

# Samsung propels 5G adoption to the network edge

# SAMSUNG

#### Software

Red Hat® OpenShift®

Red Hat OpenShift Container Platform

Red Hat OpenShift Data Foundation (formerly Red Hat OpenShift Container Storage)

Red Hat OpenStack® Platform

Red Hat Enterprise Linux®

Red Hat Advanced Cluster Management for Kubernetes Samsung Electronics is recognized as a leader in global technology. To respond to growing demand for devices with greater processing power and support the introduction of 5G, Samsung created a consistent hybrid cloud environment using Linux container platform and storage solutions from Red Hat. With this new infrastructure, the company is accelerating delivery of solutions for networks and edge processing in a distributed cloud architecture.



"We're excited to be working with Red Hat and IBM to reimagine edge computing, 5G, and hybrid cloud solutions."

K.C. Choi

Corporate EVP/Head of Group, Global Mobile B2B Team, Samsung Electronics

## Technology

More than **US\$200 billion** in revenue

#### **Benefits**

- Accelerated application delivery using real-time edge data
- Established scalability to respond to 5G data growth
- Improve application security and performance

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# Responding to 5G and edge connectivity

Samsung Electronics, a global technology company, sought to adopt a flexible IT solution to their business challenges, including accelerating delivery of innovative, artificial intelligence (AI)-based applications for consumers and enterprises that maximize the growing capabilities of mobile devices and the rollout of 5G and edge connectivity.

The company also sought to support integration of intelligent, reliable devices into enterprise environments and to build a cloud-native platform for reuse of infrastructure resources.

# Building a centralized hybrid cloud platform

Samsung and Red Hat have been collaborating to deliver network and edge solutions built on Red Hat OpenShift, the industry's most comprehensive enterprise Kubernetes platform, that will help bring the power of edge computing to enterprises and allow telecommunications service providers to make 5G a reality.

Based on Red Hat Enterprise Linux and Kubernetes container technology, Red Hat OpenShift provides robust automation capabilities and modular flexibility, supported by integrated, software-defined storage through Red Hat OpenShift Data Foundation (formerly Red Hat OpenShift Container Storage). Red Hat OpenStack Platform integrates with Red Hat OpenShift to enhance cloud-native application development and deployment.

This OpenShift-based infrastructure supports Samsung's secure, fit-for-purpose mobile devices, containerized network—including core and radio access network (RAN)—edge management, and Al solutions, designed to help businesses take advantage of 5G.

"We're excited to be working with Red Hat and IBM to reimagine edge computing, 5G, and hybrid cloud solutions," said K.C. Choi, Corporate EV/Head of Group, Global Mobile B2B Team, Samsung Electronics.

Looking forward, Samsung will use Red Hat Advanced Cluster Management for Kubernetes to provide a single, consistent view and management capability across multinode, 3-node, and single-node clusters, and to create, upgrade, and retire Kubernetes clusters reliably, consistently, and at scale.

#### Accelerating application development and delivery

- Reduced delivery time of new applications to support real-time processing of edge data in a distributed cloud architecture
- Accelerated and simplified at-scale development and deployment of machine learning (ML) workloads with containerization
- ▶ Enhanced service quality by using collected acoustic and visual data to detect anomalies
- Improved worker safety in high-risk manufacturing and utilities settings
- Reduced management and operational costs
- Created technology foundation to establish collaboration centers in Dallas, Texas and Suwon,
   South Korea for developing, testing, and benchmarking private networks and real-world Industry
   4.0 use cases



# **About Samsung Electronics**

Since being established in 1969, Samsung Electronics has grown into one of the world's leading technology companies, and become recognized as one of the top 10 global brands. Our network now extends across the world, and Samsung takes great pride in the creativity and diversity of its talented people, who drive our growth. To discover more, please visit our website at <a href="https://www.samsung.com">www.samsung.com</a> and our official newsroom at <a href="https://www.samsung.com">news.samsung.com</a>.



#### About Red Hat Innovators in the Open

Innovation is the core of open source. Red Hat customers use open source technologies to change not only their own organizations, but also entire industries and markets. Red Hat Innovators in the Open proudly showcases how our customers use enterprise open source solutions to solve their toughest business challenges. Want to share your story? Learn more.



#### **About Red Hat**

Red Hat is the world's leading provider of enterprise open source software solutions, using a community-powered approach to deliver reliable and high-performing Linux, hybrid cloud, container, and Kubernetes technologies. Red Hat helps customers develop cloud-native applications, integrate existing and new IT applications, and automate and manage complex environments. A trusted adviser to the Fortune 500, Red Hat provides award-winning support, training, and consulting services that bring the benefits of open innovation to any industry. Red Hat is a connective hub in a global network of enterprises, partners, and communities, helping organizations grow, transform, and prepare for the digital future.

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North America 1888 REDHAT1 www.redhat.com Europe, Middle East, and Africa 00800 7334 2835 europe@redhat.com

Asia Pacific +65 6490 4200 apac@redhat.com **Latin America** +54 11 4329 7300 info-latam@redhat.com

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