

SEN1000i-S

Sound & Voice Analytics

Installation Guide- For Milestone VMS

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- 6. Summary



Product Configuration and Description

1 Integration Schematics: Sound and Voice Analytics – Milestone VMS





Product Components



SEN1000i-S Device



Lower cover



Angle adjusting/ Mount bracket



Etc

(1) SEN-1000-S Voice recognition product configuration and description -2

♦ Equipment Description

Front view	Back	Bottom
<u<image></u<image>	VESA Mount hole	<u<image></u<image>

SEN1000i-S Voice recognition product configuration and description -3

Status LED Description



※ Each LED direction is based on the front of the equipment.

Step 2. Adding Camera to Milestone

Step 3. Neurolytics plugin Settings in MIP

Step 4. ISD Server Settings

Step 5. Adding MIP driver to Milestone

Step 6. Adding Metadata (Camera to MIP driver)

Step 7. SA Event and Alarm Settings

Step 8. CCTV Footage View grid Settings

The detailed Milestone VMS user manual found in the following link

https://doc.milestonesys.com/latest/en-US/portal/htm/chapter-page-sc-user-manual.htm?TocPath=XProtect%20Smart%20Client%7CXProtect%20Smart %20Client%20user%20manual%7C___0

https://doc.milestonesys.com/sc/pdf/2020r3/en-US/MilestoneXProtectSmartClient_UserManual_en-US.pdf

Milestone – SA Plugin System; Installer & License files

- 1) Milestone installer
- 2) Plugin File
- 3) SEN-1000i-S installer files Milestone VMS
- 4) SEN-1000i-S Speech Recognition + Milestone

Make sure that all installer and relevant license files are received before starting the installation process

Download and install Visual C++ Redistributable Packages <u>https://www.microsoft.com/en-us/download/confirmation.aspx?id=14632</u> (2010) <u>https://www.microsoft.com/en-us/download/confirmation.aspx?id=48145</u> (2015)



XProtect Corporate 2020 R2 Test	XProtect Corporate 2020 R2 Test	XProtect Corporate 2020 R2 Test
Components to be installed	Select encryption	Specify recording server settings
	It is recommended to secure communication with encryption. Learn more	Recording server name:
XProtect Management Server (64-bit) XProtect Management Server (64-bit) XProtect Management Client 2020 R2 (6	Server certificate Applies to management server, recording server, data collector Encrypt Select certificate Details	Management server address: DESKTOP-28239GS 80
 ✓ XProtect Smart Client 2020 R2 (64-bit) ✓ XProtect Event Server (64-bit) ✓ XProtect Log Server (64-bit) ✓ XProtect Mobile Server (64-bit) ✓ XProtect Mobile Server (64-bit) 	No confinence de lec 4 Streaming media certificate	Examples: localhost, managementserver.domain.com and managementserver.domain.com:81
	Applies to clients and servers that retrieve data streams from the recording server Encrypt Select certificate No ceruincate selected	Note: The recording server stores the recordings in the selected folder. It is recommended that you save your video recordings on a drive different from where you install the program. You select the installation location in the next step.
	6	D:\MediaDatabase Browse
		Free disk space on drive: 2.39 TB
Previous Continue Cancel	Uncheck and continue	Retention time for video recordings: 7 adays 6
XProtect Corporate 2020 R2 Test	5 Previous Continue Cancel	Previous Continue Cancel
	XProtect Corporate 2020 R2 Test	
Specify mobile server encryption	Select file location and product language	XProtect Corporate 2020 R2 Test
Before enabling encryption, make sure that the selected certificate is trusted on all devices running services that retrieve data streams from the mobile server.	Fie location:	
Web Client will not be available.	C:\Program Files (x86)\Milestone Browse	Installing XProtect Corporate 2020 R2 Test
will not be able to connect with the mobile server.	Free disk space on drive: 129 GB	
For more information, see the guide about certificates.		
Encrypt the connections from clients and services that retrieve data streams from the mobile server. No selection> Details	Product language: English (United States) ~	Installing Microsoft SQL Express
Uncheck and continue	Note that IIS logging will be disabled on the management server. Also note that the basic user feature requires an HTTPS binding with an IIS certificate. If the binding and the certificate are not installed, the program installs them automatically.	Overall progress
8 evious Contifue Cancel	9 Previous Instal Cancel	



	Run the "Smart client" & connect		Make - It ca showr	e sure are r in be v n belov	all the unnir verifie w.	e Mi ig in d by	leston the b ″desk	e sever prog ackground. (top tray" ico	rams n as
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SKIN V	Authentication								
	Basic authentication -								
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			I		-	-	-		
XIXAA	Remember password Auto-login	^			¢\$		\$	140% 😑 😑	
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NA 1	20.2.2352.1	// *Ne	🐽 Mile	i 🛃 Mil	le ^	, ĝ	J 🗗	Mute microphone	

6/2/2021





Add Hardware			- 0
Wait while your hardware is being detect Once detection has completed, select w	ed. hich hardware to add.		mileston
Detected hardware:			1
Add Address	Port	Hardware model	3.4.5
localhost	8554	Universal 1 channel driver	J Success

Add Hardware									×
Hardware and The hardware	cameras are enab and its devices wi	led per default. Ma Il be assigned aut	anually enai o-generated	ble addit I names	ional device Alternative	es to be used. ly, enter names manu	ally.	milest	tone
Hardware name ter	mplate:				Device na	ame template:			
Default				~	Default				4
Hardware	🗹 Camera	Microphone	, [] Speak	er	🗌 Metadata	🗌 input	Output	
Hardware to Add	8		Enabled	Nan	ie .				
Universal 1 chann	el driver - localhost								
Hardware:			\square	Univ	ersal 1 chan	nel driver (localhost)			
👒 Camera po	nt 1:			Univ	ersal 1 chan	nel driver (localhost) -	Camera 1		
🔎 Microphon	e port 1:			Univ	ersal 1 chan	nel driver (localhost) -	Microphone 1		
							₽3		
Help					< Bac	k 🗌	Next >	Cancel	

Add Hardware	
Select a default group for all devices Alternatively, select device group ind	vo iv 4 or each device.
Default camera group:	Devices
No group selected	Cameras
Default microphone group	Universal 1 channel driver (loc
ereisent merephene Brach	







Print

Back

Next

= 1 3 Milestone installer				
File Home Share View				
$\leftarrow \rightarrow \checkmark \uparrow$ \checkmark Milestone - VA Plugin System \rightarrow 3_Milestone installe	r		√ ē	Q
✓ Quick access ^ ✓ Desktop ✓ ✓ Downloa ds ✓ ✓ Documents ✓	Date modified 6/2/2021 1:19 PM 6/2/2021 1:20 PM	Type Application Windows Installer	Size 1,923,213 KB 286,976 KB	
Milestone MIP SDK 2020 R2 Setup - End-User License Agreement Please read the following license agreement carefully	× 娜 Milestone MIP SDI Ready to install	(2020 R2 Setup		
Milestone End-user License Agreement	Click Install to beg installation setting	Milestone MIP SDK 2020 R2	or change any of your	×

Cancel



- 1. Run MIPSDK_Installer provided by Milestone.
- 2. Copy plugin folder named "Neurolytics" and paste the folder inside the path C:\Program Files\Milestone\MIPPlugins



3. Enable **Neurolytics** plugin by opening **"Plugin Overview"** and choosing **Neurolytics option** in **"MIP SDK Tray Manager"** program as shown in the picture:





4. Unselect all plugin files by "Clear all"

5. Enable "Neurolytics" plugins by opening "Plugin Overview" and select in Plugin Overview Manager as shown in the picture. Press "Save".



To verify the **Neurolytics** plugin that installed was successful or not, open XProtect Smart Client

program, and go to "About" option and click on.

✤ It was successful if a pop-up window show as below.



25/6/2021 2:46:53 pm 📃 🗕	. •		×		
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Setup		Hel Vid	p (F1) eo Tutori	als	
/6/2022. To full	0	Ab	aut		



Step 4. ISD Server Settings



Step 4. ISD Server Settings

◆ ISDserver is an interworking program that transmits events to Milestone VMS.

Program image **Explanation** ISD server Start server **B.** ISDserver.exe settings Export Caminfo 1) Click "Choose Folder" to select a folder to extract З Waiting ... Choose Folder C.WUsersW senturian camera information from. Exported Close 2) Click "Export" button to extract information of all cameras connected to Milestone VMS. **X** After executing the ISDserver program, > ISD <u>ن</u> ~ Search ISD "Caminfo.txt" file is created in the selected folder. \wedge Name Caminfo.txt - Notepad × Information of all cameras connected to Milestone VMS loost_thread-vc120-mt File Edit Format View Help BouncyCastle.Crypt CAM ID I CAM NAME is entered in the file. de6439db-9a36-4c3e-9b37-9afc939ebfa7 MDC-L7290FTD-24 MDC-L7290FTD-24 (192,168,21,60) - Camera 1 Caminfo.txt 67bcdbf2-35c1-42b3-a36c-76d6859882cf || TRUEN Co., Ltd. IVS-P5236W12R (192.168.21.203) - Camera 1 CoreToolkits.dll Cudart64_80.dll 3) Click the "Start server" button to connect to the DBExporterClientMW.dll Google.Protobuf.dll server. icudt48.dll

Ln 4, Col 1

90%

Windows (CRLF)

UTF-8

icuin48.dll

🔌 icuio48.dll

icule48.dll

✓ <</p>

 $\ensuremath{\mathbbmm}$ After clicking the button, "Waiting... " status and ready to link.)

Step 5. Adding MIP driver to Milestone

Notes: MIP driver can only be added when the ISD server is running



Step 5. Adding MIP driver to Milestone

					Hardware name te	mplate:		Device na	check	
cted hardware information:					Default			· Dufault /		
dress	Port	Hardware model		Status	-	-	-	3	-	
lhost	5000	MIP Driver		Success	Hardware	🗹 Camera	Microphone	Speaker	🗹 Metadata	L
			_		Hardware to Add		Enable	d Name		-
					MIP Driver - localh	iost]		
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ne group selected						MIP Driver (lo	calhost) - Metadata 7	Default Group		
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Step 6. Adding Metadata (Camera to MIP driver)



Step 7. SA Event and Alarm Settings



Step 7. SA Event and Alarm Settings





Step 8. CCTV Footage View grid Settings



Step 8. CCTV Footage View grid Settings





Device Hardware Installation







Explanation	Detailed image
 Connect the angle source equipment and angle bracket. * Screws required for bracket mounting are included. 	
② Connecting blocks and RJ45 when installing waterproof flexible. pass all DC and UTP lines first.	After fastening the bracket





X Notes on Installation

- ✓ There should be no obstacles near the equipment for smooth sound source detection.
- ✓ It is recommended to avoid installation where frequent noises occur.
- ✓ It is recommended to install at least at the height of 2M because there is a risk of damage.



Device Hardware (HW) Settings

Oevice HW settings

◆ ISD Ethernet is a tool program used to set up the equipment IP address.

Explanation

Detailed image





• Ethernet tool

will be installed.

Explanation	D	etailed image	
2. FTP Server setting	🔿 Dhcp 💿 Static		
Enter FTP Server IP and PORT where detected sound will be	Client IP Ftp 3	Server IP Port	Server PC IP
uploaded. (By default, PORT uses 24 .)	192, 168, 250, 5 192,	,168,250,2 24	
※ The detected event source is uploaded to the FTP server.	Netmask Udp 255, 255, 255, 0 192,	Server IP Port ,168,250,2 1308	
3. UDP Server Setting	Gateway Voic 192, 168, 250, 1 192,	ce Server IP Port , 168, 250, 2 5050	
Enter the Server IP and Port to receive UDP messages. (In case of linking with Milestone, PORT is 1308 and Serverip is the server IP where "ISD server" program is installed.) ※ When interlocking with VMS, etc., interlock with UDP packet.	Can Info Update d-c Clock Sync Lock	nera ID Ptz 169d449eed0 1 ation Par Mode helptest _ 0	Camera ID that exported from ISDserver. - Refer page 23
4. VOICE Server setting	Class Setting Devi	ice Alive Time 0	Example: CAM ID CAM NAME 35fce504-e15c-47ec-9c60-2721db9ef331
Enter the Server IP and PORT where KServer (voice recognition server)			

(Default port is **5050** and if changed, KSERVER program also You need to change the setting.)

% It analyzes / extracts the words included in the sound source stream input through the device.

✓ FTP Server PORT: 24 ✓ Udp Server PORT: 1308 ✓ Voice server PORT : 5050

Oevice HW settings

Ethernet tool

Explanation

5. Camera ID

Enter the camera information to be linked. Refer to Slide #23

(You can check the camera information in "Caminfo.txt" that

"Exported" from ISDServer.exe.)

6. PTZ Initial number setting

PTZ Set the initial number.

7. Location setting

Specify the equipment installation location.

8. Par

interlocking-formatted Separator Set (default: _)

9. Mode

Sets UDP packet interlocking format (default: 0)

10. Device Alive Time

Keep alive Set the interval for sending messages. (When it is set as 0, it is not transmitted. When it is linked with Milestone, it is set as 0.)





Ethernet Tool

Explanation

11. Threshold Setting

Click "Device and Mic Settings" and "Connect" menu.

- Mic input: current environmental noise dB
- Threshold: set value, should be higher than Mic Input
- Gain: Microphone Gain Value

This function sets the dB value for detecting sound sources.

The more you set it to the right, the higher the volume of the sound source you want to detect.

Click the 'Info Update' button to apply the changes before setting the threshold. At this time, the device will reboot once.

Detailed image





Ethernet tool

Explanation

Detailed image





Ethernet tool

Explanation

Detailed image

13. Info Update

After class set, press "Info Update"

- \Rightarrow The device start reboot
- \Rightarrow Reboot takes roughly **5min**





Sound & Voice Analytics Server Program Setting



4 KSERVER Settings-1

♦ KSERVER is a voice recognition server program that has the function of extracting the words contained in the sound source received through the SEN1000I-s voice recognition equipment.

Explanation	Program image
 A. KSERVER License 1) When run "K server program", it will ask license 2) Please send the "info" to Senturian to deliver the license 1, 2, 3) After plugin license it will show "Good" and click "ok" ** This license part, generate different "info" whenever you turn on. To keep in same, it is recommended to disable all Ethernet connections except just 1, in "device manager" menu. 	Icence KEY Info mhWs0GCEKmDgVM2IGWvQiOM9HnqVM/oUQ7059124/co= OK Cancel Icence KEY - icence 1 sg=DhQ05U2MoGCcwJQQV3cus+WRERV1U5VoURJJQWUI= icence 2 vuElqw3qy+hu783JJdNlodtiDjpCirxWgIrWcG5+0VHz3a3kuADkxV32Lo/1WW info mhWs0GCEKmDgVM2IGWvQiOM9HnqVM/oUQ7059124/co= info mhWs0GCEKmDgVM2IGWvQiOM9HnqVM/oUQ7059124/co= info mhWs0GCEKmDgVM2IGWvQiOM9HnqVM/oUQ7059124/co=

4 KSERVER Settings-2

♦ KSERVER is a voice recognition server program that has the function of extracting the words contained in the sound source received through the SEN1000i-s voice recognition equipment.





Abnormal Sound Event & Event Log Testing in Milestone

Checking the "Event" in Milestone

Program image

Event confirmation

When an event ("Help" or "Help me" or "Scream" is normally received, an event popup is displayed along with the event type as shown in the picture





Checking the "Event Log" in Milestone

Program image

6/24/2021 4:54:40 PM - 🗆 🗙 Milestone XProtect Smart Client Alarm Manager 👩 System Monitor + 0 1 Live Playback Search \boxtimes Setup O No map has been selected Live Camera - 6/24/2021 4:54:38.313 PM The event log can be checked in the "Alarm ENTURIAN SOLUT Manager" tab as shown in the picture. VAEvent = Video analytics 4:54:29.248 PM II >> 4 4 6/24/2021 4:30 PM Quick Filters Reports Alarms No filter Y 1-2 Time Priority Level State Level Owner ID State Name Source Y New (2) Message **ISDEvent = Intelligent** 4.54.28 PM 6/24/202 1 SDeven Live Camera New T In progress (0) Sound Detector Event 4:53:43 PM 6/24/202 1 New **ISDevent** Live Camera 1154 Y On hold (0) T Closed (30) Servers DESKTOP-CRVR3DR ÷

Event



Summary



Run all the program after closing all the program. All program should not be closed but can be minimized.



