

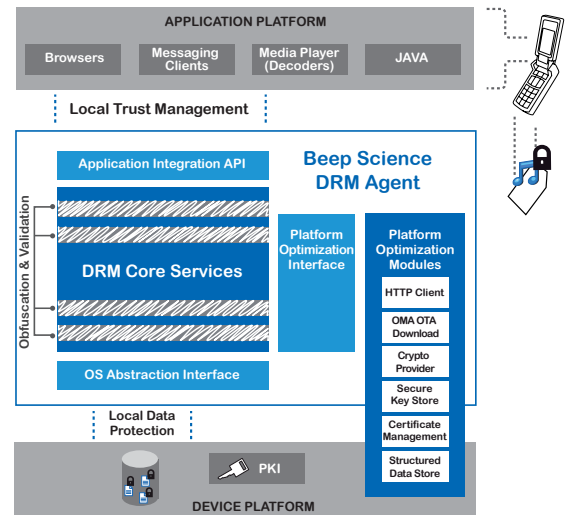
Beep Science DRM Agent



**Digital Rights Management Agent software
interoperable with OMA DRM 1.0 and 2.0**

Overview

The Beep Science DRM Agent is a full software solution enabling management of OMA DRM 1.0 and 2.0 protected content. It provides device manufacturers and platform vendors with a complete solution to DRM enable the devices. The software is already deployed in µltron, RTKE, Nucleus, Symbian, Linux, Windows Mobile & Windows Desktop operating platforms. Additional platforms can easily be supported. The DRM Agent is extensively tested to guarantee interoperability with all commercially available OMA DRM servers.



Features and Core DRM Services

- Rights Retrieval with complete ROAP support
- Rights Management including storage, retrieval, cleanup, and merging
- Subscriptions through Inheritance (Parent Rights) and Groups
- Content Sharing through Superdistribution, Domains and DCF Embedded Rights
- PDCF enabling progressive download and streaming
- Content management to help keep track of DRM content
- Backup & Restore to recover rights after device failure
- Content Access and decryption
- Local Content Protection for OMA DRM 1.0

Application Integration

The DRM Agent is ready for integration with all platform components (WAP, MMS, Media Player, JAVA, etc). The Application Integration API is designed to allow the DRM Agent to take full responsibility for all DRM functions; while making it easy for the manufacturer to design the perfect DRM user interface (MMI). The primary features of the Application Integration API are

- DRM Agent Management
- Content Management
- Rights Management
- Content Access
- MMI Callbacks

The DRM Agent is already pre-integrated with several application frameworks and applications, including Trolltech's QTopia and Open-Plug's ELIPS.

DRM Security

The DRM Agent's security features enable it to be deployed confidently in hostile environments. The DRM Agent is designed to resist hackers from compromising sensitive DRM information.

Trust Models

Configurable to support all of the major OMA DRM Trust Models (incl. CMLA). Multiple trust models may be supported on a single device.

Platform Integration

The DRM Agent architecture enables fast integration into a wide-range of device platforms. When porting the DRM Agent to a new platform Beep Science engineers are usually able to complete the task within 3 weeks. It is a simple matter of adapting low level code to the native platform interfaces. After the "porting" is complete the OS Abstraction Layer source code can be provided to help with platform maintenance. Alternatively the OS Abstraction Layer can be written by Beep Science' customer.

As a further option the DRM Agent may be customized to take advantage of existing platform components such as Cryptography, Secure Key Storage and Data Storage. For example in the case of Cryptography libraries the DRM Agent can be deployed as a standalone full software solution, but the architecture allows replacement of low level cryptographic primitives or entire cryptographic algorithms. This enables integration with cryptographic hardware and other native crypto services. The DRM Agent is pre-integrated with a number of leading cryptography technology providers.

Beep Science provides extensive support during the platform and application integration process. Even leading the design of the DRM integration can be arranged on request.

Test and Debug Facilities

Alongside the DRM Agent Beep Science provides a number of tools to allow independent testing of the DRM Agent after it is ported to the target platform. This includes access to our fully functional Test Server and the delivery of an extensive Automated Test Harness.

The DRM Agent also features an extensive runtime logging system to help track down integration problems quickly.

Extensions

OMA DRM for Windows PC

For Windows PCs the DRM Agent is extended with browser and media player plug-ins. Plug-Ins are available for all the major Internet browsers and media players, including Windows Media Player.

Mobile TV

The DRM Agent supports service and content protection for Mobile Broadcast, including DVB-H (18-Crypt) and OMA BCAST (DRM profile).

Additional DRM schemes

The DRM Agent can be delivered integrated with additional DRM schemes, such as Microsoft WMDRM 10.

SIM Cards

The DRM Agent supports deployments utilizing Memory and SIM Cards for Content and Rights storage.