# SIMPLIFY OPENSTACK CLOUD MANAGEMENT WITH ZECHSTER AND RED HAT

**PARTNER SOLUTION BRIEF**

> "*The Zechster Converged Cloud Solution elevates the efficiency of research and development in our Material and Chemical Research Laboratories in Taiwan. It not only reduces the time of material development but also accelerates the integration of the material platform application with the cloud.*"[1]

TIEN JUNG HUANG PH.D.
TECHNICAL MANAGER,
INDUSTRIAL TECHNOLOGY RESEARCH INSTITUTE DEPARTMENT OF MULTISCALE SIMULATION MATERIAL AND CHEMICAL RESEARCH LABORATORIES

## INTRODUCTION

Many organizations recognize the advantages of cloud infrastructures but have been reluctant to implement them because they lack the expertise to deploy, manage, measure performance, and secure them.

Zechster Converged Cloud Solution addresses these issues with a prebuilt and integrated cloud package that includes Zechster Cloud Service Portal, Red Hat® OpenStack® Platform and Red Hat Ceph® Storage. This solution has undergone testing for compatibility with Red Hat OpenStack Platform and Red Hat Ceph Storage. It simplifies implementation, reduces management complexity, and provides the tools to improve security. With Zechster Converged Solution, you get cloud infrastructure delivered as a single integrated stack from your choice of Zechster-certified channel hardware partners.

## ZECHSTER CONVERGED CLOUD SOLUTION

With Zechster Converged Cloud Solution, organizations can set up AWS-like (Amazon Web Services) cloud services in minutes with integrated, factory-installed systems that eliminate segregated infrastructures. Bundled with Red Hat OpenStack Platform and Red Hat Ceph Storage, this infrastructure solution delivers a single integrated stack.

The Zechster Converged Cloud Solution is made up of several building blocks. Each building block consists of separate hardware that is prepackaged and tested to work as a plug-and-play module. The ability to add a fully configured and tested infrastructure module makes it easier to expand and maintain the cloud without spending time reconfiguring the various components.
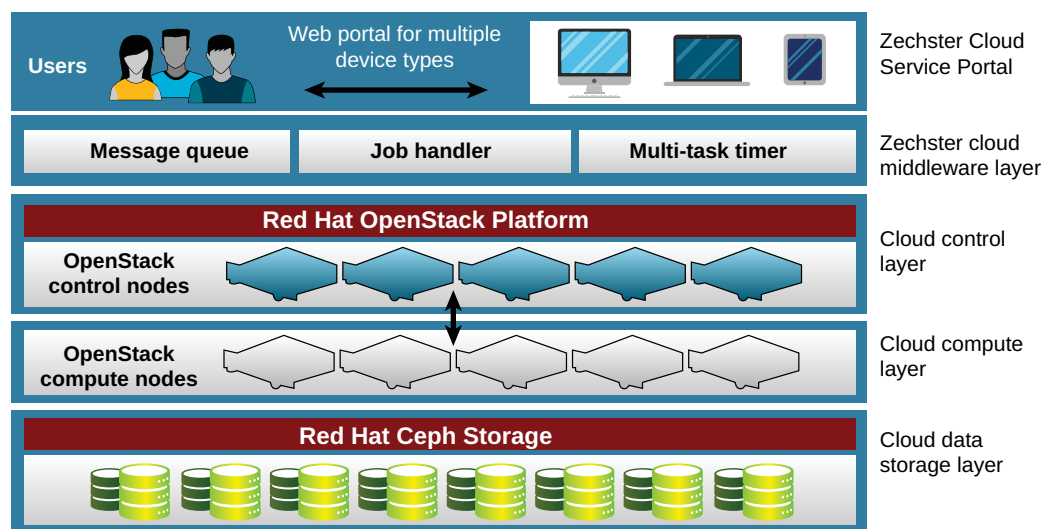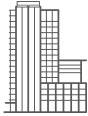


*Figure 1. Zechster Converged Cloud Solution*

## ABOUT ZECHSTER

Zechster is a consulting services provider that focuses on innovative and efficient solutions for cloud computing, high performance computing (HPC), distributed computing, and modern IT infrastructures. Team members have extensive experience in IT, cloud computing, HPC, Linux, Java™, and distributed databases.

1 *www.zechster.com/solution.html*

The Zechster Converged Cloud Solution includes five functional modules:

- **Cloud management service center** provides the ability to monitor hardware, software, and services for your entire cloud environment.

- **Integrated monitoring information and reporting center** provides a unified view of attributes for devices, systems, and application information centers. It allows users to customize multiple, different dashboard views.

- **Organizational decentralization management center** allows people with different authorizations to log in and only access their own appropriate monitoring and reporting information.

- **Policy management center** allows each user to set up a detailed monitoring policy for their own devices, systems, and applications. Users do not need to have a technical knowledge of the infrastructure.

- **Log records management center** provides a centralized collection and multi-point backup solution. Log records of all devices, systems, and applications are collected, stored, and archived to cloud storage at regular intervals for backup.

## RED HAT OPENSTACK PLATFORM AND RED HAT CEPH STORAGE

Red Hat OpenStack Platform combines the power of Red Hat Enterprise Linux® with OpenStack technology to deliver a scalable foundation to build and manage an open private or public cloud. Red Hat OpenStack Platform uses Red Hat Enterprise Linux as the operating environment for services, access to hardware resources, and third-party integration with existing or new systems. Red Hat Enterprise Linux provides system-wide performance, scalability, and security as an operating system for the guest applications running in these virtual environments. For customers considering an OpenStack deployment, it matters which OpenStack distribution and which Linux offering to choose. Red Hat—recognizing the critical interdependencies between the two—coengineered them with closely aligned product engineering teams.

Red Hat Ceph Storage provides a unified storage platform for web-scale object stores, and supports block, object, and file storage. Red Hat Ceph Storage scales the way Red Hat OpenStack Platform does—out, not up—and its extensible architecture allows it to integrate more tightly with Red Hat OpenStack Platform than traditional, proprietary solutions.

## CONCLUSION

Zechster is part of the Red Hat Independent Software Program that provides access to tools and business models that simplify incorporation of Red Hat technology into turnkey solutions. Zechster Converged Cloud Solution helps organizations overcome the complexity of implementing a cloud infrastructure and delivers:

- **Faster time to value.** AWS-like cloud computing services simplify the rollout of new environments.

- **Easy to scale.** Customers can add a fully configured and tested infrastructure block that makes it easier to expand and maintain the cloud without reconfiguring the various components.

- **Improved reliability.** Customers gain protection against single-point failure for software problems and physical machine failures with an auto-migration function and data replication capabilities.

## LEARN MORE

For more information about Zechster solutions, contact service@zechster.com or call 886+921324131.