TECH TOOLS

MythTV 0.25 Released

The MythTV developers recently announced version 0.25 of their free and open source software digital video recorder (DVR). The software, which is distributed under the terms of the GNU GPL, has been under heavy development since 2002, and now, according to the website, it contains most features users would expect from a good DVR.

According to the website, MythTV version 0.25 includes several significant new features, including new video accelera-tion capabilities, such as VAAPI and Di-rectX Video Acceleration 2, and ex-panded and improved audio capabilities, such as E-AC3, TrueHD, and DTS-HD sup-port. Your TV and other AV components can be con-trolled via CEC (Con-sumer Electronics Control), and en-hanced and integrated metadata manage-ment capabilities are available for record-ings and videos. This version also offers a fully functional API for third-party apps, including HTTP Live Streaming ca-pabilities for delivering video content in real time via the API.

Additionally, MythMusic has been completely rewritten, and MythVideo is now directly integrated, rather than being distributed as a separate plugin. MythThemes is no longer maintained as a separate repository – all themes, in-cluding third-party themes, can now be downloaded directly from the front-end theme chooser.

For more details about the additions, changes, and bugfixes for this release, see the MythTV wiki at: *http://www.mythtv.org/wiki/*. Tarballs of all MythTV releases are available now. Or, you can check out the wiki packages to see whether binaries are available for your favorite distribution.

Android Emulator Improvements Announced

The Android engineering team has announced improvements to the Android emulator, a key tool for Android developers in building and testing apps.

According to the blog post, these improvements include a dramatic performance upgrade and support for a broader range of hardware features, notably sensors, and multifinger input.

Specifically, the latest system image has built-in GPU support (Android 4.0.3 r2) and now supports OpenGL ES 2.0. It's now possible to use a tethered Android device to supply inputs for sensors and multitouch input. According to the blog, the devel-opers are working to provide em-ulator support for other hardware features, including Bluetooth and near-field communication (NFC).

The CPU performance of the emulator has also been im-proved. Hardware floating point operation has been available for system images since Ice Cream Sandwich (Android 4.0), allow-ing CPU operations to be emu-lated roughly twice as quickly. For more information on these changes, see the developers' blog at: *http://android-developers. blogspot.com/*.

Qt 5 Alpha Released

The Qt project has released Qt 5 Alpha. According to the an-nouncement, for this alpha release, the developers focused on delivering the Qt essential modules and not the entire expected feature richness of Qt 5.

According to Lars Knoll's blog, four major changes were undertaken for Qt 5: (1) Base all Qt ports on the Qt Platform Abstraction layer (QPA), making it easier to port Qt to other windowing systems and devices; (2) Re-architect the graphics stack and increase performance com-pared with Qt 4 by using Qt Quick and OpenGL (ES) 2.0; (3) Modularize the repository structure for increased flexibility and to meet the merging of desktop and mobile; and (4) Separate all QWidget-related functionality into its own library.

According to the Qt announcement, these changes and oth-ers improved functionality to "make it easier and faster to cre-ate smooth, accelerated graphics performance with limited re-sources by making better use of the GPU resulting in better performance on inexpensive hardware" (e.g., Raspberry Pi). This source-only release can be downloaded from *http:// qt-project.org/wiki/Qt-5-Alpha*. Additional technical details can be found on Lars Knoll's blog at *http://labs.qt.nokia.com/2012/ 04/03/qt-5-alpha/*.