

Subject: Microsoft's Active Stream Format
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Steve --

Last week I attended a one day NDA "design review" at Microsoft of their new Active Stream Format file format. The format itself is far from noteworthy. However, it may provide us with some better ideas as to their priorities, and therefore ways to effectively approach them regarding QuickTime.

ASF is positioned as the industry standard container for delivering media and exchanging media between applications. This is the same positioning as QuickTime. They have stated that ASF supersedes their current AVI and Wave formats. ASF is nothing more than a modernize version of the AVI format, with additions to handle network streaming. It is an adequate container for media streaming, although not as flexible as they claim, nor nearly as flexible as the work being done by our own QuickTime Streaming team. ASF is entirely inadequate for media authoring, and by Microsoft's own admission sub-optimal for some common streaming situations. There is a lot of industry interest in ASF, only because it is supported by Microsoft. They plan to introduce ASF publicly next month.

Several Microsoft people (nearly all ex-Apple) made a point to tell me that Microsoft is in no way strongly attached to ASF. They need a standard media container and that's all. These same Microsoft people suggested that they would still consider scrapping it entirely and use QuickTime instead.

Microsoft positions ASF as having been developed in conjunction with several other companies, the most noteworthy being Progressive, although the reality appears to be that it was entirely a Microsoft effort. Indirectly I have heard that Progressive is very dissatisfied with ASF, but is powerless to do much about it.

The idea of a standard streaming format is promising for some, but has deeper implications. Today, each streaming vendor has their own file format/MIME-type. This means that within a web browser, their streaming player will automatically be invoked to handle streams associated with their file type. If there is only one streaming format, the streaming player will always be the same, the ASF player. This means that Microsoft effectively controls the delivery of all streaming media within web browsers as more content is delivered in ASF. This scares many, including people at Progressive. They believe they add value in their complete player software, not just the decoders that they can plug into Microsoft's streaming client software (DirectShow/NetShow). Of course, if QuickTime is the standard streaming format, the problem is the same.

What several people have realized is that we need a way to moderate player software selection on the client side based on criteria such as the media types contained within the file, not just the file type. This issue has also come up within W3C as they consider defining standards for

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media.

Given all of the above, here is one possible arrangement with Microsoft:

1. QuickTime is the file format. We create a consortium of companies, including Microsoft but led by Apple, to define future extensions. This is what we have been doing semi-formally already with a small group of companies, so it isn't a major shift.
2. QuickTime software is the media authoring solution on Windows. This gives Microsoft a rich set of tools for creating this media immediately, which is something they don't have, and have never done right themselves. It also absolutely secures our dominance as the media technology layer for content creation.
3. We can't make Microsoft give up their player strategy. It is too important to them. We should be able to agree to compete on a more level playing field. This means that we need to agree to have the player moderation mechanism I described above so that our player and theirs can co-exist on the same machine. Because we would be delivered with every Windows machine, it would remove a major barrier to using QuickTime articulated by many content companies. Content creators, content providers, and users can determine which player is best for a given purpose. This is the most difficult point to clearly describe, but I think it can be nailed down.
4. We agree to share codec delivery technologies. This means that we can't get frozen out because we don't have rights to a particular compression technology. I think this is very important, especially given Microsoft's recent acquisitions in this area. At the ASF event, Microsoft stated that they were basically planning to do this already, so it isn't asking much of them. We aren't holding onto any major secrets in this area, so we wouldn't be giving up anything significant either.

Microsoft is busy trying to sort out how to deal with some of their recent media acquisitions, including VXtreme, Progressive, and WebTV. They are already rethinking pieces of their media strategy, so this is probably a good time for us to suggest even more radical ideas.

Given our recent experience with Intel, I will point out here that my contacts at Microsoft and Progressive have nearly all been with engineering, and may well not reflect the views of management.

If we don't find a way to make ASF go away, then we must consider either how to take advantage of it or position ourselves against it. I suspect that the latter is a somewhat futile position. I'd be glad to expand on these options, if you'd like.

-- Peter

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