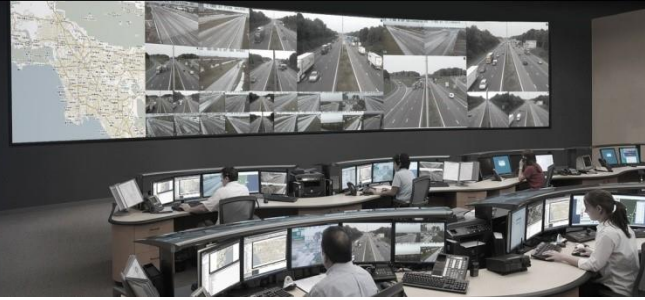


Zenitel Stentofon

Manually edited DO not regenerate from design Surface



A Whole World of Integration



www.cnlsoftware.com

Table of Contents

1	Document Versions.....	4
2	Referenced Documents.....	5
3	Manufacturer	6
4	IPSecurityCenter Versions.....	7
5	Operating Systems	8
5.1	Client Side Functionality	8
5.2	Server Side Functionality	8
6	Models / Firmware Versions.....	9
7	Hardware Configurations.....	10
8	Driver Package	11
9	Driver Features.....	12
9.1	AlphaCom Server	12
9.1.1	Device Connection and Online States.....	12
	DC1.0 Device Online Status.....	12
	DC2.0 Authentication.....	12
9.1.2	Video	13
9.1.3	Properties.....	13
	Minimum State Update Interval (ms)	13
	Max Heartbeat Interval.....	13
	DefaultAccessPulsePeriod.....	13
9.1.4	Methods.....	14
9.1.4.1	Make a Call.....	14
9.1.4.2	Hangup Call	14
9.1.4.3	Answer Call.....	14
9.1.4.4	DialDAK.....	15
9.1.4.5	RefreshStates	15
9.1.5	Events.....	16
9.1.5.1	HeartBeatFailed	16
9.2	Stentofon Station	17
9.2.1	Device Connection and Online States.....	17
	DC1.0 Device Online Status.....	17
	DC2.0 Authentication.....	17
9.2.2	Video	18

9.2.3	Properties.....	18
	Station ID.....	18
	State	18
	Access Pulse interval (ms).....	18
9.2.4	Methods.....	19
9.2.4.1	MakeCall.....	19
9.2.4.2	HangUpCall.....	19
9.2.4.3	AnswerCall	19
9.2.4.4	RaiseCustomerParameter	20
9.2.4.5	DialDAK.....	20
9.2.4.6	Release Latch	21
9.2.5	Events.....	22
9.2.5.1	CallRequest	22
9.2.5.2	Call Connected	22
9.2.5.3	CallRequestRemoved	22
9.2.5.4	CallDisconnected.....	22
9.2.5.5	CustomParameter	23
9.2.5.6	LatchStateChange	23
10	Installation	24
10.1	Prerequisites	24
10.2	Driver Installation.....	25
10.2.1	Additional Installation Details.....	25
10.2.2	Device Configuration.....	26
10.2.3	Additional Configuration Details.....	26
10.2.4	Driver Compatibility	27
11	Issues and observations	27
11.1	Connectivity Issues.....	27
11.2	SDK Heartbeat.....	27
11.3	Release Latch	27

1 Document Versions

Version	Date	Name	Change
1.0	2020-01-24	AM	Document Created.
1.1	2020-02-12	AM	Updated with heartbeat and latch commands

2 Referenced Documents

Document	Version	Description
Driver Project Requirements (DDK-PR)	1.0	The Zenitel AlphaCom Server driver must conform to all the requirements detailed in this document.
Driver Connection and Online States Requirements (DDK-DC)	1.0	The Zenitel AlphaCom Server driver must conform to all requirements in this document detailed in the section: Device Connection and Online States

3 Manufacturer

Name Zenitel



Website <https://www.zenitel.com>

Description Over 70 years in the communications market is what separates Zenitel from the rest of the intercom providers.

4 IPSecurityCenter Versions

The driver must be compatible with the following IPSecurityCenter versions:

IPSecurityCenter Version	Supported
4.7	<input checked="" type="checkbox"/>

5 Operating Systems

5.1 Client Side Functionality

Operating Systems	Supported
Windows 7 64 bit	<input checked="" type="checkbox"/>

5.2 Server Side Functionality

Operating Systems	Supported
Windows Server 2008 R2	<input checked="" type="checkbox"/>
Windows Server 2012	<input checked="" type="checkbox"/>

6 Models / Firmware Versions

Model	Versions	SDK
AlphaCom	1.2.0	1.2.0

7 Hardware Configurations

N/A

8 Driver Package

The driver package is named:

CNL.IPSecurityCenter.Driver.Stentofon.Version.[BUILD-VERSION].ipsedriver

9 Driver Features

9.1 AlphaCom Server

9.1.1 Device Connection and Online States

The full requirements for these features can be found in the [Device Connection and Online States Requirements](#)

Feature	
DC1.0 Device Online Status	None
DC2.0 Authentication	None

9.1.2 Video

This device does not support video.

9.1.3 Properties

General requirements for properties can be found in [Driver Project Requirements](#).

Name	Type	Description	Default Value & Ranges
Minimum State Update Interval (ms)	int	The minimum time (ms) between requests for the state of the AlphaCom system and stations	Default: Min: Max:
Max Heartbeat Interval	int	The maximum interval (ms) that is allowed between heartbeats.	Default: 5000 Min: Max:
DefaultAccessPulsePeriod	int	Default period (ms) to pulse an access control	Default: 2500 Min: Max:

9.1.4 Methods

General requirements for methods can be found in [Driver Project Requirements](#).

9.1.4.1 Make a Call

Make a call

Returns void.

Performance

The method must complete within 2 seconds.

Parameters

Name	Type	Description	Default Value and Ranges
From Station ID	int	Station Initiating the call	Default: Min: Max:
To Station ID	int	Station to receive the call	Default: Min: Max:

9.1.4.2 Hangup Call

Terminate a call between this station and another

Returns void.

Performance

The method must complete within 2 seconds.

Parameters

Name	Type	Description	Default Value and Ranges
StationId	int	Station ID	Default: Min: Max:

9.1.4.3 Answer Call

Answer a call on station

Returns void.

Performance

The method must complete within 2 seconds.

Parameters

Name	Type	Description	Default Value and Ranges
StationID	int	Station to answer Call	Default: Min: Max:

9.1.4.4 *DialDAK*

Dial DAK

Returns void.

Performance

The method must complete within 2 seconds.

Parameters

Name	Type	Description	Default Value and Ranges
Number	int	Number	Default: Min: Max:
Station ID	int	Station ID	Default: Min: Max:

9.1.4.5 *RefreshStates*

Refresh the states of the devices

Returns void.

Performance

The method must complete within 2 seconds.

Parameters

Name	Type	Description	Default Value and Ranges
------	------	-------------	--------------------------

9.1.5 Events

General requirements for events can be found in [Driver Project Requirements](#).

9.1.5.1 *HeartBeatFailed*

Event raised by the driver when SDK provided heartbeat interval exceeds permitted level as defined by the property 'Max Heartbeat Interval'

Performance

The driver must be able to handle 4000 events per hour.

Event Properties

Name	Type	Description
Time interval since last keep alive	TimeSpan	The time interval of the last keep alive message that exceeded 5 seconds

9.2 Stentofon Station

9.2.1 Device Connection and Online States

The full requirements for these features can be found in the [Device Connection and Online States Requirements](#)

Feature	
DC1.0 Device Online Status	None
DC2.0 Authentication	None

9.2.2 Video

This device does not support video.

9.2.3 Properties

General requirements for properties can be found in [Driver Project Requirements](#).

Name	Type	Description	Default Value & Ranges
Station ID	int	Station Identifier for this call point	Default: Min: Max:
State	string	Current State of this Station	Default: Min: Max:
Access Pulse interval (ms)	int	The time (ms) to leave a latch 'unlocked'	Default: Min: Max:

9.2.4 Methods

General requirements for methods can be found in [Driver Project Requirements](#).

9.2.4.1 *MakeCall*

Make a call from this station to another in the network

Returns void.

Performance

The method must complete within 2 seconds.

Parameters

Name	Type	Description	Default Value and Ranges
ToStationId	int	Station ID to make a call to.	Default: Min: Max:

9.2.4.2 *HangUpCall*

HangUpCall

Returns void.

Performance

The method must complete within 2 seconds.

Parameters

Name	Type	Description	Default Value and Ranges
N/A			

9.2.4.3 *AnswerCall*

Answer Call from another station in the network

Returns void.

Performance

The method must complete within 2 seconds.

Parameters

Name	Type	Description	Default Value and Ranges
N/A			

9.2.4.4 *RaiseCustomerParameter*

Raise Customer Parameter Event on the current station

Returns void.

Performance

The method must complete within 2 seconds.

Parameters

Name	Type	Description	Default Value and Ranges
Parameter1	int	Parameter1	Default: Min: Max:
Parameter2	int	Parameter2	Default: Min: Max:
Parameter3	int	Parameter3	Default: Min: Max:
Parameter4	int	Parameter4	Default: Min: Max:
Parameter5	int	Parameter5	Default: Min: Max:
FromStationId	string	FromStationId	Default: Min: Max:

9.2.4.5 *DialDAK*

DialDAK (Activates a function key on the terminal)

Returns void.

Performance

The method must complete within 2 seconds.

Parameters

Name	Type	Description	Default Value and Ranges
Number	int	Number (of the function key)	Default: Min: Max:

9.2.4.6 Release Latch

Sends a release latch request to the specified Station.

If zero is used the command is send to the local station, otherwise it is sent to the specified station.

Returns bool.

Performance

The method must complete within 2 seconds.

Parameters

Name	Type	Description	Default Value and Ranges
Station ID	int	Station ID of the location to release the latch for (Zero releases current device latch)	Default: Min: Max:

9.2.5 Events

General requirements for events can be found in [Driver Project Requirements](#).

9.2.5.1 CallRequest

Call Request event is raised on current station

Performance

The driver must be able to handle 4000 events per hour.

Event Properties

Name	Type	Description
From Station ID	string	ID of the station Requesting the Call

9.2.5.2 Call Connected

Call between stations Connected

Performance

The driver must be able to handle 4000 events per hour.

Event Properties

Name	Type	Description
From Station ID	string	Station that has been connected to.

9.2.5.3 CallRequestRemoved

Call Request Removed event is raised indicating the a call request has been terminated

Performance

The driver must be able to handle 4000 events per hour.

Event Properties

Name	Type	Description
N/A		

9.2.5.4 CallDisconnected

CallDisconnected

Performance

The driver must be able to handle 4000 events per hour.

Event Properties

Name	Type	Description
StationId	string	StationId

9.2.5.5 CustomParameter

CustomParameter

Performance

The driver must be able to handle 4000 events per hour.

Event Properties

Name	Type	Description
Parameter1	int	Parameter1
Parameter2	int	Parameter2
Parameter3	int	Parameter3
Parameter4	int	Parameter4
Parameter5	int	Parameter5
FromStationId	string	FromStationId

9.2.5.6 LatchStateChange

Performance

The driver must be able to handle 4000 events per hour.

Event Properties

Name	Type	Description
Active	bool	When true the latch is locked when false the latch is unlocked

10 Installation

10.1 Prerequisites

Install the SDK on all machines running the following services / software:

- Client
- Connection Manager

10.2 Driver Installation

- Start the IPSecurityCenter™ client and any supporting services
- Open the Device Driver Manager from the System Configuration
- Click the ***Install*** button
- Select the Zenitel AlphaCom Server Driver Package in the Open file dialog
- Wait for the driver to be uploaded

The driver packages should be listed in the Device Driver Manager.

10.2.1 Additional Installation Details

None

10.2.2 Device Configuration

- Right click in a folder (e.g. Devices) in the System Configuration: **New** → **Device On** → **Server**
- Click **Next** on the introduction
- Select **Zenitel** in the **Device Manufacturer** list
- Select **AlphaCom Server** in the Available Devices list
- Click **Next** to enter the device details: Enter the Zenitel AlphaCom Server hostname or IP address, the port (use 0 to use the default port), and user name and password if integrated security is not being used.
- Click **Next** and **Finish** to add the device.
- Enable the device to bring it online.

10.2.3 Additional Configuration Details

N/A

10.2.4 Driver Compatibility

The following devices are known to be incompatible with the Zenitel AlphaCom Server.

Model
N/A

11 Issues and observations

11.1 Connectivity Issues

This is a limitation of the underlying Stentafon SDK

Although we have 'disconnected' and the SDK reports that we have, the underlying system 'takes a while' to actually disconnect.

So when we try to 'reconnect' the last link is 'still active' and we get the reported state which does not refresh

So:

- Disconnect
- Wait 'a bit'
- Connect and it will work
- If not restart Connection Manager

11.2 SDK Heartbeat

The AlphaCom SDK provides an internal heartbeat function which at a fixed 5 second interval test the connection to the controlling server and sends an event to any listening application via the SDK.

This interval value cannot be changed.

The device driver has its own timer that monitors the last received time of this heartbeat, event and if the period between received events exceeds the value specified by the property 'Max Heartbeat Interval' an event is raised indicating a heartbeat failure.

For this system that event does not take the server offline since there is an additional event in the SDK that is subscribed to that notifies if the TCP connection dies.

11.3 Release Latch

The release latch command can be sent to ANY station, but only is only responded to from stations that have it configured,

The status change is noted via events that are returned from the station and as a consequence IPSC only creates events for those stations that allow 'latch release'

