IBM lance LinuxONE, une gamme de mainframe sous Linux

Paris - 25 août 2015: IBM annonce une nouvelle étape dans sa stratégie mainframe en s'engageant dans les technologies et communautés open-source afin de fournir à ses clients les plus hauts niveaux de sécurité et de performances que le mainframe permet pour répondre aux enjeux du cloud hybride et de l'analytique.

IBM annonce par ailleurs son partenariat avec Canonical, le distributeur d'Ubuntu, ainsi que son don à la communauté open-source de technologies dédiées aux mainframes.

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IBM Unveils Linux-Only Mainframe; Builds on Linux Success

Makes Largest One-Time Contribution of Mainframe Code to Open Source Community
Linux Foundation Launches First-of-Kind "Open Mainframe Project"

IBM (NYSE: [IBM](#)) today announced a significant expansion of the mainframe's strategy of embracing open source-based technologies and open-source communities to provide clients with the most secure[1], highest performance capabilities for an era where mainframes increasingly anchor

corporate [analytics](#) and [hybrid clouds](#).

The company is betting big on open source in the enterprise:

- Unveiling the most secure Linux servers in the industry – The company is introducing two Linux mainframe servers – called [LinuxONE](#) – that are the industry's most powerful[2] and secure enterprise servers designed for the new application economy and hybrid cloud era.

- Deepening open source software enablement – IBM will enable open source and industry tools and software including [Apache Spark](#), [Node.js](#), [MongoDB](#), [MariaDB](#), [PostgreSQL](#), [Chef](#) and [Docker](#) on z Systems to provide clients with choice and flexibility for hybrid cloud deployments. [SUSE](#), which provides Linux distribution for the mainframe, will now support KVM, giving clients a new hypervisor option. Canonical and IBM also announced plans to create an [Ubuntu distribution](#) for LinuxONE and z Systems. The collaboration with Canonical brings Ubuntu's scale-out and cloud expertise to the IBM z Systems platform, further expanding its reach and support.

- Contributing the single largest amount of mainframe code to open source community – The code, designed to fuel digital transformation, includes technology from IBM's mainframe to help enterprises identify issues and help prevent failures before they happen, help improve performance across platforms and enable better integration with the broader network and cloud.

"Fifteen years ago IBM surprised the industry by putting Linux on the mainframe, and today more than a third of IBM mainframe clients are running Linux," said Tom Rosamilia, senior vice president, IBM Systems. "We are deepening our commitment to the open source community by combining the best of the open world with the most advanced system in the world in order to help clients embrace new mobile and hybrid cloud workloads. Building on the success of Linux on the mainframe, we continue to push the limits beyond the capabilities of commodity servers that are not designed for security and performance at extreme scale."

LinuxONE – Industry's Most Advanced Enterprise-Grade Linux Platform

IBM is launching LinuxONE, a new portfolio of hardware, software and services solutions, providing two distinct Linux systems for large enterprises and mid-size businesses. LinuxONE Emperor, based on the IBM z13, is the world's most advanced Linux system with the fastest processor in the industry.

The system is capable of analyzing transactions in "real time" and can be used to help prevent fraud as it is occurring. The system can scale up to 8,000 virtual machines or hundreds of thousands of containers – currently the most of any single Linux system. LinuxONE Rockhopper, an entry into the portfolio, is designed for clients and emerging markets seeking the speed, security and availability of the mainframe but in a smaller package.

IBM's LinuxONE systems, available starting today, are the most secure Linux systems with advanced encryption features built into both the hardware and software to help keep customer data and transactions confidential and secure. Protected-key, available on LinuxONE, provides significantly enhanced security over clear-key technology and offers up-to 28X improved performance over standard secure-key technology[3].

Company Enables New Open Software and Industry Tools for Mainframe

Significantly broadening options for enterprises, IBM has enabled key open source and industry software for LinuxONE and IBM z Systems, including Apache Spark, Node.js, MongoDB, MariaDB, PostgreSQL, Chef and Docker. These technologies work seamlessly on the mainframe just as they do with other platforms, with compelling performance advantages while requiring no special skills.

IBM helped pioneer virtualization on the mainframe and is now offering more choices for virtualization by enabling the new LinuxONE systems to be provisioned as a virtual machine through the open standards-based KVM hypervisor, just like any Linux server. SUSE, a leading distributor of Linux, will provide initial support for KVM for the mainframe.

Canonical and IBM also announced an initiative to encourage the growth of Ubuntu Linux on z Systems. Canonical plans to distribute Ubuntu for LinuxONE and z Systems, adding a third Linux distribution. SUSE and Red Hat already support distribution. Canonical also plans to support KVM for the mainframe.

IBM Joins New Linux Foundation Project as Demand Grows for Mainframe in Open Source Community

Enabling greater access in the developer community, IBM's contribution of mainframe technologies is the largest single contribution of mainframe code from IBM to the open source community. A key part of the mainframe code contributions are IT predictive analytics that constantly monitor for unusual system behavior and help prevent issues from turning into failures. The code can be used by developers to build similar sense and respond resiliency capabilities on other systems.

The contributions will help fuel the new "Open Mainframe Project," formed by the Linux Foundation, the nonprofit organization dedicated to accelerating the growth of Linux and collaborative development. In collaboration with the Linux Foundation, IBM will support the Open Mainframe Project, a collaboration of nearly a dozen organizations across academia, government and corporate sectors to advance development and adoption of Linux on the mainframe.

"Linux on the mainframe has reached a critical mass such that vendors, users and academia need a neutral forum where they can work together to advance Linux tools and technologies and increase enterprise innovation," said Jim Zemlin, the Linux Foundation executive director. "The Open Mainframe Project is a direct response to the demands of Linux users and the supporting open source ecosystem to address unique features and requirements built into mainframes for security, availability and performance."

IBM Provides Access to LinuxONE Developer Cloud at No Cost

With today's announcement, IBM is also providing unprecedented access to the mainframe to foster innovations by developers in the open source community. IBM is creating the LinuxONE Developer Cloud to provide open access to the development community. The cloud acts as a virtual R&D engine for the creation, testing and piloting of emerging applications including testing linkages to engagement systems, mobile applications and hybrid cloud applications.

Marist College and Syracuse University's School of Information Studies plan to host clouds that provide developers access to a virtual IBM LinuxONE at no cost. As part of the program, IBM also will create a special

cloud for independent software providers (ISVs) hosted at IBM sites in Dallas, Beijing and Boeblingen, Germany, that provide application vendors access and a free trial to LinuxONE resources to port, test and benchmark new applications for the LinuxONE and z Systems platform.

New financing models for the LinuxONE portfolio provide flexibility in pricing and resources that allows enterprises to pay for what they use and scale up quickly when their business grows. The new LinuxONE systems are available today.

For more information on the IBM LinuxONE Systems Portfolio, visit http://www.ibm.com/linuxone and follow the conversation at #IBMz, #LinuxONE and #LinuxCon.

Note to journalists and bloggers: *You can view and download b-roll video footage on TheNewsMarket by clicking here:* www.thenewsmarket.com/ibm-bets-big-on-linux-on-the-mainframe.*The video is available in HD, standard definition broadcast and streaming quality. For a full collection of downloadable images, click here:* ibm.biz/linuxONEimages*.*

QUOTES:

ADP

ADP, a cloud-based provider of human resource services for more than 630,000 businesses, uses Linux on z Systems to help process payroll, benefits and other key employee services for more than 36 million people worldwide.

"ADP is running some of the most critical and sensitive operations for our customers -– no one wants to miss a paycheck. Linux on z Systems gives us the ability to manage large amounts of data and transactions with speed and security while ensuring our system is always available even when demand spikes. The Linux environment also gives us options for exploring new open-source software and tools that may enhance our IT operations." – *Greg Levine SVP Infrastructure & Operations for ADP*

SinfoníaRx

SinfoníaRx, a health-care company originally developed by researchers and faculty at the University of Arizona College of Pharmacy, has been using Linux on z Systems for almost three years. SinfoníaRx helps providers and their patients better manage care by looking at a patient's full list of prescriptions to identify safety issues, gaps in care and better treatment options.

"We serve more than 5 million patients who often have 10 to 15 prescriptions from multiple doctors and pharmacies. By using Linux on IBM z Systems, we have the processing speed we need to quickly analyze a complex list of prescriptions and gain insights for improving patient treatment and outcomes. We also have an IT environment that's both flexible for developing applications and capable of scaling up without interruption as we add more patients." – *Kevin Barber, SinfoníaRx CIO.*

SUSE

"Open source is about choice for customers, in software, hardware infrastructure, support and services. SUSE continues to innovate with IBM on new solutions and initiatives including LinuxONE, KVM for IBM z Systems and the Open Mainframe Project to expand enterprise horizons and multiply opportunities. Extending and adapting the open source ecosystem can only help clients succeed." – *Michael Miller, SUSE vice president of global alliances and marketing.*

Canonical

"The largest enterprises in the world count on Ubuntu as their platform for scale-out applications, private and public clouds. With the expansion of Ubuntu support to IBM z Systems and LinuxONE, IBM mainframe customers will benefit from Ubuntu's ecosystem of scale-out and cloud solutions. IBM and Canonical teaming to bring Ubuntu to z Systems allows customers to leverage the speed and security of z Systems, and the open-source software and tools of Ubuntu, to enhance the IT operations for a new universe of customers." – *Jane Silber, CEO of Canonical*

MariaDB

"As the one default database platform for leading Linux distributors, including Red Hat and SUSE, MariaDB is excited to support IBM LinuxONE. With Linux on IBM z growing at twice the rate of the Linux market overall, there is clear customer demand for open source solutions on IBM's highly scalable and secure platform. These qualities align perfectly with MariaDB's true open source model, which leverages Community innovations to provide best-in-class scalability, improved performance, and security, for on---premise, hybrid and cloud applications." – *Patrik Sallner, CEO of MariaDB*

MongoDB

"We are committed to make MongoDB available on all major platforms and are excited to add support for IBM z Systems' enterprise grade Linux and LinuxONE platform. This announcement is a leap forward for customers who want to deploy modern, mission-critical applications built with MongoDB and take advantage of the performance, scalability and security of IBM's mainframe hardware products." – *Eliot Horowitz CTO & Founder, MongoDB*

Chef

"We're experiencing rapid and accelerating adoption of Chef within the enterprise, making integration with IBM z Systems an important feature for our platform. We're excited to collaborate with IBM on their support for open source technology and to ensure an awesome Chef and IBM user experience for years to come." – *Matt Ray, Director of Partner Integration, Chef*

2ndQuadrant

"2ndQuadrant is excited by combining the world's most advanced open source database, PostgreSQL, with the world's most efficient, trusted and secure server, the IBM z13. The results of up to 2X throughput performance far exceed our goal, and we are pleased to partner with IBM for supporting IBM's customers." – *Simon Riggs, CTO & Founder, PostgreSQL Development at 2ndQuadrant*

[1] Based on Common Criteria EAL5+ security rating for z Systems mainframe, U.S. National Vulnerability Database;

Reflection of IT Architecture in Customer Experience, a Solitaire Interglobal Ltd study; and

2015 Global Server Hardware and Server OS Reliability Survey, a joint survey by ITIC and Strategy Analytics.

[2] Based on IBM tests that showed LinuxONE can perform 30 billion RESTful web interactions/day with Dockerized Node.js and MongoDB, driving over 470K database read and writes per second.

[3] Based on IBM tests of the LinuxONE system compared to standard secure-key technology.