

NMM Software Developer Kit (NMM-SDK) (Windows)

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This document describes the installation and usage of the NMM-SDK for Windows.

In this document, we assume that NMM-SDK package is called `nmm-sdk-2.2.0.msi` and will be installed to directory `c:\Program Files\Motama\NMM SDK`. Please replace these names as appropriate, e.g. with the name of the NMM-SDK package that you are actually using.

1. Introduction

The NMM Software Developer Kit (NMM-SDK) allows you to quickly get started with developing software based on the Network-Integrated Multimedia Middleware (NMM). The NMM-SDK provides a simple interface specified in NMM-IDL, a plug-in that implements this interface, and an application that uses those two components in a flow graph.

2. Requirements

Before using the NMM-SDK, make sure that

- NMM is properly installed, configured and successfully tested as described in the installation instructions.
- Every user account developing with the NMM-SDK has write access to the NMM directory (e.g. `c:\Program Files\Motama\NMM`). This is necessary for installing new plug-ins developed using the SDK.

3. Installation

3.1. Download NMM-SDK

Download NMM-SDK from here ([../././nmmdownload.html](#)).

3.2. Install

Note: You need system administrator rights to perform this step.

Install NMM-SDK by double clicking `nmm-sdk-2.2.0.msi`. The default installation path `c:\Program Files\Motama\NMM SDK` can be used.

Make sure that every user account developing with the NMM SDK has write access to the directory where the NMM SDK is installed.

3.3. Environment Variables

Set the environment variables as described in the installation guide for NMM. You have to do this for every user account that will use the NMM SDK.

3.4. Build

- Open `C:\Program Files\Motama\NMM SDK\mmm_WinXP\hellovolumefilter.sln` in Visual Studio.
- Choose `Release` as configuration profile.
- Choose `Build->Build Solution` from menu.

During the build the plug-in dll is written to the directory given in `NMM_DEV_DIR`.

3.5. Register

After the new NMM plug-in is installed to the NMM directory, it needs to be registered:

- `cd c:\Program Files\Motama\NMM\`
- Then execute `./serverregistry -s` as usual. Please make sure that the new plug-in included in the NMM-SDK is printed out in this step (`AudioVolumeFilterNode`).

3.6. Run NMM Applications

Finally, you can start the newly installed NMM application:

- `cd c:\Program Files\Motama\NMM`
- Run `hellovolumefilter <wav file>` using some WAV file. You should be able to hear audio and interactively change the volume using the simple software filter implemented in `AudioVolumeFilterNode`.
- After example application started you can enter `s <0 - 100 %>` to modify volume of audio playback - e.g. `s 0` turns volume off and `s 100` let's example application doing playback with full volume.

4. Development

Feel free to extend the NMM interface, plug-in, or application provided in the NMM-SDK. Or, write your own source code by taking the provided source code as reference.

If you add a new plug-in, you also need to run `./serverregistry -s` once as described above. And it has to be written to the NMM directory.