**Network Monitor C++ Examples**

By: Paul Long, Michael Hawker & Ning Yang

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# Introduction

This package contains Network Monitor API examples which can be compiled in Visual Studio. These are the same examples contained within the Network Monitor Help file included with the product. They are provided as a convenience to complement the Help as examples for using the API in C++.

# Contents

This package contains eight example programs which perform various tasks. They are as follows:

1. CapFiltLive  
    Captures data and adds it to a file (see example 2), then processes frames searching for HTTP requests.
2. CapSaveLive  
    Captures data and saves frames to a file.
3. DocumentEx  
    Complete example of 3.2 API namespace used in Help. Performs various tasks.
4. GetFrameComments  
    Prints out any comments contained within a capture file.
5. IterateFields  
    Prints out raw field information about a specified frame in a capture file.
6. IterateFieldsWithDisplayFormat  
    Prints out information on a field as displayed in Network Monitor from a specified frame in a capture file.
7. LoadCapAndFilter  
    Similar to example 1, but processes directly from a file instead of saving live network data first.
8. ShowAllConversations  
    Prints out all the conversations in a capture file.

# VS C++ Project Setup

Please view the “Developing with Visual Studio” Help topic in the Network Monitor Help. It can be found under the Help menu in the Network Monitor product.

## Dependencies

Ntddndis.h – Included with some Visual Studio versions or the Windows Driver Kit: <http://msdn.microsoft.com/en-us/library/ms794193.aspx>.

## Cross-Platform

When developing cross platform, you need a copy of the Nmapi.lib for each platform. These can be obtained by extracting the library from the Network Monitor MSI. For instance, to get the x64 version, you would do the following:

1. Download the x64 Setup exe from the [download center](http://go.microsoft.com/fwlink/?LinkID=103158) and save to your local drive.

2. Extract the MSI files from the executable to a folder on your drive.

nmsetup33\_x64.exe /C /T:"C:\TargetFolder"

3. Extract the program files from the Netmon.msi and store in a temporary directory.

Msiexec.exe /a netmon\_amd64.msi /qb TARGETDIR="C:\MyFolder"

4. Now run through the configuration steps again, but change the platform to x64. You can reference the same directory for Nmapi.h, but you must specify the directory that you created above for the other Nmapi.lib.

## Troubleshooting

1. **fatal error C1083: Cannot open include file: 'NMApi.h': No such file or directory**Make sure to follow the Visual Studio setup guidelines in the Network Monitor Help to include the correct path to the Nmapi.h file.
2. **error LNK2019: unresolved external symbol \_NmCloseHandle@4 referenced in function "void \* \_\_cdecl MyLoadNPL(void)" (?MyLoadNPL@@YAPAXXZ)**You have the incorrect library. Make sure you are running your project targeted for your platform (If you are on an x64 machine, change the build target to x64,. Also make sure you added the paths in the configuration for the x64 targets, as well).