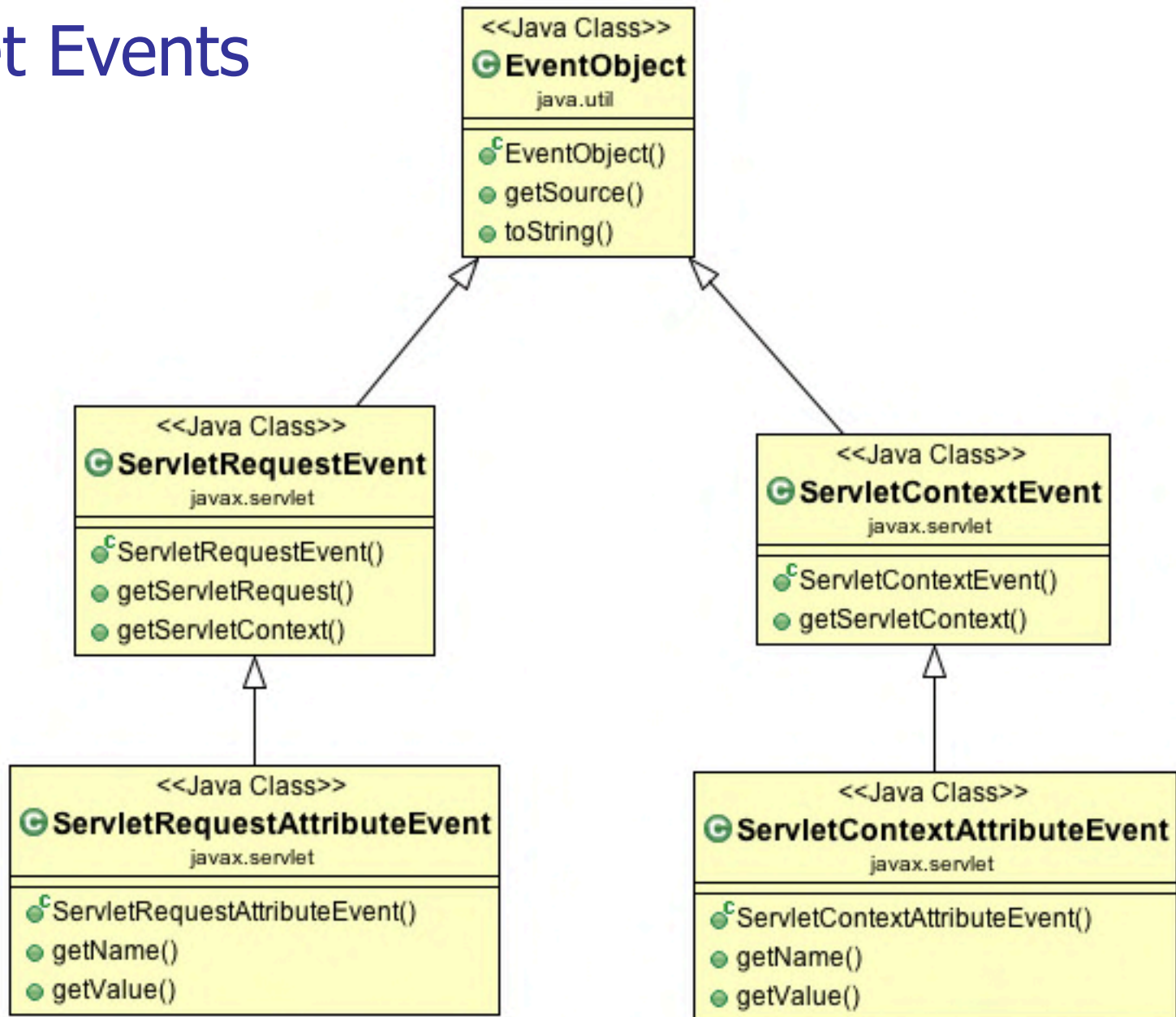
- attributeAdded()
- attributeRemoved()
- attributeReplaced()



Listeners



Servlet Events



Package javax.servlet.http : Interface



<u>Interface</u>

HttpSessionActivationListener	Objects that are bound to a session may listen to container events notifying them that sessions will be passivated and that session will be activated.
HttpSessionAttributeListener	This listener interface can be implemented in order to get notifications of changes to the attribute lists of sessions within this web application.
HttpSessionBindingListener	Causes an object to be notified when it is bound to or unbound from a session.
HttpSessionListener	Implementations of this interface are notified of changes to the list of active sessions in a web application.



Package javax.servlet : Class



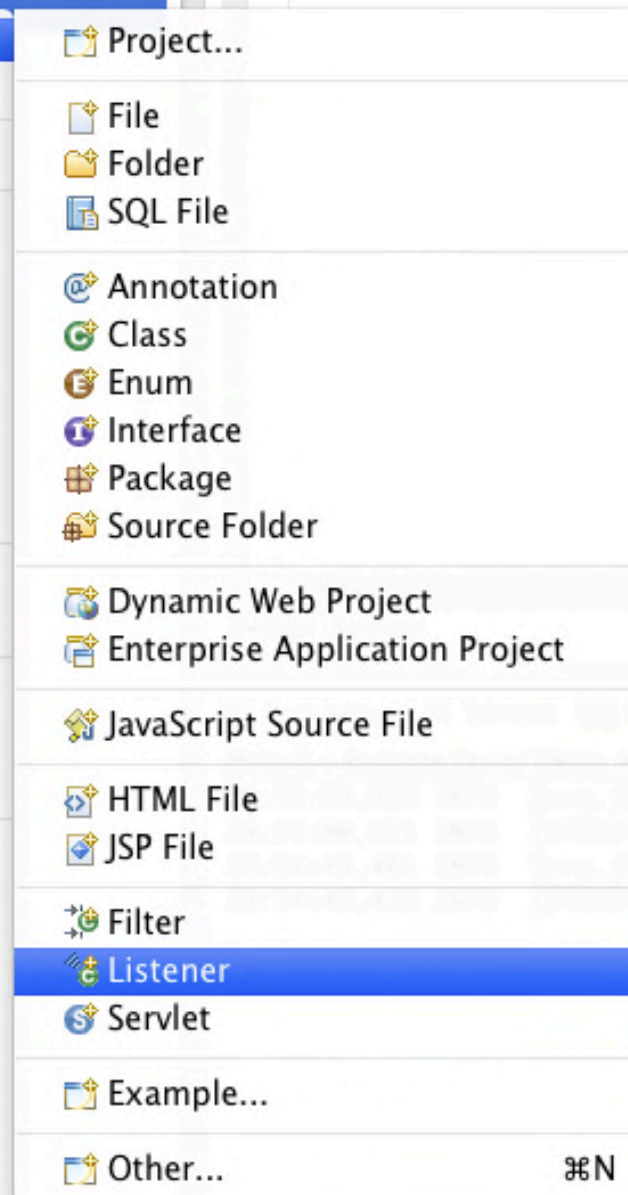
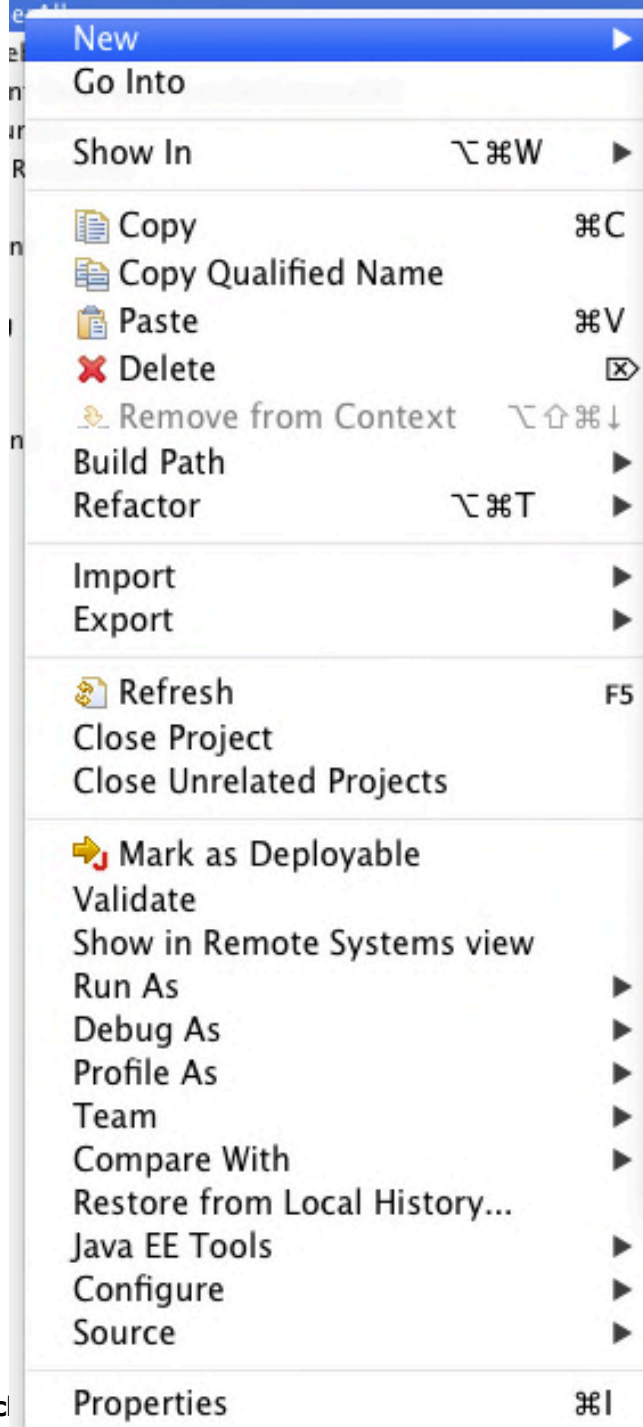
ServletContextAttributeEvent	This is the event class for notifications about changes to the attributes of the servlet context of a web application.
ServletContextEvent	This is the event class for notifications about changes to the servlet context of a web application.
ServletRequestAttributeEvent	This is the event class for notifications of changes to the attributes of the servlet request in an application.
ServletRequestEvent	Events of this kind indicate lifecycle events for a ServletRequest.

Package javax.servlet.http : Class




HttpSessionBindingEvent	Events of this type are either sent to an object that implements HttpSessionBindingListener when it is bound or unbound from a session, or to a HttpSessionAttributeListener that has been configured in the deployment descriptor when any attribute is bound, unbound or replaced in a session.
HttpSessionEvent	This is the class representing event notifications for changes to sessions within a web application







to  Create Listener

Create Listener

Specify class file destination.

Project:

Source folder:


Java package:

Class name:

Superclass:

☐ Use existing Listener class

Class name:







Create Listener

Select the application lifecycle events to listen to.

Servlet context events

<input checked="" type="checkbox"/> Lifecycle	javax.servlet.ServletContextListener
<input type="checkbox"/> Changes to attributes	javax.servlet.ServletContextAttributeListener

HTTP session events

<input type="checkbox"/> Lifecycle	javax.servlet.http.HttpSessionListener
<input type="checkbox"/> Changes to attributes	javax.servlet.http.HttpSessionAttributeListener
<input type="checkbox"/> Session migration	javax.servlet.http.HttpSessionActivationListener
<input type="checkbox"/> Object binding	javax.servlet.http.HttpSessionBindingListener

Servlet request events

<input type="checkbox"/> Lifecycle	javax.servlet.ServletRequestListener
<input type="checkbox"/> Changes to attributes	javax.servlet.ServletRequestAttributeListener

Select All Deselect All

 < Back Next > Cancel Finish





Create Listener

Select the application lifecycle events to listen to.

Servlet context events

<input checked="" type="checkbox"/> Lifecycle	javax.servlet.ServletContextListener
<input type="checkbox"/> Changes to attributes	javax.servlet.ServletContextAttributeListener

HTTP session events

<input type="checkbox"/> Lifecycle	javax.servlet.http.HttpSessionListener
<input type="checkbox"/> Changes to attributes	javax.servlet.http.HttpSessionAttributeListener
<input type="checkbox"/> Session migration	javax.servlet.http.HttpSessionActivationListener
<input type="checkbox"/> Object binding	javax.servlet.http.HttpSessionBindingListener

Servlet request events

<input type="checkbox"/> Lifecycle	javax.servlet.ServletRequestListener
<input type="checkbox"/> Changes to attributes	javax.servlet.ServletRequestAttributeListener

Select All Deselect All

 < Back Next > Cancel Finish





```
package com.fuchs;

+ import javax.servlet.ServletContextEvent;

- /**
 * Application Lifecycle Listener implementation class ContextListener
 *
 */
public class ContextListener implements ServletContextListener {

-     public void contextInitialized(ServletContextEvent arg0) {
        System.out.println("ServletContextListener started");
    }

-     public void contextDestroyed(ServletContextEvent arg0) {
        System.out.println("ServletContextListener destroyed");
    }

}
```





```
ContextListenerner.java  *web.xml  ⌵
<?xml version="1.0" encoding="UTF-8"?>
<web-app xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xmlns="http://java.sun.com/xml/ns/javaee"
  xmlns:web="http://java.sun.com/xml/ns/javaee/web-app_2_5.xsd"
  xsi:schemaLocation="http://java.sun.com/xml/ns/javaee http://java.sun.com/xml/ns/javaee/web-app_2_5.xsd"
  id="WebApp_ID" version="2.5">
  <display-name>servlet listener</display-name>
  <listener>
    <listener-class>com.fuchs.ContextListenerner</listener-class>
  </listener>
</web-app>
```



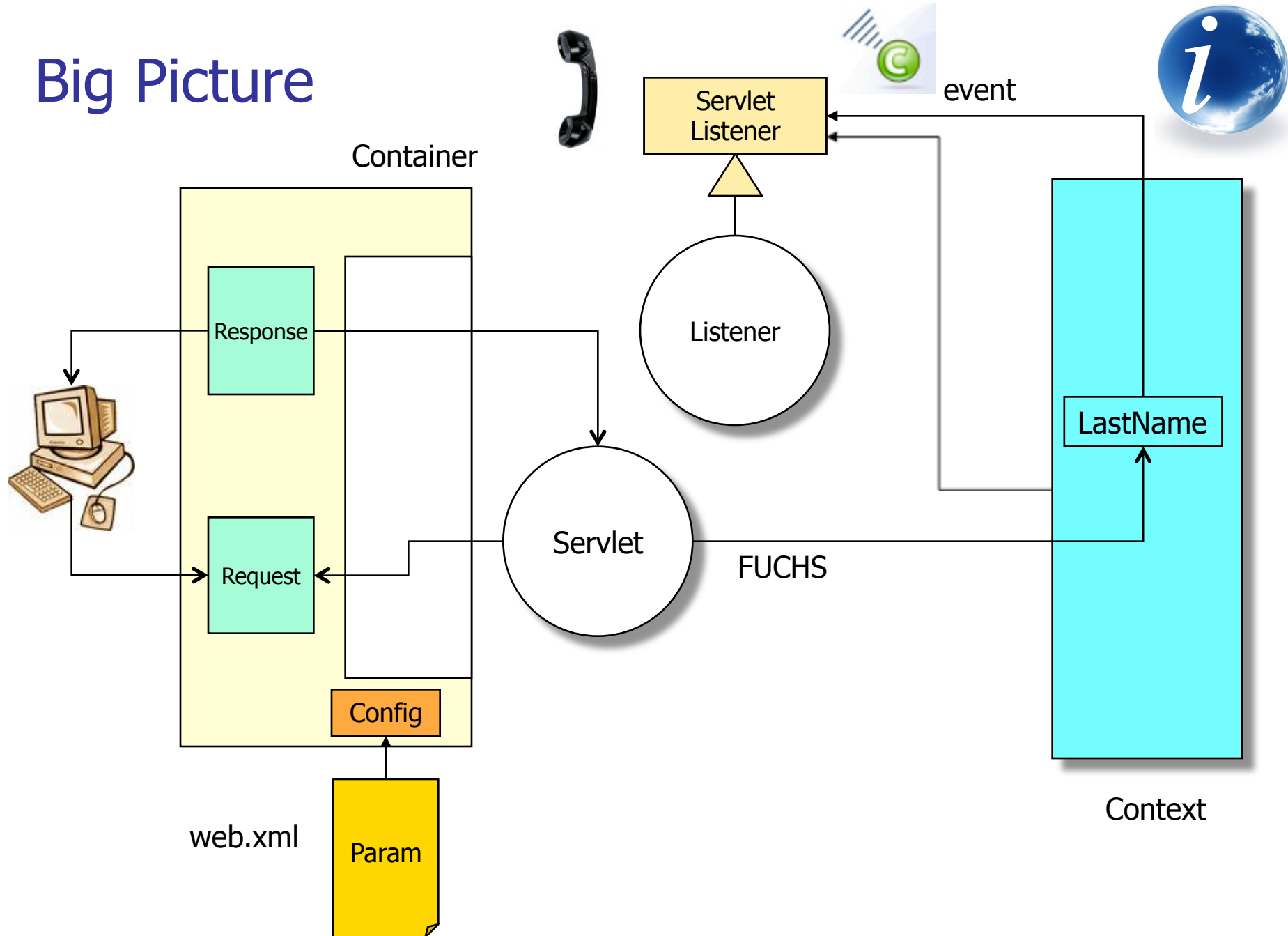


```
JBoss 6.x Runtime Server [JBoss Application Server Startup Configuration] /System/Library/Java/JavaVirtualMachines/1.6.0.jdk/Contents/Home/bin/java (2 févr. 2014 11:35:25)
20:52:59,929 INFO [org.jboss.web.tomcat.service.deployers.TomcatDeployment] deploy, ctxPath=/servletlistener
20:53:00,021 INFO [STDOUT] ServletContextListener started
```

```
JBoss 6.x Runtime Server [JBoss Application Server Startup Configuration] /System/Library/Java/JavaVirtualMachines/1.6.0.jdk/Contents/Home/bin/java
20:52:59,929 INFO [org.jboss.web.tomcat.service.deployers.TomcatDeployment] deploy, ctxPath=/servletlistener
20:53:00,021 INFO [STDOUT] ServletContextListener started
20:54:49,401 INFO [org.jboss.web.tomcat.service.deployers.TomcatDeployment] undeploy, ctxPath=/servletlistener
20:54:49,429 INFO [STDOUT] ServletContextListener destroyed
```



Big Picture



Attribute context listener



```
⊕ import java.io.IOException;

- /**
  * Servlet implementation class AttribEvent
  */
public class AttribEvent extends HttpServlet {
    private static final long serialVersionUID = 1L;

    protected void doGet(HttpServletRequest request, HttpServletResponse response) throws ServletException, IOException {
        System.out.println( "Servlet Set context OK");

        PrintWriter out = response.getWriter();

        ServletContext context = getServletContext();

        getServletContext().setAttribute("lastName", "fuchs");

        out.println("My last name is " + context.getAttribute("lastName"));
    }
}
```



Context attribute listener



```
+ import javax.servlet.ServletContextAttributeEvent;

- /**
 * Application Lifecycle Listener implementation class AttribContextListener
 *
 */
public class AttribContextListener implements ServletContextAttributeListener, ServletContextListener {

-     public void contextInitialized(ServletContextEvent arg0) {
         System.out.println("ServletContextListener started");
     }

-     public void attributeAdded(ServletContextAttributeEvent arg0) {
         System.out.println("ServletContextListener Attribute added");
     }

-     public void attributeReplaced(ServletContextAttributeEvent arg0) {
         System.out.println("ServletContextListener Attribute replaced");
     }

-     public void attributeRemoved(ServletContextAttributeEvent arg0) {
         System.out.println("ServletContextListener Attribute removed");
     }

-     public void contextDestroyed(ServletContextEvent arg0) {
         System.out.println("ServletContextListener Context destroyed");
     }

}
```



```
JBoss 6.x Runtime Server [JBoss Application Server Startup Configuration] /System/Library/Java/JavaVirtualMachines/1.6.0.jdk/Contents/Home/bin/java
17:40:09,878 INFO [org.jboss.web.tomcat.service.deployers.TomcatDeployment] deploy, ctxPath=/attribEvent
17:40:09,892 INFO [STDOUT] ServletContextListener started
17:40:10,794 INFO [STDOUT] Servlet Set context OK
17:40:10,795 INFO [STDOUT] ServletContextListener Attribute added
17:40:14,905 INFO [org.jboss.web.tomcat.service.deployers.TomcatDeployment] undeploy, ctxPath=/attribEvent
17:40:14,907 INFO [STDOUT] ServletContextListener Context destroyed
17:40:15,011 INFO [org.jboss.web.tomcat.service.deployers.TomcatDeployment] deploy, ctxPath=/attribEvent
17:40:15,025 INFO [STDOUT] ServletContextListener started
17:40:37,410 INFO [STDOUT] Servlet Set context OK
17:40:37,411 INFO [STDOUT] ServletContextListener Attribute added
17:40:51,659 INFO [STDOUT] Servlet Set context OK
17:40:51,660 INFO [STDOUT] ServletContextListener Attribute replaced
17:41:08,405 INFO [org.jboss.web.tomcat.service.deployers.TomcatDeployment] undeploy, ctxPath=/attribEvent
17:41:08,407 INFO [STDOUT] ServletContextListener Context destroyed
```



Big Picture

