



NOVEMBER 15, 2022

RENDEZ-VOUS AUTOUR DE VMS

Report on the "Rendez-vous autour de VMS" - November 15, 2022.

The VMSgenerations meeting "Rendez-vous autour de VMS" held on November 15 introduced a new format with a live development session.

The topic "*Integration of OpenVMS systems in WebServices/MicroServices architectures*" describes a method to integrate VMS with other environments.

The session is based on a presentation of the method and tools, three testimonials of real-life deployments, and an interactive demo followed by a Q&A exchange.

During the welcome / introduction presented by **Miroslaw Szczepkowski** and **Benoît Maillard**, we thanked the **ProVMS** association, a consortium of VMS professionals, which after its recent dissolution donated the *Integrity* server used today for the interactive demo. We also thanked **VSI** for providing the VMS licenses for this demonstration.

The next "*Rendez-vous autour de VMS*" session will return to a more traditional format, focusing on supplier news (*VSI, Oracle, ...*) and is expected to take place early 2023.

COURSE OF THE WORKSHOP

Jean-François Piéronne presented a method to evolve VMS applications that need to interact with the rest of the world from the perspective of WebServices or MicroServices :

- He recalled the context of legacy monolithic applications and the historical development principle that revolved around the operating system with the tools of the **Digital** world.
- He then presented the architecture chosen to integrate VMS with other environments, based on a message router, an HTTP framework and a standardization of data exchange.

TOOLS

The tools chosen here are *RabbitMQ*, *FastAPI* and the *JSON* format. Other choices are possible to provide comparable functionality. Here, criteria such as open-source aspect, popularity, openness to multiple languages, the possibility of getting support, and performance were considered in the selection.

In parallel with these tools, the demo shows the use of an interactive graphical user environment for editing (*Microsoft Visual Studio Code*), and an *Heptapod* forge to accommodate cross-platform developments based on *GitLab/Mercurial*.

This last topic, already addressed in a previous testimonial from a VMS customer (See [Rendez-vous du 7 avril 2022](#) (ctrl-click for a new tab)) can be the subject of a next interactive demo session "*Rendez-vous Lab*".

FEEDBACK FROM EXPERIENCE

The testimonials highlighted three cases in which this method was used to transform VMS applications.

- The first highlights a case from the financial sector and securities clearing. **Christian Levrey** presented us the history of the information system at this customer, which has been built on VMS and *Rdb* for 30 years. The need to access information via the web a few years ago led to the introduction of *Oracle* databases, where the information from *Rdb* was replicated using the *JCC* and *CDC* tools. Updating information through this interface was not optimal. The constraint was to allow data updates only from VMS and the *Rdb* database. Redesigning the applications (90 *Cobol* applications) and introducing *RabbitMQ* with *JSON* allowed immediate visibility of updates, simplification by eliminating multiple replication layers, and improved user experience.
- Second customer case presented by **Rémi Jolin** : a health insurance company validating opticians' quotes from their applications on VMS

(*Basic applications + L4G ApTools*) by responding instantly, via *Python* and *Soap*. Previously, opticians had to exchange information about each patient file by fax or phone.

- Third case : a transportation and logistics company that has restructured its VMS applications in the form of business objects that allow interoperability with customers' information systems. The transportation provider thus adapts its applications to the specific message formats of its client customers. As an example, a new application was created within a few days to support the warehouse of a new customer.

Jean-François Piéronne then illustrated the topic interactively with a demonstration on the tools, in particular *FastAPI* and *Visual Studio Code*. Examples of simple web services, with or without parameters, simplified tests and documentation, in *Python* or *C*, authenticated or not, running on VMS or *Linux*.

The demo also showed the use of *GitLab* and *Mercurial* forges/repositories via *Heptapod*, enabling cross-platform development with VMS fully integrated with the other environments..

In the exchange session, the questions of the participants were answered and further evocations of concrete cases of updating applications and using modern development tools around VMS were given.

The presentation material and recordings of the main passages of the session are available at <https://www.vmsgenerations.fr/rdv-15-nov-2022/>.

The VMSgenerations association's Board of Directors is open to the issues that users would like us to address and, more broadly, to any contributions, reactions or suggestions so that the association's activities reflect everyone's expectations.

So do not hesitate to write to us at the e-mail address:

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