HUATAI LIFE SPEEDS DEVELOPMENT WITH OPEN SOURCE I.T. AND RED HAT OPENSHIFT
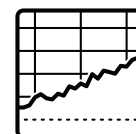
Huatai Insurance Group

Huatai Life Insurance Co. Ltd., a Chinese life insurance company created by some of the country's leading finance groups and enterprises, faced rapid growth but lacked an IT foundation that could adapt to changing demands. The company sought to adopt open source technologies to build autonomous IT systems, enhance system performance and development efficiency, and reduce total cost of ownership (TCO). Huatai Life's teams worked closely with Red Hat Consulting to deploy Red Hat container and container-native storage as the foundation of its updated IT environment. As a result, the company has greatly improved its business agility and flexibility and gained freedom from costly vendor support lock-in.

SOFTWARE

Red Hat® OpenShift® Container Platform

Red Hat Ceph® Storage

Red Hat Consulting

Beijing, China ●

HEADQUARTERS

INSURANCE

400+ BRANCHES AND OUTLETS

BENEFITS

- Decreased application delivery times down by 85%

- Reduced time for single insurance transaction from 6 seconds to 0.3 seconds

- Reduced application development costs by 30% and software development costs by 94%

"With Red Hat's open source technology, we have significantly enhanced resource management for our development infrastructure, avoiding over-reliance on external vendors to save money."

ZHANG YI
GENERAL MANAGER OF I.T.
HUATAI LIFE INSURANCE CO. LTD

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SUPPORTING RAPID ONLINE GROWTH

Created by some of China's leading finance groups and enterprises, Huatai Life Insurance Co. Ltd. is a life insurance company with more than 200 branches nationwide. The company's recent growth strategy has focused on building its online channels. To continue to stay competitive in a fast-paced, increasingly digital market, Huatai Life wanted to use cloud computing and big data analytics to support service innovation.

However, this digital transformation revealed limitations in the company's existing IT environment. Its IT systems, based on proprietary technology, were neither agile enough nor capable of supporting rapid development. As a result, the IT department at Huatai Life struggled to respond quickly to shifting customer demands.

In addition, the insurance industry requires developing many complex applications using huge volumes of data generated from multiple users–with response times within seconds. With Huatai Life's IT environment, however, rapid growth in processes and data slowed performance for customer-facing applications.

Its proprietary software also led to higher costs and less flexible deployment. Huatai Life spent an average of 10-20% of its IT budget on maintenance every year, with an annual increase of 7%. Vendor lock-in limited system upgrades and troubleshooting to existing providers, creating costly inefficiency and a lack of choice in support services.

"We'd been deploying software through external vendors and incurred huge procurement costs," said Zhang Yi, general manager of the IT department at Huatai Life. "According to our estimates, the annual cost of commercial software purchases was as high as RMB 50 million."

The introduction of China's 2016 Cybersecurity Law, a regulation that strongly emphasizes autonomous control, Huatai Life was determined to adopt a new approach to IT.

ADOPTING OPEN SOURCE WITH RED HAT

Huatai Life recognized that open source technology could help it shift to agile, efficient, automated, and scalable IT systems. After evaluating several community open source platforms, Huatai Life chose to work with Red Hat to take advantage of robust enterprise software and expert professional services.

"We recognized Red Hat as a leader in the open source community and Red Hat OpenShift as the industry's leading container platform," said Zhang. "The open source ecosystem led by Red Hat assured us of the solution's longevity and access to support when required."

During its initial transition to open source, Huatai Life worked closely with Red Hat Consulting for technical support and best practices. With help from Red Hat's expert consultants, the company planned, designed, and deployed a new architecture based on Red Hat OpenShift Container Platform.

"Companies generally journey from physical machines to virtualization, then eventually to containerization, but we moved directly from physical machines to containerization," said Zhang. "This leap required not only transformation of the entire application system, but also adoption of efficient container solutions and expert support."

After its successful deployment of OpenShift, Huatai Life adopted additional open source technology for developing platforms and applications, including open source middleware and Red Hat Ceph Storage, a flexible, scalable platform for container-native storage.

With these solutions, the company has established an agile container platform to support rapid development and growing scale–at a lower cost.

ENHANCING COMPETITIVENESS WITH OPEN SOURCE

FASTER DEVELOPMENT

A flexible, agile open source system has significantly enhanced Huatai Life's development, operations, and maintenance IT capabilities, helping the company rapidly develop new insurance applications in line with business priorities and market demands.

Huatai Life's simplified deployment process has reduced bare-metal deployment time from 30 minutes to just 5 minutes. In addition, the company has decreased application release times by 85%—from 2 weeks to just 2 days.

These improvements help Huatai Life's developers identify and resolve issues faster—before new releases are launched to market.

"In our past iterations, half of the bugs appeared when the release went live. Debugging took a long time and affected business processing efficiency," said Zhang. "After deploying open source systems, the number of bugs appearing during live uptime has significantly dropped."

EFFICIENT SCALABILITY

With Red Hat OpenShift Container Platform, Huatai Life can easily scale its IT systems to achieve greater efficiency without making major changes to its system architecture or affecting system stability. For example, with seamless, automated server scaling, the length of a single insurance transaction was reduced from 6 seconds to 0.3 seconds. The maximum limit of concurrent transactions also increased, from 50 transactions to up to 500 transactions.

"During our Kaimenhong promotion, a marketing campaign aimed at attracting new businesses to the online platform, a new customer took just 3-5 minutes to go live on the platform," said Zhang.

The company enhances this rapid scalability with Red Hat's efficient, container-native storage to support analysis of its rapidly growing business data. "Red Hat Ceph Storage offered high performance, reliability, and flexibility to scale in supporting our applications as we experienced immense growth in our online business. Ultimately these improvements helped us deliver an excellent customer experience," said Zhang.

LOWER TOTAL COST OF OWNERSHIP

By reducing management complexity with effective container cluster management and orchestration provided by its Red Hat software, Huatai Life has reduced its application development costs by 30%—with anticipated future financial savings increasing to 50%. In addition, the company reduced its annual software development and deployment costs from RMB 50 million to less than RMB 3 million—a 94% improvement.

Transitioning to open source software has also helped Huatai Life reduce high costs associated with proprietary vendor support, as the company can now autonomously upgrade and maintain its own applications.

"With Red Hat's open source technology, we have significantly enhanced resource management for our development infrastructure, avoiding over-reliance on external vendors to save money," said Zhang.

EXPERT GUIDANCE

Huatai Life's improvements to performance and costs have been supported by expert guidance from Red Hat Consulting, including working closely during the product evaluation phase to develop a system blueprint.

During deployment, Huatai Life engaged Red Hat consultants for comprehensive training for service engineers and guidance on container migration, development of its continuous integration and delivery (CI/CD) pipeline, and performing system optimization and debugging.

As a result, Huatai Life employees–from IT technical engineers to corporate leaders–have gained technical expertise on migrating to open source environments and autonomously innovating with open source.

"Red Hat engineers and consultants have demonstrated high levels of professionalism and service, providing us with guidance on open source technology and our system build," said Zhang. "That support gave us the confidence to focus on our system transformation and continuous integration efforts."

SUPPORTING DIGITAL TRANSFORMATION

Huatai Life has overcome the challenges of digital transformation to improve the agility, performance, scalability, and cost of its systems, strengthening its advantage in the online insurance market.

The company plans to expand its use of Red Hat OpenShift Container Platform to all six of its major IT environments, including its front-end, content management, and internet core systems, as well as its private cloud, big data, and artificial intelligence (AI) platforms.

"Red Hat played a vital role in our transformation by guiding us on the use of open source technologies. Their open source technology capabilities left a deep impression on us," said Zhang. "We hope to continue working closely together to further our contribution to the open source ecosystem and evolve from a user to a contributor."

ABOUT HUATAI LIFE INSURANCE

Huatai Life Insurance Co. Ltd. is a nation-wide life insurance company with over RMB 3 billion invested. The company, headquartered in Beijing, was officially launched in 2005. The company has over 400 branches and outlets set up in various provinces and cities in China.

www.life.ehuatai.com

ABOUT RED HAT

Red Hat is the world's leading provider of open source software solutions, using a community-powered approach to reliable and high-performing cloud, Linux, middleware, storage, and virtualization technologies. Red Hat also offers award-winning support, training, and consulting services. As a connective hub in a global network of enterprises, partners, and open source communities, Red Hat helps create relevant, innovative technologies that liberate resources for growth and prepare customers for the future of IT.

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1 888 REDHAT1	00800 7334 2835	+65 6490 4200	+54 11 4329 7300
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