

# Introducing an efficient infrastructure within a radiotherapy service

To meet new needs, Oncologie 78 opted to use state-of-the-art HPE architecture

## Objective

Upgrade to a better multi-site environment with easier administration to meet customer needs

## Approach

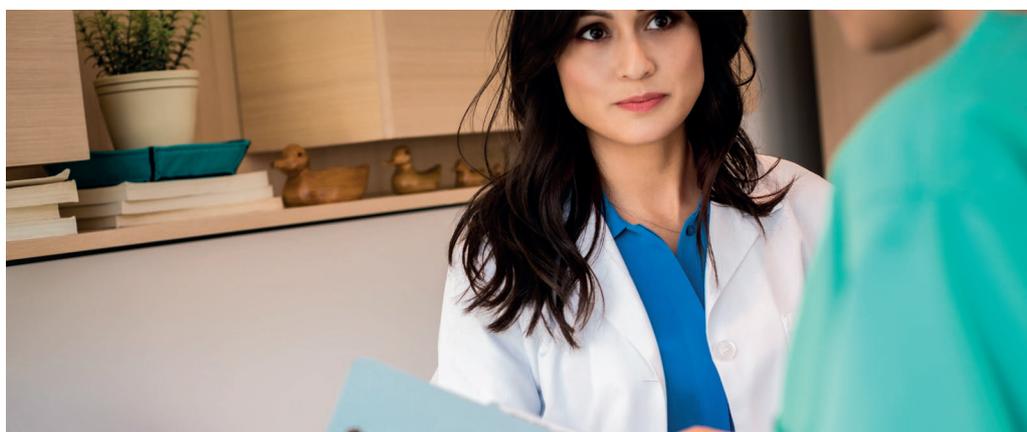
After consulting several providers, Oncologie 78 opted for Exa Informatique, which recommended using an HPE solution. The solution relies on server virtualisation, a smart storage solution and a fast network

## IT Matters

- 90% time savings for software maintenance
- Backups every fifteen minutes compared to just once a day previously
- Smart data management thanks to HPE 3PAR StoreServ Storage

## Business Matters

- Thin clients replace workstations
- Improved patient data security
- Gradually moving away from hard copies of medical files



Created in 2009, Oncologie 78 is a company that works with several doctors at a radiotherapy centre in Versailles, France. To cope with changes in its activities, it needed to replace its ageing IT system to integrate a new business software application. It opted for a 100% HPE solution, resulting in maintenance, time and use savings.

## Challenge

### Replace ageing architecture with a sustainable virtual solution

Oncologie 78 is a company that works with several doctors in the 'Centre de Radiothérapie de Versailles'. Each year, it sees around 1,300 cancer patients whom it treats with two linear particle accelerators (LINACs). In the past, the company used thirteen physical servers, whose maintenance period was ending, as well as a range of industrial systems. These servers had to be regularly purged of their data, which then had to be stored elsewhere. At the same time, in 2016, Oncologie 78 needed to install a new version of its Mosaiq business software, which manages patients' files and the linear particle accelerators.

## Customer at a glance

### Hardware

- HPE ProLiant DL380 Gen9 Server
- HPE 3PAR StoreServ Storage

### HPE Services

- HPE Proactive Care

Patient files contain information about medical diagnoses, prescriptions and patient scans (in the form of images) and are used to calculate doses for treatment plans and to reposition patients during treatment. Hence, there is a huge quantity of data to process. However, to take full advantage of the new software's features, and address new needs, especially safeguarding and securing data, the architecture had to be completely overhauled.

## Solution

### Virtual machines and smart storage

The first step was to take stock of the situation. This task was carried out by Exa Informatique. Based on its advice, Oncologie 78 opted to implement a solution based on two servers, the fault-tolerant HPE ProLiant DL380 Gen9 for virtualisation, and the HPE 3PAR StoreServ Storage array comprising SSD technology, hard disks, as well as a 10-Gbps SAN. The servers also feature HPE graphic acceleration cards bringing increased fluidity to the company's PC-based and Citrix® thin client-based workstations.

In terms of storage, the HPE 3PAR StoreServ array has 12 6TB hard drives i.e. with a capacity of 40TB, and sixteen SSD disks with a capacity of 400GB corresponding to 4TB. "The principle," explains Ludovic Michon, a medical doctor working at the clinic, "is to place our business applications and active imaging data on the SSD disks (frequent requests) to quickly reconstruct 3D, and even 4D scans, with a time dimension." The hard disks are used to store data subject to frequent requests. Moreover, the HPE 3PAR StoreServ array helps the clinic stay abreast of its storage needs, which are in the region of 2TB to 3TB each year. In total, twenty people now have access to this new architecture. They include secretaries, doctors and physicists.

This number is set to grow as new radiographers will soon join the group of users.

## Benefit

### Time, maintenance and use savings

"The first benefit we noticed," remarks Ludovic Michon, "is that the time needed to update our business application, which involves huge transfers of data, has gone from eight hours to just 40 minutes thanks to the new set-up." Plus, new software versions are immediately available to all users. There is almost no need for maintenance.

In addition, the company now has a data management system provided by the management tool that comes with the HPE 3PAR StoreServ array. By adjusting the settings, the data is automatically transferred i.e. from the SSDs to the hard disks, which avoids saturating the SSDs. Result: Oncologie 78's Mosaïq database is backed up every fifteen minutes compared to just once a day in the past.

This means that if there is a malfunction, patients' treatment records can be easily retrieved. However, the company wants to go even further and is already planning to digitise 100% of its medical files. First, it plans to implement a Business Recovery and Business Continuity Plan (BRP/BCP) over the next few months thanks to the new HPE 3PAR StoreServ array, which will be housed in new premises, which are currently under construction.

The infrastructure is monitored via a five-year HPE Proactive Care contract, ensuring total peace of mind that the entire system is working smoothly.

Learn more at  
[hpe.com/servers](https://hpe.com/servers)



Sign up for updates