



BioAccess Integration White Paper



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1. Introduction

This document indicates the features/abilities of the BioAccess device when integrated with CathesisVision. Functionally this integration will entail the triggering of standard CathesisVision Events, based on information received from the device.

For instructions on installation or configuration of the integration, please consult the **BioAccess Integration App-note**, available on the Cathesis website, and/or the **CathesisVision Setup Manual**.

1.1 Integration Purpose

This integration receives messages from the BioAccess software package as transactions occur. Device objects may be linked to cameras, allowing associated footage to be databased according to the configuration of CathesisVision events and alarms which trigger on information received from the BioAccess software. Device event messages received from the BioAccess software are databased.

Note: For information regarding the regular operation of a BioAccess device, please consult the relevant documentation.

1.2 Requirements

1.2.1 General Requirements

- CathesisVision 2017.3 and later.
- Please note this integration was tested and works with BioAccess version 6.3.0.0.

1.2.2 CathesisVision License

License No.	License Name	Description
CBIO-2000	BioAccess Device license	This license is the “base” license to integrate with an access control system. It is applied to the server to which the access control device is connected. It will allow for the connection of a single BioAccess device.
CMCO-1001	BioAccess Reader license	These licenses apply to the doors, or readers, in an access control system. The CBIO-1001 will license a single reader, and may be added on a reader-by-reader basis.
CBIO-3000	BioAccess Bundle license	This license includes the CBIO-2000 BioAccess device license, and also provides support for unlimited CMCO-1001 reader licenses.



Note:

1. Either purchase the bundle license, or **both** the device and reader license.
2. In this integration, individual devices will require a license for each device.

1.3 Integration Components

All CathesisVision integrations have two component levels: **Device** and **Object**.

Device	The device is CathesisVision software's interface, which handles all the interaction between CathesisVision and the integrated hardware. When an integration is added to the CathesisVision system, a device is added. The messages received from the device are called Device Events.
Objects	Objects are the individual pieces of hardware that comprise the integration. There may be multiple "object types" under the objects group. For example, the main controller and door nodes of an access control system are both objects. They are different types of objects.

A NOTE ON CAMERA CHANNELS

The CathesisVision software packages have **limits on camera channels**. A multi-sensor camera is physically a single device (camera) but it **requires a camera channel for each one of the internal cameras**. The same applies to an encoder: a 16-channel encoder will account for 16 camera channels on the CathesisVision software, even though it is a single device. Even when a camera or device only uses a single IP license, the camera channel limit will still apply.



2. Features and Abilities

This section details the main features of the integration, and the associated abilities.

2.1 General Integration Features

- CathexisVision receives event information from the BioAccess software via UDP.
- The BioAccess software needs to be configured to export live door events to the CathexisVision server.
- Communication is one-directional. CathexisVision cannot control or query the device.
- CathexisVision cannot send a heartbeat to the device and thus cannot determine whether the software and hardware is functional.

2.2 Device Objects

- Device objects are generated once events are received.
- Reader objects support overlays.
- Device objects can be used to trigger events.
- Device objects cannot be controlled as an action of a CathexisVision system event.
- Objects may be linked to cameras to associate device events with video footage.

2.3 Events

CathexisVision receives event information from the BioAccess device. All device messages are databased as 'Door transactions' or 'Other events.' See below for full list.

Note: Not all of these events have been tested as the evaluation hardware and software did not allow the events to be triggered. This is indicated next to the listed events.

Event Element	Features/Abilities
<p>Device Event Types</p> <p>Door Transaction</p>	<p>Most door-related events:</p> <ul style="list-style-type: none"> • AccessGranted - message received. • AccessDenied - message received. • DoorOpenTooLong - message received. • DoorForcedOpen - message received. • DoorClosedAfterAlarm - message received. • DoorUnlocked - message received. • DoorLockedBack - message received. • BioMismatch - As per ANV Holdings Normal access denied message (Biometric denied). • DualAuthenticationFailure – unable to trigger. • AccessCardExpired – unable to trigger. • EmergencyDoorRelease – unable to trigger.



	<ul style="list-style-type: none"> • KeyOverride – unable to trigger. • EDRTamper – unable to trigger. • KOTamper – unable to trigger. • Anti-PassbackViolation – unable to trigger. • EmergencyBreakGlass – unable to trigger. • RequestToExit - As per ANV Holdings this feature isn't used.
<p>Other Events</p>	<ul style="list-style-type: none"> • TamperAlarm - message received as Tampering Detected. • TempCardReturned – unable to trigger. • TempCardNotReturnedAfterExpiry – unable to trigger. • TempCardExpired – unable to trigger. • InternalLogFileFull - The software handles the logs. This Event is unlikely to be triggered as the device can hold up to 1 million logs. • ManagementMenuLogin – unable to trigger. • ManagementMenuLogout – unable to trigger. • DatabaseDeleted - message received. • EnrolmentCompleted - message received. • DeletionCompleted - message received as Person Deleted. • UserModificationCompleted - message received as Person Modified. • ContactlessCardEncoded – unable to trigger. • ContactlessCardReset – unable to trigger. • SettingsChanged - message received. • ContactlessCardSecurityKeysReset - message received as Card Security Key Reset. • FirmwareUpgrade – unable to trigger. • JobCodeCheckFailure - As per ANV Holdings this feature isn't used. • TerminalBootCompleted - message received as Reboot Completed. • AddUser - message received as Person Added. • RebootInitiated - message received. • DuressFingerDetected – unable to trigger. • SecurityPolicyChanged - message received.
<p>CathesisVision Event Actions</p>	<ul style="list-style-type: none"> • BioAccess events application are reflected in CathesisVision, and can be used to create CathesisVision system events which can perform a number of CathesisVision system actions. • It is not possible to control this integration.

2.4 Metadatabase

A unique meta-database is created on the CathesisVision server for this integration. It is fully searchable with configurable filters based on device event information (as above) and time stamping. The filtered event/s and the associated video will then be available for review in a new window from which an archive can be created and exported.

Database Element	Features/Abilities
General	<ul style="list-style-type: none"> • All device events are databased as ‘door transactions’ or ‘other events.’ • Database entries include links to the footage from cameras linked to device objects. • Multiple cameras may be linked to multiple objects. • Device event meta-data is displayed where applicable. • Databased device events may be viewed in the embedded video player, which includes the usual CathesisVision video review tools.
View Options	<ul style="list-style-type: none"> • Door events. • Other events.
Sort Options	<ul style="list-style-type: none"> • Device event time.
Easy Search	<ul style="list-style-type: none"> • Transaction type. • Reader name. • User name.
Filter	<ul style="list-style-type: none"> • Time. • Event type. • Transaction type. • Reader name. • Reader ID. • User name. • User ID.
Export	Database entries may be exported in CSV and PDF format.

3. Conclusion

This document was designed to deal specifically with this integration. For further information regarding CathesisVision software, please consult the main manual (<http://cathesisvideo.com/>).

For support, contact support@cat.co.za.

USEFUL LINKS

To view **tutorial videos** on CathesisVision setup, visit <https://cathesisvideo.com/resources/videos>

Find answers to Cathesis **Frequently Asked Questions**: <https://cathesis.crisp.help/en/?1557129162258>

