

Canonical Announces New Partnerships for Industrial and Telecoms IoT

LONDON – February 19 – [Canonical](#) is pleased to announce key partnerships for industrial and telecoms IoT, underscoring the importance of security for critical infrastructure by investing in fast, automated, reliable updates for the machines that drive networking and industrial systems.

Critical infrastructure systems are now an attack vector for espionage and disruption. Canonical and partners are working to deliver certified Ubuntu Core devices that are automatically updated to address systemic vulnerabilities fast. Ubuntu Core also provides best-in-class application isolation based on kernel containers, minimising the impact of errors and vulnerabilities in third-party applications.

“Certified and supported Ubuntu platforms set the standard for safety and security in connected devices” said Mark Shuttleworth, founder of Canonical and Ubuntu. “Device manufacturers who choose Ubuntu Core on certified platforms now have a popular platform that meets corporate and government requirements for security updates and management.”

Today’s announcement covers partnerships with major silicon providers whose processors and platforms power mission critical devices, cloud storage and analytics providers hosting secure data for enterprise devices, and OEMs building the next generation of secure, software-defined network equipment.

Software-defined appliances simplify telco customer-premises equipment (CPE) provisioning

Canonical is working with telecoms operators to simplify customer premises equipment acquisition, deployment and maintenance, building on the carrier-grade systems and application update mechanisms built into snappy Ubuntu Core. Instead of branded hardware appliances with fragmented management systems, customers can look forward to standard management systems on commodity X86 and ARM hardware for a wide range of software-defined CPE appliances delivered as snappy apps and frameworks.

“Snappy Ubuntu Core is a valuable and powerful IoT enabler for talented developers and inventors. Our mission is to support them with Deutsche Telekom’s resources and business knowledge. We believe that our partnership will bring groundbreaking products and services created by creative individuals gathered inside and around Ubuntu community.” said Jakub Probola, of Deutsche Telekom’s incubator, [hub:raum](#).

Ubuntu is already the leading platform for telco OpenStack deployments. Ubuntu Core is well placed to extend that lead into the customer premises equipment market.

Network switches and routers gain apps and updates

Next-generation switches are capable of running Ubuntu Core and a collection of network-centric applications. Cavium, one of the world’s leaders in network silicon, will support Ubuntu Core for its switch and router solutions, accelerating the development of next-generation smart networking infrastructure by a wide range of OEM manufacturers.

“Ubuntu met our need for a secure and reliable platform that enables real-time updates and an open marketplace for network intelligence,” says Larry Wikelius, Director of Ecosystems and Partner Enabling at Cavium, “and it is easy to bring our Linux-based applications to Ubuntu Core.”

Cloud connectivity with Azure and AWS

Both Microsoft and Amazon have agreed to publish their IoT developer APIs on Ubuntu Core for snappy developers.

“Smart industrial systems need secure cloud back-ends for data storage and analysis. Microsoft and Canonical are partnering to deliver developer APIs to enable Ubuntu Core for snappy developers. This partnership will simplify cloud-backed device development,” says John Chewchuk, Technical Fellow at [Microsoft](#).

Enterprise-grade and hardened for industrial control

Ubuntu’s widespread deployment in enterprise data centres sets the stage for its entry to industrial control and management systems. Canonical will join the Industrial Internet Consortium to collaborate with companies focused on smart, connected systems in such environments.

“RTI is excited about the work Canonical is doing with the Snappy Ubuntu Core. It will enable RTI customers to more easily build secure distributed systems for the Industrial IoT,” says Stan Schneider, CEO of [Real-Time Innovations, Inc.](#): “I am also excited to have Canonical join the IIC.”

Know what’s running on every device

The device market is historically fragmented, with little established provenance for software installed on access points, switches, routers and industrial controllers. Manufacturers rarely publish updated firmware for such devices because of the cost and complexity of managing that fragmentation. Ubuntu Core offers a standard platform with a reliable stream of updates that is extensible for any device. Users gain common tools, interfaces and updates for all certified devices.

Raise the bar for security and certainty

Revelations of software and hardware tampering by intelligence agencies have focused attention on institutional ability to verify the integrity of appliances and systems. The system and application update mechanisms in Ubuntu Core also provide certainty for enterprises of the source and validity of the software installed on an Ubuntu Core device, contributing substantially to overall system assurance.

Major platforms collaborate to raise quality and reduce costs for manufacturers

Canonical today announced a program for silicon and board manufacturers to certify their platforms. All devices based on certified platforms receive ongoing security updates at no cost to the manufacturer, creating a level playing field for device innovators. Manufacturers can also opt for custom device certification for specific devices.

“Ubuntu Core replaces thousands of fragmented kernels and very high maintenance costs with a low-cost reference platform certified across very large numbers of devices and updated regularly to address newly discovered issues,” says Maarten Ectors, VP of Connected Devices at Canonical. “We aim to reduce the cost to deliver high-assurance devices and raise the bar for proactive infrastructure defense in both corporate and government environments.”

Canonical will certify a range of platforms from participating vendors, across the ARM, POWER and X86 architectures. The Cavium Thunder range of massively multi-core ARM server CPUs, the TI Sitara range of low-cost ARM SoC’s, and the Intel x86 64-bit server platforms are examples of the wide range of platform options now available to appliance designers building on Ubuntu Core.

For more information please visit: www.ubuntu.com.

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About Canonical

[Canonical](#) produces [Ubuntu](#), the leading open-source platform for cloud, personal computing and next-generation devices.

Ubuntu introduces a new mobile experience for phone users, a smarter ecosystem dynamic for developers, and unprecedented differentiation opportunities for carriers and device manufacturers.

Ubuntu ships on millions of PCs annually, aimed at education, government and enterprise markets. Ubuntu also enables next-generation devices at the heart of the internet of things. Ubuntu is used in 80% of production OpenStack cloud deployments worldwide. Canonical's scale-out expertise and orchestration technology enable software-defined-networks and storage, providing the platform of choice for network equipment providers and operators.