ARM targets device platform for quicker IoT development cycles

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ARM on Wednesday announced its mbed device platform. The platform includes the mbed OS as a free operating system for ARM Cortex-M processor-based devices, and is targeted toward bringing about energy-efficient Internet of Things devices. ARM basically wants to make it easier for developers to help bring such products to market.

"Today's IoT devices largely exist in isolation and it has been impossible to realize a truly interconnected world where devices are interoperable with many different cloud services," said Krisztian Flautner, general manager, Internet of Things division, at ARM. "The ARM mbed IoT Device Platform will solve this by providing a common communication and management toolkit." ARM has been focusing on a platform that will bring Internet protocols, security and standards-based manageability

into one integrated solution for energy and cost-constrained devices. The goal is for developers to create products more quickly as they can rely on common building blocks for IoT devices and services. "Part of the reason that we felt the need to do an operating system was because there's a lot of fragmentation in the marketplace," Krisztian Flautner, the firm's vice-president of research and development, told the BBC.

Cortex-M chips go in a range of low-power devices using Wi-Fi, ZigBee and Bluetooth and other radio technologies, said Eric Auchard of Reuters on Wednesday, and he also noted that ARM created mbed originally as software for home hobbyists to experiment with creating electronic appliances of their own. That was then and this is now: He said that ARM is extending its mbed, used by developers to build products, "into a full-scale management platform ready to control up to millions of devices via cloud-based computers."

Hardware manufacturers will have access to the software before the end of the year, and the first devices to use it are expected to launch in 2015, said the BBC. .

The mbed IoT Device Platform includes support for standards such as Bluetooth Smart, 2G, 3G, LTE and CDMA cellular technologies, Thread, Wi-Fi, and 802.15.4/6LoWPAN along with TLS/DTLS, CoAP, HTTP, MQTT and Lightweight M2M. Launch partners for the mbed IoT Device Platform include Atmel, CSR, Ericsson, Farnell, Freescale, IBM, KDDI, Marvell, MegaChips, MultiTech, Nordic Semiconductor, NXP, Renesas, SeeControl, Semtech, Silicon Labs, Stream Technologies, ST, Telenor Connexion, Telefonica, Thundersoft, u-blox, wot.io and Zebra.

"ARM expects many will opt for its solution, providing a potentially lucrative new revenue stream on top of the licensing fees it already receives from chip manufacturers that use its designs," said Leo Kelion

of BBC News.

More information: ARM announcement: www.arm.com/about/newsroom/arm … hings-deployment.php