

vamp# instructions

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vamp# instructions

This is a small document of how to use the <u>vamp#</u> software and how to compile it from <u>source</u>.

What is the vamp#

The vamp# is a A lightweight open source <u>HTPC</u> software for video, audio and photo playback for Microsoft® Windows® platform.

The software was wrote because some other similar <u>HTPC</u> software's were either requiring too much resources or are otherwise over-bloated with "useless" features.

The used libraries and the programming technique

The software is written purely in <u>C# programming language</u> and is currently relying on <u>.NET</u> <u>Framework v.4.6.1</u>. The software uses Windows Forms as the <u>GUI</u> which is somewhat outdated according to some people, but much easier to approach.

The software's video playback is base on the famous an efficient <u>VLC</u> media player and the movie and TV show data is gathered from the <u>TMDb (The Movie Database)</u>.

Another libraries will be listed after the actual instructions.



Play an arbitrary file

To play an arbitrary file you need to either select the menu from the main menu or select an already watched directory from the right side list.

Play an arbitrary file via the menu item

The arbitrary video playback starts from the menu item which gives you a file browser dialog. The browser playback dialog's starts from the previously browsed path which is saved in the settings.



The "tick" () icon on the right side of the file indicates that the file has been watched, and the half-moon icon indicates that the file has been watched to some point and then the playback was stopped (). To play a file just simply click the file to start the playback.



×

Play a file from the list

When the mouse hovers over the menu item the right side of the screen gets filled with previously browsed directories. Any directory can be selected from the list and the file browser dialog executes on that directory.

The 100 Season 5 The Simpsons Season 29 The Theory of Everything Some TV Show Season 1

There is also this deletion button (🗙) which can be used to delete an item from the list.





Movie collection

Movies are added to the movie collection via the add () button on the bottom of the movie collection list which opens a directory browser dialog. The actual menu item in this case does nothing else than displays the movie collection list when the mouse hovers over the menu item. The refresh button () updates the <u>TMDb (The Movie Database</u>) data for the movies in the collection(s).



The <u>TMDb (The Movie Database</u>) update/load dialog:





There is also a delete (💌) button which can be used to delete a movie collection from the list.





Watching movies

To launch a selection window to watch a movie simply select the collection from which you may want to watch a movie from. The selection dialog includes the movie posters, the descriptions of the movies and their running times. Also the same indicators are used to display the watching state of a movie.

The "tick" () icon on the left of a selected movie indicates that the movie has been watched, and the half-moon icon indicates that the movie has been watched to some point and then the playback was stopped (). To watch a movie just simply click the movie to start the playback.





TV show season collection

TV show seasons are added to the TV show season collection via the add () button on the bottom of the TV show collection list which opens a directory browser dialog. The actual menu item in this case does nothing else than displays the TV show season collection list when the mouse hovers over the menu item. The refresh button () updates the <u>TMDb (The Movie Database</u>) data for the TV show season(s) in the collection(s).



The <u>TMDb (The Movie Database</u>) update/load dialog:





There is also a delete (💌) button which can be used to delete a TV show season from the list.





Watching TV shows

To launch a selection window to watch a TV show season episode simply select the collection from which you may want to watch a TV show season episode. The selection dialog includes the TV show season episode stills, the descriptions of the TV show season episodes and their running times. Also the same indicators are used to display the watching state of a TV show season episode.

The "tick" () icon on the left of a selected TV show season episode indicates that the TV show season episode has been watched, and the half-moon icon indicates that the TV show season episode has been watched to some point and then the playback was stopped (). To watch a TV show season episode just simply click the episode to start the playback.





DVD / optical disc playback

The DVD / other optical disc playback doesn't currently work – so this entry is in a todo stage.







Music

The music playback relies on the <u>amp#</u> program's remote control <u>WCF (Windows Communication</u> <u>Foundation)</u> <u>API</u>. The reason to use the <u>amp#</u> software is simply that there was no reason program a new music player and some of the music playback libraries are incompatible with the <u>GPLv3</u> license.



Configuring the amp#

Configuring the <u>amp#</u> software is quite simple – however the remote control <u>API</u> to get enabled an elevated user rights are required.





Enable the remote control <u>API</u> from the settings:

	🖬 Settings 🛛 🗙	
	□ Enabled quiet hours 20:00	
	 Pause on quiet hours Decrease volume on quiet hours by percent: 80 	
	Remote control API	
	http://localhost:11316/ampRemote/	
	Set Uri	
	Lantency (ms): 500	
	Cancel OK	
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The music playback

The <u>amp#</u> software must be running in order for the audio playback to work – however the remote control interface doesn't.

	[Ulkomaat]: A01 The Humming [2]	
Find:		
03 - Linger		×*
04 - Free To Dec	ide	×
05 - I'm Still Rem	nembering	×
06 - Empty		×
07 - Zombie		×
08 - Yesterday's	Gone	×
09 - No Need To	Argue	\mathbf{x}
A01 The Hummi	ng [2]	×
A02 So I Could F	ind My Way [2]	×
A03 Even In The	Shadows [3]	×
A04 The Forge C	of The Angels [4]	
A05 Echoes In R	ain [5]	×
A06 I Could Neve	er Say Goodbye [6]	×
A07 Dark Sky Isl	and [7]	×
A08 Sancta Mari	a [8]	×
A09 Astra Et Lun	a [9]	×
A10 The Loxian	Gate [10]	×
A11 Diamonds C	n The Water [11]	X
	Time: -03:00 Time: $-03:00$ Time:	

The playback interface is quite simple – it has a search text box, the list of the songs in the album and common music player controls.

Playback controls explained

The playback position is displayed in minutes and seconds of how much of the playback time is left and the playback position can be adjusted with a slider.



The volume is adjusted as per-song basis so there is no master volume at all.





The rating of the song can be set with the slider with the stars in it.



Items can be deleted from the album by selecting the delete button on the right side of the song or by pressing delete button from the keyboard.



NOTE: These previously mentioned controls do affect the <u>amp#</u>'s <u>database</u> and are saved by the <u>amp#</u> software.

Playlist shuffling / randomizing is set with the button described below.

The playlist shuffling / randomizing is enabled



The playlist shuffling / randomizing is disabled



Playlist repeat is set with the button described below.

The playlist repeat is enabled



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The playlist repeat is <u>disabled</u>



The previous song is played if any songs have been played; otherwise the button is disabled



The disabled button



Play / pause button either resumes the paused playback or pauses the current playback

Start / resume the playback



Pause the playback





The next song button either selects the next song from a queue or plays the next song depending on the randomization / shuffle and repeat settings.

The next song button



The display queue button displays the queue if any songs are queued; otherwise the button is disabled.

The display queue button is enabled



The display queue button is disabled



The context button allows to load saved queues, append to the current queue and select another album from the <u>amp#</u>'s <u>database</u>

The context button





The items in the context menu



The first menu item called "Select Album" allows the user to change the album from the <u>amp#</u>'s <u>database</u>.

Select album item was clicked..

0	Select Album
2	Load a saved queue
2	Append a saved queue

So a dialog to select an album is displayed – the user can either cancel or select another album

	Sel	ect Al	bur	n
Dance				
Default				
finTest				
Kaikki				
testii				
Ulkomaat				
	OK		×	Cancel



The second menu items allows a user to load a saved queue for playback from the <u>amp#</u> software's <u>database</u>.

A load a saved queue item was clicked..



So a dialog is is displayed to allow user to either select a saved queue or cancel the operation

Load a save	ed q	ueue	
Testijono 2			
Petterin jono			
Kokeilu 11.11.17			
Lapparit - 25. marraskuutata 2017 (17:27)			
perkele			
Jono: Oletus - 15. joulukuutata 2017 (18:16)			
Append			
Append 2			
⊘ OK	×	Cancel	

An append a saved queue item was clicked..



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So a dialog is displayed to either append to the end of the current queue or cancel the operation

Append a say	ved queue	
Testijono 2		
Petterin jono		
Kokeilu 11.11.17		
Lapparit - 25. marraskuutata 2017 (17:27)		
perkele		
Jono: Oletus - 15. joulukuutata 2017 (18:16)		
Append		
Append 2		
OK	X Cancel	

The exit button closes the <u>amp#</u> remote control window but the <u>amp#</u> software it self is left to the state it was running when the window was still open.

The close button



The queue counter displays how many songs there are in the queue currently

The queue counter

In queue: 11

There is also this tool-tip text which gives a short description when the mouse hovers over a control

The tool-tip text

Queue

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Keyboard controls for the music playback

Searching for songs is just as simple as to just start writing text event though the search box doesn't have a focus.

	[Ulkomaat]: A01 The Humming	
Find:	wild chi	
Enya - Wild Child		
Midnight Blue		
Song Of The Sandman		
02. Wild Child		

Control keys

- The Delete key deletes selected items from the album (play list)
- The Return key starts a playback of a selected item from the list
- The Add key (NP +) adds a song to the queue, if the Control key is also down the song is inserted into the queue after the currently playing song in the queue.
- The Up and Down arrow keys and the Page Up or Page Down keys allows the user to navigate in the song list.



Music playback errors

The only actual error there might occur with the music player window is that the <u>amp#</u> software is not running or the remove control <u>API</u> is not configured correctly.

The error message in the music player window



The error message text:

There was no endpoint listening at http://localhost:11316/ampRemote/ that could accept the message. This is often caused by an incorrect address or SOAP action. See InnerException, if present, for more details.



Watching YouTube

<u>YouTube</u> <u>TV</u> interface can be simply launched from the main menu bu selecting the <u>YouTube</u> button from the menu.

The <u>YouTube</u> menu item



This opens a window based on the <u>Chromium Embedded Framework</u> with the <u>YouTube</u>'s <u>TV</u> interface.

The <u>YouTube</u>'s <u>TV</u> interface loading



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The interface in ready state (weird recommendations though 0)



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The Internet

The Internet menu allows you to store web sites mostly for watching videos. The browser is based on the <u>GeckoFX-45.0</u> framework because as compared to Chromium this has an embedded support for decryption of <u>DRM</u> content in <u>HTML5</u> videos. Do note that the <u>Flash</u> is not supported and will not <u>ever</u> be supported.

The menu item is as follows and has no other functionality than to display the website list on the right side of the screen when the mouse hovers over the menu item.

The Internet menu item



It the right side list box the user can select, add and delete a website from the list. The delete (🗙) button simply displays a dialog whether a selected website should be deleted from the list.

The delete item dialog



The add button (1) displays a dialog which allows the user to add a website to the list.

The dialog also allows you to give a name for the website to be added to the list so too long or too complex WWW addresses aren't displayed.



The add website (location) dialog



The right side menu for managing websites



Once an item is clicked from the list the web browser window automatically navigates to the selected location.





The web browser window showing the selected location



Photo albums

Photo albums can be viewed and deleted through the main interface but there is no editing possibility. The software has a separate photo album editor for that. The menu item it self does nothing else than shows a list of photo albums on the right side of the screen when the mouse hovers over the menu item.

The photo album menu item





A photo album can be either watched or deleted using the delete (\mathbf{X}) button in the photo album list box.

The deletion dialog



An item is is selected from the photo album list

Haukkakorhola 01.04.2003 - 04.04.2003	× *
Haukkakorhola 04.04.2003 - 09.04.2003	×
Haukkakorhola 09.04.2003 - 19.04.2003	×
Haukkakorhola 20.04.2003	×
Haukkakorhola 20.04.2003 - 25.04.2003	×
Haukkakorhola 25.04.2003 - 05.05.2003	×
Haukkakorhola 06.05.2003-11.05.2003	×

After selecting an item a photo album browser window opens. It has simple movement buttons to backward and forward.



Petteri Kautonen, VPKSoft 14.10.2018

The photo album window with the navigation menu showing



TIP: To zoom an image use the right mouse button and drag the mouse over the image.

The exit menu item

The exit menu item currently does nothing else than quits the program.

The exit menu item





Controls in the web browser windows

The web browser windows were build to be simple – you can only browse backwards and forwards and exit the web browser window. An additional freature is the ability to refresh the current web page.

The navigation tool bar pops up when the mouse is at the bottom side of the screen



There are five buttons to use with the navigation in addition to what the web browsers control has to offer.

The back button takes the user to the previous page the browser was on. There are also keyboard controls such as Alt+Left Arrow and Backspace keys for keyboard use.

The back button



The forward button tajes the user to the next page the browser was on. There are also keyboard controls such as Alt+Right Arrow and Shift+Backspace keys for keyboard use.

The previous button



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The refresh buttons refreshes the web page. There are also keyboard controls such as F5 to refresh the page and Ctrl+F5 to refresh the page entirely without using the previously cached data.

The refresh button



The home button sets the page to the page the browser window was started on. The keyboard shortcut key is Alt+Home.

The home button



The close button simply closes the web browser window. The keyboard shortcut is the Escape key.

The close button



The controls works both on the Chromium and the Gecko based web browser windows.



Photo album viewer controls

In the photo album viewer a user can select previous or next photo and rotate the photos in 90 degree steps.

The photo album viewer control bar



The previous button displays the previous image or the last image in the album if first photo in the album is currently visible. The shortcut key is Left.

The previous photo button



The rotate counter-clockwise button rotates the image 90 degrees counter-clockwise. The shortcut key is Page Up.

The rotate counter-clockwise button





The rotate clockwise button rotates the image 90 degrees clockwise. The shortcut key is Page Down.

The rotate clockwise button



The next button displays the next image or the first image in the album if last photo in the album is currently visible. The shortcut key is Right.

The next photo button



The exit button simply exits the photo album viewer. The shortcut key is Escape.

The exit button



Use the right mouse button to zoom the image to 100 percent and drag the mouse pan the image while zoomed.



PDF viewer controls

The <u>PDF</u> viewer has no other controls than the bottom browser bar's exit button and the Escape key closes the <u>PDF</u> viewer window. Other controls are based on the viewer control it self – it can be zoomed, dragged and scrolled as any <u>PDF</u> viewer.

The <u>PDF</u> viewer window with the control bar visible showing the Thanks to (credits) document

Thanks to



Licenses

- libVLC: <u>GNU General Public License</u>
- VIc.DotNet: MIT
- cef: Modified BSD (3-clause BSD license)
- CefSharp: Modified BSD (3-clause BSD license)
- openclinart: CC0



Other GUI controls

Thera are few other controls in the GUI. The one shows simply the Thanks to <u>PDF</u> document on the right upper corner of the main window.





The other is just a link to my website to the <u>vamp#</u> software's web page which opens the website in the Gecko web browser window.



On the center of the upper center of the main window is the settings button. The settings can also be found in the <u>Windows</u> start menu under the <u>vamp#</u> item if the software is installed via the installer.



The last one is the loading indicator which just indicates that the software is loading something and hasn't crashed – so please do wait. The other parts of the GUI also go disabled while this indicator is spinning.



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The photo album editor

The photo album editor is in a way a "normal" <u>Windows</u> application and you shouldn't try to use it on a <u>HTPC</u> – instead export and import the photo album made with a normal <u>PC</u>.

The photo album editor can be launched from the <u>Windows</u> start menu or by giving the <u>vamp#</u> software a command line argument "--photos".

The photo album editor at glance

	vamp# photo album editor [Haukkakorhola 36 / 'C:\Files\Ku	via\Valokuvat\Kuva48\S2300004.JPG']	12		×
	File				
	New	Tags in the database:			
B	Save changes			A	
×	Undo changes	Kitaja		and .	
٠	Export selected albums (XML)	Kmalainen	1771		1
1	Import (XML)	Kigahylly	N LOOM		
*	Export selected albums (SQL)	Kissamintu			18
×	Delete selected albums	Kisup Jalu	North	Sec.	
-	Exit		A.M.	and a set	10
Pł	noto album name: Haukkakorhola 36	Album date: 28.5.2004 🔹 12:50:49 🗨 🖉			
P	hotos in the album	Tags assigned for the photo:	a straight	1	
	Kiitäjä puun rungolla 1	Kiitaja			0
	Kiitäjä puun rungolla 2	Perhonen			
	Lammikon ensimmäiset kukat - rentukka ja "lumme" 1		C. Lin		
	Lammikon ensimmäiset kukat - rentukka ja "lumme" 2		1 tow		
	Lammikon ensimmäiset kukat - rentukka ja "lumme" 3		Nº2	200	10
	Lammikon ensimmäiset kukat - rentukka ja "lumme" 4		100	1.	
P	noto description:			N.	
K	iitäjä puun rungolla 1		m	310	
				1	
				18	1
Ti	me taken: 5. 6 .2004 - 14:11:35 -			100	
Ti	me taken (text description):	🥜 Add tag <	100		
Г			XX		
	Drag photo files tags here to dele the database>	or photo file ste them from	1		

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The parts of a photo album with the editor

A single photo album in the vap# software consists of the following things

- The name of the photo album
- The photo files in the file system
- The start date and time of the photo album
- The description for a single image in the photo album
- The tags assigned to a single image in the photo album
- The date and time of a single file in the photo album

Creating a photo album

The creation of a photo album is simple. Just select New from the main menu. First a name for the new albums is asked from the user.

File			
	New 🔶		
	Save changes		
X	Undo changes		
♣.	Export selected albums (XML)		
<u></u>	Import (XML)		
*	Export selected albums (SQL)		
×	Delete selected albums		
-	Exit		

Once the name is given a folder browser dialog opens where the user can select the folder containing the photo album.

📜 Give a name for th	e photo album	_		×
Photo album name:	New photo album			
ОК			Canc	el

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A folder browser dialog opens with the from the directory selected in the settings.

Select a folder			×
← → × ↑ <mark> </mark> •	« Kuvia » Valokuvat » Kuva52	✓ Č Search Kuva52	Q
Organize 🔻 New	folder		⊾ -
Documents vamp vamp	^	No items match your search.	
🝊 OneDrive			
💻 This PC			
🧊 3D Objects			
📃 Desktop			
Documents			
👆 Downloads	~		
F	Folder: Kuva52	Select Folder	Cancel:

Just select the folder containing the photo album and a new photo album is created.

The new photo album just created

Photo album name: New ph	oto album	📝 Album	date:	24. 7 .2004	▼ 10:19:19	- 🥥
Photos in the album			Tags assig	ned for the photo:		
S2300001		^				^
S2300002						
S2300003						
S2300004		~				
Photo description:						
\$2300001						
Time taken:	24. 7 .2004 💌 1	0:19:19 💌 🥝]/			×
Time taken (text description):			<u>~</u>	Add tag <		

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The description and tags for a single photo in the album

The photo in the photo album can be given a description and tags to describe the photo in the album. One of the two must be given or both. If the describtion is empy the tags assigned to the photo will be used as describtion delimited by commas (,); otherwise the given describtion will be used while displaying the photo.

Tags can be assigned to the photo with two different ways.

The first one is simply to drag an existing tag over the photo view box or over the list box displaying the selected photo's tags.

The other way is to write the tag to the text box and select the "Add tag \leftarrow " button.



An image to show how a tag can be added to a single photo in a photo album



The describtion for a photo file can be set from below the photo album's photo list box. The is also the time the photo was taken.

Photos in the album	1	Tags assigned for the photo:
Oona sohvalla	^	Kiitäjä
Oona sohvalla ja Billy vieressä		Perhonen
Kiitäjä puun rungolla 1		
Kiitäjä puun rungolla 2	~	
Photo description:		
Kiitäjä puun rungolla 1		
Time taken: 5. 6 .2004 💌	14:11:35 💌 🥥	<u> </u>
Time taken (text description):		Add tag <

If I was to erase the describtion the describtion in the list would change to the list of tags instead.

Photos in the album	Tags assigned for the photo:
Oona sohvalla ^	Kiitäjä
Oona sohvalla ja Billy vieressä	Perhonen
Kiitäjä, Perhonen	
Kiitäjä puun rungolla 2 🗸	
Photo description:	The description now changed to the list of tags as the description is empty.
lime taken: 5. 6.2004 ▼ 14:11:35 ▼ 3	
Time taken (text description):	Add tag <

The time the photo was taken is gotten from the photo's <u>Exif</u> tag howevet if it's not valid the date and time can be changed. Also a free description of the photo's taking time can be given like *"Summer of 69"*, etc.

The actual files in the file system remain unchanged when setting their properties in the photo album editor. All the properties are saved into the <u>vamp#</u>'s <u>database</u>.

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The photo album's properties

The photo album has two properties one being the name and the other the date and time of the photo album.

Photo album name:	Haukkakorhola 36	5 🗾 🥖	Album date:	28. 5 .2004	• 12:50:	:49	- 📀
		📜 Give a name for the	e photo album		_		×
		Photo album name:	Haukkakorhola 36				
			Photo album with th	e given name alread	ly exists		
		OK				Car	ncel

The name is given in a different dialog box as a check must be made that there are no same named photo albums in the photo album collection. The date usually is the date the first photo was taken, but it can also be set to any value a user wishes to.

Deleting photos from album and deleting tags

To delete a photo from a photo album just drag and drop a photo from the photo album's contents list box to the trash bin. The deletion is confirmed with a dialog.



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To delete a tag from a selected photo the previous procedure applies – just drag the tag into the trash bin. A deletion of a tag is not confirmed with a dialog.

Tags ass	igned for the phot	0:		
Billy				^
Pesulla	3			
				<
<u></u>	Add tag <			
file ` from				

Saving changes to the photo album

If the photo album is edited the changes can be saved with the large save button in the lower left corner of the photo album editor or by selecting the *Save changes* menu item from the *File* menu.

The save button

The Save changes menu item 📄 File New H Save changes X Undo changes + Export selected albums (XML) 1 Import (XML) V Export selected albums (SQL) × Delete selected albums • Exit

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The undo changes button

To undo changes you can select the large undo changes button in the lower left corner of the photo album editor or by selecting the *Undo changes* menu item from the *File* menu.



All other changes can be undone except a deletion of a photo album or deletion of a photo in a photo album. Do note that the GUI reacts to photo album's edition by disabling items that are not needed to for editing a selected photo album.

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Exporting photo album(s)

Photo albums can either be exported in <u>XML</u> or in <u>SQL</u> format. The export files don't include the actual photos in the file system – only their locations. Select the albums you wish to export from the list.

Photo albums:	
Haukkakorhola 33	^
Haukkakorhola 34	
Haukkakorhola 35	
Haukkakorhola 36	
Haukkakorhola 37	¥

After the selection export the selected album(s) in either <u>XML</u> or SQL format. Do note that the software doesn't allow <u>SQL</u> to be imported to prevent direct <u>SQL injection</u>.

The exported XML format

The exported <u>XML</u> contains the following structure:

Basically the contents are the same as in the <u>database</u>.



The exported SQL format

The exported <u>SQL</u> contains "well" formated <u>SQL</u> sentences to run against the <u>database</u> – however a direct import is made impossible due to the possibility of <u>SQL injection</u> (malicious <u>SQL</u>).

```
--ALBUMNAME=Haukkakorhola.33
INSERT · INTO · PHOTOALBUM · (NAME , · FIRSTDATE , · BASEDIROVERRIDE)
SELECT · 'Haukkakorhola · 33', ·
'2004-04-02.00:00:00.000'.
'C:\Files\Kuvia'.
WHERE .NOT .EXISTS (SELECT .* .FROM .PHOTOALBUM .WHERE .NAME .= . 'Haukkakorhola .33'); .
INSERT · INTO · PHOTOALBUMLINK · (NAME , · MD5HASH)
SELECT · 'Haukkakorhola · 33' , · '0x861D83EC328E4FA554FCA6C55C744AAA' ·
WHERE .NOT .EXISTS (SELECT .* .FROM . PHOTOALBUMLINK .WHERE .MD5HASH .= .' 0x861D83EC328E4FA554FCA6C55C744AAA') ; .
INSERT · INTO · PHOTODATA · (MD5HASH, · DESCRIPTION, · DATETIME) ·
SELECT .' 0x861D83EC328E4FA554FCA6C55C744AAA', .'Billy, .Pesulla', .'2004-04-02.00:00:00.000'.
WHERE ·NOT ·EXISTS (SELECT ·* ·FROM ·PHOTODATA ·WHERE ·MD5HASH ·= · '0x861D83EC328E4FA554FCA6C55C744AAA ' ·AND ·DESCRIPTION ·= · 'Bil
UPDATE · PHOTODATA
SET DESCRIPTION -= · 'Billy, · Pesulla', ·DATETIME -= · '2004-04-02 ·00:00:00.000' ·
WHERE ·MD5HASH ·= · '0x861D83EC328E4FA554FCA6C55C744AAA'; ·
INSERT · INTO · PHOTOFILE · (MD5HASH, · FILENAME)
SELECT .' 0x861D83EC328E4FA554FCA6C55C744AAA', .'Valokuvat\Kuva45\S2300019.JPG'
WHERE .NOT . EXISTS (SELECT .* . FROM . PHOTOFILE .WHERE .MD5HASH .= .' 0x861D83EC328E4FA554FCA6C55C744AAA ' .AND .FILENAME .= .' Valoku
DELETE · FROM · PHOTODATATAG · WHERE · MD5HASH ·= · ' 0x861D83EC328E4FA554FCA6C55C744AAA'; ·
INSERT · INTO · PHOTODATATAG · (MD5HASH, · TAGTEXT)
```

VALUES - ('0x861D83EC328E4FA554FCA6C55C744AAA', -'Billy'); -

INSERT · INTO · PHOTODATATAG · (MD5HASH, 'TAGTEXT) · VALUES · ('0x861D83EC328E4FA554FCA6C55C744AAA', 'Pesulla'); ·



Importing a photo album from XML

To import a photo album from a <u>XML</u> file select the *Import* (<u>XML</u>) menu item from the *File* menu.

📄 F	ile
	New
	Save changes
×	Undo changes
≛.	Export selected albums (XML)
<u></u>	Import (XML)
*	Export selected albums (SQL)
×	Delete selected albums
-	Exit

An open file dialog opens to select a <u>XML</u> file to import into the <u>database</u>. If the files in the XML file are not found in the source computer's file system the album's file locations are asked to make the import successfull.

Deleting photo album(s)

To delete selected photo album(s) select the *Delete selected albums* menu item from the *File* menu. Each deletion is confirmed separately.





Video player window's playback controls

The video player window consist of mostly common playback control and some related to the <u>VLC</u> media player.



The time shows how many hours, minutes and seconds the playback position is compared to the total length of the video.

The playback position

Time: 00:01:26/02:18:38

The playback position can be adjusted via the slider next to the text describing the position.



The subtitle selection can be used to select the subtitles the VLC has detected or to disable the subtitles at all.



The select subtitle dialog





The audio control doesn't control the master audio of the system, it controls the audio of the current video which is playing. This is saved to the <u>vamp#</u>'s <u>database</u> and set while the video is re-played.

The audio slider and the volume mute button



The jump to the start of the playback starts the playback from the beginning.

The jump to start button



The rewind button rewinds the playback faster than the normal playback speed.

The rewind button



The play / pause button pauses the playback when the video is playing or resumes the playback when the video is paused. Also a mouse click on the screen toggles the play / pause state.

The play and the pause button







The stop button also acts as an exit button. The playback position is saved to the database.

The stop button



The wind forward button winds the playback faster than the normal playback speed.

The wind forward button



The jump to end button marks the video as watched and closes the playback window. It can be used if you have already watched the video or don't want to wach the video.

The jump to the end button



Tooltips in the player window mostly show the function of the button / control except for with the audio slider with which the percentage of the original playback volume is also displayed.

The volume tooltip



If the volume is set to zero the the volume button goes to a muted state and can be restored with the same button.

The volume muted



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If the playback of a file has been stopped somewhere in the middle a dialog is shown if the playback should be started from the beginning or to continue the playback from the previously stopped location.





The settings

The settings are either launched from the main screen or from the Windows start menu under the <u>vamp#</u> folder. It is recommended that the software is restarted after the settings have been changed.

The settings window at glance

⊗ vamp# settings		×
amp# remote control API (Music Player):	http://localhost:11316/ampRemote	
Base dicrectory for movie files:	C:\Users\Petteri Kautonen\Videos	
Base dicrectory for TV show series files:	Z:\Series	
Base dicrectory for image/photo files:	C:\Files\Kuvia	
Cache the database into the memory:	Г	
Cache the TMDb poster/still images into the memory:	Г	
TMDb (The Movie Database) enabled:	$\overline{\mathbf{v}}$	
TMDb poster/still image file system cache path:	C:\Users\Petteri Kautonen\AppData\Local\vamp#\TBDbIma	
Use file name for TV show episode naming:		
Language (a restart is required):	English (United States)	
⊘ OK	X Cancel	

The amp# remote contro API (Music Player)

This setting tells the <u>vamp#</u> software the endpoint where the <u>amp#</u> remote control <u>API</u> is listening to requests. The setting allows the user to play music via the music player window. The default setting is <u>http://localhost:11316/ampRemote</u>.

The amp# remote contro API (Music Player) setting

amp# remote control API (Music Player):

http://localhost:11316/ampRemote



....

....

The base directory for movie files

This setting tells the <u>vamp#</u> software the default location for movie files. This setting only affects the directory browser dialog when adding new movie folders to the collection. The default value is %USERPROFILE%\Videos.

The base directory for movie files setting

Base dicrectory for movie files:

C:\Users\Petteri Kautonen\Videos

The base directory for TV show series files

This tells the <u>vamp#</u> software's the default location for TV show series files. This setting only affects the directory browser dialog when adding new TV show folders to the collection. The default value is %USERPROFILE%\Videos.

The base directory for TV show series files setting

Base dicrectory for TV show series files:

Z:\Series

Base directory for image/photo files

This tells the <u>vamp#</u> software the default location for image / photo files. This setting only affects the directory browser dialog when browsing for a photo album folder to add or to update the collection. The default value is %USERPROFILE%\Pictures.

Base directory for image/photo files setting

Base dicrectory for image/photo files: C:\Files\Kuvia ...



Cache database in the memory

This setting affects the method of how the <u>database</u> is being handled by the software. The default setting is false and should be kept that way as the in-memory <u>database</u> might cause excess memory usage.

Cache database in the memory setting

Cache the database into the memory:

Cache the TMDb poster/still images into the memory

Г

This setting affects the method of how the caching of poster/still images from the <u>TMDb</u> is handled. The default value is false and should always be kept false as numerous amount of poster/still images in the memory <u>will</u> cause excess memory usage.

Cache the TMDb poster/still images into the memory setting

Cache the TMDb poster/still images into the memory:

TMDb (The Movie Database) enabled

This value indicates if the software should fetch data for the movie and TV show series files from the <u>TMDb (The Movie Database</u>). The default value is true and there is no reason to disable the setting.

 $\overline{\mathbf{v}}$

TMDb (The Movie Database) enabled setting

TMDb (The Movie Database) enabled:



TMDb poster/still image file system cache path

A path in the file system where the <u>TMDb</u> poster / still images should be cached if the caching is enabled. The default value is %USERPROFILE%\AppData\Local\vamp#\TBDbImageCache.

TMDb poster/still image file system cache path setting

 TMDb poster/still image file system cache path:
 C:\Users\Petteri Kautonen\AppData\Local\vamp#\TBDbIma
 ...

Use file name for TV show episode naming

This indicates if the file name should be used for TV show season episode naming instead of the longer string version. The default value is false.

Use file name for TV show episode naming setting

Use file name for TV show episode naming:

Language (a restart is required)

This is the language used in the software. The default is English (United States). Currently two languages are supported: en-US and fi-FI. Do remember to restart the software if the GUI language has been changed.





Hardware requirements

The hardware requirements are the same as mentioned in the <u>vamp# software's website</u>.

- Microsoft® Windows® supporting .NET Framework v.4.6.1.
- Runs both on 32 and 64 bit operating systems.
- Internet connection for the <u>TMDb</u> <u>database</u>, this is however optional.
- 4 GB RAM, a hard drive and some Intel Celeron or similar <u>CPU</u> with 2+ cores and running @2 GHz and a display chip

My low end HTPC

The specifications on my low-end <u>HTPC</u> (which doesn't run Kodi) according to the <u>CPU-Z</u> software.

Processor	s Mainboa	ara Memor	ry SPD	Graphics	Bench	About	General		Memory	SPD	Graphics	Bench	About
Name		Intel Celer	on J1900				Туре	DDR3	_	Channel #	¥ [Dual	
Code Name	Bay T	Trail-D	Brand ID		(ir	ntel2	Size	4 GBytes		DC Mode	e 🗌		
Package		Socket 11	170 BGA		in	nside"			NB	Frequency	/		
Technology	22 nm	Core Vo	ltage 1	.024 V	CEL	ERON"	Timings						
Specification	I	[ntel® Cele	ron® CPU	J1900 @ 1	.99GHz			DRAM Free	uency	666.7 M	Hz		
Family	6	Mod	del 7	Ste	pping	8		FSB	DRAM	1:8			
Ext. Family	6	Ext. Mo	del 37	Re	vision	C0		CAS# Latence	y (CL)	9.0 doc	ks		
Instructions	MMX, SSE,	SSE2, SSE	3, SSSE3, S	SE4.1, SSE	4.2, EM	64T, VT-x	R/	AS# to CAS# Delay	(tRCD)	9 dock	s		
								RAS# Precharge	e (tRP)	9 clock	s		
Clocks (Core #	ŧ0) ———		Cache					Cycle Time	(tRAS)	24 cloc	ks		
Core Speed	1332.74	1 MHz	L1 Data	4 x 24 KB	ytes	6-way		Bank Cycle Time	e (tRC)				
Multiplier	x 16.	.0	L1 Inst.	4 x 32 KB	ytes	8-way		Command Rat	e (CR)	1T			
Bus Speed	83.301	MHz	Level 2	2 x 1 MB	ytes	16-way		DRAM Idle	: Timer 🛛				
Rated FSB			Level 3					Total CAS# (tRI	DRAM) [
								Row To Column ((trcd)				
Coloction	Socket #1	-	Core	es 4	Threa	ds 4							



The <u>GPU</u>

GPU	NVIDIA CeForce 820M		GPU	Intel® HD Gran	aice	Instal?
Reard Mapuf	ASI ISTek Computer Inc	- 💿	Board Mapuf	ASUSTEK Compute	r Inc	
Code Name	Revision A2	DWIDIA	Code Name	Revis	ion F	
Technology		11010104	Technology			(intel)
Clocks	Memory		Clocks	Mer	nory	
Core	Size		Core	820 MHz	Size	
Shader	Туре		Shader 🗌		Туре	
Memory	Vendor		Memory		Vendor	
				Pr.	- 110-466	

The license

The software (<u>vamp#</u>) is licensed under the terms of the terms of the <u>GNU GENERAL PUBLIC</u> <u>LICENSE Version 3, 29 June 2007</u>.

Other information

This software doesn't affect the file system of the operating system; this includes

- Video files
- Photo files
- Optical media discs
- Audio files
- Any other

The only thing that is affected is the software's own directory which includes the <u>database</u>, browser caches, error logs and some cached data from the <u>TMDb (The Movie Database</u>). The software's own data directory is located at %USERPROFILE%\AppData\Local\vamp#.

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Compiling the software from source

To compile the software from source you will need

- An internet connection
- A Microsoft® Visual Studio® 2017 community edition or better

Getting the source code

The source code is located at GitHub, <u>https://github.com/VPKSoft/vamp</u>.

Use the Git (Command Prompt): git clone https://github.com/VPKSoft/vamp.git





Getting the source path ready

First open the solution in the <u>Visual Studio 2017</u> by selecting the vamp.sln file.

Name	Date modified	Туре	Size
.git	12.10.2018 16:38	File folder	
🛃 FolderSelectDialog	12.10.2018 16:38	File folder	
🛃 installer	12.10.2018 16:38	File folder	
🛃 static_packages	12.10.2018 16:38	File folder	
🛃 vamp	12.10.2018 16:38	File folder	
🛃 .gitattributes	12.10.2018 16:38	Text Document	3 KB
🛃 .gitignore	12.10.2018 16:38	Text Document	6 KB
河 album_editor.ico	12.10.2018 16:38	lcon	17 KB
🔊 copy_lang.bat	12.10.2018 16:38	Windows Batch File	1 KB
🌄 icon.ico	12.10.2018 16:38	lcon	17 KB
🔊 lang.sqlite	12.10.2018 16:38	SQLITE File	140 KB
LICENSE	12.10.2018 16:38	File	35 KB
📝 README.md	12.10.2018 16:38	MD File	4 KB
🔊 settings.ico	12.10.2018 16:38	lcon	67 KB
🔊 thanks_to.odt	12.10.2018 16:38	OpenDocument-t	58 KB
lthanks_to.pdf	12.10.2018 16:38	Adobe Acrobat D	79 KB
🚧 TMDbAttribution.png	12.10.2018 16:38	FastStone PNG File	6 KB
💯 vamp.sin 🛛 🔶 🚽	12.10.2018 16:38	Visual Studio Solu	2 KB

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Restore the NuGet packages

Now thath the solution is opened the nuget packages it is using must be restored. To do this you need to click the solution with right mouse button and select *Restore NuGet Packages*



After that just start coding.

NOTE: Do not update the System.Data.SQLite.Core NuGet package as many other NuGet packages and the software it self uses the NuGet. Updating the package will lead to an exception: *System.BadImageFormatException: Could not load file or assembly* 'System.Data.SQLite..





Compiling the installer package

First select the Release with Any CPU from the Visual Studio



From the solution explorer select the solution with the right mouse button and then select *Rebuild Solution*





After the software has been compiled open the solution folder, navigate to the installer folder and execute the *make_installer.bat* batch file. The <u>NSIS</u> (<u>Nullsoft Scriptable Install System</u>) must be installed before this procedure.

Name	Date modified	Туре	Size
<mark>a</mark> 2015	23.9.2018 18:43	File folder	
DotNetChecker.nsh	10.1.2018 10:36	NSIS Header File	7 KB
🔊 license.txt	7.12.2015 20:06	Text Document	35 KB
🔊 make_installer.bat	24.9.2018 17:40	Windows Batch File	1 KB
🔊 setup_vampsharp.nsi	9.10.2018 19:56	NSIS Script File	9 KB
🐹 un_icon.ico	26.2.2018 21:04	lcon	17 KB

After the *make_installer.bat* has been launched you should propably take a coffee break or something.. 😆

The installer being compiled



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The installer is ready

After the coffee break or something the installer should be ready and appear to the installer directory.

The NSIS finished

📔 MakeNSISW - Finished Sucessfully		_		×
File Edit Script Tools Help				
👌 🖯 🚡 🖉 🖉 । 🙆 🖗 🔹 🌶	🔁 🔗 🙆			
Output: "C:\Users\Petteri Kauton \Projects\GIT\hub\vamp\installe: Install: 6 pages (384 bytes), 2 2497 instructions (69916 bytes), language tables (684 bytes). Uninstall: 2 pages (192 bytes), 135 instructions (3780 bytes), 5 tables (540 bytes). Datablock optimizer saved 70347 Using lzma (compress whole) comp	<pre>nen\Documents\Visual % r\setup_vampsharp_1_0 sections (1 required) , 1486 strings (71609 2 sections (1 required) 180 strings (2993 byted) KiB (~8.1%). pression.</pre>	Studio 2013 _0_3.exe") (4144 byte bytes), 2 ed) (4144 by es), 2 langu	≥s), ytes), lage	^
EXE header size: Install code: Install data: Uninstall code+data:	53248 / 36864 bytes (145129 bytes) (808691323 by (32597 bytes)) tes)		
Compressed data: 2699	89761 / 808869049 byte	es		
CRC (0x53CB85F8):	4 / 4 bytes			
Total size: 2700-	43013 / 808905917 byte	es (33.3%)		
				Υ
NSIS v3.03	Test	t Installer	Close	

The installer in the file system

Name	Date modified	Туре	Size
2015	23.9.2018 18:43	File folder	
DotNetChecker.nsh	10.1.2018 10:36	NSIS Header File	7 KB
🛃 license.txt	7.12.2015 20:06	Text Document	35 KB
🔊 make_installer.bat	24.9.2018 17:40	Windows Batch File	1 KB
🔊 setup_vampsharp.nsi	9.10.2018 19:56	NSIS Script File	9 KB
🔜 setup vampsharp 1 0 0 3.exe	<u>12.10.2018 17:33</u>	Application	<u>263 714 KB</u>
🐹 un_icon.ico	26.2.2018 21:04 File description: vamp# Company: VPKSoft File version: 1.0.0.3 Date created: 12.10.2018 17:27 Size: 257 MB	lcon	17 KB



Credits / Thanks to

<u>libVLC</u>,

libVLC is the core engine and the interface to the multimedia framework on which VLC media player is based.

<u>Vlc.DotNet</u>,

Vlc.DotNet is a .net library that hosts the audio/video capabilities of the VLC libraries. In other words, it's a .net wrapper around libvlc.

Chromium Embedded Framework,

The Chromium Embedded Framework (CEF) is a simple framework for embedding Chromiumbased browsers in other applications.

CefSharp,

.NET (WPF and Windows Forms) bindings for the Chromium Embedded Framework

<u>GeckoFX-45.0</u>,

library that allows embeding Gecko in C# applications.

Loading.io,

Loading.io provides the world's best ajax loaders, loading gifs, preloaders and ajax spinners.

<u>NSIS</u>,

NSIS (Nullsoft Scriptable Install System) is a professional open source system to create Windows installers. It is designed to be as small and flexible as possible and is therefore very suitable for internet distribution.

NsisDotNetChecker,

NSIS plugin that allows one to detect if particular .Net framework is installed on the computer and download/install one if it is not found.

PdfiumViewer,

PDF viewer based on Google's PDFium.

libdvdcss-dll,

Compiled libdvdcss libraries for Windows. Ready for use with Handbrake.

THE MOVIE DB,

This product uses the TMDb API but is not endorsed or certified by TMDb.



TmdbEasy,

TMdbEasy is a wrapper, written in C# , for the TMDB Api v3. By using TMdbEasy you can easily gain access to a large amount of movie data.



Globalmousekeyhook,

This library allows you to tap keyboard and mouse, detect and record their activity even when an application is inactive and runs in background.

MediaInfo,

MediaInfo is a convenient unified display of the most relevant technical and tag data for video and audio files.

<u>MediaInfoDotNet</u>, Wrapper Library for MediaInfo Library. Automatically chooses 32 and 64 bit library.

VPKSoft (me),

Various libraries both <u>GNU Lesser General Public License Version 3</u> and <u>GNU GENERAL</u> <u>PUBLIC LICENSE Version 3</u>.

openclipart,

Greate clipart which is all licensed as public domain.

Aha-Soft 16x16 Free Application Icons,

A small icon set of 16x16 icons in various image formats.

MetadataExtractor,

MetadataExtractor is a straightforward .NET library for reading metadata from image and movie files.

<u>Owner-drawn trackbar(slider)</u> - Implementing a Windows Forms owner-drawn trackbar (slider) control in C#.

© Michal Brylka



"Third party" licenses

- libVLC: <u>GNU General Public License</u>
- Vlc.DotNet: <u>MIT</u>
- cef: Modified BSD (3-clause BSD license)
- CefSharp: <u>Modified BSD (3-clause BSD license)</u>
- openclipart: <u>CC0</u>
- Loading.io: <u>CC0</u> and commercial versions
- NsisDotNetChecker: <u>MIT</u>
- System.Data.SQLite: Public Domain
- globalmousekeyhook: <u>MIT</u>
- NSIS (Nullsoft Scriptable Install System): The zlib/libpng License (Zlib)
- GeckoFX-45.0: <u>Mozilla Public Licence</u>
- PdfiumViewer: <u>Apache 2.0 License</u>
- libdvdcss-dll: GNU General Public License, version 2
- THE MOVIE DB: <u>Terms of Use</u>, <u>API Terms of Use</u>
- TmdbEasy: GNU GENERAL PUBLIC LICENSE Version 3
- MediaInfo: <u>BSD-2-Clause license</u>
- MediaInfoDotNet: <u>BSD-2-Clause license</u> (Assumed from the <u>MediaInfo</u> library's <u>license</u>, which this library is using)
- openclipart: <u>Public Domain</u>
- Aha-Soft: Attribution 3.0 United States (CC BY 3.0 US)
- MetadataExtractor, <u>Apache License Version 2.0</u>
- Owner-drawn trackbar(slider), <u>The GNU Lesser General Public License (LGPLv3)</u>

If your library or contribution is not listed here do contact me at <u>https://www.vpksoft.net</u> or send email to <u>vpksoft@vpksoft.net</u>.

Final words

I'll be back.

If you enjoyed the show please contact me at my <u>website</u> or via the <u>GitHub</u> or via email: <u>vpksoft@vpksoft.net</u>.



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