



# RS2 Technologies Access Control Integration White Paper

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# 1. Introduction

This document indicates the features/abilities of the RS2 Access Control software 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 **RS2 Technologies Access Control Integration App-note**, available on the Cathesis website, and/or the **CathesisVision Setup Manual**.

## 1.1 Requirements

### 1.1.1 General Requirements

- CathesisVision 2020.2 and later
- Win 10-64 bit and later, Win Server 2008 R2 and later.
- Minimum 4GB of RAM required.

**Note:** For information regarding the regular operation of a RS2 Technologies device, please consult the relevant RS2 Technologies documentation.

There is a General Integration section in the **CathesisVision Setup Manual**. It contains information on creating an integration database, as well as a general introduction to the Integration Panel. **Read this section.**

### 1.1.2 License Requirements

License No.	License Name
CRST – 1001	RS2 Access Control Reader
CRST-2000	RS2 Access Control Device
CRST – 3000	RS2 Access Control Bundle

**Note:** In this integration, a single license will cover multiple linked devices.

## 1.2 Specifications

This integration was tested on:

Hardware name	Mercury
Hardware model number	LP1502, MR52, LP2500
Firmware as tested	Hardware firmware = 1.303
Third-party software name	RS2 Universal
Third-party software version	V9
Third-party software license required	API license

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## 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.

## 2. Features and Abilities

This section indicates the features/abilities of RS2 Technologies access control software when integrated with CathesisVision.

### 2.1 General Device Features

- All device messages are databased as Access events, security events and information event messages.
- Reader objects support overlays indicating door status, access granted/denied, cardholder photo, and request to exit messages, among others.
- Device objects can be used to trigger events.
- In systems running CathesisVision 2022.2 and later, it is possible to configure the integration so that CathesisVision only receives integration data from a particular site. See ***RS2 Technologies Access Control Integration App-note*** for setup details.

### 2.2 Device Objects

Object Type		Features
General		<ul style="list-style-type: none"> <li>• This integration has Input, Output, Reader, Sites and System objects.</li> <li>• Objects may be linked to cameras to associate device events with video footage.</li> </ul>
Input	General	<ul style="list-style-type: none"> <li>• Input objects may be commanded.</li> <li>• Input objects support overlays.</li> </ul>
	Object properties	<ul style="list-style-type: none"> <li>• Name</li> <li>• State</li> <li>• Input in alarm</li> </ul>
	States	<ul style="list-style-type: none"> <li>• Secure</li> <li>• Insecure</li> </ul>
	Command	<ul style="list-style-type: none"> <li>• Mask</li> <li>• Unmask</li> </ul>
Output	General	<ul style="list-style-type: none"> <li>• Output objects may be commanded.</li> <li>• Output objects support overlays.</li> </ul>
	Object properties	<ul style="list-style-type: none"> <li>• Name</li> <li>• State</li> </ul>
	States	<ul style="list-style-type: none"> <li>• Inactive</li> <li>• Active</li> </ul>
	Command	<ul style="list-style-type: none"> <li>• Activate</li> <li>• Deactivate</li> <li>• Pulse</li> </ul>
Reader	General	<ul style="list-style-type: none"> <li>• Reader objects may be commanded.</li> <li>• Reader objects support overlays.</li> </ul>

	<b>Object properties</b>	Following panel object properties are indicated in CathesisVision: <ul style="list-style-type: none"> <li>Name</li> <li>Access configuration</li> <li>Reader mode</li> <li>Door state</li> <li>Door in alarm</li> <li>Force open</li> <li>Held open</li> <li>Access cycle</li> <li>Licensed</li> </ul>
	<b>Door status</b>	<ul style="list-style-type: none"> <li>Open</li> <li>Closed</li> </ul>
	<b>Command</b>	<ul style="list-style-type: none"> <li>Momentary unlock</li> <li>Disable</li> <li>Unlock</li> <li>Lock</li> <li>Set reader mode (permanent)</li> <li>Set reader mode (temporary)</li> </ul>
<b>Sites</b>	<b>Object properties</b>	<ul style="list-style-type: none"> <li>Name</li> <li>Regional server name</li> <li>Site online</li> </ul>
<b>System</b>	<b>Object properties</b>	<ul style="list-style-type: none"> <li>Name</li> <li>Service version</li> <li>Serial number</li> <li>Revision</li> <li>Connection status</li> </ul>

## 2.3 Device Events

Event Element	Features/Abilities	
<b>General</b>	<ul style="list-style-type: none"> <li>Events triggered on the RS2 system are sent to CathesisVision.</li> <li>Device Event types are: Input, Output and Reader.</li> </ul>	
<b>Device Event Types: Logs</b>	<b>Input</b>	<ul style="list-style-type: none"> <li>Time</li> <li>Site</li> <li>Name</li> <li>Source type</li> <li>Event type</li> <li>Event description</li> </ul>
	<b>Output</b>	<ul style="list-style-type: none"> <li>Time</li> <li>Site</li> <li>Name</li> <li>Source type</li> <li>Event type</li> <li>Event description</li> </ul>
	<b>Reader</b>	<ul style="list-style-type: none"> <li>Time</li> </ul>

- Site
- Name
- Source type
- Event type
- Event description
- Card holder
- Card number
- Facility code

<b>CathesisVision Event Actions</b>	<p>Events triggered on the RS2 system are reflected in CathesisVision, and can be used to create CathesisVision system events which may control one of the device objects as an action of the system event.</p> <p>Input, Output, and Reader objects may be controlled via a CathesisVision system event action, to perform an action.</p>
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## 2.4 Metadatabase

A unique metadatabase 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
<b>General</b>	<ul style="list-style-type: none"> <li>• All device events are databased as Input, Output, and Reader.</li> <li>• Database entries include the footage from cameras linked to device objects.</li> <li>• Multiple cameras may be linked to multiple objects.</li> <li>• Device event metadata is displayed where applicable.</li> <li>• Databased device events may be viewed in the embedded video player, which includes the usual CathesisVision video review tools.</li> </ul>
<b>View Options</b>	<ul style="list-style-type: none"> <li>• Reader</li> <li>• Input</li> <li>• Output</li> </ul>
<b>Sort Options</b>	<ul style="list-style-type: none"> <li>• Device event time</li> </ul>
<b>Easy Search</b>	<ul style="list-style-type: none"> <li>• Time</li> <li>• Site</li> <li>• Name</li> <li>• Source type</li> <li>• Event type</li> <li>• Event description</li> <li>• Card holder</li> </ul>
<b>Filter</b>	<ul style="list-style-type: none"> <li>• Time</li> <li>• Type</li> <li>• Site</li> <li>• Name</li> <li>• Source type</li> </ul>

**Export**

- Event type
- Event description
- Card holder.

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 about the CathesisVision software, consult the main manual (<http://cathesisvideo.com/>).

For support, email [support@cat.co.za](mailto: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>