

DRM Implementation on Symbian 9.x Platform



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Discussions Points

- ❖ Why am I here?
- ❖ DRM snapshot
- ❖ DRM and Security
- ❖ DRM User Experience
- ❖ DRM Mid-Term Challenges
- ❖ Summary

Discretix at a Glance



- Main Operations in Israel. Offices in USA, Europe & APAC
- Robust, high performance security solutions for mobile devices and flash memory
- Complete Solution: Hardware, Middleware, Applications



For the 2nd year in row now:
Discretix is the largest vendor of embedded security

- Multi-disciplinary team – 70+ employees
 - Mobile and Flash
 - Hardware and Software
 - Security specialists

- Supported Standards



Association



Discretix DRM Traction

Licensees

DRM Security Infrastructure (Hardware IP)



Multi Scheme DRM Client (Software)



Supported Platforms

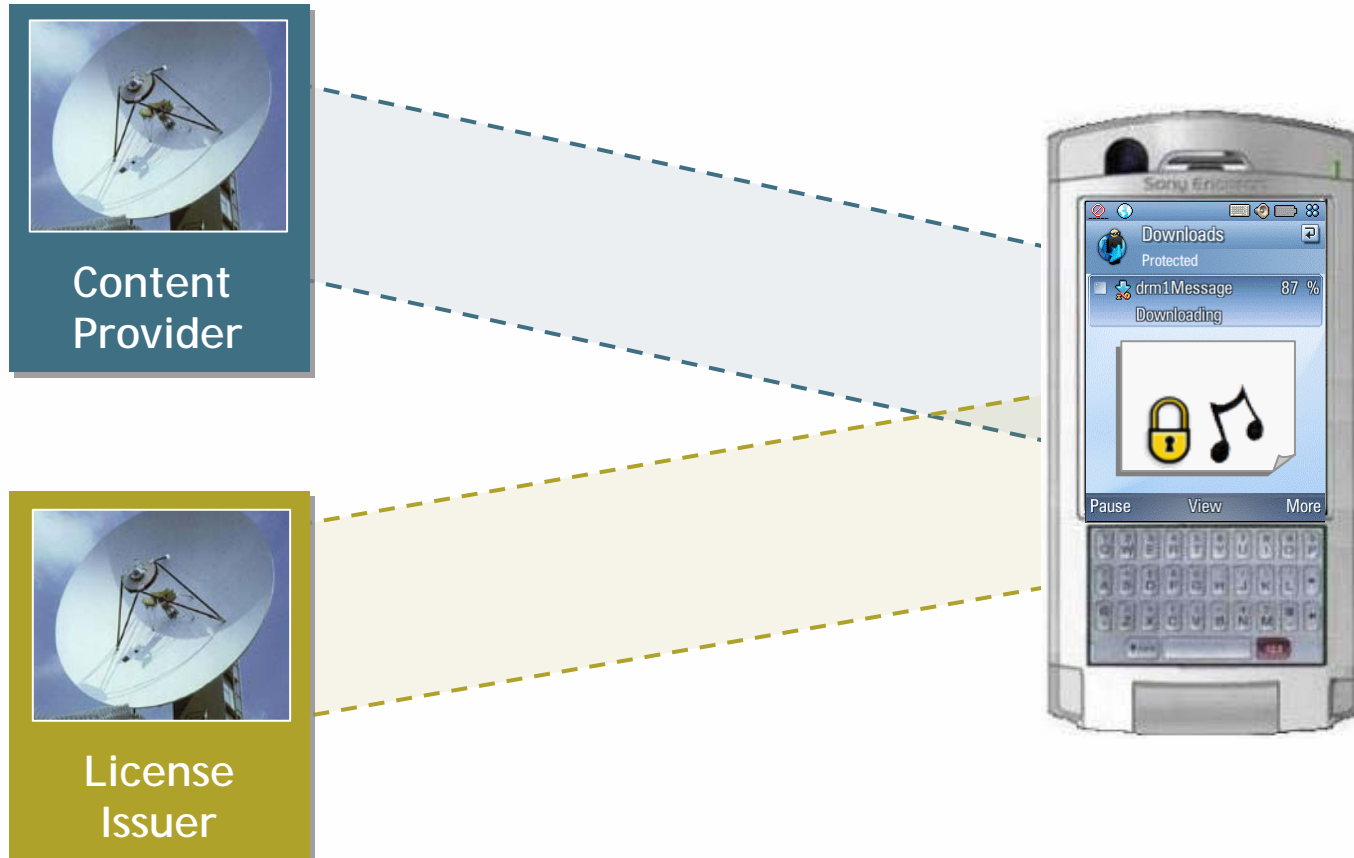
hardware



Software



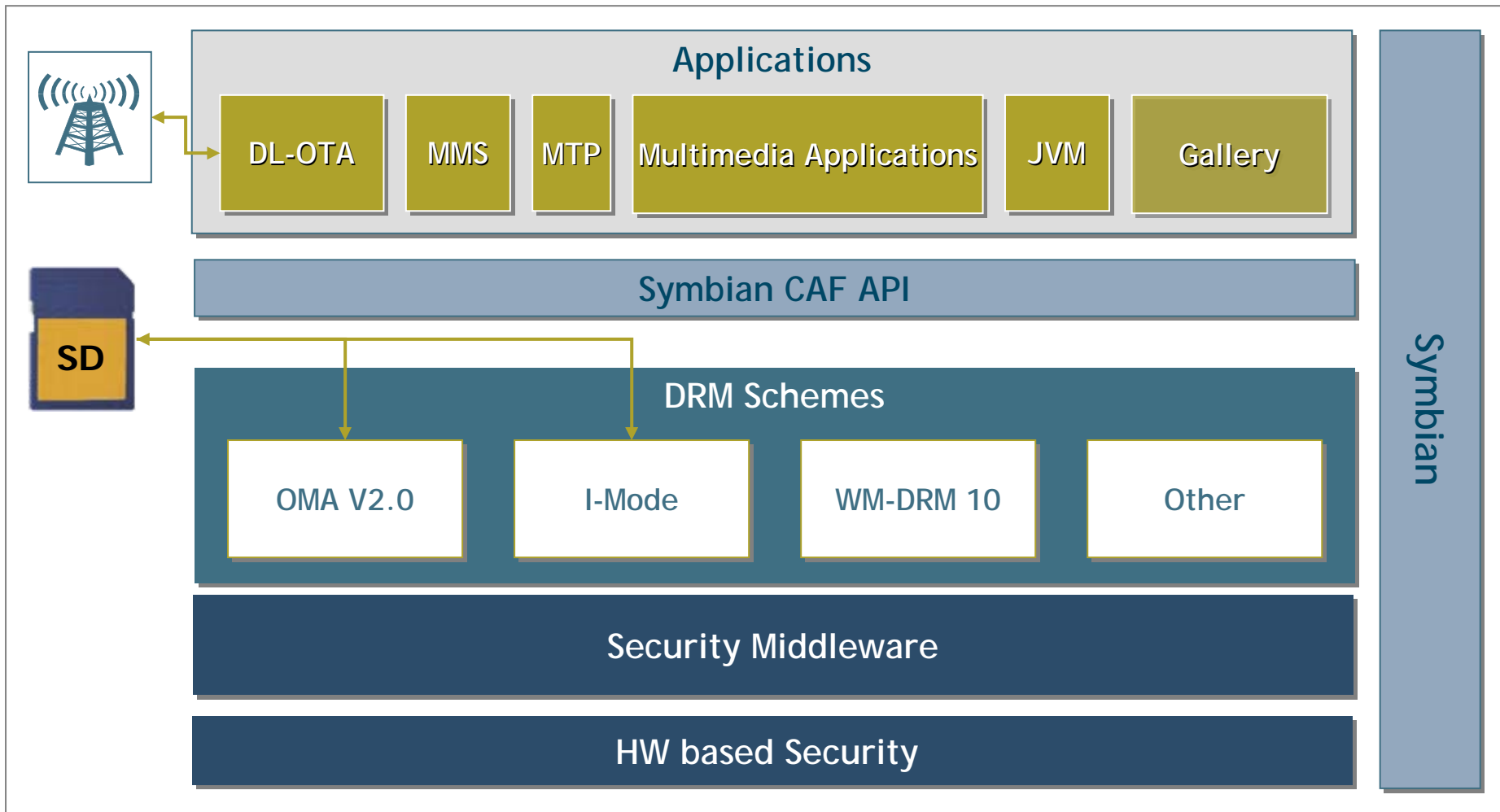
Introduction to DRM



Jungle of DRM Schemes



Multi-Scheme DRM Client Architecture for Symbian OS



It's all About Security

DRM Watch

Windows Media DRM Hacked

August 31, 2006

By [Bill Rosenblatt](#)

A [hack to Windows Media DRM](#) versions 10 and 11 (the latter being a new beta version) has appeared on various sites.

The so-called Fairuse4wm program finds the encryption key to WM DRM files and uses it to circumvent the DRM from legitimately obtained audio and video files.

cnet NEWS.com

Hackers crack Apple, Microsoft music codes

September 1, 2006

By [Ina Fried](#)

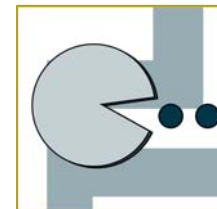
In the continuation of a long-running arms race, both Apple Computer and Microsoft have seen their music protection technologies come under fire in recent days.

Who Cares About Robust DRM Solutions?

Mobile operators



Content providers



DRM Schemes



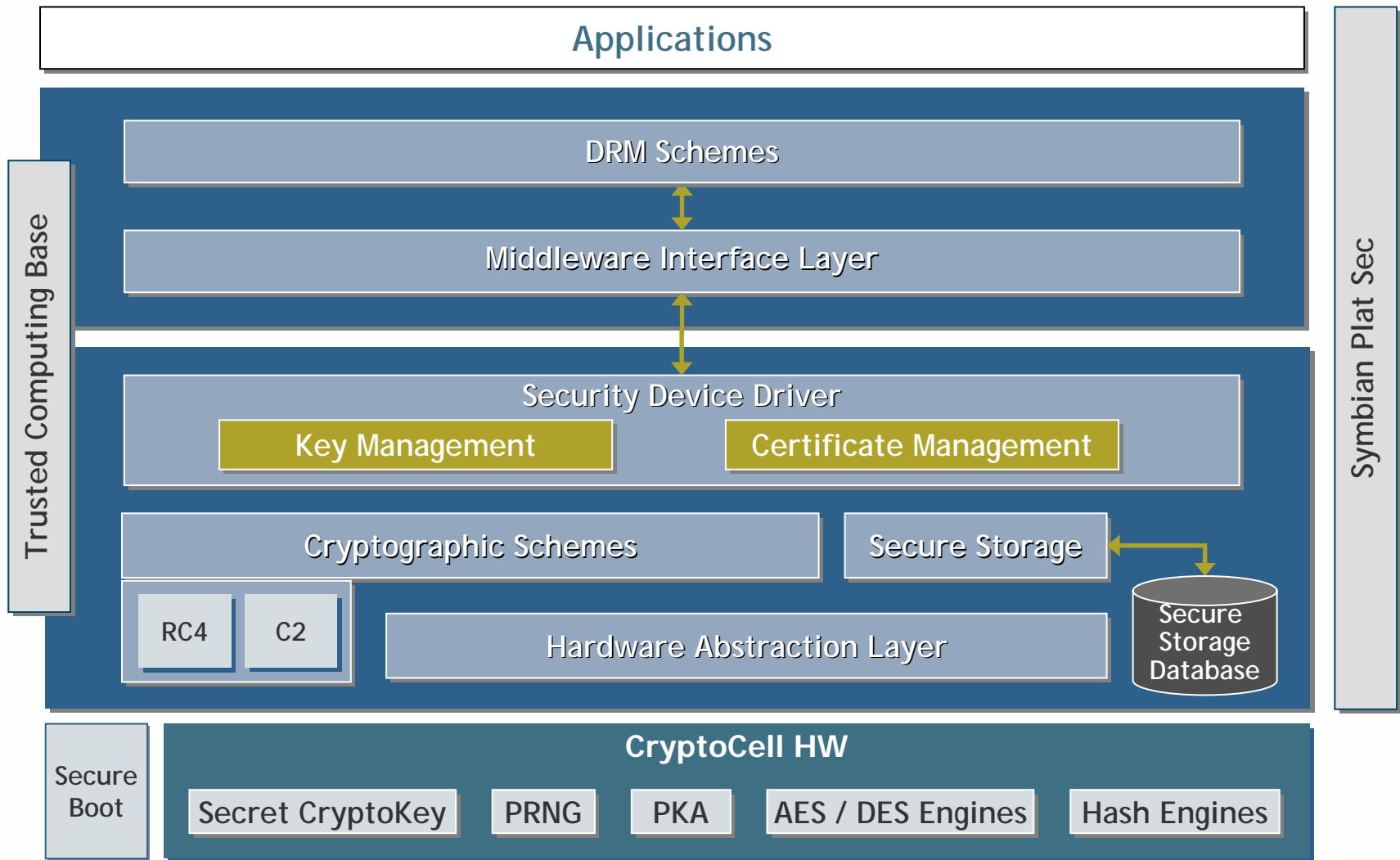
Compliance Bodies



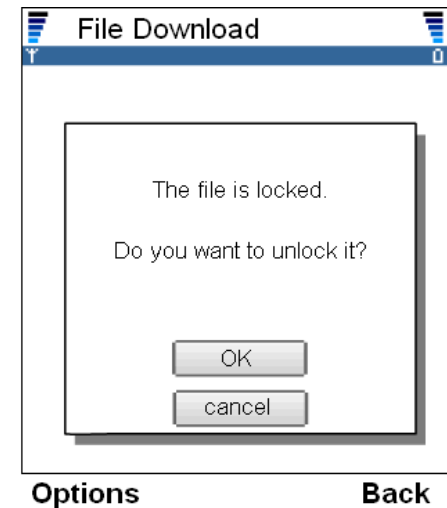
Content Protection Challenges

- ❖ The end-user is part of the threat model
 - Must be protected against malware legally installed on the device
 - Security measurements should not affect battery playback time or decoding performance
 - Must be cost effective
- ❖ Requires complex data flows (compared to other security systems)

Discretix DRM Security Architecture for Symbian 9.x

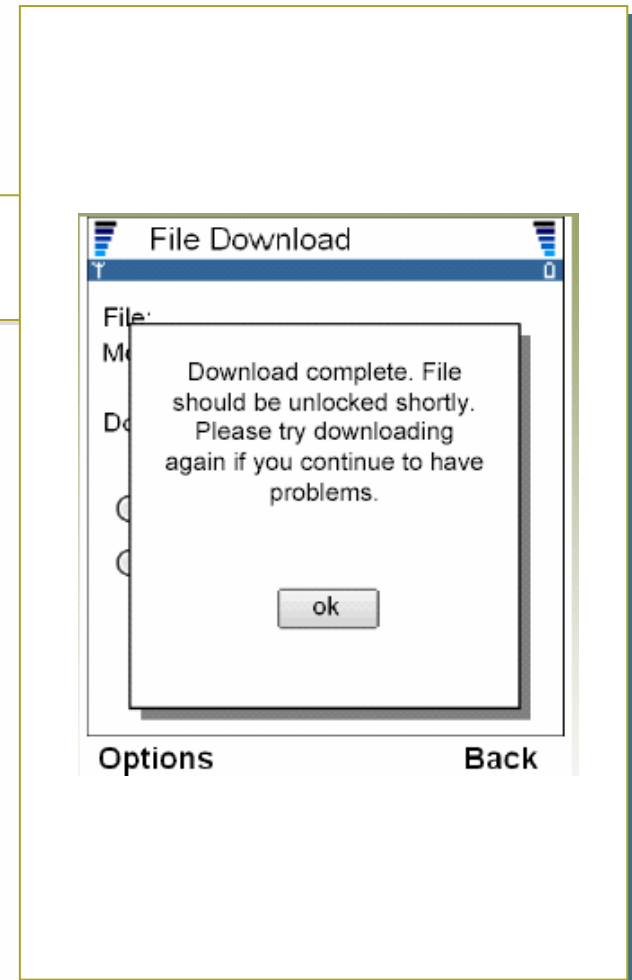


- ❖ Easy license acquisition process
- ❖ License arrival and expiration notifications
- ❖ DRM protection indication
- ❖ Easy to access DRM management tasks



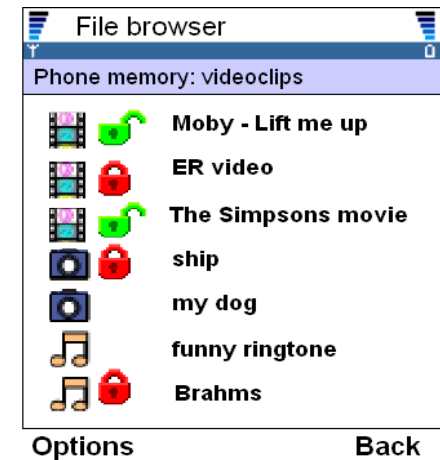
DRM User Experience

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- ❖ CAF is OMA centric some features in other schemes are missing
 - License synchronization required for WM-DRM is difficult to implement
 - Marlin DRM is not based on RO concepts and may be hard to implement under CAF
- ❖ White-list management is missing
- ❖ MTP support is missing

- ❖ DRM = Security
- ❖ There is no one “magic dust” to make solutions more secure. Robust security is achieved by a combination of factors:
 - Hardware based mechanisms
 - Application level security mechanisms at the OS level
- ❖ User experience is a key factor to success
 - KISS – Keep It Simple Stupid
- ❖ Implementation challenges

Thank you for your attention!

