



# C2P Keyscan Bridge

Install and Use Manual  
Version 0.05

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## Preface:

The C2P Keyscan Bridge is an add-on middleware software component to the Keyscan Aurora access control system. The purpose of this add-on component is to provide a bridge between the Keyscan Aurora system and the OnSSI Video Management System. The key component of the C2P Keyscan Bridge middleware is the user configurable spreadsheet that is part of the C2P Keyscan Bridge GUI.

The user configurable spreadsheet allows the user to define Aurora commands along with the resultant actions to be executed by the Bridge when those commands are received. In the spreadsheet these commands are listed as the “Key” for each line of the spreadsheet. Each time a Key is received the Bridge checks each line of the spreadsheet starting at the first line and works its way down check each line of the spreadsheet for a match. With each match found the Bridge performs the action specified in that line of the spreadsheet.

## Key features:

- 1) Call up both live and recorded surveillance video from any camera in the OnSSI Enterprise.
- 2) Call up a single camera or multiple cameras with a single Keyscan Command as well as control camera PTZ presets.
- 3) Remotely control camera call up screens on multiple Aurora workstations with a single Aurora command.
- 4) Call up user defined procedures alongside video of access control events.
- 5) Users can switch between dynamic and fixed matrix viewing modes of operation.
- 6) Optionally set the camera call up screen to automatically minimize after a user defined number of seconds.
- 7) The C2P Keyscan Bridge provides a Keyscan workstation simulator to enable installers and users to quickly and easily test out the functional status of both the C2P Keyscan Bridge and the IPClient.

## Pre-install requirements:

The machine to be used for the install needs to be relatively current with Windows Updates.

PC workstation must have Ocularis Client installed prior to installing the C2P Keyscan Bridge

During the install temporarily disable antivirus software and drop the firewalls.

PC workstation should meet Ocularis Client hardware requirements.

Ability to temporarily set UAC to off while doing the install.

OnSSI VMS – Can be any version of Ocularis

Ocularis Base version 4.0 or higher.

For applications utilizing the Procedure capability of the integration a Universal camera license from OnSSI is required.

## Quickstart Procedure:

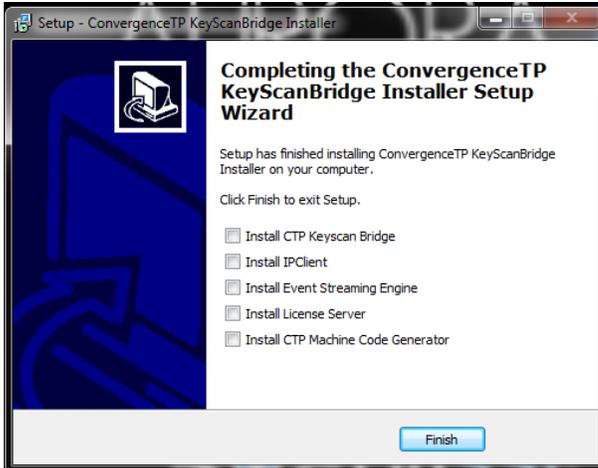
Most C2P Keyscan Bridge installs can quickly be done using the following steps.

- 1) Review the Pre-install hardware and software requirements. [Pre-install requirements:](#)
- 2) Run the C2P Keyscan Bridge Installer as described on page 4 [C2P KeyscanBridge Installer](#)
- 3) Assuming the default Ocularis admin/admin login credentials are valid for the initial test, the C2P Keyscan Bridge will work as shipped once the spreadsheet is modified to use actual Ocularis camera names. See [Dispatch List editing tools](#) for more detail on how to add or modify spreadsheet entries.
- 4) Configure the IPClient. Specifically the Ocularis IP address and login credentials. See [IPClient Settings GUI](#)
- 5) Ensure that the License Server is running. See [License Server Control Panel](#)
- 6) Test the C2P Keyscan Bridge using the Simulator located in the C2P Keyscan Bridge GUI. See [Demo Mode](#)
- 7) Test the C2P Keyscan Bridge using the Keyscan workstation.

## C2P KeyScanBridge Installer

The C2P KeyScanBridge Installer contains all of the software components needed.

*Note: Start the installer by using the mouse right click "Run as Administrator" option.*



## Keyscan Workstation Components

The first 3 components of the Installer are installed on the PC hosting the Keyscan workstation. Simply check off these 3 components and follow the default install prompts to completion.

### C2P KeyScan Bridge

This is the primary component of the integration. It interfaces directly with the Keyscan workstation and provides the user configurable GUI for the operation of the integration. This software is loaded on the PC hosting the Keyscan workstation.

### IPClient

The IPClient is the embedded version of the Ocularis client that is used to display the video being requested by the Keyscan workstation. This software is typically loaded on the PC hosting the Keyscan workstation but can also be installed on other PCs in the customer enterprise.

### Event Streaming Engine (Optional)

The Event Streaming Engine provides the user configurable Procedure capability for the integration. This software is installed on the PC hosting the Keyscan workstation.

## Ocularis Base Components

These 2 software components go onto the machine hosting Ocularis Base.

*Note: The Machine Code Generator does not actually get installed. It simply runs at the end of the install and provides a unique machine code that is used to license the product to this workstation.*

### License Server

The license server is installed on the machine hosting Ocularis Base.

### C2P Machine Code Generator

The Machine Code Generator is only run during install on the machine that will be hosting the License Server. Simply cut-n-paste the code returned and email it to [sales@C2p.com](mailto:sales@C2p.com). See sample code below.



# C2P Keyscan Bridge Settings GUI



The screenshot shows the C2P Keyscan Bridge Settings GUI. At the top, there are several input fields for configuration: Dispatch Listen Port (7213), IP Client Listen Port (7209), ESE Host (127.0.0.1), and Procedure Port (6664). There are also checkboxes for "Fixed Matrix" and "Demo Mode" (with a "Simulator" button), and a "Procedure Settings" button labeled "Edit Procedures".

The main section is the "Dispatch List" spreadsheet:

Key	Client	ViewPort1	ViewPort2	ViewPort3	ViewPort4	ViewPort5	ViewPort6	Auto Reset	Procedure
341	127.0.0.1	CTP Overview1							
342	127.0.0.1	CTP Overview1	CTP Camera2						
343	127.0.0.1	CTP Overview1	CTP Camera2	Procedure					M2M Alert1
345	127.0.0.1	CTP Overview1	CTP Camera2	Procedure	RTC				
344	127.0.0.1	CTP Overview1	CTP Camera2	Procedure	RTC				M2M Alert1

Below the spreadsheet are three buttons: "Edit Dispatch Entry", "Delete Dispatch Entry", and "Add Dispatch Entry".

At the bottom, there are sections for "Ocultate Client" (with "User Credentials" and "Refresh Cameras" buttons), "IPC\_Dispatch Service" (with "Running" status, "Start", "Stop", "Enable Logging", and "View Log" buttons), and "Settings" (with "Help", "Save", and "Exit" buttons).

## Dispatch List

The Dispatch List is the spreadsheet portion of the GUI. It is here where the user is able to assign specific actions to the “Key” being received from the Keyscan workstation.

**Key** – Unique numeric command sent by the Keyscan workstation

**Client** - This is the IP address of the PC hosting the IPClient that will be updated as a result of the Key for that row of the spreadsheet being received. Normally the IPClient is located on the same PC as the Keyscan workstation but that is not a requirement.

**ViewPort** – Viewports 1 – 6 are the locations in the IPClient where camera video is to be put as a result of the command key for that row in the spreadsheet being received. The viewports are numbered from left to right and from top to bottom. For example: In a 2x2 screen the top left is viewport1 and the bottom right is viewport4.

**Auto Reset** – Auto Reset is an optional numeric value that if present determines how long in seconds the IPClient will be visible before it minimizes to the tray. For example: if the Auto Reset column contains a 10 the IPClient will minimize to the tray automatically after 10 seconds.

*Note: Auto Reset only applies when Fixed Matrix is NOT selected.*

**Procedure** – The procedure field allows for an optional user defined procedure to be displayed for that row. For more detail see [Procedure Settings](#)

## Dispatch List editing tools

Directly beneath the Dispatch List Spreadsheet are 3 buttons used to edit and create entries in the spreadsheet.

*Note: Anytime something is changed in the Dispatch List the user MUST select Save in the bottom right of the form and also Stop then Start the Dispatch Service also located at the bottom of the form.*

**Edit Dispatch Entry** – Allows the user to edit an existing spreadsheet entry. In order to use Edit Dispatch Entry the “Key” for that row in the spreadsheet must be selected. After selecting Edit Dispatch Entry the button name changes to Save Dispatch Cameras.

The only way to leave Edit Dispatch Entry mode is to select Save Dispatch Cameras.

**Delete Dispatch Entry** – Allows the user to delete a spreadsheet entry. In order to use Delete the “Key” for that row in the spreadsheet must be selected.

**Add Dispatch Entry** - Allows the user to Add a new spreadsheet entry. In order to use Add Dispatch Entry the “Key” for that row in the spreadsheet must be selected. After selecting Add Dispatch Entry the button name changes to Save Dispatch Cameras.

The only way to leave Add Dispatch Entry mode is to select Save Dispatch Cameras.

## Processing Defaults

Processing defaults selects between Fixed Matrix mode and Dynamic mode.

The default mode is Dynamic mode which allows the IPClient to select the screen layout based on the number of cameras being requested and also allows the IPClient to be brought up from the tray automatically and even minimized automatically if the Auto Reset feature is used.

Fixed mode maintains a constant fixed screen layout based on the screen layout defined in the IPClient settings GUI. In Fixed mode the viewport that a camera is placed in within the spreadsheet becomes critical because only that viewport will be effected by the Key for that row in the spreadsheet being received = fixed video matrix functionality.

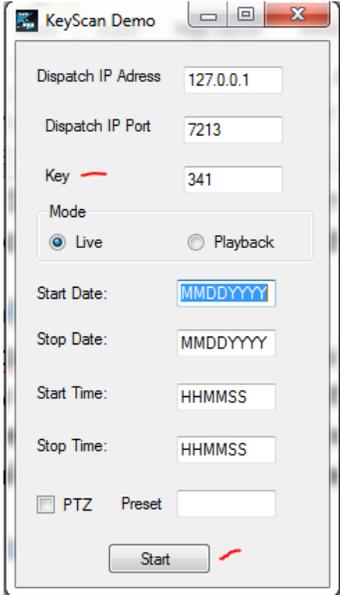
If fixed mode is selected in the C2P Keyscan Bridge GUI then it MUST also be selected in the IPClient Settings GUI. Anytime Fixed mode is selected or deselected in either the Bridge or IPClient GUI the GUI settings MUST be Saved using the Save button in the lower right corner of the GUI. In addition if changes are made in the GUI the Service MUST also be stopped and Started using the buttons found in the GUI.

## Demo Mode

The C2P Keyscan Bridge GUI contains a Keyscan workstation simulator. The purpose of the simulator is to provide a way to quickly and easily setup and test the Dispatch List spreadsheet entries. The simulator allows the user to manually type in the command Keys to be executed by the Dispatch List spreadsheet. The user can also test browse mode functionality as well as any PTZ presets being used by the Keyscan workstation.

The most common test is to simply type in the Key to be tested and then select Start. If the Bridge and IPClient services are running and the Key sent matches a Key in the Dispatch List then the IP Client will display the cameras specified by that Key.

In the screenshot below the Key 341 is being sent to the C2P Keyscan Bridge as a test.



The screenshot shows the 'KeyScan Demo' application window. It contains the following fields and controls:

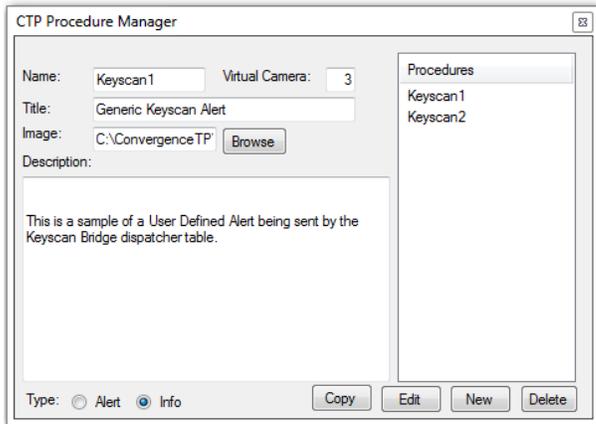
- Dispatch IP Address: 127.0.0.1
- Dispatch IP Port: 7213
- Key: 341
- Mode: Live (selected), Playback
- Start Date: MMDDYYYY
- Stop Date: MMDDYYYY
- Start Time: HHMMSS
- Stop Time: HHMMSS
- PTZ Preset: [checkbox] PTZ Preset [text box]
- Start button: [button] Start

## Procedure Settings

The use of Procedures as part of the C2P Keyscan Bridge is completely optional.

If Procedures are to be used then an additional camera Universal Camera license from OnSSI will be required. The setup for the Universal Camera is covered in [ConvergenceTP Virtual Camera setup Procedure](#) at the end of this document.

To edit and add new procedures the C2P Keyscan Bridge GUI provides a Procedure Manager tool. The tool is available in the top right corner of the C2P Keyscan Bridge GUI.



### C2P Procedure Manager fields.

**Name** – Name refers to the name of the Procedure as it will be recognized in the Procedure column of the C2P Keyscan Bridge spreadsheet.

**Virtual Camera** – Virtual Camera is the Universal Camera number that this procedure will use for display. Universal cameras come as a single camera or more commonly in groups of 16 or 64 cameras. Because these Universal cameras use only a single IP address only a single camera license from OnSSI is needed per IP address. In the example above that procedure is using camera 3 in a 16 channel universal camera license. Often specific doors or locations are given their own Universal camera that is dedicated for that use.

**Title** – Title is the name of the Procedure that will show up in the camera view of the Procedure of the IP Client. See IP Client screenshot above right.

**Image** – User can browse for images to use as part of their procedure.

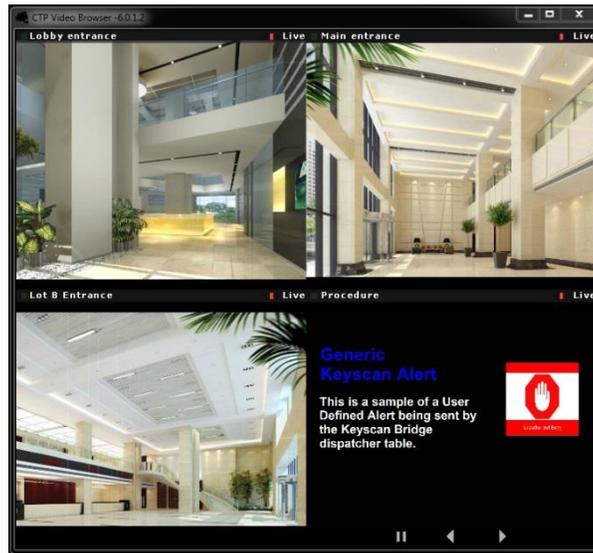
**Description** – Description is the text users add to their procedure.

**Type** – Type provides the user with 2 types of procedures to choose from. An Alert type makes the text for the title of the procedure red during playback and Info type makes the text for the title blue.

**Procedures** – The Procedures window provides a list of the existing procedures that have been created.

#### Note on using the Procedure Manager:

*Always remember to select the action at the bottom of the procedure manager tool prior to adding or editing procedures. For example: In the sample screenshot above if you wanted to edit the procedure shown you must first select Edit before attempting to edit the Keyscan1 procedure.*

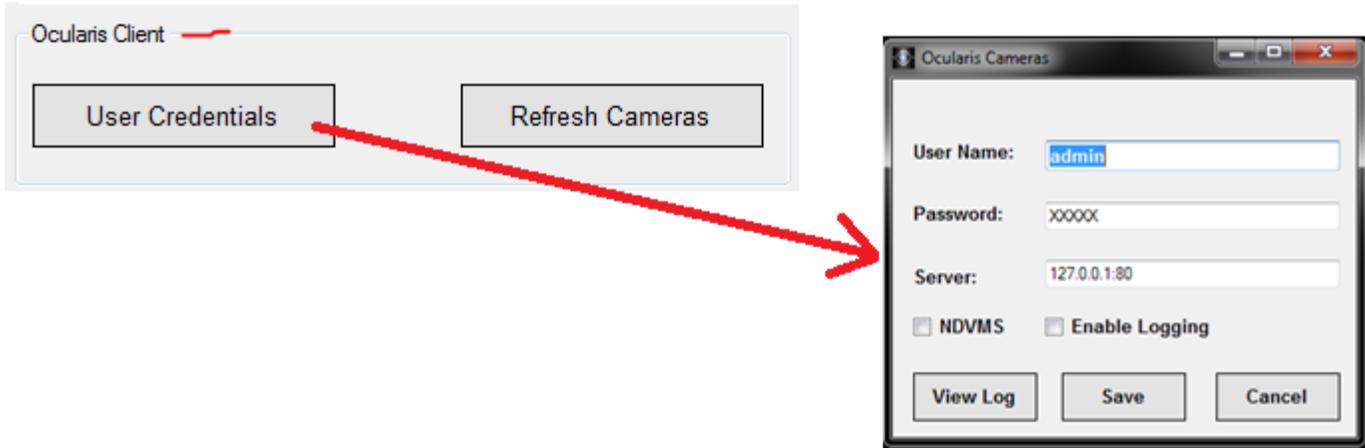


## Ocularis Client

Ocularis Client in the C2P Keyscan Bridge GUI allows the user to specify what Ocularis login credentials will be used by the C2P Keyscan Bridge GUI to log into Ocularis. The Bridge uses this login to provide a dropdown to select the cameras to be added to the Dispatch spreadsheet.

*Note1: The Ocularis IP address and login credentials need to be the same in both the C2P Keyscan Bridge GUI and the IPClient GUI. See IPClient Settings GUI screenshot in the next section below.*

*Note2: After any changes are made to the Ocularis Cameras setting screen below you must select Save before exiting and then select Refresh Cameras so the new credentials will be used for the login process to update the cameras available for the new login credentials.*

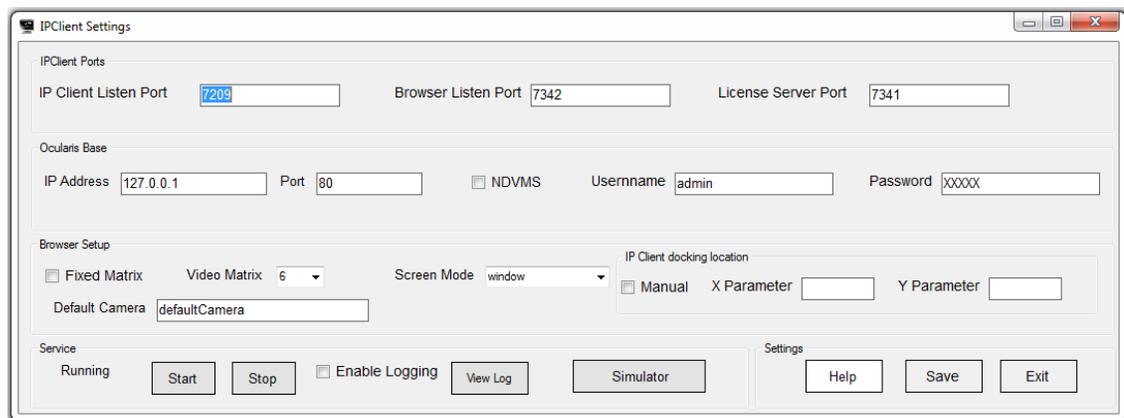


## IPClient Settings GUI

The IPClient is the embedded Ocularis client application that provides the camera display screen.

Unlike the C2P Keyscan Bridge GUI the setup for the IPClient is normally done once during the install process and not touched again.

*Note: Any changes made in the IPClient Settings GUI require the GUI page to be saved using the Save button in the bottom right and also the IPClient Service will need to be stopped then restarted before the change will be recognized.*



**Ocularis Base-** This is where you specify the IP address for the Ocularis Base as well as the username and password to be used by the IPClient to login.

*Note: the IP address and login credentials used in IPClient must equal the IP address and credentials specified in the Ocularis Cameras screen in the C2P Keyscan Bridge see [Ocularis Client](#) above.*

**Browser Setup** – Browser Setup allows the user to specify either Fixed Matrix Mode or Dynamic mode for viewing. If Fixed Matrix mode is checked then the user also needs to select how many cameras will be part of the fixed matrix display. If Fixed Matrix mode is selected here it must also be selected in the C2P Keyscan Bridge GUI as well. The default mode is Dynamic.

Users can also select between Windowed mode and Full Screen Mode in Browser Setup as well.

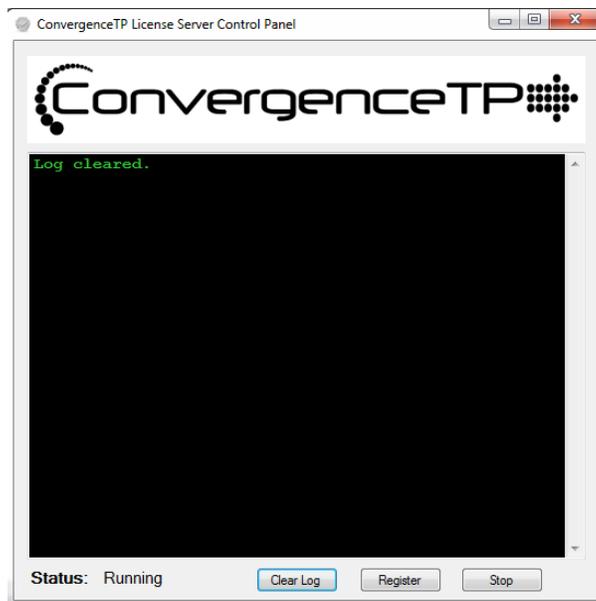
## License Server Control Panel

The License Server is installed on the same machine as Ocularis Base. It is therefore critical that the C2P Machine Code Generator be installed and run on the machine hosting Ocularis Base.

By default the license server will run for 30 days without looking for a license file so a license file is not needed during this initial 30 day period. Once you receive your license file from [Sales@c2p.com](mailto:Sales@c2p.com) you will then need to load that license using the License Server Control Panel.

To load the license file simply select “Register” on the License Server Control panel and then follow the onscreen instruction to load your license file and register the license.

*Note: Anytime the license file is updated it is important to stop then start the license server again using the Stop/Start button on the License Server control Panel. See screenshot below.*



## Sample Command prompt syntax

### Live mode

```
K2OB -s192.168.1.19:7213 -mlive -c1
```

### Playback mode

```
K2OB.exe -s192.168.1.19:7213 -c341 -mplayback -d03022015 -o03022015 -b132600 -e132700
```