

## **Release notes**

### **BVMS 12.1.0 Updates SystemManager package**

Date: 21-May-2025

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# 1 Document History

✘ This document is distributed online and updated on regular basis, whenever new patches are released and added to the package. The latest version of this document is always available on the [Bosch Security and Safety Systems Download Store](#).

Date	Version	Changes
26.03.2024	1.0	Initial release - for BVMS Cumulative Patch 3
25.04.2024	1.1	Updated for BVMS Cumulative Patch 4 + VRM 4.31
04.06.2024	1.2	Updated for BVMS Cumulative Patch 5 + VSG 9.1.4.2
20.06.2024	1.3	Updated for BVMS Cumulative Patch 8
15.10.2024	1.4	Updated for BVMS Cumulative Patch 12 + VSG 9.1.5.1 + Transcoder 7.10.62
19.11.2024	1.5	Updated for BVMS Cumulative Patch 13 + VRM 4.32.0029
21.05.2025	1.7	Updated for BVMS Cumulative Patch 17

## 2 BVMS 12.1.0 Updates System Manager package

DIVAR IP System Manager application is the central user interface that offers an easy system setup, configuration and application software upgrade for DIVAR IP all-in-one 4000, DIVAR IP all-in-one 5000, DIVAR IP all-in-one 6000 and DIVAR IP all-in-one 7000 (DIP-72xx, DIP-73xx, DIP-74xx) systems. The BVMS\_12.1.0\_Updates\_SystemManager\_package\_1.17.zip contains a BVMS 12.1.0 Cumulative Patch 17 patch installer software package for the DIVAR IP System Manager application. It also contains updated VRM, VSG, and Transcoder Service installer software packages for the DIVAR IP System Manager application. It is used to install the patch and other updated components for BVMS 12.1.0 on the DIVAR IP appliances managed by the DIVAR IP System Manager.

### 2.1 Installation prerequisites and operation notes

- DIVAR IP System Manager application **version 2.4.0** or higher shall be installed and started.
- To download the BVMS 12.1.0 Updates System Manager package 1.17, go to <https://downloadstore.boschsecurity.com/>. Then, under the Software tab, select BVMS Appliances from the list and click Select.
- Locate the BVMS\_12.1.0\_Updates\_SystemManager\_package\_1.17.zip file from the list of all available software packages, and save it to a storage medium such as a USB stick.
- Unzip the files on the storage medium. Do not change the folder structure of the unzipped files.
- Connect the storage medium to your DIVAR IP system and follow instructions in the Upgrading software section of, for example, DIVAR IP all-in-one 4000 / 6000 systems User Manuals to install desired BVMS patches or components updates on your DIVAR IP.

### 2.2 List of components, compatible with BVMS 12.1.0, available in the package

- VRM 4.32.0029, refer to corresponding release notes
- VSG 9.1.5.1, refer to corresponding release notes
- Transcoder Service 7.10.62

### 2.3 Known limitations and issues

- After installing the patch, it is necessary to initiate a configuration change on the server side, activate the new configuration, and then log in again with your user account. Additionally, make sure to restart all running Operator Client instances to apply the newly activated configuration.

## 3 BVMS 12.1 - Cumulative Patch history

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No.	Patch version	Release Date
1	Cumulative Patch 1	11.01.2024
2	Cumulative Patch 2	<i>not released</i>
3	Cumulative Patch 3	27.03.2024
4	Cumulative Patch 4	17.04.2024
5	Cumulative Patch 5	14.05.2024
6	Cumulative Patch 6	27.05.2024
7	Cumulative Patch 7	07.06.2024
8	Cumulative Patch 8	14.06.2024
9	Cumulative Patch 9	28.06.2024
10	Cumulative Patch 10	11.07.2024
11	Cumulative Patch 11	07.08.2024
12	Cumulative Patch 12	02.10.2024
13	Cumulative Patch 13	31.10.2024
14	Cumulative Patch 14	16.05.2025
15	Cumulative Patch 15	24.01.2025
16	Cumulative Patch 16	29.01.2025
17	Cumulative Patch 17	16.05.2025

## 4 Patches included in the Cumulative Patch 17 for BVMS 12.1

### 4.1 Overview

No.	Name of the fix	Included in
1	440029 - Filtering PTZ commands	Cumulative Patch 17, 16, 15, 14, 13, 12, 11, 10, 9, 8, 7, 6, 5, 4, 3, 1
2	441937 - Slowing down MP4 exported video	Cumulative Patch 17, 16, 15, 14, 13, 12, 11, 10, 9, 8, 7, 6, 5, 4, 3
3	445686 - Delay in the first PTZ movement	Cumulative Patch 17, 16, 15, 14, 13, 12, 11, 10, 9, 8, 7, 6, 5, 4, 3
4	448513 - Operator Client login issue and server stability after the restart or activation of configuration	Cumulative Patch 17, 16, 15, 14, 13, 12, 11, 10, 9, 8, 7, 6, 5, 4, 3
5	449787 - Operator Client crashes randomly due to memory errors	Cumulative Patch 17, 16, 15, 14, 13, 12, 11, 10, 9, 8, 7, 6, 5, 4
6	446227 - Config Client displays black event setting page	Cumulative Patch 17, 16, 15, 14, 13, 12, 11, 10, 9, 8, 7, 6, 5
7	448960 - Zoom out problems for the cameras with "Image pane optimized" view	Cumulative Patch 17, 16, 15, 14, 13, 12, 11, 10, 9, 8, 7, 6, 5
8	452047 - Some BVMS events missing in the OPC server	Cumulative Patch 17, 16, 15, 14, 13, 12, 11, 10, 9, 8, 7, 6, 5
9	454258 - State update of Virtual Inputs	Cumulative Patch 17, 16, 15, 14, 13, 12, 11, 10, 9, 8, 7, 6
10	455490 - ePTZ presets for ONVIF panoramic cameras	Cumulative Patch 17, 16, 15, 14, 13, 12, 11, 10, 9, 8, 7
11	456966 - High CPU load of the Operator Client	Cumulative Patch 17, 16, 15, 14, 13, 12, 11, 10, 9, 8
12	456180 - Improved opening of multiple cameras	Cumulative Patch 17, 16, 15, 14, 13, 12, 11, 10, 9, 8
13	458067 - Reference image settings for limited user groups	Cumulative Patch 17, 16, 15, 14, 13, 12, 11, 10, 9
14	458607 - Reference image stream with secure connection and disabled HTTP port	Cumulative Patch 17, 16, 15, 14, 13, 12, 11, 10, 9
15	460258, 459187, 458553 - Problems with some special user permissions in the Config Client	Cumulative Patch 17, 16, 15, 14, 13, 12, 11, 10

No.	Name of the fix	Included in
16	457540 - IVA setting "Alarm extension time" missing	Cumulative Patch 17, 16, 15, 14, 13, 12, 11, 10
17	457064 - VPX1600XF cameras with deinterlaced problem	Cumulative Patch 17, 16, 15, 14, 13, 12, 11, 10
18	441518 - Export Player doesn't start	Cumulative Patch 17, 16, 15, 14, 13, 12, 11
19	460598, 461366 - Permissions for Alarm Options	Cumulative Patch 17, 16, 15, 14, 13, 12, 11
20	462340 - User permissions for the iSCSI chap password	Cumulative Patch 17, 16, 15, 14, 13, 12
21	455696 - Black screen is shown in live view for some ONVIF cameras	Cumulative Patch 17, 16, 15, 14, 13, 12
22	461469 - Too many I-frame requests with live UDP streaming for CPP13 / 14 cameras	Cumulative Patch 17, 16, 15, 14, 13
23	465447 - Occasional Operator Client crashing with metadata enabled for ONVIF cameras	Cumulative Patch 17, 16, 15, 14, 13
24	457257 - Delayed SDK connection	Cumulative Patch 17, 16, 15, 14, 13
25	465834 - Improved protect / unprotect functionality in Operator Client	Cumulative Patch 17, 16, 15, 14
26	464745 - Operator Client randomly crashing	Cumulative Patch 17, 16, 15
27	472428 - Configuration Client randomly crashing	Cumulative Patch 17, 16
28	474806 - ASP.NET Core 8.0 Runtime	Cumulative Patch 17

## 4.2 Detailed Release Notes for the patch

<b>Patch ID:</b>	472428, 464745, 465834, 465447, 461469, 457257, 462340, 455696, 441518, 460598, 461366, 460258, 459187, 458553, 457540, 457064, 458067, 458607, 456180, 456966, 455490, 454258, 446227, 448960, 452047, 449787, 448513, 445686, 441937, 440029
<b>Patch Title:</b>	BVMS 12.1 - Cumulative Patch 17
<b>Patch Target Version:</b>	BVMS-12.1.0.414

### Important Hint:

It is mandatory that the installation of the "ASP.NET Core 8.0 Runtime" using the "dotnet-hosting-8.0.13-win.exe" (also included in this Patch) is executed before the BVMS Patch.

To do so, double-click the "dotnet-hosting-8.0.13-win.exe" and follow the instructions.

After the installation of the BVMS Patch please reboot the PC.

Get confirmation on "ASP.NET Core 8.0 Runtime" is used:

To execute the following command, please start a Powershell window with 'Run as Administrator':

```
(Get-Process *Workstation*).Modules | Where-Object { $_.Modulename -like "coreclr*" }
```

The correct response looks as follows (in the path of the FileName "..\8.0.13\..." for "ASP.NET Core 8.0 Runtime" is listed):

```
Size(K) ModuleName FileName
```

```
-----
```

```
4980 coreclr.dll C:\Program Files\dotnet\shared\Microsoft.NETCore.App\8.0.13\coreclr.dll
```

## 4.2.1 Patch Details:

This patch fixes issue 474806 with ASP.NET Core 8.0 Runtime.

-----  
This patch fixes issue 472428 by preventing the Configuration Client to crash.

-----  
This patch fixes issue 464745 by preventing the Operator Client to crash.

-----  
This patch fixes issue 465834 by improving the protect / unprotect functionality in Operator Client. It is recommended to use the VRM 4.32.29, as a corresponding bugfix was also done in VRM (can be downloaded separately).

-----  
This patch fixes issue 461469 by improving the i-Frame request handling.

This patch fixes issue 465447 by preventing the Operator Client to crash.

This patch fixes issue 457257 by improving the SDK connection.

-----  
This patch fixes issue 462340 by handling the iSCSI chap password correctly.

This patch fixes issue 455696 by improving the H264 video packet handling. The Video Streaming Gateway (VSG) 9.1.5.1 is needed.

-----  
This patch fixes issue 441518 that the ExportPlayer can't be started.

This patch fixes issue 460598 and 461366 by improving the permissions in ConfigClient - Alarm Options.

-----  
This patch fixes issue 460258, 459187 and 458553 in the area of user permissions in Config Client.

This patch fixes issue 457540 by making the missing IVA setting "Alarm extension time" available again in Config Client.

This patch fixes issue 457064 by solving the deinterlaced problems in the Operator Client when using VPX1600XF cameras.

-----  
This patch fixes issue 458067 with improvements in the area of reference image permissions.

This patch fixes issue 458607 by improving the access to reference image stream with secure connection and disabled HTTP port.

-----  
This patch fixes issue 456180 by improving the procedure to open multiple cameras in Operator Client with GPU decoding.

This patch fixes issue 456966 by preventing high CPU load on the Operator Client if network problems are available (packet loss).

-----  
This patch fixes issue 455490 by enabling camera presets for Onvif panoramic cameras in Config Client.

-----  
This patch fixes issue 454258 by improving the state update of virtual inputs.

-----  
This patch fixes issue 446227 by solving the issue of a black event settings page in Config Client.

This patch fixes issue 448960 by fixing zoom issues in the area of "image pane size optimized" view in Operator Client.

This patch fixes issue 452047 by adding missing camera OPC events ("GlobalChange", "Blurry" and "ReferenceImage").

-----  
This patch fixes issue 449787 by improvements in the area of memory consumption of Operator Client.

-----  
This patch fixes issue 448513 by improving the login process to the Operator Client.

### **Important hints:**

The Patch for issue 448513 needs to be installed on the Management Server. It is optional for the Operator Client machines only if further problems occur.



**NOTE - Manual action required:**

After installing the patch, it is necessary to initiate a configuration change on the server side, activate the new configuration, and then log in again with your user account. Additionally, make sure to restart all running Operator Client instances to apply the newly activated configuration.

-----  
This patch fixes issue 445686 by improving the session handling for the PTZ connection.  
This patch fixes issue 441937 by improvements in the area of mov-/mp4-exports.  
-----

This patch fixes issue 440029 by filtering out same zoom commands and optimizes PTZ command frequency with granularity adjustment.  
The granularity for pan and tilt movements can be set in the OperatorClient.exe.config file. The key is "PtzGranularity" and its default value is "10".  
It specifies the smallest step size for the pan and tilt speed adjustments.  
Lower values allow for finer control, while higher values result in coarser adjustments.

**Important hint:**

Please use only allowed values for the "PtzGranularity", which are: 1, 2, 4, 5, 10, 20, 25, 50, 100  
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## 4.2.2 Problem Details:

Issue 474806 needs to install ASP.NET Core 8.0 Runtime.  
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Issue 472428 caused the Configuration Client to crash.  
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Issue 464745 caused the Operator Client to crash.  
-----

Issue 465834 caused the problem that the protect / unprotect functionality in Operator Client was not working reliable if a lot of cameras are involved.

Issue 461469 caused too many i-Frame requests for CPP13 & CPP14 cameras if during livestream UDP packages get lost.

Issue 465447 caused the problem that the Operator Client crashes if specific Metadata in Axis camera is enabled.

Issue 457257 caused the problem that establishing the SDK connection is delayed if a user tries to login only via SDK (not OPClient or ConfigClient).  
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Issue 462340 caused the problem that for readonly user permissions are not affective with regards to the iSCSI chap password.

Issue 455696 caused the problem that black screen is shown in live view using Axis camera via VSG with H264.  
-----

Issue 441518 caused the problem that the ExportPlayer can't start with message "binaries corrupted".

Issue 460598 and 461366 caused permission problems in ConfigClient - Alarm Options.  
-----

Issue 460258, 459187 and 458553 caused the problem that user permissions don't work in Config Client for specific use cases.

Issue 457540 caused the problem that in Config Client the IVA setting "Alarm extension time" is missing (under Device / VCA / Tasks / Task configuration)

Issue 457064 caused the problem that the Operator Client shows VPX1600XF cameras with deinterlaced problems.  
-----

Issue 458067 caused the problem that the Operator Client don't support reference image settings for limited user groups.

Issue 458607 caused the problem that no access to reference image stream is possible with secure connection and disabled HTTP port.  
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Issue 456180 caused a delay when opening multiple cameras from favorites in Operator Client.

Issue 456966 caused a high CPU load on the Operator Client if network problems are available (packet loss).  
-----

Issue 455490 caused the problem that no camera presets could be saved in Config Client for Onvif panoramic cameras.

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Issue 454258 caused the problem that the state of virtual inputs does not update correctly unless you are in the logical tree or when you move to the logical tree.

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Issue 446227 caused the problem that the Config Client shows black event settings page after changing some events and then go to external data and try to change settings too.

Issue 448960 caused the problem that some cameras have issues with zoom out while using "image pane size optimized" view.

Issue 452047 caused the problem that camera OPC events are missing.

-----

Issue 449787 caused the problem that the Operator Client crashes randomly due to memory errors.

-----

Issue 448513 caused the problem that the login to the Operator Client has a very high delay, especially after the activation of new configuration.

Issue 445686 caused the problem of a delay in starting the first PTZ movement.

Issue 441937 caused the problem that in mov- or mp4-exports the video is shown with low frame rate and either delayed or no audio.

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Issue 440029 caused the problem that the Video Stream stops while giving PTZ commands.

### 4.2.3 Affected Bosch VMS Components / Machines:

- BVMS Management Server
- BVMS Operator Client
- BVMS Configuration Client
- BVMS Cameo SDK
- BVMS ExportPlayer
- Video Streaming Gateway (VSG) 9.1.5.1, needs to be downloaded separately

### 4.2.4 List of Replaced Files:

- AppData\Client\OpClient\Components\Spring.Bootstrap.xml
- AppData\Client\OpClient\Components\Spring.TamperDetection.xml
- AppData\Shared\Spring.HashEngine.xml
- bin\Bosch.BVIP\_VDP\_DiBos\BVIP\_VDP\_DiBos.dll [Version 3.10.0.37]
- bin\Bosch.VideoSDK5.BVIP\BVIP\_VDP2.dll [Version 3.10.0.38]
- bin\Bosch.VideoSDK5.BVIP\rcppmedia.dll [Version 3.10.29.0]
- bin\Bosch.VideoSDK5.Core\GCA2.dll [Version 6.40.12.29576]
- bin\Bosch.VideoSDK5.Core\yca\_plugins\plugin\_flow.dll [Version 4.55.0.1]

-

bin\WSMonitoringService\Bosch.Vms.WorkstationMonitoring.Applications.Backend.ApiWindowsServiceApp.runtimesconfig.json

- Bosch.Cctv.DeviceApi.dll [Version 12.1.0.437]
- Bosch.Controls.Toolkit.Helper.dll [Version 12.1.0.450]
- Bosch.Controls.Toolkit.UltraTreeController.dll [Version 12.1.0.447]
- Bosch.Vms.Backend.CentralServer.WcfServices.AuthenticationService.dll [Version 12.1.0.458]
- Bosch.Vms.Backend.CentralServer.WcfServices.DataAccessService.dll [Version 12.1.0.458]
- Bosch.Vms.BISProxy.dll [Version 12.1.0.432]
- Bosch.Vms.CameoSdk.Core.dll [Version 12.1.0.458]
- Bosch.Vms.Client.ConfigClient.ConfigPermissions.Imp.dll [Version 12.1.0.455]
- Bosch.Vms.Client.ConfigClient.ScanWizard.Imp.dll [Version 12.1.0.437]
- Bosch.Vms.Client.OpClient.Application.ClientSupport.dll [Version 12.1.0.458]
- Bosch.Vms.Client.OpClient.Dibos.ArchiveAction.dll [Version 12.1.0.461]
- Bosch.Vms.Client.OpClient.Playback.Nvr.TimelineTools.Wpf.dll [Version 12.1.0.461]
- Bosch.Vms.Client.OpClient.Ptz.PtzController.dll [Version 12.1.0.422]
- Bosch.Vms.Client.OpClient.ReflImage.dll [Version 12.1.0.443]
- Bosch.Vms.Client.OpClient.VideoComp.Impl.dll [Version 12.1.0.463]
- Bosch.Vms.Client.Shared.Authentication.dll [Version 12.1.0.458]
- Bosch.Vms.Client.Shared.PtzController.dll [Version 12.1.0.415]
- Bosch.Vms.ClientSDK.dll [Version 12.1.0.458]

- Bosch.Vms.Config.AlarmConfiguration.dll [Version 12.1.0.451]
- Bosch.Vms.Config.AlarmConfigurationUserControls.dll [Version 12.1.0.451]
- Bosch.Vms.Config.DomeSettingsUserControls.dll [Version 12.1.0.437]
- Bosch.Vms.Config.RecordingSettingConfig.dll [Version 12.1.0.437]
- Bosch.Vms.Config.Reporting.dll [Version 12.1.0.434]
- Bosch.Vms.Config.UserAccessManagement.dll [Version 12.1.0.447]
- Bosch.Vms.Frontend.ConfigClient.Common.dll [Version 12.1.0.437]
- Bosch.Vms.Frontend.OpClient.Communication.dll [Version 12.1.0.458]
- Bosch.Vms.Frontend.OpClient.ObjectStateTable.Imp.dll [Version 12.1.0.436]
- Bosch.Vms.Frontend.OpClient.ServerManagement.dll [Version 12.1.0.458]
- Bosch.Vms.Frontend.OpClient.StateService.dll [Version 12.1.0.436]
- Bosch.Vms.Frontend.OpClient.Wcf.dll [Version 12.1.0.458]
- Bosch.Vms.Frontend.Shared.ConfigurationApi.dll [Version 12.1.0.437]
- Bosch.Vms.Server.UserAuthenticationService.dll [Version 12.1.0.458]
- Bosch.Vms.Shared.Communication.WcfClient.dll [Version 12.1.0.458]
- Bosch.Vms.Shared.Dome.Services.dll [Version 12.1.0.422]
- Bosch.Vms.Shared.Export.Mpeg.ArchiveStreamProvider.dll [Version 12.1.0.416]
- Bosch.Vms.Shared.Export.Mpeg.FfMpegFacade.dll [Version 12.1.0.416]
- Bosch.Vms.Shared.WebServices.Contracts.dll [Version 12.1.0.458]
- BVMSOpcServer.exe [Version 12.1.0.432]
- ConfigClient.exe.config
- ConfigWizard.exe.config
- DecoderLibrary.dll [Version 2.12.1.204]
- ObjectRepository.Packages.Onvif.dll [Version 12.1.0.437]
- OperatorClient.exe.config
- VL\_ConfigManager.dll [Version 7.71.175.0]