

Overview of Sun Microsystems Open Media Commons Initiative

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W3C can be a significant enabler in making video a first-class citizen of the Web, and one important aspect of such an endeavor would be in the area of facilitating open, royalty-free digital content specifications. Sun Microsystems' experience in the Open Media Commons initiative described below can provide helpful insights into the challenges, methodologies and opportunities of developing royalty-free specifications for digital content, as this is a domain in which there is much prior art at the same time that royalty-bearing standards and proprietary solutions are being promoted.

In particular, work in this area would benefit from proceeding under W3C's patent policy, which establishes that in order to promote the widest adoption of Web standards, W3C seeks to issue Recommendations that can be implemented on a Royalty-Free [\(<http://www.w3.org/Consortium/Patent-Policy-20040205/#def-RF>](http://www.w3.org/Consortium/Patent-Policy-20040205/#def-RF) (RF) basis.

1. Introduction to Open Media Commons

Sun announced the Open Media Commons (OMC) (<http://www.openmediacommons.org>) initiative in August 2005 as an open source community project to develop royalty-free open solutions for digital content, including digital rights management (DRM) solutions.

OMC seeks to drive cross-industry growth and prosperity as well as promote both intellectual property protection and user privacy.

OMC's goals include:

- Develop open, royalty-free digital content solutions.
- Promote the creation, duplication and distribution of digital content and assure that creators and owners get compensated.
- Collaborate with like-minded open-source communities.
- Influence standards organizations.

OMC's principles include:

- Innovation flourishes through openness - open standards, reference architectures and implementations.
- All creators are users and many users are creators.
- Content creators and holders of copyright should be compensated.
- Respect for users' privacy is essential.
- Code (both laws and technology) should encourage innovation.

In December, 2006, OMC released Version 1.0 of DReaM-CAS¹.

2. Project DReaM

Project DReaM began as an internal Sun research effort and transitioned to a community project with the objective of driving open, royalty free standards and implementations for managing digital content when Sun announced the Open Media Commons (OMC) initiative in August 2005 (see <http://www.openmediacommons.org>). The goal of Project DReaM is to encourage community participation in the development of CAS and DRM/"Mother May I" (DRM-MMI) specifications and open source reference implementations based on Sun's initial contributions from Project DReaM. To expedite the development process and minimize the need for up front formal standards body organizational structures, the specifications were initially drafted by Sun and made available to interested parties who registered with OMC. Simultaneously, open source reference implementations by Sun were made available under Sun's Common Development and Distribution License (CDDL).

At the same time, Sun also released the "DReaM-CAS Intellectual Property Review by Sun Microsystems"².

3. IPR Process

The overall DReaM IPR landscape, as well as the overall digital content standards IPR landscape, is quite broad. In response, the DReaM IPR and patent review process has considered a variety of art and initiatives, including, but not limited to:

- Available art from expired patents, known older methods and product/systems and art originally in the public domain
 - may provide 'patent-clear' paths for DReaM technical specifications and architectural aspects. It may also reveal strategies for appropriately avoiding issues involving patents that may be of questionable novelty or scope.
- Active patents
 - important for identifying potential 'patent thickets' and developing appropriate solutions for avoiding issues they may present.
- Leverage off of and cooperate with entities and initiatives having similar royalty free objectives
 - can establish industry support and momentum for DReaM objectives, and provide an opportunity for leveraging existing royalty free standards and cross-licensing where applicable.

Entities and initiatives that may have similar or parallel royalty free objectives, desires, or considerations, although no direct relationship with Open Media Commons, include:

- <http://www.khronos.org/>
- <http://www.xiph.org/>

¹ https://www.openmediacommons.org/specs_register.php

² http://www.openmediacommons.org/collateral/DReaM-CAS_IPR_White_Paper_v1.0.pdf

- Digital Cinema Initiative, <http://www.dcmovies.com/>
- JPEG 2000
- <http://www.digitalpreservation.gov/formats/intro/intro.shtml>
- <http://creativecommons.org/>

4. Patent Commons

One idea being considered by Sun for building confidence in the IP unencumbered state of OMC specifications is the use of a “Patent Commons” structure to aggregate and document information about encumbered (patented) technology which is pledged to be “royalty-free” through reciprocal patent non-assertion statements by patent holders with respect to fully compliant OMC implementations. We believe that such patent non-assertion statements would be an effective way of increasing confidence in the long term goal of enabling the creation of royalty free implementations.

Some existing patent commons initiatives, like Peer to Patent (<http://dotank.nyls.edu/communitypatent/>) and the Patent Commons Project (<http://www.patent-commons.org/>) are examples of what could be done to further the goal of royalty-free digital content specifications.