



Music/Photo/Video

Manifest, Metadata and Practices for Digital Media Collections



Music Profile Specification

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This document is available at <http://www.osta.org/mpv/mpvmbrrs/specs/MPVMusicProf-Spec-0.21WD.PDF>

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ABSTRACT

The Music Profile specification defines metadata and practices for processing and playback of collections of digital music collections stored on an optical disc and other storage media such as memory cards and computer harddrives or exchanged via internet protocols.

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Contents

Contents	3
Chapter 1: Introduction	3
1.1 Executive Summary	3
1.2 Terms of Use	3
Chapter 2: MPV Music Profile 1.0.....	3
Chapter 3: MPV Music Schemas.....	3
3.1 Introduction.....	3
3.2 Schema Information.....	3
3.3 MPV Music Profile Metadata Introduction	3
3.4 Use of Dublin Core Metadata	3
3.5 Music-specific Metadata	3
3.6 MPV Music Profile Mapping To Other Music Metadata Formats.....	3
3.6.1 ID3 and OSTA MPV Music Profile.....	3
3.6.2 WinAMP M3U and OSTA MPV Music Profile	3
3.6.3 OSTA MultiAudio and OSTA MPV Music Profile	3
3.7 Use of Existing MPV Specifications.....	3
3.8 <mpvm:MusicProperties> Music Metadata.....	3
Chapter 4: MPV Music Profile Practices	3
4.1 Best Practices for Linking Manifests and Albums	3
4.2 Best Practices for Presenting a Manifest.....	3
4.3 Best Practices for Playing	3
4.4 Best Practices for Browsing.....	3
4.5 Best Practices for Supported Formats	3
4.6 Examples	3
Appendix I: References	3

Chapter 1: Introduction

1.1 Executive Summary

Music/Photo/Video (MPV) is an open specification that makes easier the representation, exchange, processing and playback of collections of digital media content, including stills, stills with audio, still sequences, video clips, and audio clips.

Applications and devices and users that use Music/Photo/Video benefit even when they only interact with music and audio in basic ways; such as personal music collections that can be burned on CDs by many software applications.

Music/Photo/Video uses a simple text-based format that is easily understood and also easy to produce and consume programmatically in firmware or computer software. Music/Photo/Video does *not* tackle a large number of problems at once – instead, it focuses on a few key problems that it solves with simple but robust approaches. Where possible and practical, it supports use of established specifications and standards.

The development and promotion of Music/Photo/Video is sponsored by the Optical Storage Technology Association (OSTA). The specification development and promotion process is open to all members; all organizations and individuals are welcomed as members. The association includes over 50 member companies from all over the world that produce products that collectively represent a majority marketshare in mainstream recordable optical storage categories.

Music/Photo/Video is not only a specification. It also includes a compliance test suite and processes, compliance testing materials, a logo program for compliant products, and a website. These materials and procedures are made available and administered by OSTA at a modest cost. OSTA charges no royalty for use of the specification or logo. In addition, sample open-source code implementations of key steps in processing MPV content may be contributed by interested parties.

The specification is being developed in phases and results in "profiles". Each profile in Music/Photo/Video defines only those formats and practices that are necessary for the key tasks targeted by the profile. A number of candidate profiles for development have been identified, including:

- **Basic Profile:** key tasks: defining content collections, renditions, identifiers, and access to other metadata
- **Presentation Profile:** two key tasks: viewing a slideshow and interactively browsing content collections
- **Photo/Video Profile:** two key tasks: viewing a slideshow and interactively browsing content collections
- **Music Profile:** key tasks: listening to a music collection and interactively browsing content collections
- **Internet Profile:** key task: interacting with and sending collections of photo-video content over the web and email
- **Disc Archive Profile:** key task: interoperability of photo archives on recordable optical discs
- **Editing Profile:** key task: modifying existing collections of photo-video content.
- **Printing Profile:** key task: printing collections of photo-video content
- **Container Profile:** key task: storing photo-video content collections in containers

Underlying all profiles is the “Core”, which defines the overall framework of all MPV profiles. The Basic and Presentation Profiles, for example, build on the Core and, when implemented in consumer electronics devices like DVD players or in application software, can provide compelling playback of photo-video slideshows and interactive browsing of photo-video content. It can also facilitate interchange of photo-video content between applications.

Music/Photo/Video technology has three central components: Collections, Metadata, and Identification. Each of these make reference in various ways to data files containing the photo-video content. This information may be augmented by information from various profiles. For example, the Presentation profile provides information that may be used by player applications and devices to provide an attractive playback user experience.

1.2 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 Music/Photo/Video specification document for a precise and legal description.

The Music/Photo/Video 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.

Music/Photo/Video is not only a specification. It also includes a compliance test suite and processes, compliance testing materials, a logo program for compliant products, and a website. These materials and procedures are made available and administered by OSTA at a modest cost. OSTA charges no royalty for use of the specification or logo. In addition, some sample open-source code implementations of key steps in processing MPV content may be contributed by interested parties.

Chapter 2: MPV Music Profile 1.0

The MPV Music Profile 1.0 supports the following key tasks: defining collections of music, organizing music into albums and playlists, listening sequentially or shuffled to an album / playlist, and interactively browsing the album. An album is a presentation-focused view of the collections of music assets defined by the MPV Core Specification [MPV-Core].

The MPV Music Profile 1.0 consists of the following modules and practices, which are specified in detail separately in this document.

- MPV Core Specification 1.0
- MPV Presentation Profile Specification 1.0
- MPV Music Profile Specification 1.0

The MPV Music Profile is expected to be supported by most MPV-aware applications and devices that represent and present collections of music to users and provides the basis for interoperability of collections across all range of storage media, devices, applications, and services.

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

COMPATIBILITY

The MPV Music Profile 1.0 is an extension of the MPV Core Specification 1.0 and is fully compatible with the MPV framework it establishes.

SCHEMA NAMESPACE

This information must be present in the namespace declarations in the MPV Manifest.

Schema	Namespace Identifier	Schema Location	Conventional Namespace Prefix
Music Profile	http://ns.osta.org/mpv/music/1.0/	lax/profiles/music/profile.xsd	mpvm:

PROFILE IDENTIFIER

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

Music Profile Name	http://ns.osta.org/mpv/music/1.0/
--------------------	---

EXAMPLE

```
<?xml version="1.0" encoding="UTF-8"?>
<file:Manifest
  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: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>
      </ProfileBag>
    </ManifestProperties>
  </nmf:Metadata>
  ...
</file:Manifest>
```


Chapter 3: MPV Music Schemas

3.1 Introduction

The MPV Music Profile leverages the existing MPV Core specification and Basic and Presentation Profiles for creating collections of music and organizing them into albums / playlists. The MPV Music Profile augments this framework with additional metadata specific to music.

The Music Profile provides a basic set of metadata with represents data and conventions used by the software applications that create and play compressed audio music on PCs and music publishers of music CDs. It also leverages the MultiAudio specification already developed by OSTA [MultiAudio]. The music metadata that may be represented using the MPV Music Profile includes the following:

Music Asset (“Song”, “Track”): Location, Title, Principal artist, Album title, Genre, Playing time, Year recorded, Original order, Artwork, Videos, Performed by, Music by, Lyrics by, Arranged by, More info, , Average encoded bitrate, Lyrics, Rights, Identifier, Description, Format,

Album (“Playlist”) of Music: Title, Principal Artist, Description, Identifier, Artwork, Music Entries

3.2 Schema Information

The MPV presentation module uses the following schemas:

Schema group	Namespace Identifier	Conventional Namespace Prefix
Music	http://ns.osta.org/mpv/music/1.0/	mpvm:

3.3 Use of Existing MPV Specifications

The MPV Music Profile uses MPV in a manner consistent with these the existing MPV Core specification and the MPV Basic Profile and Presentation Profile specifications. For metadata, it incorporates the MPV Dublin Core NMF specification for those properties that can be represented in that manner.

3.4 MPV Music Profile Metadata Introduction

<i>Metadata</i>	<i>MPV Music Profile</i>	<i>Discussion</i>
Music Asset (“Song”, “Track”)	mpv:Audio asset	
Pathname	mpv:Audio mpv:LastURL	one or more pathnames that should resolve to the audio file
Title	mpv:Audio nmf:Metadata dc:title	
Genre	mpvm:MusicProperties:Genre	
Principal artist	mpvm:MusicProperties:PrincipalArtist	
Album Title	mpvm:MusicProperties:AlbumTitle	
Year or Date Recorded	mpvm:MusicProperties:Recorded	recorded date
Identifier	mpv:Audio nmf:Metadata dc:identifier	Catalog number, UPC, etc. A text string, not classified in any way and not guaranteed unique.
Description	mpv:Audio nmf:Metadata dc:description	Commentary, message, description
Format	mpv:Audio nmf:Metadata dc:format	use MPV-provided list of well-known MIME types
Asset artwork	mpv:Audio mpv:Related mpv:relationship=”urn:osta-org:mpv:music:artwork” mpv:StillRef	Refers to an image or other content that is an asset’s artwork. ISSUE: other media types for artwork?
Video of the asset	mpv:Audio mpv:Rendition mpv:renditionType=”show” mpv:VideoRef	
Performed by	mpvm:MusicProperties:PerformedBy	Performer Names
Music by	mpvm:MusicProperties:MusicBy	ComposerName
Lyrics by	mpvm:MusicProperties:LyricsBy	SongwriterName
Arranged by	mpvm:MusicProperties:ArrangedBy	ArrangerName
Online Info	mpvm:MusicProperties:MoreInfoURL	
Playing Time	mpvm:MusicProperties:PlayingTime	in seconds, duration
Track Order	mpvm:MusicProperties:OrigIndex	sequence order of the audio track on the original media, such as an audio CD. Starts with 1, not 0.
Average Encoded Bitrate	mpvm:MusicProperties:AvgEncodedBitrate	
Lyrics	mpvm:MusicProperties:Lyrics	Time offset, text, language??
Extra Data	mpv:Metadata and nmf:Metadata	
Album (“Playlist”) of Music	mpvp:Album	
Number of Entries	(implicit)	

Title	dc:title	
Principal Artist	dc:creator	
Description	dc:description	
Identifier	dc:identifier	catalog number, IDC
Artwork	mpvp:Album:mpvp:Related mpvp:relationshipType="artwork"	
Playlist Items	mpvp:Album:mpvp:Foreground contents	
Extra Data	mpv:Metadata and nmf:Metadata anywhere	

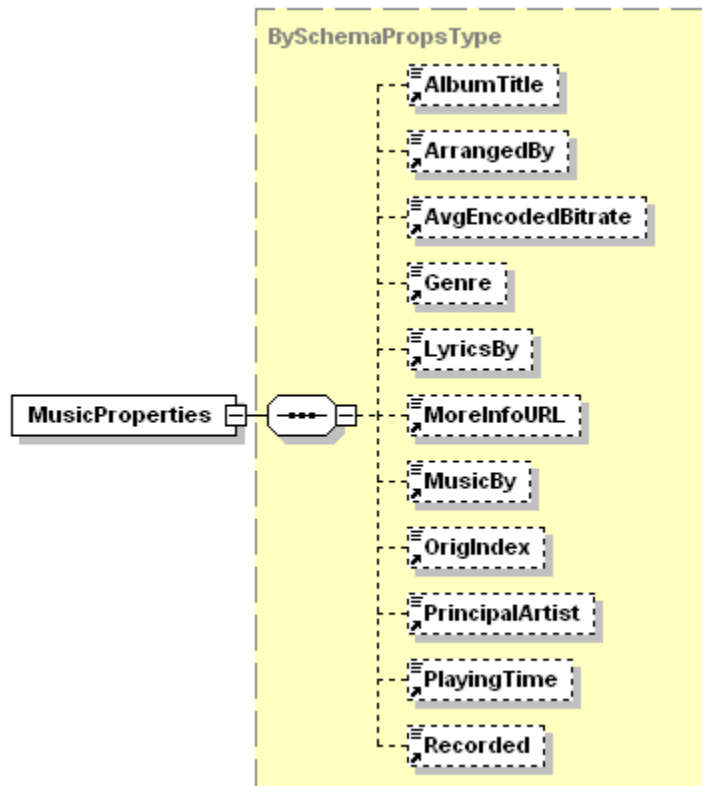
3.5 Use of Dublin Core Metadata

Music Asset (“Song”, “Track”)	mpv:Audio asset	
Title	mpv:Audio nmf:Metadata dc:title	
Identifier	mpv:Audio nmf:Metadata dc:identifier	Catalog number, UPC, etc. A text string, not classified in any way and not guaranteed unique.
Description	mpv:Audio nmf:Metadata dc:description	Commentary, message, description
Format	mpv:Audio nmf:Metadata dc:format	use MPV-provided list of well-known MIME types
Performed by	mpv:Audio nmf:Metadata dc:creator	Performer Names

Album (“Playlist”) of Music	mpvp:Album	
Title	dc:title	
Principal Artist	dc:creator	
Description	dc:description	
Identifier	dc:identifier	catalog number, IDC

3.6 Music-specific Metadata

MPVM: MUSIC PROPERTIES



```

<?xml version="1.0" encoding="UTF-8"?>
<xs:schema targetNamespace="http://ns.osta.org/mpv/music/1.0/"
xmlns="http://ns.osta.org/mpv/music/1.0/" xmlns:nmf="http://ns.osta.org/nmf/1.0/tools/"
xmlns:xs="http://www.w3.org/2001/XMLSchema" xmlns:nmf="http://ns.osta.org/nmf/1.0/"
xmlns:mpvmLyric="http://ns.osta.org/mpv/music/1.0/lyric/" elementFormDefault="qualified"
attributeFormDefault="qualified">
  <xs:import namespace="http://ns.osta.org/nmf/1.0/" schemaLocation="../../imports/nmf/base.xsd"/>
  <xs:annotation>
    <xs:documentation>The MPV Music Properties schema</xs:documentation>
  </xs:annotation>
  <!--
    name for BySchemaProperties element
  -->
  <xs:element name="MusicProperties" type="BySchemaPropsType"
substitutionGroup="nmf:BySchemaPropsBase"/>
  <!--
    top-level schema element type
  -->
  <xs:complexType name="BySchemaPropsType">
    <xs:complexContent>
      <xs:extension base="nmf:BySchemaPropsType">
        <xs:sequence>
          <xs:element ref="AlbumTitle" minOccurs="0"/>
          <xs:element ref="ArrangedBy" minOccurs="0"/>
          <xs:element ref="AvgEncodedBitrate" minOccurs="0"/>
          <xs:element ref="Genre" minOccurs="0"/>
          <xs:element ref="LyricsBy" minOccurs="0"/>
          <xs:element ref="MoreInfoURL" minOccurs="0"/>
        </xs:sequence>
      </xs:extension>
    </xs:complexContent>
  </xs:complexType>

```

```

        <xs:element ref="MusicBy" minOccurs="0"/>
        <xs:element ref="OrigIndex" minOccurs="0"/>
        <xs:element ref="PrincipalArtist" minOccurs="0"/>
        <xs:element ref="PlayingTime" minOccurs="0"/>
        <xs:element ref="Recorded" minOccurs="0"/>
    </xs:sequence>
</xs:extension>
</xs:complexContent>
</xs:complexType>

<xs:element name="AlbumTitle" type="AlbumTitleType"/>
<xs:complexType name="AlbumTitleType">
    <xs:simpleContent>
        <xs:extension base="xs:string"/>
    </xs:simpleContent>
</xs:complexType>

<xs:element name="ArrangedBy" type="ArrangedByType"/>
<xs:complexType name="ArrangedByType">
    <xs:simpleContent>
        <xs:extension base="xs:string"/>
    </xs:simpleContent>
</xs:complexType>

<xs:element name="AvgEncodedBitrate" type="AvgEncodedBitrateType"/>
<xs:complexType name="AvgEncodedBitrateType">
    <xs:simpleContent>
        <xs:extension base="xs:int"/>
    </xs:simpleContent>
</xs:complexType>

<xs:element name="Genre" type="GenreType"/>
<xs:simpleType name="GenreType">
    <xs:union memberTypes="GenreBaseType xs:anyURI"/>
</xs:simpleType>
<xs:simpleType name="GenreBaseType">
    <xs:restriction base="xs:string">
        <xs:enumeration value="Acid"/>
        <xs:enumeration value="Acid Jazz"/>
        <xs:enumeration value="Acid Punk"/>
        <xs:enumeration value="AlternRock"/>
        <xs:enumeration value="Alternative"/>
        <xs:enumeration value="Ambient"/>
        <xs:enumeration value="Bass"/>
        <xs:enumeration value="Blues"/>
        <xs:enumeration value="Cabaret"/>
        <xs:enumeration value="Christian Rap"/>
        <xs:enumeration value="Classic Rock"/>
        <xs:enumeration value="Classical"/>
        <xs:enumeration value="Comedy"/>
        <xs:enumeration value="Country"/>
        <xs:enumeration value="Cult"/>
        <xs:enumeration value="Dance"/>
        <xs:enumeration value="Darkwave"/>
        <xs:enumeration value="Death Metal"/>
        <xs:enumeration value="Disco"/>
    </xs:restriction>
</xs:simpleType>

```

```
<xs:enumeration value="Dream"/>
<xs:enumeration value="Electronic"/>
<xs:enumeration value="Ethnic"/>
<xs:enumeration value="Euro-Techno"/>
<xs:enumeration value="Eurodance"/>
<xs:enumeration value="Funk"/>
<xs:enumeration value="Fusion"/>
<xs:enumeration value="Game"/>
<xs:enumeration value="Gangsta"/>
<xs:enumeration value="Gospel"/>
<xs:enumeration value="Gothic"/>
<xs:enumeration value="Grunge"/>
<xs:enumeration value="Hard Rock"/>
<xs:enumeration value="Hip-Hop"/>
<xs:enumeration value="House"/>
<xs:enumeration value="Industrial"/>
<xs:enumeration value="Instrumental"/>
<xs:enumeration value="Instrumental Pop"/>
<xs:enumeration value="Instrumental Rock"/>
<xs:enumeration value="Jazz"/>
<xs:enumeration value="Jazz+Funk"/>
<xs:enumeration value="Jungle"/>
<xs:enumeration value="Lo-Fi"/>
<xs:enumeration value="Meditative"/>
<xs:enumeration value="Metal"/>
<xs:enumeration value="Musical"/>
<xs:enumeration value="Native American"/>
<xs:enumeration value="New Age"/>
<xs:enumeration value="New Wave"/>
<xs:enumeration value="Noise"/>
<xs:enumeration value="Oldies"/>
<xs:enumeration value="Other"/>
<xs:enumeration value="Polka"/>
<xs:enumeration value="Pop"/>
<xs:enumeration value="Pop-Folk"/>
<xs:enumeration value="Pop/Funk"/>
<xs:enumeration value="Pranks"/>
<xs:enumeration value="Psychadelic"/>
<xs:enumeration value="Punk"/>
<xs:enumeration value="R and B"/>
<xs:enumeration value="Rap"/>
<xs:enumeration value="Rave"/>
<xs:enumeration value="Reggae"/>
<xs:enumeration value="Retro"/>
<xs:enumeration value="Rock"/>
<xs:enumeration value="Rock and Roll"/>
<xs:enumeration value="Showtunes"/>
<xs:enumeration value="Ska"/>
<xs:enumeration value="Soul"/>
<xs:enumeration value="Sound Clip"/>
<xs:enumeration value="Soundtrack"/>
<xs:enumeration value="Southern Rock"/>
<xs:enumeration value="Space"/>
<xs:enumeration value="Techno"/>
<xs:enumeration value="Techno-Industrial"/>
<xs:enumeration value="Top 40"/>
```

```

        <xs:enumeration value="Trailer"/>
        <xs:enumeration value="Trance"/>
        <xs:enumeration value="Tribal"/>
        <xs:enumeration value="Trip-Hop"/>
        <xs:enumeration value="Vocal"/>
    </xs:restriction>
</xs:simpleType>

<xs:element name="LyricsBy" type="LyricsByType"/>
<xs:complexType name="LyricsByType">
    <xs:simpleContent>
        <xs:extension base="xs:string"/>
    </xs:simpleContent>
</xs:complexType>

<xs:element name="MoreInfoURL" type="MoreInfoURLType"/>
<xs:complexType name="MoreInfoURLType">
    <xs:simpleContent>
        <xs:extension base="xs:string"/>
    </xs:simpleContent>
</xs:complexType>

<xs:element name="MusicBy" type="MusicByType"/>
<xs:complexType name="MusicByType">
    <xs:simpleContent>
        <xs:extension base="xs:string"/>
    </xs:simpleContent>
</xs:complexType>

<xs:element name="OrigIndex" type="OrigIndexType"/>
<xs:complexType name="OrigIndexType">
    <xs:simpleContent>
        <xs:extension base="xs:int"/>
    </xs:simpleContent>
</xs:complexType>

<xs:element name="PrincipalArtist" type="PrincipalArtistType"/>
<xs:complexType name="PrincipalArtistType">
    <xs:simpleContent>
        <xs:extension base="xs:string"/>
    </xs:simpleContent>
</xs:complexType>

<xs:element name="PlayingTime" type="PlayingTimeType"/>
<xs:complexType name="PlayingTimeType">
    <xs:simpleContent>
        <xs:extension base="xs:time"/>
    </xs:simpleContent>
</xs:complexType>

<xs:element name="Recorded" type="RecordedType"/>
<xs:complexType name="RecordedType">
    <xs:simpleContent>
        <xs:extension base="xs:date"/>
    </xs:simpleContent>
</xs:complexType>

```

</xs:schema>

3.7 MPV Music Profile Example

```

<?xml version="1.0" encoding="UTF-8"?>
<file:Manifest 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:dc="http://ns.osta.org/nmf/1.0/dc/"
  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>
      </ProfileBag>
    </ManifestProperties>
  </nmf:Metadata>
  <mpvp:Album>
    <nmf:Metadata>
      <dc:Properties>
        <dc:description>14 swing classics re-recorded in the '50s by th original artists
for great sound with all the integrity and excitement of the original
performances.</dc:description>
        <dc:identifier>7243 5 21223 2 5 Capitol Jazz</dc:identifier>
        <dc:rights>(P) and (C) 1999 Capitol Records, Inc. All rights
reserved.</dc:rights>
        <dc:title/>
      </dc:Properties>
      <mpvm:MusicProperties>
        <mpvm:AlbumTitle>Great SWING CLASSICS in HI-FI</mpvm:AlbumTitle>
        <mpvm:Genre>Jazz</mpvm:Genre>
        <mpvm:MoreInfoURL>www.bluenote.com</mpvm:MoreInfoURL>
      </mpvm:MusicProperties>
    </nmf:Metadata>
    <mpvp:Foreground>
      <mpv:AudioRef mpv:idRef="01-GREAT-SWING-CLASSICS.WMA-20021202031833-a"/>
      <mpv:AudioRef mpv:idRef="02-GREAT-SWING-CLASSICS.WMA-20021202031833-a"/>
    </mpvp:Foreground>
  </mpvp:Album>
  <mpv:AssetList>
    <mpv:Audio mpv:id="01-GREAT-SWING-CLASSICS.WMA-20021202031833-a">
      <nmf:Metadata>
        <dc:Properties>
          <dc:creator>Benny Goodman and his Orchestra</dc:creator>
          <dc:description/>
          <dc:format>audio/x-ms-wma</dc:format>
          <dc:identifier/>
          <dc:title>Jumpin' At The Woodside</dc:title>
        </dc:Properties>
        <mpvm:MusicProperties>

```



```

<mpvm:AlbumTitle>Great SWING CLASSICS in HI-FI</mpvm:AlbumTitle>
<mpvm:PrincipalArtist>Benny Goodman</mpvm:PrincipalArtist>
<mpvm:MusicBy>Count Basie</mpvm:MusicBy>
<mpvm:ArrangedBy>Count Basie;Jimmy Mundy</mpvm:ArrangedBy>
<mpvm:AlbumTitle>Great SWING CLASSICS in HI-FI</mpvm:AlbumTitle>
<mpvm:Recorded>1954-11-09</mpvm:Recorded>
<mpvm:Genre>Jazz</mpvm:Genre>
<mpvm:OrigIndex>1</mpvm:OrigIndex>
<mpvm:PlayingTime>00:03:28</mpvm:PlayingTime>
</mpvm:MusicProperties>
</nmf:Metadata>
<mpv:LastURL>01 Great Swing Classics.wma</mpv:LastURL>
</mpv:Audio>
<mpv:Audio mpv:id="02-GREAT-SWING-CLASSICS.WMA-20021202031833-a">
  <nmf:Metadata>
    <dc:Properties>
      <dc:creator>Duke Ellington and his Orchestra</dc:creator>
      <dc:description/>
      <dc:format>audio/x-ms-wma</dc:format>
      <dc:identifier/>
      <dc:title>Harlem Air Shaft</dc:title>
    </dc:Properties>
    <mpvm:MusicProperties>
      <mpvm:AlbumTitle>Great SWING CLASSICS in HI-FI</mpvm:AlbumTitle>
      <mpvm:PrincipalArtist>Duke Ellington</mpvm:PrincipalArtist>
      <mpvm:MusicBy>Duke Ellington</mpvm:MusicBy>
      <mpvm:AlbumTitle>Great SWING CLASSICS in HI-FI</mpvm:AlbumTitle>
      <mpvm:Recorded>1955-11-17</mpvm:Recorded>
      <mpvm:Genre>Jazz</mpvm:Genre>
      <mpvm:OrigIndex>2</mpvm:OrigIndex>
      <mpvm:PlayingTime>00:03:54</mpvm:PlayingTime>
    </mpvm:MusicProperties>
  </nmf:Metadata>
  <mpv:LastURL>02 Great Swing Classics.wma</mpv:LastURL>
</mpv:Audio>
</mpv:AssetList>
</file:Manifest>

```

3.8 MPV Music Profile Mapping To Other Music Metadata Formats

3.8.1 ID3 and OSTA MPV Music Profile

The ID3 specifications are popular metadata representations for music. The OSTA MPV Music Profile specification provides similar capabilities within the context of the XML-based MPV specification framework.

The following mapping table can be used to associate ID3V1.0 and V1.1 terms and concepts with MPV Music Profile terms and concepts. ID3V2.0 provides much more extensive metadata and is not supported with the MPV Music Profile 1.0.

<i>ID3</i>	<i>MPV Music Profile</i>	<i>Discussion</i>
ID3V1	All specified under	

	mpv:Audio nmf:Metadata	
Song title	dc:title	
Artist	dc:creator	mpvm:MusicProperties:PrincipalArtist can also be used.
Album	mpvm:MusicProperties:AlbumTitle	
Year	mpvm:MusicProperties:Recorded	
Comment	dc:description	
Genre	mpvm:MusicProperties:Genre	
ID3V1.1	All specified under mpv:Audio nmf:Metadata	
Song title	dc:title	
Artist	dc:creator	mpvm:MusicProperties:PrincipalArtist can also be used.
Album	mpvm:MusicProperties:AlbumTitle	
Year	mpvm:MusicProperties:Recorded	
Comment	dc:description	
Album Track	mpvm:MusicProperties:OrigIndex	
Genre	mpvm:MusicProperties:Genre	

3.8.2 WinAMP M3U and OSTA MPV Music Profile

The WinAMP M3U playlist is commonly encountered. The following illustrates mapping M3U playlist to the MPV Music Profile.

<i>M3U Playlist</i>	<i>MPV Music Profile</i>	<i>Discussion</i>
Song title	mpv:Audio nmf:Metadata dc:title	
Filename	mpv:Audio mpv:LastURL	
Duration	mpvm:MusicProperties:PlayingTime	

3.8.3 OSTA MultiAudio and OSTA MPV Music Profile

The OSTA MultiAudio specification provides a CD or DVD table of contents and playlist representation for compressed audio content on data discs. This binary format is suitable for implementation in very resource-constrained devices.

The OSTA MPV Music Profile specification provides similar capabilities within the context of the XML-based MPV specification framework. This allows a single consistent multimedia album format to span music, photo, and video content. For consumer electronics devices able to provide an implementation of the MPV framework, the MPV Music Profile offers a means to support all multimedia content within a constant framework and single firmware implementation.

The following mapping table can be used to associate MultiAudio terms and concepts with MPV Music Profile terms and concepts:

<i>MultiAudio</i>	<i>MPV Music Profile</i>	<i>Discussion</i>
TrackEntry	mpv:Audio asset	
Pathname	mpv:Audio mpv:LastURL	
Track Name	dc:title	

Performer Name	dc:creator	mpvm:MusicProperties:PrincipalArtist can also be used to refine dc:creator.
Composer Name	mpvm:MusicProperties:MusicBy	
Songwriter Name	mpvm:MusicProperties:LyricsBy	
ArrangerName	mpvm:MusicProperties:ArrangedBy	
AlbumName	mpvm:MusicProperties:AlbumTitle	
Genre	mpvm:MusicProperties:Genre	
Playing Time	mpvm:MusicProperties:PlayingTime	
Year Recorded	mpvm:MusicProperties:Recorded	
Track Order	mpvm:MusicProperties:OrigIndex	
Number of Channels		
Average Encoded Bitrate	mpvm:MusicProperties:AvgEncodedBitrate	
Maximum Bitrate		
Sample Rate		
Extra Data	mpv:Metadata and nmf:Metadata	
Playlist	mpvp:Album	
Number of Tracks	-- (implicit)	
Playlist Name	dc:title	
Playlist Description	dc:description	
Track Indexes	mpvp:Album:Foreground contents	
Extra Data	mpv:Metadata and nmf:Metadata	
Playlist Directory	mpvp:Album	
Name	dc:title	
Description	dc:description	
Tracklist Pathnames	mpvp:AlbumRef or mpv:ManifestLinkRef in the mpvp:Album:Foreground	
Playlist Indexes	mpvp:AlbumRef or mpv:ManifestLinkRef in the mpvp:Album:Foreground	
Extra Data	mpv:Metadata and nmf:Metadata	
TOC_Header	file:Manifest nmf:Metadata	
Version Number	encoded into profile and namespace identifiers	
UUID	mpvId:InstanceID	
Volume Name	dc:title	
Data Preparer Identifier		
Publisher Identifier	dc:publisher	
Copyright	dc:rights	
Creation Date and Time	dcterms:created	
Modification Date and Time	dcterms:modified	
Effective Date and Time	dcterms:issued	
Expiration Date and Time		
Number of Playlist Directories	implicit	
Number of Tracks	implicit	
Number of Playlists	implicit	
Extra Data	mpv:Metadata and nmf:Metadata	

3.9 <mpvm:MusicProperties> Music Metadata

The Music Profile defines a schema for music properties. This schema can be used on all audio assets by specifying the root element of the mpvm schema as the only child of the nmf:Metadata element.

The guiding practice for applications and devices that process and present MPV music content based on this schema is that music properties on an mpvp:Album apply also to the tracks contained by that album.

Chapter 4: MPV Music Profile Practices

...

4.1 Best Practices for Linking Manifests and Albums

...

4.2 Best Practices for Presenting a Manifest

...

4.3 Best Practices for Playing

...

4.4 Best Practices for Browsing

...

4.5 Best Practices for Supported Formats

...

4.6 Examples

...

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