



Digital Music, Photo, and Video Collections



MPV Document Profile Specification

**Revision 0.11
Working Draft**

8 December 2003

© 2003 Optical Storage Technology Association

IMPORTANT NOTICE

This document is a working draft for review by OSTA members and approved parties. It is a draft document and will be updated, replaced, or obsoleted by other documents at any time and without notice. It is inappropriate to use OSTA Working Draft documents as reference materials, to cite them in other publications, or to refer to them as anything other than a “work in progress”.

NOT FOR DISBTRIBUTION ON A PUBLIC WEBSITE

This document is available at <http://www.osta.org/mpv/mpvmbrrs/specs/MPVDoc-Spec-0.11WD.PDF>

POINTS OF CONTACT

<p><u>OSTA</u> David Bunzel OSTA President</p> <p>Tel: +1 (408) 253-3695 Email: dbunzel@osta.org</p> <p>http://www.osta.org</p> <p><u>MPV Website</u> http://www.osta.org/mpv/</p>	<p><u>Technical Content</u></p> <p>Pieter van Zee MPV Initiative Lead Editor, MPV Specification</p> <p>Tel: +1 541-715-8658 Email: Pieter_van_Zee@hp.com</p> <p>Felix Nemirovsky Chairman, MultiRead Subcommittee</p> <p>Tel: +1 415 643 0944 Email: felixn@pacbell.net</p>
---	---

ABSTRACT

The MPV Document Profile Specification defines the MPV implementation practices and schema for how to identify metadata about an MPV manifest, including the application that wrote the manifest and previous manifests upon which it is based.

COPYRIGHT NOTICE

Copyright 2003 Optical Storage Technology Association, Inc.

REVISION HISTORY

Revision	Date	Comments
0.10	17 March 2003	First complete draft
0.11	8 Dec 2003	Minor typo fixups before release at meeting

LICENSING IMPORTANT NOTICES

- (a) THIS DOCUMENT IS AN AUTHORIZED AND APPROVED PUBLICATION OF THE OPTICAL STORAGE TECHNOLOGY ASSOCIATION (OSTA). THE SPECIFICATIONS CONTAINED HEREIN ARE THE EXCLUSIVE PROPERTY OF OSTA BUT MAY BE REFERRED TO AND UTILIZED BY THE GENERAL PUBLIC FOR ANY LEGITIMATE PURPOSE, PARTICULARLY IN THE DESIGN AND DEVELOPMENT OF WRITABLE OPTICAL SYSTEMS AND SUBSYSTEMS. THIS DOCUMENT MAY BE COPIED IN WHOLE OR IN PART PROVIDED THAT NO REVISIONS, ALTERATIONS, OR CHANGES OF ANY KIND ARE MADE TO THE MATERIALS CONTAINED HEREIN.
- (b) COMPLIANCE WITH THIS DOCUMENT MAY REQUIRE USE OF ONE OR MORE FEATURES COVERED BY THE PATENT RIGHTS OF AN OSTA MEMBER, ASSOCIATE OR THIRD PARTY. NO POSITION IS TAKEN BY OSTA WITH RESPECT TO THE VALIDITY OR INFRINGEMENT OF ANY PATENT, COPYRIGHT OR OTHER INTELLECTUAL PROPERTY RIGHT, WHETHER OWNED BY A MEMBER OR ASSOCIATE OF OSTA OR OTHERWISE. OSTA HEREBY EXPRESSLY DISCLAIMS ANY LIABILITY FOR INFRINGEMENT OF INTELLECTUAL PROPERTY RIGHTS OF OTHERS BY VIRTUE OF THIS OSTA DOCUMENT, NOR DOES OSTA UNDERTAKE A DUTY TO ADVISE USERS OR POTENTIAL USERS OF OSTA DOCUMENTS OF SUCH NOTICES OR ALLEGATIONS. OSTA HEREBY EXPRESSLY ADVISES ALL USERS OR POTENTIAL USERS OF THIS DOCUMENT TO INVESTIGATE AND ANALYZE ANY POTENTIAL INFRINGEMENT SITUATION, SEEK THE ADVICE OF INTELLECTUAL PROPERTY COUNSEL AND, IF INDICATED, OBTAIN A LICENSE UNDER ANY APPLICABLE INTELLECTUAL PROPERTY RIGHT OR TAKE THE NECESSARY STEPS TO AVOID INFRINGEMENT OF ANY INTELLECTUAL PROPERTY RIGHT. OSTA EXPRESSLY DISCLAIMS ANY INTENT TO PROMOTE INFRINGEMENT OF ANY INTELLECTUAL PROPERTY RIGHT BY VIRTUE OF THE EVOLUTION, ADOPTION, OR PUBLICATION OF THIS OSTA DOCUMENT.
- (c) ONE OR MORE PATENT HOLDERS HAVE FILED STATEMENTS OF WILLINGNESS TO GRANT A LICENSE, ON REASONABLE AND NONDISCRIMINATORY TERMS, ON A RECIPROCAL BASIS, UNDER PATENT CLAIMS ESSENTIAL TO IMPLEMENT THIS SPECIFICATION. FURTHER INFORMATION MAY BE OBTAINED FROM OSTA.
- (d) OSTA MAKES NO REPRESENTATION OR WARRANTY REGARDING ANY SPECIFICATION, AND ANY COMPANY USING A SPECIFICATION SHALL DO SO AT ITS SOLE RISK, INCLUDING SPECIFICALLY THE RISKS THAT A PRODUCT DEVELOPED WILL NOT BE COMPATIBLE WITH ANY OTHER PRODUCT OR THAT ANY PARTICULAR PERFORMANCE WILL NOT BE ACHIEVED. OSTA SHALL NOT BE LIABLE FOR ANY EXEMPLARY, INCIDENTAL, PROXIMATE OR CONSEQUENTIAL DAMAGES OR EXPENSES ARISING FROM THE USE OR IMPLEMENTATION OF THIS DOCUMENT. THIS DOCUMENT DEFINES ONLY ONE APPROACH TO COMPATIBILITY, AND OTHER APPROACHES MAY BE AVAILABLE IN THE INDUSTRY.
- (e) THIS DOCUMENT IS A SPECIFICATION ADOPTED BY OSTA. THIS DOCUMENT MAY BE REVISED BY OSTA AT ANY TIME AND WITHOUT NOTICE AND USERS ARE ADVISED TO OBTAIN THE LATEST VERSION. IT IS INTENDED SOLELY AS A GUIDE FOR ORGANIZATIONS INTERESTED IN DEVELOPING PRODUCTS WHICH CAN BE COMPATIBLE WITH OTHER PRODUCTS DEVELOPED USING THIS DOCUMENT. THIS DOCUMENT IS PROVIDED "AS IS".
- (f) THE MPV NAME, THE MPV LOGO, AND THE MusicPhotoVideo NAME ARE TRADEMARKS OF OPTICAL STORAGE TECHNOLOGY ASSOCIATION, INC. ALL OTHER TRADEMARKS ARE THE PROPERTY OF THEIR RESPECTIVE OWNERS. THESE OSTA TRADEMARKS MAY NOT BE USED EXCEPT FOR JOURNALISTIC PURPOSES WITHOUT AN EXPLICIT LICENSE FROM OSTA.

Contents

Contents.....	4
Table of MPV Document Requirements.....	5
Chapter 1: Introduction.....	6
1.1 Executive Summary.....	6
1.2 MPV Profiles.....	7
1.3 Terms of Use.....	7
Chapter 2: MPV Document Profile 1.0.....	8
2.1 MPV Document Introduction.....	8
2.2 MPV Specification Practices.....	8
2.3 Formalities For Use of the MPV Document Profile.....	9
2.4 MPV Document Profile.....	10
Chapter 3: MPV Document Profile Schema.....	11
3.1 Attributes in <file:Manifest> element.....	11
3.1.1 mpvd:writtenBy attribute.....	11
3.1.2 mpvd:documentIdRef attribute.....	11
3.2 mpv:Document Content.....	12
3.2.1 mpv:InstanceID of the Manifest.....	12
3.2.2 Dublin Core Properties of the Manifest.....	12
3.2.3 Locale of the Manifest.....	13
3.3 Example.....	14
Chapter 4: MPV Document Profile Practices.....	15
4.1 Chaining to an Earlier MPV Manifest.....	15
4.1.1 Writer of the Manifest.....	15
Appendix I: References.....	16

Table of MPV Document Requirements

The following table is a comprehensive list of the requirements specified by the MPV Document Profile specification, ordered by Requirement Number. This list can provide a quick reference guide to the specification and also is useful to quickly lookup more information about a specific requirement by number.

WRITER REQUIREMENTS

DOW100-1 mpvd:writtenBy attribute. The file:Manifest element MUST have the mpvd:writtenBy attribute, which identifies the application that wrote this specific MPV manifest. The attribute is updated everytime the manifest is modified in any way. 11

READER REQUIREMENTS

Error! No table of figures entries found.

COMMON REQUIREMENTS

Error! No table of figures entries found.

Chapter 1: Introduction

1.1 Executive Summary

MPV (MusicPhotoVideo) is an open, multiplatform specification for playlists and asset management of digital music, photo, and video files. MPV makes easier the representation, exchange, processing and playback of collections of digital media content, including music, still images, stills with audio, still sequences, video clips, and audio clips.

The MPV Document Profile Specification defines the MPV implementation practices and schema for how to identify metadata about an MPV manifest, including the application that wrote the manifest and previous manifests upon which it is based.

MPV playlists can be enjoyed in consumer electronics products such as a CD or DVD player or on a PC. MPV playlists and the content they reference are unlike audio CDs and DVD-Video discs because they store the multimedia content like MP3 and JPEG files in formats used by PCs on a “data CD”.

MPV is an open format developed under the leadership of the Optical Storage Technology Association (OSTA) and available from OSTA at no cost. Information regarding the MPV Specification, SDK for software developers, and logo licensing program can be found at www.osta.org/mpv.

SITUATION TODAY

Consumers create CDs full of personal digital content – music, photo, and video content in PC file formats like MP3, JPEG and MPEG – captured by digital cameras, photofinishing retailers, personal music collections, and PC multimedia applications. The expectation and desire of consumers is to enjoy the playback experience not only in PCs but wherever a player can go -- in their home entertainment environment, in their car or in their pocket.

Today, most consumer electronic (CE) devices do not recognize the content on CDs created by PC applications or retail services or do so poorly. Because each application stores the content on a disc uniquely, there is no standard way for CD and DVD players to recognize and playback the content. And the user playback experience is different between each CE device.

Without a standard method for organization and access, the CE device can take many minutes reading through large collections of multimedia content or will present filesystem views of the data. Consumers get frustrated with trying to find and quickly access their desired music, photo, or video content.

CE devices are starting to add support for PC formats. MP3 for music has enjoyed wide spread adoption in DVD player, car stereo, and personal music systems. Support for JPEG for photos is growing in consumer electronics products. MPEG1 and MPEG2 video is already broadly adopted by both PC and CE industries. Additional formats

are emerging and growing in popularity, such as Windows Media Audio (WMA), ATRAC3, MPEG4 Audio (AAC), and more.

MPV BENEFITS CONSUMERS

When applications and application both write and read MPV, consumers will enjoy enhanced interoperability of content between applications and devices from any vendor. This gives consumers more choice and vendors greater ability to innovate and differentiate.

1.2 MPV Profiles

The MPV specification is developed in a modular manner and in phases. This results in "profiles". Each profile in MPV defines only those formats and practices that are necessary for the key tasks targeted by the profile. MPV Document Profile makes use of the Core specification, which defines the overall framework of all MPV profiles.

1.3 Terms of Use

This section of the specification is descriptive and not intended to be complete nor definitive. Please refer to the definitive statement of licensing terms at the beginning of the MPV specification document for a precise and legal description.

The MPV specification is developed using an open process. The resulting specification is available from OSTA. No royalty is charged by OSTA for use of the specification. The overall desire is to develop a specification that is not subject to separate licensing requirements or royalty. During the development process, the expectation is that all participants contribute their efforts and intellectual property without any expectation or requirement for compensation. However, OSTA does not warrant that the specification is not or will not be subject to such claims by other parties.

Chapter 2: MPV Document Profile 1.0

2.1 MPV Document Introduction

The MPV Document Profile makes use of existing MPV specification ([MPVCore]) and combines them with additional specific requirements to define tightly the usage of these MPV profiles to guarantee interoperability between devices and applications that conform to the MPV Playlists specification.

Conformance with the MPV Document Profile specification is required for use of the MPV Logo on products.

The MPV Document Profile introduces limited new schema and practices.

2.2 MPV Specification Practices

The MPV Document Specification establishes three important practices.

1. All practices are qualified using the keywords MUST, MUST NOT, REQUIRED, SHALL, SHALL NOT, SHOULD, SHOULD NOT, RECOMMENDED, MAY, and OPTIONAL, if and where they appear in this document, are to be interpreted as described in [RFC2119].

The keywords are classified into three imperative levels. All words at a given level have the same level of imperative.

- Level 1: MUST, MUST NOT, REQUIRED, SHALL, SHALL NOT
- Level 2: SHOULD, SHOULD NOT
- Level 3: RECOMMENDED, MAY, OPTIONAL

For conformance testing, the keyword imperative levels are treated as warning levels, with the following meaning:

- Level 1: Error -- MUST be fixed.
- Level 2: Severe Warning -- SHOULD be fixed to enhance compatibility.
- Level 3: Warning – RECOMMEND to be fixed. Not critical to compatibility.

2. All practices are classified as either Common, Writer, or Reader requirements. Common requirements are practices that are relevant to both Writers and Readers. Writer requirements identify specific MPV content that Writers must produce; Reader requirements identify specific behaviours that Readers must implement.
3. All practices are identified with a unique “requirement number” by which they may be referenced easily.

For example, a verification tools could output results and reference the requirement by number. Practices are identified using a prefix plus a number. This specification uses the letters “DO” plus the letter “C” for common, “W” for writer, or “R” for reader, plus the specification version number without the decimal separator as the prefix, as in PL100-83. A future revision of the specification might identify the same requirement by a different number if the number or order of the requirements were to change, e.g. DO110-85.

2.3 Formalities For Use of the MPV Document Profile

The mechanism that MPV uses to add capabilities to the Core specification is the Profile. MPV Core sets out specific formalities to follow when a MPV Profile is used -- an MPV file must declare which profiles it implements and it must declare the namespaces of the profiles. This allows a processing application to quickly determine whether a given MPV file meets its expectations for processing.

PROFILE COMPONENTS

The MPV Document Profile 1.0 makes use of the MPV Core 1.0 Specification [MPVCore].

The MPV Document Profile 1.0 includes the schema and practices detailed by this document.

COMPATIBILITY

The MPV Document Profile 1.0 is fully compatible with the MPV framework established by [MPVCore]. Thus MPV files that implement the MPV Document Profile 1.0 should be readable by most MPV-aware applications and devices that are not in conformance with the MPV Document Profile.

Applications and devices that conform to the MPV Document Profile 1.0 specification will provide the user a consistent user experience around the handling of MPVdocuments (manifests).

SCHEMA NAMESPACE

The MPV Document Profile specification defines some schema, which uses the Document namespace.

Schema group	Namespace Identifier	Schema Location	Conventional Namespace Prefix
Document	http://ns.osta.org/mpv/document/	lax/profiles/document/impl/document.xsd	Mpvd:

The introductory schema information is expressed as follows.

```
<?xml version="1.0" encoding="UTF-8"?>
<xs:schema xmlns:mpvd="http://ns.osta.org/mpv/document/1.0/" xmlns:xs="http://www.w3.org/2001/XMLSchema"
elementFormDefault="qualified" attributeFormDefault="qualified">
```

PROFILE IDENTIFIER

This information must be present in the Profile section of the MPV Manifest.

MPV Document Profile Name	http://ns.osta.org/mpv/document/1.0/
---------------------------	---

EXAMPLE**2.4 MPV Document Profile**

DOW100-1 MPV Document Profile. The MPV Document profile MUST be implemented and declared.

This practice confirms that the manifest implements the MPV Document profile.

Example:

```
<file:Manifest
  mpvd:writtenBy="http://www.mycompany.com/myapp/1.05/"
  mpvd:documentIdRef="ID000001"
  xmlns:file="http://ns.osta.org/manifest/1.0/"
  xmlns:mpv="http://ns.osta.org/mpv/1.0/"
  xmlns:mpvp="http://ns.osta.org/mpv/presentation/1.0/"
  xmlns:mpvm="http://ns.osta.org/mpv/music/1.0/"
  xmlns:mpvd="http://ns.osta.org/mpv/document/1.0/"
  xmlns:nmf="http://ns.osta.org/nmf/1.0/" >
  <nmf:Metadata>
    <ManifestProperties xmlns="http://ns.osta.org/manifest/1.0/">
      <ProfileBag>
        <Profile>http://ns.osta.org/mpv/basic/1.0/</Profile>
        <Profile>http://ns.osta.org/mpv/presentation/1.0/</Profile>
        <Profile>http://ns.osta.org/mpv/music/1.0/</Profile>
        <Profile>http://ns.osta.org/mpv/document/1.0/</Profile>
        <Profile>http://ns.osta.org/mpv/playlists/1.0/</Profile>
      </ProfileBag>
    </ManifestProperties>
  </nmf:Metadata>
  ...
</file:Manifest>
```

Chapter 3: MPV Document Profile Schema

3.1 Attributes in <file:Manifest> element

3.1.1 mpvd:writtenBy attribute

DOW100-1 mpvd:writtenBy attribute. *The file:Manifest element MUST have the mpvd:writtenBy attribute, which identifies the application that wrote this specific MPV manifest. The attribute is updated everytime the manifest is modified in any way.*

This practice is to guarantee that a reader can quickly determine whether it knows the application that wrote the manifest. Because this attribute is in the opening element of the manifest, it enables easy transfer of the manifest processing to one of several possible readers that provide differing behaviours and levels of validation. This attribute can also be used by a MPV launcher to preferentially launch the application that wrote the manifest. Note that the value of the attribute MUST be a URN-style value to minimize the risk of value collision.

Example:

```
<file:Manifest
  mpvd:writtenBy="http://www.mycompany.com/myapp/1.05/"
  mpvd:documentIdRef="ID000001"
  xmlns:file="http://ns.osta.org/manifest/1.0/"
  xmlns:mpv="http://ns.osta.org/mpv/1.0/"
  xmlns:mpvp="http://ns.osta.org/mpv/presentation/1.0/"
  xmlns:mpvm="http://ns.osta.org/mpv/music/1.0/"
  xmlns:mpvd="http://ns.osta.org/mpv/document/1.0/"
  xmlns:nmf="http://ns.osta.org/nmf/1.0/" >
  ...
</file:Manifest>
```

3.1.2 mpvd:documentIdRef attribute

DOW100-Error! Bookmark not defined. mpvd:documentIdRef attribute. *The file:Manifest element SHOULD have the mpvd:documentIdRef attribute and MUST have the attribute if the manifest is derived from another manifest.*

This practice conforms to [MPVDoc] and is very useful for applications that are looking for the rich metadata information about the current document. For example, a typical use will be to look up the referenced mpv:Document asset, then look at its <mpv:Related mpv:relationship="derivedFrom"> element to locate a previous manifest from which the current manifest was derived.

Example:

```
<file:Manifest
  mpvd:writtenBy="http://www.mycompany.com/myapp/1.05/"
  mpvd:documentIdRef="ID000001"
  xmlns:file="http://ns.osta.org/manifest/1.0/"
  xmlns:mpv="http://ns.osta.org/mpv/1.0/"
  xmlns:mpvp="http://ns.osta.org/mpv/presentation/1.0/"
  xmlns:mpvm="http://ns.osta.org/mpv/music/1.0/"
  xmlns:mpvd="http://ns.osta.org/mpv/document/1.0/"
  xmlns:nmf="http://ns.osta.org/nmf/1.0/" >
...
</file:Manifest>
```

3.2 *mpv:Document Content*

3.2.1 mpv:InstanceID of the Manifest

DOW100-Error! Bookmark not defined. mpv:InstanceID of the Manifest. The mpv:Document asset representing the manifest itself MUST have the mpv:InstanceID element.

The mpv:InstanceID is a unique number for every manifest.

EXAMPLE:

```
<!-- This asset describes this very MPV Manifest -->
<mpv:Document mpv:id="ID000001">
  <mpv:InstanceID>urn.osta-org.mpv.uuid.23452234BDF9BBA934338DFBFFDE8342</mpv:InstanceID>
  <nmf:Metadata>
    <Properties xmlns="http://purl.org/dc/elements/1.1/"
    ...
    </Properties>
  </nmf:Metadata>
</mpv:Document>
```

3.2.2 Dublin Core Properties of the Manifest

DOW100-Error! Bookmark not defined. dc properties of the Manifest. The mpv:Document asset representing the manifest itself SHOULD have the dc properties to set important information about the manifest's content, including: creator, description, format, identifier, publisher, rights, title, created, modified.

The mpv:Document representing the MPV manifest itself can have any kind of data associated with it. Of principle interest are the Dublin Core properties are highly interchangeable.

The usage of the Dublin Core properties for the MPV Document profile are:

DC Elements:

Creator – plain text name of creator application or device

Description – any kind of description, possibly from a user

Format – the MIME type string “application/vnd.osta-org.mpv+xml”

Identifier – plain text of any kind

Publisher – plain text publisher info

Rights – plain text describing rights

Title – plain text for title

DC Terms:

Created

Modified

3.2.3 Locale of the Manifest

DOW100-Error! Bookmark not defined. Locale of the Manifest. The mpv:Document asset representing the manifest itself SHOULD have the dc:language element set to the default locale of the manifest’s content.

This practice conforms to [MPVDoc]. The MPV manifest is authored for a single “locale”, where a locale is a combination of language and territory, such as English-U.S. The locale of a manifest is recorded as a dc:language element of the manifest’s own mpv:Document asset. The default locale of all text in the manifest is identified by the dc:language element within the mpv:Document element representing the current manifest. A player MAY honor the use of dc:language for purposes of sorting, line wrapping, currency, and other values.

Example:

```
<file:Manifest
  mpvd:writtenBy="http://www.mycompany.com/myapp/1.05/"
  mpvd:documentIdRef="ID000001"
  xmlns:file="http://ns.osta.org/manifest/1.0/"
  xmlns:mpv="http://ns.osta.org/mpv/1.0/"
  xmlns:mpvp="http://ns.osta.org/mpv/presentation/1.0/"
  xmlns:mpvm="http://ns.osta.org/mpv/music/1.0/"
  xmlns:mpvd="http://ns.osta.org/mpv/document/1.0/"
  xmlns:nmf="http://ns.osta.org/nmf/1.0/" >
...
  <mpv:AssetList>
    <!-- This asset describes this very MPV Manifest -->
    <mpv:Document mpv:id="ID000001">
      <mpv:InstanceID>urn.osta-org.mpv.uuid.2234BDF9BBA934338DFBFFDE8342</mpv:InstanceID>
      <nmf:Metadata>
        <Properties xmlns="http://purl.org/dc/elements/1.1/"
...
          <language>en-US</language>
...
        </Properties>
      </nmf:Metadata>
    </mpv:Document>
  </file:Manifest>
```

3.3 Example

This is an example of the MPV Document Profile-conformant parts of a well-formed MPV manifest.

```
<?xml version="1.0" encoding="UTF-8"?>
<file:Manifest
  mpvd:writtenBy="http://www.mycompany.com/myapp/1.05/"
  mpvd:documentIdRef="ID000001"
  xmlns:file="http://ns.osta.org/manifest/1.0/"
  xmlns:mpv="http://ns.osta.org/mpv/1.0/"
  xmlns:mpvp="http://ns.osta.org/mpv/presentation/1.0/"
  xmlns:mpvm="http://ns.osta.org/mpv/music/1.0/"
  xmlns:mpvd="http://ns.osta.org/mpv/document/1.0/"
  xmlns:nmf="http://ns.osta.org/nmf/1.0/" >
  <nmf:Metadata>
    <ManifestProperties xmlns="http://ns.osta.org/manifest/1.0/">
      <ProfileBag>
        <Profile>http://ns.osta.org/mpv/basic/1.0/</Profile>
        <Profile>http://ns.osta.org/mpv/presentation/1.0/</Profile>
        <Profile>http://ns.osta.org/mpv/music/1.0/</Profile>
        <Profile>http://ns.osta.org/mpv/document/1.0/</Profile>
        <Profile>http://ns.osta.org/mpv/playlists/1.0/</Profile>
      </ProfileBag>
    </ManifestProperties>
  </nmf:Metadata>

  <mpv:AssetList>
    <!-- This asset describes this very MPV Manifest -->
    <mpv:Document mpv:id="ID000001">
      <mpv:InstanceID>urn.osta-org.mpv.uuid.2234BDF9BBA934338DFBFFDE8342</mpv:InstanceID>
      <nmf:Metadata>
        <Properties xmlns="http://purl.org/dc/elements/1.1/">
          <creator>MyCompany MyApp 1.0</creator>
          <description>this is a description</description>
          <language>en-US</language>
          <title>some title</title>
        </Properties>
        <Properties xmlns="http://purl.org/dc/terms/1.0/">
          <createDate></createDate>
          <modifiedDate>asdf </modifiedDate>
        </Properties>
      </nmf:Metadata>
      <mpv:Related mpv:relationship="derivedFrom">
        <mpv:DocumentRef mpv:idRef="ID000002"/>
      </mpv:Related>
    </mpv:Document>
    <!-- This asset describes the MPV Manifest from which the current one was derived -->
    <mpv:Document mpv:id="ID000002">
      <mpv:InstanceID>urn.osta-org.mpv.uuid.4583BDF9BBA934338DFBFF993493</mpv:InstanceID>
      <mpv:LastURL mpv:filesystem="NTFS">album002.pvm</mpv:LastURL>
    </mpv:Document>
    ...
  </mpv:AssetList>
</file:Manifest>
```

Chapter 4: MPV Document Profile Practices

4.1 Chaining to an Earlier MPV Manifest

4.1.1 Writer of the Manifest

DOW100-Error! Bookmark not defined. Locale of the Manifest. The mpv:Document asset representing the manifest itself SHOULD have the dc:language element set to the default locale of the manifest's content.

This practice conforms to [MPVDoc]. The MPV manifest is authored for a single “locale”, where a locale is a combination of language and territory, such as English-U.S. The locale of a manifest is recorded as a dc:language element of the manifest’s own mpv:Document asset. The default locale of all text in the manifest is identified by the dc:language element within the mpv:Document element representing the current manifest. A player MAY honor the use of dc:language for purposes of sorting, line wrapping, currency, and other values.

...

Appendix I: References

[DATETIME]

"Date and Time Formats", M. Wolf, C. Wicksteed. W3C Note 27 August 1998,
Available at: <http://www.w3.org/TR/NOTE-datetime>

[DC]

"Dublin Core Metadata Initiative", a Simple Content Description Model for Electronic Resources.
Available at <http://purl.org/DC/>

[DC-NMF]

"Dublin Core Normalized Metadata Format Profile Specification 1.0"; OSTA, 2002.
Available at <http://www.osta.org/mpv/>

[DCF-1999]

"Design rule for Camera File system, Version 1.0", JEIDA standard, English Version 1999.1.7, Japanese Electronic Industry Development Association (JEIDA).

[DIG35-2001]

"DIG35 Specification – Metadata for Digital Images, Version 1.1", June 18, 2001, International Imaging Industry Association (I3A) [recently formed by combining the Digital Imaging Group and PIMA].
<http://www.i3a.org>

[ISO8601]

"Data elements and interchange formats - Information interchange - Representation of dates and times", International Organization for Standardization, 1998.

[ISO10646]

""Information Technology -- Universal Multiple-Octet Coded Character Set (UCS) -- Part 1: Architecture and Basic Multilingual Plane", ISO/IEC 10646-1:1993. This reference refers to a set of codepoints that may evolve as new characters are assigned to them. This reference therefore includes future amendments as long as they do not change character assignments up to and including the first five amendments to ISO/IEC 10646-1:1993. Also, this reference assumes that the character sets defined by ISO 10646 and Unicode remain character-by-character equivalent. This reference also includes future publications of other parts of 10646 (i.e., other than Part 1) that define characters in planes 1-16. "

[JFIF]

"JPEG File Interchange Format, Version 1.02"; Eric Hamilton, September 1992.
Available at <http://www.w3.org/Graphics/JPEG/jfif.txt>

[MANIFEST]

"XML Manifest Specification 1.0"; OSTA, 2002.,
Available at <http://www.osta.org/mpv/>

[MD5]

"The MD5 Message-Digest Algorithm", RFC 1321, April 1992.
Available at <http://www.ietf.org/rfc/rfc1321.txt>. Further information and source code available at <http://userpages.umbc.edu/~mabzug1/cs/md5/md5.html>

[MIME-2]

"RFC 2046: Multipurpose Internet Mail Extensions (MIME) Part Two: Media Types"; N. Freed, N. Borenstein, November 1996.
Available at <ftp://ftp.isi.edu/in-notes/rfc2046.txt>

[MIMETYPES-REG]

IANA official registry of MIME media types
Available at <http://www.isi.edu/in-notes/iana/assignments/media-types/media-types>

[MPVBasic]

"MPV – Basic Profile Specification", OSTA, 2002,
Available at <http://www.osta.org/mpv/>

[MPVCore]

"MPV Core Specification 1.0"; OSTA, 2002.,
Available at <http://www.osta.org/mpv/>

[MPVDoc]

"MPV Document Profile Specification 1.0"; OSTA, 2003.,
Available at <http://www.osta.org/>

[MPVPres]

"MPV Presentation Profile Specification 1.0"; OSTA, 2002.,
Available at <http://www.osta.org/mpv/>

[NMF]

"Normalized Metadata Format Specification 1.0"; OSTA, 2002.,
Available at <http://www.osta.org/mpv/>

[PNG-MIME]

"Registration of new Media Type image/png"; Glenn Randers-Pehrson, Thomas Boutell, 27 July 1996.
Available at <ftp://ftp.isi.edu/in-notes/iana/assignments/media-types/image/png>

[PNG-REC]

"PNG (Portable Network Graphics) Specification Version 1.0"; Thomas Boutell (Ed.).
Available at <http://www.w3.org/TR/REC-png>

[QT]

"QuickTime Movie File Format Specification", May 1996.
Available at <http://developer.apple.com/techpubs/quicktime/qtdevdocs/REF/refFileFormat96.htm>

[QT-MIME]

"Registration of new MIME content-type/subtype"; Paul Lindner, 1993.
Available at <http://www.isi.edu/in-notes/iana/assignments/media-types/video/quicktime>

[RDFsyntax]

"Resource Description Framework (RDF) Model and Syntax Specification", Ora Lassila and Ralph R. Swick. W3C Recommendation 22 February 1999, Available at <http://www.w3.org/TR/REC-rdf-syntax/>

[RDFschema]

"Resource Description Framework (RDF) Schema Specification", Dan Brickley and R.V. Guha. W3C Proposed Recommendation 03 March 1999, Available at <http://www.w3.org/TR/PR-rdf-schema/>

[RFC1766]

"Tags for the Identification of Languages", H. Alvestrand, March 1995. Available at <ftp://ftp.isi.edu/in-notes/rfc1766.txt>

[RFC2119]

"Key words for use in RFCs to Indicate Requirement Levels", S. Bradner, IETF RFC 2119 <http://www.ietf.org/rfc/rfc2119.txt>

[URI]

"Uniform Resource Identifiers (URI): Generic Syntax", T. Berners-Lee, R. Fielding, L. Masinter, August 1998. Note that RFC 2396 updates [RFC1738] and [RFC1808].

[UCS-2]

16-bit encoding of ISO 10646, commonly known as the Unicode character set.

[UTF-8]

Yergeau, F., "UTF-8, a transformation format of ISO 10646", RFC 2279, January 1998.

[W3C-NSURI]

"URIs for W3C namespaces". Policy and administrative issue for W3C, Oct. 1999. Available at <http://www.w3.org/1999/10/nsuri>

[XML10]

"Extensible Markup Language (XML) 1.0" T. Bray, J. Paoli and C.M. Sperberg-McQueen. W3C Recommendation 10 February 1998, Available at <http://www.w3.org/TR/REC-xml>

[XML-NS]

"Namespaces in XML", Tim Bray, Dave Hollander, Andrew Layman. W3C Recommendation 14 January 1999, Available at <http://www.w3.org/TR/REC-xml-names>

[XSCHEMA]

"XML Schema, XML Schema Part 1: Structures". W3C Working Draft, work in progress. Available at <http://www.w3.org/TR/xmlschema-1/>

[XSL]

"Extensible Stylesheet Language (XSL) Specification", Stephen Deach. W3C Working Draft, work in progress. Available at <http://www.w3.org/TR/xsl/>