Canonical And GE Announce Smart Fridge Powered By Snappy Ubuntu Core

By Janakiram MSV

At the IoT World 2015 event in San Francisco, Canonical announced a set of new partnerships that take its lean and mean Linux operating system, Snappy Ubuntu Core to the mainstream.

The most interesting part of the announcement is the GE ChillHub smart fridge that runs on Canonical's Snappy Ubuntu Core. GE and Local Motors created a community called FirstBuild for industrial designers, scientists, engineers, makers and early adopters to build next generation of smart appliances for consumers. ChillHub is one of the first products from FirstBuild that will be sold by GE in the consumer market. It is a smart refrigerator with USB capabilities plus WiFi connection. It is a platform to create new add-on products like a butter softener compartment, food scale/weight sensor, deodorizer, auto-fill water pitcher, temperature modules, baby bottle IR, external speakers, and voice control. The fridge has an iPhone app that can be used to monitor and control various settings. Sold at $1000, it can be ordered online through FirstBuild. For developers interested in tinkering with the ChillHub platform, there is SDK available in the form of Green Bean Connect Kit. Though it is not clear if the fridge has an embedded Raspberry Pi, the developer kit is based on the Green Bean Maker module and a Raspberry Pi 2 Model B. The mobile app communicates with the platform through Google's FireBase real-time data synchronization platform.

Apart from GE, Canonical is partnering with Acer , DataArt, and Microsoft to drive Snappy's adoption.
According to Acer, the aBeing series is a cross-platform smart center for consolidating and sharing intelligence, and controlling IoT devices. aBeing series offers a Bring Your Own Cloud (BYOC) platform for developers, which provides security, privacy protection, and helps lower costs.The prototype of Acer's aBeing One cross-platform smart center incorporates Snappy Ubuntu Core.

DataArt, a company that created DeviceHive, an IoT, and big data open sourced platforms is partnering with Canonical. The platform is available on Azure Marketplace for developers to provision it in the cloud. DeviceHive connects sensors, microcontrollers, gateways and clients with the cloud. Through Juju Charms, DeviceHive integrates Snappy Ubuntu Core with Azure to become a powerful open source IoT platform.

Originally created as an OS optimized for the cloud, Snappy evolved from the Ubuntu 8.10 Server Just Enough Operating System (JeOS). Announced in December 2014, Snappy Ubuntu Core (Snappy) is a stripped-down version of an Ubuntu server with container support and transactional updates. The lightweight OS is now generally available on a variety of platforms including BeagleBone Black and Raspberry Pi 2.

Though every OS vendor is moving towards a lean and mean, lightweight operating system, Canonical's approach is unique. The company is attempting to create a unified OS that powers everything from a microcontroller to the cloud. Snappy is a different OS when compared to traditional Ubuntu server and desktop OS. It isolates each part of OS and applications through containers. This isolation ensures that updating an application doesn't break others. Snappy Ubuntu Core runs Docker along with other frameworks.

The first GA version of 'Snappy' is available in the latest version of Ubuntu 15.04. With support for 64-bit Intel -based architectures and ARM HF, Canonical aims to make it the preferred IoT platform.