

HD on the Web: A Promise They Cannot Keep

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It's official: HD on the web is broken. And guess what: it doesn't matter which technology (Flash/Silverlight) you use, neither seems to deliver on its promises.

Take this post with a pinch of salt because it's only my own perspective, but I would say I'm in a fairly good position to report on the playback experiences I have had. My setup is slightly above average with a new 24" iMac, 4GB of RAM and a fast connection. Right now it measured 4.5Mbit/s which I consider fast enough for any HD content, especially if it uses smooth streaming, adaptive streaming, multi-bitrate streaming or whatever else the latest buzzword is.



SmoothHD is the name of Microsoft's **latest showcase site** and a (marketingbull alarm) 'cutting edge new technology from Microsoft and Akamai that will raise the bar on the consumer video experience'. Yeah, except that it doesn't. My experience is one of dropped frames, rebuffering and stuttering audio. It just about passes as an average online video experience - it would certainly give you a headache if you were trying to watch a feature length movie or sporting event.

The image on the left shows part of one of the clips - yeah it may have been blown up to what some may call HD resolution, but it certainly did not look like it was filmed in HD. It looks blurry and washed out. Other clips looked better in image quality but they instead kept frame freezing about once every 30 seconds or playing catchup with the audio. Sometimes I heard 5 seconds worth of audio without the picture moving at all. Guess I better dust the old VHS off, at least that played consistently bad.

It got worse once I entered full screen mode: all playback controls were taken away from me (wtf?) and the jerky-jumpy playback got even worse. My CPU was not impressed - check the picture and have a wild guess at which point I entered full screen mode...



The Coral Reef clip was especially bad and it stuttered nonstop. It seemed as if IIS7 was trying to measure my bandwidth, got it wrong and then didn't send enough data for my machine to consume. Whatever the cause, it wasn't adaptive at all.

Oh and one more thing: a 'cutting edge experience' should allow a user to click the timeline to seek to a point and not make the scrubber jump around like it's on steroids without actually scrubbing anywhere. A 4x4 pixels hit area on the scrubber is also not the most usable. Lots of lessons to learn when you let .NET devs build a UI ;-)

Flash to the rescue. Nice thought but sorry to disappoint, the **experience there** is just about as bad. **StreamFlashHD** is the site where Adobe showcases its latest Dynamic Streaming technology. It's a similar setup to Microsoft's showcase and promises to deliver an uninterrupted HD video experience. Problem with that is that a user is put through a similar stutter-til-the-lights-go-out ordeal as with the SmoothHD site. Many

of the clips rebuffered for me time and time again and I was anxiously waiting for the dynamic part of the streaming to kick in. It never did.

In all fairness there were a few things that went a bit better: the fullscreen mode allowed me to still access the playback controls, the CPU wasn't maxed out (far from it) and the overall video quality seemed better. That's my subjective view. On the downside, some clips weren't even deinterlaced. Gimme a break. This is Adobe putting up a showcase for HD video on the web and they use interlaced video? I rest my case.

If nothing else then remember this: if you want a good video experience you need an even better audio experience first. You simply cannot get away with choppy audio. No matter how great your resolution, it is useless frames freeze for what seems like an eternity. HD on the web gets a big fat fail from me.

But guess what, it doesn't actually matter. 99% of users do NOT care about HD (at least not in front of their computer, different story on the TV I suppose). They just want to watch video, and watch it smoothly. Give me standard definition any time, as long as it looks ok and I can hear the sound. If users really cared about resolution then YouTube would be a deserted island.

The bottom line for me: HD on the web is not even needed (yet). The problem these companies are trying to fix isn't one. Who is actually asking them for it, I doubt that it's the consumers.

Microsoft: keep the Smooth, drop the HD, and give your engineers some lessons in UI design. Adobe: give me streaming any day, but I don't think I need it to be dynamic if that makes it worse than before you 'fixed' it. Neither one of those showcase sites lived up to its promises, and that's a big disappointment. Yes, experience matters indeed, not resolution.