



# **RemoteEyes and MileStone Integration User's Manual**

---

© 2022 Odyssey Technologies, Inc.  
7526 Connelley Drive, Suite A  
Hanover, Maryland 21076  
Phone (888)291-6379

# Table of Contents

1 Programs and versions for the integration .....	1
2 Integration diagram .....	3
3 How integration looks like .....	4
4 Installation and Settings .....	6
4.1 POSSvr .....	6
4.2 POSWatch.....	6
4.2.1 Create interface(s)/tabs for POS System.....	6
4.2.2 Setup listen port .....	7
4.2.3 Setup Text Insertion service (POSSvr) info .....	8
4.2.4 Assign camera to POS register .....	9
4.2.5 Search transaction data .....	10
4.3 PWClient .....	10
4.3.1 Setup server site .....	10
4.3.2 View Transactions .....	11
4.4 DataTransferSvr .....	13
4.4.1 Create interface(s) for MileStone Transact Sources .....	13
4.4.2 Setup listen port .....	15
4.5 MileStone xProtect Management Client.....	16
4.5.1 Create transaction sources .....	16
4.5.2 Create transaction definitions.....	18
4.6 MileStone xProtect Smart Client .....	20
4.6.1 Setup views for video and text .....	20
4.6.2 Search Transact, display saved video and text .....	21

# 1. The programs/modules and versions for the integration

The integration involves POS system (1), RemoteEyes POSWatch (2), POSSvr text insertion service (3), POSWatch remote client (4), DataTransferSvr programs (5), and MileStone xProtect Management Client (6) and Smart Client (7).

## Software versions:

### RemoteEyes:

- POSSvr: 6.5.2102.11
- POSWatch: 9.0.2001.12
- PWClient: 9.0.2203.31
- DataTransferSvr: 9.0.2202.18

### MileStone:

- xProtect VMS Products 2022 R1
- xProtect Smart Client 2022 R1

## Note

**POSWatch, POSSvr, DataTransferSvr and xProtect Management Client could be installed under the same machine or different machines.**

### 1. 1 POS system

It connects POSWatch and sends transaction data from all POS registers to POSWatch.

Currently we have finished integration with bunch of POS systems. For example, Micros 3700, Micros 9700, Micros Symphony, Iss45, Sicom, Restaurant Manager, POSiTouch, Radiant, StorePoint, UnifyPOS, Store Point, Gilbarco, etc....

### 1.2 POSWatch (server program from RemoteEyes)

This is the program to get connection and POS transaction data from POS system. It handles data and save the transaction in SQL database, assigns camera to the register ID, and sends transaction text lines to POSSvr service.

It is also the server program working with PWClient (remote client) to handle data requests on client side.

### 1.3 PWClient (POSWatch remote client program from RemoteEyes)

This is the client program for POSWatch. User could request POS transaction data from POSWatch and print out the order details as PDF.

### 1.4. POSSvr (service program from RemoteEyes)

This is a Windows service program that works in between POSWatch and DataTransferSvr. It takes connections from POSWatch and DataTransferSvr, handles POS text lines sent from POSWatch and sends text along with camera info to DataTransferSvr.

#### **1.5 DataTransferSvr (server program from RemoteEyes, works with MileStone)**

This is the program works with **MileStone** software.

This is the program works with **MileStone** software.

It takes connections from MileStone transaction sources, and sends the POS text lines received from POSSvr to transaction sources. Each connection is for one transaction source and for one assigned camera/register.

#### **1.6 MileStone xProtect Management Client**

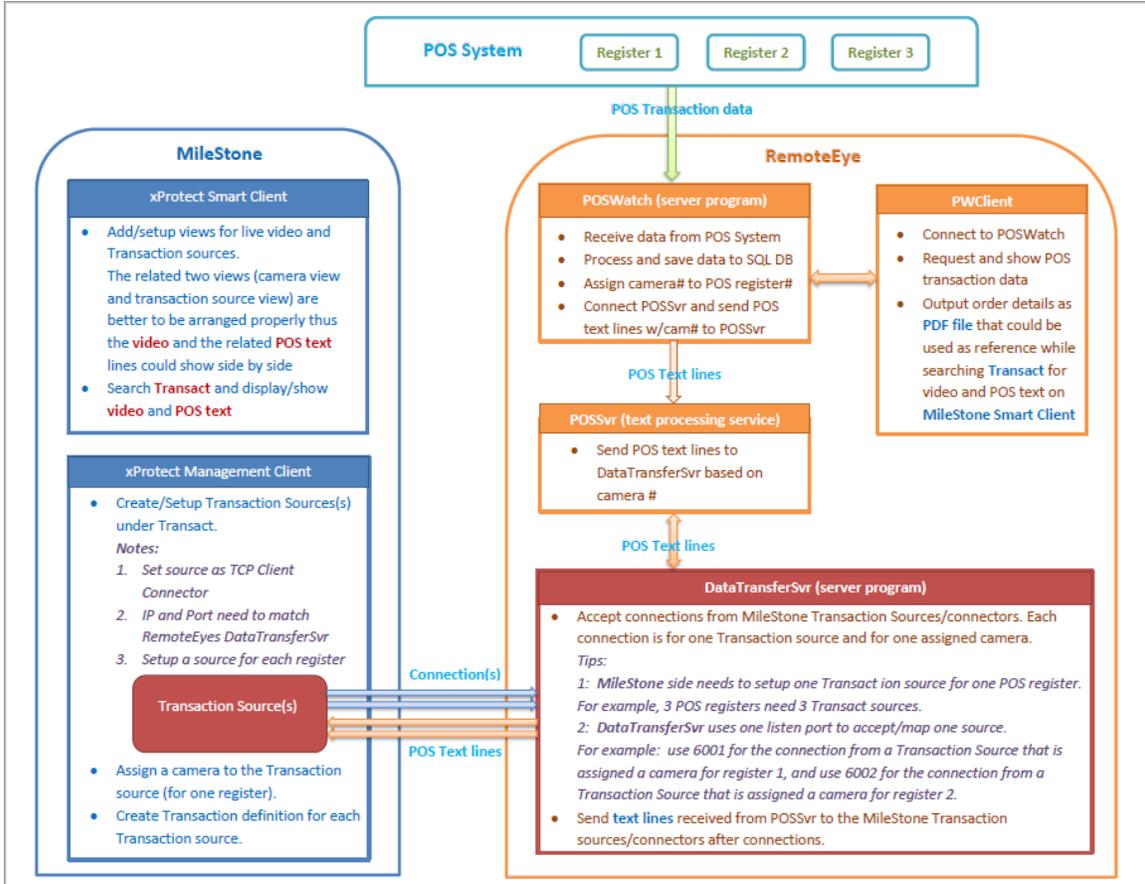
User will create and setup multiple transaction sources/definitions under **Transact**. Each transact source is for one POS register, and it will connect to DataTransferSvr and get text lines on a specific port.

#### **1.7 MileStone xProtect Smart Client**

User will create and setup Views and Transact to show live video and POS transaction text lines.

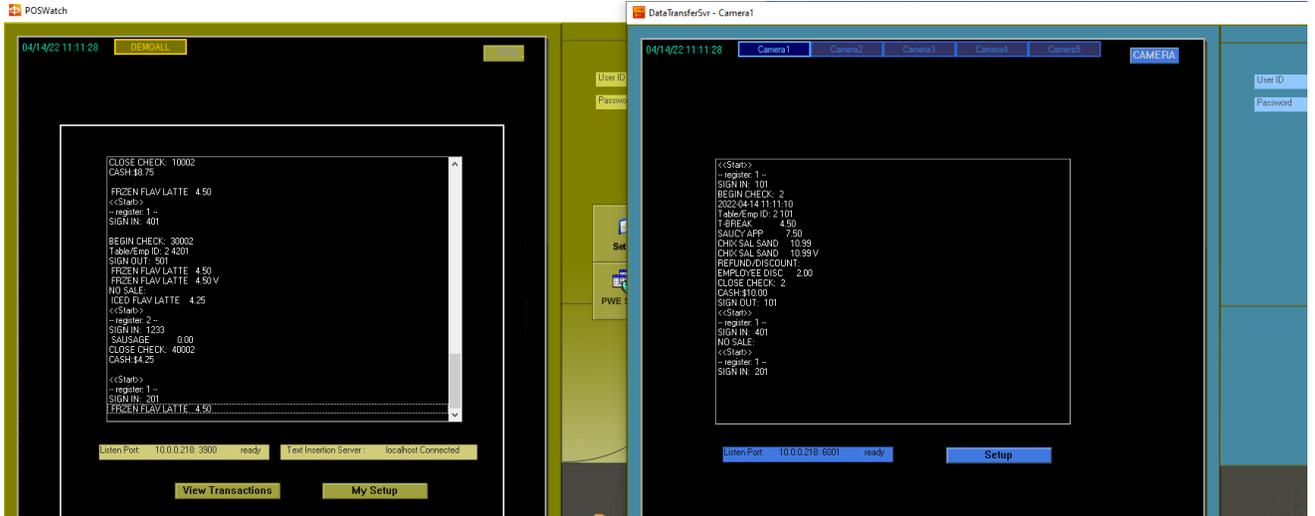
## 2. Integration architectural diagram

The following diagram is about the integration of RemoteEyes products and MileStone software.

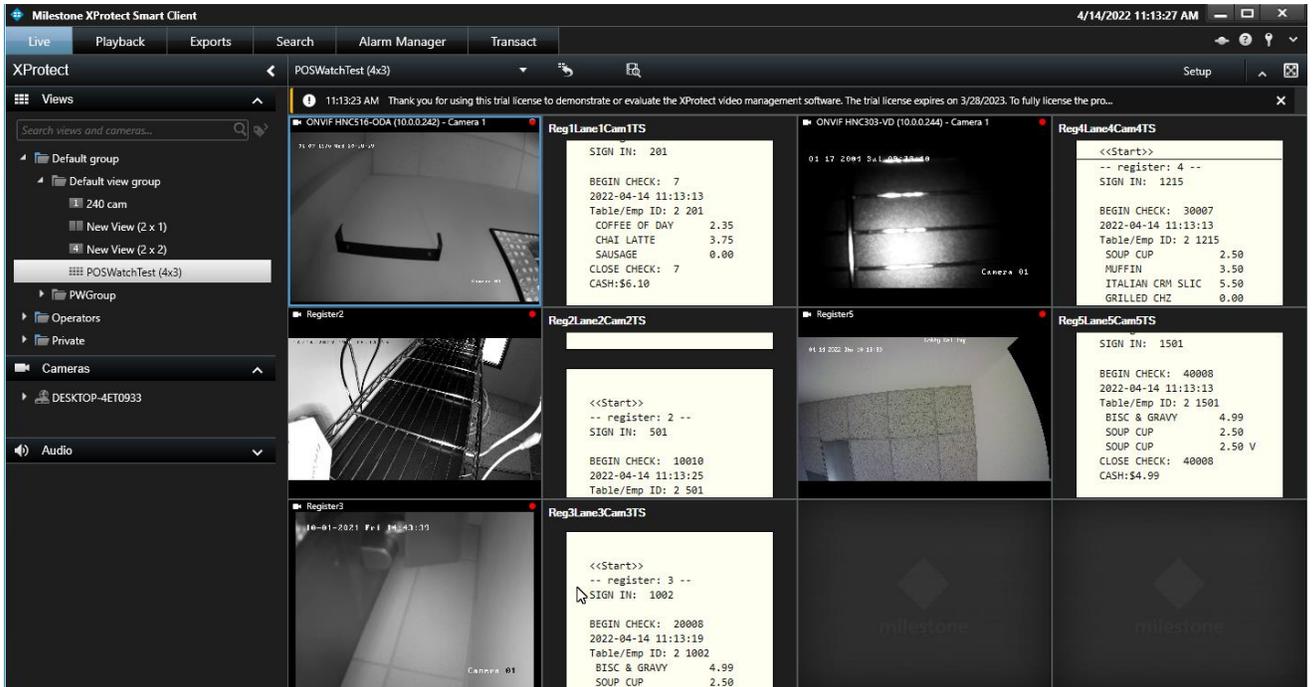


### 3. How it looks like

The following screens are about how the integration looks like while POSWatch, DataTransferSvr, xProtect Smart Client are running.



Left: RE POSWatch      Right: RE DataTransferSvr



MileStone xProtect Smart Client: Live Video and Transact View

<p>Register2</p>  <p>4/14/2022 Fri 11:13:25</p>	<p>Reg2Lane2Cam2TS</p> <pre>&lt;&lt;Start&gt;&gt; -- register: 2 -- SIGN IN: 501  BEGIN CHECK: 10010 2022-04-14 11:13:25 Table/Emp ID: 2 501</pre>
<p>Register3</p>  <p>10-01-2021 Fri 11:43:00</p> <p>Camera 01</p>	<p>Reg3Lane3Cam3TS</p> <pre>&lt;&lt;Start&gt;&gt; -- register: 3 -- SIGN IN: 1002  BEGIN CHECK: 20008 2022-04-14 11:13:19 Table/Emp ID: 2 1002 BISC &amp; GRAVY      4.99 SOUP CUP          2.50</pre>

## 4. Installation and settings

### Note

Install POSWatch, POSSvr and DataTransferSvr under the same machine.

#### 4.1 POSSvr

Use POSSvr installation package to run Setup.exe to install POSSvr service and POSSvrAdmin program. POSSvr service will be started automatically after installation.

POSSvrAdmin program is where you could change POSSvr settings. To run POSSvrAdmin, you could go to Start>All Programs>Remote Eyes>POSSvr>Launch POSSvr Admin. The default user and password for admin program is admin/admin.

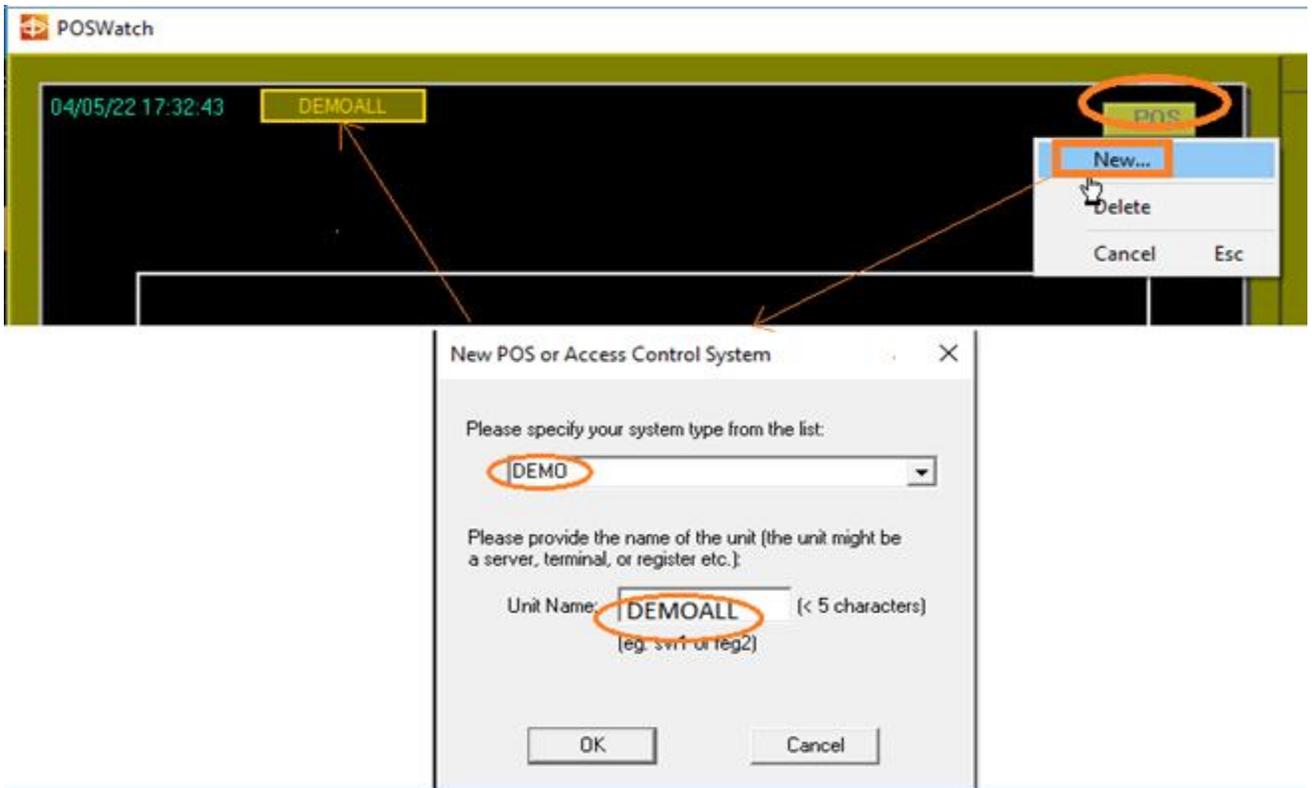
The default listen port of POSSvr is **2995**, IP is **localhost**, and the connection user/password is **admin/admin**.

#### 4.2 POSWatch:

Use POSWatch installation package to install POSWatch. Double click on desktop icon to launch POSWatch. Default **login** user/password is **admin/admin**.

##### 4.2.1 Create interface(s)/tab(s) for POS System

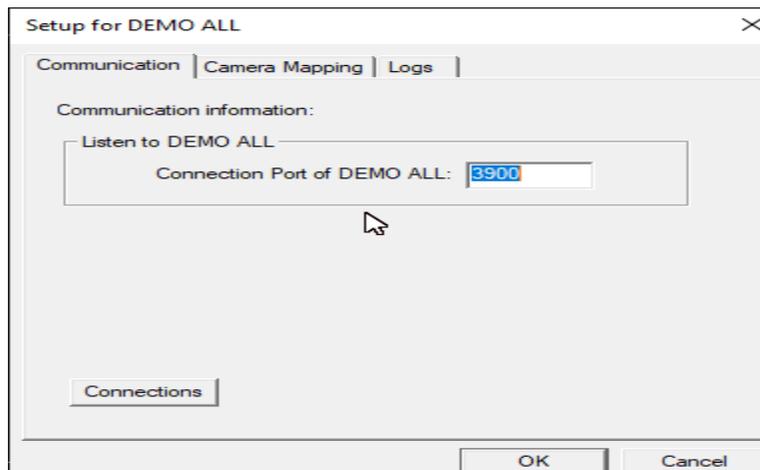
Here is an example. Click button **POS** on top to add new interface/tab for your POS system by selecting **New** then **DEMO** as the interface type.



Interface/tab creation on POSWatch

#### 4.2.2 Setup listen port

Click button **My Setup** on the bottom. Under tab **Communication** set/change POSWatch listen port that is for the connection coming from POS System when necessary. POSWatch has a default port for each type of POS systems. For example, for demo POS simulator, the default is 3900.



Listening port of POWatch for POS System

### 4.2.3 Setup Text Insertion service (POSSvr) info

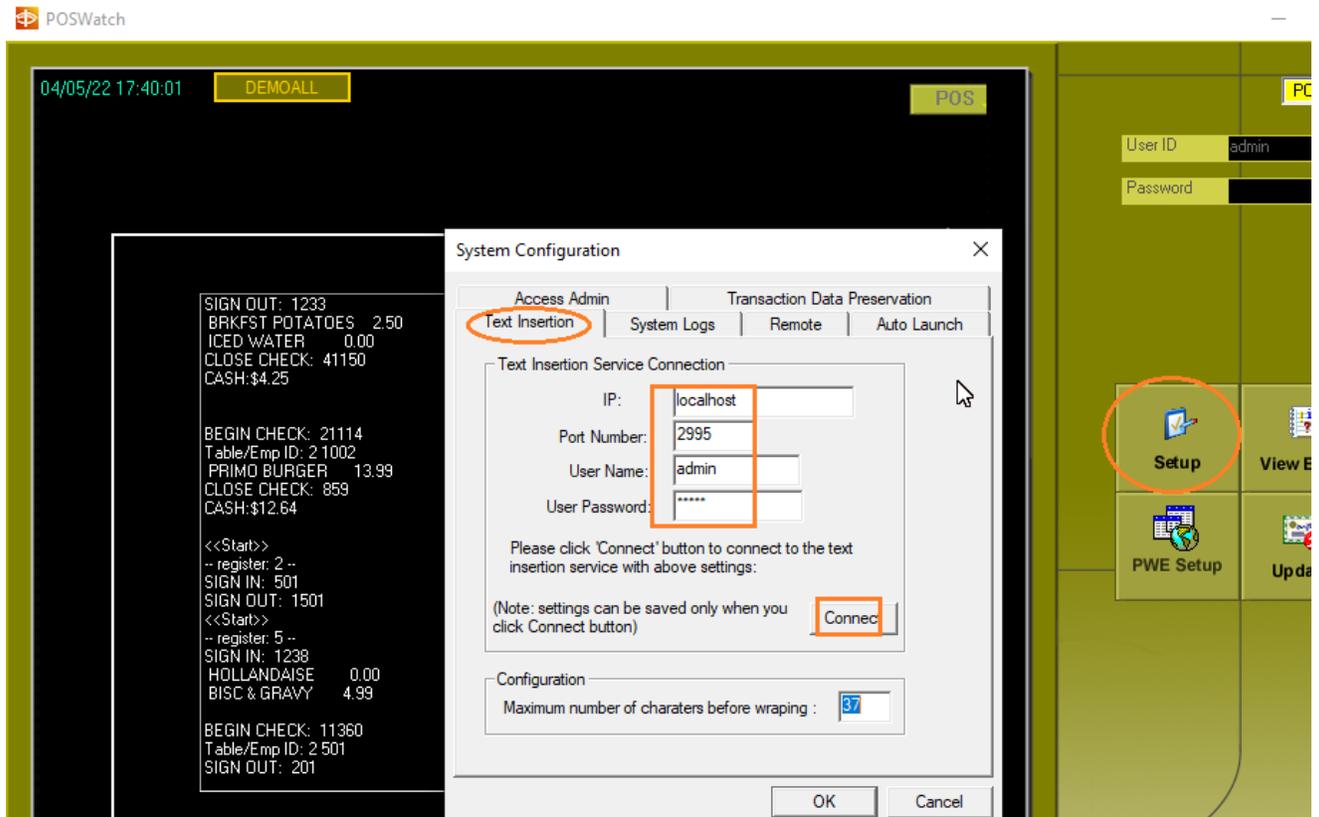
Check the status of **Text Insertion Server** on the bottom (see screen below).

If it shows **localhost connected** or **xxx.xxx.xxx.xxx connected** it means POSWatch is connected to POSSvr service and ready to send text lines to POSSvr. And you don't need to change anything.



Status of listen port and connection to POSSvr of POSWatch

If not, you need to click button **Setup** on the right pane of POSWatch screen to bring up **Text Insertion** configuration page (see screen below). IP should be always **localhost**, the default listen port of POSSvr server is **2995**. The info about text insertion service here needs to match what is under POSSvrAdmin program (check 4.1.1.1 for details).

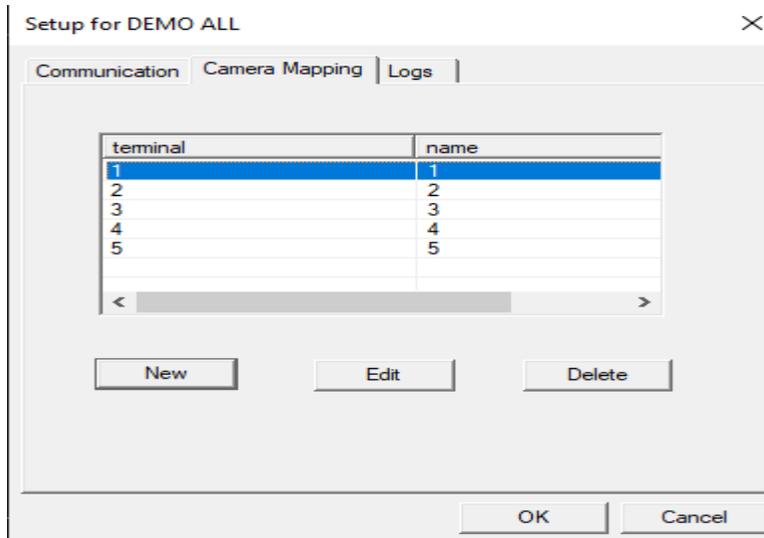


The info of text insertion service (POSSvr) on POSWatch

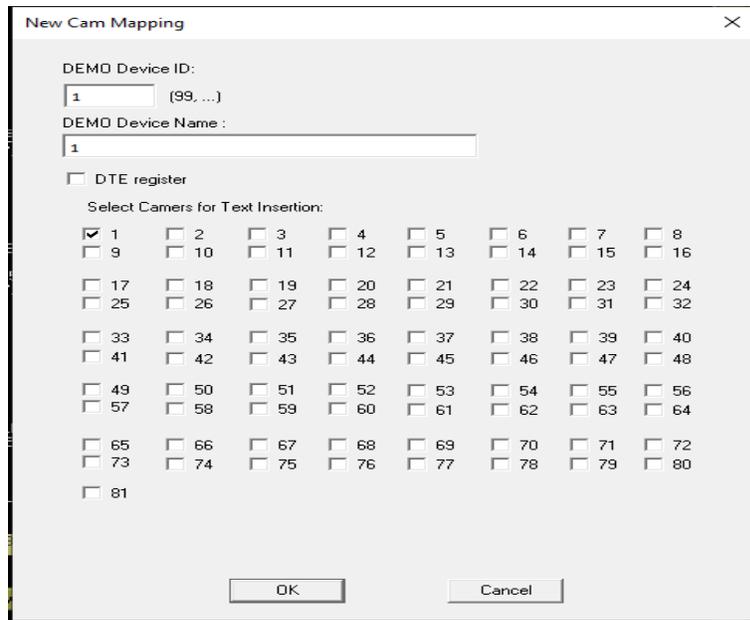
#### 4.2.4 Assign camera to POS register

Click button **My Setup** on the bottom under tab **Camera Mapping**, add your new cam-dev mapping by clicking button **New**. Under window **New Cam Mapping**, input register# as the Device (terminal) ID, and choose the corresponding camera for text insertion. Click **OK** to save your settings.

Below is an example: assign camera 1 to register 1.



Sample Camera mapping list for POS registers on POSWatch



Sample camera mapping on POSWatch

## 4.2.5 Search transaction data

Click on button **View Transactions** on the bottom of POSWatch.

Specify the searching criteria and click button **Search** to get the transaction records.

Below is an example searching result.

Search Transaction Database

Search Criteria

From: April 2022

To: April 2022

From Time: 12:00:00 AM

To Time: 5:41:23 PM

Check Number:

Employee ID:

Total

Function Code

AUTH BY  
BEGIN CHECK  
CHARGE TIP  
CLOCK IN  
CLOCK OUT  
CLOSE CHECK

Menu Item:  
2 EGGS  
BAGEL  
BISC & GRAVY  
BISCUIT SANDWICH  
RI IIFBERRY

**Search**

Row	Date	Time	Dev	Dev. Name	Emp.ID	Description	Qty	Price	Cam	Chk	Other
1	04/05/2022	00:00:00	5	test	1238	FRESH FRUIT SIDE		1.99	5	41725	<PDF> FRESH
2	04/05/2022	00:00:03	5	test	1238	CLOSE CHECK			5	41725	[payment]CAS
3	04/05/2022	00:00:03	5	test	1238	TOTAL		4.24	5	41725	[payment]CAS
4	04/05/2022	00:00:06	5	test	1238	SIGN OUT			5		<PDF>SIGN C
5	04/05/2022	00:00:09	5	test	1501	SIGN IN			5		<PDF><<Start
6	04/05/2022	00:00:12	5	test	1501	BEGIN CHECK			5	41726	<PDF> </PDI
7	04/05/2022	00:00:15	5	test	1501	FLAVORED LATTE		4.65	5	41726	<PDF> FLAVC
8	04/05/2022	00:00:18	5	test	1501	BISCUIT SANDWICH		7.99	5	41726	<PDF> BISCU
9	04/05/2022	00:00:21	5	test	1501	BISCUIT SANDWICH (V)		-7.99	5	41726	<PDF> BISCU
10	04/05/2022	00:00:24	5	test	1501	CLOSE CHECK			5	41726	[payment]CAS
11	04/05/2022	00:00:24	5	test	1501	TOTAL		4.65	5	41726	[payment]CAS
12	04/05/2022	00:00:27	5	test	1501	SIGN OUT			5		<PDF>SIGN C
13	04/05/2022	00:00:30	5	test	1238	SIGN IN			5		<PDF><<Start
14	04/05/2022	00:00:33	5	test	1238	BEGIN CHECK			5	41727	<PDF> </PDI
15	04/05/2022	00:00:36	5	test	1238	GREEK GYRO		10.99	5	41727	<PDF> GREE
16	04/05/2022	00:00:39	5	test	1238	ICED WATER			5	41727	<PDF> ICED \
17	04/05/2022	00:00:42	5	test	1238	CLOSE CHECK			5	41727	[payment]CAS
18	04/05/2022	00:00:42	5	test	1238	TOTAL		10.99	5	41727	[payment]CAS
19	04/05/2022	00:00:45	5	test	1238	SIGN OUT			5		<PDF>SIGN C
20	04/05/2022	00:00:48	5	test	1501	SIGN IN			5		<PDF><<Start
21	04/05/2022	00:00:51	5	test	1501	BEGIN CHECK			5	41728	<PDF> </PDI
22	04/05/2022	00:00:54	5	test	1501	COFFEE OF DAY		2.35	5	41728	<PDF> COFFE
23	04/05/2022	00:00:57	5	test	1501	CHAI LATTE		3.75	5	41728	<PDF> CHAI L
24	04/05/2022	00:01:00	5	test	1501	CHAI LATTE (V)		-3.75	5	41728	<PDF> CHAI L
25	04/05/2022	00:01:03	5	test	1501	CLOSE CHECK			5	41728	[payment]CAS
26	04/05/2022	00:01:03	5	test	1501	TOTAL		2.45	5	41728	[payment]CAS
27	04/05/2022	00:01:06	5	test	1501	SIGN OUT			5		<PDF>SIGN C
28	04/05/2022	00:01:09	5	test	1238	SIGN IN			5		<PDF><<Start
29	04/05/2022	00:01:12	5	test	1238	BEGIN CHECK			5	41729	<PDF> </PDI
30	04/05/2022	00:01:15	5	test	1238	GRILLED CHICKEN		8.99	5	41729	<PDF> GRILL
31	04/05/2022	00:01:18	5	test	1238	ICED WATER			5	41729	<PDF> ICED \
32	04/05/2022	00:01:21	5	test	1238	CLOSE CHECK			5	41729	[payment]CAS
33	04/05/2022	00:01:21	5	test	1238	TOTAL		8.99	5	41729	[payment]CAS
34	04/05/2022	00:01:24	5	test	1238	SIGN OUT			5		<PDF>SIGN C
35	04/05/2022	00:01:27	5	test	1501	SIGN IN			5		<PDF><<Start
36	04/05/2022	00:01:30	5	test	1501	BEGIN CHECK			5	41730	<PDF> </PDI
37	04/05/2022	00:01:33	5	test	1501	BISC & GRAVY		4.99	5	41730	<PDF> BISC &

Total Records: 2000

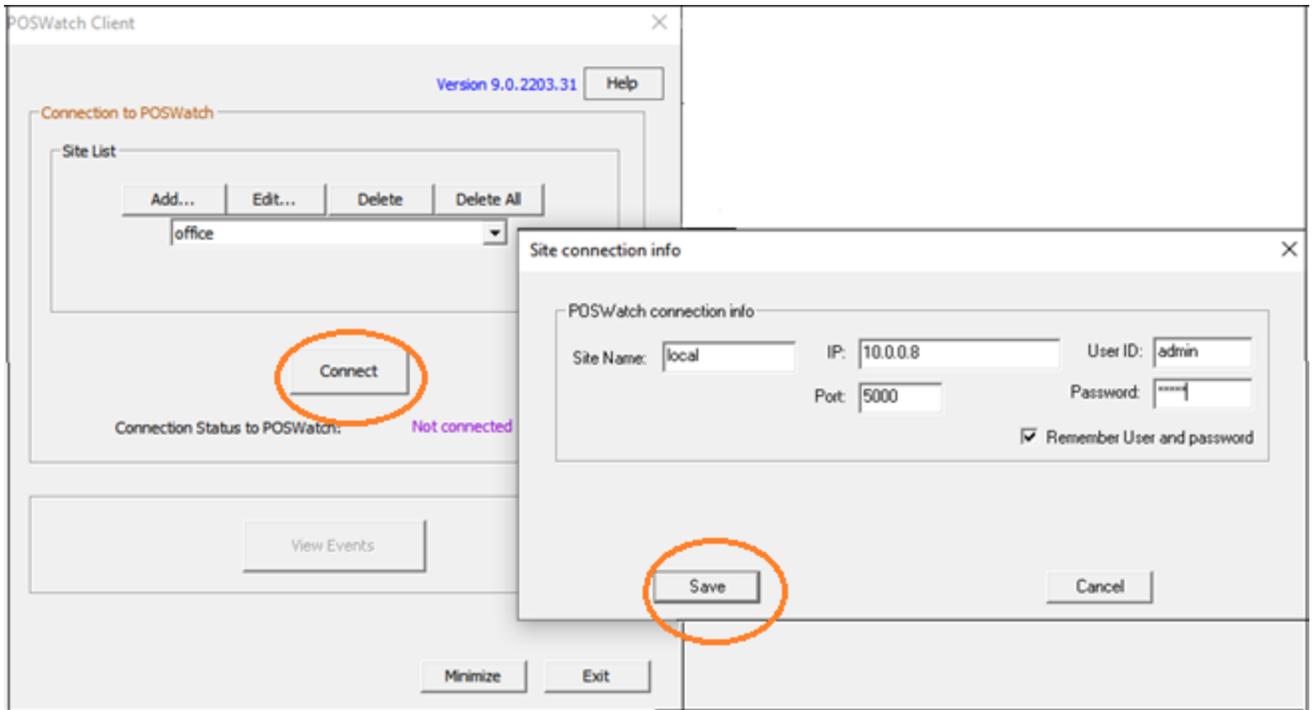
Close

Sample View Transaction result on POSWatch

## 4.3 PWClient - POSWatch remote client

### 4.3.1 Setup server site

Click button **Add** and enter POSWatch site connection info, click **Save** to save the site. Click button **Connect** to make connection.



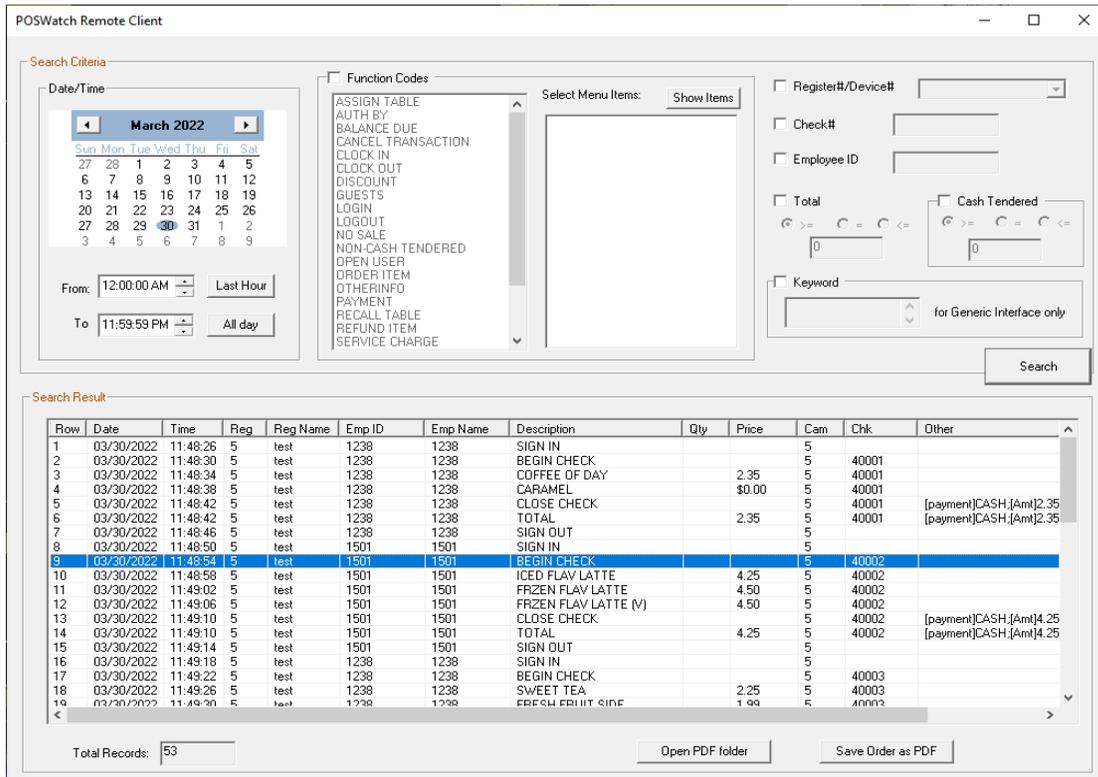
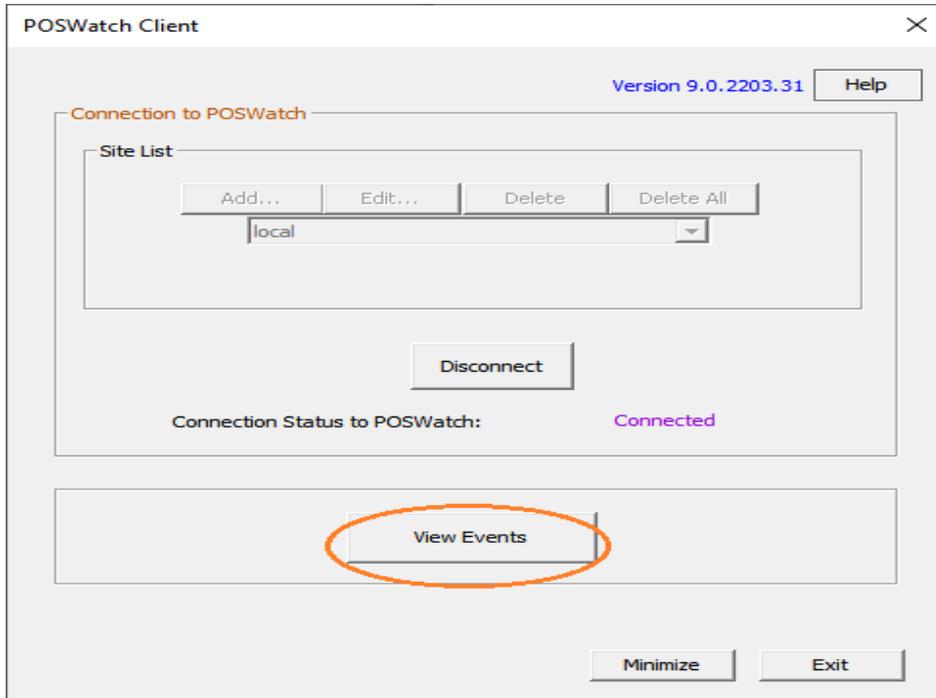
POSWatch server site info on PWClient

#### 4.3.2 View Transactions

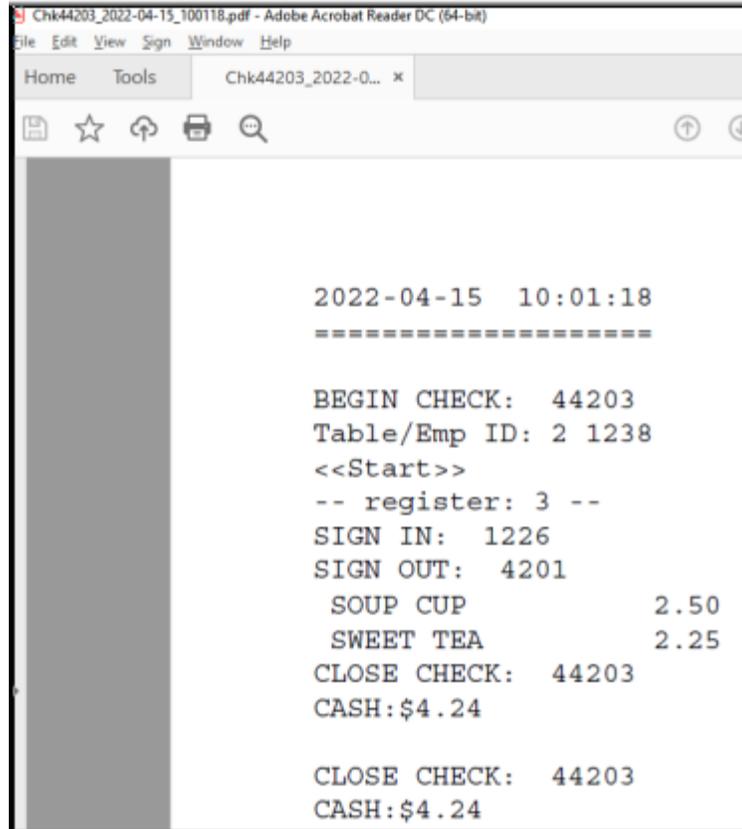
Once PWClient gets connected to POSWatch site, click button **View Events** to bring up search window.

Provide search criteria and click button **Search** to request transaction data saved in POSWatch SQL database. The data will show in the result list. Below is an example.

To output the complete and detailed order/ticket/check, select any line of the order in the list and click button **Save Order as PDF**. **User could use this pdf file as reference while searching Transact on MileStone xProtect Smart client.**



Transaction result requested by PWClient



Sample PDF on PWClient

## 4.4 Setup DataTransferSvr

### 4.4.1 Create interface(s)/tab(s) for MileStone transaction sources

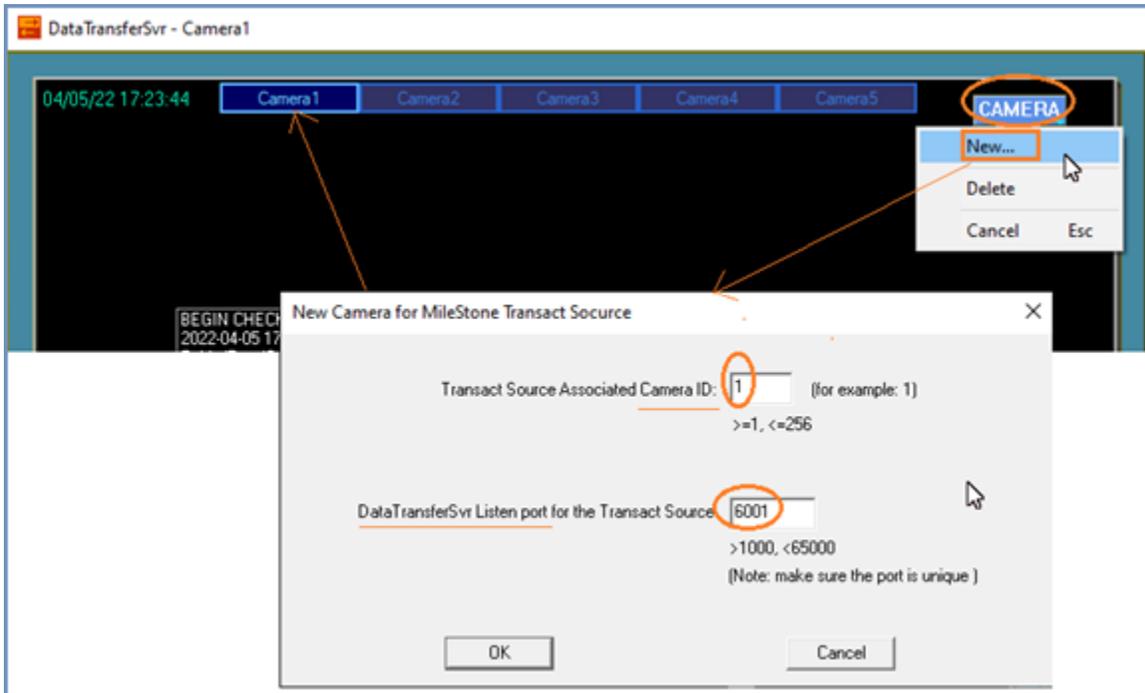
Here is an example. Click button **CAMERA** on top to add new interface/tab for one MileStone Transaction Source. Select **New** then provide camera ID (matches what you setup on POSWatch) and listen port (MileStone transaction source will use it to connect).

**Camera ID** should match how you name the related MileStone transaction source (check below for MileStone transaction source settings). For example, if you are going to create the interface for source **Reg1LaneCam1TS**, you should enter **1** for camera ID field. Please notice that the listen port **6001** should be the same for both interface/tab **Camera1** and source **Reg1LaneCam1TS**.

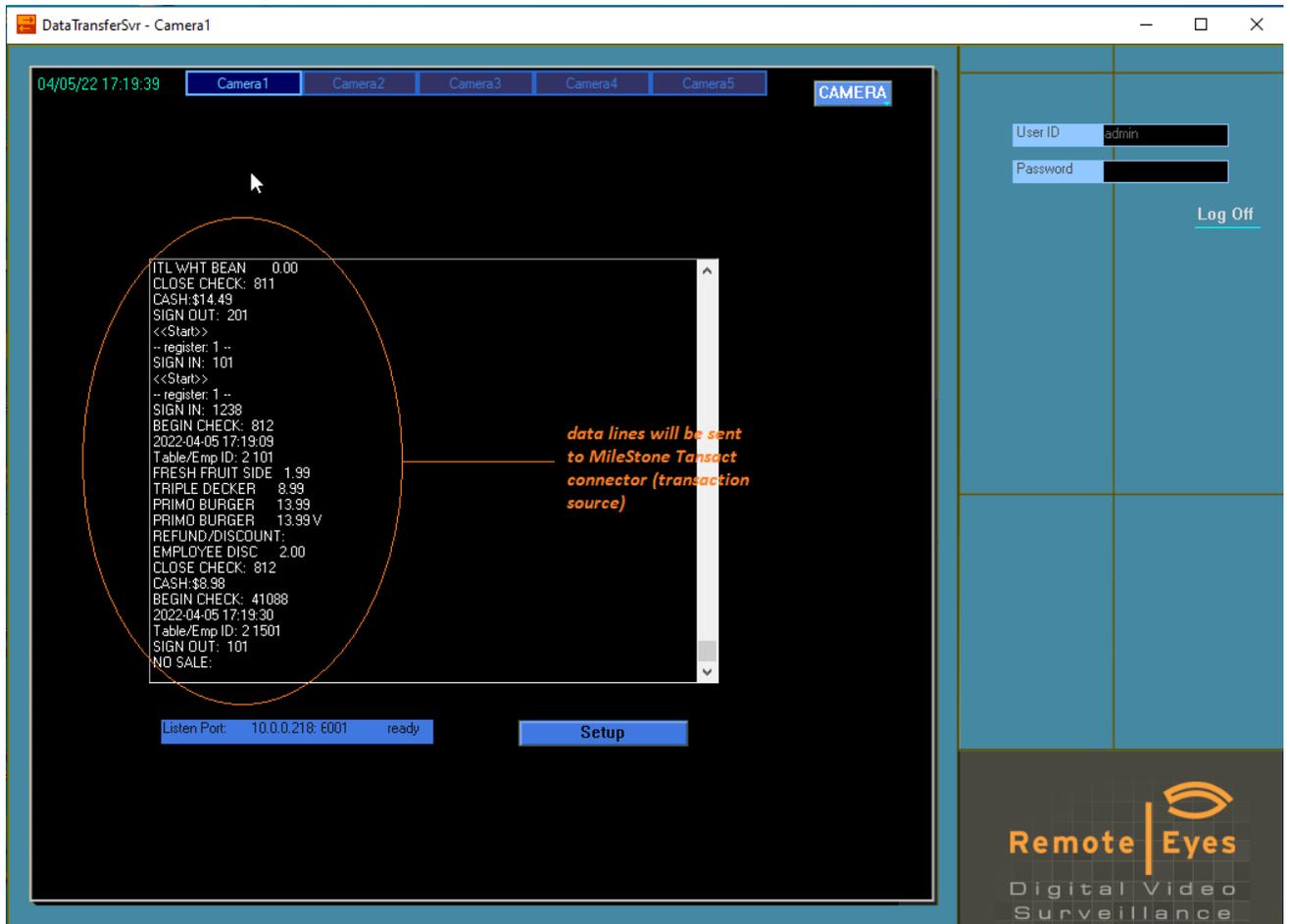
Check screen shots below. It created 5 interfaces/cameras/tabs.

Interface/tab **Camera1** listens on port **6001** and **camera ID is 1**. So, the text lines from POS register 1 (say camera 1 is assigned to register 1 on

POSWatch) will be sent to MileStone transaction source **Reg1LaneCam1TS** (see MileStone xProtect Management Client settings below, port is 6001) that is created for register 1



Creation of new interface/camera on DataTransferSvr for MileStone Transaction Source

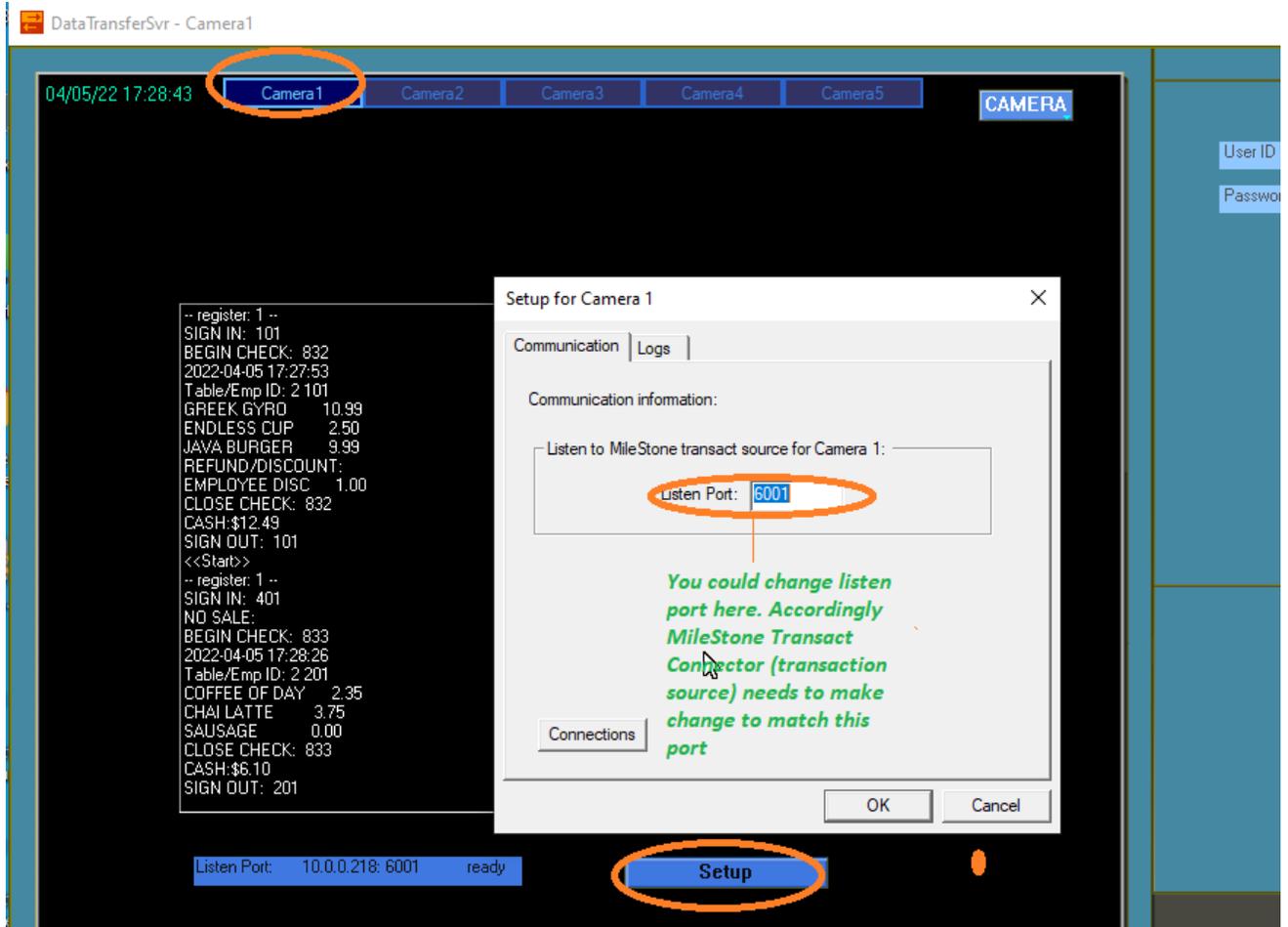


Sample screen of DataTransferSvr

#### 4.4.2 Setup listen port

Click button **Setup** on the bottom. Under tab **Communication** set/change interface listen port that is for the connection coming from MileStone transaction source (Transact connector) when necessary.

Below is an example for interface **Camera1**.



Listening port of DataTransferSvr for MileStone Transaction Source

## 4.5 Setup MileStone xProtect Management Client - Transact

### 4.5.1 Create transaction sources

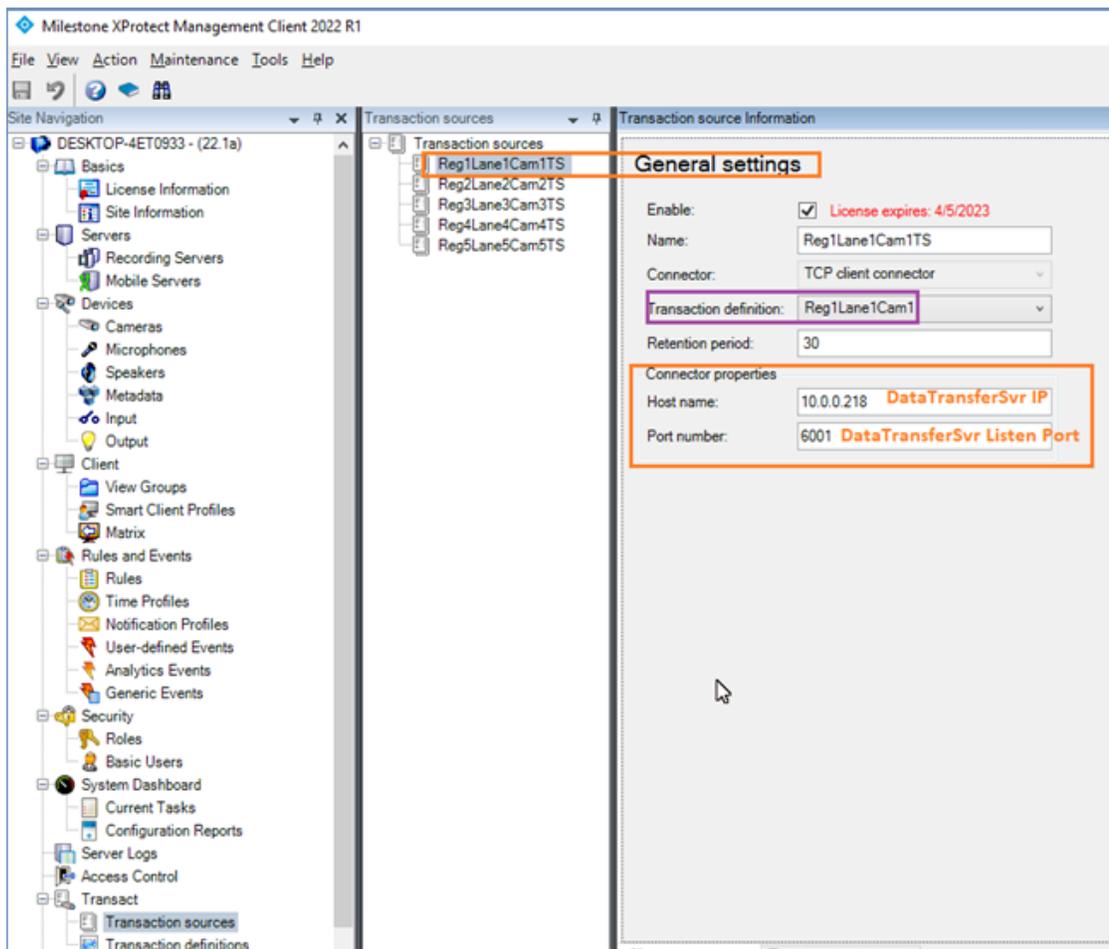
Under **Transact** > **Transaction sources**, add new source(s).

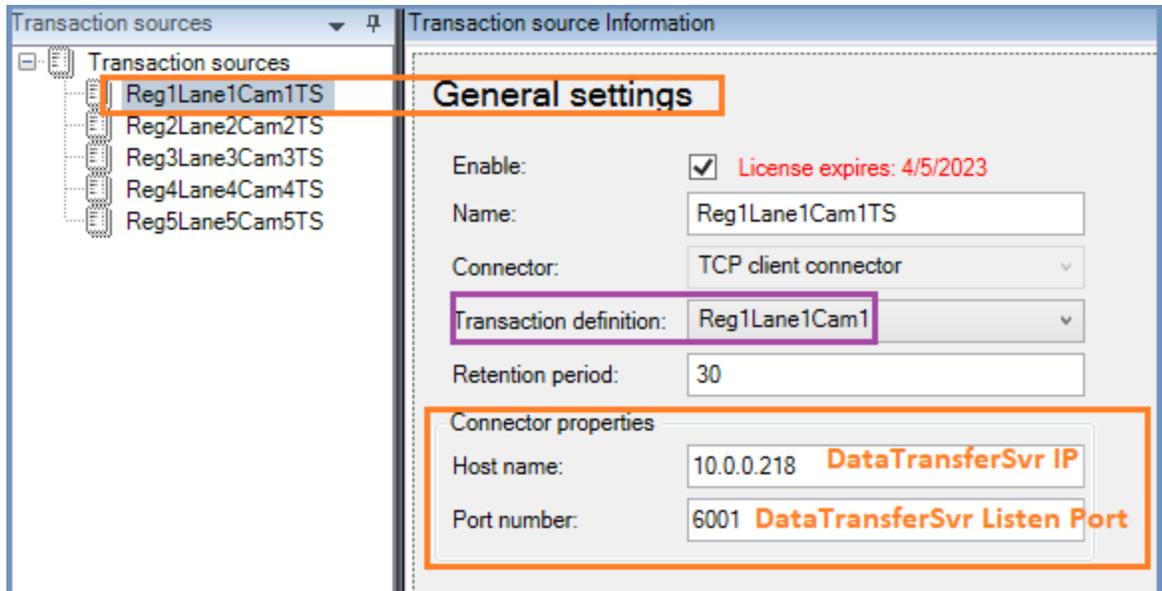
Each transaction source is for one register. If you have 3 registers, create 3 sources.

About **naming**, to have settings under control between camera and register, it is better to include register ID and camera ID while you name a transaction source. For example, if camera 1 is assigned to POS register 1 on RE POSWatch, and you use interface Camera1 on RE DataTransferSvr, you could name your source as Reg1Lane1Cam1TS (or Reg1Cam1TS). In this way, text lines from POS register 1 will be sent to transaction source Reg1Lane1Cam1TS. That is, **both DataTransferSvr interface/cam ID and related POS register ID on POSWatch should be included in the name of the transaction source.**

You also need to associate the proper camera with your transaction source under xProtect management Client.

Here is a sample transaction source, **Reg1Lane1Cam1TS**, which is created for register 1 and uses port 6001 to connect to RE DataTransferSvr. All text lines for POS register 1 will be sent to Reg1Lane1Cam1TS.





MileStone xProtect Management Client Transact setup

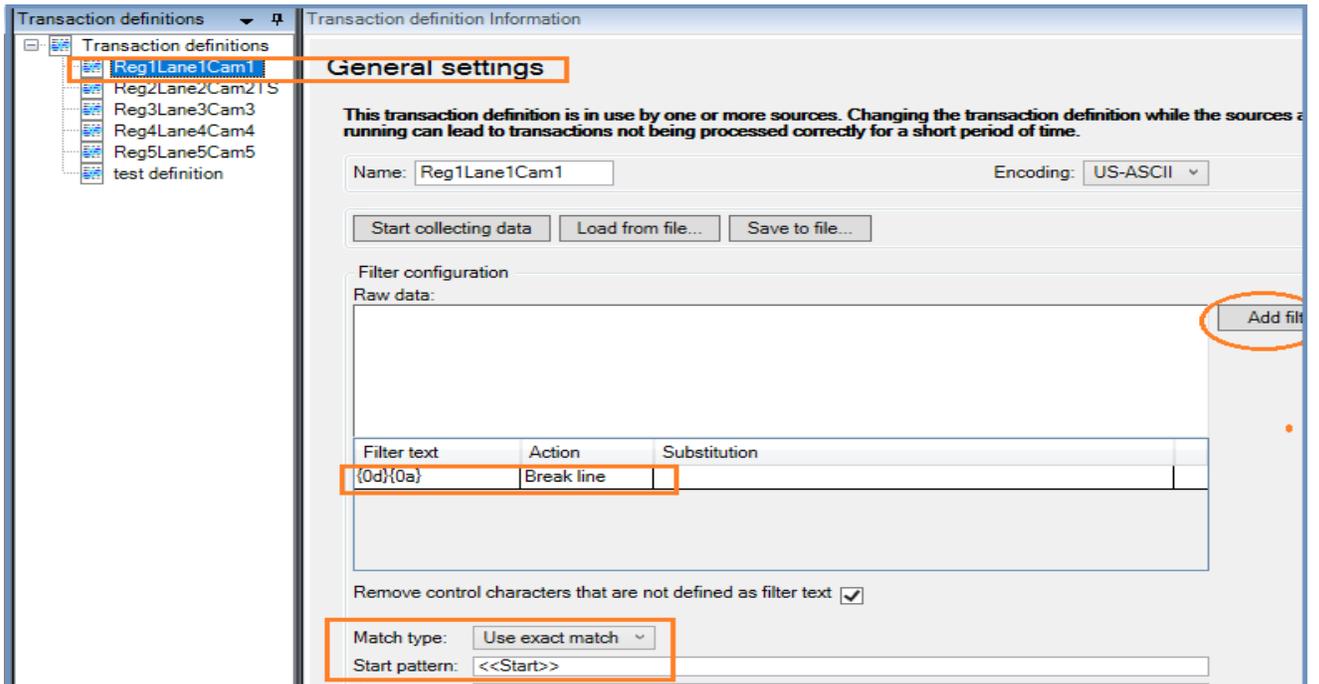
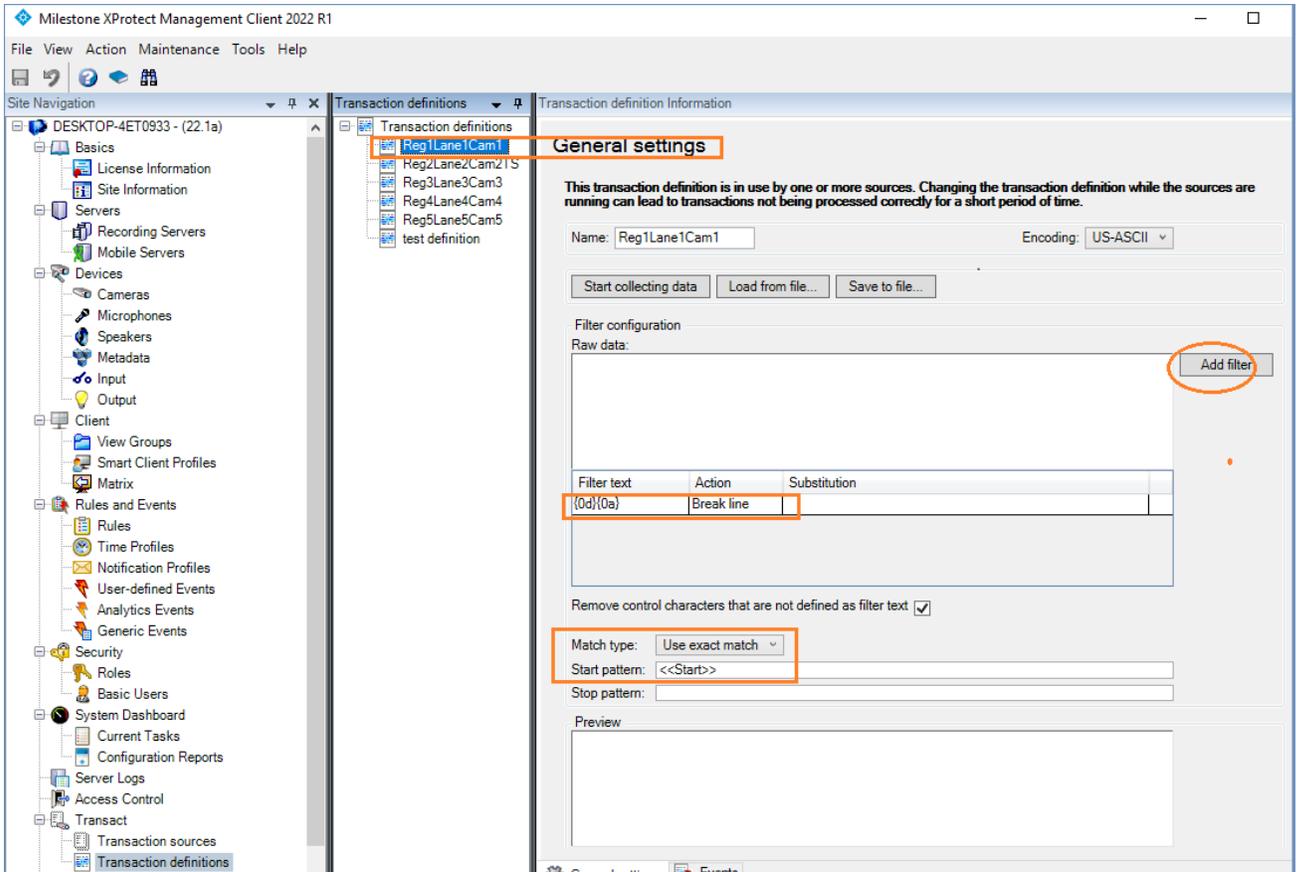
#### 4.5.2 Create transaction definitions

Under **Transact** > **Transaction definitions**, add new definition(s).

Below is the example to setup definition for source **Reg1Lane1Cam1TS**.

**Tips:** 1. Use **{0d}{0a}** as **Break Line** while adding filter.

2. Enter **<<Start>>** as **Start pattern**, choose **Use exact match** for **Match type**.



Sample MileStone Transaction definition

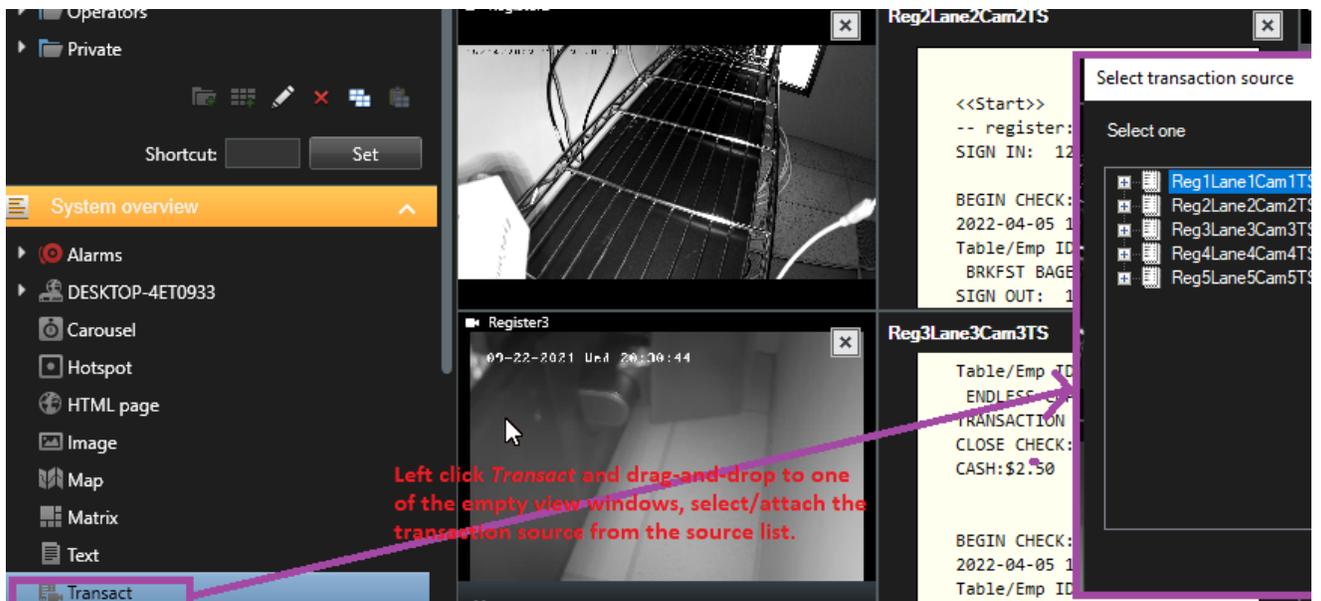
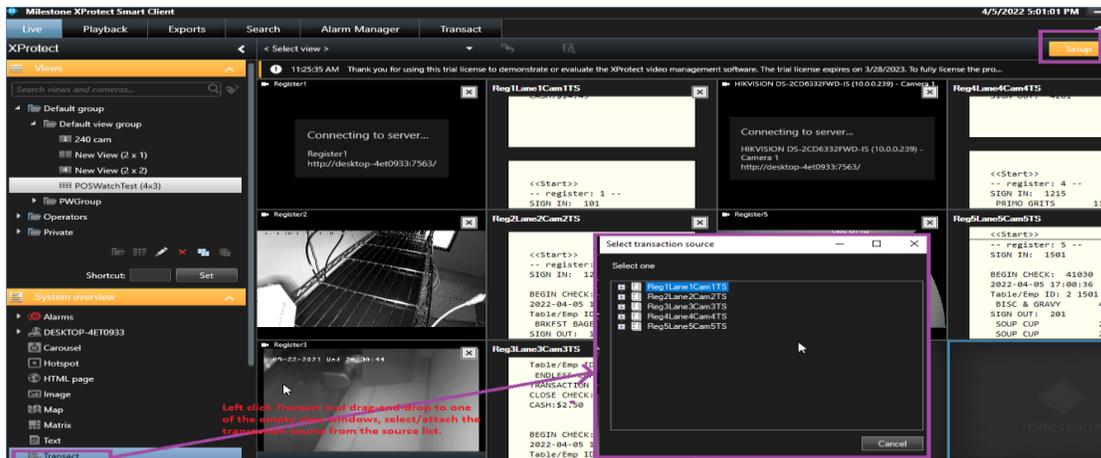
## 4.6 MileStone xProtect Smart Client

### 4.6.1 Setup views for video and text

Below is an example. Under **Views** add view group **POSWatchTest (4x3)**. To attach video camera and transaction source to the views, click button **Setup** on top right (Tips: for transaction source, left click **Transact** and **drag-and-drop** to the **empty view**, select/attach the transaction source from the source list).

#### Note

The Views for transaction source and the assigned camera are better to be side by side thus you could easily check the video and text simultaneously.



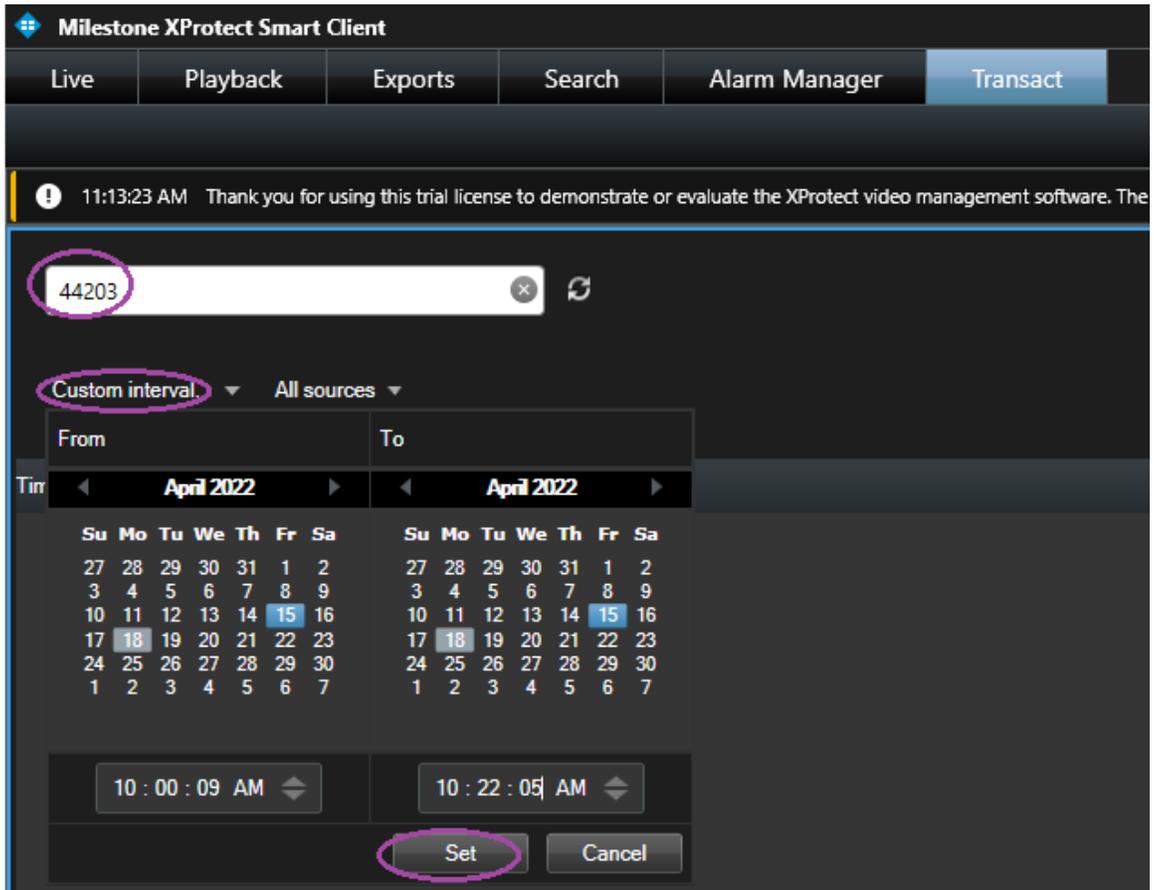
Sample MileStone xProtect Smart Client views for video and transaction source

#### 4.5.2 Search transaction data and display saved video and text

Click button **Transact** on top, enter keyword and specify **date/time** and click button **Set**. The POS transaction data text lines will be listed on left pane.

Click one of the transaction text lines in the list, the related video and text will show accordingly. You could play the clip to

Below is an example for how searching transaction and showing video and text work. The keyword is order number 44203, and time/date is from 4/15/22 10:00:09 AM to 4/15/22 10:22:05 AM. While choosing one of the records, the related video file and transaction text file will load and both show the timestamp.



Search transactions data/text lines

Milestone XProtect Smart Client 4/18/2022 11:26:32 AM

Live Playback Exports Search Alarm Manager Transact

11:13:23 AM Thank you for using this trial license to demonstrate or evaluate the XProtect video management software. The trial license expires on 3/...

44203

4/15/2022 10:00:09 AM All sources 1 - 2

Time	Source	Transaction line
10:01:27 AM 4/15/2022	Reg5Lane5Cam5TS	CLOSE CHECK: 44203
10:01:18 AM 4/15/2022	Reg5Lane5Cam5TS	BEGIN CHECK: 44203

Register5 - 4/15/2022 10:01:27.811 AM Lobby Ceiling

04-15-2022 Fri 09:01:00

0:01 AM 10:01:27.986 AM

```

<<Start>>
-- register: 5 --
SIGN IN: 1238

BEGIN CHECK: 44203
2022-04-15 10:01:18
Table/Emp ID: 2 1238
SWEET TEA 2.25
FRESH FRUIT SIDE 1.99
CLOSE CHECK: 44203
CASH:$4.24

SIGN OUT: 1238

```

Show saved video and text