Durban Sugar Terminal Weighbridge Integration White Paper

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1. Introduction

The Durban Sugar Terminal Weighbridge driver sends and receives messages through the Event directory.

For a detailed guide on the installation and configuration of the Durban Sugar Terminal Weighbridge with **CathexisVision**, please refer to the *CathexisVision Durban Sugar Terminal Weighbridge Integration App-note*, available on the Cathexis website.

1.1 General Requirements

- Windows 7, 64-bit and later, Windows Server 2008 R2 and later.
- Ubuntu 12 and Ubuntu 16.
- Linux supported.

1.2 CathexisVision Requirements

1.2.1 CathexisVision Software

- CathexisVision 2020.4 and later.

- **Note**: SAST is using SampleManager version 11.0 with the weighbridge module being customised for SAST. This software interfaces with the CathexisVision software via TCP/IP communication. The CathexisVision NVR IP address and port are configurable in SampleManager. The default port is 5000.

1.2.2 Licenses

The Durban Sugar Terminal Weighbridge integration license requirements are as follows:

License	Name	Description
CDST-2000	Durban Sugar Terminal Weighbridge Device	This license is the "base" license to integrate with a weighbridge system. It is applied to the server to which the weighbridge is connected.
CDST-1001	Durban Sugar Terminal Weighbridge	These licenses apply to the weighbridges. The CDST-1001 will license a weighbridge, and may be added on a weighbridge-by-weighbridge basis.
CDST-3000	Durban Sugar Terminal Weighbridge Bundle	This license includes the CDST-2000 weighbridge device license, and also provides support for unlimited CDST-1001 weighbridge licenses.

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

1.3 Integration Components and Features

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.

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2. Features and Abilities

This section indicates the features/abilities of the Durban Sugar Terminal weighbridge when integrated with CathexisVision.

2.1 General Device Features

- Messages are communicated from the files generated on the user's weighbridge and placed into the event directory of the integration.

- The Event device event messages are used to trigger Cathexis system events.

2.2 Device Objects

Object Type	Feature	
General		- Displays information about the associated Weighbridge - Events on the device can be used to trigger CathexisVision system events. - Supports camera overlays.
Weighbridge	States	N/A No state information for Weighbridge.
	Object Properties	- ID and Name. - Cameras - Object Groups - License
	Commands	N/A Communication channel cannot be commanded.

2.3 Device Events

Event Element	Features/Abilities
General	- Event messages generated by the device will generate device event messages in CathexisVision. - These device event messages can be used to trigger system events.
Event	The following device event messages are received from the device and displayed in the CathexisVision device events tab and integration metadatabase: - Time - Intake ID - Weighbridge - Vehicle - Mass

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	• All device events are sent to the integration metadatabase. • Database entries include the footage from cameras linked to device objects. • Multiple cameras may be linked to multiple 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	The metadatabase may be viewed by the following: • Event.
Sort Options	The metadatabase may be sorted by: • Time. The available sort options depend on the selected view.
Easy Search	The metadatabase may be searched specifically for: • Weighbridge
Filter	The metadatabase may be filtered according to: • Start Time. • End Time. • Line Item The available sort options depend on the selected view.
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 about the CathexisVision software, consult the ***CathexisVision Setup Manual*** (https://cathexisvideo.com/).

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

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*