

RSA Insurance

Insurer executes an enormous data migration to effect digital and cloud strategies

RSA Insurance is one of the world's oldest general insurers, providing insurance products and services to individuals and businesses of all sizes. The RSA mainframe and systems support major operations representing approximately 4.5 million policies.

Business challenge

RSA's mainframe operating system and most of its systems software relied on legacy technology that was losing support. The challenge was to enable digital-first and cloud-first strategies and to mitigate material IT risk. To accomplish that, RSA needed to move its infrastructure, software, and mainframe data to a robust and security-rich cloud architecture.

Transformation

The migration to cloud is a key component of RSA's strategic IT infrastructure modernization goals. Kyndryl™ helped RSA modernize and transform with unique hybrid solutions including managed extended cloud IaaS for IBM Z®. The transformation allows RSA to adopt smart technologies to create and automate industry-leading actuarial models for its analysts. RSA sees significant cost savings and greater cost predictability through the move from traditional architecture to cloud. Changing from a fixed to a variable cost model will enable flexibility and future growth.

Results

More than 5,500 test cases executed during the project

- More than 800 test cases were performed by 50 RSA business testers during the cut-over window.

Nearly 10,000 logical volumes of data migrated

- Migrated approximately 85,000 GB of disk data hosted on nearly 10,000 logical volumes.

Estimated 30% performance gain

- Batch time running performance improved 30%.

6 months project completion time

- Industry average completion time is 9-12 months for comparable major infrastructure changes.

“Our goal is to provide a set of technologies that are unparalleled in terms of competitive advantage . . . and ensure that we're outperforming in our chosen markets.”

Akhlis Hafiz
 Director of Digital Transformation
 and Customer Delivery
 RSA Insurance



Background and team goals

The RSA mainframe is one of RSA's vital systems, sending over 4,000 files to other application environments each week. RSA's first mainframe computer went live in 1969 with punch cards and flat files on an IBM 360/65 with 512k RAM.

The project team's primary task was to migrate three mainframe environments to the IBM Z managed extended cloud infrastructure, or zCloud. The data consisted of 11 LPARs (logical partitions), 85 terabytes of physical disk data that sat across 10,000 logical volumes, and 85 terabytes of tape data that sat on 25,000 virtual tapes.

RSA was keenly aware of the critical advantages in moving to digital and cloud capabilities—and of the complexities of executing large legacy migration projects. Meeting the challenge would require deep technical expertise and a lot of tight planning, collaboration, and management. In 2020, during the COVID-19 pandemic, RSA chose IBM® Infrastructure Services, now known as Kyndryl, to help lead its IT transformation project.

Unique challenges

Given the ongoing pandemic, few key team members were ever able to meet in person. The project plan was complex and had no room for missed dates. Across 12 mainframe technical functions, thousands of test cases, and stakeholders from 6 partner and vendor organizations, RSA had to accomplish the migration with minimal impact to staff, customers, and the business—all in a compressed timeframe.

Prior to the migration, the project team removed or replaced hundreds of instances of redundant software and staged two dry run events. The first dry run was to prove the LPARs could be successfully migrated and that all the systems could be successfully deployed on zCloud. The second dry run added fine-tuning and application testing, such as for software interfaces. The team ultimately managed and coordinated across teams from multiple strategic partner organizations to deliver the project ahead of schedule, with no negative impact to RSA's business operations.

Smooth transfer of knowledge was also critical to project success. More than 120 remote classroom-based virtual sessions, with playbacks and specific one-to-one sessions, were held so that the new team could capably take on post-migration responsibilities.

While there were many logistical problems solved over the intense 6-month assignment, the most unexpected was having to dig up the road on the A24—a major London route—with two weeks notice to replace a connection!

“In line with our cloud and digital first strategy, this migration gives us the agility to improve delivery predictability. As an organization, we are moving away from legacy architecture to meet the demands of scalable growth. Our move to the cloud is a key milestone on the transformation roadmap. The ability to execute in 6 months showcases the delivery capability we have developed.”

Akhlas Hafiz
Director of Digital Transformation
and Customer Delivery
RSA Insurance



Developing a competitive edge through IT innovation

Through IT modernization, RSA aims to improve the costs, functionalities, and overall predictability of its service delivery. As financial and insurance markets transition to digital, the move to cloud also gives RSA the flexible architecture it needs to innovate new capabilities and prepare for future competitive trends.

Akhlas Hafiz, Head of Digital Transformation, Technology Change and Delivery, describes the opportunity this way:

“We’re looking at how we really get the most out of the IT investment longer term. We’re looking at digital from a customer UX perspective, monetizing cloud as an asset for our business, and industry trends such as artificial intelligence and machine learning—and what agility we need to have in our architecture to better develop those.”

Protecting data, applications, and environments

In addition to the LPAR migrations to zCloud and extensive software cleaning and updates, Kyndryl helped RSA implement high-capacity network connectivity. The network connection is designed to interoperate easily with multiple suppliers, geographies, and technologies between itself and the Kyndryl data centers.

The Kyndryl zCloud solution for RSA is built to help deliver economies of scale in a securely hosted, high-capacity, high-availability multitenant mainframe environment for the primary and backup data centers. The solution for RSA is also designed to be General Data Protection Regulation (GDPR) compliant, and support end-to-end encryption, including tape, storage and in-flight data across networks.

Moving forward

As part of its larger vision of innovation, RSA plans to continue modernization efforts. For RSA, and for thousands of clients worldwide, Kyndryl's role as a trusted advisor is based on our experience working with the vital systems that organizations run on every day. Kyndryl offers [managed infrastructure-as-a-service](#) for hybrid cloud deployment and migration, managed private cloud, and data center disaster recovery. With options for single and multitenant infrastructure, on-or off-premises, Kyndryl provides the complete infrastructure stack from mainframe to x86 computing—all on hybrid cloud.

RSA Insurance determined that Kyndryl is a partner with the right knowledge set—uniquely able to manage an intricate mix of hybrid multicloud environments and data center technologies, suppliers, and tactical situations—to deliver the right results.

“The advantages of these data centers are the high availability and security-rich features. We’re able to operate an LPAR model created to offer highest levels of security. All of which are integral to the solution designed and delivered for RSA. And it also includes additional subsystem isolation geared to protect data, protect applications, and to protect the test and production environment.”

Shahira Brennan
Client Partner Executive
Kyndryl



Take the next step

Learn more about how Kyndryl advances the vital systems that power human progress.

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