

Upgrade and comprehensive support for DigitalRoute's mediation platform

Case study

Customer profile

The customer is the Eastern European subsidiary of a leading tier one mobile network operator (MNO) that operates GSM, UMTS and LTE-based cellular networks in Europe, Canada and US. The operator is the largest MNO in the country and one of the most significant MNOs in the region.

Business challenge

In the autumn of 2012, R Systems was chosen by the operator for a complex migration project of DigitalRoute's MediationZone platform that was being upgraded from version 5.0 to 5.1, including transition of both software and hardware components. On top of this, R Systems was entrusted with the support and maintenance services for the complete mediation platform. The platform was the key system for serving the mobile customer base of approximately 15 million users, as it was covering a wide variety of services operating on over 100 workflows in on-line and batch mode, therefore it was crucial to perform seamless migration in a very short timeframe (4-month period) and to establish an effective support and maintenance process and team in less than 3 months.

R Systems contribution and solution

Bringing into place the best engineering and management expertise on the market in the BSS domain, R Systems succeeded in fulfilling all objectives of this challenging project. We managed to set up highly skilled project and support teams in a very short period and the proposed migration strategy proved to be 100% reliable and secure, despite the

technical complexity of the legacy architecture. Furthermore, the support and maintenance services, governed by very strict service level agreement terms, have been in place since day one without breaching contractual terms.

R Systems has developed its own practice of managing complex architecture transformation projects involving system integration, migrations and upgrades of business-critical platforms such as mediation. This methodology is a well-defined process defined within our quality management system and may be used for any kind of undertaking similar to the one described above. Considering the particular complexity and time-sensitive conditions of the mediation project, R Systems took advantage of this methodology to reduce significant technological risks that might have affected the business of the customer.

In order to complete the smooth migration and upgrade of the MediationZone platform, R Systems used a "lightweight" Scrum version of the aforementioned methodology. The initial scope of the project was divided into 4 phases covering subsequent "migration sprints": phase I – preliminary analysis; phase II – pilot migration; phase III – real migration; phase IV – production switch pilot migration.

The purpose of the pilot migration was to detect any potential problems with the legacy architecture and most risk-sensitive workflows that might not have been identified by the operator during the preliminary analysis.

To ensure safe and efficient production switch in the final sprint, at the end of each phase R Systems performed thorough compatibility tests which proved the full functional coverage and infrastructural stability of the migrated workflows with a dedicated test tool (R Systems TOP Testing Suite).

The technical goals of upgrading the mediation platform were successfully met, while the mobile operator's business continued absolutely unimpaired. The operator appreciated the above phase-based approach for combining the advantages of traditional systematic analysis, effectively reducing project risks with time and cost efficiency of the lightweight project management methodology. This project proved R Systems to be a fully reliable and skilled partner for the operator, capable of handling most sophisticated system integration challenges and opened new opportunities for further optimization of the operator's OSS/BSS infrastructure.

As a result, R Systems was also awarded the deployment of second MediationZone installation used as HA solution, working in Active-Standby for batch processing and Active-Active for real-time processing. Further R Systems was entrusted with the upgrades of the platform from v. 5.1 to 6.3 (in 2014) and from 6.3 to 7.2 (in 2016), as well as with related support services for the entire mediation platform.