

Security Management System Configuring ISS SecurOS ALPR Software Interface

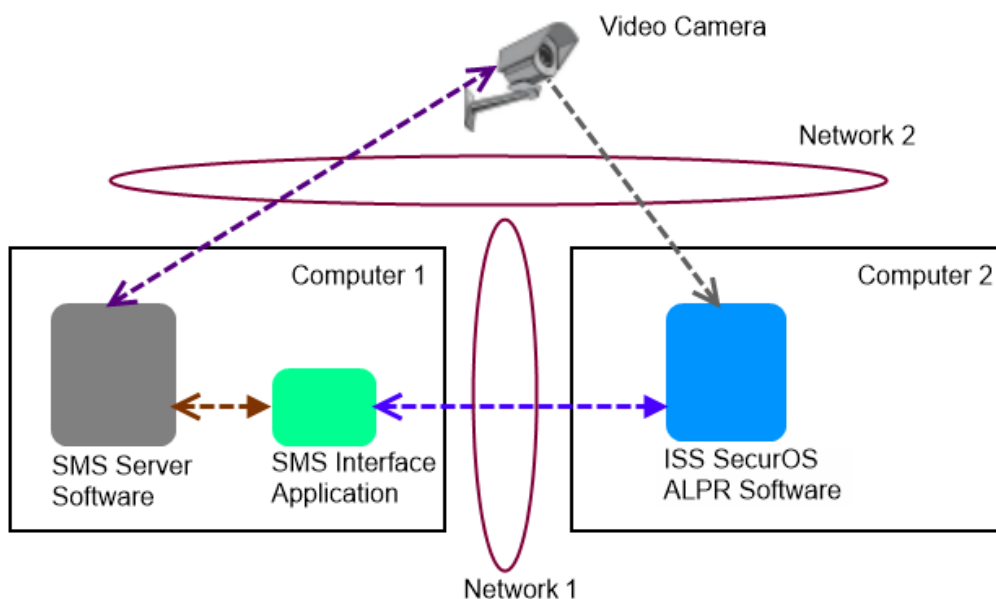
Introduction

Security Management System software is a true open platform VMS software solution. It provides interface for integration with several cameras, encoders, DVRs, video sources, CCTV keyboards, access control systems, building management systems, fire alarm systems, fence control systems, PLCs, 3rd party video analytics solutions, 3rd party face recognition solutions, 3rd party license plate recognition systems etc.

This document describes the steps to configure the integration between 'Security Management System server' software and 'ISS SecurOS license plate recognition (ALPR)' software.

Integrated System design

The integrated system works as follows –



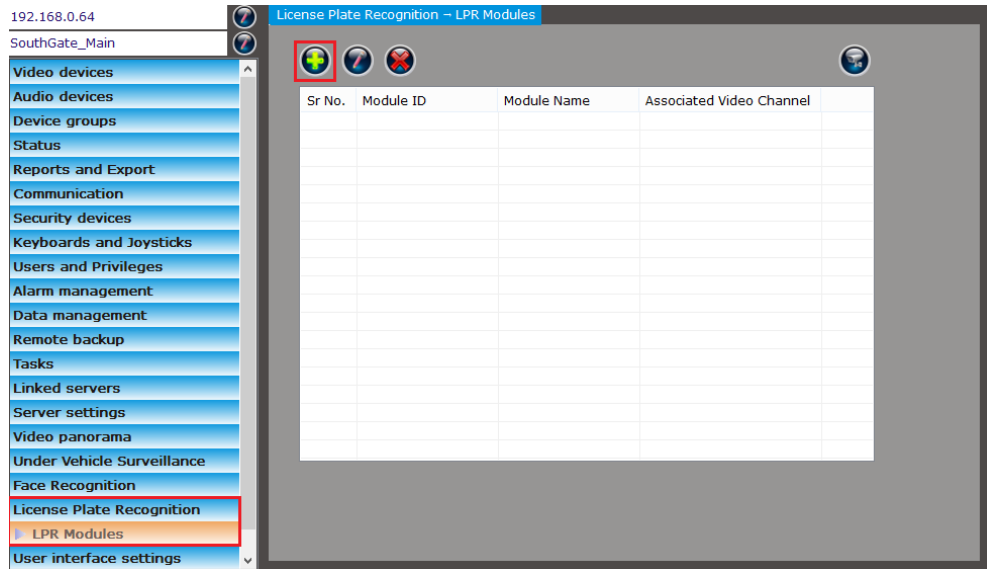
1. 'ISS SecurOS ALPR software' is installed on a separate computer. It captures video from the video camera independently.
2. 'Security Management System server' software is installed on a separate computer. The video camera is added to 'Security Management System server' software as a normal video source. 'Security Management System server' software communicates with the video camera independently.
3. 'Security Management System server' software installer includes 'SMS Integration Application'. This application runs on same computer where 'Security Management System server' software is running.
4. The 'SMS Integration Application' communicates with the 'ISS SecurOS ALPR software' through network
5. 'Security Management System server' software communicates with the 'SMS Integration Application'

Note – Network1 and Network2 can be separate networks or can be a part of a single network.

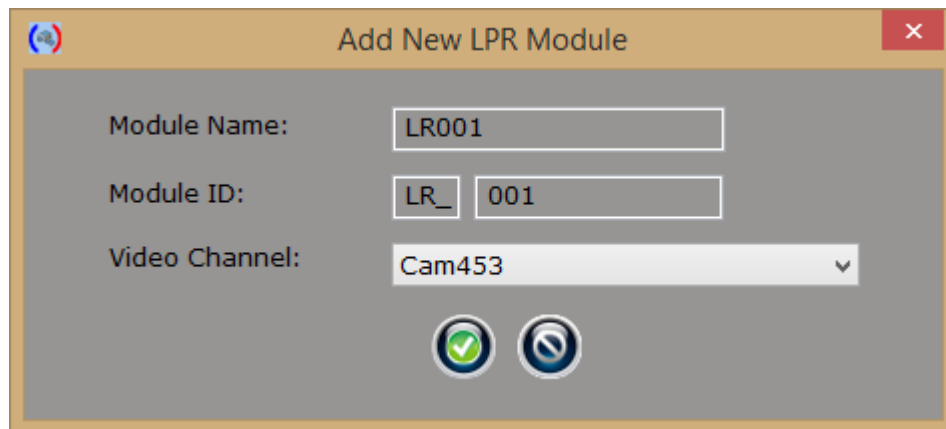
Important – Please refer to 'ISS SecurOS ALPR software' manual for hardware recommendations, and ensure that requirements are met by 'Computer 2' used in this system.

Configuring 'Security Management System server' software

1. Execute 'Security Management System Server' software.
2. Add required cameras to 'Security Management System Server' software. One of these cameras should be the IP camera used for 'License Plate Detection'. It is the same camera which is accessed by the ISS SecurOS ALPR software independently.
3. Navigate to the 'License Plate Recognition -> LPR Modules' page from the left-hand side navigation menu.

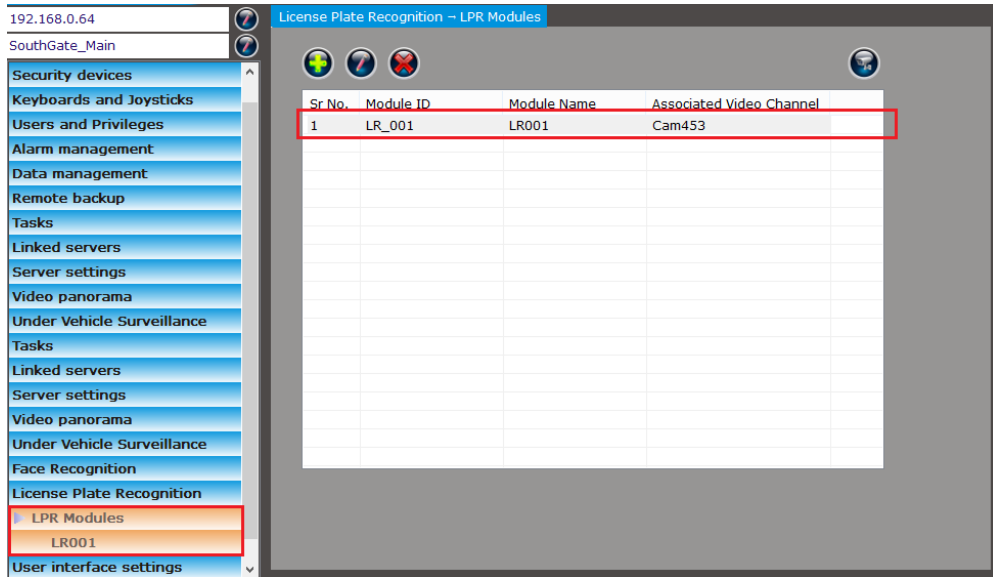


4. Click on the 'Add LPR module...' button. This will pop-up the 'Add New LPR Module' dialog box.

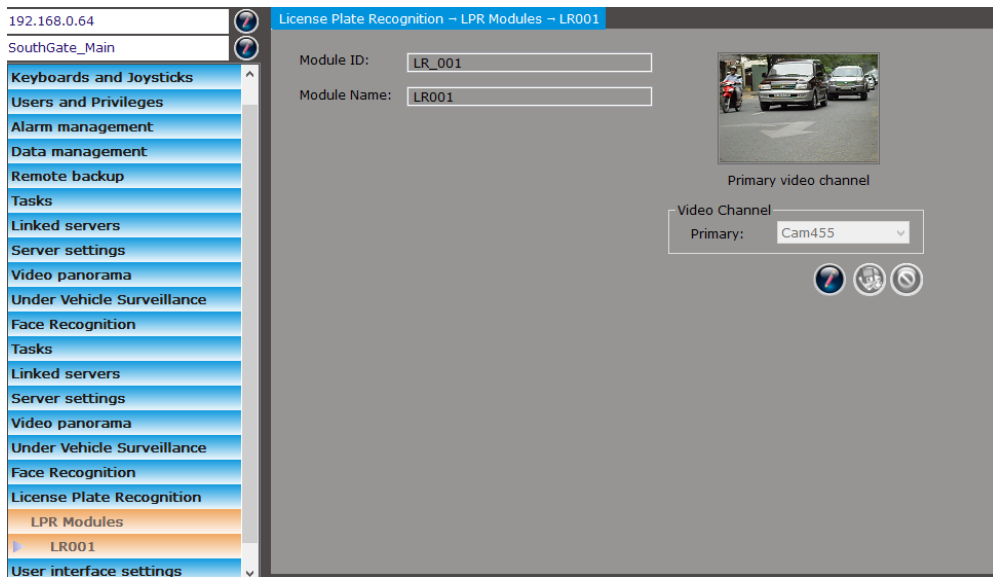


5. Provide the required inputs on the 'Add New LPR Module' dialog box.
 - (a) 'Module ID' is unique string which is internally used by the 'Security Management System server' software.

- (b) Please select 'Video Channel' which is must be same camera used in ISS SecurOS ALPR software for ALPR processing
- 6. Click on the 'OK' button to finish adding the LPR module
- 7. The newly added LPR module will be then displayed in list of the LPR Modules

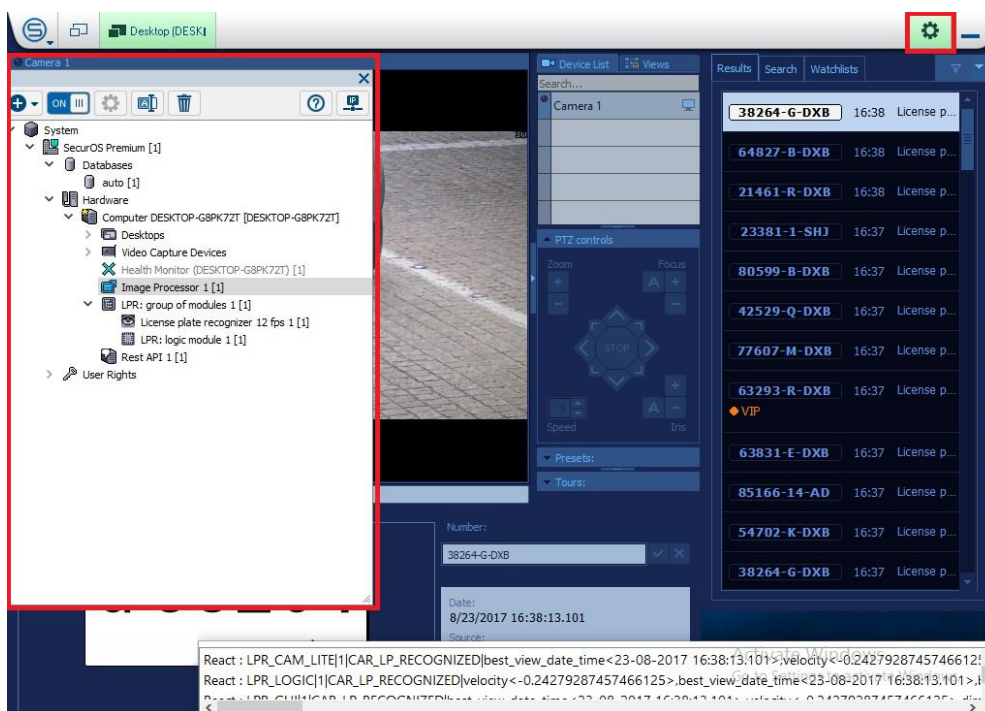


- 8. A separate link will be available for each of the added LPR modules. Clicking in the link will show the information about the LPR module, the video of the associated video channel. Video from the associated video channel will also be displayed on this page. If required, the associated video channel can be changed.

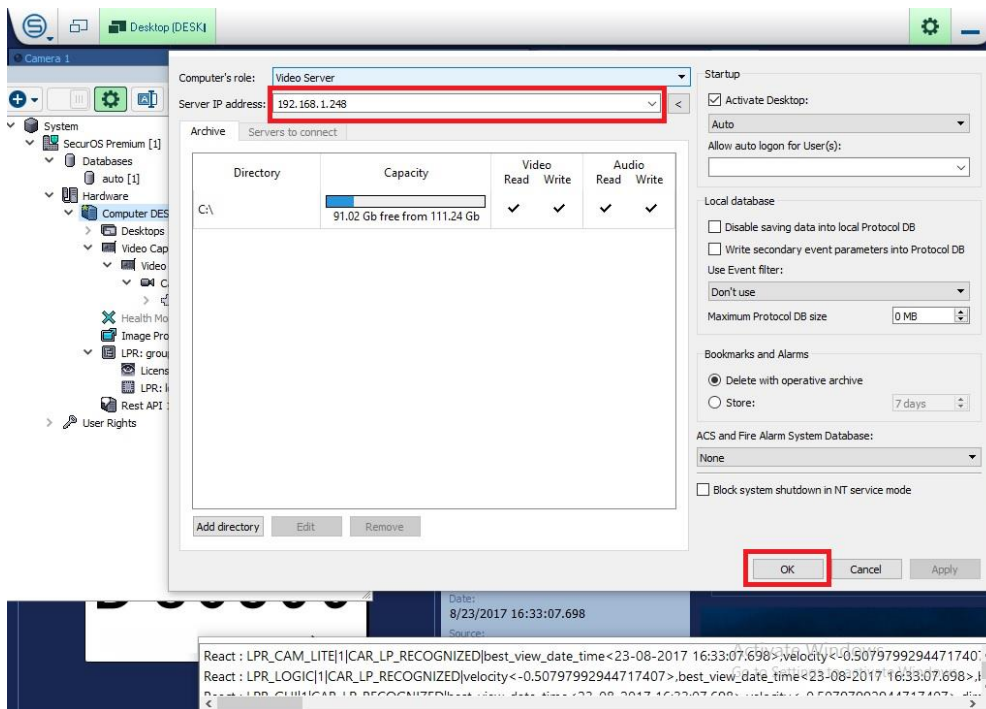


Configuring ISS SecurOS ALPR software

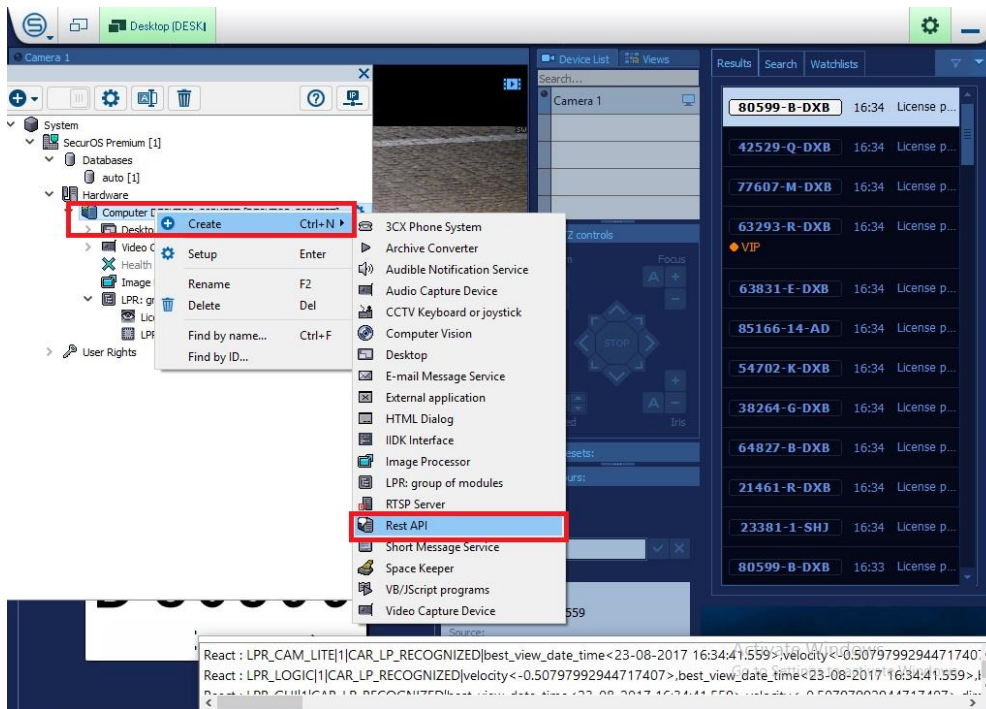
1. Configure camera in ISS SecurOS ALPR software for LPR detection. (Please refer to ISS SecurOS ALPR software documentation for the steps to add a camera and to configure it for ALPR)
2. Configuring IP Address - Click on 'Configure the system' button in 'ISS SecurOS ALPR software' as shown in image below, it will pop settings menu as shown in image.



3. Select 'Computer' node in tree control and click 'Enter' button. It will popup settings dialog as shown in images below, enter 'Server IP Address' (this is the IP address of the server computer on which ISS SecurOS ALPR software is running) and click on 'Ok' button



4. Configure 'REST API' - Right click on 'Computer' node, select 'Create' option, select 'Rest API'.



Provide 'Rest API' id and click 'Ok'.
This can be kept as default, which is 1.

Parameters of created object

ID:

Name:

Computer:

Provide 'Port Number' and click 'Ok'.
Select any available ports OR accept the defaults.

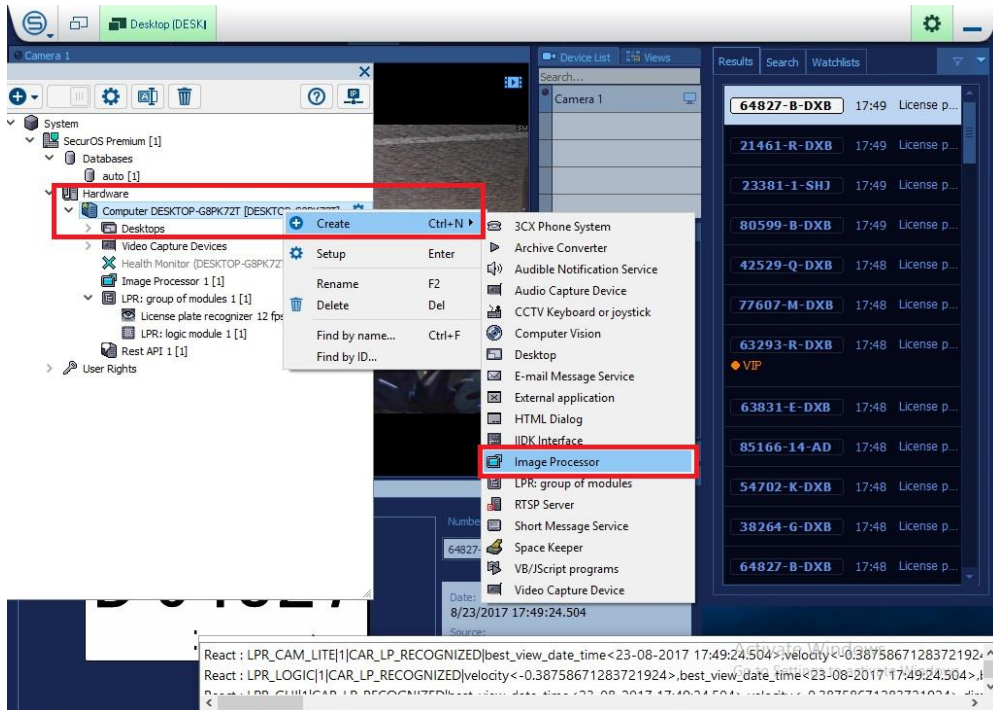
Port:

WebSocket port:

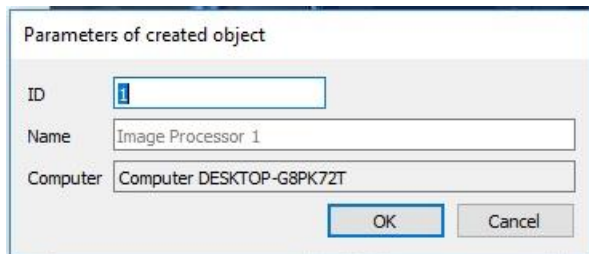
Use HTTPS

Use Event Filter:

5. Configure 'Image Processor' – Right click on computer node, select 'Image Processor'

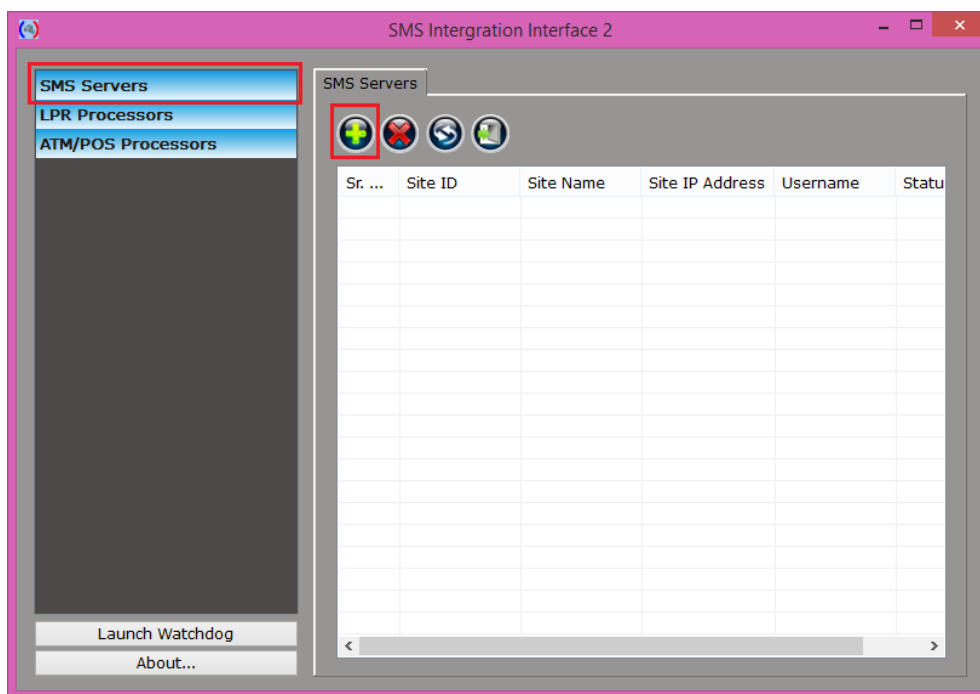


Provide parameters for 'Image Processor' and click 'Ok' button.
This can be kept as default, which is 1.

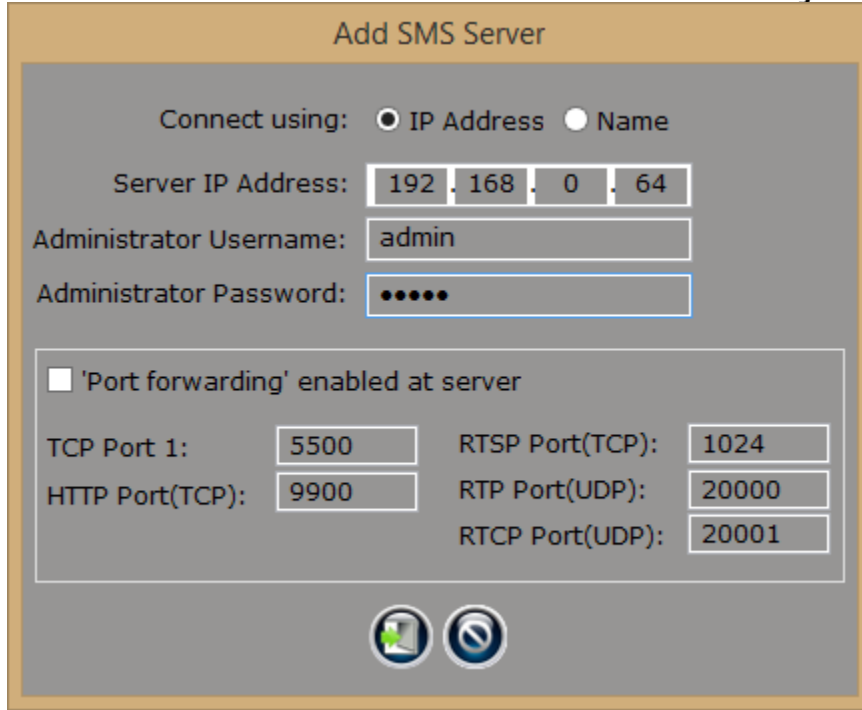


Configuring 'SMS Integration Interface' Application

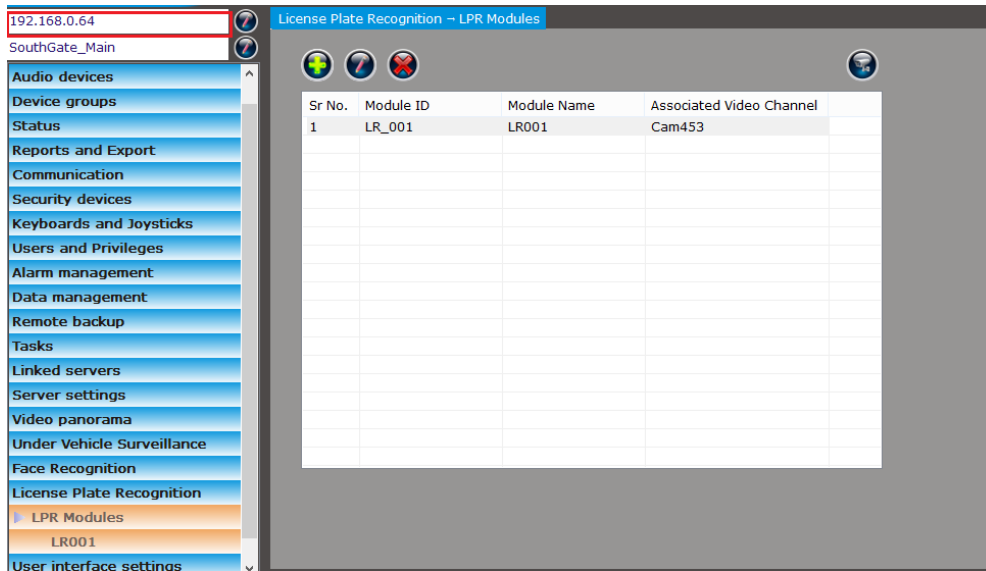
1. Execute 'SMS Integration Interface 2' application from the programs menu shortcut 'Security Management System -> Server -> Extension Apps -> SMS Integration Interface 2'



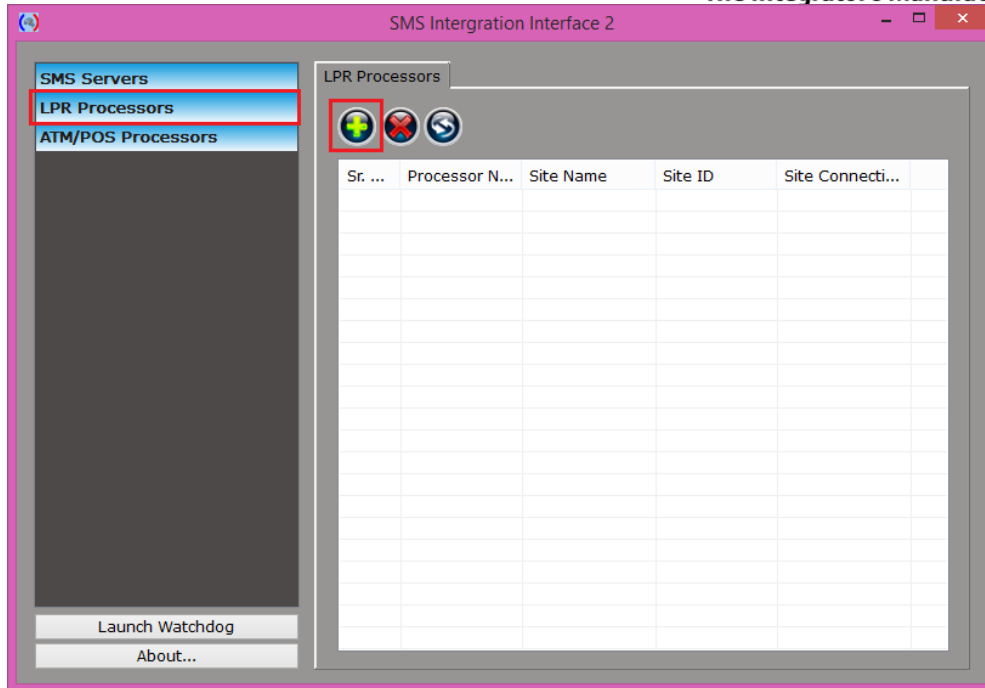
2. Navigate to the 'SMS servers' page from the left-hand side navigation menu
3. Click on the 'Add new site' button to add a new 'Security Management System server'. This will pop up 'Add SMS server' dialog box



4. Type the IP address of the 'Security Management System server' software. It is the IP address is displayed at the top-left corner in the 'Security Management System server' software.



5. Type the user name and its password to connect to the 'Security Management System server'. This user should have 'Administrator' privilege in the 'Security Management System server' software.
6. Navigate to the 'LPR Processors' page from the left-hand side navigation menu



7. Click on the 'Add' button to add a new LPR Processor. This will pop up 'Add LPR Processor' dialog box

Add LPR Processor

LPR Processor Type

LPR Processor Type: ISS SecurOS

LPR Processor Name: SecurOSSolution

LPR Software Connection Parameters

IP Address: 192 . 168 . 1 . 248

Port Number: 8888

Camera ID: 1

Associated SMS Server LPR Parameters

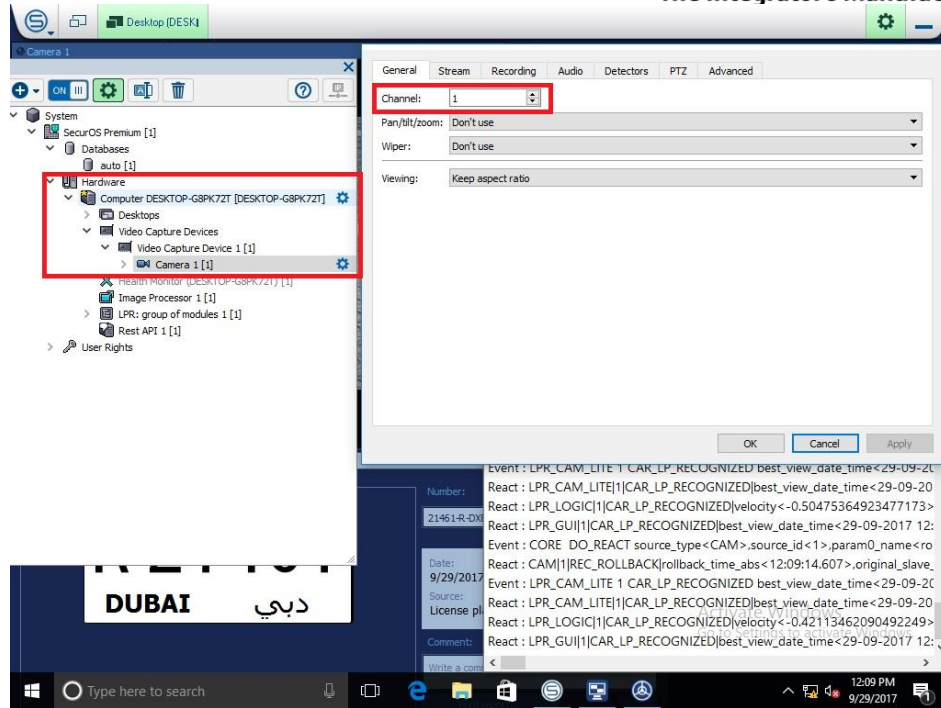
SMS Server: Kuldeep03(192.168.1.113)

LPR Module: LR001(LR_001)

8. Provide the parameters –
 - (a) Select 'LPR Processor Type' as 'ISS SecurOS'
 - (b) Type 'LPR Processor Name'. It can be any valid string
 - (c) Under 'LPR Software Connection parameters', provide valid IP Address, port number, camera ID.

IP address and port number indicate information for connecting to the ISS SecurOS ALPR Software.

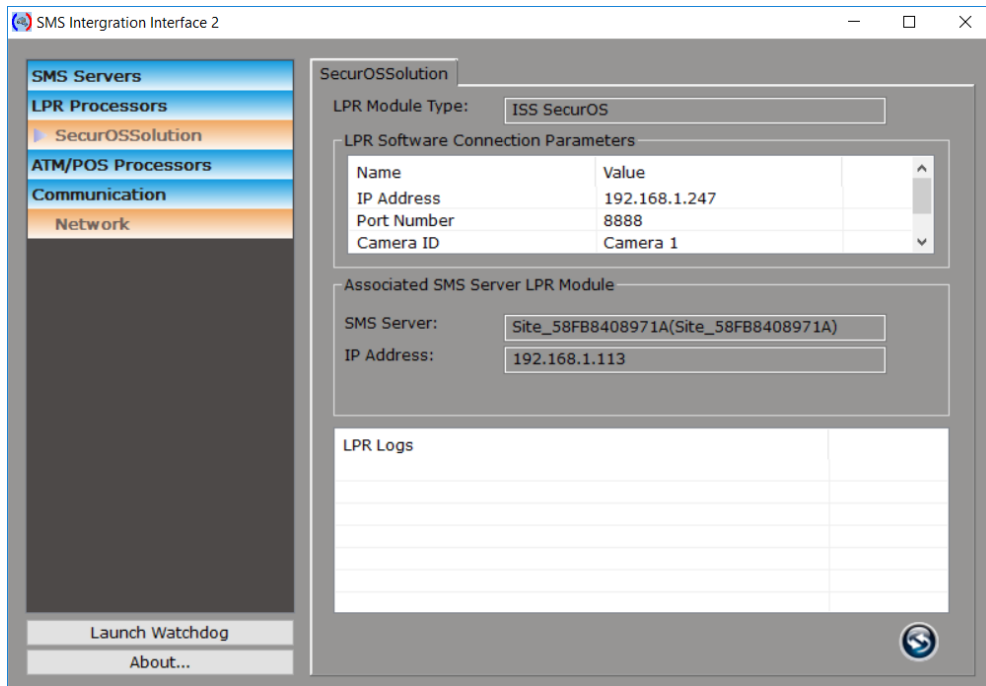
'Camera ID' is the ID assigned to the target camera in the ISS SecurOS ALPR software. Camera ID for a camera in the ISS SecurOS ALPR software can be obtained from the GUI as per the screenshot below



(d) Select the target 'SMS server' from the dropdown menu.

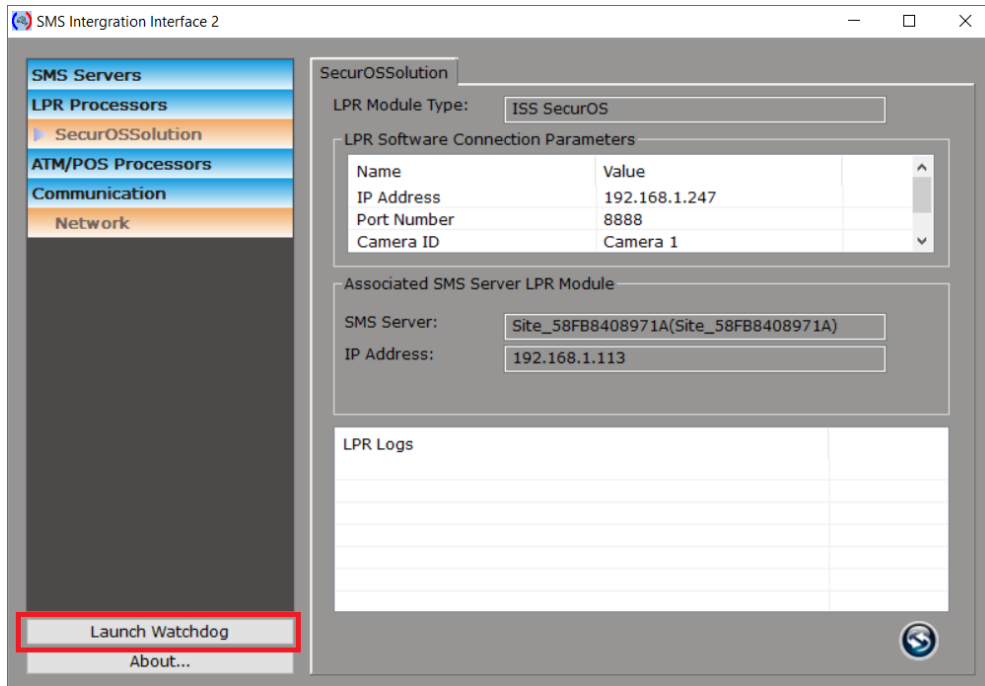
9. Click on the 'OK' button to finish adding the LPR processor.

10. Click on LPR Processor name on left hand side navigation menu



11. 'LPR Logs' list will display recent communication between associated software modules.

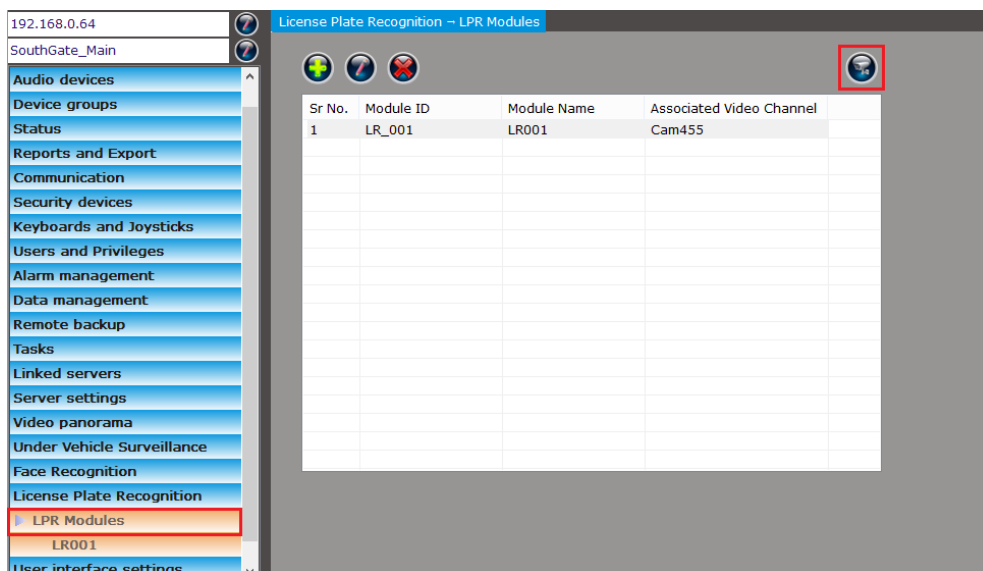
12. If the software is being set up for deployment, please click on the 'Launch watchdog' button to start the watchdog application.



A confirmation message box will be displayed. Click on the 'Yes' button to accept and to launch the watchdog application. Once watchdog application is started, it will also get added to computer's start-up. Hence watchdog and the 'SMS Integration Interface 2' will start automatically after computer reboot.

License Plate Detection Monitor Screen

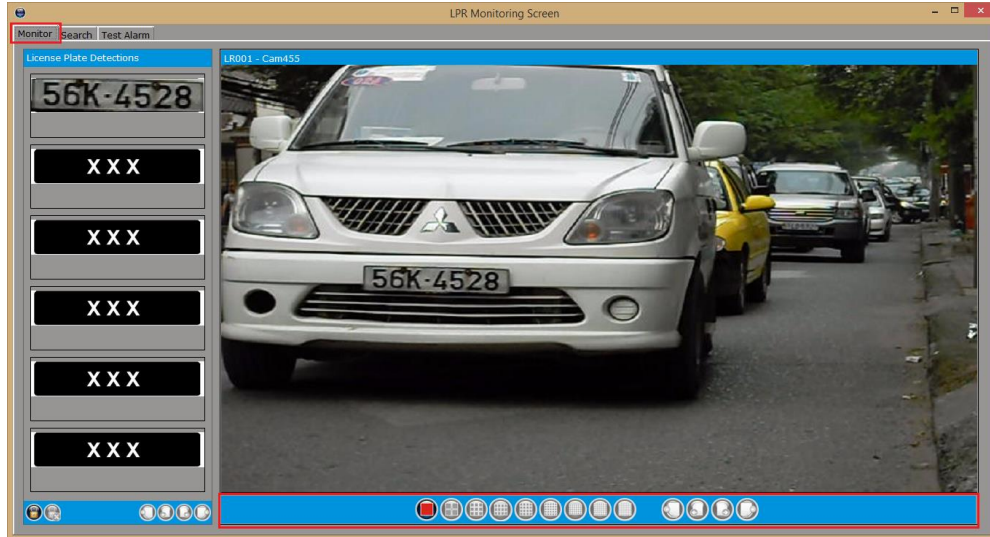
1. In 'Security Management System server' software, navigate to the 'License Plate Recognition -> LPR Modules' page from the left-hand side navigation menu.



2. Click on the 'View Monitor Screen' button to open the LPR monitoring screen.
3. The monitor screen has 3 tabs – 'Monitor', 'Search' and 'Test Alarm'

Monitor tab

1. The 'Monitor' tab has following user interface elements -



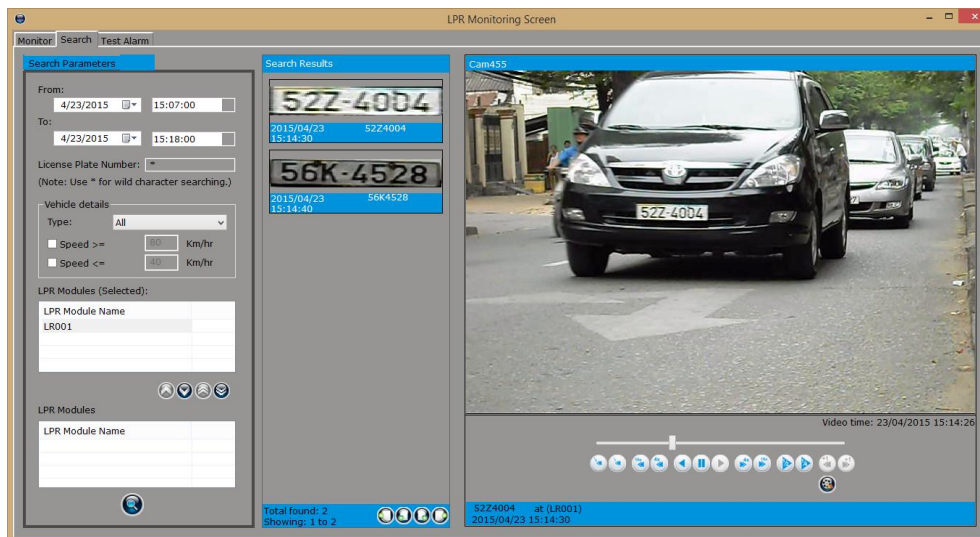
- (a) Live video display: Which displays live video feeds for the associated LPR modules on the right side of the screen. The video toolbar can be used to control the video displays.
 - (b) License Plate Detections: Which is available on the left side of the screen and displays the list of detected license plates. Right click on any of the detected license plate images and select 'LPR Event Details...' to view the 'details window' displaying larger size images and the details about the license plate.
2. 'License Plate Detections' list will be refreshed real-time and display the latest detections.
 3. To view earlier alarms from these lists, please click on the 'Freeze' button available in the control toolbar below the lists. This will enable the page navigation in the list.



4. The real-time list refresh will get disabled while 'Freeze' is in action. Please click on the 'Unfreeze' button to returns to the real-time view mode.

Search Tab

1. The 'Search' tab has following user interface elements –



- (a) Search Parameters section: Which is available on the left hand side. Search parameters can be provided in this section and new search can be initiated.
 - i. Search Time Duration – to specify the search time duration 'From' time to 'To' time
 - ii. License Plate Number – It supports wild card search by typing * character as wild card search string. Typing * as search string returns all detected license plates in selected time duration.
 - iii. Vehicle Details – Extra search parameters can be provided including type of vehicle and speed.
 - iv. LPR Modules – it is possible to select one or more LPR modules which will be included in the search operation.
 - v. 'Search' button is available at the bottom of this section. Clicking on the 'Search' button performs the search operation and displays the search results
- (b) Search Results section: Which displays the search results, as a list.
 - i. Any of the search result can be clicked to view the recorded video associated with license plate detected.
 - ii. Page navigation buttons are available at the bottom of the search results list.
 - iii. Right click on search result and select 'LPR Event Details...' to view 'Details window' which displays larger size image and extra information about detected license plate.

Test Alarm tab

The 'test alarm' tab is not used during normal operations. It is used during configuration and fine tuning of the system, for generating test / dummy data.