**Support Server-side Javascript Debug in Jaxer (Protocol Version 4)**

This effectively changes the protocol version from 3 to 4. This document also describes the protocol change (see Jaxer Protocol(v3).doc for details about the protocol).

1. Establishing a debug session (Jaxer & Manager)

A debug session is initiated with an OPTIONS request (Jaxer must be a handler for this request). The request is identified as initiating a debug session if it contains the following header:

\_\_JAXER\_DEBUGGER

Upon receiving such a request, Jaxer will ask Manager for an id to identify this debug session (jaxerdebugid). After supplying the value to Jaxer, Manager will mark this Jaxer to be used only for this debug session; no other requests will go to this Jaxer. So it is important that this cmd (get jaxerdebugid) be called only if the Jaxer will be used for debug, or the Jaxer will be idling forever. It is also the responsibility of the debug session which has control of the Jaxer terminates the Jaxer that is used for debug.

Jaxer will set the cookie “Jaxer-ID” with the value obtained from Manager. Subsequent debug requests should set a header “Jaxer-ID” with the value obtained from the “Jaxer-ID” cookie.

1. Debug requests (mod\_jaxer /servlet & Manager)

This is protocol version 4. Besides supporting Jaxer debug, it is identical to protocol version 3.

The Connector must check the incoming request (regardless if it is a handler or filter request) to see if it contains a header “Jaxer-ID”. If it does, then this is a debug request:

Connector sends a DebugRequest(10) block to Manager. The DebugRequest block has the same format as the RequestHeader block. The block may contain other fields (name value pairs), but to the minimum, it must contain the header Jaxer-ID and its value.

Manager must examine each incoming request. If it sees a DebugRequest(10), it will parse the content and identify the Jaxer that should handle this request.

Manager will send back a DebugRequest(10) block back to the connector. The content of this block will have a field “Accepted” with a value of “1” indicating OK, and “0” indicating error. Optionally, there can be an “Error” field containing the actual error. If an error occurs, Manager will just close the connection after sending back the DebugRequest block.

I f the identified Jaxer is serving another request, then the incoming request will be put on a waiting list. Otherwise, Manager passes the connection to the dedicated Jaxer from this point on.

Connector receives the DebugRequest block, and continues as usual (eg start with BeginRequest as in protocol version 3) when there is no error. Otherwise it should end the request.

So protocol version 4 can be vied as

If (income\_request\_is\_debug\_request)

{

Send DebugRequest

Recv DebugRequest

}

// Exactly the same as protocol V3 from this point on.

Send BeginRequest

Recv BeginRequest

Send RequestHeader

… …

1. End debug (Jaxer & Manager)

Jaxer will terminate itself at the end of the debug session.