Public/Press reaction to introduction of SWF Verification on iPlayer – Briefing Paper

Background on decision

The External Relations and Technology Group met on the 11th February 2010 and discussed the level of content protection present on the on-demand iPlayer streams. As a result it was decided that on PC platforms Adobe's SWF Verification feature would be enabled to try and prevent piracy from the iPlayer platform.

This measure was implemented on Monday 22rd February 2010, and was picked up by some internet blogs as early as the 23rd Feb with newspaper sites shortly afterwards.

It was also decided at the same ERTG meeting not to encrypt iPlayer streams using RTMPE,

[SECTION 43]

Main complainant groups

The most vocal group of complainants about the change have been the users of a piece of software known as the Xbox Media Center (XBMC). XBMC is an open source programme used to manage audiovisual media, primarily created to run on obsolete Xbox (rather than the current Xbox 360 model) games consoles. Developers of this software had created an unapproved way to view the iPlayer streams without using Flash, which this hardware and software could not otherwise use. Our implementation of SWF verification prevents this from working. The XBMC developers say that they could easily technically bypass this, but are afraid of legal action from Adobe under the US DMCA and will not, though as the software is open source an individual technical user could do so.

Most of the complaints around our blocking of XBMC have suggested that as the software only allowed streaming and did not offer the ability to keep the files permanently that they have been unfairly targeted. However, these complaints do not take into account that we have rights agreements that prohibit distribution to games consoles that this unofficial software would put us in breach of – it is entirely possible that we would have had to take action against this software had we appreciated it existed before this point anyway. The numbers of users of XBMC are fairly small – the iPlayer plug-in for the software has been downloaded 18,000 times, which suggests the number of active users is unlikely to be more than 1,000.

Many of the complainants have asked the BBC to "whitelist" XBMC from the SWF Verification to allow the plugin to still work, but as there is no reliable way to identify or distinguish XBMC users from those of piracy software we couldn't do that without completely negating the change in content protection in the first place. Given the open source nature of the software, it is difficult to see how we could provide any

[SECTION 40(2)]

reasonably secure version of iPlayer to XBMC even as part of a formal syndication agreement.

The other main complainant group has been open source advocates, who began attempting to reverse engineer the RTMP protocol used by iPlayer to deliver content several years ago, in order to play this content in non-standard devices. Since then, Abobe has freely given away the source specification to the protocol to the public to aid these efforts, reasoning that content providers who need protection against stream ripping should switch to their secure RTMPE protocol.

[SECTION 4.2]

Such open source advocates object in principle to the entire principle of a seven day window for BBC content, or the fact that BBC on-demand streams cannot be freely captured and re-used, so criticism for any attempt to enforce the iPlayer window is inevitable.

BBC blogs & complaints

There are four main avenues of feedback to the BBC which have attracted complaints on our introduction of SWF Verification: the Trust, the iPlayer Message Board, the BBC Internet Blog and the BBC Backstage Blog.

The BBC Trust is currently running a public consultation into the BBC's on-demand services (which closes on the 12th March), and the response form for this has been an obvious target for complaints about the BBC's use of SWF verification. Therefore a large number of negative responses can be expected.

The iPlayer Message Board has a thread on this issue started by users of XBMC that has reached a hundred replies. While these are overwhelmingly negative and critical, the relatively small number also suggests XBMC has a very small user base.

The BBC Internet Blog was also a target for negative comments, mostly ideological complaints about the BBC's use of content protection, but it does include a good summary of complaints by users (and is included in Appendix 2).

The BBC Backstage Blog is a BBC project to engage with external developers, and included a summary of responses (all negative) to the BBC Backstage mailing list. Some of the comments in the BBC staff written summary could be considered unhelpful, such as "No one seems capable of replying which is causing even more upset."

Press Coverage

[SECTION 4.0(2)]

Press coverage of the change has mostly been restricted to the technical press, with a short BBC response –

"Since launch in 2007, BBC iPlayer has always used content protection in order to provide UK audiences with the most compelling content. We periodically review the level of security to protect BBC programmes, brands and trademarks."

Follow up articles appeared on some press websites, such as The Register, covering the BBC Trust statement that it would not be investigating the matter after receiving a number of complaints. The Trust stated at the time that although it had received many negative submissions to its open consultation on iPlayer, it had not received any formal complaints. This is unlikely to still be the case.

The most mainstream article has been an article on the Guardian website, which was published on the 1st March, suggesting that the worst of the press attention may not be over yet. A selection of press stories is presented in appendix 1.

Freedom of Information Requests

The BBC received a Freedom of Information request on the 25th January requesting "any and all information relating to the change in configuration on the BBC iPlayer streaming servers which enabled SWFVerification [sic]." The individual who made the request does not appear to be a journalist as far as can be ascertained, but their request and BBC acknowledgement have both been made available on the "whatdotheyknow.com" website that collates F.O.I. requests, and there is every reason to believe that any response will also eventually be published there.

The BBC must respond within 20 working days (i.e. the 25th March). [SECTION 40(2)] FM&T is co-ordinating the response.

Effect on piracy

Unfortunately the effect on tools used to pirate the iPlayer streams from the change has been minimal. Get_iPlayer, the main tool used to capture the Flash streams, is still able to do so with little inconvenience (iPlayer programmes can no longer be viewed and saved at the same time using the software, but they can still be kept on a permanent basis). Other iPlayer piracy tools such as iPlayer Downloader capture the iPhone streams, which have not had any content protection changes implemented as yet.

Many of the press articles and blogs mentioned above heavily criticise the BBC for introducing a measure that they (accurately) see as targeting piracy but have only hit "legitimate" (in their opinion) uses of iPlayer and not prevented any piracy.

[SECTION 42]

[SECTION 40(2)]

[SECTION 42]

Recommendations

1. Any future content protection strategy changes need the BBC to create a communications strategy in advance of their implementation as a matter of priority to offset similar complaints.
2. Some form of public advice or statement, even if non-specific, about the terms and conditions of using the iPlayer streams (this may have to be a wider piece of work that is undertaken in conjunction with the BBC's syndication policy) may have to be made.
3. Advise BBC Backstage that some of their reporting is unhelpful to the BBC's rights clearance efforts.

[SECTION 42]

[SECTION 40(2)]

Appendix 1

"The BBC has reportedly started using the SWF Verification routine -- aimed at protecting copyright content -- with its iPlayer streaming video service. It could be an attempt to stop third-party software from downloading videos, which usually only last for seven days. However, it has the side effect of dropping the video stream after one or two minutes when used with unauthorised players. This includes open source media players such as XBMC."

The Guardian, 1st March 2010
(http://www.guardian.co.uk/technology/blog/2010/mar/01/bbc-iplayer)

"[The Register] asked the BBC to explain why it had implemented the change without first advising its UK licence fee-paying users of iPlayer that plugins such as XBMC would no longer have access to the service.
"Since launch in 2007, BBC iPlayer has always used content protection in order to provide UK audiences with the most compelling content. We periodically review the level of security to protect BBC programmes, brands and trademarks," it said in a statement.
However, it didn't explain to us why Auntie had decided to put a block on open source RTMP plugins now."
"Ironically, third party utilities that download files (which presumably the verification is there to prevent) still work fine. It is possible that this move will actually increase the occurrence of downloading files which will not be time limited, or torrenting of copyrighted material."
The Register, 24th February 2010
(http://www.theregister.co.uk/2010/02/24/iplayer_xbmc_adobe_swf_verification/)

"The governing body of the BBC has no plans to investigate the Corporation's decision to block open source implementations of RTMP (real-time messaging protocol) streaming in the iPlayer, despite grumbles from many UK viewers and listeners of the service.

"The decision to block open source plugins is a matter for BBC Management. The Trust has not received any complaints on this issue and has no plans to look into it further at present," a BBC Trust spokeswoman told The Register"
The Register, 1st March 2010
(http://www.theregister.co.uk/2010/03/01/no_bbc_trust_probe_iplayer_swf_verification/)

Appendix 2

"Thanks for mentioning The Reg article... but does the BBC have no comments/response to add?"

[SECTION 40(2)]

Blog poster 'Neil', BBC Internet Blog, 24th February 2010
(http://www.bbc.co.uk/blogs/bbcinternet/2010/02/round_up_wednesday_24_febru
ary.html#P92848118)

"As pointed out several times, this change does not stop piracy. It doesn't
even stutter it. The SWF Verification change is easily circumvented by ne'er-
do-wells. Even a switch to Adobe's stream encryption (rtmpe) would not dent
the problem of piracy. Fundamentally DRM is broken concept when the
viewing device is an open platform such as a PC or Mac - you only need to
look at iTunes (heavily DRM'ed) to see that this is so. DRM only (almost)
works for systems closed in both hardware and software.

This is about excluding some classes of device and some platforms, and
locking users in to specific technology. The piracy argument is moot because
the pirates will continue unhindered, and the only people being punished are
the legitimate users.

I feel that this is about content providers stamping their feet because they
didn't realise people could watch content through a TV, and the 'new delivery
channel' dollar signs faded from their eyes. This is why I feel it is important to
understand why the Wii is considered to be acceptable."

Blog poster 'Lens', BBC Internet Blog, 24th February 2010
(http://www.bbc.co.uk/blogs/bbcinternet/2010/02/round_up_wednesday_24_febru
ary.html#P92873939)

"Can we please have a clear statement of policy from someone at the BBC,
that would serve as a starting point for a discussion? Either it is the intention
to allow open source software to access iPlayer streams (the HD streams, not
just the low quality mobile streams), or it is not. My guess is that the latter is
the case, but then the BBC needs to come out and say this clearly, rather
than making a slew of misleading claims about "open-source" as Mr. Hunter
does above."

Blog poster "gamiepo", 7th March 2010, BBC Internet Blog,
(http://www.bbc.co.uk/blogs/bbcinternet/2010/03/bbc_iplayer_content_protection
.html#P93316457)

"It's not a fact, it's a negotiating position, and a weak one. The rights-holders
always demand DRM, but when they're simply told they can't have it, they
give in. The did it with free-to-air TV in the United States, they did it with
Freesat here, and they're beginning to do it with online music sales.

If the BBC stood by its previous commitments to proper open standards and
allowed anyone to make an iPlayer client, in the same way that anyone is
(currently) allowed to make a broadcast TV receiver, then we wouldn't have a
problem."

[Section 4.0]

Blog poster "Ewan", 9th March 2010, BBC Internet Blog
(http://www.bbc.co.uk/blogs/bbcinternet/2010/03/bbc_iplayer_content_protection
.html#P93366093)

> "There's a lot of raw feelings about this whole issue and to be fair to the
> public little information about why from the BBC. I'm sure more is coming but
> in the meanwhile, there does seem to be a problem with streaming content
> generally. Without talking for the BBC, it seems clear that content deals are
> done to a limited amount of devices. So everytime a new one is added, it is
> cleared by legal and the copyright owners before hand. I know this makes
> little difference in a digital world and this is like the Hulu/Boxee stand-off, but
> we need to find a way to get through to the copyright owners, as they seem
> to be setting the rules."

SECTION 40 (2)(BBC Employee), BBC Backstage Blog, 25th February 2010
(http://www.bbc.co.uk/blogs/bbcbackstage/2010/02/what-happened-to-iplayer-
strea.shtml)

[SECTION 40(2)]