

# Flash

## Tips on Flash programming in LAMS

The LAMS interface is built using both Flash, JSPs and Javascript. Flash is used for the components, such as authoring, which would be difficult to build using HTML based technologies.

### Client/Server Communications

The [WDDX](#) protocol is used for most client/server communications.

### Documents

The ASDocs are located in lams\_documents/UI\_Design\_Docs/apidoc/frameset.html <http://dolly.uklams.net/lams/docs/frameset.html>

### Debugging

View the client debugging window - press CTRL-ALT-? in the Flash window.

### The Development Environment

So far we have been using Flash Studio MX 2004. Sepy the Actionscript editor makes a great tool - bit buggy and does crash a bit. Monitoring the Eclipse Actionscript developer plug-ins. Could be a good alternative.

#### Issue - Compiler caches external class files

It seems that sometimes cached classes are not updated on compiling, this also affects when using the IDE's debugger and stepping through code. It seems to happen occasionally, basically the solution is to delete the ASO cache from your local disk. That is all the files here:  
\\Macromedia\Flash MX 2004\en\Configuration\Classes\aso.

See this Macromedia technote for instructions. [http://www.macromedia.com/cfusion/knowledgebase/index.cfm?id=tn\\_19045](http://www.macromedia.com/cfusion/knowledgebase/index.cfm?id=tn_19045)