



DTVKit Technical Steering Committee- 17th October 2018

Present: [KW] Karl Wood (DTVKit), [PE] Phil Evans (DTVKit), [CP] Charlotte Parkes (DTVKit), [HC] Harriet Clarke (OBS), [SF] Steve Ford (OBS), [JN] Jason Nash (OBS), [SM] Simon Moore (Inview)

Phone: [CA] Chris Aldworth (OBS). [AS] Adam Sturtridge (OBS)

Apologies: [AF] Andrew Frost (HARMAN)

Next Meeting: March/April 2019

Items:

1) Actions from the previous meeting

a. Individual access to Github should be reviewed to prevent unauthorized users from accessing the code.

i) DTVKit has allowed for company accounts up until now, however, this is now not permitted. Individual accounts need to be used and regularly checked to ensure that the individual still is working for the company.

Action: CA to check if any company accounts are still active. If the account is still active then, they need to provide appropriate details, or the account will be suspended from accessing the DTVKit repositories.

b. DTVKit Guidelines for upstreaming large changes/contributions

i) It can take a moderator weeks to check large changes on Github, however, to try and break a large chunk of code into sections this would be very difficult to do. This is because you need to wait until the platform layer is ready until you can make any progress.

ii) Aimed mainly at platform code and not higher level.

Action: JN and PM to review what basis they could give test streams and a test plan to DTVKit

c. Test Suite and Compliance

i) A forum area for DTVKit Testing has been added, so members have a dedicated area for their testing questions.

ii) Need a firm understanding what we need from a testing perspective, and what is owned by OBS/DTVKit? What is going to be released into DTVKit? We need a policy about how we are going to implement testing.

iii) Review DTVKit testing roadmap, then members can comment on if it is fit for purpose. Research Java Based tests and review whether they will be beneficial.

Action: PE to review DTVKit testing roadmap.

Action: PE and PM to discuss the possibility of providing remote access to the OBS test automation services to KW, so he can see the status of the running tests on DVBCore, and the daily applicational tests run on DTVKit.

d. Mantis

- i) Suggested that members would like to receive notifications on Mantis.
- ii) Can notifications be split per module?

Action: OBS are still looking into notification support on Mantis, need to check the notifications are working. Also, need to evaluate what the sign-up process of receiving notifications is.

e. Android

- i) Proposal to appoint moderators for Android. There has been a discussion with Andrew Frost (HARMAN) and Joshua House (OBS) who have both agreed to be moderators. This covers both the RPC service and the Input source repositories.

Action Closed.

f. HbbTV 2.X Support Vxotok

- i) DTVKit will no longer license Vxotok HbbTV 2.0.1, rather we will refer members to ALL the HbbTV solutions we are ported to.

Action Closed.

g. DTVKit Forum

- i) Review the process of how the forum gets used.
- ii) DTVKit to look into sending out a weekly mail to all subscribers.

Action: CP to send out an email encouraging members to use the forum.

2. Android

- a. HARMAN and OBS cooperation for supporting members from integration through to certification.
 - i) HARMAN and OBS are supporting members for DTVKit.
 - ii) HARMAN can do google certification for Android TV. DTVKit works with AOSP and Google TV, they both use the same input framework.
 - iii) DTVKit has a potential member joining who has custom launchers for Android.
- b. HbbTV in Android
 - i) OBS and Seraphic had a HbbTV solution at IBC. Currently, there is no full solution for HbbTV in Android.
- c. MHEG in Android
 - i) OBS are looking into integrating MHEG into Android – more information on this at the next TSC.
- d. MediaCas
 - i) This is regarding DVB and CA areas - Google is trying to make this more straightforward. Currently, Google and Cas are trying to come to an agreement.

Action: Next TSC meeting – more information on MHEG in Android and MediaCas.

e. CI+ ECP reference implementation – update from OBS

- a) CI+ ECP has been fully tested and proven. OBS has implemented this and they have had their first commercial engagement.
- b) CI+ ECP covers 4K and HD content.
- c) Code available to DTVKit members to use as a reference in their own systems.

4. HbbTV 2.0.1 solution moving forwards

- a. Please see number 3.

5. OBS DTVKit test streams -update from OBS

- a. OBS is currently looking into developing a set of test streams – some streams have been created, however- they are not fully complete.
- b. It has been suggested that DTVKit need their own test streams. A list or specification of everything which needs to be tested and then a stream can be created for it.

Action: HC to speak to KW regarding generating test streams for DTVKit.

6. Raspberry Pi as a generic DTVKit developing/prototyping platform – update on progress

- a. Standard DTVKit software on Raspberry Pi, USB tuner support for terrestrial and satellite, and can now pull in live TV.
- b. Still some issues regarding Raspberry Pi. Currently, there is an issue with getting the video working in real time, it is using FFmpeg library- in which it can decode, however- there is an issue with scaling and presenting the video. There are also some AV sync problems.
- c. PS (OBS) is currently looking into an alternative library to FFmpeg scale software.
- d. HARMAN is also looking into Raspberry Pi. They have the tuner and video decoder working in real time, but this is using a XWindows. HARMAN has currently put this project on hold.
- e. It has been suggested that the Raspberry Pi will be beneficial to DTVKit, it would be ideal to have a demo that we can send out, as currently, the only demos that we have are ones from our members.

Action: PE to follow up with Qt and KW to share his findings with the rest of the group.

7. HARMAN Media framework for DTVKit – update on what has been made available to DTVKit

- a. G Streamer is now compatible with DTVKit.
- b. Current working features include: Playback, you can add plugins, basic integration with DTVKit, the platform code has been changed and has a proof of concept.
- c. Changes have been made to the App, however- it has not yet been made available to DTVKit members

Action: HARMAN to have a discussion with SF.

8. Mail lists – Any comments

- a. No comments.

9. Forum – Any Comments

- a. No comments.

10.Mantis/Github -What improvements can be made?

- a. It has been suggested that notifications and policies could be improved.

Action: Github notifications need to be investigated.

11.Roadmap

- a. DTVKit is looking into CI+ 2.0, which is currently in discussions.
- b. By the end of the year, DTVKit will have a porting layer for Amlogic chipsets.

12. Test Suites

- a. No comments

13.Next release schedule

- a. March 2019

14.Mantis Tickets

- a. Mantis 295- On hold, leave until there is more customer interest, send a message out about it.
- b. Mantis 592- On hold
- c. Mantis 743- Resolved
- d. Mantis 742- Rejected
- e. Mantis 498- Awaiting on HARMAN to update when the changes have been made.
- f. Mantis 729- Awaiting on HARMAN to update when the changes have been made.
- g. Mantis 728- SF to look into. Keep open for now.
- h. Mantis 713- Fix no longer required as mantis- 722 has resolved the issue. Issue rejected.
- i. Mantis 148- Resolved
- j. Mantis 247- On hold
- k. Mantis 316- Rejected
- l. Mantis 502- Rejected
- m. Mantis 435- Keep Open
- n. Mantis 686- Rejected
- o. Mantis 685- Rejected
- p. Mantis 537- Keep Open
- q. Mantis 501- Keep Open
- r. Mantis 264- Keep Open
- s. Mantis 273- Keep Open
- t. Mantis 508- This has been left open until the next TSC
- u. Mantis 442- On hold

15.AOB

- a. Next meeting date: March/April 2019

16.New Members

- a. We are pleased to announce that Amlogic and Antik have recently joined DTVKit.

