MPV Interoperability Specification

Samsung Electronics
Digital Media R/D Center

Seong-Kook Shin <vinsk.shin@samsung.com>
MPV

- MPV is an open specification developed and sponsored by the Optical Storage Technology Association (OSTA).
- MPV makes easier the representation, exchange, processing and playback of collections of music, photo, and video content.
- MPV specification is being developed in phases and result in “profiles.”
MPV Interoperability Specification

- Mission Objective – To define tight the MPV implementation practices and metadata required to guarantee interoperability of media.
- The consumer devices (e.g. DSC, Camcoder) needs to satisfy the MPV Interoperability Specification to guarantee interoperability between decies and applications.
- Currently the MPV IS contains 39 writer requirements and 10 reader requirements.
MPV Specification Hierarchy

- MPV Writer Device
- MPV Reader Device

- Music Profile
- Presentation Profile
- Basic Profile
- Broadcast TV Profile
- Core Spec.
- XML Manifest.
- DC/NMF
- Camera Profile
- MPV IS
MPV IS Practices

The IS establishes these important practices.

- First, IS uses qualified keywords MUST, REQUIRED, SHALL, SHOULD, RECOMMENDED, MAY, OPTIONAL and their counterpart with the meaning as described in [RFC2119].
- All practices are classified as Writer or Reader requirements
- All practices are identified with an unique requirement number.
Current Status

- Version 1.0 specifies (mainly) the writer behavior of following three MPV profiles:
  - MPV Basic Profile
  - MPV Presentation Profile
  - MPV Music Profile
- MPV Broadcast Television Profile will be incorporated into the IS soon.
Several MPV enabled CE devices

- We have several MPV enabled CE devices that generate MPV manifest.
- Mostly, More writer devices than reader devices are issued on the market.
Implementing Consideration

- Most CE devices are now enough to handle MPV technology. (Mainly operations of processing XML based documents)

- In most cases, less than 1 MB of RAM is required to process a MPV document.
To do.

- Currently, MPV IS is working on the requirements of MPV writer devices. No detailed information of MPV reader behaviors.
- We may need to define more strict set of MPV manifest generation rules to satisfy CE MPV reader devices since there are few MPV reader devices due to the flexibility of various MPV specifications.