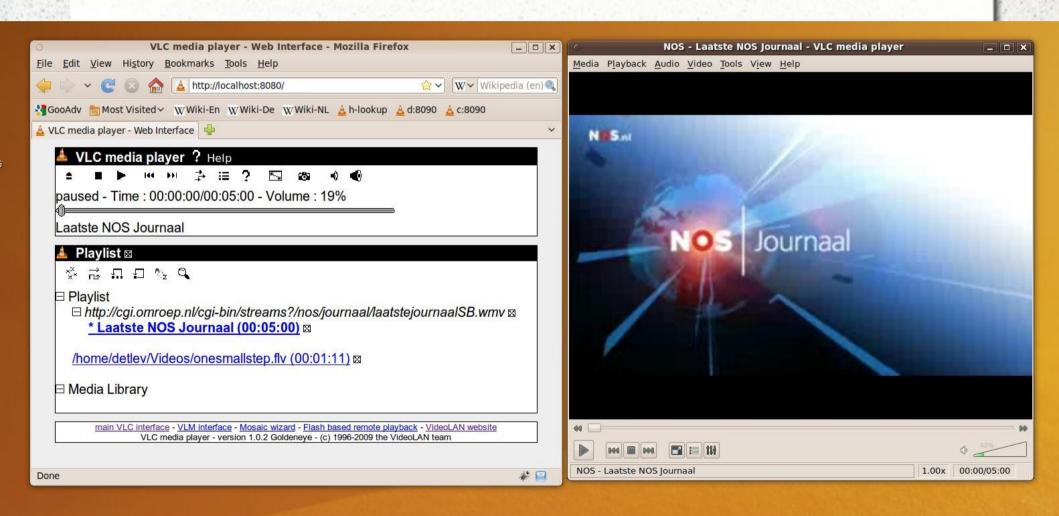
VLC http interface

Browser Interface vs. normal interface



Controlling VLC from Perl via http

```
# Wrote a little module to do things like:
 my $vlc = VlcHttp->new({host=>'localhost:8080')
  $vlc->in play($file);
                         # start playing file
  $vlc->wait for state('playing');
  $vlc->pl pause;
                                 # pause playback
  $vlc->wait for state('paused');
  $vlc->seek(23);
                                 # seek to 23s
  $vlc->pl pause;
                                 # play for 4s
  $vlc->sleep(4);
  $vlc->pl pause;
  $vlc->volume("30%");
  $vlc->fullscreen; $vlc->snapshot;
# (Not yet definitive form here: VlcHttp.pm)
```

How does it work?

- VLC has built-in http server
- nicely documented on:
 - http://www.videolan.org/doc/vlc-user-guide/en/ch05.html
- to enable the http interface:
 - vlc -I http (http instead of normal GUI)
 - vlc --extraintf http (http + normal GUI)
- by default on http://localhost:8080
- --http-host <host>:<port> for other url

Security: .hosts, .access

- Remote access: requires entry in .hosts
 - <vlc-dir>/http/.hosts
 - add line like: 192.168.0.0/16
 - sometimes required reboot... (?)
- Quite important: allowed hosts will get some access to whole file system through the browser when vlc is running with http interface!
- .access for password protection by directory (line: "detlev:secret")

VLC as http server

- document-root:
 - <vlc-dir>/http
- with <vlc-dir> typically being:
 - /usr/share/vlc
 - C:\Program Files\VideoLAN\VLC
- GUI is defined in:
 - <vlc-dir>/http/index.html
 - <vlc-dir>/http/js/functions.js

How GUI sends commands (AJAX)

- index.html has special tags:
 - <vlc id="include"
 param1="dialogs/main" />
- expanded by vlc to dialogs containing buttons like:
 - <button id="btn_pause"
 onclick="pl_pause();" ...
 title="Pause" >
- java-script in functions.js makes request to:
 - http://localhost:8080/requests/status.
 xml?command=pl pause

http-response

- For requests to:
- http://localhost:8080/requests/status.xml (including any commands sent)
 - xml listing of current status (stop/playing/paused, position, length etc.)
- http://localhost:8080/requests/playlist.xml
 - xml listing of currently loaded playlist (including id number of clips, needed for some calls)
- List of main functions: vlc_calls.html

All the perl it takes to play clip 26

All the perl it takes to find current playback position

```
demo04.pl:
use LWP::Simple;
use XML::DOM;
use XML::DOM::XPath;
  $status url =
    "http://localhost:8080/requests/status.xml";
  $xml = LWP::Simple::get($status url);
  $parser = new XML::DOM::Parser;
  $doc = $parser->parse($xml);
  @nodes = $doc->findnodes( '/root/time');
  $time = $nodes[0]->getFirstChild->getNodeValue;
  printf "time=%s\n",$time;
```

Uses...?

Personally I use it for:

- language practice: quickly go back to positions I want to study / ask questions about
- start playback of tv channels (online streams or DVB-T)
 on other computers from command line

Might use it for:

- taking snapshots at computed times
- controlling volume / fullscreen mode remotely and/or from command line

<*The End>*