OASIS Members to Develop VIRTIO Interoperability Standard for Virtualization

ARM, Cisco, IBM, Machine-to-Machine Intelligence (M2Mi), NetApp, Novell, Oracle, Red Hat and Others Collaborate on Virtual I/O Interface

12 Sept 2013 - Semiconductor companies, network device developers, and hardware and software providers from around the world are collaborating at the OASIS open standards consortium to define a standard that will enable virtualization implementations to share drivers with one another. The work of the new OASIS Virtual I/O Device (VIRTIO) Technical Committee will eliminate the need to develop separate kernel drivers for devices by providing a common virtual I/O interface.

"Most virtual I/O devices are tied to a particular virtualization implementation, yet differ only slightly from one another," explained Rusty Russell of IBM, who chairs the new OASIS Virtual I/O Device (VIRTIO) Technical Committee. "By defining clean device interfaces which separate the guest driver from the code that is specific to the hypervisor implementation, VIRTIO will give developers the ability to maintain code on their side of the API without changing other code while still providing space for individual innovation and differentiation."

With VIRTIO, virtual devices will resemble physical devices, be extensible, and perform well. One or more buses, including the Peripheral Component Interconnect (PCI), will be considered. The work will build on the existing Virtio PCI Card Specification Draft.

New members are encouraged to join the OASIS VIRTIO Technical Committee at any time. Archives of the work are accessible to both members and non-members, and OASIS invites public review and comment on the work.

Support for OASIS VIRTIO

M2Mi, [1]
"As virtualization, Machine-to-Machine communications, and cloud computing increasingly drive infrastructure requirements, standards around simplicity and better performance for virtual environments are important for success. We look forward to working with the members in the VIRTIO Technical Committee to develop and refine these standards for broader impact and adoption."

--Geoff Brown, CEO and Founder of Machine-to-Machine Intelligence (M2Mi)

Novell, [2]
"As a pioneer in open source software, and a provider of reliable and interoperable Linux and cloud infrastructure solutions for the enterprise, SUSE is pleased to be a member of this standardization process. This effort provides a means of increasing the quality of software delivered to SUSE customers. The work of this committee to improve the VIRTIO Interface will provide clarity in both existing and new implementations, allowing them to be more robust and bug free. It will also promote the development of new and innovative
VIRTIO interfaces."
--Bruce Rogers, SUSE Consulting Engineer

Oracle [3]
"Oracle is a leading provider of virtualization solutions for the enterprise and continues to advance its offerings in many areas by helping drive industry standardization such as support of OASIS VIRTIO Technical Committee. VITRIO is an important technology that can improve interoperability between virtualization platforms. With its straightforward design, it can enable increased hypervisor-guest communication speeds and reduce latency, which in turn helps customers increase performance significantly."
--Don Deutsch, VP, Chief Standards Officer, Oracle

Red Hat [4]
"Red Hat is pleased to support the VIRTIO Technical Committee. Standardizing on a common set of interfaces for virtualized drivers offers clear benefits for end users, allowing common images to be used across multiple hypervisor platforms, and encouraging interoperability and portability. By standardizing on a common set of standard interfaces, we can also drive faster innovation in the cloud and virtual environments, using the proven principles of ‘shared intellectual horsepower’ that drove the success of Linux and of KVM."
--Andrew Cathrow, Senior Manager, Product Management, Red Hat

Additional information
VIRTIO Technical Committee [5]

About OASIS
OASIS is a non-profit, international consortium that drives the development, convergence and adoption of open standards for the global information society. OASIS promotes industry consensus and produces worldwide standards for cloud computing, M2M, IoT, security, privacy, content technologies, energy, emergency management, and other areas. OASIS open standards offer the potential to lower cost, stimulate innovation, grow global markets, and protect the right of free choice of technology. OASIS members broadly represent the marketplace of public and private sector technology leaders, users, and influencers. The consortium has more than 5,000 participants representing over 600 organizations and individual members in 65 countries.

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