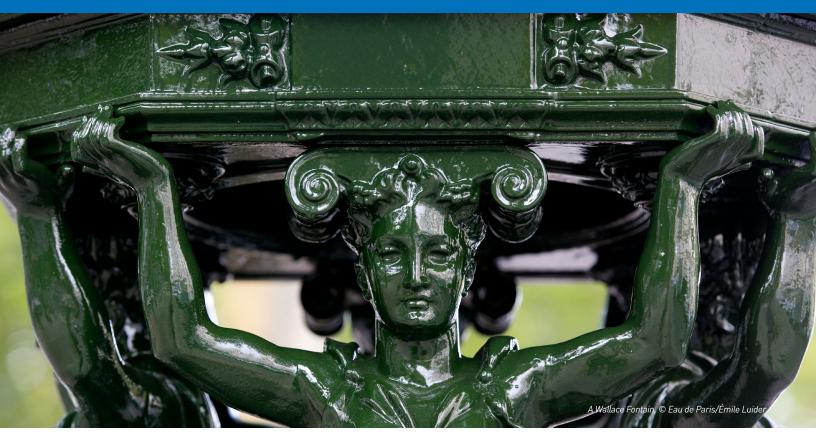
# Quantum.



# CASE STUDY

# The Eau de Paris Streamlines Backups and Keeps Operations Flowing Safely

When the Eau de Paris, the capital city's water utility, saw its VM backups go down the drain, it overhauled the entire system. The new Quantum-Veeam solution cuts backup times in half, provides long-term retention and automated security against malware, and cuts VM restore times from two days to just seconds.





We needed to get faster backups on a daily basis, considering the constant data growth. On top of that, we also wanted to put in place the backup best practices including a diskto-disk-to-tape strategy.

> Jean-Michel di Nicolo, Project Manager, Information Systems Department at Eau de Paris



When we tested the instant recovery feature, we were fully satisfied as we could see a huge improvement on the results. We are confident to know that we will get a strong benefit here if ever we need to launch a recovery.

Julien Lefevre – Network Administrator at Eau de Paris

#### SOLUTION OVERVIEW

- Two Quantum DXi4700 deduplication and replication appliances (45 TB), located at two different sites
- Scalar<sup>®</sup> i3 tape library with iBlade<sup>™</sup> and LTO tapes/drives
- Veeam v9.4 Enterprise software with VDMS

### **KEY BENEFITS**

- Backup performance has been doubled, allowing backups to complete inside the allotted window
- Data deduplication rates of up to 80:1 on full backups dramatically reduce disk storage requirements
- The time needed for VM restores has been shortened from two days to seconds
- Veeam and Quantum integration provides automated management of backup between disk and tape, reducing admin overhead
- Disk backup provides fast, local restores, and tape copies provide long-term retention and protection
- Support from integrator, Veeam, and Quantum has been consistently responsive and effective, maximizing system uptime and keeping overall costs low

# A WATERFALL OF DATA

The Eau de Paris is the pre-eminent water delivery utility in France supplying more than 3 million daily users with a constant supply of pure, healthy water. The system, now more than a century old, manages a complex network of water collection, treatment, quality control, and distribution that combines catchment basins, aqueducts, tanks, and treatment plants, along with systems serving private residents and public fountains and taps.

The data that supports the business and its 900 employees has been growing rapidly over the last decade (15% per year), and the company has increasingly turned to virtual servers to streamline operations, reduce admin overhead, and lower overall costs. This combination of growth and new technology, however, also created a problem for the company's backup operations.

## LEGACY BACKUP SYSTEMS CAN'T KEEP UP WITH DATA GROWTH AND VIRTUALIZATION

The old infrastructure relied on legacy backup systems that were designed for conventional, physical servers but that struggled as more and more servers were virtualized. Backup was slow, often not completing during backup windows, and it was difficult for the IT department to restore files and manage long-term protection. At one point with the old system, it took the team a full two days to restore one VM from the backup files.

"We needed to get faster backups on a daily basis, considering the constant data growth. On top of that, we also wanted to put in place the backup best practices including a disk-to-disk-totape strategy," explains Jean-Michel di Nicolo, Project Manager in the Information Systems Department at Eau de Paris.

The team decided that they needed to make a complete overhaul of the backup methodology. The primary drivers were faster backup speeds, streamlined recovery—especially for VMs—and an automated system that could provide both local, disk-based backups for quick restores and longterm, secure retention that would protect the system from malware attacks. Plus, as a public utility, the team needed low total cost of ownership and strong support that it could count on into the future.

## QUANTUM AND VEEAM PROVIDE OPTIMAL SOLUTION FOR VIRTUAL AND PHYSICAL ENVIRONMENTS

After carefully looking at all the alternatives, the team chose a combination of Quantum DXi® deduplication appliances and Scalar tape libraries for the core of the backup system, and Enterprise backup software from Veeam for both physical and virtual servers.

In the new system, backups all go to the DXi initially, where they are stored to provide fast local, disk-based recovery for at least 30 days. The Veeam software automatically writes copies of the backup files to the Scalar tape library in a background process to provide a second copy that is safe from ransomware and other attacks.



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After 30 days, the tape copies are removed to secure offline storage to provide long-term protection for at least seven years.

### NEW SYSTEM CUTS BACKUP TIME IN HALF, MAKES VM RESTORE INSTANTANEOUS

The Quantum-Veeam solution has achieved all the goals set by the Eau de Paris team when it decided to create a new system. The time required to complete backups has been cut in half, in spite of accelerated data growth. The DXi's high deduplication rates, up to 80:1 on full backups, has reduced disk requirements dramatically. The management of data sets across disk and tape has been fully automated to provide both fast restores and long-term protection while reducing admin overhead. And recovery of VMs has gone from a grueling, two-day ordeal to a fast, instantaneous restore.

### ABOUT THE EAU DE PARIS

First designed in the late nineteenth century by Eugene Belgrand, Eau de Paris is the largest public water system in France, supplying 534,000 cubic meters of quality water to 3 million daily users. The Eau de Paris and its 900 employees collect, treat, analyze, and distribute water from both surface and ground sources using 470 kilometers of aqueducts, 102 catchment basins, 5 water tanks, 6 treatment plants, and some 1,200 public fountains and taps.

#### ABOUT QUANTUM

Quantum technology and services help customers capture, create, and share digital content—and preserve and protect it for decades at the lowest cost. Quantum's platforms provide the fastest performance for high-resolution video, images, and industrial IoT, with solutions built for every stage of the data lifecycle, from high-performance ingest to real-time collaboration and analysis and lowcost archiving. Every day the world's leading entertainment companies, sports franchises, research scientists, government agencies, enterprises, and cloud providers are making the world happier, safer, and smarter on Quantum. See how at **www.quantum.com**. Quantum

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