

# Features and Plug-ins of NMM

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This is a list of all features and plug-ins in the current version of NMM. Section 1 describes all features of NMM, supported platforms and licenses under which NMM or features of NMM are available. Section 2 describes which features of NMM are supported on which platforms and available under which licenses and provides information on the status of all features of NMM and which external libraries are needed for each feature on each platform.

## 1. Overview of NMM

This section describes all features of NMM, supported platforms and licenses under which NMM or features of NMM are available.

## 1.1. Core Multimedia Middleware Architecture

**Table 1. Overview of NMM Core Multimedia Middleware Architecture**

Component	Directory	Description
Core Middleware Architecture	nmm/comm/	The communication middleware layer provides basic functionality such as a unified messaging system, a proxy-object communication mechanism, an abstract network architecture, serialization and format negotiation
Core Multimedia Architecture	nmm/multimedia/	The multimedia middleware layer provides the basic building blocks of NMM-based multimedia applications, such as nodes and jacks. It is required by NMM plug-ins and applications using NMM plug-ins.
Multimedia Middleware Services	nmm/services/	The core multimedia middleware architecture provides a registry service for device and plug-in management.

## 1.2. Optional Features

**Table 2. Overview of NMM Optional Features**

Feature	Directory	Description
TCP Protocol Support	nmm/comm/netstrategy	A transport strategy based on the Transport Control Protocol (TCP)
RTP Protocol Support	nmm/comm/netstrategy	A transport strategy based on the Real-time Transport Protocol (RTP)
RTP MPEG Transport Stream Protocol Support	nmm/comm/netstrategy	A simple transport strategy based on the Real-time Transport Protocol (RTP) for receiving MPEG transport streams
UDP Protocol Support	nmm/comm/netstrategy	A transport strategy based on the User Datagram Protocol (UDP)
Magic Number Serialization	nmm/comm/serialize	A serialization strategy which uses magic numbers

Feature	Directory	Description
XML Serialization	nmm/comm/serialize	A serialization strategy which uses XML
Audio/Video Synchronization	nmm/multimedia/sync	Distributed synchronization of multiple audio and multiple video streams
High-quality Audio/Audio Synchronization	nmm/multimedia/sync	Distributed highly accurate synchronization of multiple audio streams
Service Discovery	nmm/services/registry	Discovery of available registries and plug-ins within the network
Audio Handover	nmm/multimedia/sync	Seamless audio handover between multiple hosts in the network
Session Sharing	nmm/services/registry	Sharing of multimedia flow-graphs between multiple applications running in the same network

### 1.3. Plug-ins

Table 3. Overview of NMM Plug-ins

Plug-in	Directory	Description
AACAudioDecodeNode	nmm/plugins/audio/aac	Decodes compressed AAC audio
AC3DecodeNode	nmm/plugins/audio/ac3dec	Decodes compressed AC3 audio and converts it into raw stereo audio
AC3ParseNode	nmm/plugins/audio/ac3dec	Determines the format of a compressed AC3 audio stream
ACMAudioDecodeNode	nmm/plugins/audio/acm	Decodes a compressed audio stream using the Microsoft Windows Audio Codec Manager (ACM)
ALSAPlaybackNode	nmm/plugins/audio/alsa	Plays an audio stream on a soundcard using the Advanced Linux Sound Architecture (ALSA)
ALSARecordNode	nmm/plugins/audio/alsa	Records an audio stream from a soundcard using the Advanced Linux Sound Architecture (ALSA)

Plug-in	Directory	Description
AnalyseDataIdNode	nmm/plugins/stats	Extended version of the IdNode, which uses analyseData. Can be used as a template for new nodes which do data analysis to determine the format (typically done by decoders).
AudioMuxNode	nmm/plugins/audio/mux	Multiplexes two audio streams, with fading effect
AVDemuxNode	nmm/plugins/av	Splits a stream with buffers labeled as audio and video into separate audio and video streams
AVMuxNode	nmm/plugins/av	Combines separate audio and video streams into a single stream with buffers labeled as audio and video
BrightnessNode	nmm/plugins/video/filter	A video filter that adjusts the brightness
BufferDropNode	nmm/plugins/general	Drops buffers at regular intervals
BufferShapingNode	nmm/plugins/general	Packs multimedia data into buffers of fixed size
BufferTimestampControlNode	nmm/plugins/general	Frame rate converter which only adjusts buffer timestamps
BufferTimestampNode	nmm/plugins/general	Sets or changes timestamps of incoming buffers.
CDDANode	nmm/plugins/file/cdda	Audio CD source for Linux with CDDDB support
CDDASourceNode	nmm/plugins/file/cdda	Audio CD source for Windows
CopyNode	nmm/plugins/general	Creates multiple copies of the input stream
DevNullNode	nmm/plugins/stats	A sink node which does nothing
DirectXDisplayNode	nmm/plugins/video/display/DirectX	Displays a video stream using a Microsoft DirectX overlay surface
DirectXPlaybackNode	nmm/plugins/audio/DirectX	Plays an audio stream on a soundcard using Microsoft DirectX Audio
DummyAudioSinkNode	nmm/plugins/audio/dummy	A dummy sink node accepting only raw audio formats
DummyVideoSinkNode	nmm/plugins/video/dummy	A dummy sink node accepting only raw video formats
DVBS2ReadNode	nmm/plugins/video/tv/dvbs2	Reads an MPEG2 transport stream from a DVB-S2, DVB-S or DVB-T card

Plug-in	Directory	Description
DVBSimulatorNode	nmm/plugins/video/tv/dvb/simulator	Reads an MPEG2 program stream from a file and simulates a DVB card
DVDNavReadNode	nmm/plugins/file/dvd	Reads an MPEG2 program stream from a DVD and provides an interface for navigation
DVDReadNode	nmm/plugins/file/dvd	Reads an MPEG2 program stream from a DVD and provides an interface for direct access to DVD chapters
DXVA2DisplayNode	nmm/plugins/video/display/DirectX	A video sink for Windows Vista based on DirectX Video Acceleration 2
FFMpegAudioDecodeNode	nmm/plugins/audio/ffmpeg	Decodes compressed audio of various compressed audio formats using the FFMpeg library
FFMpegAudioEncodeNode	nmm/plugins/audio/ffmpeg	Encodes raw audio into various compressed audio formats using the FFMpeg library
FFMpegAVIReadNode	nmm/plugins/file/ffmpeg	Reader for AVI file format which uses FFMPEG library
FFMpegAVIWriteNode	nmm/plugins/file/ffmpeg	Reader for AVI file format which uses FFMPEG library
FFMpegDecodeNode	nmm/plugins/video/ffmpeg	Decodes a video stream from various compressed video formats using the FFMpeg library
FFMPEGDeinterlaceNode	nmm/plugins/video/filter	Deinterlaces YV12 video using the FFMPEG library
FFMpegEncodeNode	nmm/plugins/video/ffmpeg	Encodes a video stream to various compressed video formats using the FFMpeg library
FLACReadNode	nmm/plugins/file/flac	Reader for FLAC audio files
FramerateConverterNode	nmm/plugins/video/converter	Converts between different frame rates in a raw video stream
GenericFireWireNode	nmm/plugins/ieee1394	A generic source node which reads from an IEEE1394 device
GenericReadNode	nmm/plugins/file/generic	Reads raw data from a file
GenericWriteNode	nmm/plugins/file/generic	Writes raw data to a file
H264DecodeNode	nmm/plugins/video/ffmpeg	Decodes H.264 video using the FFMPEG library

Plug-in	Directory	Description
HLSLDisplayNode	nmm/plugins/video/display/DirectX	Renders YUV video using DirectX9 and hardware-accelerated color-space conversion
IcecastNode	nmm/plugins/audio/icecast	Injects an MP3 audio stream into an icecast server
IdNode	nmm/plugins/stats	A filter node which does nothing
iPAQDisplayNode	nmm/plugins/video/display/ipaq	Displays a video stream using the frame buffer device on a Compaq iPAQ
IVTVReadNode	nmm/plugins/video/tv/ivtv	Reads an MPEG2 program stream from a TV card with a hardware MPEG2 encoder using Video4Linux2 and the IVTV driver
JPEGDecodeNode	nmm/plugins/video/jpeg	Decodes video frames in JPEG format
JPEGEncodeNode	nmm/plugins/video/jpeg	Encodes video frames in JPEG format
LogoNode	nmm/plugins/video/filter	Overlays a raw video frame with a logo
M4AReadNode	nmm/plugins/file/m4a	Reader for M4A files
MacOSXPlaybackNode	nmm/plugins/audio/macosx	Plays an audio stream on a soundcard on Mac OS X
MagickManipulationNode	nmm/plugins/video/magick	Manipulates an image file using the ImageMagick library
MagickReadNode	nmm/plugins/file/magick	Reads an image file using the ImageMagick library
MagickWriteNode	nmm/plugins/file/magick	Writes an image file using the ImageMagick library
MessageSeekNode	nmm/plugins/general	Dumps messages to a file and can resend single messages or sequences of messages
MP3ReadNode	nmm/plugins/file/mpeg	Reads an MP3 audio stream from an MP3 file
MPEGAudioDecodeNode	nmm/plugins/audio/mpegdec	Decodes compressed MP3 audio into raw audio
MPEGAudioEncodeNode	nmm/plugins/audio/mpegenc	Encodes raw audio as compressed MP3 audio
MPEGDemuxNode	nmm/plugins/av/mpeg	Splits an MPEG2 program stream into separate audio, video and subtitle streams

Plug-in	Directory	Description
MPEGReadNode	nmm/plugins/file/mpeg	Reads an MPEG2 program stream from an MPEG file
MPEGTimeShiftingNode	nmm/plugins/file/timeshifting	Provides a timeshifting buffer for MPEG2 program streams
MPEGTSDemuxNode	nmm/plugins/av/mpeg	Demultiplexer for MPEG Transport Streams
MPEGTSReadNode	nmm/plugins/file/mpeg	Reader MPEG Transport Stream (.ts) files
MPEGVideoDecodeNode	nmm/plugins/video/mpegdec	Decodes an MPEG2 video stream
MPEGVSHDetectionNode	nmm/plugins/av/mpeg/vshdetect	Discards all buffers in an MPEG2 program stream until a video sequence header (VSH) is found
NetSinkNode	nmm/plugins/net	Uses a transport strategy, such as RTP, to send a multimedia stream to the network
NetSourceNode	nmm/plugins/net	Uses a transport strategy, such as RTP, to receive a multimedia stream from the network
OggVorbisDecodeNode	nmm/plugins/audio/oggvorbis	Decodes an ogg/vorbis audio stream to raw audio
OGMDemuxNode	nmm/plugins/av/ogm	Stream demultiplexer for Ogg Media (OGM) files
OSDManagerNode	nmm/plugins/video/osd/manager	Renders a GUI to an overlay over a raw video stream
OverlayNode	nmm/plugins/video/filter	Overlays a video stream with another video stream
PCMDecodeNode	nmm/plugins/audio/pcm	Converts a u-law or a-law PCM audio stream to a linear audio stream
PCMEncodeNode	nmm/plugins/audio/pcm	Converts a linear audio stream to u-law or a-law PCM audio
PlaybackNode	nmm/plugins/audio/oss	Plays an audio stream on a soundcard using OSS
PNGReadNode	nmm/plugins/file/png	Reads video frames from PNG files
PNGWriteNode	nmm/plugins/file/png	Writes video frames to PNG files
RawNode	nmm/plugins/stats	A source node which produces a stream of raw random data

<b>Plug-in</b>	<b>Directory</b>	<b>Description</b>
RecordNode	nmm/plugins/audio/oss	Records an audio stream from a soundcard using OSS
RGBtoRGBConverterNode	nmm/plugins/video/converter	Converts a raw video streams between different RGB formats
RGBtoYV12ConverterNode	nmm/plugins/video/converter	Converts a raw video stream from RGB to YV12 format
SAnalyzerNode	nmm/plugins/audio/visualization	Spectrum analyzer which generates a visualization video stream from an audio stream
ScopeNode	nmm/plugins/audio/visualization	Scope audio visualizer which generates a visualization video stream from an audio stream
TimedBufferDropNode	nmm/plugins/general	Drops buffers within a given timestamp range
TimeDisplayNode	nmm/plugins/video/filter	Overlays raw video frames with a time display
TS2PESNode	nmm/plugins/av/remux	Remultiplexes an MPEG2 transport stream to an MPEG2 program stream
TSDemuxNode	nmm/plugins/av/ffmpeg	Demultiplexer for MPEG2 transport streams which uses FFMpeg
TVCardReadNode	nmm/plugins/video/tv/tvcard	Reads a raw video stream from a TV card using Video4Linux version 1
TVCardReadNode2	nmm/plugins/video/tv/tvcard	Reads a raw video stream from a TV card using Video4Linux version 2
URLNode	nmm/plugins/net/url	Reads a HTTP stream (such as internet radio) from a HTTP URL
VideoCropNode	nmm/plugins/video/converter	A video filter that can be used for cropping out a specific part of each frame
VideoGrabNode	nmm/plugins/video/display/X	A video source that grabs video frames from an X11 screen
VideoMuxNode	nmm/plugins/video/mux	Multiplexes two video streams, with shrink/grow/overlay effect
VideoScalerNode	nmm/plugins/video/converter	Scales a video stream to a different image size

Plug-in	Directory	Description
VISCACameraReadNode	nmm/plugins/video/camera/visca	Reads a raw video stream from a VISCA camera using Video4Linux2 and provides an interface for controlling the camera
WaveOutPlaybackNode	nmm/plugins/audio/WaveOut	Audio renderer which uses the Microsoft Windows WaveOut API
WavReadNode	nmm/plugins/file/wav	Reads a raw audio stream from a WAV file
WavWriteNode	nmm/plugins/file/wav	Writes a raw audio stream to a WAV file
WhiteNoiseNode	nmm/plugins/video/whitenoise	Produces a white noise video stream
WMFSinkNode	nmm/plugins/file/asf	Writes a stream to a media file using the Microsoft Windows Media File (WMF) library
WMFSourceNode	nmm/plugins/file/asf	Reads a stream from a media file using the Microsoft Windows Media File (WMF) library
XDisplayNode	nmm/plugins/video/display/X	Displays a video stream using the X Windows system with Xv extension
YUVDeInterlaceNode	nmm/plugins/video/filter	Deinterlaces a YV12 video stream
YUVtoRGBConverterNode	nmm/plugins/video/converter	Converts a raw video stream from YUV to RGB format
YUVtoYUVConverterNode	nmm/plugins/video/converter	Converts a raw video streams between different YUV formats

## 1.4. Supported Platforms

This section lists the platforms which are supported by NMM.

**Table 4. Platforms**

Name	Description
Linux	A Linux system on a PC or other platform, such as embedded platforms. NMM supports both 32-bit and 64-bit Linux installations.
Windows	Microsoft Windows XP, Windows Vista, or Windows 7

Name	Description
Mac OS X	A Mac OS X system on an x86 or PowerPC platform
Playstation 3	A Linux system on a Playstation 3

## 1.5. Licenses

This section describes the different licences under which NMM or individual features of NMM are available.

**Table 5. Licenses**

Name	Description
GPL	GNU General Public license
NMM-NCL	NMM Non-Commercial License
NMM-CEL	Commercial Evaluation Licenses
NMM-CL	Commercial Licenses

## 2. Status, Licensing and Requirements

This section describes which features of NMM are supported on which platforms and available under which licenses and provides information on the status of all features of NMM and which external libraries are needed for each feature on each platform. For general information about supported platforms, see Section 1.4. For an explanation of the different licenses under which NMM is available, see Section 1.5.

**Table 6. Availability Information**

Name	Value(s)	Description
License	GPL	GNU General Public License, see Section 1.5
	NMM-NCL	NMM Non-Commercial License, see Section 1.5
	NMM-CEL	Commercial Evaluation Licenses, see Section 1.5
	NMM-CL	Commercial Licenses, see Section 1.5
Status	OK	The feature is available on the platform

Name	Value(s)	Description
	NOT AVAILABLE	The feature is not supported on this platform, either because the platform does not support the feature or because there is no source code or binary for this feature included in this release.
	BROKEN	The feature can be used on this platform, but it is broken or has other problems.
	NOT TESTED	Source code is present for this feature, and it is possible that the feature can be compiled on this platform, but the source code does not use any external libraries, and no external libraries are available. However, we have not tested this feature on this platform and therefore cannot guarantee that it will compile and be used.
Used Libraries		No external libraries are used for this feature.
	libfoo (1.2.3)	This feature requires version 1.2.3 in order to be compiled or used.

## 2.1. Linux

Table 7. NMM Core Multimedia Middleware Architecture on Linux

	License	Status	Used Libraries (and versions)
Core Middleware Architecture	GPL, NMM-CL	OK	libltdl (1.4.2), loki
Core Multimedia Architecture	GPL, NMM-CL	OK	libltdl (1.4.2), loki
Multimedia Middleware Services	GPL, NMM-CL	OK	libltdl (1.4.2), loki

Table 8. NMM Optional Features on Linux

Feature or Plug-in	License	Status	Used Libraries (and versions)
TCP Protocol Support	GPL, NMM-CL	OK	

Feature or Plug-in	License	Status	Used Libraries (and versions)
RTP Protocol Support	GPL, NMM-CL	OK	libliveMedia (2005.07.13)
RTP MPEG Transport Stream Protocol Support	GPL, NMM-CL	OK	
UDP Protocol Support	GPL, NMM-CL	OK	
Raw UDP Protocol Support	GPL, NMM-CL	OK	
Magic Number Serialization	GPL, NMM-CL	OK	
XML Serialization	GPL, NMM-CL	OK	libxml2 (2.4.23), libxml++
Audio/Video Synchronization	GPL, NMM-CL	OK	
High-quality Audio/Audio Synchronization	NMM-CEL, NMM-CL	OK	
Service Discovery	GPL, NMM-CL	OK	
Audio Handover	NMM-CEL, NMM-CL	OK	
Session Sharing	GPL, NMM-CL	OK	

Table 9. NMM Plug-ins on Linux

Feature or Plug-in	License	Status	Used Libraries (and versions)
AACAudioDecodeNode	GPL, NMM-CL <sup>a</sup>	OK	libfaad (2.7)
AC3DecodeNode	GPL	OK	a52dec (0.7.4)
AC3ParseNode	GPL	OK	a52dec (0.7.4)
ACMAudioDecodeNode		NOT AVAILABLE	
ALSAPlaybackNode	GPL, NMM-CL	OK	asoundlib (1.0.9a)
ALSARecordNode	GPL, NMM-CL	OK	asoundlib (1.0.9a)
AnalyseDataIdNode	GPL, NMM-CL	OK	
AudioMuxNode	GPL, NMM-CL	OK	
AVDemuxNode	GPL, NMM-CL	OK	
AVMuxNode	GPL, NMM-CL	OK	
BrightnessNode	GPL, NMM-CL	OK	
BufferDropNode	GPL, NMM-CL	OK	
BufferShapingNode	GPL, NMM-CL	OK	

Feature or Plug-in	License	Status	Used Libraries (and versions)
BufferTimestampControlNode	GPL, NMM-CL	OK	
BufferTimestampNode	GPL, NMM-CL	OK	
CDDANode	GPL	OK	cdparanoia (IIalpha9.8-548)
CDDASourceNode		NOT AVAILABLE	
CopyNode	GPL, NMM-CL	OK	
DevNullNode	GPL, NMM-CL	OK	
DirectXDisplayNode		NOT AVAILABLE	
DirectXPlaybackNode		NOT AVAILABLE	
DummyAudioSinkNode	GPL, NMM-CL	OK	
DummyVideoSinkNode	GPL, NMM-CL	OK	
DVBS2ReadNode	GPL, NMM-CL	OK	DVB API version 5.1
DVBSimulatorNode	GPL, NMM-CL	OK	
DVDNavReadNode	GPL	OK	libdvdnav (0.1.10), libdvdread
DVDReadNode	GPL	OK	libdvdread (0.9.4)
DXVA2DisplayNode		NOT AVAILABLE	
FFMpegAudioDecodeNode	GPL, NMM-CL <sup>b</sup>	OK	ffmpeg (0.5)
FFMpegAudioEncodeNode	GPL, NMM-CL <sup>c</sup>	OK	ffmpeg (0.5)
FFMpegAVIReadNode	GPL, NMM-CL <sup>d</sup>	OK	ffmpeg (0.5)
FFMpegAVIWriteNode	GPL, NMM-CL <sup>e</sup>	OK	ffmpeg (0.5)
FFMpegDecodeNode	GPL, NMM-CL <sup>f</sup>	OK	ffmpeg (0.5)
FFMPEGDeinterlaceNode	GPL, NMM-CL <sup>g</sup>	OK	ffmpeg (0.5)
FFMpegEncodeNode	GPL, NMM-CL <sup>h</sup>	OK	ffmpeg (0.5)
FLACReadNode	GPL, NMM-CL	OK	
FramerateConverterNode	GPL, NMM-CL	OK	
GenericFireWireNode	GPL	BROKEN	libl1394 (0.2.6), libraw1394 (1.2.0)
GenericReadNode	GPL, NMM-CL	OK	
GenericWriteNode	GPL, NMM-CL	OK	
H264DecodeNode	GPL, NMM-CL <sup>i</sup>	OK	ffmpeg (0.5)
HLSDLDisplayNode		NOT AVAILABLE	

Feature or Plug-in	License	Status	Used Libraries (and versions)
IcecastNode	GPL, NMM-CL	OK	libshout (2.0), libogg (1.1), libvorbis (1.0.1)
IdNode	GPL, NMM-CL	OK	
iPAQDisplayNode	GPL, NMM-CL	OK	libxml2 (2.4.23), libxml++
IVTVReadNode	GPL, NMM-CL	OK	
JPEGDecodeNode	GPL, NMM-CL	OK	libjpeg (6.2.0-738)
JPEGEncodeNode	GPL, NMM-CL	OK	libjpeg (6.2.0-738)
LogoNode	GPL, NMM-CL	OK	
M4AReadNode	GPL, NMM-CL	OK	
MacOSXPlaybackNode		NOT AVAILABLE	
MagickManipulationNode	GPL, NMM-CL	OK	ImageMagick (6.3.5-5)
MagickReadNode	GPL, NMM-CL	OK	ImageMagick (6.3.5-5)
MagickWriteNode	GPL, NMM-CL	OK	ImageMagick (6.3.5-5)
MessageSeekNode	GPL, NMM-CL	OK	
MP3ReadNode	GPL, NMM-CL	OK	
MPEGAudioDecodeNode	GPL	OK	libmad (0.15.1b)
MPEGAudioEncodeNode	GPL, NMM-CL	OK	lame (3.96.1)
MPEGDemuxNode	GPL, NMM-CL	OK	
MPEGReadNode	GPL, NMM-CL	OK	
MPEGTimeShiftingNode	GPL, NMM-CL	OK	
MPEGTSDemuxNode	GPL, NMM-CL	OK	
MPEGTSReadNode	GPL, NMM-CL	OK	
MPEGVideoDecodeNode	GPL	OK	mpeg2dec (0.4.0b)
MPEGVSHDetectionNode	GPL, NMM-CL	OK	
NetSinkNode	GPL, NMM-CL	OK	
NetSourceNode	GPL, NMM-CL	OK	
OggVorbisDecodeNode	GPL, NMM-CL	OK	libogg (1.1), libvorbis (1.0.1)
OGMDemuxNode	GPL	OK	libogg (1.1), libvorbis (1.0.1), ogmtools
OSDManagerNode	GPL, NMM-CL	OK	
OverlayNode	GPL, NMM-CL	OK	

Feature or Plug-in	License	Status	Used Libraries (and versions)
PCMDecodeNode	GPL, NMM-CL	OK	
PCMEncodeNode	GPL, NMM-CL	OK	
PlaybackNode	GPL, NMM-CL	OK	
PNGReadNode	GPL, NMM-CL	OK	libpng (1.0.13)
PNGWriteNode	GPL, NMM-CL	OK	libpng (1.0.13)
RawNode	GPL, NMM-CL	OK	
RecordNode	GPL, NMM-CL	OK	
RGBtoRGBConverterNode	GPL, NMM-CL	OK	
RGBtoYV12ConverterNode	GPL, NMM-CL	OK	
SAnalyzerNode	GPL	OK	fftw (2.1.5)
ScopeNode	GPL, NMM-CL	OK	
TimedBufferDropNode	GPL, NMM-CL	OK	
TimeDisplayNode	GPL, NMM-CL	OK	
TS2PESNode	GPL	OK	vdr
TSDemuxNode	GPL, NMM-CL <sub>j</sub>	OK	ffmpeg (0.5)
TVCARDReadNode	GPL, NMM-CL	OK	
TVCARDReadNode2	GPL, NMM-CL	OK	
URLNode	GPL, NMM-CL	OK	
VideoCropNode	GPL, NMM-CL	OK	
VideoGrabNode	GPL, NMM-CL	OK	Xlib
VideoMuxNode	GPL, NMM-CL	OK	
VideoScalerNode	GPL, NMM-CL	OK	
VISCACameraReadNode	GPL, NMM-CL	OK	
WaveOutPlaybackNode		NOT AVAILABLE	
WavReadNode	GPL, NMM-CL	OK	
WavWriteNode	GPL, NMM-CL	OK	
WhiteNoiseNode	GPL, NMM-CL	OK	
WMFSinkNode		NOT AVAILABLE	
WMFSourceNode		NOT AVAILABLE	
XDisplayNode	GPL, NMM-CL	OK	libxml2 (2.4.23), libxml++, Xlib, libpng (1.0.13; optional, only for screenshot functionality)

Feature or Plug-in	License	Status	Used Libraries (and versions)
YUVDeInterlaceNode	GPL (C implementation), NMM-CL (MMX implementation)	OK	
YUVtoRGBConverterNode	GPL, NMM-CL	OK	
YUVtoYUVConverterNode	GPL, NMM-CL	OK	
Notes:			
a. Commercial non-GPL licensing of this software is possible by licensing the used external library			
b. Commercial non-GPL licensing of this software is possible by using an LGPL version of FFMpeg			
c. Commercial non-GPL licensing of this software is possible by using an LGPL version of FFMpeg			
d. Commercial non-GPL licensing of this software is possible by using an LGPL version of FFMpeg			
e. Commercial non-GPL licensing of this software is possible by using an LGPL version of FFMpeg			
f. Commercial non-GPL licensing of this software is possible by using an LGPL version of FFMpeg			
g. Commercial non-GPL licensing of this software is possible by using an LGPL version of FFMpeg			
h. Commercial non-GPL licensing of this software is possible by using an LGPL version of FFMpeg (except H.264 encoding)			
i. Commercial non-GPL licensing of this software is possible by using an LGPL version of FFMpeg			
j. Commercial non-GPL licensing of this software is possible by using an LGPL version of FFMpeg			

## 2.2. Mac OS X

**Table 10. NMM Core Multimedia Middleware Architecture on Mac OS X**

	License	Status	Used Libraries (and versions)
Core Multimedia Middleware Architecture	GPL, NMM-CL	OK	libltdl (1.4.2), loki
Core Multimedia Architecture	GPL, NMM-CL	OK	libltdl (1.4.2), loki
Multimedia Middleware Services	GPL, NMM-CL	OK	libltdl (1.4.2), loki

**Table 11. NMM Optional Features on Mac OS X**

Feature or Plug-in	License	Status	Used Libraries (and versions)
TCP Protocol Support	GPL, NMM-CL	OK	
RTP Protocol Support	GPL, NMM-CL	NOT TESTED	libliveMedia (2005.07.13)

Feature or Plug-in	License	Status	Used Libraries (and versions)
RTP MPEG Transport Stream Protocol Support	GPL, NMM-CL	NOT TESTED	
UDP Protocol Support	GPL, NMM-CL	NOT TESTED	
Raw UDP Protocol Support	GPL, NMM-CL	NOT TESTED	
Magic Number Serialization	GPL, NMM-CL	OK	
XML Serialization	GPL, NMM-CL	NOT TESTED	libxml2 (2.4.23), libxml++
Audio/Video Synchronization	GPL, NMM-CL	NOT TESTED	
High-quality Audio/Audio Synchronization	NMM-CEL, NMM-CL	NOT TESTED	
Service Discovery	GPL, NMM-CL	NOT TESTED	
Audio Handover	NMM-CEL, NMM-CL	NOT TESTED	
Session Sharing	GPL, NMM-CL	NOT TESTED	

Table 12. NMM Plug-ins on Mac OS X

Feature or Plug-in	License	Status	Used Libraries (and versions)
AACAudioDecodeNode	GPL, NMM-CL <sup>a</sup>	NOT TESTED	libfaad (2.7)
AC3DecodeNode	GPL	OK	a52dec (0.7.4)
AC3ParseNode	GPL	OK	a52dec (0.7.4)
ACMAudioDecodeNode		NOT AVAILABLE	
ALSAPlaybackNode		NOT AVAILABLE	
ALSARecordNode		NOT AVAILABLE	
AnalyseDataIdNode	GPL, NMM-CL	NO TESTED	
AudioMuxNode	GPL, NMM-CL	OK	
AVDemuxNode	GPL, NMM-CL	OK	
AVMuxNode	GPL, NMM-CL	OK	
BrightnessNode	GPL, NMM-CL	OK	
BufferDropNode	GPL, NMM-CL	OK	
BufferShapingNode	GPL, NMM-CL	OK	
BufferTimestampControlNode	GPL, NMM-CL	OK	

Feature or Plug-in	License	Status	Used Libraries (and versions)
BufferTimestampNode	GPL, NMM-CL	OK	
CDDANode		NOT AVAILABLE	
CDDASourceNode		NOT AVAILABLE	
CopyNode	GPL, NMM-CL	OK	
DevNullNode	GPL, NMM-CL	OK	
DirectXDisplayNode		NOT AVAILABLE	
DirectXPlaybackNode		NOT AVAILABLE	
DummyAudioSinkNode	GPL, NMM-CL	OK	
DummyVideoSinkNode	GPL, NMM-CL	OK	
DVBS2ReadNode		NOT AVAILABLE	
DVBSimulatorNode	GPL, NMM-CL	OK	
DVDNavReadNode	GPL	NOT TESTED	libdvdnav (0.1.10), libdvdread
DVDReadNode	GPL	NOT TESTED	libdvdread (0.9.4)
DXVA2DisplayNode		NOT AVAILABLE	
FFMpegAudioDecodeNode	GPL, NMM-CL <sub>b</sub>	OK	ffmpeg (0.5)
FFMpegAudioEncodeNode	GPL, NMM-CL <sub>c</sub>	OK	ffmpeg (0.5)
FFMpegAVIReadNode	GPL, NMM-CL <sub>d</sub>	OK	ffmpeg (0.5)
FFMpegAVIWriteNode	GPL, NMM-CL <sub>e</sub>	OK	ffmpeg (0.5)
FFMpegDecodeNode	GPL, NMM-CL <sub>f</sub>	OK	ffmpeg (0.5)
FFMPEGDeinterlaceNode	GPL, NMM-CL <sub>g</sub>	OK	ffmpeg (0.5)
FFMpegEncodeNode	GPL, NMM-CL <sub>h</sub>	OK	ffmpeg (0.5)
FLACReadNode	GPL, NMM-CL	NOT TESTED	
FramerateConverterNode	GPL, NMM-CL	OK	
GenericFireWireNode		NOT AVAILABLE	
GenericReadNode	GPL, NMM-CL	OK	
GenericWriteNode	GPL, NMM-CL	OK	
H264DecodeNode	GPL, NMM-CL <sub>i</sub>	OK	ffmpeg (0.5)
HLSLDisplayNode		NOT AVAILABLE	
IcecastNode	GPL, NMM-CL	NOT TESTED	libshout (2.0), libogg (1.1), libvorbis (1.0.1)
IdNode	GPL, NMM-CL	OK	
iPAQDisplayNode		NOT AVAILABLE	
IVTVReadNode		NOT AVAILABLE	

<b>Feature or Plug-in</b>	<b>License</b>	<b>Status</b>	<b>Used Libraries (and versions)</b>
JPEGDecodeNode	GPL, NMM-CL	NOT TESTED	libjpeg (6.2.0-738)
JPEGEncodeNode	GPL, NMM-CL	NOT TESTED	libjpeg (6.2.0-738)
LogoNode	GPL, NMM-CL	OK	
M4AReadNode	GPL, NMM-CL	OK	
MacOSXPlaybackNode	GPL, NMM-CL	OK	
MagickManipulationNode	GPL, NMM-CL	NOT TESTED	ImageMagick (6.3.5-5)
MagickReadNode	GPL, NMM-CL	NOT TESTED	ImageMagick (6.3.5-5)
MagickWriteNode	GPL, NMM-CL	NOT TESTED	ImageMagick (6.3.5-5)
MessageSeekNode	GPL, NMM-CL	OK	
MP3ReadNode	GPL, NMM-CL	OK	
MPEGAudioDecodeNode	GPL	OK	libmad (0.15.1b)
MPEGAudioEncodeNode	GPL, NMM-CL	OK	lame (3.96.1)
MPEGDemuxNode	GPL, NMM-CL	OK	
MPEGReadNode	GPL, NMM-CL	OK	
MPEGTimeShiftingNode	GPL, NMM-CL	OK	
MPEGTSDemuxNode	GPL, NMM-CL	OK	
MPEGTSReadNode	GPL, NMM-CL	OK	
MPEGVideoDecodeNode	GPL	OK	mpeg2dec (0.4.0b)
MPEGVSHDetectionNode	GPL, NMM-CL	OK	
NetSinkNode	GPL, NMM-CL	NOT TESTED	
NetSourceNode	GPL, NMM-CL	NOT TESTED	
OggVorbisDecodeNode	GPL, NMM-CL	OK	libogg (1.1), libvorbis (1.0.1)
OGMDemuxNode	GPL	OK	libogg (1.1), libvorbis (1.0.1), ogmtools
OSDManagerNode	GPL, NMM-CL	OK	
OverlayNode	GPL, NMM-CL	OK	
PCMDDecodeNode	GPL, NMM-CL	OK	
PCMEncodeNode	GPL, NMM-CL	OK	
PlaybackNode		NOT AVAILABLE	
PNGReadNode	GPL, NMM-CL	OK	libpng (1.0.13)
PNGWriteNode	GPL, NMM-CL	OK	libpng (1.0.13)
RawNode	GPL, NMM-CL	OK	

Feature or Plug-in	License	Status	Used Libraries (and versions)
RecordNode		NOT AVAILABLE	
RGBtoRGBConverterNode	GPL, NMM-CL	OK	
RGBtoYV12ConverterNode	GPL, NMM-CL	OK	
SAnalyzerNode	GPL	NOT TESTED	fftw (2.1.5)
ScopeNode	GPL, NMM-CL	OK	
TimedBufferDropNode	GPL, NMM-CL	OK	
TimeDisplayNode	GPL, NMM-CL	OK	
TS2PESNode	GPL	OK	vdr
TSDemuxNode	GPL, NMM-CL <sub>j</sub>	NOT TESTED	ffmpeg (0.5)
TVCardReadNode		NOT AVAILABLE	
TVCardReadNode2		NOT AVAILABLE	
URLNode	GPL, NMM-CL	OK	
VideoCropNode	GPL, NMM-CL	OK	
VideoGrabNode	GPL, NMM-CL	NOT TESTED	Xlib
VideoMuxNode	GPL, NMM-CL	OK	
VideoScalerNode	GPL, NMM-CL	OK	
VISCACameraReadNode		NOT AVAILABLE	
WaveOutPlaybackNode		NOT AVAILABLE	
WavReadNode	GPL, NMM-CL	OK	
WavWriteNode	GPL, NMM-CL	OK	
WhiteNoiseNode	GPL, NMM-CL	OK	
WMFSinkNode		NOT AVAILABLE	
WMFSourceNode		NOT AVAILABLE	
XDisplayNode	GPL, NMM-CL	OK	libxml2 (2.4.23), libxml++, Xlib, libpng (1.0.13; optional, only for screenshot functionality)
YUVDeInterlaceNode	GPL (C implementation), NMM-CL (MMX implementation)	OK	
YUVtoRGBConverterNode	GPL, NMM-CL	OK	
YUVtoYUVConverterNode	GPL, NMM-CL	OK	

Feature or Plug-in	License	Status	Used Libraries (and versions)
Notes:			
a. Commercial non-GPL licensing of this software is possible by licensing the used external library			
b. Commercial non-GPL licensing of this software is possible by using an LGPL version of FFMpeg			
c. Commercial non-GPL licensing of this software is possible by using an LGPL version of FFMpeg			
d. Commercial non-GPL licensing of this software is possible by using an LGPL version of FFMpeg			
e. Commercial non-GPL licensing of this software is possible by using an LGPL version of FFMpeg			
f. Commercial non-GPL licensing of this software is possible by using an LGPL version of FFMpeg			
g. Commercial non-GPL licensing of this software is possible by using an LGPL version of FFMpeg			
h. Commercial non-GPL licensing of this software is possible by using an LGPL version of FFMpeg (except H.264 encoding)			
i. Commercial non-GPL licensing of this software is possible by using an LGPL version of FFMpeg			
j. Commercial non-GPL licensing of this software is possible by using an LGPL version of FFMpeg			

## 2.3. PlayStation 3

**Table 13. NMM Core Multimedia Middleware Architecture on PlayStation 3**

	License	Status	Used Libraries (and versions)
Core Multimedia Middleware Architecture	GPL, NMM-CL	OK	libltdl (1.4.2), loki
Core Multimedia Architecture	GPL, NMM-CL	OK	libltdl (1.4.2), loki
Multimedia Middleware Services	GPL, NMM-CL	OK	libltdl (1.4.2), loki

**Table 14. NMM Optional Features on PlayStation 3**

Feature or Plug-in	License	Status	Used Libraries (and versions)
TCP Protocol Support	GPL, NMM-CL	OK	
RTP Protocol Support	GPL, NMM-CL	NOT TESTED	libliveMedia (2005.07.13)
RTP MPEG Transport Stream Protocol Support	GPL, NMM-CL	NOT TESTED	
UDP Protocol Support	GPL, NMM-CL	NOT TESTED	
Raw UDP Protocol Support	GPL, NMM-CL	NOT TESTED	
Magic Number Serialization	GPL, NMM-CL	OK	

Feature or Plug-in	License	Status	Used Libraries (and versions)
XML Serialization	GPL, NMM-CL	NOT TESTED	libxml2 (2.4.23), libxml++
Audio/Video Synchronization	GPL, NMM-CL	OK	
High-quality Audio/Audio Synchronization	NMM-CEL, NMM-CL	NOT TESTED	
Service Discovery	GPL, NMM-CL	NOT TESTED	
Audio Handover	NMM-CEL, NMM-CL	NOT TESTED	
Session Sharing	GPL, NMM-CL	NOT TESTED	

Table 15. NMM Plug-ins on PlayStation 3

Feature or Plug-in	License	Status	Used Libraries (and versions)
AACAudioDecodeNode	GPL, NMM-CL <sup>a</sup>	NOT TESTED	libfaad (2.7)
AC3DecodeNode	GPL	OK	a52dec (0.7.4)
AC3ParseNode	GPL	OK	a52dec (0.7.4)
ACMAudioDecodeNode		NOT AVAILABLE	
ALSAPlaybackNode	GPL, NMM-CL	OK	asoundlib (1.0.9a)
ALSARecordNode	GPL, NMM-CL	OK	asoundlib (1.0.9a)
AnalyseDataIdNode	GPL, NMM-CL	OK	
AudioMuxNode	GPL, NMM-CL	OK	
AVDemuxNode	GPL, NMM-CL	OK	
AVMuxNode	GPL, NMM-CL	OK	
BrightnessNode	GPL, NMM-CL	OK	
BufferDropNode	GPL, NMM-CL	OK	
BufferShapingNode	GPL, NMM-CL	OK	
BufferTimestampControlNode	GPL, NMM-CL	OK	
BufferTimestampNode	GPL, NMM-CL	OK	
CDDANode	GPL	NOT TESTED	cdparanoia (IIIalpha9.8-548)
CDDASourceNode		NOT AVAILABLE	
CopyNode	GPL, NMM-CL	OK	
DevNullNode	GPL, NMM-CL	OK	
DirectXDisplayNode		NOT AVAILABLE	
DirectXPlaybackNode		NOT AVAILABLE	

Feature or Plug-in	License	Status	Used Libraries (and versions)
DummyAudioSinkNode	GPL, NMM-CL	OK	
DummyVideoSinkNode	GPL, NMM-CL	OK	
DVBS2ReadNode		NOT AVAILABLE	
DVBSimulatorNode	GPL, NMM-CL	OK	
DVDNavReadNode	GPL	NOT TESTED	libdvdnav (0.1.10), libdvdread
DVDReadNode	GPL	NOT TESTED	libdvdread (0.9.4)
DXVA2DisplayNode		NOT AVAILABLE	
FFMpegAudioDecodeNode	GPL, NMM-CL <sup>b</sup>	OK	ffmpeg (0.5)
FFMpegAudioEncodeNode	GPL, NMM-CL <sup>c</sup>	OK	ffmpeg (0.5)
FFMpegAVIReadNode	GPL, NMM-CL <sup>d</sup>	OK	ffmpeg (0.5)
FFMpegAVIWriteNode	GPL, NMM-CL <sup>e</sup>	OK	ffmpeg (0.5)
FFMpegDecodeNode	GPL, NMM-CL <sup>f</sup>	OK	ffmpeg (0.5)
FFMPEGDeinterlaceNode	GPL, NMM-CL <sup>g</sup>	OK	ffmpeg (0.5)
FFMpegEncodeNode	GPL, NMM-CL <sup>h</sup>	OK	ffmpeg (0.5)
FLACReadNode	GPL, NMM-CL	NOT TESTED	
FramerateConverterNode	GPL, NMM-CL	OK	
GenericFireWireNode		NOT AVAILABLE	
GenericReadNode	GPL, NMM-CL	OK	
GenericWriteNode	GPL, NMM-CL	OK	
H264DecodeNode	GPL, NMM-CL <sup>i</sup>	OK	ffmpeg (0.5)
HLSLDisplayNode		NOT AVAILABLE	
IcecastNode	GPL, NMM-CL	NOT TESTED	libshout (2.0), libogg (1.1), libvorbis (1.0.1)
IdNode	GPL, NMM-CL	OK	
iPAQDisplayNode		NOT AVAILABLE	
IVTVReadNode	GPL, NMM-CL	OK	
JPEGDecodeNode	GPL, NMM-CL	NOT TESTED	libjpeg (6.2.0-738)
JPEGEncodeNode	GPL, NMM-CL	NOT TESTED	libjpeg (6.2.0-738)
LogoNode	GPL, NMM-CL	OK	
M4AReadNode	GPL, NMM-CL	OK	
MacOSXPlaybackNode		NOT AVAILABLE	
MagickManipulationNode	GPL, NMM-CL	NOT TESTED	ImageMagick (6.3.5-5)

<b>Feature or Plug-in</b>	<b>License</b>	<b>Status</b>	<b>Used Libraries (and versions)</b>
MagickReadNode	GPL, NMM-CL	NOT TTESTED	ImageMagick (6.3.5-5)
MagickWriteNode	GPL, NMM-CL	NOT TESTED	ImageMagick (6.3.5-5)
MessageSeekNode	GPL, NMM-CL	OK	
MP3ReadNode	GPL, NMM-CL	OK	
MPEGAudioDecodeNode	GPL	OK	libmad (0.15.1b)
MPEGAudioEncodeNode	GPL, NMM-CL	OK	lame (3.96.1)
MPEGDemuxNode	GPL, NMM-CL	OK	
MPEGReadNode	GPL, NMM-CL	OK	
MPEGTimeShiftingNode	GPL, NMM-CL	OK	
MPEGTSDemuxNode	GPL, NMM-CL	OK	
MPEGTSReadNode	GPL, NMM-CL	OK	
MPEGVideoDecodeNode	GPL	OK	mpeg2dec (0.4.0b)
MPEGVSHDetectionNode	GPL, NMM-CL	OK	
NetSinkNode	GPL, NMM-CL	NOT TESTED	
NetSourceNode	GPL, NMM-CL	NOT TESTED	
OggVorbisDecodeNode	GPL, NMM-CL	OK	libogg (1.1), libvorbis (1.0.1)
OGMDemuxNode	GPL	OK	libogg (1.1), libvorbis (1.0.1), ogmtools
OSDManagerNode	GPL, NMM-CL	OK	
OverlayNode	GPL, NMM-CL	OK	
PCMDDecodeNode	GPL, NMM-CL	OK	
PCMEncodeNode	GPL, NMM-CL	OK	
PlaybackNode	GPL, NMM-CL	NOT TESTED	
PNGReadNode	GPL, NMM-CL	OK	libpng (1.0.13)
PNGWriteNode	GPL, NMM-CL	OK	libpng (1.0.13)
RawNode	GPL, NMM-CL	OK	
RecordNode	GPL, NMM-CL	NOT TESTED	
RGBtoRGBConverterNode	GPL, NMM-CL	OK	
RGBtoYV12ConverterNode	GPL, NMM-CL	OK	
SAnalyzerNode	GPL	NOT TESTED	fftw (2.1.5)
ScopeNode	GPL, NMM-CL	OK	

Feature or Plug-in	License	Status	Used Libraries (and versions)
TimedBufferDropNode	GPL, NMM-CL	OK	
TimeDisplayNode	GPL, NMM-CL	OK	
TS2PESNode	GPL	OK	vdr
TSDemuxNode	GPL, NMM-CL <sub>j</sub>	NOT TESTED	ffmpeg (0.5)
TVCardReadNode		NOT AVAILABLE	
TVCardReadNode2		NOT AVAILABLE	
URLNode	GPL, NMM-CL	OK	
VideoCropNode	GPL, NMM-CL	OK	
VideoGrabNode		NOT AVAILABLE	
VideoMuxNode	GPL, NMM-CL	OK	
VideoScalerNode	GPL, NMM-CL	OK	
VISCACameraReadNode		NOT AVAILABLE	
WaveOutPlaybackNode		NOT AVAILABLE	
WavReadNode	GPL, NMM-CL	OK	
WavWriteNode	GPL, NMM-CL	OK	
WhiteNoiseNode	GPL, NMM-CL	OK	
WMFSinkNode		NOT AVAILABLE	
WMFSourceNode		NOT AVAILABLE	
XDisplayNode		NOT AVAILABLE	
YUVDeInterlaceNode	GPL (C implementation)	OK	
YUVtoRGBConverterNode	GPL, NMM-CL	OK	
YUVtoYUVConverterNode	GPL, NMM-CL	OK	

## Notes:

- a. Commercial non-GPL licensing of this software is possible by licensing the used external library
- b. Commercial non-GPL licensing of this software is possible by using an LGPL version of FFMpeg
- c. Commercial non-GPL licensing of this software is possible by using an LGPL version of FFMpeg
- d. Commercial non-GPL licensing of this software is possible by using an LGPL version of FFMpeg
- e. Commercial non-GPL licensing of this software is possible by using an LGPL version of FFMpeg
- f. Commercial non-GPL licensing of this software is possible by using an LGPL version of FFMpeg
- g. Commercial non-GPL licensing of this software is possible by using an LGPL version of FFMpeg
- h. Commercial non-GPL licensing of this software is possible by using an LGPL version of FFMpeg (except H.264 encoding)
- i. Commercial non-GPL licensing of this software is possible by using an LGPL version of FFMpeg
- j. Commercial non-GPL licensing of this software is possible by using an LGPL version of FFMpeg

## 2.4. Windows

**Table 16. NMM Core Multimedia Middleware Architecture on Linux**

	License	Status	Used Libraries (and versions)
Core Multimedia Middleware Architecture	NMM-NCL, NMM-CEL, NMM-CL	OK	pthread-win32 (?), ntp, loki
Core Multimedia Architecture	NMM-NCL, NMM-CEL, NMM-CL	OK	pthread-win32 (?), ntp, loki
Multimedia Middleware Services	NMM-NCL, NMM-CEL, NMM-CL	OK	pthread-win32 (?), ntp, loki

**Table 17. NMM Optional Features on Windows**

Feature or Plug-in	License	Status	Used Libraries (and versions)
TCP Support	NMM-NCL, NMM-CEL, NMM-CL	OK	
RTP Protocol Support		NOT AVAILABLE	
RTP MPEG Transport Stream Protocol Support		NOT AVAILABLE	
UDP Protocol Support	NMM-NCL, NMM-CEL, NMM-CL	OK	
Raw UDP Protocol Support	NMM-NCL, NMM-CEL, NMM-CL	OK	
Magic Number Serialization	NMM-NCL, NMM-CEL, NMM-CL	OK	
XML Serialization		NOT AVAILABLE	
Audio/Video Synchronization	NMM-NCL, NMM-CEL, NMM-CL	OK	
High-quality Audio/Audio Synchronization	NMM-CEL, NMM-CL	OK	
Service Discovery		NOT AVAILABLE	
Audio Handover	NMM-CEL, NMM-CL	OK	
Session Sharing	NMM-NCL, NMM-CEL, NMM-CL	OK	

**Table 18. NMM Plug-ins on Windows**

Feature or Plug-in	License	Status	Used Libraries (and versions)
AACAudioDecodeNode	GPL, NMM-CEL, NMM-CL <sup>a</sup>	OK	libfaad (2.7)
AC3DecodeNode	GPL	OK	a52dec (0.7.4)
AC3ParseNode		NOT AVAILABLE	
ACMAudioDecodeNode	NMM-NCL, NMM-CEL, NMM-CL	OK	
ALSAPlaybackNode		NOT AVAILABLE	
ALSARecordNode		NOT AVAILABLE	
AnalyseDataIdNode	GPL, NMM-CL	NOT AVAILABLE	
AudioMuxNode		NOT AVAILABLE	
AVDemuxNode	NMM-NCL, NMM-CEL, NMM-CL	OK	
AVMuxNode	NMM-NCL, NMM-CEL, NMM-CL	OK	
BrightnessNode		NOT AVAILABLE	
BufferDropNode		NOT AVAILABLE	
BufferShapingNode	NMM-NCL, NMM-CEL, NMM-CL	OK	
BufferTimestampControlNode	NMM-NCL, NMM-CEL, NMM-CL	OK	
BufferTimestampNode		NOT AVAILABLE	
CDDANode		NOT AVAILABLE	
CDDASourceNode	NMM-NCL, NMM-CEL, NMM-CL	OK	
CopyNode	NMM-NCL, NMM-CEL, NMM-CL	OK	
DevNullNode	NMM-NCL, NMM-CEL, NMM-CL	OK	
DirectXDisplayNode	GPL	OK	libxml2 (2.4.23), libxml++, mplayer, vlc
DirectXPlaybackNode	NMM-NCL, NMM-CEL, NMM-CL	OK	
DummyAudioSinkNode	NMM-NCL, NMM-CEL, NMM-CL	OK	
DummyVideoSinkNode	NMM-NCL, NMM-CEL, NMM-CL	OK	
DVBS2ReadNode		NOT AVAILABLE	
DVBSimulatorNode		NOT AVAILABLE	
DVDNavReadNode		NOT AVAILABLE	
DVDReadNode		NOT AVAILABLE	

<b>Feature or Plug-in</b>	<b>License</b>	<b>Status</b>	<b>Used Libraries (and versions)</b>
DXVA2DisplayNode	NMM-NCL, NMM-CEL, NMM-CL	OK	
FFMpegAudioDecodeNode	GPL, NMM-CEL, NMM-CL <sup>b</sup>	OK	ffmpeg (svn revision 22988)
FFMpegAudioEncodeNode		NOT AVAILABLE	
FFMpegAVIReadNode	GPL, NMM-CEL, NMM-CL <sup>c</sup>	OK	ffmpeg (svn revision 22988)
FFMpegAVIWriteNode	GPL, NMM-CEL, NMM-CL <sup>d</sup>	OK	ffmpeg (svn revision 22988)
FFMpegDecodeNode	GPL, NMM-CEL, NMM-CL <sup>e</sup>	OK	ffmpeg (svn revision 22988)
FFMPEGDeinterlaceNode	GPL, NMM-CEL, NMM-CL <sup>f</sup>	OK	ffmpeg (svn revision 22988)
FFMpegEncodeNode		NOT AVAILABLE	
FLACReadNode	NMM-NCL, NMM-CEL, NMM-CL	OK	
FramerateConverterNode		NOT AVAILABLE	
GenericFireWireNode		NOT AVAILABLE	
GenericReadNode	NMM-NCL, NMM-CEL, NMM-CL	OK	
GenericWriteNode	NMM-NCL, NMM-CEL, NMM-CL	OK	
H264DecodeNode	GPL, NMM-CEL, NMM-CL <sup>g</sup>	OK	ffmpeg (svn revision 22988)
HLSLDisplayNode	NMM-NCL, NMM-CEL, NMM-CL	OK	
IcecastNode		NOT AVAILABLE	
IdNode	NMM-NCL, NMM-CEL, NMM-CL	OK	
iPAQDisplayNode		NOT AVAILABLE	
IVTVReadNode		NOT AVAILABLE	
JPEGDecodeNode		NOT AVAILABLE	
JPEGEncodeNode		NOT AVAILABLE	
LogoNode		NOT AVAILABLE	
M4AReadNode	NMM-NCL, NMM-CEL, NMM-CL	OK	
MacOSXPlaybackNode		NOT AVAILABLE	

<b>Feature or Plug-in</b>	<b>License</b>	<b>Status</b>	<b>Used Libraries (and versions)</b>
MagickManipulationNode	NMM-NCL, NMM-CEL, NMM-CL	OK	ImageMagick (6.4.6)
MagickReadNode	NMM-NCL, NMM-CEL, NMM-CL	OK	ImageMagick (6.4.6)
MagickWriteNode	NMM-NCL, NMM-CEL, NMM-CL	OK	ImageMagick (6.4.6)
MessageSeekNode	NMM-NCL, NMM-CEL, NMM-CL	OK	
MP3ReadNode	NMM-NCL, NMM-CEL, NMM-CL	OK	
MPEGAudioDecodeNode	GPL	OK	libmad (0.15.1b)
MPEGAudioEncodeNode		NOT AVAILABLE	
MPEGDemuxNode	NMM-NCL, NMM-CEL, NMM-CL	OK	
MPEGReadNode	NMM-NCL, NMM-CEL, NMM-CL	OK	
MPEGTimeShiftingNode		NOT AVAILABLE	
MPEGTSDemuxNode	NMM-NCL, NMM-CEL, NMM-CL	OK	
MPEGTSReadNode	NMM-NCL, NMM-CEL, NMM-CL	OK	
MPEGVideoDecodeNode	GPL	OK	mpeg2dec (0.4.0b)
MPEGVSHDetectionNode		NOT AVAILABLE	
NetSinkNode		NOT AVAILABLE	
NetSourceNode	NMM-NCL, NMM-CEL, NMM-CL	OK	
OggVorbisDecodeNode		NOT AVAILABLE	
OGMDemuxNode		NOT AVAILABLE	
OSDManagerNode	NMM-NCL, NMM-CEL, NMM-CL	OK	
OverlayNode	NMM-NCL, NMM-CEL, NMM-CL	OK	
PCMDecodeNode		NOT AVAILABLE	
PCMEncodeNode		NOT AVAILABLE	
PlaybackNode		NOT AVAILABLE	

<b>Feature or Plug-in</b>	<b>License</b>	<b>Status</b>	<b>Used Libraries (and versions)</b>
PNGReadNode	NMM-NCL, NMM-CEL, NMM-CL	OK	libpng (1.0.13)
PNGWriteNode	NMM-NCL, NMM-CEL, NMM-CL	OK	libpng (1.0.13)
RawNode	NMM-NCL, NMM-CEL, NMM-CL	OK	
RecordNode		NOT AVAILABLE	
RGBtoRGBConverterNode	NMM-NCL, NMM-CEL, NMM-CL	OK	
RGBtoYV12ConverterNode	NMM-NCL, NMM-CEL, NMM-CL	OK	
SAnalyzerNode		NOT AVAILABLE	
ScopeNode		NOT AVAILABLE	
TimedBufferDropNode	NMM-NCL, NMM-CEL, NMM-CL	OK	
TimeDisplayNode		NOT AVAILABLE	
TS2PESNode		NOT AVAILABLE	
TSDemuxNode	NMM-NCL, NMM-CEL, NMM-CL	OK	ffmpeg (svn revision 11871)
TVCardReadNode		NOT AVAILABLE	
TVCardReadNode2		NOT AVAILABLE	
URLNode		NOT AVAILABLE	
VideoCropNode	NMM-NCL, NMM-CEL, NMM-CL	OK	
VideoGrabNode		NOT AVAILABLE	
VideoMuxNode		NOT AVAILABLE	
VideoScalerNode	NMM-NCL, NMM-CEL, NMM-CL	OK	
VISCACameraReadNode		NOT AVAILABLE	
WaveOutPlaybackNode	NMM-NCL, NMM-CEL, NMM-CL	OK	
WavReadNode	NMM-NCL, NMM-CEL, NMM-CL	OK	
WavWriteNode	NMM-NCL, NMM-CEL, NMM-CL	OK	
WhiteNoiseNode		NOT AVAILABLE	
WMFSinkNode	NMM-NCL, NMM-CEL, NMM-CL	OK	

Feature or Plug-in	License	Status	Used Libraries (and versions)
WMFSourceNode	NMM-NCL, NMM-CEL, NMM-CL	OK	
XDisplayNode		NOT AVAILABLE	
YUVDeInterlaceNode	GPL (C implementation), NMM-CL (MMX implementation)	OK	
YUVtoRGBConverterNode	NMM-NCL, NMM-CEL, NMM-CL	OK	
YUVtoYUVConverterNode		NOT AVAILABLE	
<p>Notes:</p> <ul style="list-style-type: none"> <li>a. Commercial non-GPL licensing of this software is possible by licensing the used external library</li> <li>b. Commercial non-GPL licensing of this software is possible by using an LGPL version of FFMpeg</li> <li>c. Commercial non-GPL licensing of this software is possible by using an LGPL version of FFMpeg</li> <li>d. Commercial non-GPL licensing of this software is possible by using an LGPL version of FFMpeg</li> <li>e. Commercial non-GPL licensing of this software is possible by using an LGPL version of FFMpeg</li> <li>f. Commercial non-GPL licensing of this software is possible by using an LGPL version of FFMpeg</li> <li>g. Commercial non-GPL licensing of this software is possible by using an LGPL version of FFMpeg</li> </ul>			