visual engineering
LIGHTWARE

Visca protocol LARA Driver

Ver. 1.2.0

Installation Manual

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1. Introduction

This document is created to help integrators creating LARA configuration includes PTZ Camera control with Visca protocol. It is possible to define the communication mode and the speed of PTZ movements in this version (1.1.1) of Visca driver of LARA.

The system's main components are:

Lightware UCX/MMX2 Universal Matrix Switcher,

PTZ camera, that can be controlled via Visca protocol (RS232 / Ethernet UDP).

The room automation is done by Lightware Advanced Room Automation (LARA). It is a modular system which includes drivers for the equipment applied in the system. In this case a Visca protocol driver V 1.2.0. is used.

2. Installation and Configuration

2.1. Installation

Minimum equipment requirement for the solution:

- Lightware UCX / MMX2 Universal Matrix Switcher (FW: v2.9.0b6)
- PTZ camera controllable via VISCA protocol
- Ethernet network switch
- Cables

Before uploading and configuring the Visca driver Ver.1.2.0 please download the latest Firmware from https://lightware.com/. Upgrade your UCX/MMX2 Universal Matrix Switcher and activate LARA.

For further information please refer to the user manuals:

https://lightware.com/pub/media/lightware/filedownloader/file/User-Manual/Taurus_UCX_series_Users_Manual.pdf

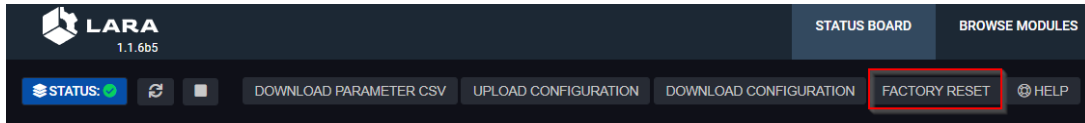https://lightware.com/pub/media/lightware/filedownloader/file/User-Manual/LARA_Users_Manual.pdf

https://lightware.com/lara/

2.3. Creating a new configuration with Visca driver

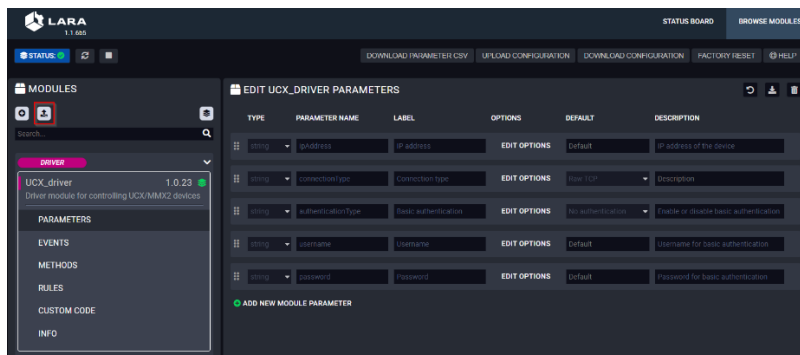### 2.3.1. Uploading module to LARA config

Start new, empty configuration in LARA. It can be done with pressing FACTORY RESET:

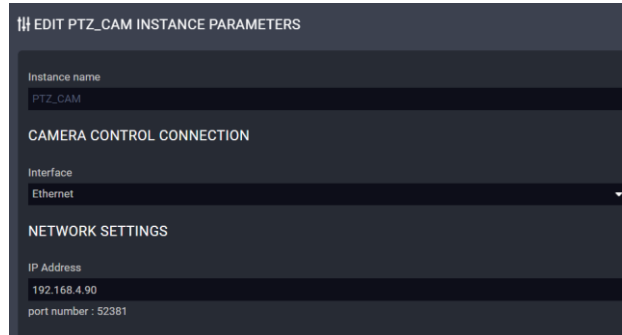Create a new UCX/MMX2 module and an instance from it.

After these steps above please upload the Visca driver V1.2.0. with selecting 'Upload module' menu item and create a new instance from it.

As the next step the configuration of the existing module can be done.

2.4. Configuration

2.4.1. Setting parameters of PTZ_CAM instance created from Visca Driver:

It is possible to choose Ethernet (UDP) or RS232 control options.

In case of choosing Ethernet option please set the IP address of the camera.

After choosing to use RS232 option please set the baud-rate matching the camera settings and the port number of UCX/MMX2 to connect the PTZ camera.
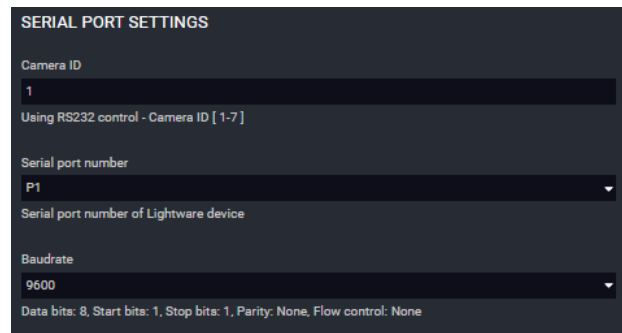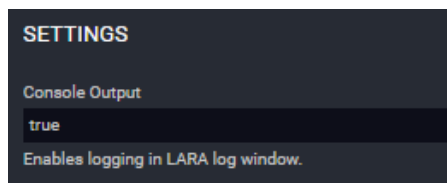

The PTZ movement speed can be adjusted in the PAN TILT SETTINGS.

These parameters define the speed of PTZ movement in case of using methods of Visca driver.
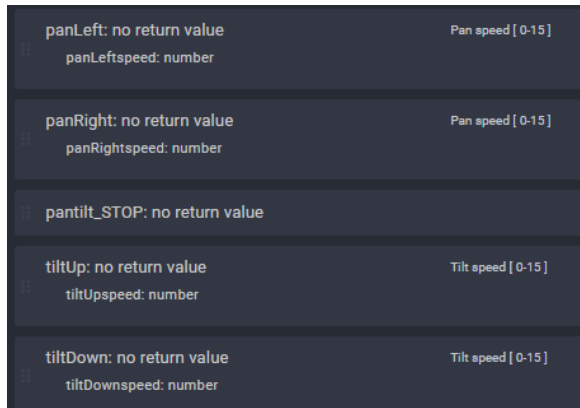
Console output settings enables the LARA console log messages. It helps following the operation, and helps debugging.

If the configuration runs, and the IP address settings are properly done all of the status sign should be green on the left side of each instance's status section like in this example:
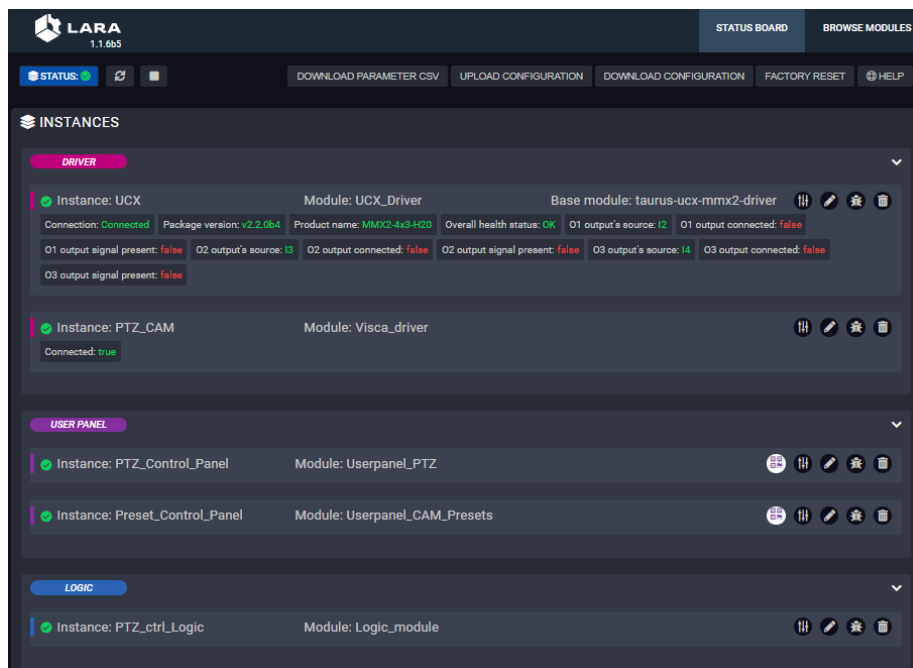
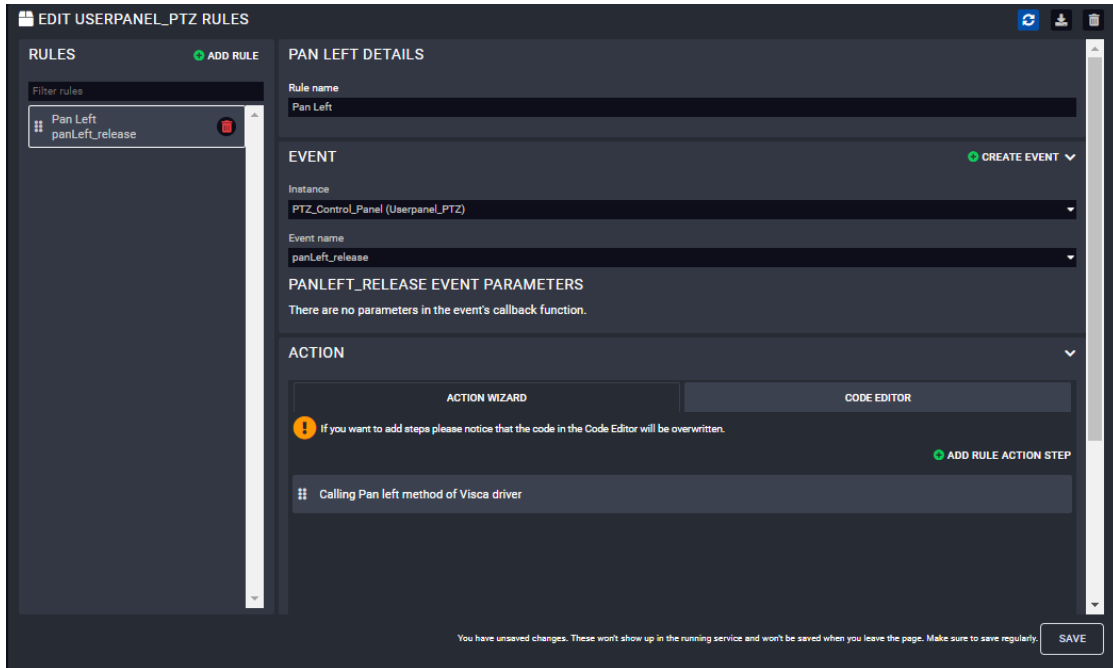Now the demo system is ready to start to control the PTZ camera.

3. Operation

3.1. PTZ movement and Camera Preset functions

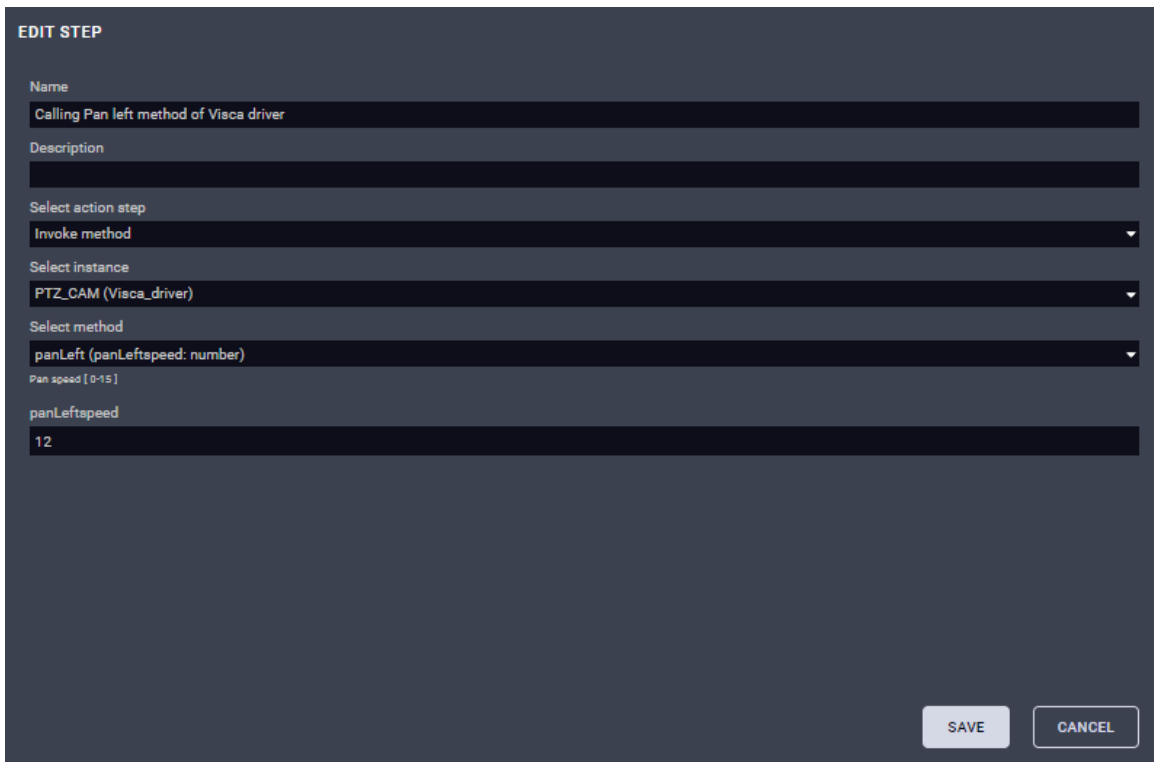### 3.1.1. PTZ operation

PAN movement example:

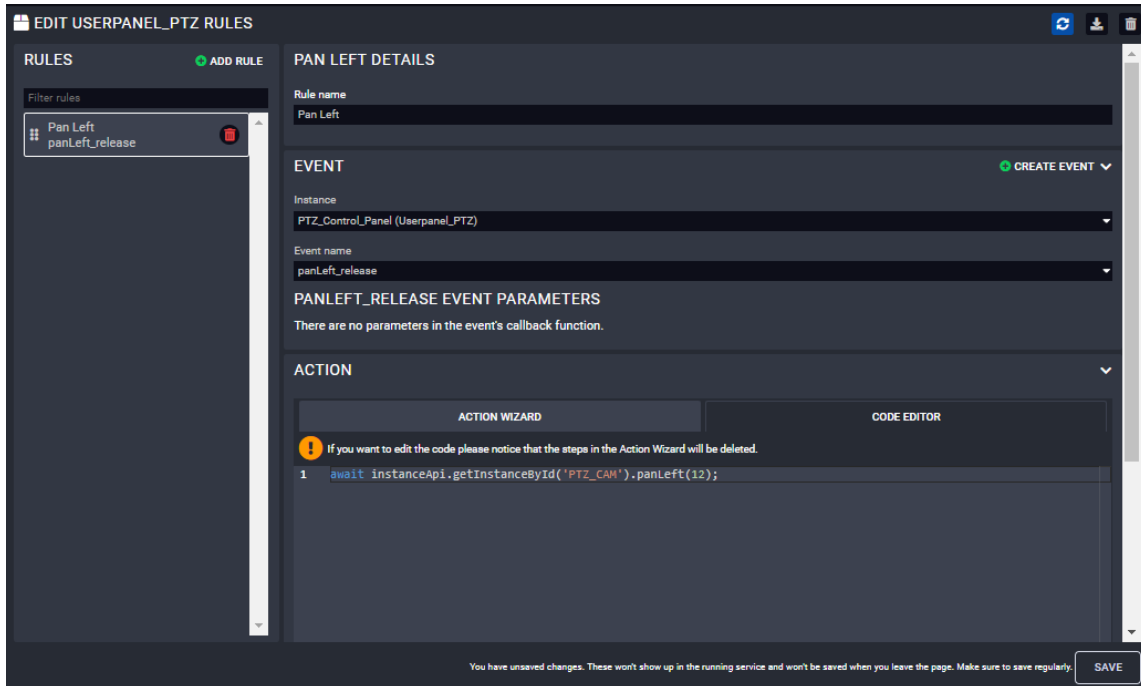Create a rule in the PTZ control panel which is triggered by pressing the 'PAN left' button on a touch panel:

With the help of ACTION WIZARD create a RULE ACTION STEP:

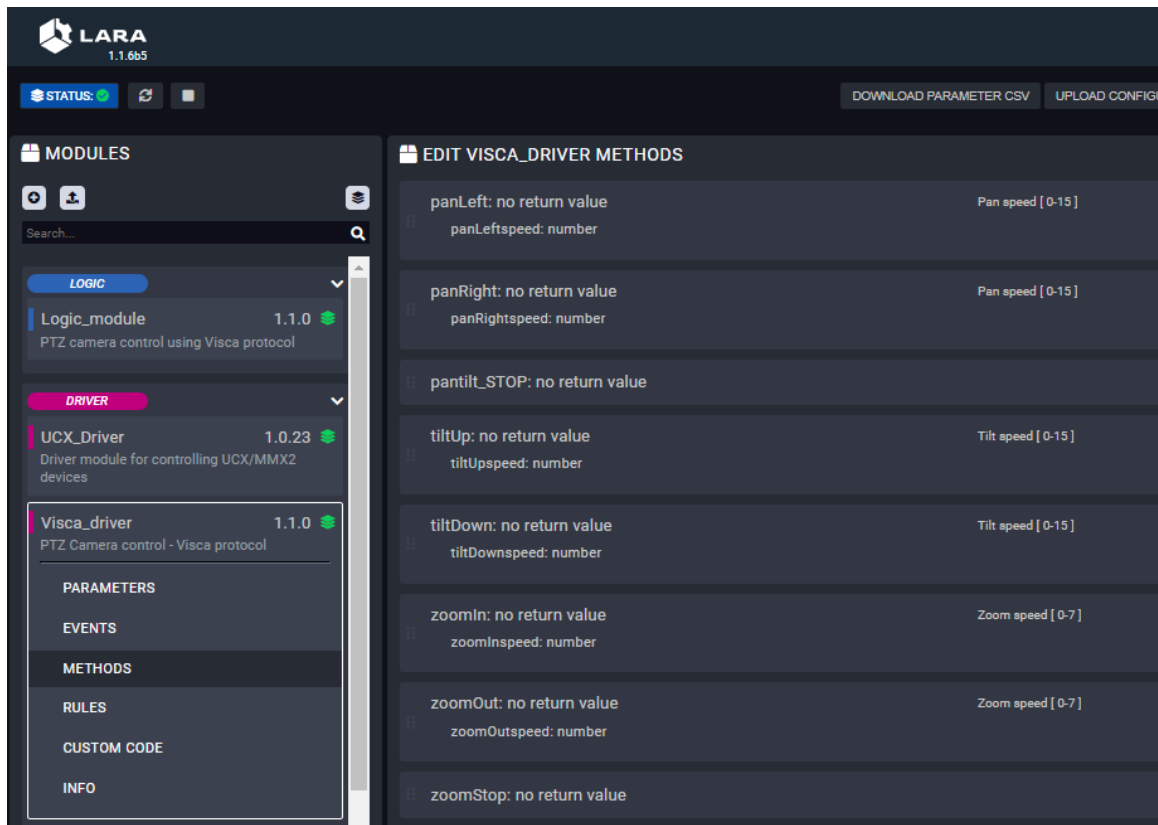In this example: PTZ_CAM is the name of the instance created from the Visca Driver.

It is possible to create this RULE ACTION STEP in the CODE EDITOR SECTION as well:

In this example: PTZ_CAM is the name of the instance created from the Visca Driver.
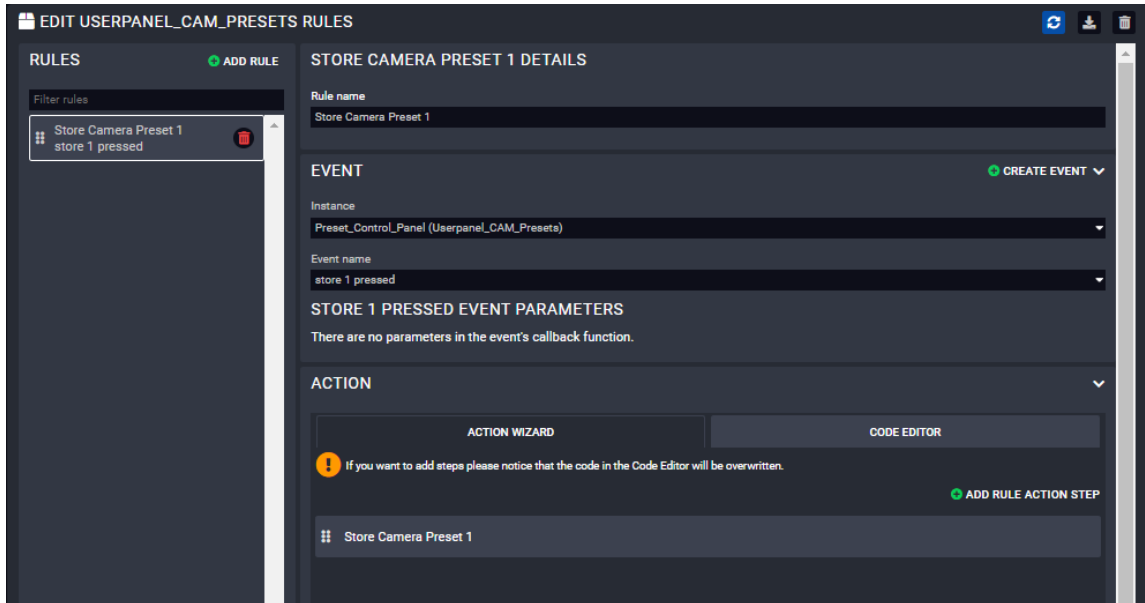
Please follow steps above for creating other action steps for another PTZ movements by calling other methods of Visca driver of LARA:
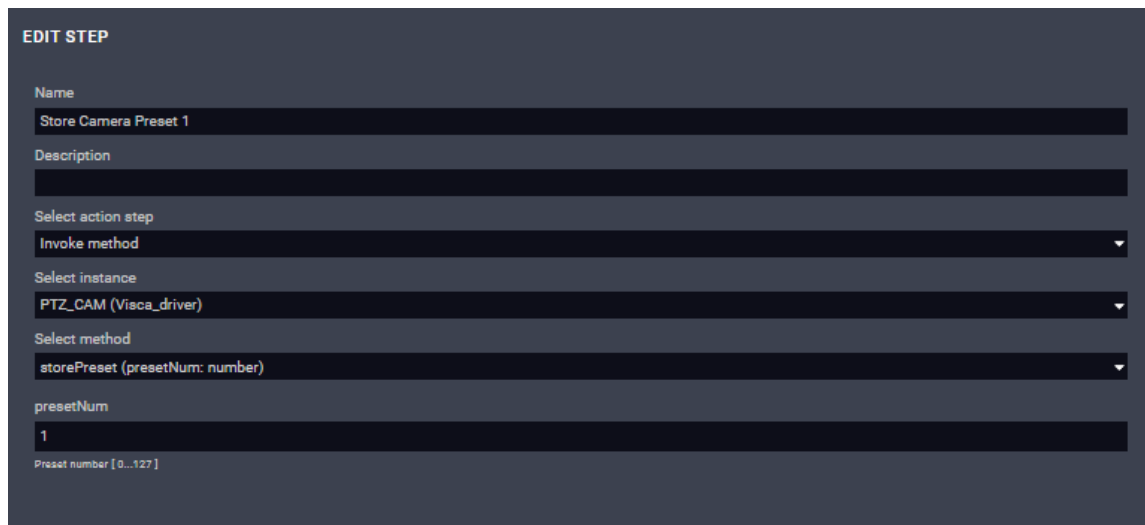
3.1.2. PTZ Preset functions

Store preset example:

Create a rule in a PTZ control panel which is triggered by pressing the 'STORE' button on a touch panel:

With the help of ACTION WIZARD create a RULE ACTION STEP:

In this example: PTZ_CAM is the name of the instance created from the Visca Driver.

It is possible to create this RULE ACTION STEP in the CODE EDITOR SECTION as well:

In this example: PTZ_CAM is the name of the instance created from the Visca Driver.

Please follow steps above for creating action steps for recalling preset function by calling the other method of Visca driver of LARA:

4. Appendix

4.1. Document history

Rev.	Release date	Changes	Editor
v1.0	27-09-2022	Initial version	Péter Szabó 3
v1.1	04-05-2023	Speed parameters added to PTZ function	Péter Szabó 3
v1.1.1	11-05-2023	Minor updates	Péter Szabó 3
v1.2.0	12.02.2024	LARA v1.2 compatible version	Péter Szabó 3

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