

The IM-ACX is a Transaction and Control Bridge between Milestone's XProtect VMS and the ISONAS Access Control System.

Summary

This document provides a basic overview as well as installation and operating instructions for the IM-ACX[™] software package.

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IM-ACX[™] functions as a bidirectional communication link between Milestone XProtect Access (XP-Access) and ISONAS Access Control systems. It logs access control events into the XProtect Event and Alerts lists (for viewing and review by Smart Client users), and enables Smart Client users to easily control (i.e. Unlock and Lock) security system devices such as electric strikes and magnetic locks.

1.1. Logical View



Note: XProtect and Pure Access Manager should reside on separate servers. Two servers are shown in this manual to help illustrate the concepts.



1.2	2. 0	perationa	al View
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2. Features & Benefits

- Unifies Access Control and Video Surveillance into a single powerful security solution.
- Enables Smart Client users to easily operate one or more Access Control systems.
- Live Viewing
 - Live monitoring of access control events.
 - o Dedicated functions in the Smart Client enable users to:
 - Effectively monitor events
 - Manually control passage of cardholders presenting credentials at Access Points.
 - A dedicated Access Control tab within the XProtect Smart Client for access control operations saves time and ensures a greater automation.
 - View live video linked to events from the access control system in XProtect Smart Client.
 - Access control events can be displayed with related camera images.
 - Centralized door state overview and control.
- Map Integration
 - Integrates with the interactive maps function available in various XProtect platforms.



- Door items can be added to the map, displaying current state (Opened/Closed, Locked/Unlocked) of each door.
- Notification
 - o Associate custom Alarm definitions with Access Control events.
 - Access Request Notification works as a fly out and draws attention to specific events related to the access control system, enabling instant actions, such as taking a snapshot when a door is opened and closed.
- Investigation
 - Conduct Access Control event investigations.
 - Filter searches to easily find what is needed, such as searching for all denied access events or a specific card holder
- Multiple Access Control systems
 - Operate multiple access control systems from the same user interface. This may be relevant when coordinating access control across different buildings or sites.

3. Event Data Flow

Legend for descriptions below:

Code	Description		
	Access Control System		
Pure IP	ISONAS Pure IP Reader-Controller		
ISONAS	ISONAS Pure Access & PANRServ (Servers / Services)		
	Communication Link between Systems		
IM-ACX ISONAS IM-ACX			
	Milestone XProtect System		
ХР	Milestone XProtect		
XP-Access	XProtect Access Manager		
SC	Smart Client		

3.1. Events from ISONAS generate events in XP





3.2. Commands from SC generate events in ISONAS



4. Operational Data Flow (Basic Overview)

4.1. Smart Client / XP-Access to Access Control System



4.2. Access Control System to Milestone / Smart Client





5. System Setup (Overview)

5.1. General Installation Process

The overall flow of configuring the system is shown in the diagram below.

- The core Milestone and ISONAS applications are installed and configured
- The specific Plug-ins that support the interface are installed
- The IM-ACX application is installed
- The appropriate configurations are made
- And then the integrated systems are tested.





Assuming that both a functioning XProtect system and a functioning ISONAS system are already in place, the basic setup of XProtect Access integration setup is outline below.

Note: Refer to the "System Installation and Configuration" section for specific instructions about the installation and configuration of IM-ACX and its integration with ISONAS and XProtect.

5.2. Configure ISONAS Pure Access (Cloud or Manager)

- 1. A working AC system which includes:
 - a. A Pure IP reader-controller that will be used for testing
 - b. Two test personnel records
 - i. One person who will be accepted by the reader-controller
 - 1. Assign an image to that person
 - 2. Assign a credential to that person
 - ii. One person who will be rejected by the reader-controller
 - 1. Assign an image to that person
 - 2. Assign a credential to that person

5.3. Configure ISONAS PANRServ

- 1. Define "Input" for receiving incoming commands from IM-ACX (originating in Smart Client / XProtect Access).
- 2. Define "Output" for sending real-time events to IM-ACX.

5.4. Install and Configure ISONAS IM-ACX

- 1. Install IM-ACX server (Milestone server).
- 2. Configure IM-ACX using its Desktop application interface.
 - a. Assign IP port for listening for commands / requests from XP-Access.
 - b. Assign IP address of XProtect Access server.
 - c. Assign IP address and port for sending commands to PANRServ
 - d. Assign IP port for listening for Events from ISONAS.

Note: these will come in as default to local host upon download

5.5. Install ISONAS IM-ACX Plug-in and Configure Milestone XProtect Access

- 1. Install IM-ACX Plug-in (on Milestone server into the Event Server "MIP Plug-in" folder).
- 2. Assign IP address of IM-ACX server.
- 3. Assign IP port for sending commands / requests to IM-ACX (Access Control System). (This is the corollary to the "XProtect Access Port" in the IM-ACX properties, referenced above.)
- 4. Assign User ID and Password for sending commands / requests to IM-ACX / Access Control system.

5.6. Configure Milestone Smart Client

1. Define Views (containing XProtect Access interface data).



5.7. Test and Configure IM-ACX as a Windows Service

- 1. Test the Interface's core functionality
 - a. Assign a Door to a Camera
 - b. Verify an "Admit" from the Smart Client operates the door.
 - c. Verify the "Admit" activity records appear on the Smart Client's Access Control Tab
- 2. Install the IM-ACX application as a Windows Service.

6. System Installation and Configuration

It is assumed that the reader has an understanding of ISONAS Pure Access and Milestone XProtect. Only the unique system configurations are shown here.

6.1. IM-ACX Core Installation Checklist

Step	Mark when	
Number	Complete	Description (Core IM-ACX Install)
001		 Configure ISONAS Pure Access Pure Access is configured with:
002		 Configure Milestone XProtect Assure the following conditions are met: Milestone XProtect Enterprise or Corporate is installed (Version dated 2014 or newer) Milestone Management Application is available You have the proper user logon to be able to configure the XProtect Management application, and Smart Client A couple cameras have been defined within the Milestone XProtect.
003		 Server Firewall Settings Typical and recommended installation will be to install both services on the Milestone Management Sever. If you choose to use two servers, where the IM-ACX application is installed on one server, and a 2nd server supports the XProtect application. In this case, any related firewalls on the servers and/or networking equipment need to configured to allow traffic thru on the following IP-ports: TCP-protocol's IP-Ports: 85, 86, 87, & 88



004		Access the ISONAS PANRServ application Windows Navigation: Start Button → Programs → ISONAS → PANRServ		
Step	Mark when			
005	Complete	Core IM-ACX Install) Configure ISONAS PANRServ Input and Output Communication Channels The Pure Access Section determines the tenant and credentials the data and information should be connected to. The "Input" receives incoming commands from IM-ACX (originating in Smart Client / XP-Access). The output section sends commands, events and requests to IM-ACX. **for Pu		
		Log/Status Configuration Test Pure Access Portal Uit: https://isonaspureaccessdemo.com Image: Password Visername: adigiorgio@digitalprovisions.com Image: Password Password: reconstance seconds after Admit Basic (Input) Port: 7102 User: admin Enter your Ister: admin Composition admin Password: reconstance Enter your Ister: admin Enter your Ister: admin Chapps/UMADX/Apps_ISDNAS_Images		
		Server Connection (Output) IP Address: 127.0.1 Port: 1225 Sove Settings Optione Image: Communication when application starts If Auto-start communication when application starts Image: Mermize to system trav Log levet 3: More Image: Date and Time Log measurum stare: Image: Date and Time Image: Date and Time Service Image: Service Image: Service Image: Service log days: Image: Date and Time Image: Service Image: Date and Time I		



		 Actions: Pure Access Section: Enter the URL for Pure Access Cloud along with an administrator's login information Usually this is https://isonaspureaccesscloud.com Enter your latch interval under "Send lock message" this is usually 3 secs. **For Pure Access Manager the URL is the address of the server you are running Pure Access on and the login is your designated login to use to get into the application and requires https:// at the beginning. Basic Input Section: Retain the shown default values for the Input Username: admin password: apassword Image Path Default is C:ISONAS/IMACX/Images Server Connection(Output): Leave all existing default values for the output **Note: These values should correlate to the input and output values in IMACX.
Step Number	Mark when Complete	Description (Core IM-ACX Install)
006		Run the ISONAS PANRServ application. Windows Navigation: Start Button → Programs → ISONAS → PANRServ For now, leave the PANRServ window running, but you can minimize it.



Step Number	Mark when Complete	Description	(Core IM-ACX Install)
007		Download the IM-ACX Installation packages The IM-ACX is distributed in two (2) Windows installa have received an email with links to those files.	ation packages. You should
		Download both files and save them to your workstat These files can be found on our website <u>here</u>	ion.
008		Stop the Milestone Event Server The Milestone Event Server must be stopped to allow be discovered and initialized when the event server	w the new IM-ACX plug-in to service starts.
008a		Subject to the Services on the "tree" Stop the "Event Server" entry	



Char	Maxicula		
Step	Wark when	Description	(Coro INA ACV Install)
	r Complete	Description	(Core INI-ACX Install)
0000		XProtect Corporate	fuence the standard
		Stopping the Milestone Corporate Event Server is done Windows "Service Manager"	from the standard
		windows scruce wanager .	
		Navigation	
		From the "Control Panel", search for "Services"	
		🐺 services - Control Panel	
		G Ville Control Pares - • 🖸 🔤	
		Administrative Tools	
		Windows CardSpace Manage Information Cards that are used to log on to online services	
		System Wildow renote access to your computer	
		Allow Remote Assistance evolutions to be sent from this computer	
		Office the Standard State and Council for Security of	
		and the state of t	
		Select the "View Local Services" option	
		Select the Milestone XProtect Event Service, and stop i	t.
		Q Service -	101
		C Service (Long)	5160 / +1
		Concerning	Southern Southern and B
		Question through the second terms to use the second. Marine Auronality tem Definition United Second Secon	nit
		C. (Autor International Service) - Hericality, Parcel Law C. Autoretic Data Mindow Products, Marchael Law C. (2014) Network Marchael Review Restored A Dealert Network	Dylam Dylam M S
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		heread (Thesis /	



Sten	Mark when		
Number	Complete	Description (Core IM-ACX Install)	
009	Complete	Core IM-ACX Insta Install and Configure IM-ACX plug-in Note: The IM-ACX plug-in <u>must be</u> installed on the host computer that is running the Milestone XProtect Event Server. Copy the Plug-In Installation Package to the Milestone server. Run the Plug-In Installation Package. Note: The plug-in program will be installed in a directory under the XProtect Event Server, where it becomes an integral component of the Event Server sub-system. Image: Server sub-system. Image: Server the base term balance subter sub-system.	
		Select coopenants to indust PHONOR AND TABLE READ THE TERMS AND CONCENTIONS OF THIS LICENSE. Address Mark Tracket READ THE TERMS AND CONCENTIONS OF THIS LICENSE. Address Mark Tracket READ THE TERMS AND CONCENTIONS OF THIS LICENSE. Address Mark Tracket Read Tracket Concentrations with the ad-advision a straph of the boost of the terms of the EALA. The Read Read Tracket Concentration with the terms of the EALA. The Read Read Tracket Concentration with the terms of the EALA. The Read Read Tracket Concentration with the terms of the EALA. The Read Read Tracket Concentration with the terms of the EALA. The Read Read Tracket Concentration with the terms of the EALA. The Read Read Tracket Concentration with the terms of the EALA. The Read Read Tracket Concentration with the terms of the EALA. The Read Read Tracket Concentration of the Second State Read Tracket	
		This will create some Start Menu items under the ISONAS section.	
010		Restart the Milestone Event Server The Milestone Event Server must be stopped and restarted, so it loads the new IM-ACX Plug-in.	



ACCESS CO	NTROL			
Step	Mark when			
Number	Complete	Description		(Core IM-ACX Install)
010a	Complete	Description XProtect Enterprise Navigation within the Milestone Click on the Services on the "t Start the "Event Server" entry Start the "Event Server" entry Start the "Event Server" entry Start the service of the Service Control Service	e Management Applicatio	(Core IM-ACX Install) n
010b		XProtect Corporate Starting the Milestone Corporate Windows "Service Manager". Select the Milestone XProtect E	e Event Server is done fro vent Service, and start it.	om the standard



ALCO P S CU	NIRUL		
Step	Mark when		
Number	Complete	Description	(Core IM-ACX Install)
011		Install and Configure IM-ACX appli	ication
		Note The IM-ACX application can b	e installed on the Milestone server as well.
		Copy the Plug-In Installation Packa downloads or my documents or dir	ge to the Milestone server to the rectory of your choice.
		Run the IM-ACX application Installa	ation Package.
		MACK Setup License Agreement	🔯 M-ACK Setup: Lestalation Options 👘 🗐 🗙
		Basis review the literasterme before completing the installation.	Check the components you want to install and uncheck the components poundority want to install. Girk fault to continue.
		DIGHLISSE LICENSE AGREEMENT FOR "SOMAS_MROT" ("SOFTWARE	
		DMONTANT REACE READ THE TERMS AND CONDITIONS OF THIS LICENSE WATERMANT CHARTILLY REPORT CONTINUING WITH MIST RECORDAN DETAIL. SOMAS Security Systems, COMPANY TI Ind'Line Lacona Agreement (TILLA') is a logit agreement bothware upon certain to individual or a single refut) and SOWAS for the COMMANY address products (Security Both with new visuals associated services components), section, prefet and entry with new visuals associated services components (Security Both and "online", or electrose Comment data making the SOFTWARE RECORD. By including, opport, or otherwas using the SOFTWARE RECORD. Sogne set to bound by the News of the SELA. The Komen opmenent	Salect components to initial
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		Stop vill mutal DS-ACK in the tokening folder. To initial in a different folder, Cick Draves and select another folder. Cick Initial to due the initialition.	Completed
		Destination Folder	Show shows
		Space regards (0.798) Space evaluate 169.808 Cancel Industrianed Science 1602 < 6945 Instal	Court I salest see from other





ACCESS CO	NTROL		
Step	Mark when		
Number	Complete	Description	(Core IM-ACX Install)
Step Number 013	Mark when Complete	Description Launch the IM-ACX Launch the IM-ACX desktop application from its new shot desktop, or from the new entry in the Start Menu under shortcuts. IM-ACX will use its default configuration and "look" for it within the Milestone Event Server. The initial contact will has not yet been formally configured and the communic been established. Image: Start Comment and Start Menu under Start Menu und	(Core IM-ACX Install) ortcut icon on the the ISONAS system Its accompanying plug-in Il fail because the system ation links have not yet
		12:37:07 Connecting to ACM 85 discover 1 of 6 (port 5:12:37.08 (Succentral)) 12:37:07 Connecting to ACM 85 discover 1 12:37:08 UNK 0 seconds to see than 0.85(CONNECT_ADX) 12:37:08 UNK term VAL DOORS Heads 12:37:10 Seconds 12:371:13-LOGON ACCEPTEDOI 12:37:12 Seconds 12:371:13-LOGON ACCEPTEDOI <tr< th=""><th></th></tr<>	
		ACM	
		See the next section for detail descriptions of the IM-AC	X application's features



Configure IM-ACX

Assuming Milestone Management service and IMACX services are on the same server, most fields can be left with their default settings. With the exception of the deep links, which will be the Pure Access address.

10	ng Settings About
t	Niestone ACM (Listener) (From ACM Integration)
2	Local port 85 T IPv6
	Remote host: 127.0.0.1 (Address of ACM XProtect server)
	Ignore Request Users from ACM 3
	ISONAS To PANRServ "Basic Configuration")
	Remote host 127.0.0.1
	Remote port: 7102 Disconnect when not in use
	User: admin TPass: Tensees
	Status poling frequency: 180 seconds: (0 = no poling)
	Check door status after 'Admit'
4	Image path: C:\apps\IM-ACX\Apps_JSD14/ Deep link: Idemo.com/#digitalprovisions/
	Log level: 3: More Time Only
	Application mode: ISONAS to Milestone ACM (Requires application restart)
Ī	Service
<u></u>	
5	Defaults Undo SAVE
	7

Specific fields to review include:

- 1. IP address of XP-Access server.
- 2. IP address of the PANRServ server.
- 3. IP Port that PANRServ is listening on (Match value configure within PANRServ (7102 or equiv).
- 4. User Name & Password for logon to PANRServ process.
- 5. Location where Pure Access stores the "cardholder photos".



Step Number	Mark when Complete	Description	(Core IM-ACX Install)
		7. Once the configuration is updated,	save the configuration.
		6. URL to the site's Pure Access tenan	t login for deep links



Restart the IM-ACX Application

Stop and Start the IM-ACX application.

Review the "Service Channel" status.

and a standard of an	e processed i			
log Settings Abi	out			
Mastrum Device Map	opings 50			-
17 17:02: Pv-5Npin 17 17:02: Senice CV 17 17:05: Said Later 17 17:05: Said Later 17 17:06: Alexchig 17 17:06: Alexchig 17 17:06: Concetting 17 17:06: Concetting 17 17:06: Michaenke 17 17:06: Michaenke 17 17:06: Social Litt 17 17:08: Litt 17 17 18:55: Sance Litt 17	niliseconds/5100.511 sysR mmel "Bastrag" (pot 31/), mmel "ALM gastrag" (pot 31/), ALM Software Tot 41 ALM Top35 has path Connect one Starteg guilten Y ALL DOORS 1 Auch 17:258 Logan than guilten Y ALL DOORS 1 Auch 17:258 Logan than guilten Y ALL DOORS 1 Auch 17:258 Logan than guilt ALM Software 1 ALM	eod/table(1) (port IIIE _ 17:17:05 Service C NNECT_A2MO(A2MO(pr32 Pending) == Yes ted (1) Pendits _ (27.0.0.1 failed -resamp process FReside	hannel "Resdy" arnaeel	
17.19.03 Service Chi	and 'OF'			
1719:03 While OF: 5	Service Channel Exception	Thread was being aborted.		
17.19.06: Service Ch. 17.19.07: Start Listeri 17.19.07: Service Ch. 17.19.07: Service Ch. 17.19.07: Attempting. 17.19.07: Attempting. 17.19.07: Attempting. 17.19.08: Vet 0. tecc. 17.19.08: Vet 0. tecc. 17.19.08: Vet 0. tecc. 17.19.09: Millisteri-K. 17.19.09: Millisteri-K.	ernel "Stating" (pot 87) ing te RCM plugin arriel "Ready". ACM Connector/85 In ACM 36 (stanot 1 of 4) ACM 00[[Juccessitu] ands to: aendAcmOn890C0 ands to: aendAcmOn890C0 endAcmOn80C0041ECT_ on_AMD_ teori: inter-ForPlu 4); TopIS has just Connect	ipot SE _ 17:19.08 (Success NHECT, A2H0) A2M0(pr38 Pending) Yes ted (1)	. /	/
	Line Construction of the	1	1 march 1 march	COCUMPT
STATT Service	STOP Senice			THE PARTY NEW YORK

If the Service Channel is not shown in the "Ready" status, then your system may require you to use the "Enable Service Channel" option from the Start menu.

Navigate to the ISONAS \rightarrow IM-ACX \rightarrow Configuration section

Right click on "Enable Service Channel", and select the "Run as Administrator" option.



Once the Service Channel has been enabled: Stop and restart the IM-ACX application.



Step	Mark when	
Number	Complete	Description (Core IM-ACX Install)
016		Configure XP-Access (XProtect Enterprise)
		a. Select the "Access Control" subsystem from the main options
		panel. b. Right-click the Access Control subsystem and select "Create
		new" to initialize the link to ISONAS.
		Se Strengthe Still Management Application
		B D Averaged Street D D D D D D D D D D D D D D D D D D D
		Construction
		Control Braceward Control Cont
		B af Unit binness B annon B
		()
		1



Step	Mark when		
Numbe	er Complete	Description	(Core IM-ACX Install)
017		Configure Basic XP-Access settings (XProtect Enterpris Fix screen show	e)
		😵 (Protect Strange) in 2021 Management Application	_ (r) ×
		File Services Willeds Options Help	
		Sourcellance Server Server Server Server Movement Configuration B The Comments and Storage Inform	
		Create access control system integration Work address Create access control system integration Work address Different integration plagers and exter the correlation Work address Different integration plagers and exter the correlation Work address Different integration Work address Different integration Different integration More address Different integration <thdifferent integration<="" th=""></thdifferent>	ectori detaris.



Step	Mark when		
Number	Complete	Description (Core IM-ACX	Install)
018		Configure XP-Access (XProtect Corporate)	
018		<text><list-item><list-item></list-item></list-item></text>	ccess nk to



Step	Mark when		
Number	Complete	Description	(Core IM-ACX Install)
019		Configure XP-Access se	ttings (XProtect Corporate)
			Create Access Control System Integration
		Create access contro	ol system integration
		Name the access control syste	em integration, select the integration plug-in and enter the connection details.
		Name:	ISONAS
		Integration plug-in:	MXPB_ACM 💌
		Address:	127.0.0.1
		User name:	username
		Password:	
			Next Cancel
		 Actions: 1) Enter the Name "IN 2) Select the IM-ACX p 3) Specify the IP Addres 4) IP Port used to talk 5) The default usernar 6) To take advantage of Access url plus the tobrowser. 	1-ACX" (or any descriptive name). plug-in. ess of the IM-ACX server which will default to local host. to IM-ACX. The default setting should be acceptable. me and password should be used. of the Access Management Function, simply add your Pure tenant name. You can simple copy and paste this from your







Step	Mark when		
Number	Complete	Description	(Core IM-ACX Install
021		Concerning and any of the second of the	
		Note: There is a processing time with Milestone to 3 min to bring in all users.	that may take up to



6.2. Test IM-ACX and Configure as a Windows Service

Step Number	Mark when Complete	Description (Test IM-ACX Install)
001		Configure XProtect For detailed instructions on the configuration of the Milestone XProtect, please reference the sections listed later in this document, named: Milestone Configuration Process
002		Associate Cameras to Doors Using the Milestone Management application, access the IM-ACX setting. Through the "Associate Cameras" tab, map a camera to a door. If additional cameras and doors are available, map the additional cameras to the appropriate doors.
003		XProtect Smart Client ConfigurationUsing the XProtect Smart Client, define a view that includes the cameras w/doors.Image: Client ConfigurationImage: Client Configuration<



		Mark when	Step
CX Install)	Description (Test	Complete	Number
ACX Install)	<section-header> Description (Test I) Fest XProtect > ISONAS Function Toggle the XProtect Smart Client out of "Setup" mode. Hover the mouse over one of the camera views, and use the "Adm to unlock the door for a few seconds. Verify that the door physically unlocked.</section-header>	Mark when Complete	Step Number 004
	Admit		



Step	Mark when		
Number	Complete	Description	(Test IM-ACX Install)
005		Test ISONAS -> XProtect Function Open the XProtect Smart Client's Access Control Tab. Review the historical event list, and verify that the test a recorded.	Idmit activity has been
		This data is reported to XProtect, by the ISONAS applicat	tion.
006		Configure IM-ACX to run as a Windows Service. Note: The IM-ACX can run as either a Windows Service, or a D But only one copy of IM-ACX can be running at any spee desktop application needs to be closed, before the Win	Desktop application. cific time. This means the idows Service version is
007		started, and vice-versa. Stop the IM-ACX Desktop application	

50	DNF	IS		
REIP	Step Number	Mark when Complete	Description	(Test IM-ACX Install)
	008		 Define the IM-ACX Windows Service From the Windows Start menu: Navigate to the ISONAS → IM-ACS → Configuration Right-click on "Install IM-ACX Service" entry Select the "Run as Administrator" option. Select the "Run as Administrator" option. ISONAS IM-ACX IM-ACX IM-ACX IM-ACX Stop IM-ACX Service (Adm Song Start IM-ACX Service (Adm Stop IM-ACX Service (Adm Stop IM-ACX Service (Adm Configuration Ia. Install IM-ACX Service Ib. Uninstall IM-ACX Service Ic. Optional scDelete IM-A S. Explore Sample Images C. Uninstall 	tion section.



Step	Mark when	
Number	Complete	Description (Test IM-ACX Install)
009		<text><text><section-header><text><text><image/><list-item><list-item></list-item></list-item></text></text></section-header></text></text>
010		Allow IM-ACX to resynchronize the two systems Wait about 3 minutes, to allow IM-ACX to fully resynchronize the XProtect application with Crystal Matrix.
011		Test the IM-ACX Windows Service configuration Rerun the "Admit tests" that were previously run.



6.3. Configure XProtect's Deep-Links $\leftarrow \rightarrow$ ISONAS Pure Access integration

A Milestone SmartClient user can use the Deep Links feature to quickly access a card holder's record within the ISONAS Pure Access application. The card holder data can then be reviewed and/or updated.

Step	Mark when		
Number	Complete	Description	(Deep Links Config.)
001		Configure Deep Links Any Pure Access user that has been granted web access been given permission to modify users and user details links feature and make adjustments to card holders.	s in Pure Access and has can utilize the deep
		To enable the DeepLinks connection.	
		Log Settings / Auxal Measures ACM Extension (Finan ACM Integration) Log port: [5] [1946 Remote troot: [127:0.0.1 [Address of ACM XProtect server) Broots Program Request Users from ACM ISONAS (16 PARIPServ Tasso Configuration') Remote troot: [127:0.0.1 Remote troot: [127:0.1 Remote troot: [127:0.1] Remote troot: [127:0.1 Remote troot: [127:0.1] Remote troot: [127:0.1 Remote troot: [127:0.1] Remote troot: [127:0.1	Deep Link address should have your full Pure Access URL For example: https://isonaspureaccesscloud /#customername

UNF	15	
Step Number	Mark when Complete	Description (Deep Links Config.)
002		Configure the Pure Access Tenant URL within IM-ACX Pure Access should already be configured. Determine the site's network-wide URL. Updated IM-ACX's settings with that URL, in field (#1) shown below:
		Image: Selection and the second in the se



Step Number	Mark when Complete	Description (Deep Links Config.)
003		Refresh Milestone's Card Holder Database
		Within the XProtect Management Application, navigate to the Access Control entry.
		Open the Properties of the ISONAS entry, and click on the "Refresh" button
004		Test the SmartClient's Deep-Links feature.
		Within the XProtect SmartClient, the DeepLinks feature can be accessed in two different ways.
		From the Event Notification Window
		To test from the "Access Control" tab, select the Events listing, and then select on a specific event that is associated with a card holder. The card holder info appears in the lower right section of the window.
		At the bottom of the card holder data, click on the "Manage CardHolder" link
		Terre Connect



Step	Mark when			
Number	Complete	Description		(Deep Links Config.)
005		Pure Access Di Your Default brow need to login to P	isplay. vser should open and direct you to the login of Pure Access, and navigate to the user screen an	your Pure Access account. You will d make any adjustments necessary.
		ISONAS	C anomalies	4+4
			and some mattername too	
		and Contained		C Insta
			2.110	- Summite

6.4. IM-ACX Detailed Description

The IM-ACX desktop application can be launched from its desktop shortcut icon, or from the Start Menu entry under the ISONAS system shortcuts.

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12:37/07 Connecting1 12:37/08 ConnectToM 12:37/08 High Discon- 12:37/08 High Discon- 12:37/08 MX base Acr 12:37/08 Socket/3220 12:37/10 Socket/3220 12:37/12 Results Lang	o ACM (as between 1 of CM SESSuccessful) deto: sendAcmDn EBD ndAcmDn 20/CDN/NECT , AND_lacm: latenParM 1 Tap25 has just Conne m Statling fr + 872	4(part 96 - 12:27 DE (Success) CARECT_ADED(_A2RO) Lapritit./Aniting() ↔ Yes ictesf (7)	ed	
12:37:12 (start) 12:37:12 < 8:26:2014 12:37:12 < 8:26:2014 12:37:12 < 8:26:2014 12:37:12 < 8:26:2014 12:37:12 < 8:26:2014 12:37:12 < 8:26:2014	* QUERY ALL DOORS ><12:37 11>LOGDN/ ><12:37 11>LOGDN/ ><12:37 11>LOGDN/ ><12:37 11>LOGDN/ ><12:37 11>DOORST ><12:37 11>DOORST ><12:37 11>LOGDN/ ><12:37 11>LO	Paudo CCEPTED+ ATUS+GadyDoor+CLOSED+ ATUS+GadyDoor+CLOSED+ ATUS+GadyDoor+CLOSED+	LOCAL-SVER-COMMON- DISABLED SAFEX-disabled in - SABLED SAFEX-SUBMON-	han t
12.30.12 + 5/26/2014 12.37.12 + 5/26/2014 13.37.12 + 5/26/2014	<12:27 11: d000RST <12:37 11:	AT LISS-CODDALS-CUNKINOWIN AT LISS-Crimet Dears-CULDSEDD- AT LISS-Crimet Pattors - UNKINOWIN- AT LISS-Classing Deals-CODEN- AT LISS-Classing Deals-CODEN- AT LISS-Classing Deals-CODEN- SESTAT LISS- CODEN-CODEN-CODEN- SESTAT LISS- CODEN-CODEN-CODEN-CODEN- SESTAT LISS- CODEN-CODEN-CODEN-CODEN- SESTAT LISS- CODEN-CODEN-CODEN-CODEN- CODEN-CODEN-CODEN-CODEN- CODEN-CODEN-CODEN-CODEN-CODEN- CODEN-CODEN-CODEN-CODEN-CODEN- CODEN-CODEN-CODEN-CODEN-CODEN-CODEN- CODEN-CO	In DESABLED I VARE SIN COMMON IDCAN SARESIN COMMON IDCAN SARESIN COMMON IN COMBINED VARESIN COMPONE BLAELED VARESIN COMPONENT OF SABLED VARESIN COMPONENT DO VARESIN COMPONENT COMPO	vi r Annanti (vi de Annanti democe Annani
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IM-ACX runs on any server which has network connectivity with XProtect and the Access Control system. However, it is normally installed on the server hosting ISONAS Crystal Matrix and other ISONAS services.

The log / status window scrolls data about events in real-time. The level of details is adjustable in the XP-Access (Settings) tab.





The XP-Access (Settings) tab contains the configuration data.

1578845 1H ACK (im accum)	
Log Settings: Advat: Image path: Filescond Meastores ACM (Laterner) (From ACM Exceptation) Local pot: E5 Image path: Filescond Local pot: E5 Image path: Configuration! Filescond Filescond ISONAS (To INRServ "Exect Configuration!) Filescond Filescond Filescond Filescond Remote host: localhost Filescond Filescond Filescond Filescond Remote host: localhost Filescond Filescond Filescond Filescond Remote host: localhost Filescond Filescond Filescond Filescond Nates filescond Filescond Filescond Filescond Filescond Filescond Note start communication when application starts Measure to system may Log invet Time Crip Time Crip	Connection from XP-Access (Receive requests for data) Connection to PANRServ (Send requests for data and door status conditions) Door status polling (to insure accurate status on Smart Client maps) Badge image path Connection from PANRServ (Bosoive events is real time)
Log maximum alter Application mode: [ISORAS to Milliatone ACM	Misc. Options: * "Application mode" must remain as "ACM to Access Control". Save when complete.

- 1. Assign IP port for listening for commands / requests from XP-Access (This is the corollary to the "Port" in the XP-Access properties, referenced below.)
- 2. Assign IP address of XP-Access server.
- Assign IP address and port for sending commands to PANRServ. (This is the corollary to the "Listener" in PANRServ, referenced above.)
- 4. Assign IP port for listening for Events from ISONAS. (This is the corollary to the "Transmitter" in PANRServ, referenced above.)



6.4.1. Links for Help

Refer to the "About Box" for links to contact ISONAS if help is required.



6.5. IM-ACX Integration Operations

6.5.1. IM-ACX Log file

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na Setango Atous	
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TTANI Service STOP Service Automatics	
10-Control of the second se	

The IM-ACX log file lists transactions that have passed between the Milestone & ISONAS system. This is a powerful troubleshooting tool.



6.6. Milestone Configuration Process

6.6.1. XProtect Enterprise Management Application

The XProtect Management Application provides the configuration options for the interface with the Access Control system.





Number	when Complete	Description The window below sh	ows Milestone's ((XProtect Mgmt Enterpi General Setting for the interface.
004		Access Control		
		Associated Cameras Associated Cameras Access Control Events Access Control Actions Access Control Actions Access	General settings Enable Name Description	ISDNAS
			Integration plug-in: Last configuration refresh: Address: Port User name: Pasaword	MXP6_ACM (Version: 10.0.0.1.0) Refresh Configuration
				OK Cencel

PUR



Step Number	Mark when Complete	Description		(XProte	ct Mgmt Enterpris
005	Complete	The windows below imported from the A Access Control General Settings Cardholdes Cardholdes	Shows how to associate Access Control system.	e cameras with Pov	werNet readers
					OK Cancel



Step Number	Mark when Complete	Description	(XProtect Mgmt Enterprise)
006	Complete	Associating a camera Expanding th Select the ca of the windo Access Control General Settings Cadada Cameras Access Control Events Access Control Events Access Control Actions Cardholdes	to a specific door is done by: he list of cameras on the tree list. mera of interest, and drag it onto the door entry in the middle w. Associated cameras Drag and drop to associate cameras with door access points Doors: Name Enabled Loanas BeckDoor Area Enabled Loanas Drap camera for access point BeckDoor Drap camera for access point EmployeeEntrance Area Represent 25 days FromDoor Area Represent 25 days EmployeeEntrance Area Represent 25 days Camera S Camera S
		-77	

Number	when Complete	Description			(XProt	ect Mgmt Ent
007		The window below s column) with XP-Ace	shows the cess even	e associated ISON, ts (left column).	AS Access Cor	ntrol events (rigl
		Access Control				
		General Settings	Acce	ss control events		
		Associated Cameras	Select th	e events you want to monitor in X	Protect Smart Client: Use	categories to simplify the use of
		m Azzara Control Actions	events.	Research Control Control	Course Trans	Score Catalogue
		Contraction	F	Access Denied (Credential N	Access point	Access detied Alar
		La cardinaides	17	Access Denied (Credential)	Access point	Access denied, Aler
			F	Access Granted (Credential)	Access point	Access pranted
			R	Access Point Disabled	Access point	
			17	Access Point Enabled	Access point	
			R	Closed	Door	
			5	Connection Established	Door Controller	
			17	Connection Lost	Door Controller	-
			5	Door Alarm Normalized	Door	-
			5	Door Forced Open Alarm	Door	
			R.	Door Open Too Long Alarm	Door	
			12	Locked	Door	
			R	Open	Door .	
			17	System connected	1	
			1	System disconnected		
			4	Unlocked	Door	(°

PI



Number w	ıагк /hen Descripti omplete	on		(XProtect Mgmt Enterprise)		
009	The wind imported when the to be ove	The window below is used to review the ISONAS Cardholders (automatically imported from ISONAS). (Note that the images are automatically also imported when the cardholders themselves are imported. This step allows imported images to be overridden if necessary.)				
	General Se Associated Access Col Access Col	ettings d Cameras otroi Events ntroi Actions	Cardholders Search for cardholders to view, add or delete a picture of the cardholder. The cardholder picture is used in the XProtect Smart Client, when an access control event has been registered. Search cardholder Q			
	🤱 Cardinate	Name	- Туре			
		~REX.	Staff			
		Jones, Tom	Staff			
		PIN-3333. PIN-333	3 Staff			
		PIN-9999, PIN-999	9 Staff			
		Smith, Bob	Staff			
		Smith, Mike	Staff			



6.6.2. XProtect Corporate Management Application

The XProtect Management Application provides the configuration options for the interface with the Access Control system.









Step Number	Mark when Complete	Description	(XProtect Mgmt Corporat			
005		The window below is used to assign Access Control actions (to occur when certa events occur).				
		 General Settings Associated Cameras Access Control Events 	Access control actions Specify the settings for each action you define Enable Triggering Event Source Time Profile Action			
			V Access derived V All doors V Aways V System action V			
			Add Access Control Action Action details Configure the access request notification behavior. Camera: Related camera Spesker: Camera spesker Microphone Microphone			
			Add Command			





7. Operations

7.1. Start up

Once all subsystems are configured, insure the following, in this order;

- 1. IM-ACX is running
- 2. ISONAS PANRServ (Notification and Request Service) is running
- 3. Milestone XProtect is running
- 4. XProtect Event Server is running

7.2. Recovery

If the system becomes disabled or appears to be "locked up", there are basic procedures to restart the various subsystems.

The link between IM-ACX and ISONAS is fairly fault-tolerant, and restarts of either IM-ACX or PANRServ are generally not required.

In such cases, restart the services in the following order:

- 1. Insure that ISONAS PANRServ (Notification and Request Service) is running
- 2. **Stop** XProtect Event Server service
- 3. **Stop** IM-ACX (Desktop application or Windows Service)
- 4. Start IM-ACX (Desktop application or Windows Service)
- 5. Start XProtect Event Server service

The XProtect Event Server may require a couple minutes to fully recover. As such, any previouslyopened instances of the Smart Client will need to switch off and back onto the desired view in order to refresh the XP-Access data and/or map icons. If that does not properly restore the data within the view, then perform a logout and re-login.



8. Example Smart Client Views

8.1. Access Denied

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			Access Control Administration
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			The encourse of the
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8.2. Notification / Alert





The application can be started with a variety of options. Command line options are as follows:

IM-ACX.exe [/OPTIONS] [[LocalServerPort] MilestoneHostIPAddress MilestoneHostPort]

Where options are:

/A Alarm Reminders mode /M3 shows all messages. /M2, /M1, /M0 shows least messages (overridden by ini file once saved) /i:optionalIniName - if no path then current working directory /L:optionalLicenseFile – defaults to current working directory - do not specify path

LocalServerPort = the local server's listening port MilestoneHostIPAddress = recipientIP_Name MilestoneHostPort = recipientIP_Port

Samples of typical options include:

- IM-ACX /i:myIniFile.ini
- IM-ACX /i:myIniFile.ini /L:myLicenseFileName.lic



10.1. Trademarks

IM-ACX[™] and the ISONAS logo are trademarks of ISONAS.

All other trademarks mentioned in this document belong to their respective owners.

10.2. Licenses and Copyrights

Refer to the Installer for the full text of the software License, Copyright and Warranty details.

10.3. Surveillance Privacy

Always use discretion when installing video and / or surveillance equipment especially when there is perceived privacy, or an expectation of privacy. Inquire regarding federal, state and / or local regulation applicable to the lawful installation of video and / or audio recording or surveillance equipment. Party consent may be required.

For Additional Information:

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