

Updated Report

---

# Micro Health Check Prepared for Ohio Dept of Developmental Disabilities

---

Prepared by:

*John Brose, Support Professional, Technical Support,*

# Table of Content

---

Checked Item: Milestone XProtect Version	3
Checked Item: Milestone Care Status	3
Checked Item: XProtect Cumulative Updates	4
Checked Item: Media Deletion Due to Low Disk Space	4
Checked Item: Media Deletion Due to Overflow	5
Checked Item: System RAM utilization	5
Checked Item: System CPU utilization	6
Checked Item: Failover Configuration	6
Checked Item: Hardware acceleration capability	7
Checked Item: Antivirus presence	7

---

## Checked Item: Milestone XProtect Version

**Why we check:** Staying up to date on Milestone XProtect versions allows users to take advantage of the latest features, capabilities, and performance optimizations. New features allow users to realize increased reliability, increased security, and reduced total cost of ownership.

**Result:** DoDD has a total of 8 locations that are utilizing Milestone XProtect. Below are the locations and XProtect version each site is utilizing.

SoDC – M01-C05-133-01-6C4286 XProtect Professional+ 2019 R3  
CaDC – M01-C05-133-01-6C4BB1 XProtect Professional+ 2019 R3  
GDC – M01-C05-133-01-6C4283 XProtect Professional+ 2019 R3  
NoDC – M01-C05-133-01-6C4287 XProtect Professional+ 2019 R3  
TDC – M01-C05-132-01-6C4AAD XProtect Professional+ 2019 R2  
WDC – M01-C05-201-01-6C49EB XProtect Professional+ 2020 R1  
CDC – M01-C05-133-01-6C4280 XProtect Professional+ 2019 R3  
MvDC – M01-C05-133-01-6C4288 XProtect Professional+ 2019 R3

**Recommendation:** Milestone Recently Released the latest version of XProtect 2020 R2. It is recommended to upgrade to the latest version of Milestone XProtect to take advantage of the new features and capabilities of the software. This will increase your reliability and security of your system. Here is a link to our Version Comparison Tool to see what has changed from 2019 R2/R3 to 2020 R2.  
<https://www.milestonesys.com/community/business-partner-tools/version-comparison-tool/?prod=582f9c76-da57-46b7-810b-6591d24d0ed4&ver=a636709c-28e8-48b5-b6ba-ff1f41422606>

## Checked Item: Milestone Care Status

**Why we check:** Maintaining active Milestone Care Plus status allows users to upgrade to the latest version of Milestone XProtect as soon as it is released, with no out-of-pocket expense. Maintaining active Care Premium status allows users direct access to Milestone Technical Support 24/7. Users also receive increased priority for telephone calls and all Care Premium support cases receive a Service Level Agreement (SLA) for first response time and status update frequency.

**Result:** All locations have an active Milestone Care Plus status. The expiration of each the locations are as follows: SoDc: June 6, 2022 CaDc: June 4, 2022 GDC: February 20, 2022 NoDC: February 14, 2022 TDC: May 11, 2020 WDC: April 21, 2021 CDC: May 25, 2022, MvDC: May 11, 2022

**Recommendation:** It is very beneficial to keep the Milestone Care Plus active, as this will allow for the option to upgrade to the latest version as soon as it is released. Here is a link to some helpful information about Milestone Care  
[https://www.milestonesys.com/globalassets/materials/documents/milestonecare/milestone-care\\_faq\\_partners\\_final.pdf](https://www.milestonesys.com/globalassets/materials/documents/milestonecare/milestone-care_faq_partners_final.pdf)

## Checked Item: XProtect Cumulative Updates

**Why we check:** XProtect Cumulative Updates include all hotfixes available for a specific version of XProtect. These hotfixes are compiled into easy-to-install executables and are updated periodically throughout a software version's lifecycle. It is strongly recommended to apply the latest XProtect Cumulative Updates to your installation, as they resolve known bugs and other system errors.

**Result:** There are no cumulative patches installed on any of the servers apart from the following Recording servers only: WDC – WAR 2, WDC – WAR 3, and WDC – WAR 4.

**Recommendation:** If not upgrading to the latest version of XProtect, it is recommended to install the latest cumulative patches on all servers, as they will include the latest hotfixes and patches for XProtect. These hotfixes can resolve known bugs and system errors that may be occurring on your systems. Here is a link to the latest Cumulative Patches.

[https://supportcommunity.milestonesys.com/s/article/XProtect-VMS-cumulative-patches-complete-list?language=en\\_US](https://supportcommunity.milestonesys.com/s/article/XProtect-VMS-cumulative-patches-complete-list?language=en_US)

## Checked Item: Media Deletion Due to Low Disk Space

**Why we check:** When free disk space in XProtect recording paths falls below certain thresholds, recorded media may be at risk of deletion. Users often wish to avoid this scenario, as unexpected deletions could mean a loss of situational awareness or regulatory compliance. Adjusting recording configuration or storage hardware can prevent this scenario.

**Result:** No Media deletion was observed due to low disk space on any of the servers in the environment.

**Recommendation:** Even though at this time there is no indication that the servers are experiencing any Media Deletion Due to Low Disk Space, it is important to keep an eye on this as you would want to avoid losing any required video footage and lose the ability investigate an issue if it had arisen. If any of the servers were running out of disk space it would be recommended to adjust your retention length or add more storage.

\*- Note: During the Micro Health Check it was observed that the following servers needed some attention with the Storage and archiving configuration. Ex. Recording drive only (missing archive), archive size issue. As requested, the servers are listed below.

SoDC Bat – 1

CaDC – Cam – 1

GDC – Gal – 3

NoDc – Tol – 2

NoDc – Tol – 3

NoDC – Tol – 4

NoDc – Tol – 8 Also has alerts for the Raid.

TDC – TIFF – 1

TDC – TIFF – 2

CDC – COL – 2

## Checked Item: Media Deletion Due to Overflow

**Why we check:** When the amount of inbound recorded media exceeds the disk write performance capability of the recording and storage hardware, media may be at risk of deletion due to a scenario called 'Media Overflow'. Users often wish to avoid this scenario, as unexpected deletions could mean a loss of situational awareness or regulatory compliance. Adjusting recording configuration or storage hardware can prevent this scenario.

**Result:** The following server exhibited some media overflow in relation to the cameras. CaDC – Cam 1, CaDC Cam 2, NoDC – Tol 1, NoDC -Tol 3, NoDC – Tol 6, NoDC – Tol – 8, WDC – WAR - 2, WDC – WAR – 5, CDC – COL – 1, MV-1-NVR, MV-3-NVR

XProtect VMS (Corporate, Expert, Professional+, Express+, and Essential+) will log the message "Media Overflow" in the system log if it experiences a state where it is receiving media (video or audio) at a faster rate than the rate it can process the media and write it to the disk. To maintain server stability and uptime, the Recording Server will discard media (decline to record it) and so you may experience a loss of recorded video footage.

\* During the review of the Device Handling Log it was observed that the following servers have Device Communication Errors that the client wanted to be noted for future investigation. GDC – Gal – 3, WAR – 1, CDC – COL – 4

**Recommendation:** We recommend applying the cumulative updates before troubleshooting this issue. Once the updates are applied, we recommend you check the disk write throughput performance on your storage drives. This can be done using Windows Performance Monitor to check the Disk Idle Time (Should be >10%) and the Avg Disk sec/Write (< .005 excellent; .005 - .010 Good; .010 - .015 Fair; > .015 investigate) of the recording drive. If you have ruled out recording drive performance bottleneck as a cause of media overflow then please open a support case and we can further investigate.

## Checked Item: System RAM utilization

**Why we check:** Maintaining appropriate system RAM utilization is important for optimal performance and reliability. Most XProtect applications have minimum requirements of 2 GB of system RAM, but additional RAM may be necessary for larger systems. The typical recommended amount for best performance is 16 or 32 GB. Recommended utilization should be below 70% of max utilization.

**Result:** The recordings servers in the environment had at least a minimum of 8 GB of RAM. None of the recording servers had high memory utilization

**Recommendation:** At this time there is no action needed for System RAM utilization. If there was an issue due to high memory utilization or not enough RAM installed it would be recommended to follow the Knowledgebase article below to set the recording server up to the best performance.

[https://supportcommunity.milestonesys.com/s/article/set-up-Recording-Server-for-best-performance?language=en\\_US](https://supportcommunity.milestonesys.com/s/article/set-up-Recording-Server-for-best-performance?language=en_US)

## Checked Item: System CPU utilization

**Why we check:** Maintaining appropriate system CPU utilization is important for optimal performance and reliability. XProtect will install on most modern Intel or AMD x86 64-bit architecture CPUs (or virtual equivalent), however, larger systems will require CPUs with higher performance. Recommended utilization should be below 70% of max utilization.

**Result:** The recordings servers in the environment are not displaying any high CPU utilization.

**Recommendation:** At this time there is no action needed for System CPU utilization. If there was an issue due to high CPU utilization it would be recommended to determine what the cause of the high CPU utilization is. Here is a knowledge base article that can assist in troubleshooting the high CPU utilization. [https://supportcommunity.milestonesys.com/s/article/Milestone-image-server-or-recording-server-experience-high-CPU-utilization?language=en\\_US](https://supportcommunity.milestonesys.com/s/article/Milestone-image-server-or-recording-server-experience-high-CPU-utilization?language=en_US)

## Checked Item: Failover Configuration

**Why we check:** Failover Recording servers are used to protect an XProtect system against unplanned system downtime. It is recommended to run Failover servers on any mission-critical XProtect Corporate or XProtect Expert Recording Server where archiving is not enabled. This will allow uninterrupted video recording in the event the media database index must be rebuilt.

**Result:** At the time of the Micro Health check there were no Failover Servers configured on the environment.

**Recommendation:** Utilizing a failover server will allow you to have the system still be recording even if the primary recording server fails. This is a feature that comes with your product at no additional charge. The only cost to you is the price of the hardware. Below is an article that will explain how the XProtect Failover Recording Server works.

[https://supportcommunity.milestonesys.com/s/article/What-can-you-expect-from-an-XProtect-Failover-Recording-Server?language=en\\_US](https://supportcommunity.milestonesys.com/s/article/What-can-you-expect-from-an-XProtect-Failover-Recording-Server?language=en_US)

## Checked Item: Hardware acceleration capability

**Why we check:** XProtect software can offload Recording Server motion detection tasks to certain Intel or Nvidia GPUs. This offloading of computing tasks frees up performance resources on the CPU and helps reduce the total cost of ownership by allowing users to run more cameras on a Recording Server, without reaching the performance limitations of their CPU. Intel CPUs with Quick Sync Video technology or Nvidia GPUs with Kepler and newer chipsets are required to enable hardware-accelerated motion detection.

**Result:** Most of the servers have an NVIDIA GT 730 graphics card installed in them which is not a supported GPU for hardware acceleration.

**Recommendation:** If planning a hardware refresh or system expansion you may want to consider installing Nvidia GPU or Intel CPU with Quick Sync technology to reduce the need for additional hardware to manage video streams. More information regarding hardware acceleration can be found at [https://supportcommunity.milestonesys.com/SCRedir?art=000002702&lang=en\\_US](https://supportcommunity.milestonesys.com/SCRedir?art=000002702&lang=en_US)

## Checked Item: Antivirus presence

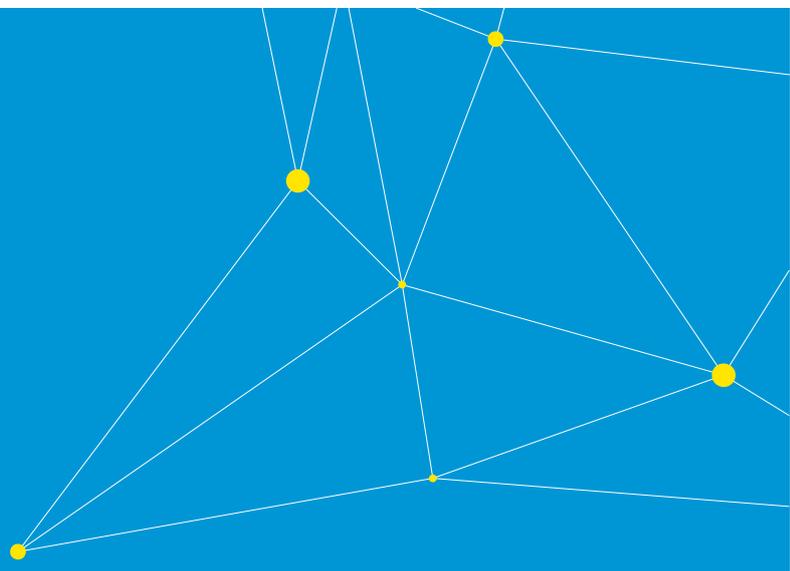
**Why we check:** Antivirus software configured with real-time scanning can be an important part of your IT security strategy, but it may interfere with XProtect software. Milestone recommends configuring antivirus software so that XProtect processes and recording paths are excluded from real-time scanning.

**Result:** All servers in this XProtect Environment are not running any Anti-Virus Software.

**Recommendation:** If a decision is made in the future to install Anti-Virus software it is recommended to exclude specific file types and locations, as well as certain network traffic. If those exclusions are not implemented, virus scanning can take up large amounts of system resources. The scanning can also temporarily lock files and can result in loss of recordings, and even database corruption.

Here is a link to our best practices for running Anti-Virus Software on an XProtect VMS System

[https://supportcommunity.milestonesys.com/s/article/Configure-anti-virus-software-on-XProtect-systems?language=en\\_US](https://supportcommunity.milestonesys.com/s/article/Configure-anti-virus-software-on-XProtect-systems?language=en_US)



Milestone Systems is a leading provider of open platform video management software; technology that helps the world see how to ensure safety, protect assets, and increase business efficiency. Milestone enables an open platform community that drives collaboration and innovation in the development and use of network video technology, with reliable and scalable solutions that are proven in more than 150,000 sites worldwide. Founded in 1998, Milestone is a stand-alone company in the Canon Group.