

1 Filtering is a standard feature of

Ans : all Servlet 2.5–compliant containers.

2 when does filter introduce into servlet technology ?

Ans : Servlet 2.3

3 Some popular uses for filters ?

Ans: include authentication, auditing, compression, encryption, and on-the-fly format transformation, to name but a few.

4 which Servlet further enhances container support of filters by providing filtering for dispatched requests?

Ans : Servlet 2.5

5 what is filter ?

Ans : Filters can intercept request header information before it reaches the resource in the processing pipeline and can therefore be used to create customized authentication schemes.

6 what can filter do?

- a) intercept request header information before it reaches the resource
- b) data transformation.
- c) preempt the serving of a particular resource

7 filter can intercept http request header information ? true or false

8 filter can be useful in data transformation, explain with an example

Ans : For example, a filter can first detect whether a user agent (browser) supports compressed data streams. If the browser can handle the compression, the filter can then compress the response from a resource on the fly

9 filter can preempt the revealing of the particular resource ?

Ans : . One example could be a time-sensitive filter that blocks access to certain resources (such as an Internet proxy server) outside certain set hours.

10 what type of resource does a server serve? Explain with a graph (see 401)

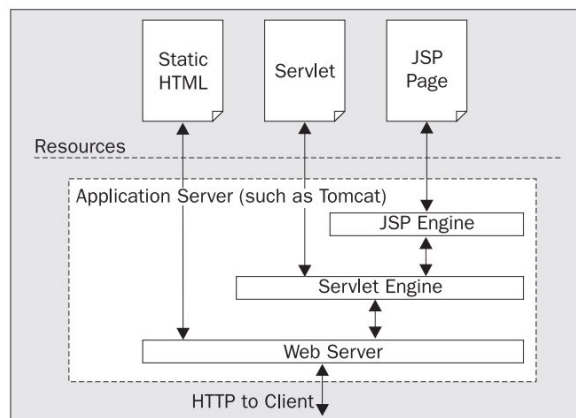


Figure 10-1. A client can request various types of resources from a web server. The web server routes the request and returns the appropriate resource to the client.

11 filter are called by the application server both prior to and subrequest resources procession to the server explain with graph?

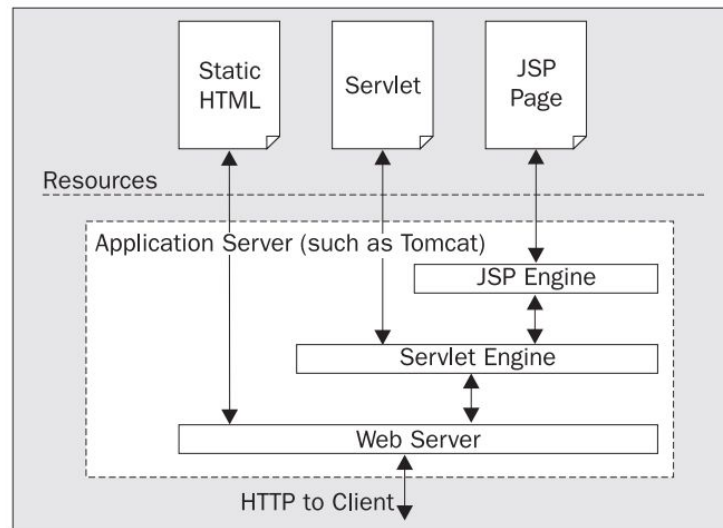


Figure 10-1. A client can request various types of resources from a web server. The web server routes the request and returns the appropriate resource to the client.

12 filter interface has _ main methods explain each methods (404)

- public void init(FilterConfig config) throws ServletException:
- public void doFilter(ServletRequest req, ServletResponse res, FilterChain chain) throws IOException, ServletException
- public void destroy():

13 define filter definition and filter mapping (404)

- Filter definition: Tells the container the textual name associated with the filter
- Filter mapping: Tells the container which resources the filter will be applied to

14 draw a diagram of filter life cycle?

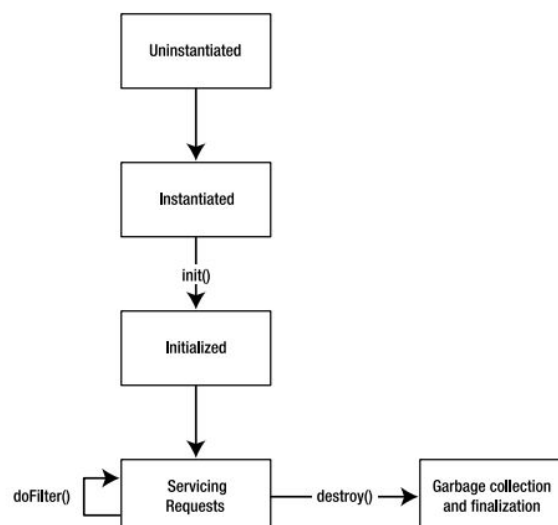


Figure 10-4. The life cycle of a filter is similar to the life cycle of a servlet. The filter is created and initialized, it processes requests, and it is destroyed when no longer needed.

15 write 3 methods of filter config interface and explain the functions?

Ans :

- **public String getFileName():** You can use this method to obtain the textual name of the filter, as defined in the web.xml deployment descriptor.
- **public String getInitParameter(String paramName):** The getInitParameter() method obtains the string value of a specific initialization parameter by name. Returns null if not found.
- **public Enumeration getInitParameterNames():** This method obtains a java.util.Enumeration consisting of all the names of the initialization parameters for this instance. These parameters are specified in the web.xml deployment descriptor within the <filter> definitions. Returns an empty enumeration if no parameter is set.
- **public ServletContext getServletContext():** This method obtains the ServletContext that the filter is executing within. This context is typically specified in the server.xml file of the server.

16 write down filter definition like filter-name,class,param(407)

- **<filter-name>:** Textual name to associate with the filter. Used in filter mapping. This is a mandatory element.
- **<filter-class>:** The actual class that implements a filter. Should be a fully qualified class name with a package prefix. This is a mandatory element.
- **<init-param>:** Specifies the initial parameters to supply to this instance of the filter. Contains <param-name> and <param-value> subelements, specifying the name and value of the parameter, respectively. Note that <init-param> is an optional child element of <filter>, which can also appear multiple times—once for each initialization parameter for the filter.

17 define filter mapping with an example

```
<filter>
<filter-name>Audit Filter</filter-name>
<filter-class>filters.AuditFilter</filter-class>
</filter>

<filter-mapping>
<filter-name>Visual Audit Filter</filter-name>
<servlet-name>mylocate</servlet-name>
</filter-mapping>

<servlet>
<servlet-name>mylocate</servlet-name>
<servlet-class>FindProd</servlet-class>
</servlet>
```

18 define /*, /servlet/*, /jsp/*.jsp, /dept/accounting/*

/* >= Everything that is served by this web application, including static pages, servlets, and JSP pages

/servlet/* >= All servlets (assuming all servlets are mapped under the /servlet path)

/jsp/*.jsp >= All JSP pages located on the /jsp path

/dept/accounting/* >= All resources in the accounting department branch of the web application

19 draw a graph related to incoming and outgoing request to access

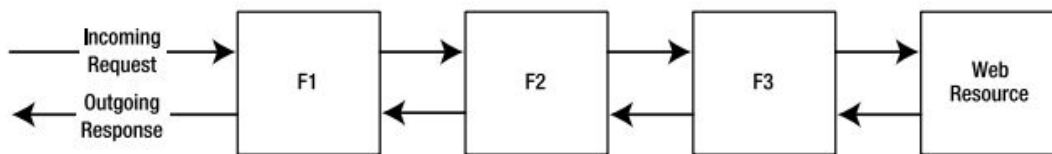


Figure 10-5. An incoming request is processed by zero or more filters, and the response from the web resource can be processed by the same set of filters.