

Title: DRM Consolidation
Source: Openwave, Nokia, Ericsson, Sony-Ericsson, Motorola, Vodafone, Siemens, Orange, NTT DoCoMo
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Summary

This input is a joint proposal from the companies listed above. Its purpose is to propose a way to achieve a consolidated solution for Digital Rights Management (DRM) for the mobile industry.

Background

Distribution of valuable content, such as chart music, to wireless devices can open up new business opportunities for both network operators and content providers. However, as such content is susceptible to fraud and illegal copying, mechanisms for protecting it are needed. Digital Rights Management (DRM) is recognized by the mobile industry as a key piece of technology for enabling distribution of valuable content to wireless devices.

3GPP has completed a set of stage 1 requirements for DRM, which have been approved by TSG-SA. These requirements are available as TS-22.242. Currently, stage 2 architecture work on DRM has not yet been started in 3GPP.

The Open Mobile Alliance (OMA) was formed in June 2002 as an effort to pull together a number of standardisation efforts in the wireless industry. It currently includes the WAP Forum, SyncML Forum, Location Interoperability Forum, Wireless Village, and MMS Interoperability Forum. Its purpose is to achieve a consistent architecture with strong focus on interoperability, as well as to avoid redundant work.

OMA has developed and published a first DRM specification for “basic” DRM, and has just started work on a second phase for “comprehensive” DRM.

OMA DRM

OMA has published phase 1 of the OMA DRM specifications as documents OMA-Download-DRM-v1_0-20020628 (framework), OMA-Download-DRMCF-v1_0-20020708 (secure content package), and OMA-Download-DRMREL-v1_0-20020628 (rights expression language). These documents are available on the OMA public web site at <http://www.openmobilealliance.org/documents.html>.

The OMA solution has been developed with the 3GPP DRM requirements, as expressed in TS-22.242, in mind, as well as taking into account requirements from GSMA and other relevant groups. With this first phase of the OMA DRM solution completed, OMA provides a modular and scalable framework, adaptable depending on the type and strength of DRM needed for different types of content and business models. The OMA DRM solution is independent of transport and content delivery mechanism; it can be applied to push, MMS, pull/download, streaming, and so on.

The OMA phase 1 DRM specification addresses initial short-term requirements for “lower value” content, as expressed in requirements from both 3GPP and GSMA. As such, it addresses all of the 3GPP DRM requirements for “Class 1, Forward Lock” DRM.

In addition, it addresses most of the 3GPP requirements for “Class 2, Comprehensive DRM”; in particular requirements regarding content packaging, separation of content and usage rights, and expression of usage rights (rights expression language).

It is the intent of the signing companies to evolve the OMA phase 1 DRM specifications to address additional requirements for “higher value” content. When complete, the OMA DRM specifications will address all the remaining 3GPP requirements for “Class 2, Comprehensive DRM”; in particular the requirements for providing a secure trust model.

Proposed way forward

With DRM activities in both OMA and 3GPP, there is a risk of industry fragmentation through multiple or incompatible solutions. To avoid multiple solutions, and to promote interoperability, it is desirable to consolidate further work on DRM in a single standards group.

The signing companies of this input propose that OMA should be the group responsible for further development of DRM.

The signing companies of this input move that TSG-SA adopts the following recommendations:

1. 3GPP adopts the OMA DRM specifications whenever it needs to assume or specify DRM functionality.
2. No stage 2 work on DRM should be started in 3GPP. 3GPP TSG-SA adopts the OMA solution as the 3GPP technical architecture for DRM.
3. There are some working groups within 3GPP who may need to apply DRM within the context of their technical specifications, e.g. MMS and Streaming. In such cases, OMA and 3GPP should work together through a close working relationship to apply OMA DRM, and to identify changes (if any) to the OMA DRM specifications that may be needed as a result.