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nanoStream Documentation - LiveVideoEncoder-Plugin - Programming with MFC

nanoStream ActiveX Plugin - VisualC++ and MFC

This tutorial shows how easy it is to create a custom Live Encoding and Streaming application with the nanoStream plugins, based on VisualStudio, C++ and MFC.

This tutorial was created with VisualStudio 2008, but should work similar with VS 2010.

Create a new MFC Application Project (File/New Project)



In the following MFC Application Wizard, select "Dialog Based Application"



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Select all default values for the rest and Finish

MFC Application Wizard - nanoS	treamTest	<u>? ×</u>
	ed Classes	
Overview Application Type Compound Document Support Document Template Strings Database Support	Generated classes: CnanoStreamTestApp CnanoStreamTestDlg	
User Interface Features Advanced Features Generated Classes	Class name: CnanoStreamTestApp Base class: CWinAppEx	Ih filg: nanoStreamTest.h .cpp_file: nanoStreamTest.cpp
	< Previous N	ext > Finish Cancel

A new project solution is created based on an empty dialog.

Right-click on the dialog and select "Insert ActiveX Control..."



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Select "nanoStream RTMPActiveX Class"



Position and resize the control window accordingly. The window will show a live camera preview later.



Create a class member variable for the control for simpler access:



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Welcome to the Add Member Variable Wizard		
ocess:	Control variable	
ariable type:	Control ID:	Category:
CRtmpactivex1	IDC_RTMPACTIVEX1	Control
riable <u>n</u> ame:	Control type:	Ma <u>x</u> chars:
_nanoStream	OCX	
	Min val <u>u</u> e:	Max valu <u>e</u> :
	.h file:	.cpp file:
	rtmpactivex1.h	rtmpactivex1.cpp
mment (// notation not required):		

Now let us create a button to create a camera preview.

From the Toolbox, select "Button" and place the button on the dialog.



Double-Click on the button to edit the new source code event handler:



This is the complete code which shows the camera preview:

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```
void CnanoStreamTestDlg::OnBnClickedButton1()
{
    // nanoStream Live Video Encoder Plugin
    m_nanoStream.InitEncoder(); // Init Encoder
    m_nanoStream.put_VideoSource(0); // Select Video Capture Source
    m_nanoStream.StartPreview(); // Start Camera Preview in Window
}
```

Now add another button to start a real encoded stream.

Add the following code to the button:

```
void CnanoStreamTestDlg::OnBnClickedButton2()
{
    // nanoStream Live Video Encoder Plugin
    // Live Encoding/Streaming to RTMP Server

m_nanoStream.put_License(_T("nlic:1.0:nanoLiveEncDemo:1.1:LivePlgDemo=1,MP4=1,RTMP=1,...."))
;
    m_nanoStream.InitEncoder(); // Init Encoder
    m_nanoStream.put_VideoSource(0); // Select Video Capture Source
    m_nanoStream.put_VideoBitrate(500000); // 500 kBit/s encoded bitrate

// URL to Flash Media Server / Wowza Media Server
// Syntax: rtmp://<server>/<app>+<stream>
```

```
m_nanoStream.put_DestinationURL(_T("rtmp://ws1.3p0.de/live+mfcStream01"));
m_nanoStream.StartBroadcast(); // Start Camera Preview in Window
}
```

When pressing button2 / broadcast, the live encoding will be started.

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