TECH TOOLS

Red Hat Releases RHEL 6.4 beta and Enterprise Virtualization 3.1

Red Hat Inc. has announced the availability of Enterprise Linux 6.4. According to the company, this beta release includes updates to existing features and new functionality in the areas of identity management, filesystem, virtualization, and storage.

Many of the enhancements will allow improved operability with Microsoft's Hyper-V virtualization environment. Specifically, version 6.4 includes the Microsoft Hyper-V Linux drivers and offers installation support for VMware and Microsoft Hyper-V para-virtualization drivers. Additionally, the announcement says that new System Security Services Daemon enhancements

improve interoperability with Microsoft Active Directory by providing centralized identity access control for Linux/Unix clients in a heterogeneous environment.

More information is available in the release notes at: *https://access.redhat. com/knowledge/docs/en-US/Red_Hat_ Enterprise_Linux/6-Beta/html/6.4_Release_Notes/index.html*.

In a separate announcement, Red Hat Inc. released Red Hat Enterprise Virtualization 3.1. According to the company, Red Hat Enterprise Virtualization 3.1 enables increased scalability of guest virtual machines, now providing support for up to 160 logical CPUs and

up to 2TB of memory per virtual machine. This version also updated its KVM hypervisor to support the latest industry-standard x86 processors. Red Hat Enterprise Virtualization 3.1 also includes an updated UI, improved cross-platform web administration portal, updated reporting dashboard, new networking capabilities, and enhanced disk storage. With 3.1, Red Hat Enterprise Virtualization has expanded its localization support, now including English, French, Spanish, Simplified Chinese, and Japanese. A 60-day trial of Red Hat Enterprise Virtualization 3.1 is available at *http://www.redhat.com/ promo/rhev3*.

Amazon Announces Redshift Data Warehouse Service

Amazon Web Services Inc. recently announced Amazon Redshift, a fully managed, petabyte-scale data warehouse service in the cloud. According to the announcement, Amazon Redshift handles all of the work of setting up and managing a data warehouse – including such tasks as provisioning capacity, monitoring and backing up the cluster, and applying patches and upgrades.

According to the company, customers can launch a Redshift cluster with just a few clicks in the AWS Management Console. Amazon Redshift is available with two underlying node types, including either 2TB or 16TB of compressed customer data per node. One cluster can scale up to 100 nodes, and on-demand pricing starts at just US$ 0.85 per hour for a 2TB data warehouse. On-demand pricing lets you pay for capacity by the hour with no long-term commitments and no upfront costs. However, Amazon's "Heavy Utilization Reserved Instance" pricing offers significant savings over an on-demand approach. According to the website, such reserved instances are most appropriate for steady-state production workloads.

Amazon Redshift offers high performance and reliability through the use of columnar data storage, advanced compression, and distribution and parallelization of queries across a cluster of inexpensive nodes. Additionally, all data written to a node in your cluster is automatically replicated to other nodes within the cluster and is continuously backed up to Amazon Simple Storage Service (S3). To learn more, visit *http://aws.amazon.com/redshift*.

Ceph on SUSE

Inktank and SUSE are partnering to provide enterprise-grade support for the Ceph Distributed Storage System as part of SUSE Cloud. SUSE will provide support for Ceph components directly to all customers of SUSE Cloud, and Inktank will provide engineering support to SUSE to ensure quick resolution of technical issues.

Integration of Ceph with SUSE Cloud allows SUSE to provide a "reliable, cost-effective distributed storage infrastructure that is available for private clouds," according to the announcement. SUSE Cloud automates setup and management tasks of cloud infrastructure, including Ceph distributed storage environments, through the Crowbar software framework.

For more information, please see *https://www.suse.com/ products/suse-cloud/* and *http://www.inktank.com*.

XtreemFS 1.4

The XtreemFS team has released a new stable version of their cloud filesystem: XtreemFS 1.4. For this version, some major improvements were made to the existing code and new features were added. Changes include improved stability, asynchronous writes, Hadoop support, and a Windows Client (currently in beta). According to the project blog, XtreemFS 1.4 is the result of almost 1000 commits to the code repository and extensive testing. The XtreemFS team welcomes external contributions, and a list of areas in which to contribute can be found at: *http://xtreemfs.blogspot.de/*.