



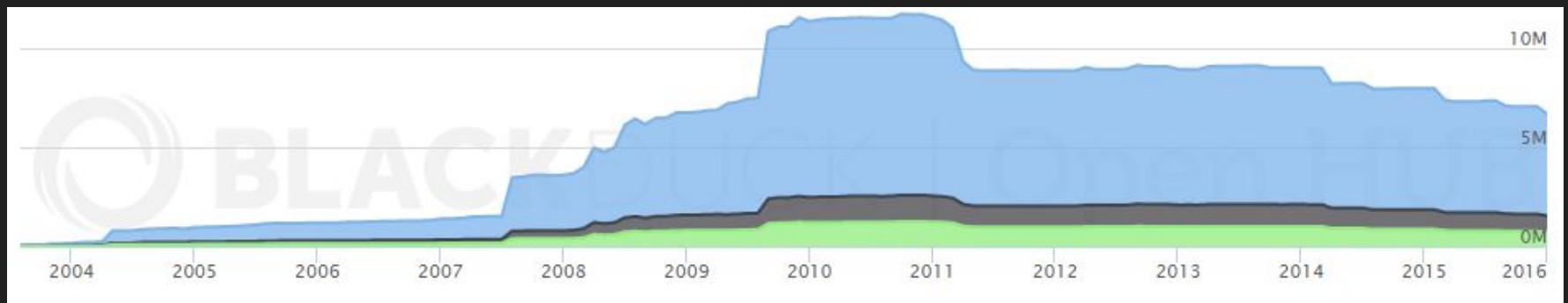
The near future.....

# Current goals

Release Early Release Often



# Loosing code makes us better





# Why loosing code?

Improved code quality

Don't duplicate code

Using new code methods like C++11

Remove obsolete libraries

Dropping unmaintained code parts

Don't have to maintain code you don't have

Move functions towards binary add-ons

- Audio encoders/decoders
- Visualisations
- Screensavers
- More will follow



# V16 Jarvis

Soon to be released



# v16 Jarvis - Main improvements






- Upgrade from DirectX 9 to DirectX 11 API
- Image resource add-ons
- Music library improvements
- Button long-press
- Stereoscopic depth for user interface
- Surface rendering for video on Android
- Goodbye libstagefright on Android
- Continues improvements in PVR/DVR
- A lot of code cleanup and improvements
- Audio Digital Signal Processing (DSP)
- Event logging
- User ratings for videos



# v16 Jarvis - Event logging

Events

8:43 PM

	<b>Video library scanner</b> Failed to scan movie: Paper Planer (2014).mkv	01/29/2016 7:30:06 PM
	<b>Video library scanner</b> Failed to scan movie: The Boy with the Cuckoo-Clock Heart (2013).iso	01/29/2016 7:19:37 PM
	<b>Video library scanner</b> Failed to scan movie: tearsofsteel_4k	01/29/2016 7:19:36 PM
	<b>Video library scanner</b> Failed to scan movie: Frozen Forever	01/29/2016 7:19:31 PM
	<b>Kodi successfully started</b> Kodi has been successfully started.	01/29/2016 7:17:01 PM

Information

Remove

View






# v16 Jarvis - Add-on manager changes

Add-ons - Video add-ons

8:58 PM

### Add-on information



**HDHomeRun**

Type: Script  
Author: SiliconDust  
Version: 2015.11.09  
Summary: HDHomeRun LiveTV and DVR

**Description** Page (1/1)

HDHomeRun on Kodi the easy way. Automatically finds all the compatible HDHomeRun devices on your network, collects available channels, and starts showing TV. Pressing select or right brings up the episode guide, where you can see what's on, and what's coming next. Pressing back brings up DVR and Options. DVR provides a simple intuitive interface to record and watch your favorite shows when you want to.

**Disclaimer**

Requires a compatible HDHomeRun device. DVR requires a running DVR server

- Configure
- Update**
- Auto-update
- Run
- Uninstall
- Disable
- Changelog







# v16 Jarvis

Audio Digital Signal Processing



# v16 Jarvis - Audio DSP

Add-ons - Audio DSP

9:01 PM

..	
Audio DSP Basic Processor	Enabled
Biquad Filters	Enabled
Free Surround Processor	Enabled

## Biquad Filters



**Author:** Achim Turan, Team KODI

**Version:** 0.0.1

The first version of this add-on includes a parametric equalizer post processing mode with constant-Q peaking filters (biquad filter). It allows you to boost or cut 10 frequency bands.





# v16 Jarvis - Audio DSP

Settings - System

9:02 PM


### Audio DSP manager

1. Input resampling    2. Pre-processing    **3. Master processing**    4. Post-processing    5. Output resampling

Here you can configure master processing modes. Notice: On playback only one active mode can be selected!

**Available modes (0)**

**Active modes (2)**

-  1. Free Surround Processor: Free Surround based on foo\_dsp\_fsurround which is part of the pro\_opt
-  2. Basic audio DSP processing system: Stereo - Dolby ...

Apply changes directly     Apply changes now





# v16 Jarvis - Audio DSP

Settings - System


9:02 PM

### Audio DSP manager


1. Input resampling    2. Pre-processing    3. Master processing    **4. Post-processing**    5. Output resampling

Here you can configure post-processing modes. This processing stage can be used for equalizing and volume correction...

#### Available modes (1)

-  Basic audio DSP processing system: Speaker correction  
Correct the volume and speaker distance on specific s...

#### Active modes (1)

-  1. Biquad Filters: Parametric EQ  
10 frequency bands plus post gain

Apply changes directly     Apply changes now    Clear active modes





# v16 Jarvis - Audio DSP

Settings - System

9:02 PM

Frequency	Gain
Preamp	0.0dB
32Hz	2.1dB
64Hz	1.3dB
125Hz	0.3dB
250Hz	-0.2dB
500Hz	-0.8dB
1kHz	0.1dB
2kHz	0.0dB
4kHz	0.4dB
8kHz	0.6dB
16kHz	2.2dB

Buttons: OK, Cancel, Defaults

## 1. Input resampling

Here you can configure



Basic audio  
Correct the

Apply changes

## Output resampling

active modes





# v16 Jarvis - User ratings

Videos - Title

X

22:46

9



**Director:** Shane Acker

**Writer:** Shane Acker / Pamela Pettler

**Studio:** Focus Films

**Genre:** Fantasy / Animation / Science Fiction / Action / Adventure / D...

**Year:** 2009

**Runtime:** 79 Minutes

**My rating:** 8

**Rating:** 6.5 (647 votes)

**Tagline:** When our world ended their mission began.

**MPAA rating:** Rated PG-13

**Path:** smb://SKYNET-SERVER/Multimedia/Animation/9 (2009)/9 (2...

1080 H.264

dts

5.1

16:9

Plot ( Page 1/1 )

When 9 first comes to life, he finds himself in a post-apocalyptic world. All humans are gone, and it is only by chance that he discovers a small community of others like him taking refuge from fearsome machines that roam the earth intent on their extinction. Despite being the neophyte of the group, 9 convinces the others that hiding will do them no good.

Play

Cast

Refresh

Choose art

Trailer

Set my rating



# V17 Krypton

Our current work-in-progress version



# When will it be ready?

We never give dates nor promises





# Planned changes

again no promises although we will try to get some  
nice things done



# VideoPlayer

Complete rework of the internal player that handles  
video  
(aka VideoPlayer)



# VideoPlayer - Why the rewrite?

A lot of legacy code was still around dating back to XBOX days

Code grew over time when adding new platforms with no real grand design in mind

Not written platform agnostic

Not as efficient as it should be

Huge entanglement of code across the codebase

Current state was holding back features



# VideoPlayer - The benefits

Maintainable code

Can't stress enough about maintainable code

Platform agnostic and platform specific are split

More efficient way of doing playback

Adding new features should be less of a hassle



# VideoPlayer - Possible features

Picture-In-Picture

Speed-up or slowdown playback speed

Futureproof towards higher bitrate and resolution videos

Additional shaders and renderers

Act as transcoder towards other players

Next up is splitting playback and user interface into their own process

Headless mode which makes Kodi a possible server component



# UPnP media import

Sharing media library between several Kodi instances, sync play count and ratings.



# UPnP media import

Media sources - Workstation

20:25

Workstation

Add import...



## Media import information

**Workstation: TV shows, Seasons and Episodes**

**Provider:** Workstation

**Media type:** TV shows, Seasons and Episodes

**Path:** f7-4bd1-b124bd22538c | upnp://f8f7322c-c235-

**Status:** Active

**Last synced:**

### Settings

Synchronisation

Start synchronisation Automatically

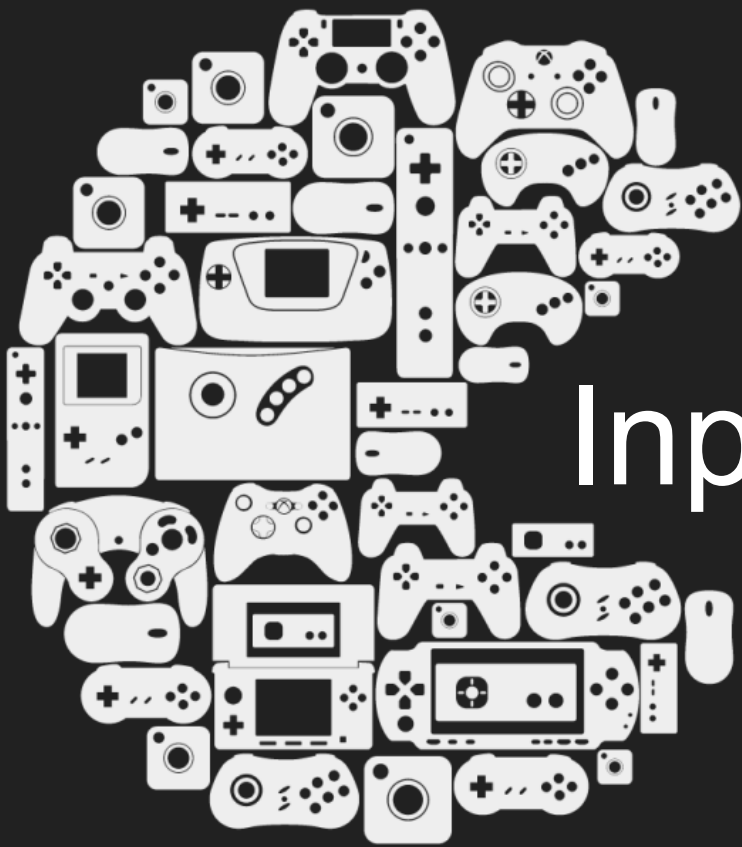
Update imported media items

- Update playback-related metadata

Update metadata on the media provider

- Update playback-related metadata on the media provider





# Input handling

Complete rework of how input is handled  
and split it off into add-ons





# Input handling - Controller setup

Settings - Games

9:50 PM

Games - Settings

## Controller Configuration

Controller profiles

- Kodi**
- Dreamcast
- Game Boy Advance
- Sega Genesis
- Nintendo 64
- NES
- PlayStation
- Super Nintendo



Buttons

- A
- B
- X
- Y
- Start
- Back
- Guide
- Left thumb
- Right thumb

Get more...    OK    Reset





# Input handling - Controller setup

Settings - Games


9:50 PM

Games - Settings

### Controller Configuration

**Controller profiles**

- Kodi
- Dreamcast
- Game Boy Advance
- Sega Genesis
- Nintendo 64
- NES**
- PlayStation
- Super Nintendo



**Buttons**

- A
- B
- Start
- Select
- Up
- Down
- Right
- Left

Get more...    OK    Reset





# RetroPlayer

Allows you to play console ROM's for which emulators are available.



# Retroplayer - Why is it so awesome?

Playing old games is so much fun

Easy controller setup

Auto handling of emulators

Never have to leave Kodi for playing games

A single library for all retro games

Save, pause, rewind and play again

# Retroplayer

Games - Internet Archive ROM Launcher

10:11 PM

Random Play

Search

Atari 2600

Atari 7800

Atari Jaguar

Atari Lynx

Game Boy Advance

Game Boy Classic

Game Boy Color

Game Gear

Internet Archive Best Of - Arcade

Internet Archive Best Of - Atari 2600

Internet Archive Best Of - Game Boy Advance

Internet Archive Best Of - Game Gear

I FEEL



LUCKY





# Apple TV (4th gen)

No jailbreaking needed. All you need is a Mac and  
xcode



# v17 Krypton - General items

Further reduce number of skin files by combining windows and dialogs

Proper passthrough on Android platform

VFS add-ons (NFS, RAR)

APNG and animated GIF support

Switching between multiple video streams (multi-angle)

DASH support

Probably a lot more to come



# v17 Krypton - Unknown sources

Settings - System

22:44

### System - Settings

Updates Install updates automatically

Show notifications

Unknown sources

Manage dependencies

Warning!

device. By allowing, you agree that you are solely responsible for any loss of data, unwanted behaviour, or damage to your device. Proceed?

Yes No

Allow installation of add-ons from unknown sources.







# A new default skin

Sorry, no sneak previews

The End