LILIN Device Cloud User Manual

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1.0 Before Using LILIN DeviceCloud

LILIN DeviceHub can manage IP cameras and NVRs via LILINHub App. LILIN Device Cloud stores recording status, on-line status, and operational status sent by LILIN DeviceHub. If there is an issue for an IP camera, installers are able to perform remote reboot for that IP camera via LILIN Web Smart PoE switch. This is to make sure that devices are in operation.



- Use your mobile phone for monitoring all devices status for client sites
- Remote reboot the device restoring back to work as needed
- No more rush to a client site for maintenance
- Plan client sites visiting for maintenance afterwards
- Centralized client sites management with AWS redundancy
- iOS and Android for device maintenance push notification
- HTTPs communication and encrypted database cloud computing
- Customize your company logo for end user Apps
- Support dashboard for quick managing devices at client sites
- Auto scan your network IP cameras and NVRs
- Auto update to LILIN Device Cloud from client sites
- Plug-n-play, no P2P, no port forwarding
- LILIN WebSmart PoE switch supported for power reboot
- Support HDMI and mouse for local management
- Support SmartPlug for device reboot.
- Support Google Map device alarm.

1.1 Sign Up a Cloud Account

Visit https://cloud.ddnsipcam.com for sign up a cloud account.

You can also visit LILIN DeviceHub ->"ACCOUNT" for creating an account.



gn Up	
Account (emai	il address)
Password	
Confirm Passw	vord
Security Code	spf
	Sign Up
gn In	

2.0 LILIN DeviceHub

LILIN DeviceHub is installed at a client site for managing IP cameras and NVRs. IP cameras connection information and NVRs recording status are sent to LILIN Device Cloud via LILIN DeviceHub.



2.1 LILIN DeviceHub Installation

For using LILIN Device Cloud, plug in the DeviceHub to a local area network where the network is connected for Internet access. LILIN DeviceHub is defaulted to a DHCP client. There is no IP address configuration needed. Once the DeviceHub is connected, it automatically connects to Internet.

2.2 Use a PC for Accessing LILIN DeviceHub

For accessing LILIN DeviceHub on a PC, download LILIN IPScan. IPScan is able to scan LILIN DeviceHub. Double click on the DeviceHub in IPScan for configuring devices over a web browser.

64 bits								-		×
IP Address 10.0.0.26 192.168.67.216 192.168.67.217 192.168.67.218	Subnet Mask 255, 255, 255, 0 255, 255, 255, 0 255, 255, 255, 0 255, 255, 255, 0	Gateway 10.0.0.1 192.168.67.1 192.168.67.1 192.168.67.1	Port 80 80 80 80	Assign Static IP Static IP Static IP Static IP	Mac Address 00ff81a7a4c8 000ffc2458bc 000ffc258047 000ffc4ed3a2	Model 9995 182 65 451	Name IP Address Subnet Mask Gateway HTTP Port No.			
							Static O DH PPPOE Account PPPOE Password Scan Device Type Authentication Username			ONVIF
							Password Refresh		Apply	
							Firmware Update	Ba	itch IP Set Time Adju	ting.
	64 bits IP Address 10.0.0.26 192.168.67.216 192.168.67.217 192.168.67.218	64 bits IP Address Subnet Mask 10.0.0.26 255.255.0 192.168.67.216 255.255.0 192.168.67.217 255.255.0 192.168.67.218 255.255.0 192.168.67.218 255.255.255.0	64 bits	64 bits IP Address Subnet Mask Gateway Port 10.0.0.26 255.255.255.0 10.0.0.1 80 192.168.67.216 255.255.255.0 192.168.67.1 80 192.168.67.217 255.255.255.0 192.168.67.1 80 192.168.67.218 255.255.255.0 192.168.67.1 80	64 bits IP Address Subnet Mask Gateway Port Assign 10.0.0.26 255.255.255.0 10.0.0.1 80 Static IP 192.168.67.216 255.255.0 192.168.67.1 80 Static IP 192.168.67.218 255.255.0 192.168.67.1 80 Static IP 192.168.67.218 255.255.0 192.168.67.1 80 Static IP 192.168.67.218 255.255.0 192.168.67.1 80 Static IP	64 bits	64 bits	64 bits	64 bits	64 bits

To login on LILIN DeviceHub, please type "admin" for user account and "1111" for password.

Click on "DEVICES"->"ACCOUNT" for creating an account. Provide the following information:

- Cloud Device Name: Identify the DeviceHub on LILIN Device Cloud or on the App.
- Cloud Account: The account (email) for accessing LILIN Device Cloud.
- Cloud Password: The password for accessing LILIN Device Cloud.
- Check Account: Check if the account is in use.
- Add Account: Create an account for LILIN Device Cloud.

Client Number: 2					2018/06/04 11:18:26	0Mbps		
9LILINI	🕲 GENERAL	The Account					admin	۴
	GENERAL	Cloud Device Name	LILIN Desktop					
DISPLAY		Cloud Account	stevehub@meritlilin.com.t E-Mail					
NETWORK		Cloud Password	•••••					
SVSTEM		Check Account	Check Check Cloud Account					
		Add Account	Add Add Cloud Account					
			Apply	Porat				
			Арріу	Reset				

Once an account is created successfully, click on Check Account button that will prompt a success message.

2.3 Use the HDMI of DeviceHub for Accessing LILIN Device Cloud

Connect the HDMI and a USB mouse to LILIN DeviceHub. This allows operating LILIN DeviceHub via an HDMI monitor.

2.4 Device Management via LILIN DeviceHub

Click on "DEVICES"->"GENERAL" on DeviceHub. Set up the cameras and NVRs for management purpose. Follow the steps below for set up devices:

- Search device: This is to explore ONVIF cameras and LILIN NVRs.
- Add device: Manually add devices to the management list.
- Delete device: Remove the selected devices from management list.
- Reboot: PoE power reboot for IP camera or software reboot.

After all network devices are set up, click Apply to save the device management list. In order to synchronize the information of all devices to the LILIN Device Cloud, go to "DEVICES" ->"ACCOUNT" and click "Apply" to synchronize information with the LILIN Device Cloud.

You can also perform reboot a network locally by clicking on Reboot button.

9LILINI	Seneral	nccount 😨							admin	
	GENERAL	Switch Name	Model	IP Address	Port	Serial Number				
DISPLAY		Plug1	SP2101W_V2	192.168.50.77	10000	801F02D6D447			More	1
<u>~</u>		Plug2	SP2101W_V2	192.168.50.60	10000	801F02D6CEE9			More	I
WINETWORK		9255	IPPOWER	192.168.50.225	8080	00925500228A			More	
SYSTEM		PS3108C	PS3108C	192.168.50.222		00-0f-fc-e8-26-03			More	I
					4 e	ntries			V	
		Switch Name	PoE No.	Device Name	Model	IP Address	Port	Status		l
		PS3108C		VN-U78	VN-U78	192.168.50.110			More	
		PS3108C		POE_TEST	IPR7424/8	192.168.50.204			More	
		PS3108C		NVR_209 IPR7424/8E		192.168.5.209			More	
						169.254.137.77			More	
				VIVOTEK	VIVOTEK	192.168.50.96			More	l
						192.168.50.222			More	
					6/6	entries				
		Add Device	Dele	te Device	Reboot	Select All		Unselect All	Load Checked Status	
		Search Device	Search S	imart Plug Searc	h PoE Switch					
								Apply	Reset	

Add Device	Manually add a device for monitoring.
Delete Device	Delete a device for monitoring.
Reboot	Remote reboot a device via DeviceHub.
Select All	Select all devices for cloud monitoring.
Unselect All	Unselect all devices for cloud monitoring.
Load Checked Status	Reload camera name and recording status to DeviceHub.
Search Device	Search all the network devices.
Search Smart Plug	Search EdiMax SmartPlug.
Search PoE Switch	Search WebSmart PoE switch.
Apply	Make sure to click Apply button for storing the settings.

Note: You must select the devices for LILIN cloud to manage.

2.4-1 How to Select Devices for LILIN Device Cloud

For monitoring a site, check a device for monitoring. Once devices are checked, these devices information will be monitored and sent to LILIN Device Cloud via DeviceHub.

	Switch Name	PoE No.	Device Name	Model	IP Address	Port	Status	
Z	PS3108C		VN-U78	VN-U78	192.168.50.110	80		More
	PS3108C	3	POE_TEST	IPR7424/8	192.168.50.204	80		More
	PS3108C	5	NVR_209 IPR7424/8E	42	192.168.5.209	80		More

2.4-2 DeviceHub Stand-alone without LILIN Device Cloud

Camera Reboot mode: If you do not want to use LILIN Device Cloud, you are able to use Camera Reboot mode. DeviceHub is operated as stand-alone mode the same as a watch-dog timer for monitoring IP cameras or NVRs without LILIN Device Cloud.

9LILIN	🕲 GENERAL	laccount	
	GENERAL	Cloud Device Name	DH032
		Cloud Account	stevehub@meritlilin.com.t E-Mail
Retwork		Cloud Password	•••••
		Check Account	Check Check cloud account
		Add Account	Add Add cloud account
		Camera Reboot	Camera watchdog reboot

3.0 LILIN Device Cloud

Visit https://cloud.ddnsipcam.com for login your account.

9LILIN	Desire Cit	a					ntin@meri	Sincomby 🧖	Language English	MENU E
	EURV1			1 1/18		100			1.000	(below
Dashboard	CEI	DIA GROU	P Tabas) Al Annians 🗸 🗸	ALL				~		
	Acres	Lastiples 9	-Notifiana B	IF Address	· No. 1	Witten Lans - B	LaDown	State	4 Adm	21
Manage Client		20101131420	E ADexa-NAV	59124491	40	4	1DHOM	Check Recording	100	
	5	2110031314.20	R BDeice-PCan	59124492	8082	1	170 IH 12M	Check Recording	1001	
Outron Davis		2010013 14.20	E CDeita MR	59.124.493	80	1	1709138		1008	
Marage Device	5	20130312 14:20	E DOexts-NH	5102484	40.	8	10910		120	
100 Mar 100	4	201001031420	R EDexta - PCan	59124485	8092	1	170.01124		100	
Configuration	5	2010/01/01 14:20	E F Devos - NVR	51:02488	40.	1	11DIH12M		FCOB	
		2010/03/3 54:20	E COnto-187	59.124457	80	1.	TOH ON		100	
Access	5	20100113-14-20	R HDevce - PCan	912440	8292	.1	100 HIDH		100	
		2010/07/01420	Deca-1MR	59134489	80	1	NOTHERS.	Check-Officine.	1008	
		2110313 14:20	E /Onice-NK/	59 124 49 10	80.	8	110 BH 12M		1004	
		2013031314.20	A Device - PCam	59 134 49 11	60K2	-1	IDH13M		100	
		2010/07/07 14:20	LOwice-MM	59.134.48.12	80.		MC1HICE1		100B	
		20130213.54.20	MDercs-MIV	59.12449.13	80	-1	1/DIH (34		100	
	1.00	2010031314.20	NOwin-PCatt	59 104 49 14	8042		11D IH UM		100	
		201001101420	CORVER-NOR	59 12449 15	80		109134		1008	
	1	Ananusza	E PORCE INT	38 Questin	40.		TID IN CH		100	
	-									
				MacRo	ok Pro					1

3.1 Dashboard

After login to the cloud, a dashboard page gets shown. Device status and bandwidth are described below:

• On-Line Status: Devices on-line status

Ч

- Recording Status: The NVR and IP camera recordings are in operation.
- Storage Status: The status of NVR and IP cameras storage
- Video Loss of NVR: The video loss status of NVR or DVR

Bandwidth History

The bandwidth history is useful for determining the bandwidth in between the site and the cloud. If an end user experiences video streaming issue, the bandwidth history can be used for determining the uploading bandwidth.

9LILIN	Device Cloud		† 1 ♥3	User: demo@lilir 급37 I	Lcom.au 🧍 Menu ☰ ∰34 👎3
Dashboard	Client				
嶜 Manage Client		VI			
Manage Device	On-Line Status	Recording Status	Storage Status	Video Loss	of NVR
Manage Visitor					
Configuration	(On-Line:34 NG:3)	In recording:8 NG:0	Healthy:8	NG:0	ected:34 Loss:3
🖹 Site Log					
🚚 Site Map ^{nu}					
⊙ Alexa	Bandwidth History				
S MAC to SN	LILIN AUSTRALIA Sydney	Demo	•		
Account	Bandwidth (Kfpa)				
		128	12/10	12/14	12/16
	Gient Sile Status			- De 1/2	
	Last Update	Client Name		¢ Device ¢	Status \$
	2018/12/17 10:13:39	LILIN AUSTRA	LIA	⊖ 25 ⊖2	Online
	2018/12/17 10:08:23	LILIN AUSTRA	LIA	₿ 4 ₿1	Online
	2018/12/17 10:08:03	LILIN AUSTRA	LIA	⋳ 5	Online

3.2 Access the DeviceHub on LILIN Device Cloud

Once a DeviceHub is connected to Internet, the DeviceHub is registered at LILIN Device Cloud-> "Configuration".

- Polling Interval: The detection period for device status to LILIN Device Cloud
- Language: The language of Device Cloud

 Pashboard Manage Client Manage Device Manage Visitor Configuration Site Log Site Log Site Map[™] Alexa MAc to SN Account 	Poling Interval 1 Hour Language English Image English Image Im	the date of the function of t		Device Cl	oud								User:	demo@lil	in.com.au	🦧 Menu
Abshboard Manage Client Manage Device Manage Visitor Configuration Site Log Site Map ^{MMA} Alexa MAC to SN Account	Poling Interval 1 Hour Language English	ashoard anage Client anage Vistor onfiguration te Log te Angel ^{man} te Xa Ac to SN ccount betk Added Thans Nadden Graham Hub 102.168.15.5 on Online Color Clive Color Clive Color Color								1	1	9 3	a 41		1 33	1
Manage Client Manage Device Manage Visitor Configuration Site Log Site Map ^{™®} Alexa MAC to SN Account	Polling Interval 1 Hour Language English Image: Control of the Name of th	anage Client anage Visitor onfiguration te Log te Map ^{ter} exa AC to SN ccount	Dashboard	Devi	ce Hub Configu	uration										
Manage Device Manage Visitor Configuration Site Log Site Map ^{Tedi} Alexa MAc to SN Account Polling Interval 1 Hour Language English Polling Interval 1 Hour Language English Polling Interval Language Polling Interval English Polling Interval Polling Interval Language English Polling Interval Language English Polling Interval Polling Interval Language English Polling Interval English Polling Interval Polling Interval Polling Interval English Polling Interval Polling In	Polling Interval 1 Hour Language English Image: English Image: English <th>anage Device anage Visitor onfiguration te Log te Map^{Med} exa AC to SN ccount</th> <th>Manage Client</th> <th></th>	anage Device anage Visitor onfiguration te Log te Map ^{Med} exa AC to SN ccount	Manage Client													
Manage Visitor Configuration Site Log Site Map ^{TME} Alexa MAC to SN Account	English Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image Image	anage Visitor onfiguration te Log te Map [™] exa AC to SN ccount	Manage Device		Polling I	nterval	1 Hour	•								
Configuration Site Log Site Map ^{finet} Alexa Alexa to SN Cooperation Cooperation Acc to SN Cooperation Account	Image: Second	nonfiguration tie Log te Map ^{twid} texa Ac to SN ccount	lanage Visitor		Languag	je	English	•								
Site Log	Image: Construction of the construc	ite Map [™] te Map [™] te Xa AC to SN ccount	onfiguration	—												
Ide Map 1001 Check Added • Client Name Site Name IP • NAV 5ys.ID • Sync to Cloud Plus Plush Scena Speed Test In Ide Xa 2018/10/02 09:22:42 LILIN AUSTRALIA Sydney Demo Hub 192.168.0.22 Online Co In	Check Added C Ellent Name Ste Name Device Name IP NAV Sys.lD Status Sync to Cloud PKS Fluh Scian Device Scian Device Reboot 2018/10/02 09:22:42 LILIN AUSTRALIA Sydney Demo Hub 192.168.0.22 Online Online Im	ite Map Maded o Glient Name Site Name Device Name IP o NAV Sys.ID o Status o Sprite Client Sprite Reboot Iexa 2018/10/02 09:22:42 LILIN AUSTRALIA Sydney Demo Hub 192.168.0.22 Online Image: Sprite	iite Log													
2018/10/02 09:22:42 LILIN AUSTRALIA Sydney Demo Hub 192.168.0.22 Online Image: Constraint of the system o	 2018/10/02 09:22:42 LULN AUSTRALIA Sydney Demo Hub 192.168.0.22 Online Online Online Online Online Online Online	Image: Second	iite Map ^{nus}	Chec	k Added	Client Name	Site Name	Device Name 🗘	IP ¢	NAV Sys.ID	Status ¢	Sync to Cloud	PNS Flush	Scan Device	Speed Test	Reboot
International and the second secon	2018/10/18 09:24:15 LILIN AUSTRALIA Graham Madden Graham Hub 10.0.0.13 Online C m m C m C m C M C C M C C M C C M C C C M C C C M C	Image: Part of the state o	1		2018/10/02 09:22:42	LILIN AUSTRALIA	Sydney Demo	Hub	192.168.0.22		Online	C	•	C	Ø	Ċ
IAC to SN 2018/11/15 14:08:39 ILILIN AUSTRALIA Melbourne Demo Melbourne Hub 192.168.15.5 Online 	□ 2018/11/15 14:08:39 LILIN AUSTRALIA Melbourne Demo Melbourne Hub 192.168.15.5 Online © Image: Transmission of transmissi transmission of transmission of transmissio	AC to SN 2018/11/15 14:08:39 ULIN AUSTRALIA Melbourne Demo Melbourne Hub 192.168.15.5 Online Image: Construction of the image: Construction of the image	lexa		2018/10/18 09:24:15	LILIN AUSTRALIA	Graham Madden	Graham Hub	10.0.0.13		Online	C	•	C	۲	Ċ
ccount	Version: 1.0.0	Version: 1.0.0	IAC to SN		2018/11/15 14:08:39	LILIN AUSTRALIA	Melbourne Demo	Melbourne Hub	192.168.15.5		Online	C	•	C	Ø	Ċ
	Version: 1.0.0	Version: 1.0.0	Account													
Version: 1.0.0									Version: 1	.0.0						

Select and check the DeviceHub, click on Edit button. Please specify the Client Name and Site Name. This allows the DeviceHub categorized for future use.

Make sure that the Sync to Cloud is enabled for sending device status back to the cloud. You can temporarily turn Sync to Cloud to off for not sending device status.



nfiguration		*
		^
Edit Device Hub		
Device Name		
LILIN Desktop		
Sync to Cloud		
YES	•	
Client		
Steve Client	•	
Site		
Steve Site	•	
	OK Cancel	
	Ourioci	
		~

To manage the DeviceHub via LILIN Device Cloud, follow the steps below:



 \odot

Delete the device of the DeviceHub monitoring from LILIN Device Cloud.

- Retrieve the status of all devices from the DeviceHub to LILIN Device Cloud again.
- Reboot the DeviceHub

Speed test in between the site and LILIN Device Cloud

Check	Added 🗢	Client Name	Site Name	Device Name	IP ¢	NAV Sys.ID	Status ≎	Sync to Cloud	PNS	Flush	Scan Device	Speed Test	Reboot
	2018/10/22 03:28:16	Steve Hu	7F Demo	DH032 Steve A1	192.168.3.66	45CA-QB- HM	Online	O		Ô	80%	Ø	Ģ
	2018/10/22 13:16:35	Steve Hu	7F -	DH032-7F			Offline		O	Ô	Ð	۲	Ċ

3.3 Manage Client

Before a DeviceHub gets configured, please create a new Client. Click on + sign to create a new client. To delete a client, check the client and click on – sign. Since a client might have multiple sites, click +/- button for creating sites for the client.

GLILIN	Device Cloud				•	•	User: dem	o@lilin.com.au	🧳 Menu ☰
					n 1	₹3	4 1	. 33	** 8
Dashboard	Client	IA 🕇 — 🖋	V ALL		+-/	»			
📽 Manage Client									
Manage Device	Site List								
🗔 Manage Visitor	Check Alarm	¢ Site Name	¢ Phone	¢ Hub	Device	¢ Type	Last Update		¢
		Sydney Demo	02 9646 4878) 01	⊖ 23 ⊖ 8	Installer	2018/11/20	0:13:33	
Configuration		Graham Madden	0423 865887) ¢1	⊖ 5	End User	2018/12/03	10:18:08	
🖹 Site Log		Melbourne Demo	0402723659	` \$1	⊟ 5	Installer	2018/11/20	10:02:17	
🚚 Site Map ^{trial}									
⊙ Alexa									
S MAC to SN									
🛔 Account									

Click on Edit button to enter a client's detail. Enter the Name, Company Name, Phone Number, Address, and Client Type for the client.

Name		
Steve Client		
Company Name		
Phone		
0800-080-888		
Address		
Client Type		
Installer		•

3.4 Manage Site

Once a client is created, please create sites for a user. A user could have multiple sites for device management purpose.

To add a site, click on + sign. To delete a site, check the site and click on – sign.

e List:						
Check	Alarm	¢ Last Update	♦ Site Name	+ Hubs	+ Device	≑ Туре
	¢	2018-04-16 14:33:11	Steve Site	٥ ¢`	0	Installer
	40	2018/04/23 17:29:04	SecuTech	3 01	17	Installer

The Edit Site dialog box shows up. Enter the information as needed.

Edit Site		
Name		
Graham Madden		
Company Name		
LILIN AU		
Phone		
0423 865887		
Address		
17 Austin Street, Woonona NSW2517		
Map Position		
-34.3442659803477, 150.91459239472658	Ø	
Client Type		
End User	-	

3.4.1 Map Position

• Click on Map Position button. This can display Google Map for installation sites. Please drag the balloon for the location. This feature is useful. An installer can use LILINHub app to determine a customer's location with device maintenance information.



a Dashboard	LILIN AUSTRALIA	Manage Client		
Manage Client				
Manage Device	Site List	Edit Site		
Manage Visitor	Check Alarm	Map Satellite Coledate []	d User	Last Update 2018/12/03 10:18:08
Configuration				
🖹 Site Log		Austiomer		
👼 Site Map ^{that}		Thirroul		
⊙ Alexa				
NAC to SN		Woono		
Account		Russell Vale		
		Corrinal Bellambi		
		Mount Keira		
		Google Keiraville North Wollongo Map data 62018 Google Terms of Use Report a map error		
		GPS Location: -34.3442659803477, 150.91459239472658		
			*	

3.5 Manage User

For a large corporation, there might be many roles for using this system. A system administrator is able to setup allowed features for a client, an operator, or an installer. For assigning a feature for a role, switch the client and the sites for assigning the authentication level. Select multiple check boxes that can apply all for users.

Dashboard	client Steve Hu	+-/	^{site} 7F Demo	+-/		
Manage Client	Access User List					
Manage Device	Alash Name		Browned		6	A
🗞 Manage User	john	john	••••	۲	Guest	
Manage Visitor						
Configuration	Allowed Feature	Guest 🔻				
🖹 Site Log		G Dashboard				
🚚 Site Map ^{ma}		Manage Client				
O Alexa		Manage Device				
o Alexa		Manage Visitor				
MAC to SN		Configuration				
Account		Site Log				
		💽 Site Map				
		Alexa				
		MAC to SN				
		Account				
		Event Push Notification				

3.6 Manage Device

Once a DeviceHub gets configured, the DeviceHub starts to send all devices status to Manage Device page.

9LILIN .	evice Cloud						† 1	9 3	User: d	lemo@lilin.com.au	∰Menu ≡ ¶3
Dashboard	Client	USTRAL	IA	~ ^s	sydney Dem	0 🖪					$\boxtimes \mathcal{C}$
Manage Client	Mana	ge Device				•					
Manage Device	Alarm 👻	Last Update	© Site Name	Device Name 4	IP:Port	 Video Loss of NVR 	Rec.Start - Rec.End	• Up/Down	¢ Status 4	Action	
Configuration		12/17 12:43	Sydney Demo	NAV	192.168.0.80:8021	0	NA	0D0H20M	Offline	🖾 🛈 🏓 💼	
🗈 Site Log		12/17 12:43	Sydney Demo	SECURITY	192.168.0.87:87	Ch7	12/07 06:00	76D2H50M	Online	🖻 😃 🛈 🖸 👂 i	Ĩ
🚚 Site Map ^{test}		12/17 12:43	Sydney Demo	NVR404C-Andrea	192.168.0.96:80	Ch1	No storage.	76D2H50M	Online	🖻 😃 🛈 🞑 🔑 ī	D
		12/17 12:43	Sydney Demo	MR8342	192.168.0.209:80	NA	NA	0D0H20M	Offline	🖾 🗘 🛈 🗌 🏓 i	Di la
Alexa		12/17 12:43	Sydney Demo	NVR3416	192.168.0.88:88	0	12/06 15:00	76D2H50M	Online	🖾 🕑 🛈 🖸 🖉 İ	Đ
MAC to SN		12/17 12:43	Sydney Demo	NVR404C-Tech	192.168.0.89:80	0	11/21 16:43 12/14 16:12	76D2H50M	Online	🖻 😃 🛈 💟 🎤 i	Ĩ
Account		12/17 12:43	Sydney Demo	ZSR8122LPR	192.168.0.199:80	NA	NA	76D2H50M	Online	🖾 🛈 🛈 🗋 🔑 ī	D
		12/17 12:43	Sydney Demo	PZD6422EX3	192.168.0.201:80	NA	NA	76D2H50M	Online	🖾 🕛 🛈 🗊 🖉 i	Ĩ
		12/17 12:43	Sydney Demo	IPD2220E	192.168.0.202:80	NA	NA	76D2H50M	Online	🖻 🕘 🛈 🗋 🔑 🛙	Î
		12/17 12:43	Sydney Demo	IR7022	192.168.0.203:80	NA	NA	76D2H50M	Online	🖻 🕘 🛈 🗋 🔑 i	D
		12/17 12:43	Sydney Demo	FR33C2	192.168.0.204:80	NA	NA	66D1H0M	Online	🖾 🖉 🛈 🗊 🖉 i	D
		12/17 12:43	Sydney Demo	MR632	192.168.0.205:80	NA	NA	76D2H50M	Online	🖾 🛈 🛈 🗋 🔑 i	D



Delete all data of the DeviceHub from LILIN Device Cloud.

- Retrieve the status of all devices from the DeviceHub to LILIN Device Cloud again.
- Reboot the device

Check device on-line status and firmware version.

- Check HDD status of an NVR
 - Check SD card recording status of an IP camera
 - Change username and password of a remote device

Device Status

P

Click on information button that can show the detail of the NVR or the camera.

Device Name	MAC	Ver	rsion	Last Reboot	Max Ch.	Max nu HDDs a	mber of llowed	HDD(s) Installed	RAID
NVR3416	000FFC11	47E2 3.0	.56	29/11/2018 16:19:05	16	4		1	No
essage									
essage Device Na	ame M.	AC		SD Card	Ver	sion	Last Rel	boot	
Device Na ZMR6522	ame M. X OC	AC 00FFC5170)3C	SD Card No	Ver 4.2.	sion 90_1	Last Rel 2018/12/	boot /13 16:13:10)

Click on HDD information button that can show the detail information of the NVR HDDs.

DD Used(%) HDD Size Disk error. Rec.Start Rec.End 9 931 GB No 02/11/2018 08.00 17/12/2018 14.08 DD #1 27738 Hours / > 2 years 35 °C / 95 °F 1.00 TB Image: HDD Running Time Image: HDD Temp. HDD Capacity	DD Used(%) HDD Size Disk error. Rec.Start Rec.End 9 931 GB No 02/11/2018 08:00 17/12/2018 14:08 DD #1 27738 Hours / > 2 years 35 °C / 95 °F 1.00 TB Image: HDD Running Time Image: HDD Temp. HDD Capacity					
IDD Used(%) HDD Size Disk error. Rec. Start Rec. End 9 931 GB No 02/11/2018 08:00 17/12/2018 14:08 DD #1 27738 Hours / > 2 years 35 ℃ / 95 °F 1.00 TB HDD Running Time HDD Temp. HDD Capacity	IDD Used(%) HDD Size Disk error. Rec. Start Rec. End 9 931 GB No 02/11/2018 08:00 17/12/2018 14:08 DD #1 27738 Hours / > 2 years 35 °C / 95 °F 1.00 TB Image: Start Star	age				
IDD Used(%) HDD Size Disk error. Rec. Start Rec. End 19 931 GB No 02/11/2018 08:00 17/12/2018 14:08 DD #1 27738 Hours / > 2 years 35 ℃ / 95 ℃ 1.00 TB HDD Running Time JDD Temp. HDD Capacity	IDD Used(%) HDD Size Disk error. Rec. Start Rec. End 9 931 GB No 02/11/2018 08:00 17/12/2018 14:08 DD #1 27738 Hours / > 2 years 35 °C / 95 °F 1.00 TB HDD Running Time HDD Temp. HDD Capacity					
IDD Used(%) HDD Size Disk error. Rec. Start Rec. End 9 931 GB No 02/11/2018 08:00 17/12/2018 14:08 DD #1 27738 Hours / > 2 years 35 ℃ / 95 °F 1.00 TB HDD Running Time HDD Temp. HDD Capacity	IDD Used(%) HDD Size Disk error. Rec. Start Rec. End 9 931 GB No 02/11/2018 08:00 17/12/2018 14:08 DD #1 27738 Hours / > 2 years 35 °C / 95 °F 1.00 TB IDD Running Time HDD Temp. HDD Capacity					
99 931 GB No 02/11/2018 08:00 17/12/2018 14:08 IDD #1 27738 Hours / > 2 years 35 °C / 95 °F 1.00 TB IDD #1 1.00 TB IDD #1 IDD Running Time HDD Temp. HDD Capacity	9 931 GB No 02/11/2018 08:00 17/12/2018 14:08 DD #1 27738 Hours / > 2 years 35 °C / 95 °F 1.00 TB HDD Running Time HDD Temp. HDD Capacity	IDD Used(%)	HDD Size	Disk error.	Rec.Start	Rec.End
DD #1 27738 Hours / > 2 years HDD Running Time HDD Temp. HDD Capacity OK	DD #1 27738 Hours / > 2 years 35 °C / 95 °F 1.00 TB Image: Comparison of the system of t	19	931 GB	No	02/11/2018 08:00	17/12/2018 14:08
OK	ОК	HDD F	Running Tim	e	HDD Temp.	HDD Capacity
						ОК



Click on SD card button that can display the SD card detail of the camera.



3.7 Site Log

Once a device is detected, the information gets relayed from DeviceHub to Device Cloud. The device status gets kept at Site Log page. The log will be kept for 30 days.



Select the entire device logs for deleting purpose.



Delete the selected device log.

9LILIN	Device Cloud				† 1	Q 3	User: 	demo@lilin.c	om.au 34	KMenu ≡ I¶3
 Dashboard Manage Client 	Site Log									@ ā
Manage Device	0000	1/1								
Manage Visitor	Client Name LILIN AUSTRALIA	Site Name Graham Madden	 Date Time 12/17 02:08:37 	Device Name	IP:Port 10.0.0.112:85	 Status Video Loss 	Note Ch4	Read \$	Manage (ሀ () 🖸	
Configuration	LILIN AUSTRALIA	Graham Madden	12/17 00:38:22	NVR security	10.0.0.112:85	Video Loss	Ch4		U () []	
🖹 Site Log	LILIN AUSTRALIA	Sydney Demo	12/17 11:09:12	NVR404C-Andrea	192.168.0.96:80	Video Loss	Ch1	S	ሮ 🛈 🖸	
🛲 Site Map ^{rral}	LILIN AUSTRALIA	Sydney Demo	12/17 11:09:12		192.168.0.87:87	Video Loss	Ch7		ሮ 🛈 🖸	
Q. Alexa	LILIN AUSTRALIA	Sydney Demo	12/17 11:09:07	NVR404C-Andrea	192.168.0.96:80	Video Loss	Ch1	S	ሮ 🛈 🖸	
O Alexa	LILIN AUSTRALIA	Sydney Demo	12/17 11:09:12	MR8342	192.168.0.209:80	Offline			ዕ 🛈 🗋	
MAC to SN	LILIN AUSTRALIA	Sydney Demo	12/17 11:09:07		192.168.0.87:87	Video Loss	Ch7	S	ዕ 🛈 🖸	
Account	LILIN AUSTRALIA	Sydney Demo	12/17 11:09:07	MR8342	192.168.0.209:80	Offline		S	ዕ 🛈 🗋	
	LILIN AUSTRALIA	Graham Madden	12/16 23:38:12	security	10.0.0.112:85	Video Loss	Ch4		ር 🛈 🖸	
	LILIN AUSTRALIA	Graham Madden	12/16 23:08:02	MR832	10.0.0.231:80	Offline		S	ር 🛈 🗍	

3.8 Alexa Integration

Visit LILINHub Alexa Skill User Manual for detail.

4.0 PoE Switches Supported

LILIN WebSmart PoE switches are supported for IP camera power reboot. Once the PoE switches are connected into the network of LILIN DeviceHub, DeviceHub is able to scan WebSmart PoE switch.

- DHCP client of LILIN WebSmart PoE switch should be enabled.
- DHCP server of LILIN WebSmart PoE switch should be disabled. •
- UPnP Client of LILIN WebSmart PoE switch should be disabled.



9LILIN	O GENERAL	🍲 ACCOUNT							admin 🌣
	GENERAL	Switch Name	Model	ID Address	Port	Serial Number			
		Plug1	SP2101W V2	192,168,50,77	10000	801E02D6D447			More
		Plug2	SP2101W V2	192,168,50,60	10000	801E02D6CEE9			More
🚱 network		9255	IPPOWER	192.168.50.225	8080	009255002284			More
CVCTEM		P\$3108C	PS3108C	192.168.50.222	80	00-0f-fc-#8-26-03			More
STOLEN									
									<u> </u>
					4e	ntries			
		Switch Name	POE NO.	Device Name	Model	↓IP Address	Port		· · · · · · · · · · · · · · · · · · ·
		✓ PS3108C		VN-U78	VN-U78	192.168.50.110	80		More
		PS3108C		POE_TEST	IPR7424/8	192.168.50.204			More
		PS3108C		NVR_209 IPR7424/8E		192.168.5.209			More
						169.254.137.77			More
				VIVOTEK	VIVOTEK	192.168.50.96			More
						192.168.50.222			More
						entries			
		Add Device	Delet	te Device	Reboot	Select All		Unselect All	Load Checked Status
		Search Device	Search S	mart Plug Searc	h PoE Switch				
Version: 1.0.00.3106								Apply	Reset

To rename a WebSmart PoE switch, click on More button and enter the Device Name for the PoE switch.

9LILIN	o general	💮 ACCOUNT					admin	* ×
DISPLAY								~
			Device Information		*			
NETWORK			Device Name	My PS3268C				
SYSTEM			User	admin				
			Password	•••••				
				Apply	dress			
								~
								~

4.1 SmartPlug Supported

Third party EdiMax SmartPlug, SP-2101W v2, is supported. Make sure that SP-2101W v2 is properly configured for its WiFi connection. Follow SP-2101W's instruction manual for enabling authentication. The WiFi router should be in the same network as DeviceHub. SP-2101W v2 can then be scanned by DeviceHub. Since there are many devices connected, you can assign few devices connecting to the SmartPlug.



Click on Search Smart Plug button for searching the SmartPlug. The SmarPlug will be displayed on the Power switch table. Click on More button for changing the name.



Switch Name	Model	IP Address	Port	Serial Number	
PLUG2	SP2101W_V2	192.168.40.80	10000	801F02D6D447	More 📈
PLUG1	SP2101W_V2	192.168.40.57	10000	801F02D6CEE9	More
PS3268C	PS3268C	192.168.40.58	80	00-40-c7-b9-aa-04	More
					×

There might be many devices connected to the SmartPlug. Please click on More button of the device. Assign the Plug to the device. Once this is configured, a user can reboot the device from LILINCloud and App.

9LILIN	C GENERAL	💮 ACCOUI	NT					admin 🛱
			Device Information			*		
			Device Name	MR6342_103				
			IP Address	(Max. length 39) 192.168.236.119				More
			Port	80				More
			User	admin				WOIE
			Password					~
			Product Type	IPCAM -				
			MAC Address	000556350043				
			nine Address	DUUGD	Get Mac	19		
			Plug	PLUG2 PLUG1	- Set Plug	12		More
								More
								More
								~
				Apply	Cancel			

5.0 LILINHub App



Visit iOS and Android App stores for downloading the LILINHub App. Once the App is installed, logon

LILIN Device Cloud by using the email address (account) and the password created.

	• —	• —	• —
Log In		← Device List 😴	← Event Log
	demo@lilin.com.au	Client bleve Olimit Official	o6/10 10:39 / Offline
9LILIN	O Device List	Goline (192.168.3.208)	UPC01/02/03 Series
•	Bandwidth Tester	(小) DVR816(小厦) Online (192.168.3.68)	Steve Client - SecuTech
stevehub@mentlilin.com.tw	Configuration	() ① 💮 🛅	U ()
· <u>/</u>	🔔 Site Log 💿	Online (192.168.3.58)	06/10 10:09 / Offline
Log In	🚚 Site Map	IRS130 Online (192.168.3.55)	U ()
🕑 Keep login	E Logout		Steve Client - SecuTech 06/10 10:09 / Offline IPC01/02/03 Series





Once login to LILIN Device Cloud, you can manage a site for device status. You can also get alarm push notification if devices experience issues.



Make all the event logs as read and processed.

Note: If you have a LILIN DDNS account, you can use LILIN DDNS account.



5.1 Speed Test

To test the bandwidth of a remote site, first select a site (DeviceHub) and click on the refresh button ² on the App for getting the bandwidth.



5.2 Site Map

Once the site map is configured from Manage Site, you are able to use LILINHub app for the device status of installed sites. Click on Red balloon for a site having maintenance issues. Green balloon means that the site is running OK.



5.3 DeviceHub Configuration

 Sync to Cloud Co
 Enable device to sync to LILIN Device Cloud.

 Flush in
 Flush button can delete all the devices for the DeviceHub. Click Scan device for a fresh start.

 Scan Device Co
 Scan devices to the DeviceHub for new devices.

 PNS Co
 Push notification service. You can turn it off for disabling push notification to LILINHub App.

 Reboot to
 Reboot the DeviceHub.

6.0 Mac to SN

If you are an installer, MAC to SN (MAC address to serial number) feature is a good tool for finding the serial number for RMA service.

9LILIN	Device Cloud		n 5	U ₽ 2	ser: stevehub@n	neritlilin.com.tw	⁴⁵⁵ Menu ≡ ■ © 13
B Dashboard	MAC to SN						
🖀 Manage Client	MAC Address						
Manage Device	A1B2C3D4E5F6						
🗞 Manage User	Serial Number						
Manage Visitor	A1234567890						
Configuration							
🖹 Site Log		Search					
🚚 Site Map ^{tus}	Product Model						
⊙ Alexa							
S MAC to SN	Serial Number						
🛔 Account							

To use this feature, make sure that you entered "Installer" at Business field.

Account Detail
Company Name
SN Merit LILIN
nt Name
Steve Hu
Contact Mail
stevehub@meritiilin.com.tw
Phone
(02)22988988
Address
fullerton ca usa
Business
Installer

7.0 Account

Please provide all the necessary information at Account page. You are able to use your own logo for using LILINHub app. For editing your logo, click on the BMP file.

Dashboard	Account Information
🖀 Manage Client	User's Logo Change your Logo
Manage Device	GET IT ON
🗞 Manage User	Google Play
Manage Visitor	Uplead Looo
Configuration	
🖹 Site Log	Push Notification test
💭 Site Map ^{Trial}	Account Detail
O Alexa	
MAC to SN	Time Zone
🛔 Account	(GMT +08:00) Beijing, Perth, Singapore, Taipei

Click on Submit button for uploading a graphic or a logo file to LILIN Device Cloud. You are able to edit the logo file by dragging the blue window below:



8.0 Alarm Push Notification of LILINHub App The following device status will be sent to LILINHub App via LILIN Device Cloud.

Status	Description	App Notification
NVR video loss	Camera video loss of a NVR	Yes
Recording error	NVR recording time is incorrect.	Yes
Storage error	NVR HDD broken SMART error	Yes
Off-line	IP of a camera or NVR is not in operation.	Yes

8.1 Feature Support List

Device	Recording Time	Reboot	Storage Size	HDD Error	Video Loss	Firmware Version
IP Camera	YES	YES	YES	N/A	YES	YES
ONVIF camera	NO	YES	NO	N/A	YES	NO
NVR	YES	YES	YES	YES	YES	YES
DHD	NO	YES	NO	NO	NO	NO
NAV	YES	N/A	NO	NO	YES	YES



Specifications

Features	Specifications
LILIN Device Hub	DH032 Device Hub
Camera support	LILIN IP camera, SD card monitoring, camera name, reboot
ONVIF camera support	Reboot via LILIN WebSmart PoE switch & power plug
NVR & DVR	LILIN NVR and DVR supported
Number of devices supported	128 devices
Voice control	Alexa controls for door, gate, NVR, and PTZ
PoE switch	LILIN WebSmart PoE PS3108C, PS3188C, PS3268C switches integrated
SmartPlug	EdiMax, SP-2101W v2
PoE port mapping	Support IP camera and WebSmart PoE port mapping and power reboot
Dashboard	Recording status, on-line status, off-line status, video loss
Remote reboot	LILIN IP cameras via LILIN WebSmart PoE switch & SmartPlug
NTP	Network time protocol supported for sync network devices
DST	Daylight saving time supported
Protocol	HTTPs to cloud, HTTP for local access, UDP discovery, ONVIF discovery
CPU	ARM Cortex A9 CPU @ 600 MHz
Fan	Fanless design
HDMI	1080P
Power	DC12V
Language supported	English, Italian, Traditional Chinese
Device Cloud	
Site management	Yes
Installer own logo	Yes
Device management	Reboot, refresh
Recording checking	NAV, NVR, and LILIN IP camera
Storage checking	NVR, LILIN IP camera SD card
Device reboot	NVR, LILIN IP camera, ONVIF IP camera
Bandwidth	Network speed report for a site
Мар	Google map
Authentication	Feature table configurable, user accounts, 5 access level configurable
App management	
Mobile phone	iOS & Android
Notification	Device status alarm notification, HDD, no recording, video loss
Device management	Reboot, refresh for devices status for remote devices
Мар	Google map
Bandwidth	Network speed report for a site
Authentication	Account login