

Interview with 4 key players at CETREL S.A.

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CETREL S.A., a 100% affiliate of SIX Payment Services, and SEQIS have a long-term history of successful cooperation. After finishing the big migration project that encompassed the migration of the Luxembourg banks' card portfolio on the new processing platform of SIX, Alexander Vukovic (SEQIS) takes the chance to interview the key players at SIX and CETREL:

Daniel von Aesch (COO), Heinz Saria (Project Lead), Alain Barthelemy (Lead System Integration Test Team) and Renaud Dechambre (Lead Business Acceptance Test Team).

VUKOVIC: Daniel, as the COO of CETREL and the main project lead for this huge migration project, what do you think, were the most thrilling challenges in this critical and successful project from a SIX point of view?

VON AESCH: Over its many years in service, our legacy environment had grown with our customers and their needs. In the new system, there had to be a corresponding working solution for all their requirements.

The biggest challenge was to gather absolute clarity of the features of our 25 year old home grown solution and their behavior in the new solution. Enriching the basic functionalities of the new solution with the features and functions that capture our industry expertise and experience and that

have served our customers for decades drives by the end of the day architectural and performance challenges. Another challenge was the high number of necessary customizations, which by definition interfere with the maintainability on the long run of a standard solution.

VUKOVIC: Alain, in your SIT-Team you introduced the idea of an automatic sanity check, could you describe the main targets of the sanity check? What do you think about the SEQIS-implementation of the Sanity Check based on Jenkins, Subversion and Powershell?

BARTHELEMY: As we are working with an external provider in an intensive roadmap, we have several deliveries, which may introduce a lot of regressions in the production system. Therefore, we needed a way to quickly be able to say if a delivery of a new release was passing the minimum set of quality criteria. This was the target of the Sanity Check. It is more than useful. We are using it intensively. The choice of Jenkins and Subversion gave us the opportunity to enhance the test cases easily in a collaborative way.

We rewrote it to a light Sanity Check to have additional faster checks. We analyze also all dependencies of the delivery, i.e. we are checking that there is no orphan piece of code. Next step will be to include NeoLoad tests (Webservices testing tool) in Jenkins.



Mag. Alexander Vukovic is a pure agile testing wizard, founder of SEQIS and member of the SEQIS

management board. In his career he worked as java and javascript developer, functional tester, load tester, test automation specialist, test manager, project manager, trainer and coach. Since 2004 he converted to be a pure agile wizard, starting to work in and with agile teams. Today he works as specialised agile testing and quality coach.

He combines fundamental theoretical knowledge (ISTQB Full, Certified PO, SM, CAT-Trainer, TDD) with 20 years of practical experience.

VUKOVIC: CETREL/SIX wanted to improve the Test Automation Strategy. What is your opinion about the achievements SEQIS in this main project target, and what do you think, is the future of test automation at CETREL?

BARTHELEMY: I am proud of the solution which is currently in place. Of course it has to be enhanced. Test

Automation is something that is living and it is definitely the future for us. It also requires analysis and methodology: The maintenance of an automated test may cost more than performing manually the test; a right balance has to be found. Next step is to have a dedicated screen showing the actual status of the Jenkins Sanity Check as well as including our own pipes.

VON AESCH: The target has been fully achieved. It is absolutely mandatory to have a sufficient test automation solution in place, if you have a standard product enriched by own developed customizations, which have to be tested on compatibility with each and every delivery of the supplier. It is necessary to know as fast as possible, if the changed customizations and the changed standard product are still working together.

DECHAMBRE: By appointing SEQIS we wanted to address the fact that we had barely practiced test automation in the past. Thanks to your cooperation, we now have the sanity check and 50% of the functional testing is fully automated. With tools answering our needs, I am thinking of the implementation of Jenkins. It also helped us to get the appropriate management attention for benefits of and the dangers in the absence of test automation.

E.g. GUI-Testing, we realized that it was economically not a good idea. The future: There is always room to improve, so we will continue to work on test automation, and SEQIS would be our natural choice if we need external support in the test domain.

SARIA: With the help of SEQIS we successfully introduced automated sanity checks, which performed the equivalent of 1-2 days of manual testing within 1 hour. SEQIS also implemented a load test environment, which is complex in functionality but easy to use. Additionally SEQIS selected and

introduced a number of additional test support tools (file comparison, DB comparison, ...) and provided training sessions for our testers.

VUKOVIC: Renaud, you and your BAT-Team are doing a very advanced parallel run, comparing real production traffic on two parallel test environments with different application versions. For that you have a lot of comparison effort, e.g. comparing result files and xmls.

So SEQIS did a lot of tool evaluations to find automatic ways to compare e.g. structured data with keys stored in flat files. What do you think about the approach of the SEQIS tool evaluations and the evaluation results?

DECHAMBRE: So, first thing when you came in was explaining the selection process and criteria. It was a high sophisticated comparison approach, with clear and factual measures. This was for me already an indication that the evaluation will be really objective with transparency. Second, when you

started evaluating the tools, you put yourself into the situation we are, not only reading white papers. This is the only realistic way to understand our real needs.

Finally you touched the goals by selecting tools, which were usable and providing us with the right things. This process revealed the necessity of some further in-house development to accommodate the size of the files, which was an important finding as there was no tool on the market to fulfill our needs.

Very good process, very good understanding of customer needs and very objective criteria. Good results at the end. The outside view was very helpful for us to understand our real needs.

VUKOVIC: Heinz, the performance engineering of web services was one of SEQIS main tasks at CETREL. Could you outline the original performance and the final performance we achieved after the performance engineering? How was SEQIS contributing to these results?



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f.l.: Alain Barthelemy (Head of System Integration Testing), Alexander Vukovic, Renaud Dechambre (Head of Business Acceptance Testing), Daniel von Aesch (COO CETREL S.A.), Heinz Saria (Project Lead Sunshine/Moon)

SARIA: Integration with client bank systems via web services is a key success factor in today's payment market. At CETREL we process more web services calls than card authorizations. During our migration to a new card processing system we encountered during initial tests average response times of several seconds. This was unacceptable. Finally we achieved average response times around 200 ms.

SEQIS helped us to set up an efficient state of the art web service load test environment. Additionally SEQIS performed most of the load tests. As a result we got comprehensive and conclusive performance analysis reports.

These reports helped our vendor to find the implementation bottlenecks and helped CETREL to find the proper dimensioning of the HW platform and system setup.

VUKOVIC: How would you summarize and value the work of SEQIS in your project?

SARIA: Based on the analysis of our test environment and test methods the right methods and tools were selected and the right training was provided to make us fit for future projects. As SEQIS is no tool provider on itself the recommendations were really based on our needs. It helped a lot that SEQIS is also experienced in our business domain.

VON AESCH: Added value of SEQIS was very high. Unlike in other SIX location, test engineering knowledge was not sufficient here in Luxembourg, which we wanted to make up for by using an outside provider. SEQIS was selected after a Proof of Concept with several suppliers and proofed the best

supplier. SEQIS was known as well to be a reliable testing company with good expertise from a former project with SIX.

To setup the full testing, automation and performance, e.g. with NeoLoad, was a lot of expertise, which was brought to SIX/CETREL in Luxembourg, which was not yet established with this level here.

BARTHELEMY: Imaginative, intensive, proactive and efficient.

DECHAMBRE: SEQIS is dedicated to testing, with no influence from any solution provider, with people who are really focusing into the test domain. Due to this clear focus, SEQIS is ideally positioned to support companies implementing test attitude. They have a lot of expertise in difficult domains, where it is hard to find people with this level of expertise. For us the result is, that we have a better view of our requirements and we have the right level of test automation in place. Very friendly team and very good relationship.

VUKOVIC: Thank you very much!