

6SS ACCR[®]
User Guide



6SS

TABLE OF CONTENTS

1. INTRODUCTION	4
2. GETTING STARTED.....	5
2.1. System Requirements	5
2.2. Quick Start	5
2.3. System Introduction	5
3. 6SS ACCR [®] PLUGIN	6
3.1. Setup Wizard	6
3.2. Installation Folder	7
3.3. Complete Installation	7
4. 6SS ACCR [®] APPLICATION	8
5. Smart Client ACCR Plugin	10
5.1. ACCR Live Detection	10
5.2. ACCR Plugin Tab	11

TABLE OF FIGURES

Figure 1: Open ACCR Setup Location.....	6
Figure 2: ACCR Setup Welcome Page.....	6
Figure 3: ACCR Installation Folder.....	7
Figure 4: ACCR Installation Complete	7
Figure 5: Connect to server.....	8
Figure 6: ACCR Recognition Tab	8
Figure 7: ACCR Camera Tab	9
Figure 8: License Tab	9
Figure 9: ACCR Live Detection	10
Figure 10: ACCR Plugin Tab	11
Figure 11: ACCR Excel File.....	11
Figure 12: ACCR PDF File	12

1. INTRODUCTION

Shipping ports and logistics centers changed a lot in the past decades. Automatic Container Code Recognition (shortly ACCR) is almost now a standard for building comprehensive databases, tracking container movement, automating and simplifying railway or harbor logistics, border control and container surveillance systems.

6SS ACCR[®] automates these processes efficiently when setting a camera in the right position to view container codes so that 6SS ACCR[®] can receive the idealize input. The recognition happens in a blink of an eye and the OCR data, including serial number, country code, size, type and equipment category, are stored in the database for later viewing by the operator in Milestone XProtect Smart Client.

6SS ACCR[®] Main Features

- Fully integrated with All Milestone XProtect versions
- Accessed from the Smart Client interface
- Fully integrated with Maps
- Parallel handling and processing of unlimited camera inputs
- Multi-language support: Latin, Arabic, Cyrillic, Chinese, Korean, Thai and many more
- Country-Independent
- State and Country detection
- Color coding for faster search
- Compatible with any image source: analog, digital, still images and MPEG video streams
- Server side ACCR processing
- Compatible with reflective, non-reflective, personalized and special interest plates
- Can handle distorted plate images
- Can detect the plate number regardless of the speed
- High accuracy and recognition of container code
- Very fast processing speed
- Filter through ACCR history based on various criteria
- Flexible search functionality by from-to date, container code, country and license type
- List of all captured plate numbers including plate color, country, state, confidence level, image, camera name and date.
- Option to view a playback video for the period when the container code was detected
- Rotated license plates option
- Scheduled reports on a daily, weekly or monthly basis
- Customizable dashboards and statistics
- Alarming capabilities (Email, SMS)
- Regular expression alerting

2. GETTING STARTED

2.1. System Requirements

- Windows OS 8.1 or above
- SQL Server 2012 or above
- Milestone XProtect Management Client (2016 or above)
- Milestone Smart Client (2016 or above)
- 6SS-ACCR App
- Carmen ACCR

2.2. Quick Start

- Milestone XProtect Management client already installed.
- Milestone XProtect Smart client already installed.
- Run ACCRSetup.msi.

2.3. System Introduction

The server part of the system consists of 2 main components: Management and Recognition. Each ACCR system contains only one Management server, and one or more Recognition servers, depending on the project size and the system's distributed architecture. Both processes can be installed and ran on the same server, but each with its own configuration. The machine has to be licensed first before doing anything on the ACCR system after the installation.

3. 6SS ACCR[®] PLUGIN

3.1. Setup Wizard

First open the copied file received and double click on **ACCRSetup.msi** to start the installation.

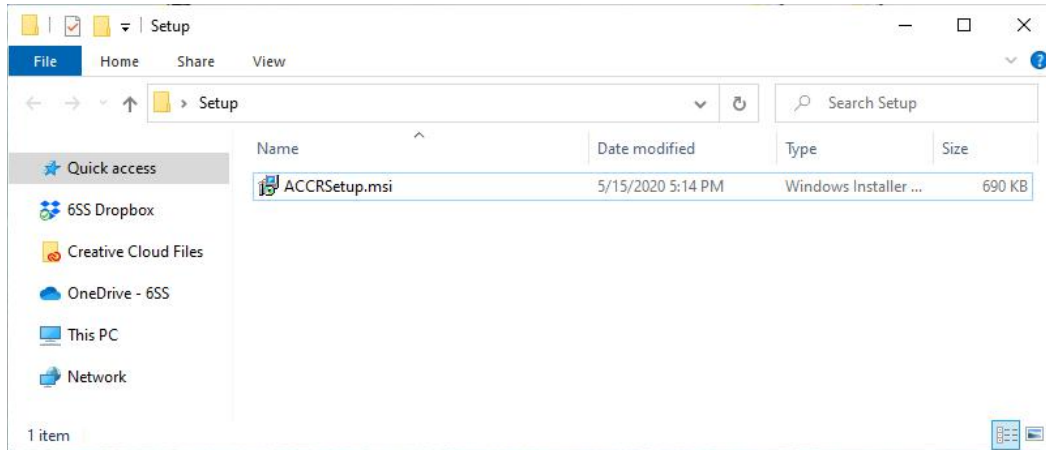


FIGURE 1: OPEN ACCR SETUP LOCATION

The setup wizard opens, click **Next** to continue.

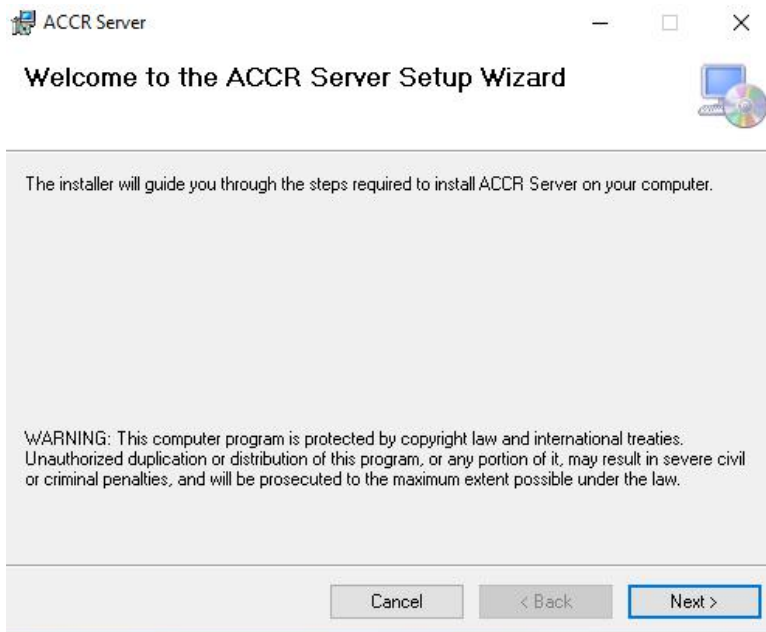


FIGURE 2: ACCR SETUP WELCOME PAGE

3.2. Installation Folder

Choose ACCR installation folder path and click **Next**.

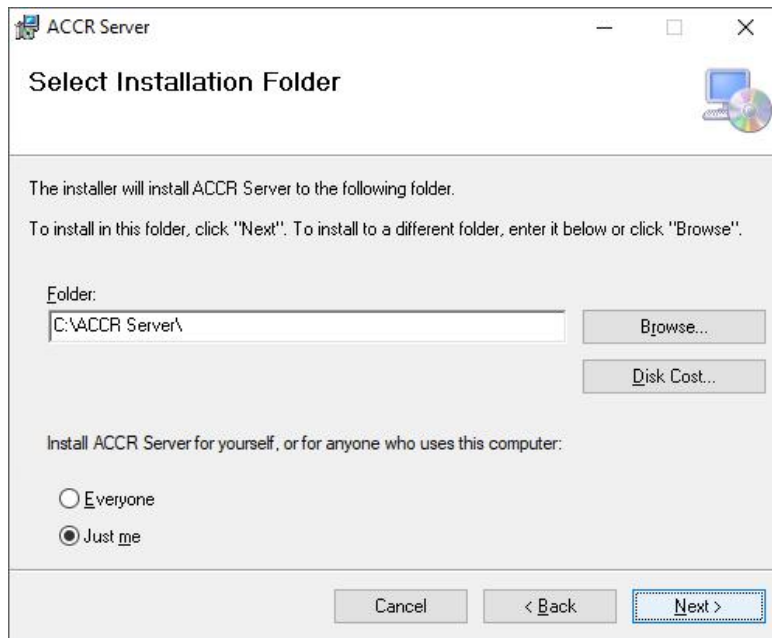


FIGURE 3: ACCR INSTALLATION FOLDER

3.3. Complete Installation

Confirm the Installation by clicking **Next** and check that the plugin has been successfully installed.

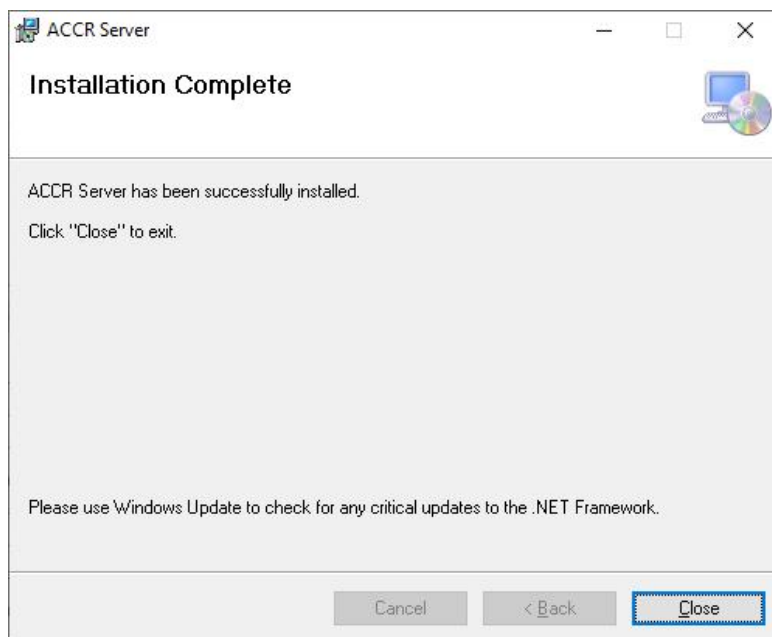


FIGURE 4: ACCR INSTALLATION COMPLETE

4. 6SS ACCR[®] APPLICATION

Open 6SS ACCR[®] app previously installed, specify SQL server address and click **Connect**.

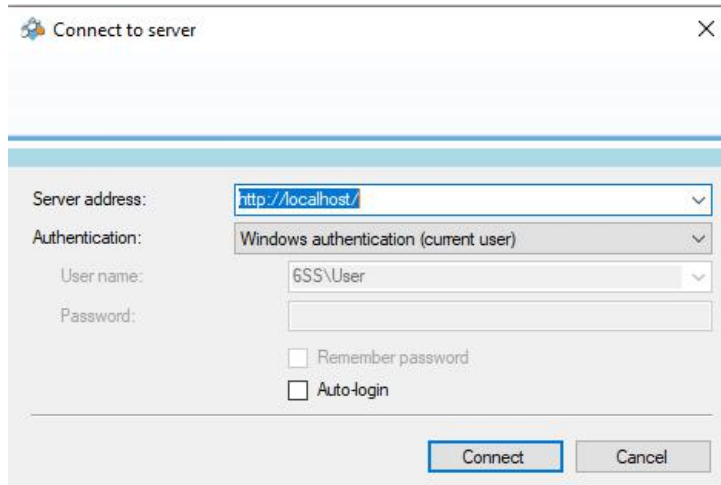


FIGURE 5: CONNECT TO SERVER

In the first tab, the added cameras (if any) defined under ACCR Camera tab will be listed. Click **Start ACCR** button to start the recognition process on the related cameras. After properly setting the required cameras and given a proper license, a list of detected container codes will be filled line by line listing the camera name along with the country, state, region, captured date, plate color and its related image.

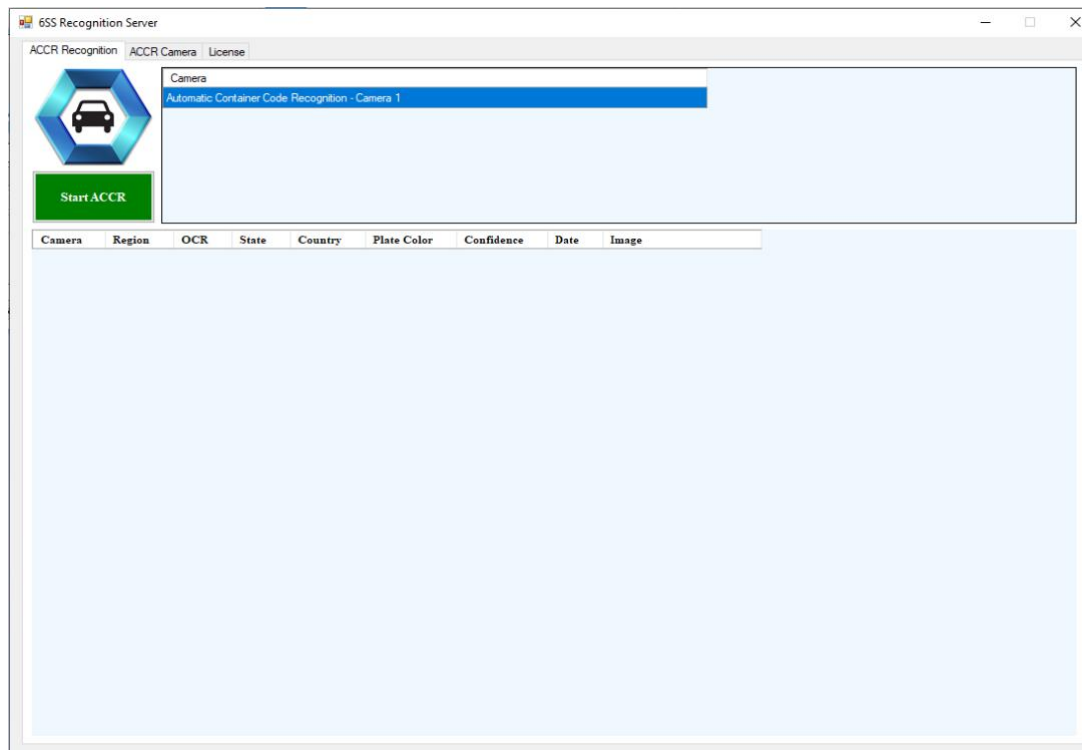


FIGURE 6: ACCR RECOGNITION TAB

Under **ACCR Camera** tab specify all the cameras dedicated for ACCR, update or delete camera when required, or even change the camera status (enable/disable). Make sure also to specify the SQL server address/name and notice the number of cameras available based on the license request.

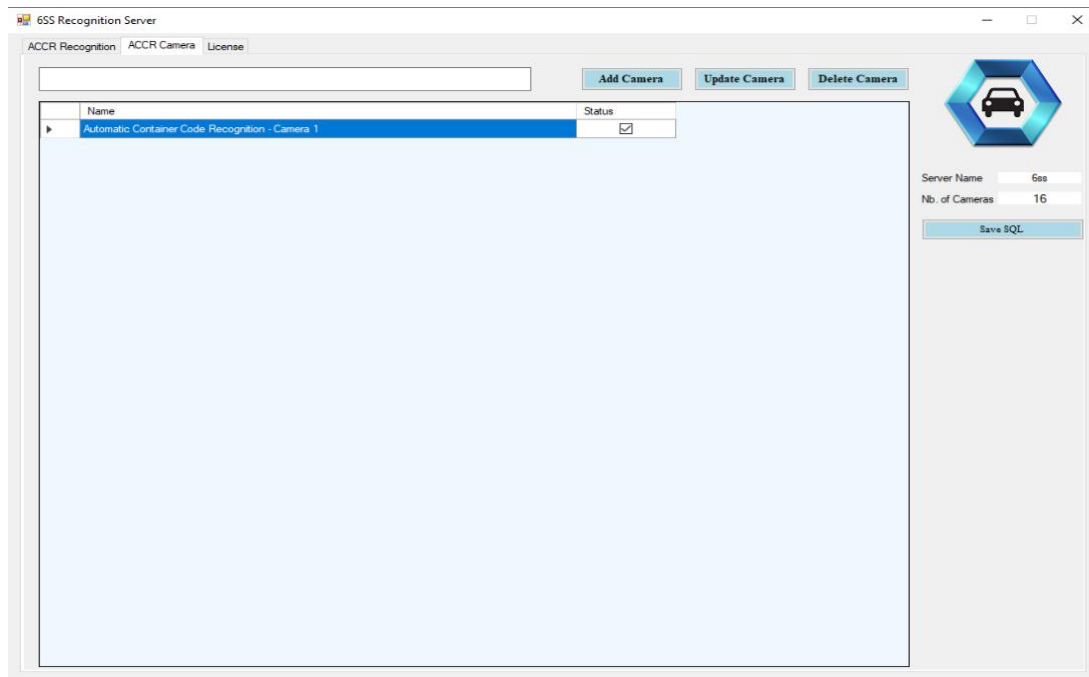


FIGURE 7: ACCR CAMERA TAB

A license is needed for the ACCR engine to work. For this purpose, click **“Generate the requested license”** button and send the generated file to Tech.t@6ss.co. Once you receive the license file, place it in the specified path highlighted in green as shown in the below figure.

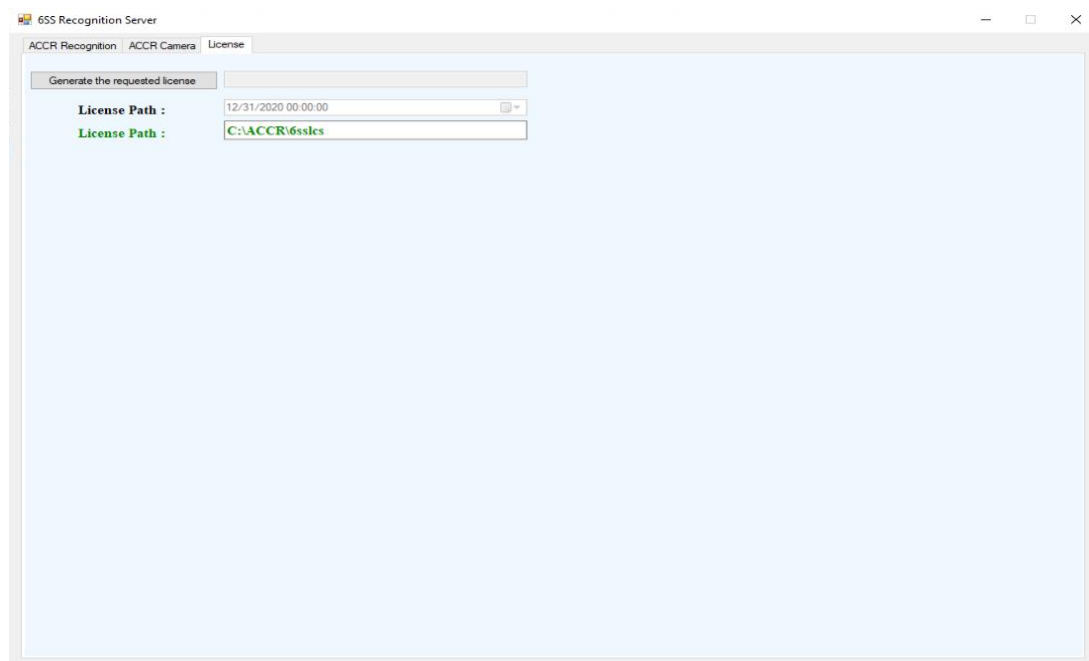


FIGURE 8: LICENSE TAB

5. Smart Client ACCR Plugin

5.1. ACCR Live Detection

Open Milestone XProtect Smart Client to view ACCR live detection after selecting the dedicated camera from the button **Select Camera** in the bottom right corner, then the button will be renamed as the camera's name. The list of captured container codes will be shown in the right panel.

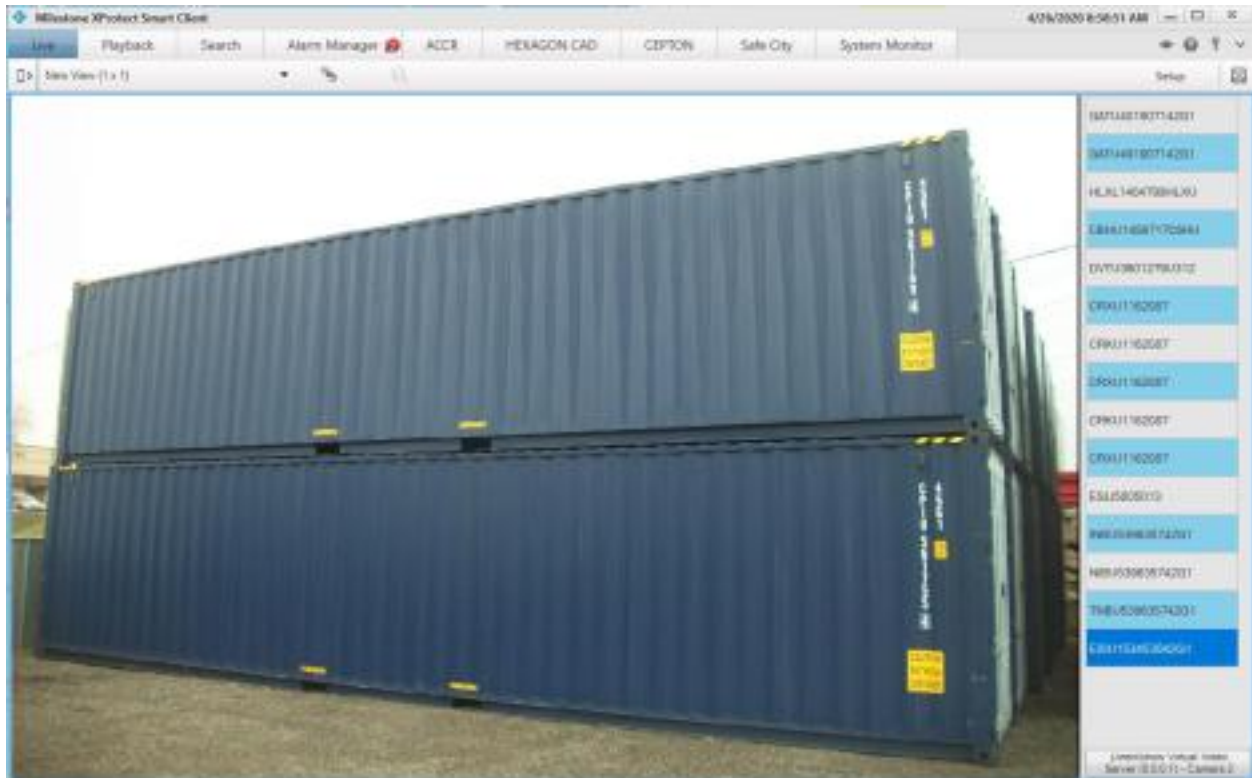
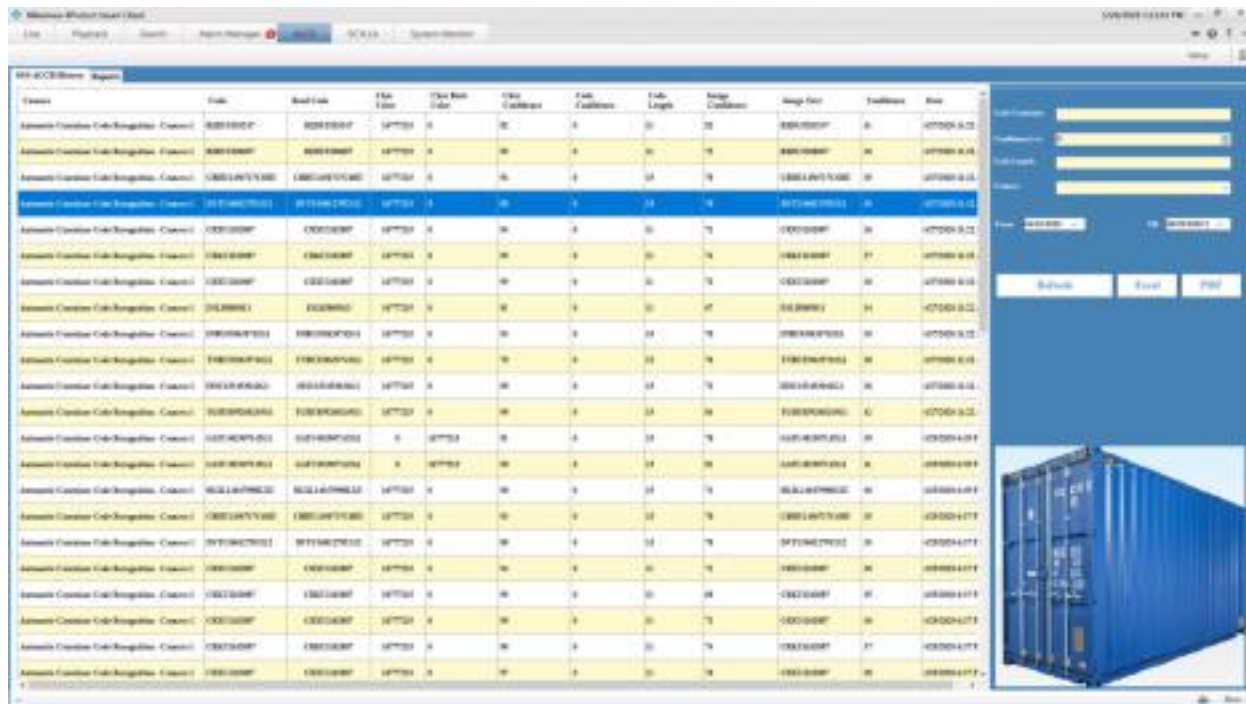


FIGURE 9: ACCR LIVE DETECTION

5.2. ACCR Plugin Tab

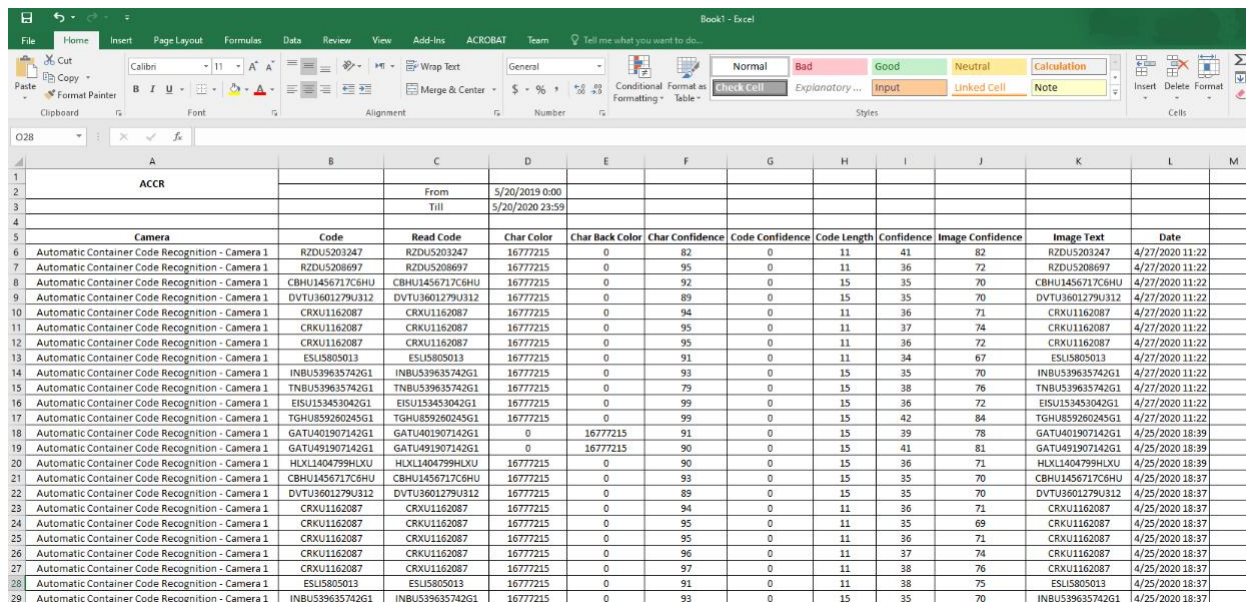
Click **ACCR** tab to view the list of all captured container codes, along with their related camera, code, char code, confidence, captured date, and the related image.

Use the filters in the right panel to filter the list as convenient and click on “Refresh” button. You can as well generate an excel/pdf file for later investigation as shown in Figure 12 and Figure 13.



Camera	Code	Read Code	Char Code	Char Back Color	Char Confidence	Code Confidence	Code Length	Confidence	Image Confidence	Image Text	Date
Automatic Container Code Recognition - Camera 1	RZDU5201247	RZDU5201247	16777215	0	82	0	11	41	82	RZDU5201247	4/27/2020 11:22
Automatic Container Code Recognition - Camera 1	RZDU5208697	RZDU5208697	16777215	0	95	0	11	36	72	RZDU5208697	4/27/2020 11:22
Automatic Container Code Recognition - Camera 1	CBHU1456717C6HU	CBHU1456717C6HU	16777215	0	92	0	15	35	70	CBHU1456717C6HU	4/27/2020 11:22
Automatic Container Code Recognition - Camera 1	DVTU3601279U312	DVTU3601279U312	16777215	0	89	0	15	35	70	DVTU3601279U312	4/27/2020 11:22
Automatic Container Code Recognition - Camera 1	CRXU1162087	CRXU1162087	16777215	0	94	0	11	36	71	CRXU1162087	4/27/2020 11:22
Automatic Container Code Recognition - Camera 1	CRXU1162087	CRXU1162087	16777215	0	95	0	11	37	74	CRXU1162087	4/27/2020 11:22
Automatic Container Code Recognition - Camera 1	CRXU1162087	CRXU1162087	16777215	0	95	0	11	36	72	CRXU1162087	4/27/2020 11:22
Automatic Container Code Recognition - Camera 1	ESUS805013	ESUS805013	16777215	0	91	0	11	34	67	ESUS805013	4/27/2020 11:22
Automatic Container Code Recognition - Camera 1	INBU539635742G1	INBU539635742G1	16777215	0	93	0	15	35	70	INBU539635742G1	4/27/2020 11:22
Automatic Container Code Recognition - Camera 1	TNBU539635742G1	TNBU539635742G1	16777215	0	79	0	15	38	76	TNBU539635742G1	4/27/2020 11:22
Automatic Container Code Recognition - Camera 1	ESUS13453042G1	ESUS13453042G1	16777215	0	99	0	15	36	72	ESUS13453042G1	4/27/2020 11:22
Automatic Container Code Recognition - Camera 1	TGHU859260245G1	TGHU859260245G1	16777215	0	99	0	15	42	84	TGHU859260245G1	4/27/2020 11:22
Automatic Container Code Recognition - Camera 1	GATU401907142G1	GATU401907142G1	0	16777215	91	0	15	39	78	GATU401907142G1	4/25/2020 18:39
Automatic Container Code Recognition - Camera 1	GATU491907142G1	GATU491907142G1	0	16777215	90	0	15	41	81	GATU491907142G1	4/25/2020 18:39
Automatic Container Code Recognition - Camera 1	HLXL1404799HUXU	HLXL1404799HUXU	16777215	0	90	0	15	36	71	HLXL1404799HUXU	4/25/2020 18:39
Automatic Container Code Recognition - Camera 1	CBHU1456717C6HU	CBHU1456717C6HU	16777215	0	93	0	15	35	70	CBHU1456717C6HU	4/25/2020 18:37
Automatic Container Code Recognition - Camera 1	DVTU3601279U312	DVTU3601279U312	16777215	0	89	0	15	35	70	DVTU3601279U312	4/25/2020 18:37
Automatic Container Code Recognition - Camera 1	CRXU1162087	CRXU1162087	16777215	0	94	0	11	36	71	CRXU1162087	4/25/2020 18:37
Automatic Container Code Recognition - Camera 1	CRXU1162087	CRXU1162087	16777215	0	95	0	11	35	69	CRXU1162087	4/25/2020 18:37
Automatic Container Code Recognition - Camera 1	CRXU1162087	CRXU1162087	16777215	0	95	0	11	36	71	CRXU1162087	4/25/2020 18:37
Automatic Container Code Recognition - Camera 1	CRXU1162087	CRXU1162087	16777215	0	96	0	11	37	74	CRXU1162087	4/25/2020 18:37
Automatic Container Code Recognition - Camera 1	CRXU1162087	CRXU1162087	16777215	0	97	0	11	38	76	CRXU1162087	4/25/2020 18:37
Automatic Container Code Recognition - Camera 1	ESUS805013	ESUS805013	16777215	0	91	0	11	38	75	ESUS805013	4/25/2020 18:37
Automatic Container Code Recognition - Camera 1	INBU539635742G1	INBU539635742G1	16777215	0	93	0	15	35	70	INBU539635742G1	4/25/2020 18:37

FIGURE 10: ACCR PLUGIN TAB



ACCR	Camera	Code	Read Code	Char Code	Char Back Color	Char Confidence	Code Confidence	Code Length	Confidence	Image Confidence	Image Text	Date
	Automatic Container Code Recognition - Camera 1	RZDU5201247	RZDU5201247	16777215	0	82	0	11	41	82	RZDU5201247	4/27/2020 11:22
	Automatic Container Code Recognition - Camera 1	RZDU5208697	RZDU5208697	16777215	0	95	0	11	36	72	RZDU5208697	4/27/2020 11:22
	Automatic Container Code Recognition - Camera 1	CBHU1456717C6HU	CBHU1456717C6HU	16777215	0	92	0	15	35	70	CBHU1456717C6HU	4/27/2020 11:22
	Automatic Container Code Recognition - Camera 1	DVTU3601279U312	DVTU3601279U312	16777215	0	89	0	15	35	70	DVTU3601279U312	4/27/2020 11:22
	Automatic Container Code Recognition - Camera 1	CRXU1162087	CRXU1162087	16777215	0	94	0	11	36	71	CRXU1162087	4/27/2020 11:22
	Automatic Container Code Recognition - Camera 1	CRXU1162087	CRXU1162087	16777215	0	95	0	11	37	74	CRXU1162087	4/27/2020 11:22
	Automatic Container Code Recognition - Camera 1	CRXU1162087	CRXU1162087	16777215	0	95	0	11	36	72	CRXU1162087	4/27/2020 11:22
	Automatic Container Code Recognition - Camera 1	ESUS805013	ESUS805013	16777215	0	91	0	11	34	67	ESUS805013	4/27/2020 11:22
	Automatic Container Code Recognition - Camera 1	INBU539635742G1	INBU539635742G1	16777215	0	93	0	15	35	70	INBU539635742G1	4/27/2020 11:22
	Automatic Container Code Recognition - Camera 1	TNBU539635742G1	TNBU539635742G1	16777215	0	79	0	15	38	76	TNBU539635742G1	4/27/2020 11:22
	Automatic Container Code Recognition - Camera 1	ESUS13453042G1	ESUS13453042G1	16777215	0	99	0	15	36	72	ESUS13453042G1	4/27/2020 11:22
	Automatic Container Code Recognition - Camera 1	TGHU859260245G1	TGHU859260245G1	16777215	0	99	0	15	42	84	TGHU859260245G1	4/27/2020 11:22
	Automatic Container Code Recognition - Camera 1	GATU401907142G1	GATU401907142G1	0	16777215	91	0	15	39	78	GATU401907142G1	4/25/2020 18:39
	Automatic Container Code Recognition - Camera 1	GATU491907142G1	GATU491907142G1	0	16777215	90	0	15	41	81	GATU491907142G1	4/25/2020 18:39
	Automatic Container Code Recognition - Camera 1	HLXL1404799HUXU	HLXL1404799HUXU	16777215	0	90	0	15	36	71	HLXL1404799HUXU	4/25/2020 18:39
	Automatic Container Code Recognition - Camera 1	CBHU1456717C6HU	CBHU1456717C6HU	16777215	0	93	0	15	35	70	CBHU1456717C6HU	4/25/2020 18:37
	Automatic Container Code Recognition - Camera 1	DVTU3601279U312	DVTU3601279U312	16777215	0	89	0	15	35	70	DVTU3601279U312	4/25/2020 18:37
	Automatic Container Code Recognition - Camera 1	CRXU1162087	CRXU1162087	16777215	0	94	0	11	36	71	CRXU1162087	4/25/2020 18:37
	Automatic Container Code Recognition - Camera 1	CRXU1162087	CRXU1162087	16777215	0	95	0	11	35	69	CRXU1162087	4/25/2020 18:37
	Automatic Container Code Recognition - Camera 1	CRXU1162087	CRXU1162087	16777215	0	95	0	11	36	71	CRXU1162087	4/25/2020 18:37
	Automatic Container Code Recognition - Camera 1	CRXU1162087	CRXU1162087	16777215	0	96	0	11	37	74	CRXU1162087	4/25/2020 18:37
	Automatic Container Code Recognition - Camera 1	CRXU1162087	CRXU1162087	16777215	0	97	0	11	38	76	CRXU1162087	4/25/2020 18:37
	Automatic Container Code Recognition - Camera 1	ESUS805013	ESUS805013	16777215	0	91	0	11	38	75	ESUS805013	4/25/2020 18:37
	Automatic Container Code Recognition - Camera 1	INBU539635742G1	INBU539635742G1	16777215	0	93	0	15	35	70	INBU539635742G1	4/25/2020 18:37

FIGURE 11: ACCR EXCEL FILE

6SS ACCR Report From :5/20/2019 12:00:00 AM To :5/20/2020 11:59:59 PM												
id	Date	Image Text	Image Confidence	Confidence	Code Length	Code Confidence	Char Confidence	Char Back Color	Char Color	Read Code	Code	Camera
1704	4/27/2020 AM 11:22:48	RZDU5203247	82	41	11	0	82	0	16777215	RZDU5203247	RZDU5203247	Automatic Container Code Recognition - Camera 1
1703	4/27/2020 AM 11:22:45	RZDU5208697	72	36	11	0	95	0	16777215	RZDU5208697	RZDU5208697	Automatic Container Code Recognition - Camera 1
1702	4/27/2020 AM 11:22:43	CBHU1456717C6HU	70	35	15	0	92	0	16777215	CBHU1456717C6HU	CBHU1456717C6HU	Automatic Container Code Recognition - Camera 1
1701	4/27/2020 AM 11:22:40	DVTU3601279U312	70	35	15	0	89	0	16777215	DVTU3601279U312	DVTU3601279U312	Automatic Container Code Recognition - Camera 1
1700	4/27/2020 AM 11:22:35	CRXU1162087	71	36	11	0	94	0	16777215	CRXU1162087	CRXU1162087	Automatic Container Code Recognition - Camera 1
1699	4/27/2020 AM 11:22:34	CRKU1162087	74	37	11	0	95	0	16777215	CRKU1162087	CRKU1162087	Automatic Container Code Recognition - Camera 1
1698	4/27/2020 AM 11:22:32	CRXU1162087	72	36	11	0	95	0	16777215	CRXU1162087	CRXU1162087	Automatic Container Code Recognition - Camera 1
1697	4/27/2020 AM 11:22:30	ESLI5805013	67	34	11	0	91	0	16777215	ESLI5805013	ESLI5805013	Automatic

FIGURE 12: ACCR PDF FILE