

Tecton Darlex

Release Documentation

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1. Introduction

The following documentation outlines the instructions and prerequisites for the device driver. It contains information instructions as well as technical prerequisites and system requirements.

2. Setup

2.1 Versions

IPSecurityCenter Version: 4.7 or above
Device Version: 'Fast Darlex', 'Darlex', 'Version 3 Darlex'
Packages: CNL.IPSecurityCenter.Driver.Tecton.Darlex.[BUILD_Version].ipsedriver

Other hardware and firmware versions may be compatible with the device driver, however functionality cannot be guaranteed.

2.2 Driver Functionality

The driver implements the following functionality:

- Live Video
- Recorded Video
- Video Export

2.3 Prerequisites

There are no software prerequisites required by either IPSecurityCenter Client or Server. The following required SDK DLLs are installed to the client and video export service installation folders when the package is installed:

- tecondvr.dll
- mc_dec_aac.dll
- mc_dec_avc.dll
- mc_enc_dv.dll
- mc_enc_mp2v.001
- mc_enc_mp2v.002
- mc_enc_mp2v.003
- mc_enc_mp2v.004
- mc_enc_mp2v.dll
- mc_enc_mpa.dll
- mc_enc_pcm.dll
- mc_mux_dv.dll
- mc_mux_mp2.dll

The following ports must be open:

IPSecurityCenter Client / Video Export Service / Server → Tecton Darlex 1024 / UDP

ICMP ping packets must not be blocked between the above IPSecurityCenter components and the Tecton Darlex.

2.4 Operating System Requirements

The functionality of the device has been tested on the following operating systems:

- Windows 7 Professional
- Windows Server 2008 R2
- Window Server 2012

3. Driver Functionality

3.1 Properties

IP

Gets / Sets the IP of the device.

Port (Default: 0)

Get / Sets the port for the device. The standard port is 1024. 0 can be specified to use the default port.

Username

Gets / Sets the username for the device. Leave empty if a username and password are not required.

Password

Gets / Sets the password for the device. Leave empty if a username and password are not required.

Version (Default: 'DarlexFast')

This must be set to the version of the Tecton Darlex being connected to for video functionality to work. Do not specify 'None' as this is used for internal error detection.

Ping Attempts (Default: 3)

Gets / Sets the number of ping attempts that will be made before the device is assumed to be offline.

Ping Interval (Default: 10 minutes)

Gets / Sets the amount of time to wait after a ping failure before retrying (see above.)

3.2 Events

This device defines no custom events; the only event available is the Device Online State event.

Online State Event

The online state event will be raised when the device changes state. The device will fail if the Tecton Darlex does not reply to a number of pings over a period of time as specified by the Ping Attempts and Ping Interval properties.

The first time a Tecton Darlex device comes online 20 cameras are created and connected to it.

3.4 Methods

The device does not define any custom methods.

4. Known Limitations

Video Export

Only one video export can be performed per device at any one time.

Network Password

If the Tecton DVR has a network password entered IPSecurityCenter will not be able to connect to the DVR. The network password has to be removed.

Live and Recorded Video

The Tecton Darlex has known issues if more than one client attempts to connect to a Tecton Darlex unit at a time. If more than one client (or video export service) connects to a unit then the behavior of the Darlex is unpredictable and can result in video connection failures. Closing any open video for the device sometimes fixes the problem, however in some cases the Tecton Darlex resets its network card which takes 5 minutes to complete.

The following restrictions apply to live and recorded video:

- The same Darlex camera cannot be displayed more than once on a client
- Live and recorded video cannot be displayed for cameras connected to the same Darlex server
- Only one camera can be displayed in playback mode
- Playback does not support rewind or fast forward through the playback slider. This is because the SDK performance playing video at different speeds was poor and does not meet the standard required for IPSecurityCenter™.

5. Troubleshooting

Video does not export and stays 'In Progress' indefinitely.

The debug output (on the machine the Video Export Service is running on) also displays the message 'Reporting file I/O exception on Save/Load with IOError = \$2'.

This problem is caused by the wrong version of the Tecton SDK being installed in the VES installation directory.

The correct versions of the files are:

- tecondvr.dll 1.0.3.1
- mc_dec_aac.dll 8.8.0.37132
- mc_dec_avc.dll 8.8.0.37132
- mc_enc_dv.dll 8.8.0.37132
- mc_enc_mp2v.001 (902,472 bytes)
- mc_enc_mp2v.002 (902,472 bytes)
- mc_enc_mp2v.003 (1,045,832 bytes)

- mc_enc_mp2v.004 (1,127,752 bytes)
- mc_enc_mp2v.dll 8.8.0.37132
- mc_enc_mpa.dll 8.8.0.37132
- mc_enc_pcm.dll 8.8.0.37132
- mc_mux_dv.dll 8.8.0.37132
- mc_mux_mp2.dll 8.8.0.37132

The correct versions can be obtained from

\\10.10.10.2\sdk\Tecton\Driver SDK Redistributable

Cannot display video for a camera

If video cannot be displayed for a camera, and the following error message is displayed:

‘Video could not be displayed for this camera because a connection to the video server could not be made.’

Then:

- Ensure the device is online by pinging its IP address.
- Check the ‘Version’ property on the device class to ensure it specified the correct type of device e.g. Liberator, Darlex (Fast)