



Weigh-Comm Weighbridge Integration White Paper

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1. Introduction

This document indicates the features/abilities of the Weigh-Comm Weighbridge solution when integrated with CathesisVision. Functionally, this integration will include the triggering of standard CathesisVision system events, based on information received from the device.

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

1.1 Integration Purpose

The Weigh-Comm Weighbridge integration is a solution for vehicle weighing. This integration uses the Avery Weigh-Tronix E1105 - an advanced multi-function weight indicator, which is designed for use in industrial weighing systems. This indicator has been integrated into the CathesisVision system as a Weigh-Comm Weighbridge device, via a TCP or serial connection..

1.2 Requirements

1.2.1 General Requirements

- CathesisVision 2023.1 and later.
- Windows 10: 64-bit and later; Windows Server 2016 and later.
- Minimum of 4GB of RAM required.

1.2.2 CathesisVision License Requirements

The CathesisVision Weigh-Comm Weighbridge integration license requirements are as follows:

License	Name	Description
CWCW-1001	Weighcomm Weighbridge	These licenses apply to the weighbridge system. The CWCW-1001 will license a single weighbridge and may be added on a weighbridge -by-weighbridge basis.
CWCW-2000	Weighcomm Weighbridge device	This license is the “base” license to integrate with the weighbridge system. It is applied to the server to which the weighbridge device is connected. This licence will allow for the connection of a single integration device.
CWCW-3000	Weighcomm Weighbridge bundle	This license includes one CWCW-2000 weighbridge device license, and also provides support for unlimited CWCW-1001 weighbridge licenses.

Note: In this integration, individual weighbridges will require a CWCW-1001 license for each.

1.2.3 Weigh-Comm Specifications

The following hardware components were used to test this integration:

Hardware name	Avery Weigh-Tronix
Hardware model number	E1105
Firmware as tested	App. 768C App Basic, version V3.0.02 Nov 24 2009 08:57
Third-party software license	No Weigh-Comm license required

1.3 Integration Components

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

Device	The device is CathexisVision software's interface, which handles all the interaction between CathexisVision and the integrated hardware. When an integration is added to the CathexisVision 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 CathexisVision 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 CathexisVision 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 indicates the features/abilities of the Weigh-Comm Weighbridge software when integrated with CathexisVision.

2.1 General Device Features

- CathexisVision receives event messages from the Weigh-Comm Weighbridge device.
- The Weigh-Comm Weighbridge device sends messages to CathexisVision via a TCP or serial connection.
- The Weighbridge device object supports camera overlays.
- Device events can be used to trigger Cathexis Events

2.2 Device Objects

Objects are populated automatically as soon as communication between the Weigh-Comm Weighbridge device and CathexisVision is established.

Object Type		Abilities
General		<ul style="list-style-type: none"> • This integration has Weighbridge and Communication Channel objects. • Device objects cannot be commanded as an action of a CathexisVision system event. • Only Weighbridge objects support overlays. • Events on the software can be used to trigger CathexisVision system and map events. • Objects may be linked to cameras to associate device events with video footage.
Weighbridge	Object Properties	<ul style="list-style-type: none"> • Name • ID • Online • Licensed
Communication Channel	Object Properties	<ul style="list-style-type: none"> • ID • Name • Channel Status • Details • Creation Type • Creation Time • Idle time (min)

2.3 Device Events

The CathexisVision Weigh-Comm Weighbridge integration generates device events, which are triggered on the device and reflected in CathexisVision.

Event Element		Features/Abilities
General		<ul style="list-style-type: none"> Events triggered on the device are sent to CathexisVision.
Device Event Types	Message	<ul style="list-style-type: none"> Time ID Weighbridge Weight

2.4 Metadatabase

A unique metadatabase is created on the CathexisVision 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. Database entries include the footage from cameras linked to device objects. Multiple cameras may be linked to multiple weighbridge objects. Device event metadata is displayed where applicable. Databased device events may be viewed in the embedded video player, which includes the usual CathexisVision video review tools.
View Options	<ul style="list-style-type: none"> Standard
Sort Options	<ul style="list-style-type: none"> Time
Easy Search	<ul style="list-style-type: none"> Time Weighbridge Weight
Filter	<ul style="list-style-type: none"> Time Weighbridge Weight
Export	Database entries may be exported in CSV and PDF format.

2.5 Maps

The CathesisVision GUI provides for configurable site maps that feature multi-layered, hierarchical, interactive interfaces providing representation and control of a site and its resources.

Map Element	Features/Abilities
General	Device objects can be embedded in a site map, which offers multiple action options when messages are received from the device, the device triggers an event, and/or the user manually initiates a map action.
Map Action Triggers	<ul style="list-style-type: none"> • Device objects may be set to trigger a map action if the user left-clicks on map. • The weighbridge device object may be set to trigger a map action if an On Event message is received from the device. • All device objects may be set to perform a map action if <i>any</i> event occurs on the device. • Device objects, which can be configured to trigger CathesisVision events, may also be set to perform a map action when specific CathesisVision events are triggered.
Map Actions Options	When triggered (see above), objects may perform the following map actions (where applicable): <ul style="list-style-type: none"> • Connect to a site. • Perform an animation. • Go to a camera preset. • Load a map. • Set a PTZ relay output. • Show a popup menu. • Set a relay output. • Show an HTML block. • Show a block of text. • Show a device popup menu.

3. Conclusion

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

For support, email support@cathexisvideo.com.

USEFUL LINKS

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

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