



Executive summary

Take the guesswork out of video surveillance with pre-validated, virtualized Milestone solutions from Dell EMC

Intel Xeon processor-powered Dell EMC PowerEdge R740xd2 servers handled a 112-camera load without failure

Video surveillance is big business. In 2019 alone, research firm IHS estimated that 180 million surveillance cameras shipped worldwide.¹ Businesses of all sectors and sizes use surveillance to protect employees and assets and face the challenge of finding reliable solutions that can handle and store the large amounts of video data they accumulate.

This is where the Dell EMC™ Surveillance Validation Labs come in. These dedicated labs pre-validate software and hardware solutions for surveillance. To show how pre-validation can help surveillance customers, we worked with engineers at the lab in Durham, NC, to validate Dell EMC PowerEdge™ R740xd2 servers, powered by Intel® Xeon® Gold 5120 processors, and Milestone XProtect® 2019 R1, an open-platform video management system (VMS) that allows companies to customize their surveillance software. In two use cases, the first with 112 cameras recording normally, and the second with 52 cameras operating during a simulated disk failure, the Dell EMC and Milestone solution featuring four virtual recorders passed validation testing.

Choosing a validated digital surveillance infrastructure solution of Milestone XProtect and Dell EMC PowerEdge R740xd2 servers powered by Intel Xeon processors could help your organization reliably protect your valuable assets: customers, employees, inventory, and more.

Different surveillance setups met stringent verification standards

Efficient recording under normal load



206 MB/s average disk throughput



17% average CPU utilization

Reliable performance during simulated disk failure and rebuild



102 MB/s average disk throughput



17% average CPU utilization

Why choose a validated solution?

Setting up a surveillance solution of any size requires research, planning, and implementation. This process can require significant trial and error before finding the correct fit for an organization's needs—which is expensive both in sunk time and labor costs. By choosing a solution that Dell EMC has already validated, you can shrink these costs and implement your surveillance solution in less time.

We worked with Dell EMC engineers to validate the Intel Xeon processor-powered PowerEdge R740xd2 server running the Milestone XProtect VMS. We found that the solution enabled a large number of cameras to record continuously without dropping frames. In our first use case, the solution supported 112 cameras recording continuously under normal conditions. In our second use case, the solution supported 52 cameras simultaneously recording, even as the server underwent a disk failure and rebuild. The ability to continue recording through disk failure showcases the reliability of the Dell EMC PowerEdge R740xd2 with Milestone XProtect, and low CPU utilization demonstrates the solution's efficiency at handling such a camera load and its capacity to support more work for those who require more cameras.

About the Milestone XProtect video management system

According to Milestone Systems, their company "develops and produces world-leading IP-based video management solutions for organizations of all shapes and sizes."³ Milestone Systems claims that XProtect products support over 8,000 cameras and hardware devices.⁴

What is the Dell EMC Surveillance Validation Lab?

The Dell EMC Surveillance Validation Lab works with leading surveillance providers from the Dell EMC partner ecosystem to test their video management solutions on various server and storage solutions. Dell EMC then uses those findings to help organizations choose a tested and validated solution that meets the organizations' demands.

In the Surveillance Lab, dedicated engineers test hardware and software solutions in what Dell EMC calls "extreme, real-world scenarios."² When your business implements a validated video management system, you do so knowing that Dell EMC has already tested and approved it for use.



The Dell EMC PowerEdge R740xd2

- 1 IHS Markit, "Top Video Surveillance Trends for 2019," accessed October 2, 2019, <https://cdn.ihs.com/www/pdf/1218/IHSMarkit-Security-Technologies-Trends-2019.pdf>.
- 2 Dell EMC, "Protecting what matters to make the world safer," accessed October 2, 2019, <https://www.dell EMC.com/en-us/solutions/surveillance-security.htm#scroll=off>.
- 3 Milestone Systems, accessed October 2, 2019, <https://www.milestonesys.com/about-us/>.
- 4 Milestone Systems, accessed October 2, 2019, <https://www.milestonesys.com/community/become-a-partner/the-open-platform/>.

Read the report at <http://facts.pt/chlm3u4>



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