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NEWS RELEASE

Penguin Computing, Calxeda and Inktank Partner to Deliver Large Scale Storage On ARM Based Servers

2013-06-08

Penguin Computing announced today that it is developing a highly efficient large scale cloud storage deployment with industry partners Calxeda® and Inktank. Calxeda is a manufacturer of ARM® based SoCs (System on Chip). Inktank is the company delivering Ceph - the massively scalable, open source, software-defined storage system. The reference implementation integrates the distributed, highly scalable Ceph storage system with Penguin Computing's power efficient UDX1, a server system based on Calxeda's ARM based Energy Core SoC. The UDX1 accommodates up to 48 servers and 36 hard drives in four rack units with a five Watt power envelope per server, an order of magnitude less than traditional x86 based servers. "Power, cooling and manageability have become the biggest challenges in modern datacenters and large scale cloud storage platforms like Ceph use scale-out architectures to deliver performance and fault tolerance," said Charles Wuischpard, CEO of Penguin Computing. "The UDX1 is the perfect server platform for Ceph. It provides a very high compute and storage density in an extremely low power envelope. The Ceph-UDX1 combination is the ideal large scale storage platform for the datacenter of the future and we are planning to deploy this type of solution in our own public HPC cloud Penguin Computing on Demand (POD)". While the UDX1 is redefining server architecture with a low-power, high-density approach, the Ceph distributed storage system perfectly complements these features by running a distributed scalable storage cluster across a large number of systems. Ceph is a massively scalable, open source, software defined storage system. It comprises an object store, block store, and a POSIX- compatible distributed file system. The platform is capable of auto-scaling to the exabyte level and beyond, is self-healing and self-managing, and has no single point of failure. The UDX1 ARM-based servers uniquely enable Ceph clusters to deliver better performance per dollar with lower power consumption and higher rack density. "The storage industry and its established players are being challenged by the software defined storage model that delivers scalability and reliability at a lower price point," said Bryan Bogensberger, CEO of Inktank. "Ceph was designed to provide scalability and fault tolerance required for large scale storage deployments on a variety of storage platforms. ARM based platforms like the UDX1 provide a unique advantage to gain efficiency and rack density that makes Ceph and

ARM a great combination for large scale storage deployments". Penguin, Inktank and Calxeda are working together to optimize the reference architecture by testing multiple permutations of UDX1 configurations for power efficiency and price/performance. "Ceph is the ideal workload for low-power Calxeda SOCs," said Barry Evans, CEO and co-founder of Calxeda. "We are excited to be working with Penguin and Inktank to serve this market as demand for Ceph is skyrocketing with the explosion of media-rich data companies have to store and analyze." The reference configuration comprises three energy cards that contain four servers per card with each server attached to three 4TB SATA drives. The system delivers performance comparable to a traditional server in a significantly smaller power envelope and higher storage density. For more information on the Calxeda-Ceph solution visit Penguin Computing's storage solutions page (http://www.penguinsolutions.com/Products/Storage). About Inktank Inktank is the company delivering Ceph—the massively scalable, open source, software-defined storage system. Launched by some of the leading developers ofCeph, Inktank is dedicated to helping organizations fully leverage the transformative power of Ceph to decrease storage costs, increase operational flexibility and help free them from restrictive and expensive proprietary storage systems. Inktank provides best-in-class professional services and support offerings to enterprises, service providers, and cloud platforms. Please visit www.inktank.com for more information or follow us on Twitter at @inktank. About Ceph Ceph, The Future of Storage™, is a massively scalable, open source, software-defined storage system that runs on commodity hardware. Ceph has been developed from the ground up to deliver object, block, and file system storage in a single software platform that is self-managing, self-healing and has no single point of failure. Consuming Ceph storage is easy because it is in the mainline Linux kernel and has many userland implementations. For example, Ceph can be accessed through the kernel, via Hadoop, Samba and FUSE, via the S3 and Swift APIs, and via the OpenStack™ and Apache CloudStack cloud operating systems. Because of its open source, scalable, software defined storage architecture,Ceph is an ideal replacement for legacy storage systems and object and block storage for cloud computing environments. About Calxeda Founded in January 2008, Calxeda brings new performance density to the datacenter with revolutionary server-on-a-chip technology. Calxeda currently employs 100 professionals in Austin Texas and the Silicon Valley area. Calxeda is funded by a unique syndicate comprising industry leading venture capital firms and semiconductor innovators, including ARM Holdings,Advanced Technology Investment Company, Austin Ventures, Battery Ventures, Flybridge Capital Partners, Highland Capital Partners and Vulcan Capital.