

Technical Release Notes

Milestone Integration Platform Software Development Kit 2022 R1

Available March 8, 2022



These release notes cover the following XProtect® products and clients:

MIP SDK 2022 R1
MIP SDK Mobile 2022 R1

New in MIP SDK 2022 R1

MIP VMS API

This first release of MIP VMS API includes XProtect MIP API Gateway, REST API and API Reference Documentation.

- XProtect MIP API Gateway
The initial point of reference for the REST API to provide a secure and steady environment for the MIP's API-first approach.
- REST API
Widely known REST API protocol and Open API schema are available for mainly Configuration API functionalities.
- API Reference Documentation
The main guide of listing the MIP VMS API endpoints, authorization and authentication requirements for the XProtect MIP API Gateway and REST API.
<https://doc.developer.milestonesys.com/mipvmsapi/>

SDK Distribution Channels

Regarding the changes in the direction from installer to online platforms, no further MIP SDK Installers (including 32-bit version of the MIP SDK) releases will be made after the 2022 R1 release. The 2022 R1 installers will remain available and supported throughout the normal 3-year support period and hot-fixes for critical issues will be made, but no further features will be released for these.

Visual Studio 2022 version of Milestone MIP SDK Templates extension

A version of the Milestone MIP SDK Templates extension for Visual Studio 2022 have been uploaded to Visual Studio Marketplace.

New NuGet package for C++ debug applications

A new NuGet package named MilestoneSystems.VideoOS.Platform.SDK-CPP.Debug has been uploaded to NuGet.org. The package can be used when needing to debug C++ applications.

Event Server

With the 2022 R1 release TLS encryption is introduced for the Event Server communication, similarly to what has previously been introduced for the other services. On systems being upgraded the default will still be that encryption is disabled, but for new installations it will be enabled by default. Also the customer can enable it for upgraded systems, either during installation or using the Server Configurator.

Whether encryption is enabled for Event Server can be seen from a lookup in *Registered services*. If encryption is disabled existing integrations will work as usual, but if it is enabled it will require the following actions from integration vendors having integrations that interact with Event Server:

- Plug-in integrations: No action needed.
- Component integrations: Needs to be rebuilt with MIP SDK 2022 R1.
- Protocol integrations: Needs to be updated to support TLS. See *Alarm List* sample for inspiration.

Event Server interaction is typically related to alarm and event handling or the use of message communication through *MessageCommunicationManager*.

Samples

The following samples have been added:

- Protocol sample named RestfulCommunicationPython has been added, demonstrating how to log in to IDP server and communicate with the API Gateway using Python.
- Component sample named RestfulCommunication has been added, demonstrating how to communicate with the API Gateway from a component integration.

The following samples have been changed:

- VideoPreview sample has been changed to use Shape methods instead of the old overlay methods.
- Several Smart Client samples have been rewritten to use WPF instead of WinForms as we recommend using WPF for both performance and rendering reasons. The remaining Smart Client samples will also be rewritten in the coming months.

Changes and solved issues

The following issues have been resolved.

Multi-Site Viewer does not allow user to add a second site

When user wants to add the second site on a 2021 R1 server, Multi-Site View does not display the correct server name in *Server* textbox and disables the *Add selected site* button.

Calling method on a ConfigurationItem might throw ArgumentMIPEXception in some cases

If a ConfigurationItem does not have its Children populated and a method is called on it, it might result in ArgumentMIPEXception.

RetrievalTaskManager not able to connect to remote server running HTTPS

If logged on to remote server using HTTPS, RetrievalTaskManager will hang for a minute (or so) and then throw an exception.

Export sample does not support metadata export

Support is added for exporting metadata devices in database export.

Digital zoom rectangle coordinates might be reported incorrectly to plugins in some cases

Cases like trying to get the digital zoom actual rectangle without zooming was causing a crash.

Lifting privacy mask does not work for DBExporter

Calling UserContext.SetPrivacyMaskLifted(true); before exporting does not affect DBExporter (liftable privacy mask is still in place).

Not possible to set an initial state of Output from MIP Driver

Indicating the initial state of an output when a new hardware is added (or hardware/device enabled+disabled) did not work.

QueryItems.Query() in Configuration API only allowed a very limited set of string values

QueryItems.Query() in Configuration API only allowed standard alpha-numeric characters plus a few others in the query string when querying for devices.

MIPEXception when running PcmAudioSource.Init() inside ViewItemUserControl

PcmAudioSource.Init() returns 'Method not supported' when called from Smart Client plugin.

Read Hardware Password - Permissions are enforced differently depending on what client is used

ReadHardwarePassword method will now require View Hardware Password permission instead of Edit permission in Hardware security group.

New in MIP SDK Mobile 2022 R1

No changes.

Downloads and documentation

The MIP SDK 2022 R1 software and documentation are available for download from our website and from NuGet, GitHub and Visual Studio Marketplace.

- NuGet.org
This is the new location for all MIP SDK binaries, published as seven different packages.
<https://www.nuget.org/profiles/milestonesys>
- GitHub
This is the new location for MIP SDK samples. They are currently made available in three repositories, one for each type of integration. Samples for MIP SDK Mobile will be added in the near future.
<https://github.com/MilestoneSys>
- Visual Studio Marketplace
This is the location for the five Visual Studio templates, all contained in one VS extension.
<https://marketplace.visualstudio.com/items?itemName=milestonesys.mipsdk-templates>
- <https://doc.developer.milestonesys.com/html/index.html>
All MIP SDK documentation can be found here.
- The MIP SDK tools can now be downloaded directly via the Download Software page.
<https://www.milestonesys.com/support/resources/download-software/>
There is one installer for Milestone StableFPS and one installer for the MIP SDK tools.

Product availability

XProtect VMS Products 2022 R1 is available **March 8, 2022**.



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.