

# Red Hat Improves IT Flexibility and Reduces Complexity with Linux Containers in Latest Version of Production-Ready OpenStack Platform

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*Red Hat OpenStack Platform 12 introduces containerized services and improves overall platform security*

SYDNEY--(BUSINESS WIRE)-- OpenStack Summit Sydney 2017 – Red Hat, Inc. (NYSE: RHT), the world's leading provider of open-source solutions, today announced Red Hat OpenStack Platform 12, the latest version of Red Hat's massively scalable and agile cloud Infrastructure-as-a-Service (IaaS). Based on the OpenStack "Pike" release, Red Hat OpenStack Platform 12 introduces containerized services, improving flexibility while decreasing complexity for faster application development. Red Hat OpenStack Platform 12 delivers many new enhancements, including upgraded DCI (distributed continuous integration) and improved security to help maintain data compliance and manage risk.

Hundreds of customers rely on Red Hat OpenStack Platform to power their hybrid and private clouds for a variety of mission-critical deployments, including [BBVA](#); [Cambridge University](#); [FICO](#); [Massachusetts Open Cloud](#); [Turkcell](#); [IAG](#); [Oak Ridge National Laboratory](#); [Paddy Power Betfair](#); [Produban](#); [UKCloud](#); and [Verizon](#). And, Red Hat OpenStack Platform is backed by a robust ecosystem of partners, including [Cisco](#), [Dell EMC](#), [Intel](#), [Lenovo](#), [Rackspace](#), and [NetApp](#) for enterprise businesses, as well as [Ericsson](#), [Nokia](#), [NEC](#), [Huawei](#), [Cisco](#) and others from the telecommunications industry.

Red Hat OpenStack Platform 12 is designed for private or public cloud infrastructure, built on the enterprise-grade backbone of Red Hat Enterprise Linux. Red Hat OpenStack Platform 12 is a tested, certified, and fully-supported version of OpenStack that provides the agility to scale and more quickly meet customer demand without compromising availability, performance, or IT security requirements. Red Hat OpenStack Platform also includes Red Hat CloudForms, Red Hat's multi-cloud management platform, to provide operational visibility and policy-based management across the Red Hat OpenStack Platform infrastructure and workloads. Additionally, Red Hat OpenStack Platform 12 maintains tight integration with Red Hat CephStorage, a highly-scalable block, object, and file storage solution, designed for scale-out clouds.

## Containerization of OpenStack services

New to Red Hat OpenStack Platform 12 is the containerization of OpenStack services. In addition to its leadership in OpenStack, Red Hat is a leader in bringing containers to the enterprise and contributing to open source projects that are driving container innovations. In order to help deliver new offerings to market faster, today's organizations need a cloud infrastructure that can allocate resources more quickly, efficiently, and at scale. Running OpenStack services on Linux containers does just that; it can increase flexibility for upgrades, rollback and service management while reducing cloud management complexity for operators. Additionally, Linux containers make it easier to scale OpenStack services quickly, helping customers meet greater user demand when it counts the most.

Whether deploying a new implementation or performing an automated upgrade through its director tool, Red Hat OpenStack Platform 12 containerizes the majority of OpenStack services, while offering a containerized Technology Preview of certain networking and storage services. This provides our strategic ecosystem partners the opportunity to certify drivers and plugins for this new deployment model, resulting in minimal or no disruption of service for our customers.

## Enhanced security

New features in Red Hat OpenStack Platform 12 such as an automated infrastructure enrollment service help organizations increase security and improve efficiency through the automation of life cycle management for security certificates. Other components such as OpenStack Block Storage (Cinder) and Bare Metal Provisioning (Ironic) have updates around volume encryption support and disk partitioning enhancements, respectively. As Red Hat continues to work towards stronger positioning against various risk management initiatives across the globe, Red Hat OpenStack Platform customers will have access to the new [Red Hat security guide](#), available in the Red Hat customer portal, outlining security features, implementation, and guidance for meeting baseline security controls to help enable a more secure OpenStack deployment.

## Greater flexibility with composable infrastructure

Composable roles were first introduced in [Red Hat OpenStack Platform 10](#), which enables operators to create customized profiles for individual services and processes to suit their unique needs. [Red Hat OpenStack Platform 11](#) expanded features for composable roles, making the deployment and upgradability of Red Hat OpenStack Platform more adaptable and consistent. Now, Red Hat OpenStack Platform 12 takes composability a step further with composable networks. In previous versions, users were forced to pick and choose pre-defined network topology. With new composable networks, users have the option to define the network topology they need with fewer constraints. Additionally, operators can create any number of networks they want, including the popular L3 spine and leaf topology, and are no longer limited in quantity of networks. These enhancements make it easier for enterprises to customize OpenStack deployments to fit their specific needs at scale.

Additionally, Red Hat OpenStack 12 now includes support for the Distributed Management Task Force's (DMTF) Redfish open API for composable infrastructure. Support for this for this new industry specification allows version 12 to interoperate with industry solutions that utilize the Redfish API, such as the Intel® Rack Scale Design (Intel® RSD).

OpenDaylight for network automation

Version 12 extends its technology preview of [OpenDaylight](#), a modular open source platform for customizing and automating a software-defined network. Designed to help our customers gain increased speed and throughput, the advancement of Network function virtualization (NFV) support through OpenDaylight for OpenStack remains a key strategy for Red Hat. The enhancements to our OpenDaylight integration are designed to not only improve the way Data Plane Developer Kit (DPDK) is implemented, but also provide better performance due to its SDN capabilities.

## Distributed Continuous Integration

Five releases ago, Red Hat's Distributed Continuous Integration (DCI) introduced a new method for customers and partners to interact with Red Hat OpenStack Platform. The primary goal of DCI is to help Red Hat ship the best quality OpenStack software in the industry, done by automating the deployment, testing, and feedback loop with customers and partners, for pre- and post-product releases. This allows Red Hat to test real-world use cases, validating each with customer and partner-driven configurations. Today, DCI automatically delivers actionable logs to Red Hat's quality engineering teams, reducing the amount of time it takes to identify, patch, and introduce fixes back into the community.

## Availability

Red Hat OpenStack Platform 12 is scheduled to be available in the near future via the Red Hat Customer Portal and as a component of the Red Hat Cloud Infrastructure and Red Hat Cloud Suite solutions.

## Supporting Quotes

*Radhesh Balakrishnan, general manager, OpenStack, Red Hat*

"To achieve the benefits offered by digital transformation, enterprises need to update their infrastructure to better support the next-generation of applications that take advantage of multiple hardware architectures, Linux container technologies, and cloud computing. Red Hat OpenStack Platform 12 provides a pathway for organizations to accomplish this in a more secure, consumable, and predictable manner while reducing vendor lock-in. The containerization of OpenStack services paired with the enhanced open source security and stability for which Red Hat is known for, offers a production-ready infrastructure for organizations to bring greater agility into their IT operations."

*Kevin Shatzkamer, vice president, Service Provider Solutions, Dell EMC*

"Continuing our four years of co-engineering and collaboration on cloud and virtualization solutions, Dell EMC is proud to be a part of the improved features, greater functionality and enhanced robustness of Red Hat OpenStack Platform 12. Combining Dell EMC's leading-edge infrastructure with the agility of Red Hat OpenStack Platform helps customers better manage their IT environments while creating a platform to drive next generation application development."

*Figen Ulgen, General Manager of Intel Rack Scale Design, Intel*

"Intel® Rack Scale Design is an industry-aligned architecture that relies on close collaboration with our ecosystem partners like Red Hat. We're pleased to see our joint efforts result in this milestone, with the Red Hat OpenStack Platform now including support for DMTF's Redfish open, standard API. We believe the combination of Red Hat OpenStack Platform with hardware based on Intel RSD will help our customers achieve a new level of agility to meet the demands of a modern, scalable data center."

*Guy Shemesh, VP CloudBand, Nokia*

"Red Hat OpenStack Platform provides a scalable, flexible foundation for Nokia CloudBand Infrastructure Software, an open solution with commercially-proven reliability, automation and robust security for deploying network functions in the cloud. Our collaboration has helped make CloudBand an effective customer deployment choice to reduce time-to-revenue for new services. CloudBand also provides automation and optimization to make network operations lean, while making it easier for customers to adopt rapid open-source innovation and avoid vendor lock-in. We're pleased to continue our long-standing relationship with Red Hat, dating from 2011, to drive carrier-grade OpenStack infrastructure, especially as the technology evolves to encompass Linux containers and other new innovations."

## Additional Resources

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## About Intel Rack Scale Design

Intel® Rack Scale Design (Intel® RSD) is an industry-aligned architecture for composable, disaggregated infrastructure. Intel RSD fundamentally changes how a data center is built, managed, and expanded over time. For more information, please visit [www.intel.com/intelrds](http://www.intel.com/intelrds).

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#### Red Hat's Forward-Looking Statements

Certain statements contained in this press release may constitute "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995. Forward-looking statements provide current expectations of future events based on certain assumptions and include any statement that does not directly relate to any historical or current fact. Actual results may differ materially from those indicated by such forward-looking statements as a result of various important factors, including: risks related to the ability of the Company to compete effectively; the ability to deliver and stimulate demand for new products and technological innovations on a timely basis; delays or reductions in information technology spending; the integration of acquisitions and the ability to market successfully acquired technologies and products; fluctuations in exchange rates; the effects of industry consolidation; uncertainty and adverse results in litigation and related settlements; the inability to adequately protect Company intellectual property and the potential for infringement or breach of license claims of or relating to third party intellectual property; risks related to the security of our offerings and other data security vulnerabilities; changes in and a dependence on key personnel; the ability to meet financial and operational challenges encountered in our international operations; and ineffective management of, and control over, the Company's growth and international operations, as well as other factors contained in our most recent Quarterly Report on Form 10-Q (copies of which may be accessed through the Securities and Exchange Commission's website at <http://www.sec.gov>), including those found therein under the captions "Risk Factors" and "Management's Discussion and Analysis of Financial Condition and Results of Operations". In addition to these factors, actual future performance, outcomes, and results may differ materially because of more general factors including (without limitation) general industry and market conditions and growth rates, economic and political conditions, governmental and public policy changes and the impact of natural disasters such as earthquakes and floods. The forward-looking statements included in this press release represent the Company's views as of the date of this press release and these views could change. However, while the Company may elect to update these forward-looking statements at some point in the future, the Company specifically disclaims any obligation to do so. These forward-looking statements should not be relied upon as representing the Company's views as of any date subsequent to the date of this press release.

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