



NO MORE GUESSWORK IN IT

Commune de Villepinte in France prepares for the reorganisation of local government and doubling of network users with hyper-converged appliances and software-defined storage



Local Government

France

Business needs

With a reorganisation of the local government expected, Commune de Villepinte needed to prepare its desktop environment for a major increase in network users.

Solutions at a glance

- [Software Defined Storage](#)
 - [Dell EMC XC Series web-scale hyper-converged appliance with Intel® Xeon® processors E5](#)
 - [Nutanix™ software](#)

Business results

- Ensures that the authority is prepared for governmental changes
- Minimises the expense of doubling the IT user base
- Guarantees a high-performance virtualized desktop to maximise productivity
- Halves desktop management overheads with hyper-convergence and SDS

“We can migrate public-sector employees from different regions to our Dell EMC XC platform safe in the knowledge that we can meet their needs. It’s our way of offering support to a strategic, countrywide goal of boosting the efficiency of public services.”

Bruno Viotty
Chief Information Officer, Commune de Villepinte

Virtual desktop infrastructures (VDIs) offer significant benefits over traditional desktops, including reduced management costs, increased security and smaller energy bills. But achieving these gains can be a challenge. If the platform behind the VDI isn't fit for purpose, the advantages can be severely diminished.

Commune de Villepinte in France put a VDI solution at the centre of a major programme to overhaul its IT. As part of a nationwide programme to boost the efficiency of local government, Commune de Villepinte was expected to provide IT services to other authorities in the area.

The existing infrastructure was coming to the end of its lifecycle and couldn't deliver the authority's IT goals. Management was time-consuming, not least across the desktop infrastructure for the authority's 350 personnel. Furthermore, the existing data storage solution lacked scalability, and this left a question mark over whether the authority could efficiently expand the environment in the long-term.

Time for a change of IT thinking

Productivity was noticeably affected by the IT system. The storage arrays lacked performance, so response times were slow when staff logged on in the morning. Bruno Viotty, Chief Information Officer of Commune de Villepinte, says: "Our goal was to move to a VDI solution and create a more scalable infrastructure to deliver the best, most efficient services to our network users. We also wanted to streamline operating expenditure as much as possible."

Alternative approach pays off

Initially, Commune de Villepinte looked to implement a VDI solution supported by dedicated servers and storage. However, it began to consider a different approach when it engaged with Dell EMC. The authority had worked with Dell EMC for more than five years, and Dell EMC was seen as a trusted adviser. It had purchased Dell EMC Storage

PS Series arrays, Dell Latitude laptops and Dell OptiPlex desktops. Arnaud Hauwelle, IT Manager at Commune de Villepinte, says: "We found that Dell EMC solutions were both reliable and well supported. We also saw Dell EMC as a trusted adviser because it consistently delivered solutions to meet the changing IT needs of organisations."

Viotty adds: "Our experience was that Dell EMC always provided strong support. This helped build the kind of close relationship that we don't have with many providers."

Hyper-convergence proves to be the answer

At this point, Dell EMC invited stakeholders at the authority to a local Dell EMC Solutions Centre for a demonstration of the Dell EMC XC Series of web-scale hyper-converged appliances. The appliances featured both Intel® Xeon® processors E5 series and Nutanix™ web-scale software for a software-defined storage (SDS) solution. It meant the authority gained the performance of Intel technology in a single platform consolidating compute and storage technology.

"We deployed the Dell EMC XC hyper-converged appliance ourselves in just a couple of hours. We created all the VDI master images beforehand with SCC, and then created 150 employee workstations in no more than 20 minutes."

Arnaud Hauwelle
IT Manager, Commune de Villepinte

Simplified deployment, work completed in hours

The authority began to work with Dell EMC partner SCC on defining the requirements for the VDI. According to Hauwelle, implementation was simple. “We deployed the Dell EMC XC hyper-converged appliance ourselves in just a couple of hours. We created all the VDI master images beforehand with SCC, and then created 150 employee workstations in no more than 20 minutes,” he says. Commune de Villepinte deployed three Dell EMC XC appliances, based on Dell EMC PowerEdge R720 servers, with Nutanix in the main data centre and a third appliance at a secondary site. Hauwelle says: “We can easily extend our Dell EMC XC cluster by adding an extra appliance node. In easy steps, you can create a highly secure solution with backup and replication built in.”

Gets ready to support reorganisation of government services

The authority is now in a better position to meet the expected reorganisation of public services in France. Authorities will adopt shared services models and Commune de Villepinte will provide IT services to other public institutions in the area. Comments Hauwelle: “We expect to deliver shared IT services in the coming year across the region. With our Dell EMC XC hyper-converged appliance running Nutanix, we can scale our IT easily and successfully make the move.”

Enables potential doubling of network users and boost to services

Viotty highlights what the SDS solution means for Commune de Villepinte. “What struck us about the Dell EMC XC appliance and Nutanix was the easy scalability. We could start with a configuration for a pre-selected number of users and then scale from there. There was no waste: we maximised our resources from the beginning,” he says. When the authority begins providing shared services, the number of end users – for example, teachers – could double to around 600. “We can migrate public-sector

employees from different regions to our Dell EMC XC platform safe in the knowledge that we can meet their needs. It’s our way of offering support to a strategic, countrywide goal of boosting the efficiency of public services,” Viotty says.

High performance today and tomorrow

Commune de Villepinte took advantage of the appliance architecture of the Dell EMC XC hyper-scale solution to maximise speed of deployment. Because it had followed the sizing guidance for total number of endpoints across its sites, the authority had peace of mind the VDI solution would be fit for purpose. With the Dell EMC XC Series, customers can choose from multiple configurations to enable different IT scenarios. The configurations include support for VDI solutions, private clouds and databases.

“We particularly value the flexibility of storage in the Dell EMC XC hyper-converged solution with Nutanix,” says Hauwelle. “It avoids oversizing, because effectively you can start small and grow. In our case, it will enable us to support the growth in end users over the next 12 months.” The IT Manager says that at peak times, the solution delivers between 3,000 and 4,000 I/Os per second. “We have seen high performance from the Dell EMC XC appliance. Employees no longer face delays when logging on in the morning. They connect to their VDI workstations in a matter of seconds,” comments Hauwelle.

“We expect to deliver shared IT services in the coming year across the region. With our Dell EMC XC hyper-converged appliance running Nutanix, we can scale our IT easily and successfully make the move.”

Arnaud Hauwelle
IT Manager, Commune de Villepinte

Gains thumbs up from personnel for speed and reliability

Feedback from employees has been unanimous. So far around 150 staff have been migrated to the VDI, with the remainder expected to move over in the coming months. “When we analysed the results of our VDI running on the Dell EMC XC architecture with Nutanix, we found there had been no hardware issues. All applications were running fast, and staff was highly satisfied. It’s a great result,” says Viotty.

Reduces IT management resources on desktops by 50 per cent

Commune de Villepinte has gained the management simplicity of a VDI with the added benefit of running the environment on a centralised, hyper-converged platform. The IT administrators at the authority can oversee the needs of the VDI in a single environment. Using the Nutanix Prism Management interface, they can aggregate storage across all nodes with thin provisioning, automatic compression and deduplication to maximise storage capacity. In terms of impact, Hauwelle says the move

has been transformative. “We have found the Dell EMC-based VDI to be incredibly simple to manage compared with the previous PC-based environment. We have halved the IT management resources we need for our desktop environment as a result of moving to a VDI solution running on Dell EMC XC Series hyper-converged technology,” he says.

Planning with confidence for future expansion

Commune de Villepinte is now considering a fourth Dell EMC XC Series appliance with Intel Xeon processors at a secondary site to provide backup and replication services. The authority is confident it can successfully extend the platform and maintain its performance over the long-term. Explains Hauwelle: “We work with Dell EMC ProSupport to maximise the performance of our Dell EMC solutions. We like the fact that we’re working with experts who can talk at a highly technical level and help us find solutions quickly. The support services from Dell EMC are very important to us.”

Intel Inside®. Powerful Solution Outside.



[Learn more](#) about Dell EMC XC Series



[Contact](#) a Dell EMC Expert



View all customer stories at Dell.com/CustomerStories



[Connect on social](#)

Copyright © 2017 Dell Inc. or its subsidiaries. All Rights Reserved. Dell, EMC, and other trademarks are trademarks of Dell Inc. or its subsidiaries. Intel, the Intel logo, Xeon, and Xeon Inside are trademarks or registered trademarks of Intel Corporation in the U.S. and/or other countries. Other trademarks may be trademarks of their respective owners. This case study is for informational purposes only. The contents and positions of staff mentioned in this case study were accurate at the point of publication, April 2016. Dell and EMC make no warranties — express or implied — in this case study. Reference Number: 10022696

