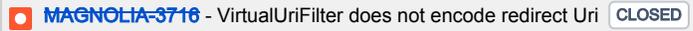


Handling of path parameters such as JSESSIONID

In Magnolia we currently have issues handling path parameters such as JSESSIONID. Path parameters are part of the URL and are preceded by a semicolon. The semicolon is a reserved character in URLs.

After  we started seeing JSESSIONID appearing more often. We're now asking the servlet container to encode the redirect url before returning it, it will include the JSESSIONID if it thinks its needed.

Jetty has always included the JSESSIONID path parameter in the return from `HttpServletRequest.getRequestURI()`, as of version 6.0.33 Tomcat does too. See https://issues.apache.org/bugzilla/show_bug.cgi?id=51833 Arguably this is the correct behaviour. It is up to the web application to parse the returned uri and strip path parameters from it.

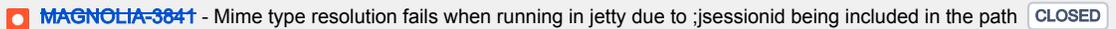
In Magnolia we're not doing this, which leads to a number of problems.

Problems

Mime types are not set correctly

In `ContentTypeFilter` we use the extension to lookup the correct mime type. However the extension we're looking for is `jpg;JSESSIONID=123`.

See <http://demopublic.magnolia-cms.com/.imaging/stk/pop/stage/dam/demo-project/img/bk/Stage/lines-looking-like-sand/jcr:content/lines%20looking%20like%20sand.2012-02-17-12-18-07.jpg;JSESSIONID=123>

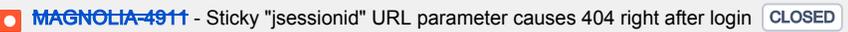
This was reported in 

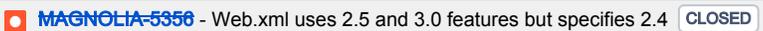
ServletDispatchingFilter fails to map requests

When the URI contains a JSESSIONID `ServletDispatchingFilter` does not match it to the servlet.

It uses the uri in `AggregationState` if a `WebContext` is present, otherwise it takes it from `getRequestURI()`. See `Mapping.findMatcher()`.

See <http://demoauthor.magnolia-cms.com/.magnolia/admincentral;jsessionid=EE3DB6042B1B57AD55C2633428F44496>

This is the cause of  It was however fixed by using the Servlet 3.0 feature `tracking-mode=cookie`, this needs to be reverted, see



Page rendering fails with 404

When a JSESSIONID is present in the URI `AggregatorFilter` can't find the content because its looking for a node having it in its name.

Note that this only happens when not using an extension, this is because `URI2RepositoryMapping#getHandle` strips of the extension and with it the path parameters.

<http://demopublic.magnolia-cms.com/demo-project;jsessionid=EE3DB6042B1B57AD55C2633428F44496>

Proposed fix

We should always strip the path parameters from the return of `HttpServletRequest.getRequestURI()` and `HttpServletRequest.getRequestURL()`. This should be added in `ServletUtil.getRequestURI()`, `ServletUtil.getOriginalRequestURI()`, `ServletUtil.getRequestURL()`, and `ServletUtil.getOriginalRequestURL()`. These are used by `ContentTypeFilter` when it populates `AggregationState`, so the `AggregationState` is then correct. This fixes all three problems listed above.

We should also use `ServletUtil.getRequestURI()` in `Mapping.findMatcher()`, see above.

In `AdminCentral` we're using semicolons in the URI, as a separator between sub app and parameters. However this is in the fragment part and the fix described does not break this. For instance <http://demo.magnolia-cms.com/.magnolia/admincentral#app:contacts:detail;/vangogh:edit>

Other identified problems that need to be addressed

These come from the use of `getRequestURI` and `getRequestURL`, problems stemming from the `JSESSIONID` being in aggregation state are not listed since those would go away with the proposed fix.

- `info.magnolia.cms.filters.InstallFilter#doFilter`
 - returns HTTP 500 when given <http://localhost:8080/magnolia/installer/start;JSESSIONID=123>
- `info.magnolia.dam.DamDownloadServlet#process`
 - goes into a redirect loop when asking for an asset where the node name does not match the file name stored on the asset
 - after renaming `/demo-features/stage/component/940x320_demo01` to `/demo-features/stage/component/940x320_demo01-xx`
 - access http://localhost:8080/dam/demo-features/stage/component/940x320_demo01-xx;JSESSIONID=123
- `info.magnolia.cms.filters.ContextFilter#doFilter`
 - puts the `JSESSIONID` into MDC
- `info.magnolia.voting.voters.BasePatternVoter#resolveURIFromValue`
 - when its subclasses `URIPatternVoter` and `URIRegexVoter` are used with `HttpServletRequest` they will not match if a `JSESSIONID` is present
- `info.magnolia.context.RequestAttributeStrategy#getAttribute`
 - querying for "requestURI" will return the URI with `JSESSIONID`
- `info.magnolia.cms.security.auth.callback.RedirectClientCallback#handle`
 - risk of a redirect loop if `requestURI` has `JSESSIONID`
- `info.magnolia.module.admininterface.AdminTreeMVCServlet`
 - fails with: "No tree handler for [resources;JSESSIONID=123] found"
- `info.magnolia.cms.filters.RangeSupportFilter#wrapResponse anon#isRequestValid`
 - will generate an etag that includes the `JSESSIONID`

We should also investigate what effect it has on cache keys, see:

- `info.magnolia.module.cache.executor.Store#makeCachedEntry`
- `info.magnolia.module.cache.filter.CachedRedirect`
- `info.magnolia.module.cache.filter.CachedError`
- `info.magnolia.module.cache.filter.InMemoryCachedEntry`
- `info.magnolia.module.cache.filter.DelegatingBlobCachedEntry`