

Playing Internet streams with MPlayer for OS/2

by Sjoerd Visser

Warpstock 2007 Europe

Subjects

This presentation is about Mplayer for OS/2

What is Mplayer?

How to install it?

How to use it?

Today (eCS times) OS/2 life is easy...

Just subscribe to the OS2VOICE Newsletter.

Mplayer: The Movie Player

[VOICENWS] SW: MPlayer for OS/2 r24878 3.3.5 (based on MPlayer 1.0 RC3)

From: Mark Dodel <feedbackDESPAM@DESPAMos2voice.org>

Date: 31-10-2007 05.30

KO Myung-Hun has released a new version of MPlayer for OS/2 on hobbes. This program is the OS/2 port of MPlayer.

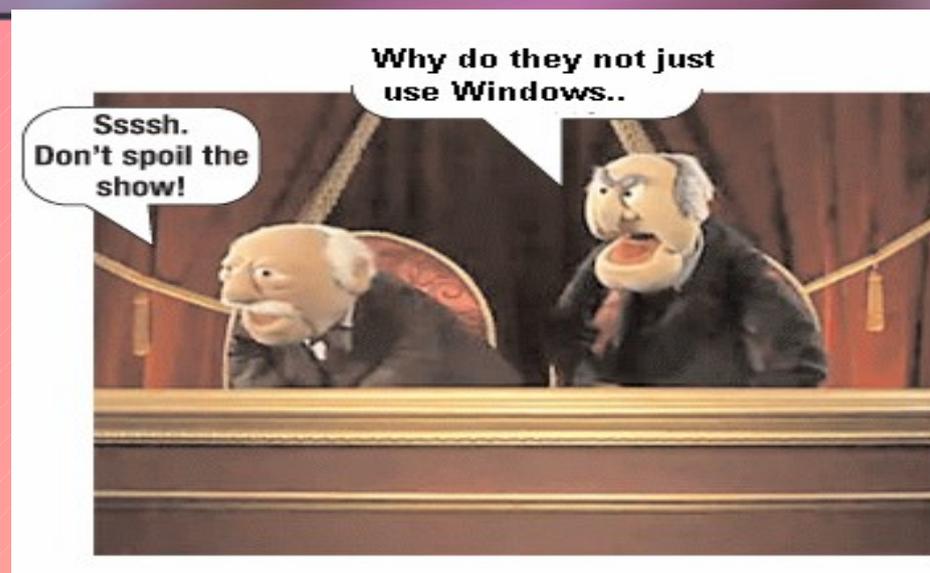
MPlayer is a movie player which runs on many systems (see the documentation). It plays most MPEG/VOB, AVI, Ogg/OGM, VIVO, ASF/WMA/WMV, QT/MOV/MP4, RealMedia, Matroska, NUT, NuppelVideo, FLI, YUV4MPEG, FILM, RoQ, PVA files, supported by many native, XAnim, and Win32 DLL codecs. You can watch VideoCD, SVCD, DVD, 3ivx, DivX 3/4/5 and even WMV movies.. Supports DIVE/WarpOverlay!, DART.

The main MPlayer web site (not for OS/2, just general information) is <http://www.mplayerhq.hu>

How to install Mplayer for OS/2 (1)

So far I have not been able to get this release to work at all.

If anyone has success I'd love to hear how you did it.



Requires kLIBC v0.6.3 ftp://ftp.netlabs.org/pub/gcc/libc-0_6_3-csd3.wpi

Hobbes:

<http://hobbes.nmsu.edu/pub/os2/apps/mmedia/video/players/mplayer-dev-svn-r24878-os2-3.3.5.zip>

MPlayer for OS/2 source:

<http://hobbes.nmsu.edu/pub/new/mplayer-dev-svn-r24878-os2-3.3.5-src.zip>

How to install Mplayer for OS/2 (2) (with thanks to Mark Dodel)

(W)Get the files Mark Dodel mentioned.

Install or unpack them by just clicking on it (eCS WPS).

- **libc-0_6_3-csd3.wpi** will launch **Warpin**. Accept the suggested default path (\OS2\DLL).
- **mplayer-dev-svn-r24878-os2-3.3.5.zip** will launch the **Archive Viewer (AV)**. AV will suggest the MPlayer path to be `.\mplayer-dev-svn-r24878-os2-3.3.5`. That's okay.
- **Tip:** copy the mplayer subdirectory to an MMOS2 binary directory on a fast JFS drive (f.i. `d:\mmos2\mplayer`).
- Then all your **MPlayer CMD batches** (you will get to like them), can refer to your state of the art, latest and greatest MPlayer.
- And you can easily "fall back" when needed.

How to use the Movie Player under OS/2

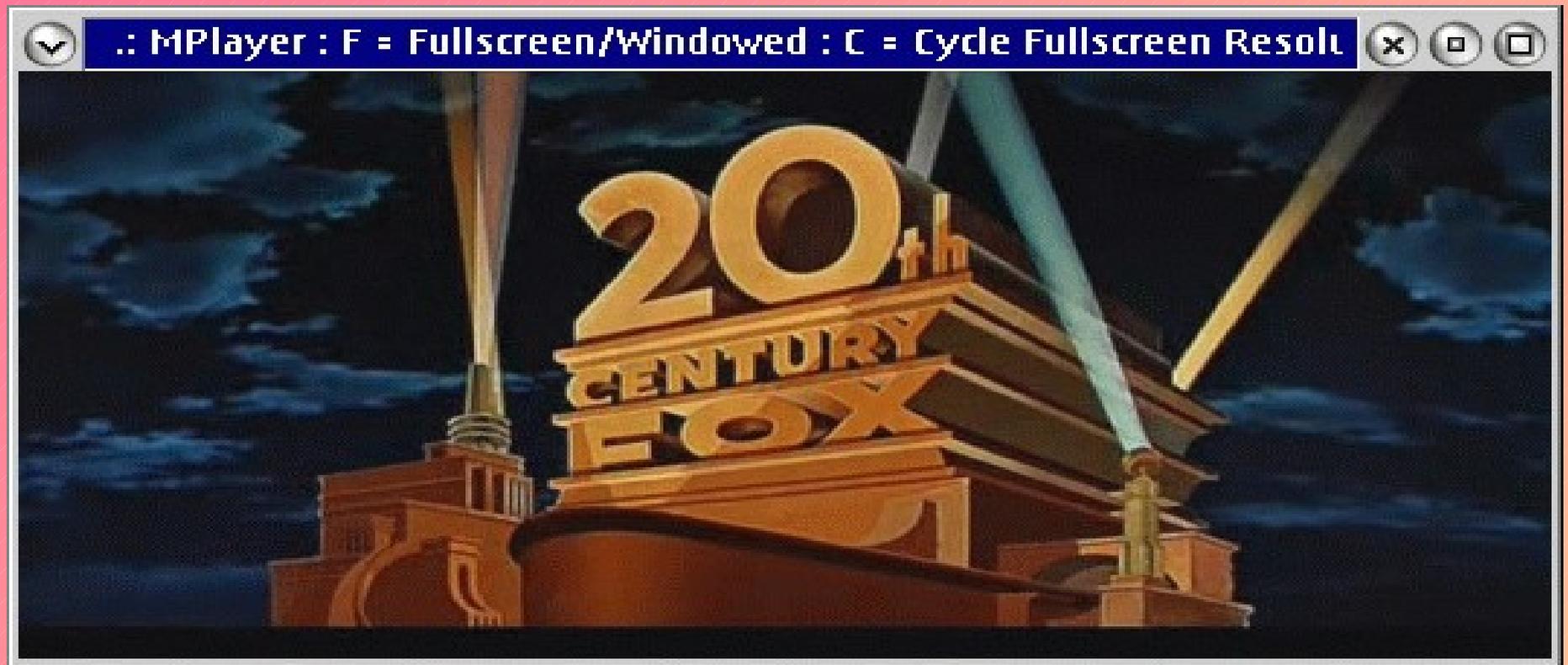
Mplayer for OS/2 is just an OS/2 application.

- **Mplayer.exe** is basically an OS/2 Command Line Interface (**CLI**) application, that uses the **Simple Direct Layer PM API** for in- and output via the GUI.
- Being a genuine OS/2 application, mplayer.exe can be launched via the WPS just by making a WPS Program object of it.
- But to tweak Mplayer you can use an WPS object of a Mplayer CMD batch. Or better several batches.

And then the "**Drag and drop**" of almost any **mediafile** to your Mplayer WPS objects should work. Under the WPS a file is loaded in the way *you* want to.

- With the massive support of mediafiles of mplayer (more extensions than you would like to know), using initially *.* for the files supported by Mplayer is not a bad idea.

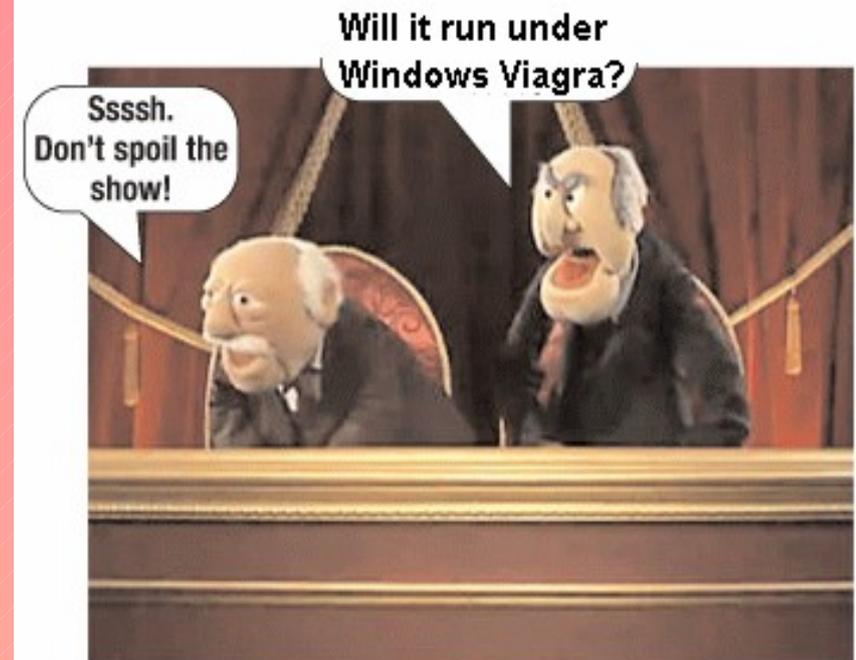
Any Questions?



RTFM: <http://www.mplayerhq.hu/design7/info.html>

Mplayer can also be used to:

- **Play DVD and VCD movies**
- **Play streaming media (sound, video) from the internet**
- **Capture streaming media in mpg format**
- **Show language code and subtitles**
- **Use Video for Linux (v4l)**
- **Supports pipes (>, <) and files**



CMD to play 10 VOB files in DVD Drive M:

set MPOPT= -alang nl,en -slang nl,en -dvd-device M:

d:\mmos2\mplayer\mplayer dvd://1 > NUL 2>&1

d:\mmos2\mplayer\mplayer dvd://2 > NUL 2>&1

d:\mmos2\mplayer\mplayer dvd://3 > NUL 2>&1

d:\mmos2\mplayer\mplayer dvd://4 > NUL 2>&1

d:\mmos2\mplayer\mplayer dvd://5 > NUL 2>&1

d:\mmos2\mplayer\mplayer dvd://6 > NUL 2>&1

d:\mmos2\mplayer\mplayer dvd://7 > NUL 2>&1

d:\mmos2\mplayer\mplayer dvd://8 > NUL 2>&1

d:\mmos2\mplayer\mplayer dvd://9 > NUL 2>&1

d:\mmos2\mplayer\mplayer dvd://10 > NUL 2>&1

exit

How to customize Mplayer_DVD.cmd with some help on short keys

mode co80,10

cls

@echo off

echo q Go to the next movie

echo / Reduce sound volume

echo o Toggle OSD states: none / seek / seek + timer / seek + timer + total time.

echo v Toggle subtitle visibility.

echo j Cycle through the available subtitles.

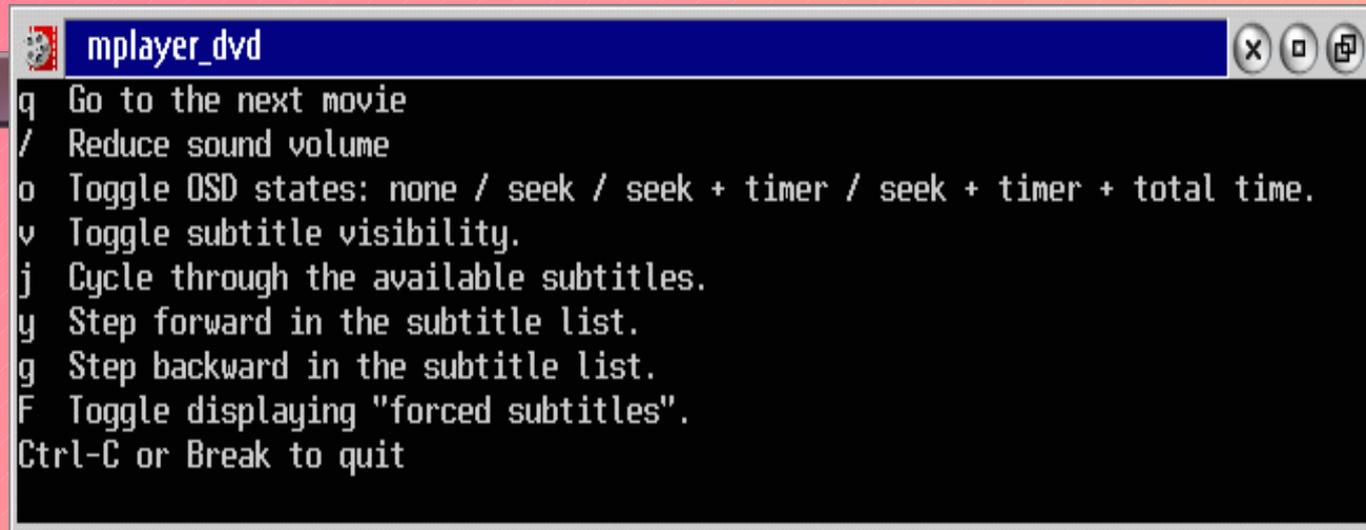
echo y Step forward in the subtitle list.

echo g Step backward in the subtitle list.

echo F Toggle displaying "forced subtitles".

echo Ctrl-C or Break to quit

set MPOPT= your options



```
mplayer_dvd
q Go to the next movie
/ Reduce sound volume
o Toggle OSD states: none / seek / seek + timer / seek + timer + total time.
v Toggle subtitle visibility.
j Cycle through the available subtitles.
y Step forward in the subtitle list.
g Step backward in the subtitle list.
F Toggle displaying "forced subtitles".
Ctrl-C or Break to quit
```

How to enable fonts for the Online Screen Display (OSD)

Mplayers Online Screen Display is used for I/O via the PM GUI:

- **Input:** to enter commands while playing movies.
- **Output:** to display movie subtitles and its own OSD menu.
- **OS/2 ports** use Innoteks True type driver by default.
- **This OSD has nothing to do with the DVD options menu (:-)**

When starting up Mplayer looks for a subfont.ttf in the MPlayer Home directory. This is the under unix "hidden" %HOME%\mplayer

So the easiest way to install an OSD font is:

```
copy c:\psfonts\arial.ttf c:\home\default\mplayer\subfont.ttf
```

Here config.sys SET HOME=c:\home\default.

You can set a custom SET HOME= also in your Mplayer batches that contain SET MOPT=[The MPlayer options you don't want to type]

A nice feature of recent gcc libs: softlinks implemented as EA's

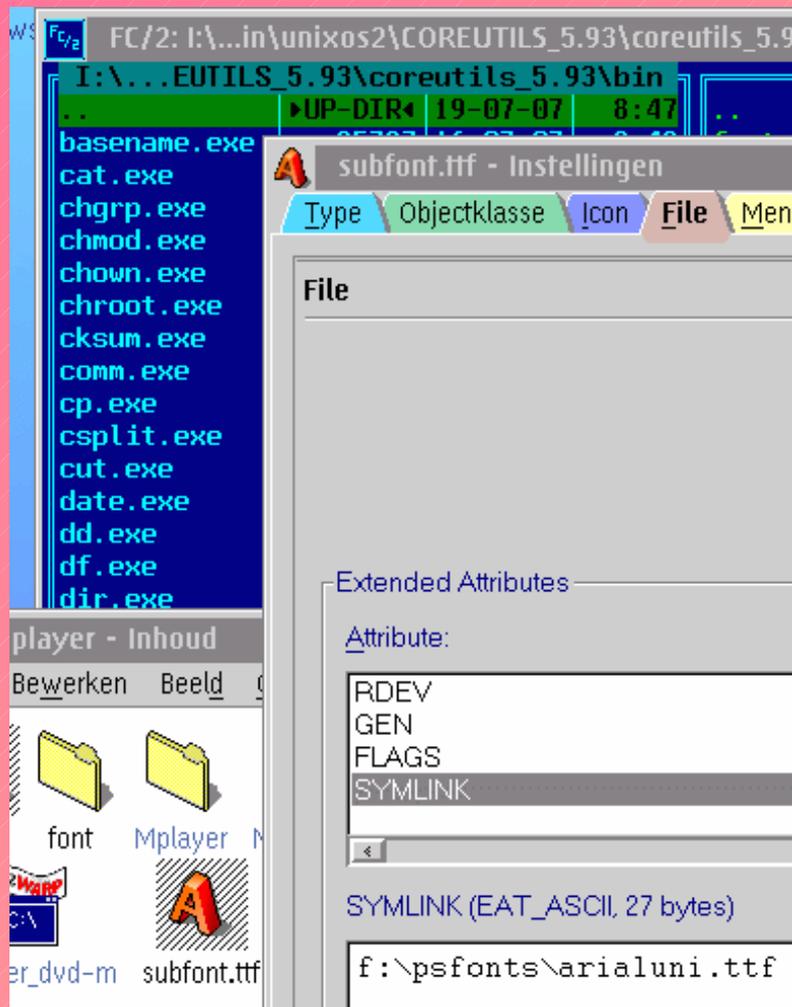
With "ln.exe" (link) from **coreutils-6.9-os2.zip** you can even create "soft" EA symlinks to fonts. Softlinks can be copied too (handy when having many homes and using very large fonts).

```
ln -s f:\psfonts\arialuni.ttf  
c:\home\sjoerd\.mplayer\subfont.ttf
```

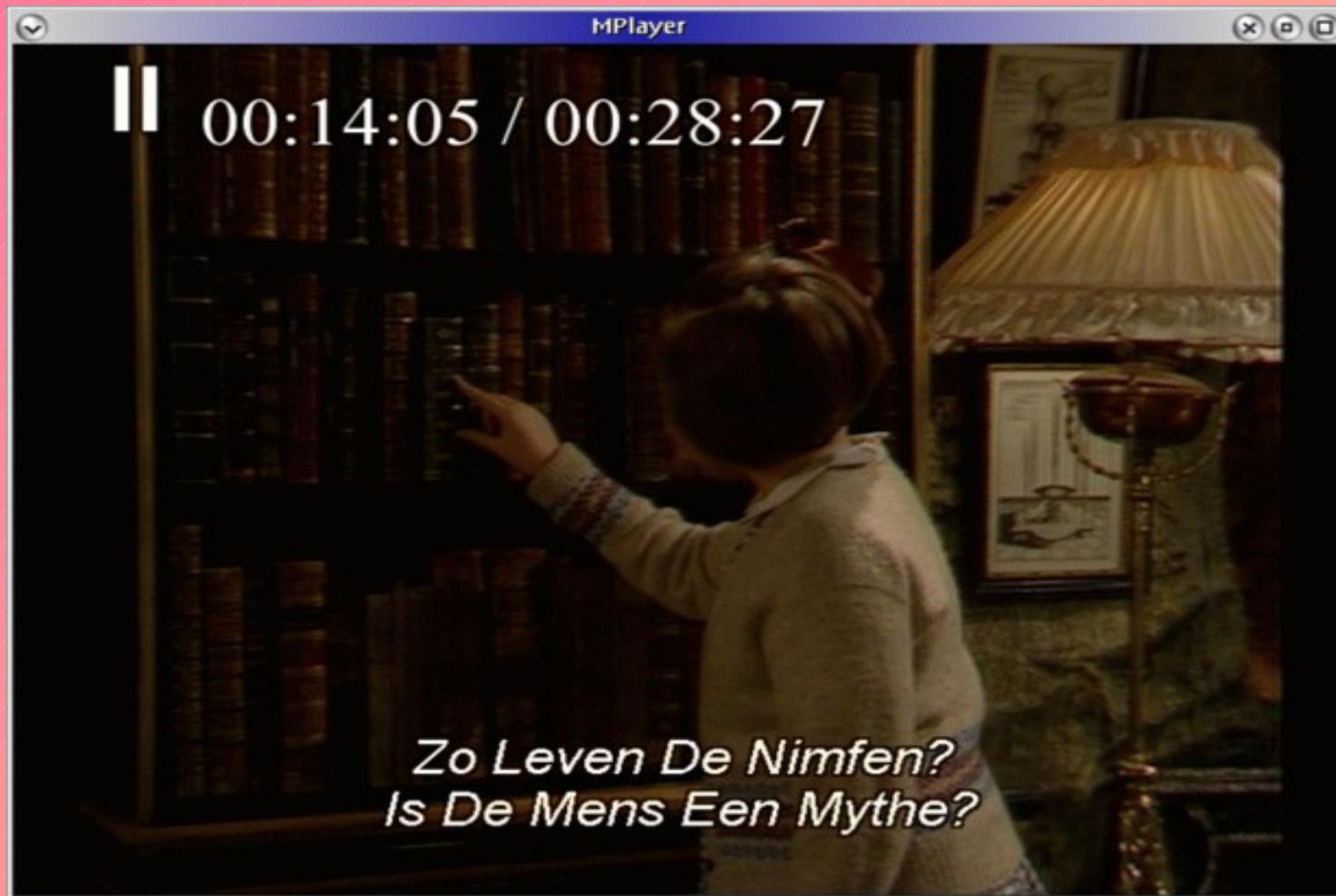
```
ls -ila
```

```
9127866760652081970 lrwxrwxrwx 1 0 0  
24 2007-07-19 08:53 subfont.ttf ->  
c:\psfonts\arialuni.ttf
```

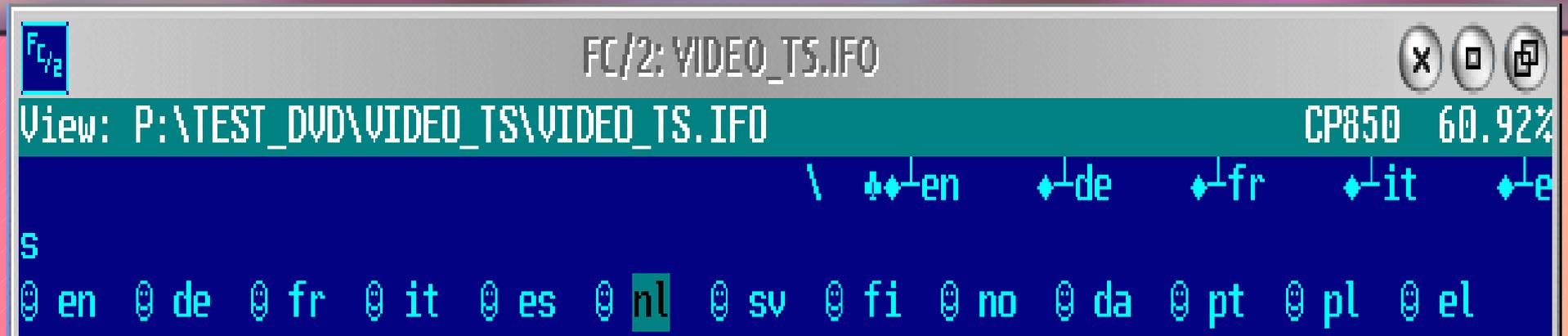
(ls done in c:\home\sjoerd\.mplayer)



Use the "o" key to toggle between OSD modes and the "j" key to find your countries subtitle (if available).



Finding alternative languages and subtitle id's (sid)



```
FC/2: VIDEO_TS.IFO
View: P:\TEST_DVD\VIDEO_TS\VIDEO_TS.IFO CP850 60.92%
\  en  de  fr  it  e
S
en  de  fr  it  es  nl  sv  fi  no  da  pt  pl  el
```

Open the DVD Information (IFO) file and look for your language code.

Here the file contains as alternative languages en, de, fr, it, es and the subtitle languages (-slang) en, de, fr, it, es, nl, sv, fi, no, da, pt, pl and el. The ID's count from 0.

To play a movie (VOB file) with English language and subtitles: SET MOPT=-alang en -slang nl (or MOPT= -sid 5)

The Versioned Object Base (VOB) files contain the movie, the sound and the subtitles in a streaming MPEG2 format. The IFO file contains metadata.

Tip : if the j-toggle does not find your language use a high -sid 12

To see and listen to embedded video and audio streams you need to have a mediaplayer plugin

The screenshot shows the BBC News website layout. At the top, there is a navigation bar with links for Home, News, Sport, Radio, TV, Weather, and Languages. A search bar is located on the right. Below the navigation bar, there are links for 'UK version' and 'International version'. The main header features the BBC News logo, a 'LISTEN LIVE' button for 'The World Today', and a 'Mobiles' section with an image of a mobile phone and text: 'Get news headlines on your handheld device'. The main content area is divided into sections: 'News Front Page' with a world map and regional links (Africa, Americas, Asia-Pacific, Europe, Middle East, South Asia, UK); 'Video and Audio' featuring a video player for 'Mexico flood rescue underway' with a 'WATCH' button; and 'MOST POPULAR STORIES' listing news items by day of the week.

BBC Home News Sport Radio TV Weather Languages Search

UK version International version | About the versions Low graphics | Accessibility help

BBC NEWS LISTEN LIVE The World Today

Mobiles
Get news headlines on your handheld device

News Front Page
Africa
Americas
Asia-Pacific
Europe
Middle East
South Asia
UK

Video and Audio

Mexico flood rescue underway
Heavy flooding in Mexico's Tabasco state has forced thousands of people to flee their homes.
WATCH

MOST POPULAR STORIES
From Video and Audio

THURSDAY
▶ Japan fighter jet catches fire

WEDNESDAY
▶ Japan fighter jet catches fire

TUESDAY
▶ 'Jailbreak king' escapes again

MONDAY
▶ Sarkozy walks out of interview

Real Player under Odin is old (and dangerous on the internet).
WarpVision (partly mplayer based) does not get the streams.

Using internet streams with Mplayer

The screenshot shows a Linux terminal window with a list of network interface statistics. The MPlayer window is overlaid on top, displaying a video stream. A tooltip for the 'Ethernet-Csmacd' interface is visible, showing the following data:

Interface	Incoming (KB/s)	Outgoing (KB/s)
Ethernet-Csmacd	52,4	0,7

The terminal output shows the following statistics for the Ethernet-Csmacd interface:

Time	Bytes	Packets	Errors	Drop	Coll	Carrier	Overrun
0.029	4484/4484	1%	0%	7.2%	16	0	6%
0.036	4498/4498	1%	0%	7.2%	16	0	28%
0.037	4499/4499	1%	0%	7.2%	16	0	28%
0.038	4500/4500	1%	0%	7.2%	16	0	28%

Being an under Linux developed application, Mplayer is very well equipped to display internet streams.

So "path/mplayer c:/mpg/movie.avi" will work the same as:

"mplayer mms://domain/./movie.wma"

- if you have a fast enough internet connection.

Some measurements with IP monitor (to monitor the used bandwidth in Kbytes/s) and PM View to measure screen size:

- ◆ MPEG 1.0 layer III (128kbit/s, 44100 Hz) audio with Z!: 16 kB/s.
- ◆ 480x360 pixels video: 80 - 120 kB/s.
- ◆ TMF clips 720x576: 80-230 kB/s.

Some problems users encounter on the web: No Windows Media Player or other (“everyone should have this brand”) browser plugin available...



OS/2 and Linux Media Players *may* have the codecs (from compress decompress) or codec analogues to decode (decompress) Windows Media Audio (WMA) or Video (WMV) files to a for their API (Odin, Wine) usable format.

But they are not the Windows Media Player that is available on 90% (= MS OEM market share) of the client desktops. MS oriented servers will notice this. And will ask you first to install *their* plugin (even if you browse without administrator rights).

So your browser will see the "Click here to download the plugin" before it gets the URL of the stream. Then it stops. That's not fair play, as alternative media players have no chance to play anything without the URL of the mms://stream.



The Firefox (and by other Mozilla browsers) used MediaConnectivity (MCP) plugin



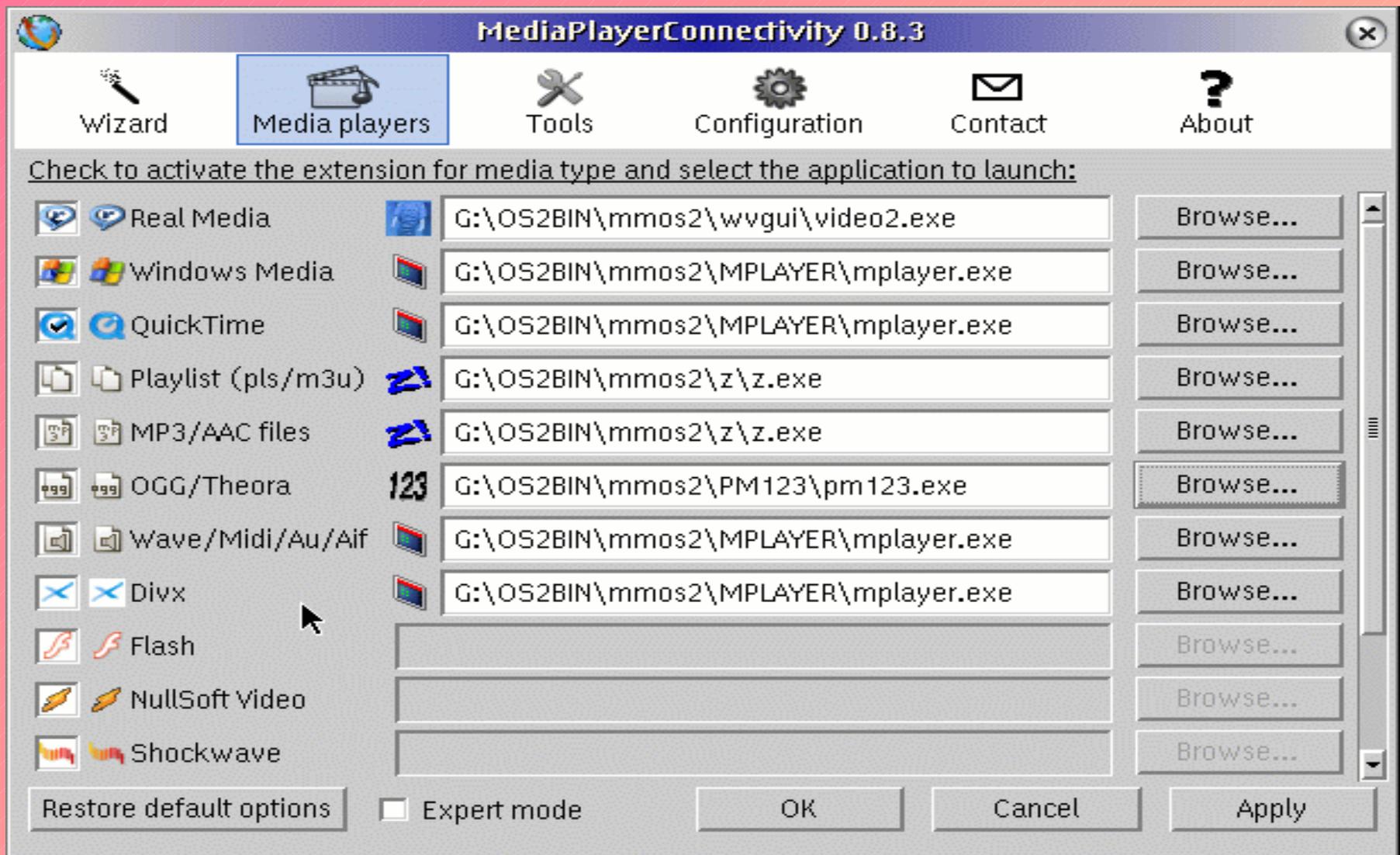
When you try to open an URL (seamingly) linking to a media file, but then the WWW server refuses you, because your browser is not equipped with the official plugins, what can you do?

Install the [MediaPlayerConnectivity :: Firefox Add-on](#)

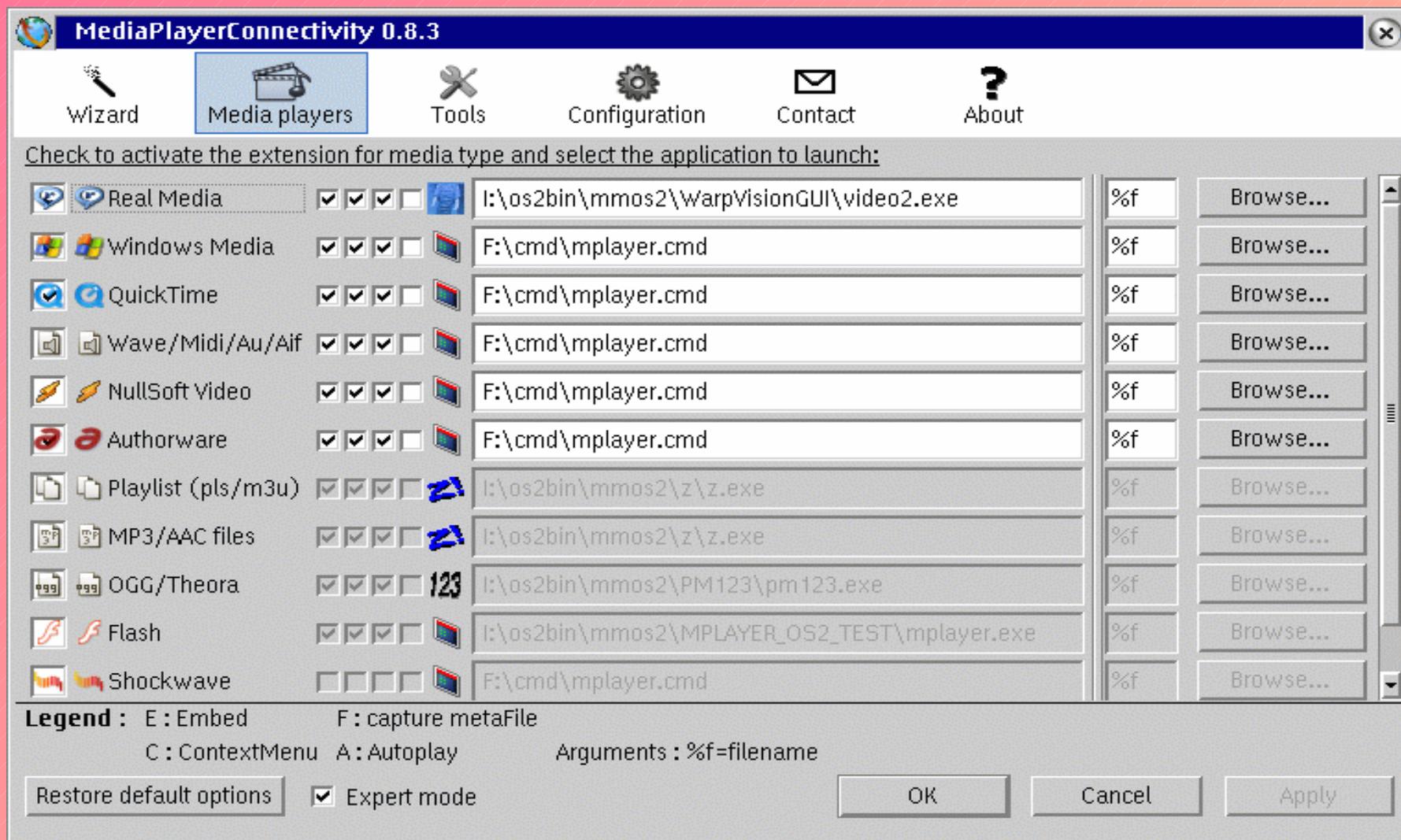
It is a java and other webscripting deceiving Mozilla plugin that mimics the behaviour of the Windows browsers. So after having seen the "Click here to download the plugin", MCP will return and will suggest the server that the browser has the required plugin.

It will then analyse the information given by the server to the browser and will show the streaming URLs via the clickable MCP logo in the browser window.

**You have to tell the MediaConnectivity plugin when and how to use your preferred OS/2 Media Players.
Use: Firefox / Tools / MediaConnectivity / Configure**



***I prefer to use OS/2 batches to launch Mplayer:
you only need to enter your preferred options
once.. The argument %f are the filenames or URLs.***



Some simple Mplayer CMD files

A standard mplayer for the internet

```
call mode co80,30
```

```
set MPOPT=-autosync 30
```

```
d:\mmos2\mplayer\mplayer %1 %2 %3 %4 %5
```

A dump_stream1.cmd to capture internet streams in temp:

```
d:\mmos2\mplayer\mplayer -dumpstream %1 %2 %3 %4 -dumpfile  
%TEMP%\dump1.mpg
```

A small and silent cli mplayer:

```
call mode co25,1
```

```
set MPOPT= -autosync 30
```

```
d:\mmos2\mplayer\mplayer %1 > NUL 2>&1
```

Mozilla / Tools / MCP / Configuration / Tools tab: here you can enter the options of the "open as" menu when you right click on an by MCP detected stream.

MediaPlayerConnectivity 0.8.3

Wizard Media players **Tools** Configuration Contact About

Tools available in the right clic menu over media links and 'black box'

Dump stream		F:\cmd\mple	%f	Browse...	Delete
Mplayer_os2_test		F:\cmd\mple	%f	Browse...	Delete
MPlayer groot		F:\cmd\mple	%f	Browse...	Delete
MPLAYER-DEV-SVN-R23385-OS2-3_3_5		F:\cmd\MPL	%f	Browse...	Delete
MPLAYER-SVN20070201-OS2		F:\cmd\MPL	%f	Browse...	Delete

Add

Download Manager

Browse...

Always use Firefox dowload manager if possible (use specified download manager only for mms:// stream, rstp...)

How to capture a stream using a dumpstream batch

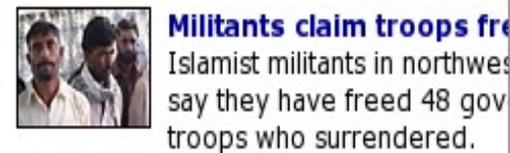
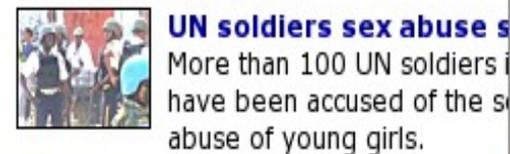
Video and Audio



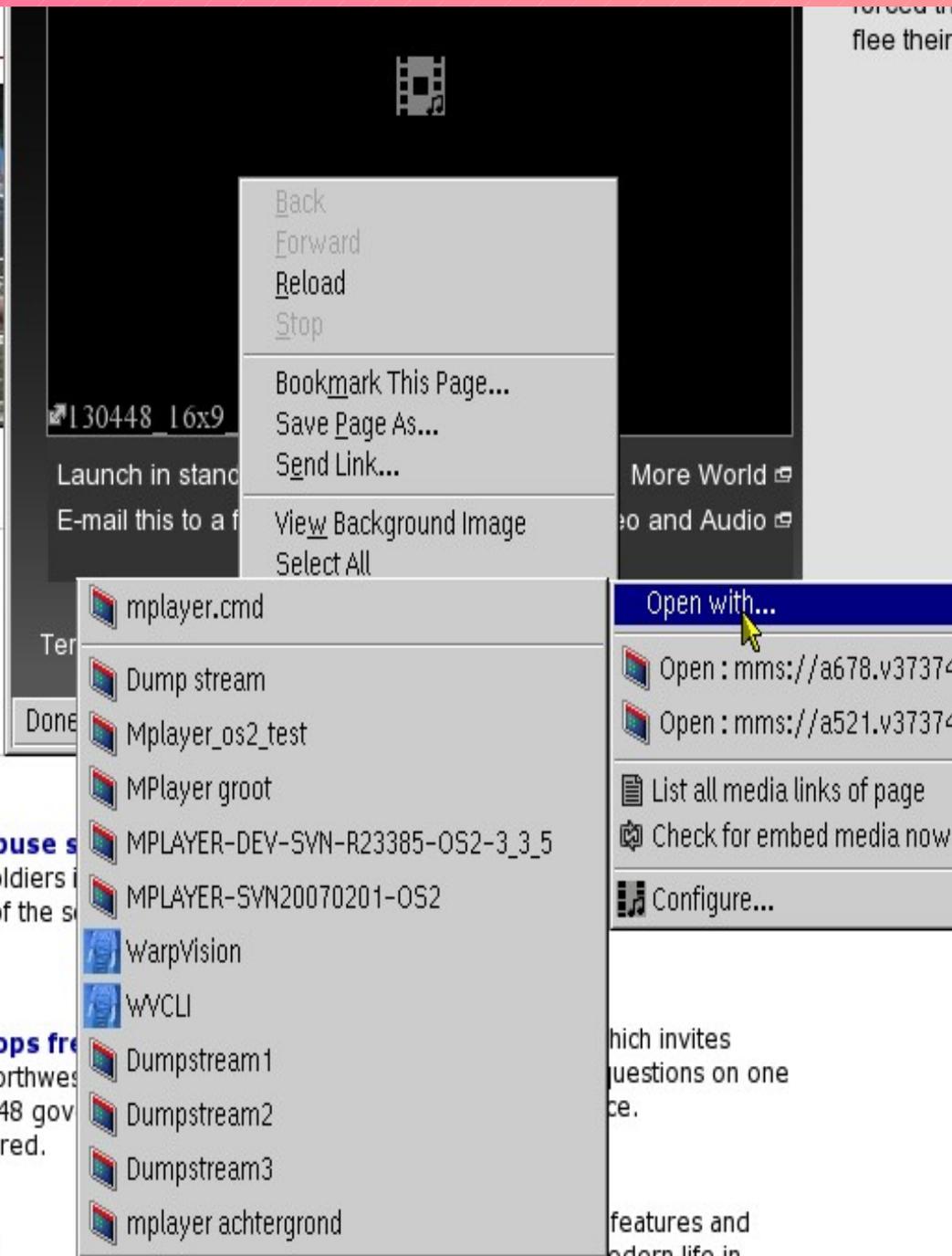
VIDEO CHOICE



OTHER TOP STORIES



Bhutto calls for investigation



The screenshot shows a browser window with a video player. A context menu is open over the video player, listing options like 'Back', 'Forward', 'Reload', 'Stop', 'Bookmark This Page...', 'Save Page As...', 'Send Link...', 'View Background Image', and 'Select All'. A 'Tools' submenu is also open, showing options like 'mplayer.cmd', 'Dump stream', 'Mplayer_os2_test', 'MPlayer groot', 'MPLAYER-DEV-SVN-R23385-OS2-3_3_5', 'MPLAYER-SVN20070201-OS2', 'WarpVision', 'WVCLI', 'Dumpstream1', 'Dumpstream2', 'Dumpstream3', and 'mplayer achtergrond'. The 'Open with...' option is highlighted, and a mouse cursor is pointing at it. The background shows a video player with a film strip icon and a 'More World' button.

To capture a stream with a batch from the tools menu:

- Rightclick on the black area around the MCP logo.
- Choose Media-PlayerConnectivity
- Choose in the Open with.. (Tools) submenu the batch or command

Watch it grow in temp

The END



Still any questions?