

The Other Java ME

Java ME on TV and other Non-Mobile Devices

Jon Courtney | May 3, 2011

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The background features a large, vibrant graphic. It consists of a central cluster of numerous small, rounded rectangular images, each containing a different scene or object, such as landscapes, animals, technology, and abstract patterns. This cluster is partially enclosed by thick, flowing blue waves that sweep across the lower half of the slide from left to right. The overall aesthetic is modern and dynamic.

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[illegible]The background features a large, vibrant graphic. On the left, there's a semi-circular arrangement of numerous small, rounded rectangular images. These images depict a wide variety of subjects: nature (forests, mountains, animals like a dog), technology (circuit boards, speakers, a hand holding a card), abstract patterns, and other miscellaneous scenes. To the right of this collage, several thick, flowing, wavy bands of color sweep across the slide. The colors are primarily shades of light blue, medium blue, and teal, creating a sense of dynamic movement and energy. The overall composition suggests themes of connectivity, media, and technological innovation.

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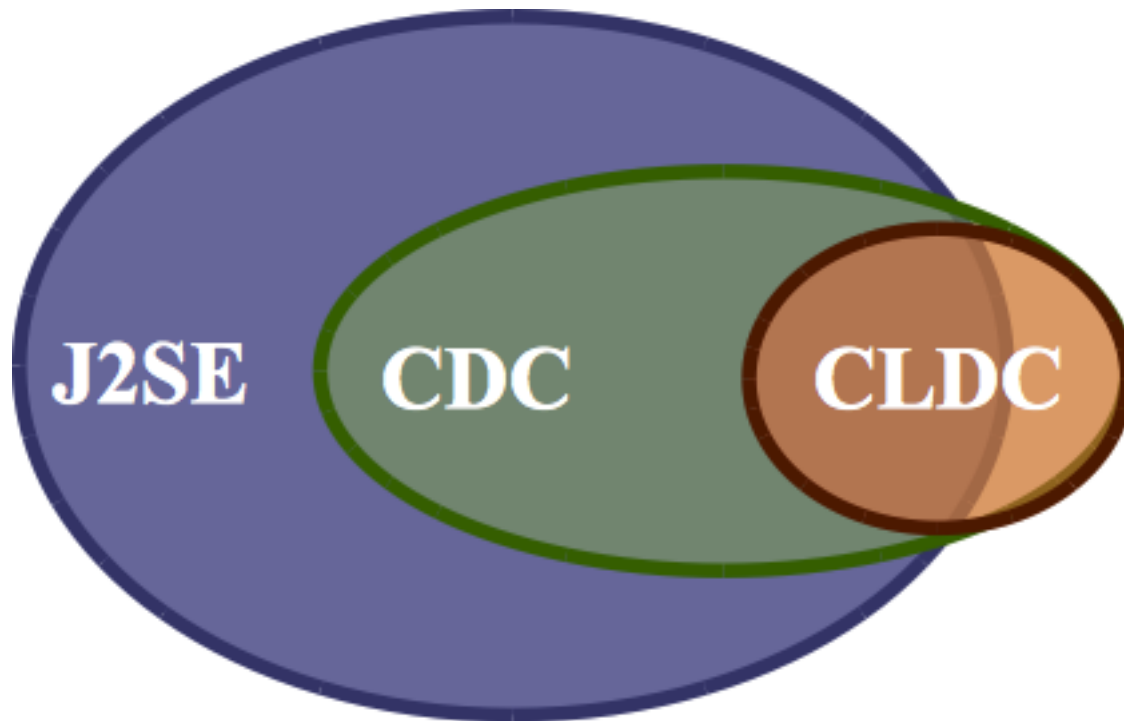
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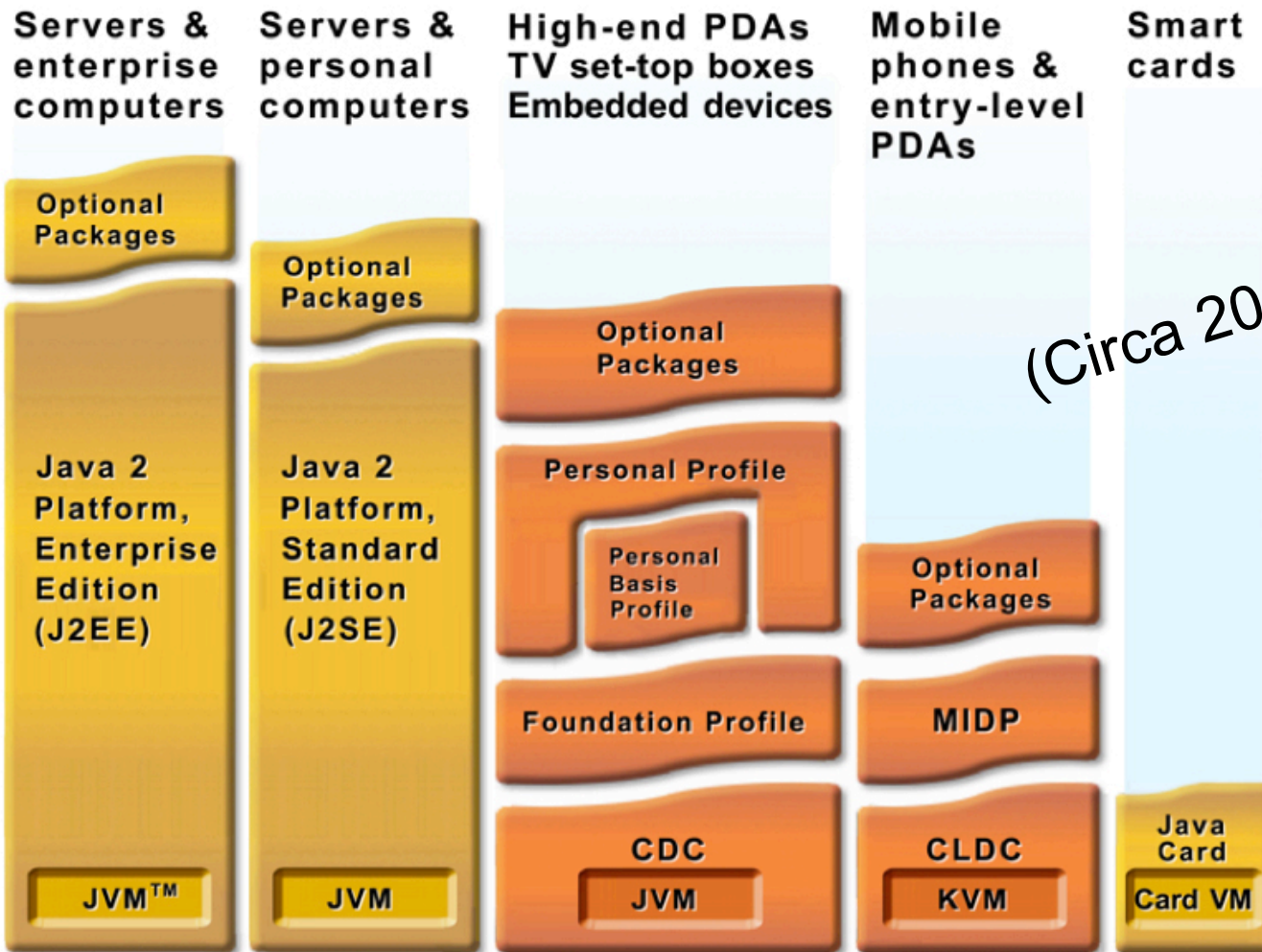
Agenda

- CDC vs. CLDC vs. J2SE
- CDC Markets Then & Now
- Example: Blu-ray
- Example: OCAP / <tru2way>
- Technology Gaps & Concerns

CLDC < CDC < J2SE < J2EE



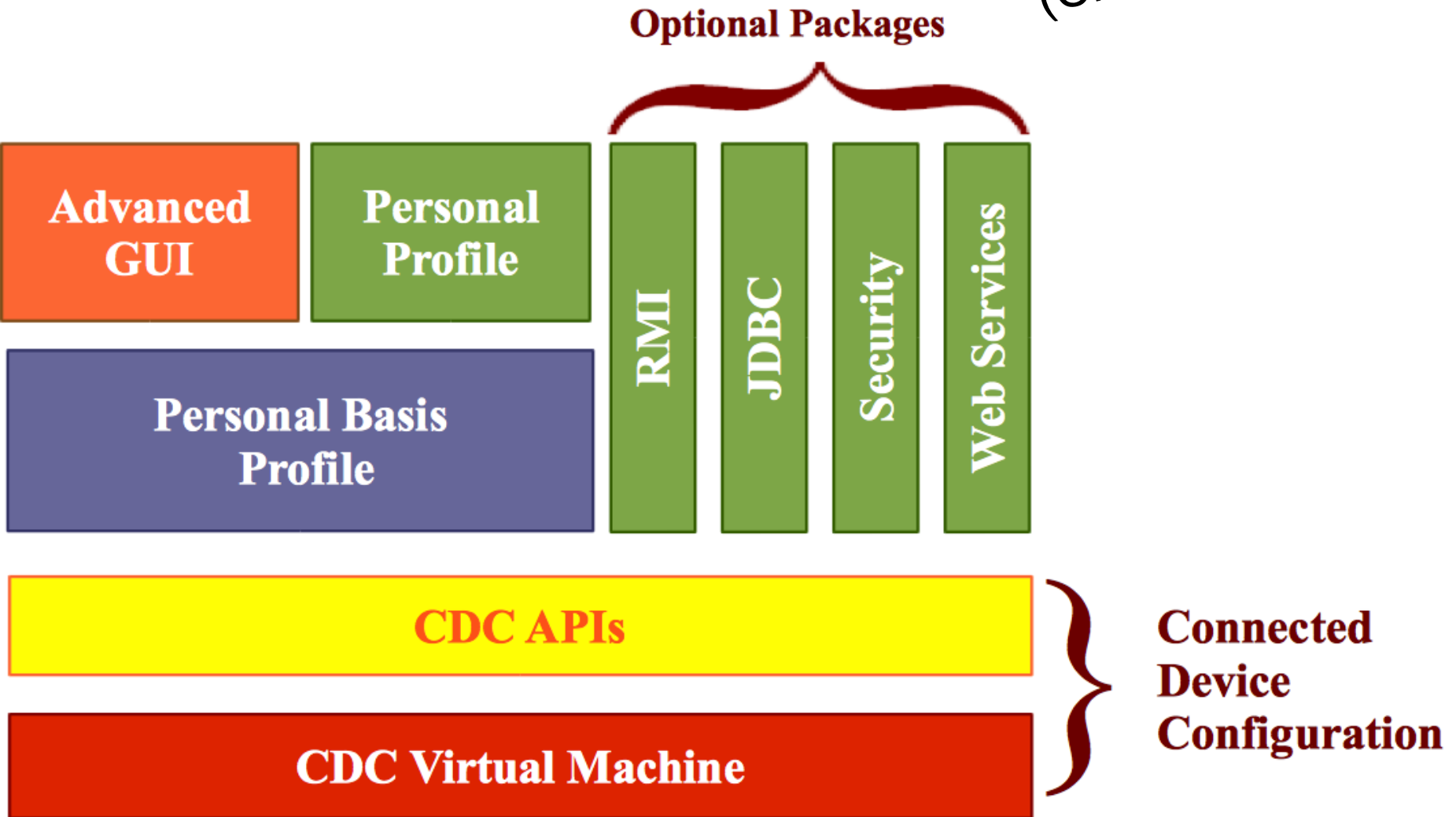
Java Platform



(Circa 2005)

CDC Stack

(Circa 2005)



CDC Then

- **Personal Profile 1.0**
 - Personal Basis Profile 1.0
- **Foundation Profile 1.0**
 - Connected Device Configuration 1.0

Target Devices

(Circa 2002)



CLDC



CDC



Desktop

CDC Today

- ~~Personal Profile 1.1~~
- **Personal Basis Profile 1.1**
 - Foundation Profile 1.1
 - Connected Device Configuration 1.1

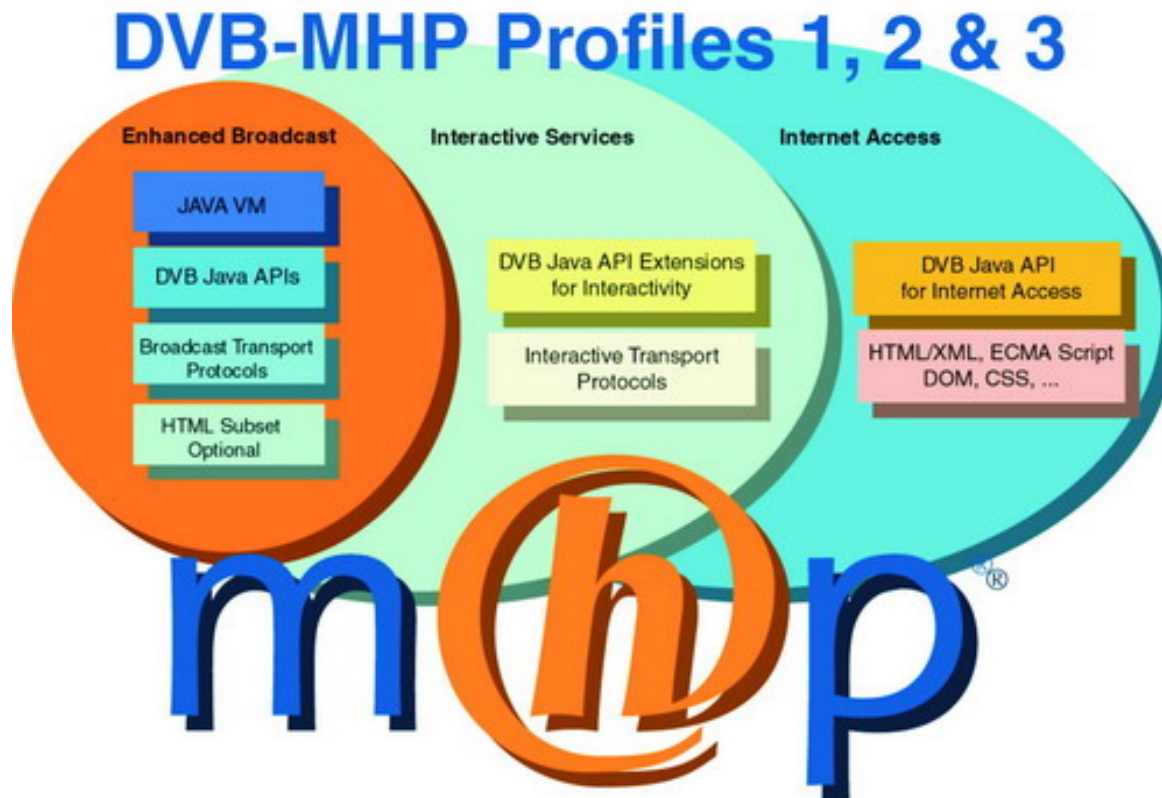
Media Devices



CDC Market Successes...

DVB MHP : 15M

- DVB GEM: Globally Executable MHP



Blu-ray Disc Players : 85M

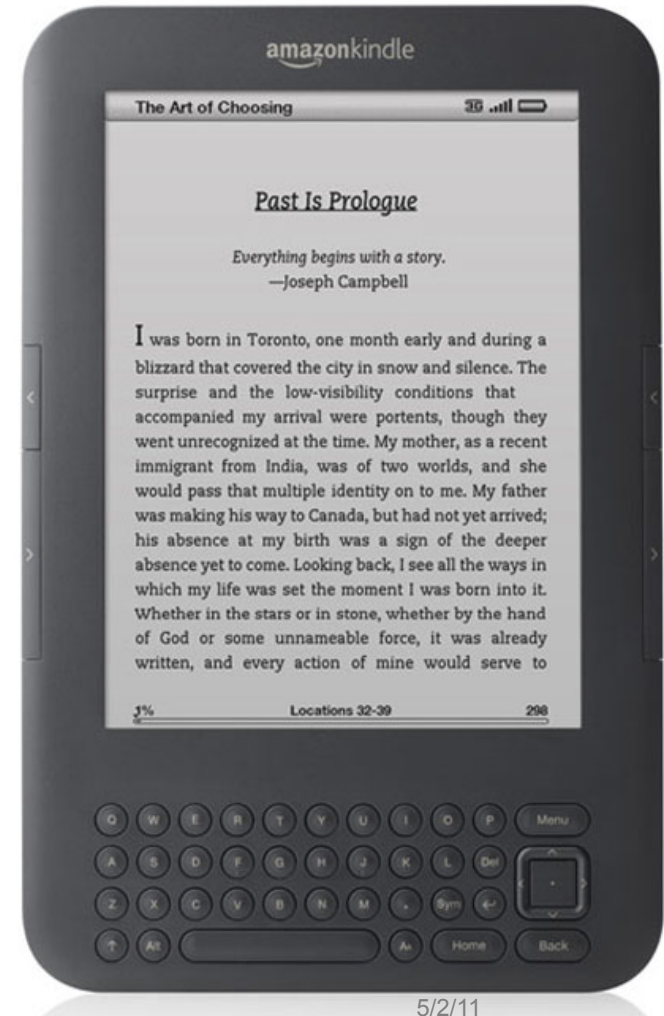
(Including 50M PS3s)



OCAP / <tru2way> : 8M



Amazon Kindle : 6M (est.)



Others

- GEM-IPTV : 2M
- ACAP (Korea) : 1M
- Java-based STBs (China) : 3M
- Brazil SBTVD Ginga-J...
- Plus:
 - advanced printers (PP)
 - more?

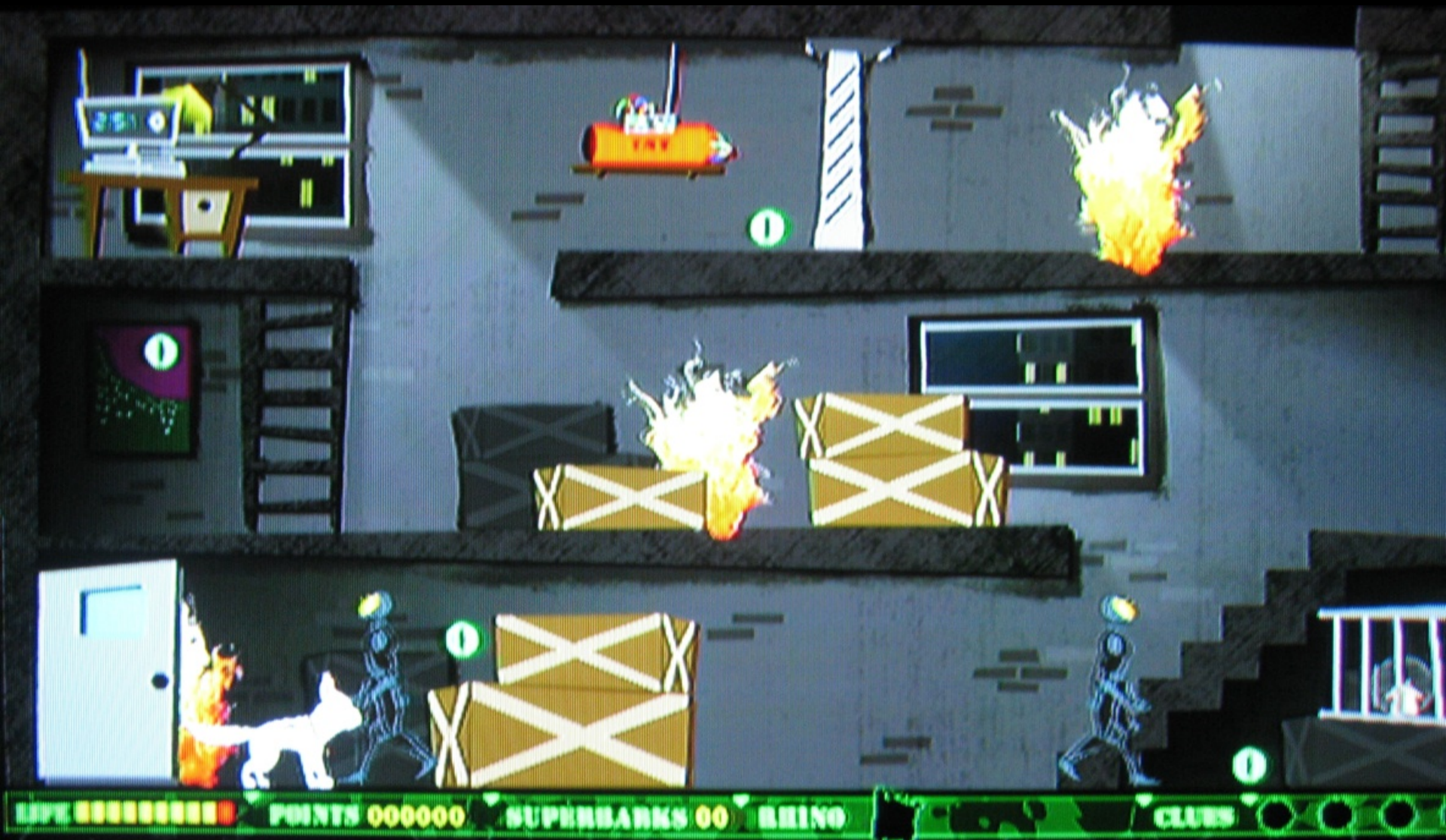
Example: Blu-ray

- Based on DVB GEM
 - PBP 1.0 or 1.1 + Java TV
- org.bluray: Disc-media-specific Java extensions
- Java used in 100% of disc menus
- Java frequently used for on-disc games and other enhancements

Blu-ray Discs







OCAP : OpenCable Application Platform

- Based on DVB GEM
 - PBP 1.1 + Java TV
- org.ocap: Cable-specific Java extensions
 - Guide app is primary client
 - Monitor app enforces operator policy
 - Multiple simultaneous secondary apps
 - Extensions for DVR, Home Networking, UPnP, 3DTV
- Adopted by 8 major N.A. cable operators
- 15M – 20M by end of 2012
- Ongoing development (10 years and counting?!)

OCAP: Java Platform Gaps

- PBP stuck on JDK 1.4 language features
 - No generics, covariant return types, typesafe enums...
- CLDC optional packages not readily available for CDC
 - E.g., OpenGL ES
- Lack of advanced UI features / options
 - Java FX???
 - AGUI (JSR 209)?
 - Open GL ES 2.0?

OCAP: Java “Concerns”

- Platform stagnation
 - Conversely, it may be hard to upgrade our PBP reference
- HTML5 integration
 - DLNA “lite” profile
- Developer mindshare
 - Losing interest and expertise to Android
- Oracle / JCP investment?
 - Previously, Sun was the driver for core TV technologies

Questions and comments...

Thank you

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