Automatic Passenger Counting

**IRMA – Infrared Motion Analyzer**

**5th Generation**

**Sensor-API**

**Driver Options**

Document information

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Validity

**Sensors treated in this document**

| **Product line** | **Sensor classes** |
| --- | --- |
| IRMA MATRIX | DIST500 |

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1. Introduction

In the Sensor API driver concept, the UIP protocol is embedded in different interfaces or network protocols. To configure the different drivers, a generic interface for parameters and options is available.  
  
Parameters are identified by alphanumeric names, their values are provided as text strings. They are then either used in text form (names), or interpreted as Booleans (“on”/”off”) or converted to numbers (“1.0”).   
  
This document provides an overview of the options that may be used for each driver (UDP, CAN, serial port).

Errors on setting of these options may throw exceptions which should be handled.

1. Options for iris::drivers::UdpDriver

|  |  |  |
| --- | --- | --- |
| **Option name** | **Default value** | **Description** |
| additionalNetworks |  | Comma-separated list of IP subnets. These are used in broadcasts triggered by a device scan. Networks must be written in the format “<Network>/<Address bits>”, for example “172.30.31.0/8” |
| additionalHosts |  | Comma-separated list of IP addresses. Explicit requests are sent to these hosts during a device scan. This is independent of broadcasts. The format is the typical “10.3.4.5” |
| timeoutOffset | 0 | *Currently unused* |
| timeoutFactor | 1.0 | *Currently unused* |
| autoTimeouts | off | *Currently unused* |
| bindAddress | 0.0.0.0 | IP address where communication through a UDP port is to be bound. Useful when multiple network interface cards (NIC) are present. The format is the standard “173.30.31.34”. A value of “0.0.0.0” means the option is not being set. |
| bindPort | 0 | IP port where communication through a socket is to be opened. Value is base 10 integer (“1234”), where 0 means it will be automatically assigned by the operating system. |
| suppressLocalSubnetBroadcasts | false | Flag that specifies if local subnet broadcasts are to be suppressed (“true”). The global broadcast (see below) 255.255.255.255 is unaffected. |
| suppressGlobalBroadcast | false | Flag that specifies whether the global broadcast to 255.255.255.255 is to be suppressed (“true”).  Warning: Disabling both broadcast types leaves only the additionalNetworks and additionalHosts reachable via scan. |
| enableLogging | false | Flag that enables logging of communication to a file. The file format is binary. The name of this file is provided in another option. |
| logfileName | udpdriver-log.bin | Name of the file used for communication log, may contain a path. |

1. Options for iris::drivers::CanDriver

|  |  |  |
| --- | --- | --- |
| **Option name** | **Default value** | **Beschreibung** |
| busSpeed | 125 | Bit rate of the CAN bus in kbit/s.  Using *SocketCAN* (Linux), must be configured via the system (/etc/network/interfaces) |
| implementation | softingCanUsb | The *Softing* adapter hardware to use; valid names are are ”softingCanUsb” for the USB adapter and “softingCanPci” for the PCI slot extension card. |
| canIrmaServicePc | true | Flag that specifies if the API wants to identify as a service device („true“) or as an on-board computer. Avoid pairing two devices/programs of either type. |
| canInterface | can0 | *SocketCAN* (Linux) only: Name of the CAN interface |

1. Options for iris::drivers::SerialDriver

|  |  |  |
| --- | --- | --- |
| **Option name** | **Default value** | **Description** |
| portName | //./COM1 [Win32] or. /dev/ttyS0 [Linux] | A virtual file name fort he serial device. The format depends on the operating system used. |
| ibisSwitch | off | Flag that specifies whether a specific datagram is sent before device scan which enables the IBIS protocol on recipients. |
| ibisSpeed | 1200 | Baud rate for the serial connection (base 10 integer) |
| ibisBvg | off | Flag that specifies whether the *BVG*-specific format with extended addresses is to be used (“on”). |
| ibis8n1 | off | Flag that specifies whether to use 8-N-1 or 7-E-2 framing. 7-E-2 is used in the *IBIS* protocol, and is the default (“off”). 8-N-1 (“on”) is used on *INEO* systems. |