

From: Mike Moskowitz
To: 'Bill Schiefelbein (E-mail)'
Cc: 'Will Friedman (E-mail)'
Subject: FW: More URLMON approach questions

Bill,

Can you let me know where we stand w.r.t. to these issues?

Thanks,
Mike

—Original Message—

From: Mike Moskowitz
Sent: Tuesday, August 08, 2000 8:37 AM
To: Bill Schiefelbein (E-mail)
Cc: Will Friedman (E-mail)
Subject: FW: More URLMON approach questions

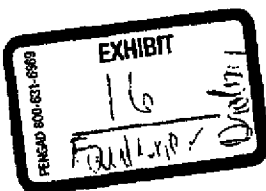
Bill,

Below are comments around the progress we have made.
Your response is greatly appreciated:

We've been able to make use of Microsoft's Redirect proposal via URLMON. Currently, it connects to our localhost HTTP server and will play a WMF file. Here are our limitations:

1. How do we handle non-WMF media files such as MPEG? The URLMON stuff gets called before any registered DirectX Source Filters. I haven't yet found a way for our Async Pluggable Protocol handler to decline a URL such that it gets passed on to DirectX. So for now, this only works for WMF files, and fails for all others.
2. Given our Async Pluggable Protocol handler, how can we get a pointer to the IGraphBuilder interface in order to pause/resume the player during low-bandwidth situations? I cannot see an obvious way to do this.
3. Finally, we need to have an instantiated source filter within the WMP's filter graph for fine control. We implement the IMediaSeeking and IAMExtendedSeeking DirectX interfaces.
4. The current URLMON redirect approach does not permit seeking. The seekbar is movable, but always snaps back to its original position, forward or backward. We're using the same HTTP streaming code as in the WMP6 product, where seeking works just fine. It is not entirely a progressive-download situation though, as the video begins to play several seconds after the URL is opened, and pauses in a buffering state when bandwidth is constrained.

I tried the same file from a local filesystem, and it seeked as expected.



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Plaintiff's Exhibit

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