

Nemp Webserver

Nemp Version 4.4

This document should help you to modify the Nemp Webserver themes and/or create your own templates.

1. Introduction

First I want to be clear about what the Nemp Webserver is, and what it is not. Some people stated that it can be used for streaming music within your home network. This is not the case.

- The Nemp Webserver IS NOT for streaming the playlist or the library within the local network.
- The Nemp Webserver IS a remote control for the player.

The idea for this was born on a private party at my home. The computer with Nemp running on it was inside my room, the boxes where standing outside in the garden, where the party actually took place. It was quite annoying to walk inside everytime we wanted to hear a special track.

With the Nemp Webserver you may have access to the playlist through your smartphone (any other device with wireless LAN and a web browser will work as well).

With the new Nemp Webserver introduced in Nemp 4.4, it is possible to define two usergroups for controlling the player. Normal users may only "vote" for a file. Files with many votes will be played earlier than other files. A user with admin rights may have further access to the player, like moving files in the playlist, seeking in the current played file or volume control.

2. Usage

When the server is activated, every device in the same network may have access to the Nemp Webserver through the IP address listed under "Own IP (LAN)" in the settings dialog, e.g. <http://192.168.1.123>. You may also need to add a port, like :4242, if you do not want to use the default port for http (80).

If you want to restrict the access to authorized people in an open WLAN, you can set username and password for access.

You can choose between several Themes. Nemp comes with 3 themes, but you can add your own if you want. The `Default` theme gives full access to the player using AJAX. The `No Javascript` theme gives (almost) full access to the player without using javascript. Some parts like seeking in the current file and volume control require javascript – these are missing in this theme. The `Party` theme gives only restricted access to the player. For full access admin rights are required (which means just another combination of username//password).

If you just want to use the Nemp Webserver, you can stop reading now. The rest of this document is for developers, who want to add their own theme.

3. The template system

The Nemp Webserver uses a simple template system. The different pages (player, playlist and library) are build based on different *template files* (*.tpl). Each template file contains parts of HTML code and some *insert tags*. These insert tags `{{value}}` are replaced by the Webserver as described in the file `TemplateOverview.pdf`.

If you want to build a new theme, you have to create a new subdirectory in `<NempDir>\HTML\`,

create a lot of *.tpl files and other files like images and files for javascript, css, static html and so on. The *.tpl files are simple text files, you can edit them with any editor you prefer. Template names are not case-sensitive as usual on Windows systems. The *insert tags* {{value}} actually are case sensitive, so {{value}} is not the same as {{Value}}.

An overview of how the different template files are used is given in the file TemplateOverview.pdf. Base template is always body.tpl, which will use a proper page*.tpl for building the actual page.

4. Commands

The Nemp Webserver understands several commands to display information or to control the player. Most of the parameters should only be used through insert tags (see template overview), e.g. {{ID}} or {{CoverID}}

- /player The default page. This page shows usually the current file and controls for play/pause, stop, next title, ...
- /playercontrol Used for controlling the player. According to the parameters, the specified action is performed (the effect is the same as clicking the corresponding button in the Nemp main window).

After this, the browser is redirected to /player.

Used Parameter: action

Possible values: (e.g. /playercontrol?action=playpause)

- playpause
- stop
- next
- previous
- /playlist Displays the playlist.
- /library This page is used for *searching* in the Nemp media library

Used parameters: query, start

- query The string the user searched for
- start Offset (used for pagination, default value is 1)
- /browse This page is used for *browsing* in the Nemp media library

Used parameters: mode, l, value, start, other. Not all combinations of parameters are allowed.

Possible values for mode are artist, album and genre. Artist shows a list of artists, album a list of albums, and genre a list of genres. The list of artist is splitted into two pages to sort out all the "one-track-artists" in your library. You can choose between these page through the parameter other. On the album page all albums with 3 or more tracks are shown. Albums with one ore 2 tracks are omitted.

Parameter l defines the letter of the preselection (only for modes artist and album). Possible values are A, ..., Z, any other value will be treated as 0.

Parameter other is used for artist. If other=1, a list of artists with less then 5 tracks is

shown. Otherwise a list of artists with 5 or more tracks is shown.

If parameter `value` is given, a list of audifiles for the specified artist, album or genre (parameter mode) will be displayed.

Parameter `start` defines an offset, if parameter `value` is used.

- `/playlist_details` and `/library_details`

Used to display detailed information for a file in the playlist or in the library. Parameter `ID` specifies the file by an Integer. Note that a file "[c:\my-favorite-song.mp3](#)" in the library has a different ID than the same file in the playlist.

- `/cover`

If you want to display a cover, you should use `/cover` with a specified ID. The Nemp Webserver will then return the proper image.

- `/playlistcontrol`

Used for actions on the playlist. The specified action is performed, and the playlist page will be reloaded.

Parameter `ID` specifies the file, on which the action should be performed.

Possible values for parameter `action` are

- `file_playnow` starts playback of the file immediately. If the file is not in the playlist yet, it is inserted after the currently playing file
- `file_vote` adds a "vote" to the file. Files with many votes will be played earlier than other ones. If a file from the library is voted, it will be added to the playlist. If a copy of the file is already in the playlist, this copy will get the vote instead. So multiple voting for a file in the library will not result in multiple copies of the file in the playlist, but in one entry with many votes.
- `file_add` adds a file at the end of the playlist. Only allowed for files from the library.
- `file_addnext` adds a file after the current title into the playlist. Only allowed for files from the library.
- `file_movedown` moves the selected file one position down. Only allowed in the playlist
- `file_moveup` moves the selected file one position upwards. Only allowed in the playlist
- `file_delete` deletes a file from the playlist.
- `/<some filename>` If the parameter `action=file_download` is used along with a proper `ID`, Nemp will send this audiofile. Otherwise the specified file is searched in the Webserver Theme directory and returned (for example images, static html files, css, ...)

5. Ajax Commands

The Nemp Webserver also understands some further commands, which may be used to send commands without the need of reloading a complete page. For an example, how these can be used, have a look into the default theme.

- `/playercontrolJS`

Parameter `action` can be used with the same values as in `/playercontrol`.

Additional values for `action` are

- `setprogress` Set the progress of the current file to the value specified in the parameter value. Valid values are numbers from 0 to 100. Return value: none.
- `getprogress` Get the progress in the current file. Return value: '0' to '100'
- `setvolume, getvolume`: Same as progress, but with the volume

Also, a parameter `part` may be used, to reload parts of the player page:

- `part=controls` will return the part `{{PlayerControl}}` of the player page template
- `part=player` will return the part `{{ItemPlayer}}` of the player page

- `/playlistcontrolJS`

Same parameters as in `/playlistcontrol`, but without redirect to the playlist page.

- `file_playnow` returns the ID of the new file, which can be used to add a class "current" to the new file by javascript.
- `file_vote` returns
 - `ok`: Success, vote was counted.
 - `spam`: The user voted too much. There is a limit of 20 votes per minute.
 - `already voted`: The user has already voted for this file. Only one vote per user and minute is allowed.
 - `exception`: Something was wrong (e.g. a deprecated link was clicked)

If "Ok" is returned, the item should be reloaded, see `loaditem`.

- `file_add, file_addnext` returns ok or invalid parameter.
- `file_movedown` returns the ID of the file below the current file, i.e. the ID of the file, with which the selected file has been swapped.

If the return value is `-1`, the file was only moved down inside the prebook list¹

If the return value is `-2`, the last file was selected, and the operation was cancelled.

The return values can be used to check whether the html playlist and the Nemp playlist are consistent. If they are, only two items can be loaded and replaced instead of reloading the complete playlist.

- `file_moveup` Same as move down. Return value is `-2` for the topmost file in the playlist.
- `file_delete` returns
 - `0`: Invalid parameter, file was not in the playlist (reload of playlist is recommended)

¹ The prebook list can be used to "sort" the playlist without moving the entries. Just select a playlist file in the Nemp window and type a number. This is a fine little function, but: This is a quite confusing concept, as it is only used in Nemp, not in any other player (afaik). You SHOULD NOT use this function when using the webserver on a party.

- 1: Success, file was deleted from playlist.
- 2: File was only deleted from the prebook list
- `loaditem` returns the html code for the specified file (through parameter `ID`) as defined in template `Itemplaylist.tpl`. If `ID=-1`, the complete playlist is loaded, as in `{{PlaylistItems}}`.

6. Admin area

The Webserver theme "party" comes with an additional subdirectory "admin". In this subdirectory you can define another set of templates, which allow further control than the templates in the root directory of the theme. You do not need to copy all template files into the admin directory – if a template file is missing, the one of the root directory is used.

For example, a normal "party user" may just vote for files, while "you" as the "DJ" may also want to control the player or delete files from the playlist.

The Nemp Webserver checks every request for a starting `/admin` in the URL. If found, admin rights are required to proceed.

The part `/admin` is then cropped from the URL. That means, all refs to static files like `css`, `javascript`, `images` are relative to the root directory of the theme. The subdirectory `admin` is only for the template files, other files in this directory will be invisible for the Webserver.

Note: If one of the guests on your party is a Nemp professional and knows the commands of the Nemp Webserver, he (or she) may directly type a url like `/playlistcontrol?id=1337&action=file_playnow` to control the playlist. Without proper identification as admin this will not work, unless you allow player control within the settings dialog at "user rights".

7. Remarks

If you have any problem with creating your own theme, or you miss some features, or you found some bugs, or enhanced an existing theme: Feel free to send me an e-mail to mail@gausi.de.