RAIFFEISEN

High Performance Customer Communications Management

Serie M/ in Container-Architecture

Central Output Management

Since 2014, Raiffeisen Switzerland has been using the Serie M/ as its central Customer Communication Management System CCM. It processes all business documents that arise from the various banking applications of the 232 independently organized cooperative banks. Based on a total of 946 document templates (770 batch, 176 interactive), Serie M/ thus generates approximately 200 million pages annually, of which about 90% are processed in batch. The rest is created interactively/online by the approximately 8,500 users. With this volume of data and the high number of users, the performance of the overall system from data source to delivery, as well as during interactive processing, is of critical importance. The Serie M/ must generate and optimize both physical and electronic documents in the shortest possible time and transfer them to the delivery channel.

Technological reorientation

In 2016, Raiffeisen Switzerland made the strategic technology decision to migrate all applications previously running under Websphere Application Server to container technology using the OpenShift application platform. In spring 2020, Serie M/ was installed under OpenShift in the test environment. Successful load and performance testing in conjunction with Avaloq's primary business system ACS enabled the solution to go live in September. The productive quarterly processing at the end of September provided initial experience for the upcoming Year-End Processing YEP.

The Challenge

At its core, the Serie M/ consists of two main modules, the M/TEXT server for document composition and the M/OMS server for consignment formation including transfer to the delivery channels. M/TEXT processes individual documents in each case, which enables excellent performance in mass processing through parallelization. Since these individual processes are of short-term nature, M/TEXT is ideally suited for the dynamic, load-dependent management of the so-called pods. This is not changed by the few individual documents within YEP, which comprise up to 3,000 pages. Further processing in M/OMS involves rather long-term processes in which the individual documents are finalized and formatted for the target format of the communication channel. In order to achieve the greatest possible performance with regard to the overall process, both process types, the short-term and the long-term ones, must achieve the maximum processing speed.

The Company

The Raiffeisen Group is the leading Swiss retail bank. The third force in the Swiss banking market has 3.7 million customers and, with 834 business outlets, offers the most dense banking network in Switzerland.

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The fire test of year-end processing

A mandatory application scenario for financial service providers is high-volume, time- and performance-critical year-end processing. At Raiffeisen Switzerland, the task is to provide an IT infrastructure once a year that can process and output the maximum document volume in just 48 hours. This is the ideal test for the CCM, which is operated for the first time in container architecture with Serie M/. This means:

- **Input**
  13.2 million XML records loaded 15 times in parallel at a total of 120 records per second.
- **Processing with M/TEXT**
  Total volume 27 million documents - speed approx. 110 documents or 220 pages per second - PDF format - output 13.2 million digital archive, 5.6 million physical dispatch, 8.2 million digital e-banking.
- **Output with M/OMS**
  Stack size 50'000 documents each - Each stack parallelized with 10 to 14 instances.
- **Hardware configuration Serie M/**

	M/TEXT and M/OMS	OMS Adapter
Pods	8	10
Memory	8-12 GB	2 GB
CPU	8 Core	2 Core

The OMS adapter is an advance module between the delivery system and the Serie M/ that prepares the data for the Serie M/ and, with its 10 pods, ensures optimal parallelization so that the Serie M/ can operate with the best possible performance.

The system fully met the technical expectations, it ran extremely stable, all documents were processed „in time". Because the Serie M/ product architecture is designed for container operation, the system scaled even more easily and faster than before. The required performance was easily achieved with a suitable hardware configuration and multiple parallelized and coordinated processes.

Safety by process monitoring

To ensure processing security, Raiffeisen Switzerland uses the numerous technical interfaces of the Serie M/ for its control system. The delivery system creates a unique check track for each document, which is added to or extended at various processing steps - formatting in M/TEXT, transfer to M/OMS and the delivery channel, and so on. A process is not completed until all check tracks have been successfully run through. In the event of an error, feedback is provided according to defined escalation levels. This makes it possible to monitor both the parallel processing of documents and omni-channel communication with physical and digital delivery „end to end".

What's next?

Raiffeisen Switzerland has already initiated the next development step. In 2021, the approximately 8,500 users of the 232 cooperative banks will receive the new M/TEXT TONIC editor based on HTML5 technology. It convinces in the interactive document editing in the browser with an even more intuitive user guidance. On the administration side, there are many innovations in digital formats such as responsive HTML or barrier-free PDF/UA documents as well as a graphic designer for template design. The new M/TEXT TONIC Editor can be operated in parallel to the previous solution, which enables flexible migration.

With this technical innovation, Raiffeisen Switzerland establishes a future-oriented solution for text-based customer communication and creates a leading role for itself in digital customer communication.

Superior technology

„In terms of performance, the system is far from being at its limits. If necessary, the processing speed could be increased even further ... and the system runs with the stability and precision of a Swiss clockwork. It's really fun to work with this technology!"

Daniel Metzger,
Head of Document Services
Raiffeisen Switzerland

Contact

We have even more information for you. Would you like to speak directly with our reference customer? We will be happy to arrange an appointment.

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