

Security Management System Configuring 'Tyron Storage Interface' (20.03.06.01)

Introduction

Security Management System software is a true open platform VMS software solution. It provides interface for integration with several cameras, encoders, DVRs, video sources, CCTV keyboards, access control systems, building management systems, fire alarm systems, fence control systems, PLCs, 3rd party video analytics solutions, 3rs party face recognition solutions, 3rd party license plate recognition systems, storage devices etc.

This document describes the steps to configure the integration between 'Security Management System server' software and 'Tyron storage device'.

Note – The 'Tyron storage device' should have specific firmware / patch installed on it, for the integration to work. Please co-ordinate with the 'Tyron storage device' vendor to confirm that the device under test has the required firmware / patch installed



Integrated system design

The integrated system works as follows -



- 1. Tyron storage device is installed and configured.
- 2. 'Security Management System server' software is installed on a computer, which is in the same network along with the Tyron storage device
- 3. 'Security Management System Tyron Storage Interface Application' is installed on same computer where 'Security Management System server' software is installed.
- 4. The 'Security Management System Tyron Storage Interface Application' communicates with the 'Tyron storage device' over network
- 5. 'Security Management System server' software communicates with the 'Security Management System Tyron Storage Interface Application'



Finalizing integration parameters

'Security Management System server' software and 'Tyron storage device' integration includes following features –

- (a) Alarms alarms generated in 'Tyron storage device' are captured by 'Security Management System server' software and are added to 'Security Management System server' software database, similar to any other alarms captured by the 'Security Management System server' software
- (b) Data indicators status parameters data is periodically queried by the 'Security Management System server' software from 'Tyron storage device', and the latest data values are displayed in the 'Security Management System' software dashboard.

Following types of 'Tyron storage device' alarms are included in this integration -

- 1. Alarms associated with drive state drive failure, drive restored
- 2. Alarms associated with fan state fan failure, fan restored
- 3. Alarms associated with power supply state power supply failure, power supply restored
- 4. High Processor temperature
- 5. High Board temperature
- 6. High RAID temperature
- 7. High Drive temperature

Following types of 'Tyron storage device' data indicators are included in this integration -

- 1. Processor temperature
- 2. Board temperature
- 3. RAID temperature
- 4. Drive temperature

A 'Tyron storage device' may have zero or more sources associated with each alarm type listed above, and zero or more sources associated with each data indicator type listed above. Also the names of the sources for alarms and names of the sources for data indicators may vary depending on the configuration of the 'Tyron storage device' being used.

The very first step, during 'Security Management System server' software and 'Tyron storage device' integration configuration is to finalize the alarms and associated sources, and data indicators and associated sources; which are required to be used in the integration.

Following are the steps to search for all supported alarms, alarm sources, data indicators, data indicator sources; supported by a 'Tyron storage device'

- Please download the 'Security Management System Tyron Storage Interface Application' installer.
- 2. Copy the 'Security Management System Tyron Storage Interface Application' installer to the server computer where 'Security Management System server software' is installed. If there are



multiple server computers where 'Security Management System server software' is installed, please select any one of them. 'Security Management System – Tyron Storage Interface Application' needs to be installed only one of the sever computers and NOT on every server computer.

- 3. Execute the 'Security Management System Tyron Storage Interface Application' installer on the target server computer. Follow the installation wizard to complete the installation.
- 4. From the desktop shortcut or from the programs menu shortcut, execute the 'Security Management System Tyron Storage Interface' application.

ron storag	je IP address:	127 . 0 . 0 . 1	Tyron storage port n	umber: 443		
ll Interval		20 Seconds				
	Start Polling	Stop Polling	Poll Once	Temperature alarm con	figuration VMS	Servers
esult Deta	iils					
Sr.No.	Title	Parameter	Value	Result	Status	
etected A	larms					
Sr.No.	Title	Parameter	Value	Result	Status	1
<						3

- 5. Type 'Tyron storage IP address' and 'Tyron storage port Number'. (Note please use default port number 443 if the port number is not known)
- 6. Click on 'Poll Once' button. This will update the 'Result Details' list with values received from the 'Tyron storage device'



on storag Interval:	ge IP address: 127 : 20	. 0 . 0 . 1	Tyron storage port nu	mber: 443		
esult Deta	Start Polling Stop	Polling	Poll Once	Temperature alarm con	figuration VMS	Servers
Sr.No.	Title	Parameter	Value	Result	Status	^
1	Drive state	raidcheck	Normal	ок		
2	Drive state	suite	Normal	OK		
3	Fan state	FAN1	6400	OK		
4	Fan state	FANA	6000	OK		
5	Fan state	FAN3	3800	OK		
6	Fan state	FAN2	4900	OK		
7	Fan state	FAN5	0	Failed		
8	Fan state	FAN4	6300	OK		
9	Power supply state	PS2	OK	OK		
10	Power supply state	PS1	OK	OK		
11	Processor temperature	CPU2	44			
12	Processor temperature	CPU1	45			
13	Board temperature	systemtemp	45 degrees C			
14	RAID temperature	RAIDTemp	46 C			
15	Drive temperature	13	46 C			
16	Drive temperature	14	486 C			~
< etected A	Jarms					>
Sr.No.	Title	Parameter	Value	Result	Status	Т
1	Fan state	FAN5	0	Failed		2
<						>

- 7. In the 'Result Details' list -
 - (a) 'Title' column displays the alarm type OR data indicator type.
 - (b) The 'Title' text for alarms would be one of the following 'Drive state', 'Fan state', 'Power supply state'.
 - (c) The 'Title' text for data indicators would be one of the following 'Processor temperature', 'Board temperature', 'RAID temperature', 'Drive temperature'.
 - (d) 'Parameter' column displays the associated 'source name'
- 8. Please review the 'Result Details' list and note the target parameters required to be configured in the integration. In this document, we will be using following 2 parameters (one alarm and one data indicator) as example
 - (a) Alarm type (Title) = 'Drive state', Source (Parameter) = 'raidcheck'
 - (b) Data indicator type (Title) = 'Processor temperature', Source (Parameter) = 'CPU2'



Security Management System server software - Configuring external alarm module

This section describes the configuration required in 'Security Management System' server software for capturing an alarm from 'Tyron storage device'.

This document describes the steps for configuration related to 'Tyron storage device' alarm type 'Drive state' and source 'raidcheck'.

- In the Security Management System server software, please navigate to the 'External alarms' tab from the left navigation menu bar. Navigate to the 'External alarms modules' sub-tab under it.
- 2. This will display the External alarms page.

192.168.0.74	External ala	arms → External al	arms modules	
Test PC				
Reports and Export	<u> </u>	<u> </u>		
Communication	Sr No.	Module ID	Module Name	Associated Video Channel
Security devices				
Keyboards and Joysticks				
Users and Privileges				
Alarm management				
Data management				
Remote backup				
Tasks				
Linked servers				
Server settings				
Video panorama				
Additional features				
Under vehicle surveillance				
External alarms				
External alarms modules				
Alarm handling		1		
External alarm rules				
Data indicators 🗸 🗸				

3. Click on 'Add external alarm module...' button, this will open 'Add New External Alarms Module' dialog box



🔕 Add New External Alarms Mo	odule	×
Module Name:	raidcheck	
Module ID:	EA_ raidcheck	
Video Channel:	<select> ~</select>	

- 4. Type 'Module Name' and 'Module ID'. Both these can be any text strings. However, it is recommended to use text which helps in identifying the alarm source. For this example, we will be using text string 'raidcheck' which is same as the target 'Tyron storage device' source name.
- Click on 'Ok' button to complete adding the external module. The new external module will be added to 'External alarm modules' list

192.168.0.74	<u>/</u>	External alarms – External alarms modules							
Test PC	2								
Reports and Export	^		👻 🗹 🗶						
Communication			Sr No.	Module ID	Module Name	Associated Video Channel			
Security devices			1	EA_raidcheck	raidcheck				
Keyboards and Joysticks									
Users and Privileges									
Alarm management									
Data management									
Remote backup									
Tasks									
Linked servers									
Server settings									
Video panorama									
Additional features									
Under vehicle surveillance									
External alarms									
External alarms modules									
raidcheck	_		L						
Alarm handling									
External alarm rules	¥								

Note – please follow same steps to add more external alarms modules, as per the project requirements.



Security Management System server software – Configuring data indicator

This section describes the configuration required in 'Security Management System' server software for accessing a data indicator from 'Tyron storage device'.

This document describes the steps for configuration related to 'Tyron storage device' data indicator type 'Processor temperature' and source 'CPU2'

- 1. In the Security Management System server software, please navigate to the 'Data indicators' tab from the left navigation menu bar. Navigate to the 'External modules' sub-tab under it.
- 2. This will display the External modules page.

192.168.0.74	Data indica	tors → External modul	les		
Test PC					~
Status ^	*	🗶 👗			<u></u>
Reports and Export	Sr No.	Data Indicator ID	Data Indicator Name	Data Refresh Time	Value
Communication					
Security devices					
Keyboards and Joysticks					
Users and Privileges					
Alarm management					
Data management					
Remote backup					
Tasks					
Linked servers					
Server settings					
Video panorama					
Additional features					
Under vehicle surveillance					
External alarms	1				
Data indicators	<				>
External modules					
User interface settings					

3. Click on 'Add...' button, this will open 'Add Data Indicator' dialog box.



🔕 Add Data Indicator	X
Module Name:	CPU2
Module ID:	DI_ CPU2
Refresh time:	30 seconds
Unit:	
Enabled	

4. Type 'Module Name' and 'Module ID'. Both these can be any text strings. However, it is recommended to use text which helps in identifying the data indicator source. For this example, we will be using text string 'CPU2' which is same as the target 'Tyron storage device' source name.

Type 'Refresh time'. It is recommended to keep it to 30 seconds.

Type 'Unit' text. This can be kept blank string.

Click 'Ok' button to complete adding the data indicator.

The new data indicator will be added to the list

192.168.0.74	2	Dat	a indicat	ors → External module	es			
Test PC	2							
Status	^		4	🧉 🗙				U
Reports and Export			Sr No.	Data Indicator ID	Data Indicator	Name	Data Refresh Time	Value
Communication			1	DI_CPU2	CPU2		30 second(s)	NA
Security devices								
Keyboards and Joysticks								
Users and Privileges								
Alarm management								
Data management								
Remote backup								
Tasks								
Linked servers								
Server settings								
Video panorama								
Additional features								
Under vehicle surveillance								
External alarms			1					
Data indicators			•					,
External modules								
User interface settings	~							

Note – please follow same steps to add more data indicators, as per the project requirements.



Security Management System server software – Add new user 1

- 1. A new user needs to be added to the 'Security Management System server software'. This user will be configured in the 'Tyron storage interface application' (described in next sub-section of this document)
- 2. In the Security Management System server software, please navigate to 'Users and Privileges' tab from the left navigation menu bar. Navigate to 'Privileges' sub tab.

192.168.0.74	🧨 Users and 🛙	Privileges → Privileges		
Test PC		D		
Security devices	<u>^</u>	8== 🗡		
Keyboards and Joysticks				
Users and Privileges	Sr No.	Privilege Name	Туре	
Users	1	Administrator	In Built	
admin	2	Operator	In Built	
00	3	Guest	In Built	
op	4	Smorthbong Client	In Built	
wb	5	Smartphone Client	In Built	
op2				
op3				
Active directory users				
Privileges				
Administrator				
Operator				
Guest				
Web Client				
Smartphone Client				
PTZ priority				
Change password	☐ Allow	adminstrative access fro	m clients	
Alarm management	~			

3. Click on the 'Add Privilege...' button. This will pop up the 'Add New Privilege' dialog box.



Add New Privilege	×	
Privilege Name Base Privilege Features allowed: Privilege Name View dashboard screen Save dashboard screen stat View data indicator Send external alarm Send data for data indicator Channel groups allowed: Channel Group CG_Group001	tyronCommunication Operator Features not allowed: Privilege Name Channel groups not allowed: Channel Group CG_AllChannels	
Alarm groups allowed	Alarms groups not allowed	
Alarm group AG_AllAlarms	Alarm group AG_NoAlarms	
	🕂 🕗	

4. Type any text string for privilege name. We are using 'tyronCommunication' text string for this example.

Select 'Operator' option for 'Base Privilege'

Please ensure that 'Send external alarm' and 'Send data for data indicator' features are added to 'Features allowed' list.

Click on the 'Add' button to finish adding new privilege.

5. The new privilege will be added to the privileges list



192.168.0.74	2	Users and P	rivileges → Privileges		
Test PC	2				
Alarm groups	^	*	X		
Status					
Reports and Export		Sr No.	Privilege Name	Туре	
Communication		1	Administrator	In Built	
Security devices		2	Operator	In Built	
		3	Guest	In Built	
Keyboards and Joysticks		4	Web Client	In Built	
Users and Privileges		5	Smartphone Client	In Built	
Users		6	tyronCommunication	Configured	
admin					
tyronCommUser					
Active directory users					
Privileges					
Administrator					
Operator					
Guest					
Web Client					
Smartphone Client					
tyronCommunication		Allow	adminstrative access from	n clients	
PTZ priority	~				

6. Navigate to 'Users' sub tab under 'Users and Privileges' from the left navigation bar.

192.168.0.74	🧷 Us	sers and P	rivileges → User	5		
Test PC	2					
Device groups	^		3== 🗙			
Alarm groups						
Status		Sr No.	User Name	Privilege	Enabled	Туре
Reports and Export		1	admin	Administrator	Enabled	In Built
Communication						
Security devices						
Keyboards and Joysticks						
Users and Privileges	1					
Users						
admin		_				
Active directory users						
Privileges						
Administrator		_				
Operator						
Guest						
Web Client						
Smartphone Client			unte alaure fan in			
tyronCommunication		Gene	rate alarm for in	valid password use		
PTZ priority	~	🗆 Enabl	e external user	management		

7. Click on 'Add new user...' button, this will open the 'Add New User' dialog box.



Add New User			×
User 1	Name:	tyronCommUser	
Pass	word:	••••	
Confirm Pass	word:	•••••	
Priv	ilege:	tyronCommunication	
		Enable user	
Address Li	ne 1:		
Address Li	ne 2:		
Phon	e No:		
E-ma	ail ID:		
		8	

8. Type username and password. These can be any valid text strings. Confirm the password

Select 'Privilege'. This should be the new privilege, recently added to the privileges list. Click on the 'Add' button to finish adding new user.

9. New user will be added to the users list.

192.168.0.74	2	Users and P	Privileges → Users				
Test PC	2						
Device groups	^	4					
Alarm groups							
Status		Sr No.	User Name	Privilege	Enabled	Туре	
Reports and Export		1	odmin	Administrator	Enabled	In Built	
Communication		2	tyronCommUser	tyronCommuni	Enabled	Configured	
Security devices							
Keyboards and Joysticks							
Users and Privileges							
🕨 Users							
admin							
tyronCommUser							
Active directory users							
Privileges							
Administrator							
Operator							
Guest							
Web Client		C Cono	rate alarm for inval	id password uso			
Smartphone Client		Gene	are alarm for mval	iu password use			
tyronCommunication	¥	🗌 Enab	le external user ma	nagement			



Configuring 'Tyron Storage Interface' application

1. Execute 'Security Management System – Tyron Storage Interface' application, from desktop shortcut or from programs menu shortcut

ron storag	e IP address:	127 .	0.0.1	Tyron storage port n	umber: 443		
ll Interval:		20	Seconds				
	Start Polling	Stop P	olling	Poll Once	Temperature alarm co	nfiguration VM	S Servers
esult Deta	ils						
Sr.No.	Title		Parameter	Value	Result	Status	
etected A Sr.No.	arms Title		Parameter	Value	Result	Status	т
<							>

- 2. Type 'Tyron storage IP address' and 'Tyron storage port Number'. (Note please use default port number 443 if the port number is not known)
- 3. To set threshold for temperature values click on 'Temperature alarm configuration...' button.



High processor temperature threshold:	100	
High board temperature threshold:	100	
High RAID temperature threshold:	100	
High drive temperature threshold:	100	

When any value for the temperature parameter crosses the associated threshold, alarm will be generated and will be sent to SMS server.

Note – Just setting thresholds will NOT generate the alarms. The 'High temperature' alarms need to be configured, as described in this section, below.

4. Click on 'Poll Once' button. This will update the 'Result Details' list with values received from the 'Tyron storage device'



on stora <u>c</u> I Interval:	pe IP address: 127	. 0 . 0 . 1	Tyron storage port nur	mber: 443		
esult Detz	Start Polling Stop	Polling	Poll Once	Temperature alarm con	figuration VMS	Servers
Sr.No.	Title	Parameter	Value	Result	Status	^
1	Drive state	raidcheck	Normal	OK		
2	Drive state	suite	Normal	OK		
3	Fan state	FAN1	6400	OK		
4	Fan state	FANA	6000	OK		
5	Fan state	FAN3	3800	OK		
6	Fan state	FAN2	4900	OK		
7	Fan state	FAN5	0	Failed		
8	Fan state	FAN4	6300	OK		
9	Power supply state	PS2	OK	OK		
10	Power supply state	PS1	OK	OK		
11	Processor temperature	CPU2	44			
12	Processor temperature	CPU1	45			
13	Board temperature	systemtemp	45 degrees C			
14	RAID temperature	RAIDTemp	46 C			
15	Drive temperature	13	46 C			
16	Drive temperature	14	486 C			~
< etected A	larms					>
Sr.No.	Title	Parameter	Value	Result	Status	1
1	Fan state	FAN5	0	Failed		2
<						>

5. Click on 'VMS Servers...' button. This will pop up the 'VMS Servers Communication Configuration' dialog box.



/MS Server Add	List Remove	ation			
Sr.No	VMS Server IP addr	Port Number	Username		
Parameter C	Configuration Edit F	Remove			
Sr.No	VMS Server IP addr	Parameter Name	Module Name	VMS Server Module	Parame
Sr.No	VMS Server IP addr	Parameter Name	Module Name	VMS Server Module	Parame
Sr.No	VMS Server IP addr	Parameter Name	Module Name	VMS Server Module	Parame
Sr.No	VMS Server IP addr	Parameter Name	Module Name	VMS Server Module	Parame

6. Click on 'Add' button from 'VMS Server List'. This will pop up the 'Add VMS server' dialog box.

Add VMS Server		×	<
	VMS Server IP address:	192 . 168 . 0 . 74	
	Port Number(TCP):	5500	
	Port Number(HTTP):	9900	
	Username:	tyronCommUser	
	Password:	•••••	
	Add	Close	

7. Type VMS server IP address, port number (TCP), port number (HTTP). These parameter values are available in the target Security Management System server software in 'Network' subtab under 'Communication' tab from left navigation bar.



192.168.0.74	Communication - Network
Test PC 🥂	□ Input IP address (Connections to cameras)
Device groups	Current: 192.168.0.74 (Status: OK)
Alarm groups	Select: 192.168.0.74
Status	Output IP address (Client connections)
Reports and Export	Current: 192.168.0.74 (Status: OK)
Communication	Select: 192.168.0.74
Network	Ports
HTTPS	TCP port1: 5500
Email settings	RTSP port (TCP): 1024
Phone settings	
FTP settings	RTP port (ODP): 20000
Video streaming	RTCP port (UDP): 20001
Restrictions	HTTP port (TCP): 9900
RSS feed settings	Web address: http://192.168.0.74:9900 🙀
External database	Communication Versions
Relay outputs	Client SDK communication version: ClientSDK-02-00-02
Web Service	Mobile client communication version: Mobile Client-03-02-00
Security devices	
Keyboards and Joysticks	
Users and Privileges 🗸 🗸	

8. Type Username and password. These are related to the new user configured in the 'Security Management System sever software' as per the section 'Security Management System server software – Add new user 1' from this document

Add VMS Server			×
	VMS Server IP address:	192 . 168 . 0 . 74	
	Port Number(TCP):	5500	
	Port Number(HTTP):	9900	
	Username:	tyronCommUser	
	Password:	••••	
	Add	Close	

9. Click 'Add' button to finish adding the VMS server.



Servers C	Communication Configu	ration			
MS Server	List				
Add	Remove				
Sr.No	VMS Server IP addr	Port Number	Username		
1	192.168.0.74	5500	tyronCommUser		
arameter	Lonfiguration				
Add	Edit F	Remove			
Add Sr.No	Edit F VMS Server IP addr	Remove Parameter Name	Module Name	VMS Server Module	Paramete
Add Sr.No	Edit I	Remove Parameter Name	Module Name	VMS Server Module	Paramete
Add Sr.No	Edit I VMS Server IP addr	Remove Parameter Name	Module Name	VMS Server Module	Paramete
Add Sr.No	Edit I VMS Server IP addr	Remove Parameter Name	Module Name	VMS Server Module	Paramete
Add Sr.No	Edit I VMS Server IP addr	Remove Parameter Name	Module Name	VMS Server Module	Paramete
Add Sr.No	Edit F VMS Server IP addr	Remove Parameter Name	Module Name	VMS Server Module	Paramete

Note – Though it is possible to add more than one VMS servers to the VMS servers list; typically only one VMS server will be added to this list

10. After adding the VMS server to the VMS servers list; click on 'Add' button from 'Parameter Configuration'.



Sr.No	VMS Server IP addr	Port Number	Username		
1	192.168.0.74	5500	tyronCommUser		
Add Sr.No	Edit F	Remove Parameter Name	Module Name	VMS Server Module	Paramet
Add Sr.No	Edit F	Remove Parameter Name	Module Name	VMS Server Module	Paramet
Add Sr.No	Edit F	Remove Parameter Name	Module Name	VMS Server Module	Paramet
Add Sr.No	Edit F VMS Server IP addr	Remove Parameter Name	Module Name	VMS Server Module	Paramet
Add Sr.No	Configuration Edit VMS Server IP addr	Remove Parameter Name	Module Name	VMS Server Module	Paramet
Add Sr.No	Configuration Edit F VMS Server IP addr	Remove Parameter Name	Module Name	VMS Server Module	Paramet

11. This will pop up the 'Add parameter configuration' dialog box

Add Parameter Configurati	on	×
VMS Server IP address:	192.168.0.74 ~	
Parameter Type:	External Module	,
Parameter Name:	Drive state - raidcheck	,
Module Name:	raidcheck Copy from param	eter name
	Add Close	

12. Select 'VMS server IP address'. Since only one VMS server is added to the list of VMS servers, only one option will be available for this parameter

Select 'Parameter type' as 'External Module'.

The 'Parameter Name' drop-down options will be dynamically updated. The 'Parameter Name' drop-down will display all possible options for the selected 'Parameter Type'. This drop-down will display the relevant parameters available from the target 'Tyron storage device', as queried during the 'Poll once' processing.

Please select 'Parameter Name'. For this document, since we will be using 'Alarm type' as 'Drive state' and 'Source' as 'raidcheck', 'Drive state – raidcheck' option is selected for 'Parameter Name'.



Type 'Module Name'. This is a text string which should exactly match the 'Module Name' set for the 'External Alarm Module' added to the 'Security Management System server software'; as per the 'Security Management System server software - Configuring external alarm module' section from this document

- 13. Click on the 'Add' button to finish adding the parameter configuration.
- 14. Parameter configuration will be added to configuration list.

Servers C	Communication Configu	ration			
MS Server	List				
Add	Remove				
Sr.No 1	VMS Server IP addr 192.168.0.74	Port Number 5500	Username tyronCommUser		
arameter (Add	Configuration Edit	Remove			-
arameter C Add Sr.No	Configuration Edit VMS Server IP addr	Remove Parameter Name	Module Name	VMS Server Module	Parame
arameter C Add Sr.No 1	Configuration Edit VMS Server IP addr 192.168.0.74	Remove Parameter Name raidcheck	Module Name raidcheck	VMS Server Module External Module	Paramet
Add Sr.No	Configuration Edit VMS Server IP addr 192.168.0.74	Remove Parameter Name raidcheck	Module Name raidcheck	VMS Server Module External Module	Paramet Drive st
Add Sr.No	Configuration Edit VMS Server IP addr 192.168.0.74	Remove Parameter Name raidcheck	Module Name raidcheck	VMS Server Module External Module	Parame Drive st
Add Sr.No	Configuration Edit VMS Server IP addr 192.168.0.74	Remove Parameter Name raidcheck	Module Name raidcheck	VMS Server Module External Module	Paramet
Add Sr.No 1	Configuration Edit VMS Server IP addr 192.168.0.74	Remove Parameter Name raidcheck	Module Name raidcheck	VMS Server Module External Module	Paramet Drive st
Add Sr.No	Configuration Edit VMS Server IP addr 192.168.0.74	Remove Parameter Name raidcheck	Module Name raidcheck	VMS Server Module External Module	Paramet

15. Click on 'Add' button from 'Parameter Configuration' again, to add one more parameter.

Add Parameter Configurati	on	×
VMS Server IP address:	192.168.0.74 ~	
Parameter Type:	Data Indicator	\sim
Parameter Name:	Processor temperature - CPU2	\sim
Module Name:	CPU2	Copy from parameter name
	Add Close	



16. Select 'VMS server IP address'. Since only one VMS server is added to the list of VMS servers, only one option will be available for this parameter

Select 'Parameter type' as 'Data Indicator'.

The 'Parameter Name' drop-down options will be dynamically updated. The 'Parameter Name' drop-down will display all possible options for the selected 'Parameter Type'. This drop-down will display the relevant parameters available from the target 'Tyron storage device', as queried during the 'Poll once' processing.

Please select 'Parameter Name'. For this document, since we will be using 'Data indicator type' as 'Processor temperature' and 'Source' as 'CPU2', 'Processor temperature – CPU2' option is selected for 'Parameter Name'.

Type 'Module Name'. This is a text string which should exactly match the 'Module Name' set for the 'Data indicator' added to the 'Security Management System server software'; as per the 'Security Management System server software – Configuring data indicator' section from this document

17. Click on the 'Add' button to finish adding the parameter configuration.

Sr.No	VMS Server IP addr	Port Number	Username byrooCommiliser		
1	192.108.0.74	5500	tyronCommuser		
arameter (Configuration				
arameter C Add	Configuration Edit I	Remove			
arameter C Add Sr.No	Configuration Edit I VMS Server IP addr	Remove Parameter Name	Module Name	VMS Server Module	Paramet
arameter C Add Sr.No 1	Configuration Edit I VMS Server IP addr 192 168 0 74	Remove Parameter Name raidcheck	Module Name raidcheck	VMS Server Module	Paramet
Add Sr.No 1 2	Configuration Edit I VMS Server IP addr 192 168 0 74 192.168.0.74	Remove Parameter Name raidcheck CPU2	Module Name raidcheck CPU2	VMS Server Module External Module Data Indicator	Paramet Drive st Process
Add Sr.No 1 2	Configuration Edit I VMS Server IP addr 192 168 0 74 192.168.0.74	Remove Parameter Name raidcheck CPU2	Module Name raidcheck CPU2	VMS Server Module External Module Data Indicator	Parame Drive st Process

18. Parameter configuration will be added to configuration list.

- 19. Click 'Close' button to close configuration dialog box.
- 20. Click on 'Start Polling' button. This will start periodic polling at specified 'Poll interval'. The 'Tyron storage device' will be queried for the parameter status values, and the response will be



parsed and status values will be sent to the 'Security Management System server software', as per the 'Parameters configuration' done in the 'Tyron storage interface' application.

ron storaș Il Interval	ge IP address: 127	. 0 . 0 . 1 Seconds	Tyron storage port nur	ber: 443	
in the second	Start Polling Sto	p Polling	Poll Once T	emperature alarm con	figuration VMS Servers
Sr.No.	Title	Parameter	Value	Result	Status
1	Drive state	raidcheck	Failed	Failed	SUCCESS
2	Drive state	suite	Normal	OK	Success
3	Fan state	FAN1	6400	OK	
4	Fan state	FANA	6000	OK	
5	Fan state	FAN3	3800	OK	
6	Fan state	FAN2	4900	OK	
7	Fan state	FAN5	0	Failed	
8	Fan state	FAN4	6300	OK	
9	Power supply state	PS2	OK	OK	
10	Power supply state	PS1	OK	OK	
11	Processor temperature	CPU2	42		Success
12	Processor temperature	CPU1	01		Error - Not Configured
13	Board temperature	systemtemp	02 degrees C		Error - Not Configured
14	RAID temperature	RAIDTemp	02 C		Error - Not Configured
15	Drive temperature	13	02 C		Error - Not Configured
16	Drive temperature	14	912 C		Error - Not Configured
<					>
etected A	larms				
Sr.No.	Title	Parameter	Value	Result	Status
1	Fan state	FAN5	0	Failed	
2	Fan state	FAN5	0	Failed	Error - Not Configured
3	Drive state	raidcheck	Failed	Failed	Success
<					

- 21. 'Status' column indicates communication status with VMS server.
 'Success' indicates values or alarms are sent successfully to VMS server.
 'Error Not Configured' indicates modules for this data indicator or alarm is not configured in VMS Server.
- 22. The alarms will be listed under 'Detected Alarms' list. The list also shows 'Status' related to communication with VMS server to send the alarm to VMS server
- 23. From the desktop shortcut or from the programs menu shortcut, please execute 'Security Management System – Tyron Storage Interface watchdog'. The watchdog application monitors the 'Security Management System – Tyron Storage Interface' application.



Security Management System server software – Add new user 2

- 1. A new user needs to be added to the 'Security Management System server software'. This user will be used for login from the 'Security Management System client software' for displaying the alarms and status values queried from the 'Tyron storage device' (described in next sub-section of this document)
- 2. In the Security Management System server software, please navigate to 'Users and Privileges' tab from the left navigation menu bar. Navigate to 'Privileges' sub tab.

192.168.0.74	🧷 Users and	Users and Privileges – Privileges							
Test PC									
Security devices		8== 🗙							
Keyboards and Joysticks									
Users and Privileges	Sr No.	Privilege Name	Туре						
Users	1	Administrator	In Built						
admin	2	Operator	In Built						
duini	3	Guest	In Built						
op	4	Web Client	In Built						
wb	5	Smartphone Client	In Built						
op2									
орЗ									
Active directory users									
Privileges									
Administrator									
Operator									
Guest									
Web Client									
Smartphone Client									
PTZ priority									
Change password	☐ Allov	w adminstrative access fro	m clients						
Alarm management	~								

3. Click on the 'Add Privilege...' button. This will pop up the 'Add New Privilege' dialog box.



Add New Privilege	×
Privilege Name: t Base Privilege: C Features allowed: Privilege Name View dashboard screen Save dashboard screen stat View data indicator Send external alarm Send data for data indicator Channel groups allowed: Channel Group CG_AllChannels	SyronClient Deperator Features not allowed: Frivilege Name Privilege Name Channel groups not allowed: Channel Group CG_Group001 CG_Group001
Alarm groups allowed	Alarms groups not allowed
Alarm group AG_AllAlarms	Alarm group AG_NoAlarms
	÷ 0

- Type any text string for privilege name. We are using 'tyronClient' text string for this example. Select 'Operator' option for 'Base Privilege' Please ensure that 'View dashboard screen' and 'View data indicator' features are added to 'Features allowed' list. Click on the 'Add' button to finish adding new privilege.
- 5. The new privilege will be added to the privileges list



192.168.0.74	1	Users and P	rivileges – Privileges		
Test PC	1				
Status	^		X		
Reports and Export					
Communication		Sr No.	Privilege Name	Type	
Security devices		1	Administrator	In Built	
Keybo and an eligible		2	Operator	In Built	
Kernitarua tahu hiyakitika	- 11	3	Guest	In Built	
Users and Privileges		4	Web Client	In Built	
Users		5	Smartphone Client	In Built	
admin		2	tyronCommunication	Configured	-
tyronCommUser		-	cyroncaenc	Consigured	_
Active directory users					
Privileges					
Administrator					
Operator					
Guest					
Web Client					
Smartphone Client					
tyronCommunication					-
tyronClient		C Allow	adminstrative access from	n clients	
PTZ priority	v				

6. Navigate to 'Users' sub tab under 'Users and Privileges' from the left navigation bar.

192.168.0.74	🧷 U	Users and Privileges - Users							
Test PC	2								
Device groups	^		3== 👗						
Alarm groups									
Status		Sr No.	User Name	Privilege	Enabled	Туре			
Reports and Export		1	admin	Administrator	Enabled	In Built			
Communication									
Security devices									
Keyboards and Joysticks									
Users and Privileges									
🕨 Users									
admin									
Active directory users									
Privileges									
Administrator									
Operator									
Guest									
Web Client									
Smartphone Client									
tyronCommunication		Gener	rate alarm for in	valid password use					
PTZ priority	~	🗆 Enabl	e external user	management					

7. Click on 'Add new user...' button, this will open the 'Add New User' dialog box.



Add N	New User		×
	User Name:	tyronClientUser	
	Password:	••	
Confir	m Password:	••	_
	Privilege:	tyronClient ~	
		Enable user	
Add	ress Line 1:		
Add Add	ress Line 1: ress Line 2:		_
Add Add	ress Line 1: ress Line 2: Phone No:		
Add Add	ress Line 1: ress Line 2: Phone No: E-mail ID:		

8. Type username and password. These can be any valid text strings. Confirm the password

Select 'Privilege'. This should be the new privilege, recently added to the privileges list. Click on the 'Add' button to finish adding new user.

9. New user will be added to the users list.

192.168.0.74	1	Users and	Privileges - Users			
Test PC	1					
Status	^	*	B= 🗙			
Reports and Export						
Communication		Sr No	User Name	Privilege	Enabled	Type
Security devices		1	admin	Administrator	Enabled	In Built
Keyboards and Joysticks		2	tvronCommUser tvronClientUser	tyronCommuni	Enabled	Configured
Users and Privileges		-	cyronenencoser	cyronenen	Chabica	comgarca
Users						
admin						
tyronCommUser						
tyronClientUser						
Active directory users						
Privileges						
Administrator						
Operator						
Guest						
Web Client		_				
Smartphone Client		E cu	ante alarm facional			
tyronCommunication		Ger	ierate alarm for inval	id password use		



Security Management System client software – Alarm and status display

- 1. On client workstation computer, execute the 'Security Management System client software'
- 2. This will display the login screen.

Type the Security Management System server software IP address. Type the user name and password. These are related to the new user recently added to the 'Security Management System server software' as per the 'Security Management System server software – Add new user 2' section from this document

Security Ma	nagement S	System Lo	gin				
						V 1	5.02.10.79
	Connect	Using:	ΘI	P Address	в О Ву	Dom	ain Name
	Site/Ser	ver IP	19	2.168.	0.74	4	4
	User	Name:	tyro	nClientU	ser		Γ
	Pass	word:	••				
From se	eo Access rver Forwardin	g' Enabl	led A	At Server			~
TCP Port	1:	5500		RTSP P	ort(TCP):	1	1024
HTTP Por	rt(TCP):	9900		RTP Po	rt(UDP):	2	20000
				RTCP F	Port(UDP)	: 2	20001
Repair Configuration							
				0	U		2

3. The 'Security Management System client software' will connect to server software, and the main screen will be displayed.



Security Management System - Client (User=tyronClient	entUser,Privilege=tyronClient) - (CCTV keyboard screen inc	dex 1)			- 🗆 X
Application Layout Setting	gs Screens Active alarms	Video Panorama Help		Live video Current time:	2019/10/18 14:33:59
Camera PTZ Digital operations 1 1 1 P Pecus : Pecus : Provide a provide a		4			
Alarms Notifications Sr No. Alarm Type Alarm Name Alar	arm time Site ID	Site Name Source ID	Source Name Generator ID	No activ	e alarm.
<			>		

4. Click on the 'Screens' menu from top menu bar and click on the 'Dashboard' sub-menu

Securit	y Management Sys	tem - Client (User=ty	ronClientUser, Privile	ege=tyronClient) - (CCTV ke	yboard screen	index 1)					-	□ ×
Applica	ation La	ayout s	Settings	Screens Ac	tive alarms	Video Panorama	Help					
Inf	inova®			Live screens	· 😽	🔎 🚮 🚮				Live video		
2217 5403	rity Management System			Playback screens						Current time:	2019/10/18	14:25:55
-Zu Test	PC(192,168.0.74)	P	I- Cam1498	Map screens				£*.				
Device groups Concentration Concentration Concentration Concentration Software S			- CE	Search alarms	creen	In the second second second						
				Export video								
				Search bookmarks	Ilysis		B					
				Forensic video analy								
				Object counting rep	rts							
				Search alarm image			A					
			_	Offline data viewer			100					
				Acknowledgement n	eport	1000						
				Dashboard	1000		and the second of the second o					
				Case export	A CONTRACTOR OF THE OWNER OF							
			Second Street,	User management		and the second s	and the second se					
C			}-					4-				
Camera	P12 Digital oper	rations I										
Focus :												
F 4	<u>a i e</u>	9 e 1										
1	🧐 为 Iris											
		0 30										
6	Y 🕘 🖻											
3	0											
PTZ spe	eed:											
								2				-
Alarms	Notifications											
Sr No.	Alarm Type	Alarm Name	Alarm time	Site ID		Site Name S	ource ID	Source Name	Generator ID			
-										No activ	alarm.	
<									>			

5. This will pop up the 'Dashboard' screen. The dashboard screen displays all the 'Alarms' generated in the 'Security Management System' and also displays the 'Data Indicator' values



(a) Dashboard					-					
Offline devices list	Notifications									
	Notification Type Watchdog applicatio	Notification Time 2019/10/04 08:00:00	Site Name Test PC	Type Of Application Server Application	Details Watchdog application	is not av;				
0 cameras offline out of 1										
Data indicators										
Sr No. Name Value 1 CPU2 50										
	۲.					>				
Offline servers list	Alarms									
S Server IP Address Server Type	Sr No. Alarm type	Alarm name A	arm time	Site Name	Source ID	Sourc				
All Servers OK	1 External Alar.	External Alar U	4/10/2019 08:42:02	SITE_18DBF20FCF04	EA_raidcheck	raidch				
< >>	٢									
All servers OK	Total 1 alarms									
🔽 Auto refresh 👩 Refreshing in 20 seconds 🖬										