



## Sogclair Aerospace relies on VMware and VCE to guarantee flexibility and security for its transnational projects

Sogclair Aerospace is an aviation and aerospace company, which has built a strong expertise in the field of simulation as well. Sogclair Aerospace is a division of the international Sogclair group, present in 6 European countries, and in North America, a designer of high added-value solutions and products for the aerospace, aviation and transport sectors (2015 turnover of 127.8 M€, 50% of which is international - 1400 employees). Its customers include global leaders in aerospace: Airbus, Thales, Bombardier, etc. Thanks to its expertise in design, processes, configuration management and manufacturing engineering, Sogclair Aerospace its customers among which global aerospace leaders such as Airbus, Thales, Bombardier.

### ACTIVITY SECTOR

Aerospace

### LOCATION

France / Worldwide

### MAIN CHALLENGES

- Business continuity
- Secure data and access
- Quick response to new requests from customers
- Project mode tools

### SOLUTION

- Virtualisation of the entire technical infrastructure - servers & storage
- Workstation virtualisation

### PROFESSIONAL BENEFITS

- Reduction of costs
- Security for data in transnational project
- Flexibility and responsiveness

### The challenge

Since the early 2000s, the Sogclair group has had a strong international presence. Starting in France, it expanded in Europe (Germany, Spain, United Kingdom), then into Tunisia and more recently into Canada. The company has developed its information system to handle the challenges and constraints in this sector: regulations, project mode, maximum reliability, international collaboration, handling technology obsolescence, data security and so on.

It has huge and constantly growing IT demands (CAD, simulation, knowledge sharing, back-up and storage, recovery plans, etc.) because of the complex nature of aviation or aerospace projects (some assemblies consist of over 200,000 parts).

So the company has an infrastructure consisting of 230 virtual servers (hosted on 24 physical servers) and 2800 workstations, 200 of which are virtual at the moment. In total it handles over 180 Tb of data, distributed either in a private cloud system at the company headquarters or across other sites. Its storage system is fully virtual and backed up to ensure data security and continuity of operations.

In 2012, Sogclair modified its industrial production strategy (especially by going off-shore for some contracts) and needed to ensure data security for transnational projects, for instance by forbidding transit of data over the network.

“In general terms, we wanted to design an organisation, and thus a technical infrastructure, that could give us greater flexibility, especially for faster project start-up or to accommodate the variety of configurations used by our customers,” explains Jacques Dejean, head of the Sogclair Group’s Information System. “Although this new infrastructure was not intended to replace our entire information system, the security demands of off-shore provision led us to consider virtualising the workstations involved.”

### The solution

Formerly, Sogclair Aerospace virtualised some applications, and thus the servers that hosted them. Citrix and VMware solutions were tested in 2010. “We chose VMware because its solution was the only one that allowed us to create a virtual machine with an IP for a specific user. This function provided tracking details for the changes” Jacques Dejean reports. “At the same time, we paved the way for our operational continuity plan by taking advantage of virtualisation and storage duplication, using EMC VPLEX on which we developed a private cloud. If there is any incident in a computer centre, servers are automatically switched to another centre, and all data are recovered.”

The particular demands of its professional field encouraged Sogclair Aerospace to continue with virtualisation. Its employees contribute to many specific projects on behalf of a variety of customers, often using several applications at once. So the

## VMWARE CASE STUDY

### VMWARE SOLUTIONS

- VCE Vblock (joint appliance by Cisco, EMC and VMware)
- VMware vSphere (server virtualisation)
- VMware Horizon View (loaded in VCE Vblock)

company was looking for a solution that would avoid a single employee having to work on 2 or even 3 physical workstations at once.

“Our aim was to reduce the number of workstations for each employee, thus reducing our demand for physical connections, computers and power consumption; improving data security and increasing flexibility and reactivity” continues Jacques Dejean. “So we opted for VCE Vblock, the joint package from Cisco, EMC and VMware, which runs VMware Horizon View (VDI) for virtualisation of workstations. This attractive package relies on a shared architecture, providing a machine that integrates hardware, software, storage and network connections, along with their associated maintenance needs. It is fully integrated, with all components mutually compatible. To start with, we virtualised 200 workstations in France. Eventually, users across 14 sites will benefit from this technology.

If the CAD workstations could not be switched to VCE because of the solution capacity, at the time Sogclair Aerospace made this choice, they now use VMware Horizon View. The View client is also used to provide training, particularly useful on machines used to teach 3D technologies.

Since 2015, Sogclair Aerospace has implemented a CAD workstation virtualisation solution, again based on VDI. There are 16 machines operating at the moment, with 30 to be deployed during 2016.

Moreover, since 2015 and thanks to the vGPU technology combined with VMware Horizon 6, Sogclair Aerospace uses virtualisation for demanding 3D CAO solutions such as CATIA V5 R21. Today it simultaneously uses CATIA for 12 virtual machines on a single server and plans to deploy until 30 VM dedicated to 3D applications by the end of 2017.

### Benefits

Sogclair Aerospace highlights the many benefits achieved through virtualisation:

“On the one hand, we are saving a great deal of time and avoiding the huge investment needed to purchase new machines. With virtual machines, it is easy to add processors or memory,

so we are no longer faced with rapid obsolescence of workstations as we used to be”, explains Jacques Dejean. “Furthermore, it gives us greater flexibility to respond quickly to customer needs: a virtual machine can be created instantly, and we no longer have to deal with the administrative constraints in purchasing new equipment.

We have also improved data security, especially for transnational projects. Virtualisation means that data no longer have to circulate over the network, thus guaranteeing confidentiality. Finally, virtualisation makes maintenance easier and updates faster,” he continues.

Sogclair Aerospace highlights other benefits gained in terms of project management: “Since setting up project mode, we have come up against travel issues for setting up a team (the size of which varies according to the project), with all the associated constraints: connections, physical travel, reconfiguration of each workstation, multiple screens, etc. Virtualisation does away with the need for physical travel and connections/disconnections,” Jacques Dejean reports. “So we save a great deal of time, which can be spent on projects, and makes life a lot easier for the teams. Eventually all our workspaces will be fitted with thin-client devices, giving each employee a connection to their own personal workspace, with login and password access, without affecting the IT department”.

To conclude, Sogclair Aerospace now has a more responsive, secure information system, so that the group can take time to consider its new projects, most of which are transnational.

