IPCAM CGI SDK 2.1

Contents

summary

The CGI APIs is based on http protocal.

Different CGI with different Permissions：visitor、operator and Administrator. In this article cgi only support get and post method. upgrade_firmware.cgi and upgrade_htmls.cgi only support post method，otherscgi only support get method.

next_url:an option param. If you don't want only return a simple "OK" when set succeed,you can add a param in the end——next_url.The param is the next file it jump to when set succeed.The param must be a Relative path.

Get: (Example)

```
<form action="/set_mail.cgi">
<input name="svr">
<input name="user">
<input name="pwd">
<input name="sender">
<input name="receiver1">
<input name="receiver2">
<input name="receiver3">
<input name="receiver4">
<input type=hidden name="next_url" value="index.htm">
<input type=submit value="ok">
</form>
```

Post : (Example)

```
<form   action="upgrade_firmware.cgi?next_url=index.htm"   method="post"
enctype="multipart/form-data">
<input type="file" name="file" size="20">
</form>
```

snapshot.cgi

description	To obtain the snapshot
Permission	visitor
Syntax	/snapshot.cgi[?user=&pwd=&next_url=]
Parameters	user:username pwd:password next_url:the name of snapshot
Note	1 If not use the parameter "next_url", the snapshot name is：*device id(Alias)_ Current time.jpg* *2* Use "next_url" (for example:next_url=1　the name of photo:1.jpg) 3 support 2 Authentication Metheds: http Basic64 encode and use username/password in the param directly.

videostream.cgi

description	Use server push mode to send videostream to Client APP
Permission	visitor
Syntax	/videostream.cgi[?user=&pwd=&resolution=]
Parameters	user:username pwd:password
Note	Resolution:　　8：320*240 　　　　　　　32：640*480

videostream.asf

description	Ipcam send videostream of asf format, only support vlc player and mplayer
Permission	visitor
Syntax	/videostream.asf[?user=&pwd=&resolution=]
Parameters	user:username pwd:password
Note	Resolution:　　8：320*240 　　　　　　　32：640*480

get_status.cgi

description	To obtain the Device status info.
Permission	everyone
Syntax	/get_status.cgi
return	now：The count of seconds form 1970-1-1 0:0:0 to now
	alarm_status： 0:no alarm
	1:motion alarm
	2:input alarm
	ddns_status：DDNS status(details see below)
	upnp_status：UPNP status(details see below)
Note	support 2 Authentication Metheds: http Basic64 encode and use username/password in the param directly.

ddns_status

Return	description
0	No Action
1	It's connecting…
2	Can't connect to the Server
3	Dyndns Succeed
4	DynDns Failed: Dyndns.org Server Error
5	DynDns Failed: Incorrect User or Password
6	DynDns Failed: Need Credited User
7	DynDns Failed: Illegal Host Format
8	DynDns Failed: The Host Does not Exist
9	DynDns Failed: The Host Does not Belong to You
10	DynDns Failed: Too Many or Too Few Hosts
11	DynDns Failed: The Host is Blocked for Abusing
12	DynDns Failed: Bad Reply from Server
13	DynDns Failed: Bad Reply from Server
14	Oray Failed: Bad Reply from Server
15	Oray Failed: Incorrect User or Password
16	Oray Failed: Incorrect Hostname
17	Oray Succeed
18	Reserved
19	Reserved
20	Reserved
21	Reserved

upnp_status

Return	description
0	No Action
1	Succeed
2	Device System Error
3	Errors in Network Communication
4	Errors in Chat with UPnP Device
5	Rejected by UPnP Device, Maybe Port Conflict

get_camera_params.cgi

description	obtain camera params
Permission	visitor
Syntax	/get_camera_params.cgi[?user=&pwd=]
Parameters	user:username pwd:password
Note	Return: Resolution: 8: 320*240 32: 640*480 Brightness: 0-255 Contrast: 0-6 Mode: 0: 50hz 1: 60hz 2 outdoor format Flip: 0: initial 1: vertical rotate 2: horizontal rotate 3: vertical + horizontal rotate

decoder_control.cgi

description	Decoder control	
Permission	operator	
Syntax	/decoder_control.cgi?command=[&next_url=]	
Parameters	value	description

		0	up
		1	Stop up
		2	down
		3	Stop down
		4	left
		5	Stop left
		6	right
		7	Stop right
		…	Reserved
		25	center
		26	Vertical patrol
		27	Stop vertical patrol
		28	Horizon patrol
		29	Stop horizon patrol
		…	Reserved
		94	IO output high
		95	IO output low

camera_control.cgi

description	To control camera sensor Parameters
Permission	operator
Syntax	/camera_control.cgi?param=&value=[&next_url=]
Parameters	param
	value (see below)

param	value
0 Resolution	8: 320*240
	32:640*480
1 Brightness	0~255
2 Contrast	0~6
3 mode	0: 50Hz
	1: 60Hz
	2: Outdoor
5 Flip&mirror	0: default
	1: flip
	2: mirror
	3: flip + mirror

reboot.cgi

description	Reboot device
Permission	Administrator
Syntax	/reboot.cgi[?next_url=]

restore_factory.cgi

description	Restore factory settings
Permission	Administrator
Syntax	/restore_factory.cgi[?next_url=]

get_params.cgi

description	To obtain the device settings info.
Permission	Administrator
Syntax	/get_params.cgi

Return:

id	Device ID
sys_ver	Firmware version number
app_ver	Web UI version number
alias	alias
now	The count of seconds form 1970-1-1 0:0:0 to now
tz	The current time zone settings contrast with the standard time zone GMT (Unit: Seconds)
ntp_enable	0:disable ntp Calibration time 1:enable
ntp_svr	Ntp Server
user1_name	User1 name
user1_pwd	User1 password

user1_pri	User1 permission
…	…
user8_name	User8 name
user8_pwd	User8 password
user8_pri	User8 permission
dev2_alias	The 2nd Device alias
dev2_host	The 2nd Device host(IP or Domain name)
dev2_port	The 2nd Device port
dev2_user	The 2nd Device user name
dev2_pwd	The 2nd Device password
…	…
dev9_alias	The 9th Device alias
dev9_host	The 9th Device host(IP or Domain name)
dev9_port	The 9th Device port
dev9_user	The 9th Device user name
dev9_pwd	The 9th Device password
ip	IP address
mask	mask
gateway	gateway
dns	Dns server
port	port
wifi_enable	0:disable 1:enable
wifi_ssid	WIFI SSID
wifi_encrypt	0:disable 1:web 2:wpa tkip 3:wpa aes 4:wpa2 aes 5:wpa2 tkip+aes
wifi_defkey	Wep Default TX Key
wifi_key1	Key1
wifi_key2	Key2
wifi_key3	Key3
wifi_key4	Key4
wifi_authtype	Authetication type 0:open 1:share
wifi_keyformat	Keyformat 0:Hex 1:ASCII
wifi_key1_bits	0:64 bits 1:128 bits
wifi_key2_bits	0:64 bits 1:128 bits

wifi_key3_bits	0:64 bits 1:128 bits
wifi_key4_bits	0:64 bits 1:128 bits
wifi_channel	Channel (default 5)
wifi_mode	Mode (default 0)
wifi_wpa_psk	wpa_psk
pppoe_enable	0:disable 1:enable
pppoe_user	pppoe user
pppoe_pwd	pppoe password
upnp_enable	0:disable 1:enable
ddns_service	0:disable DDNS 1:oray.cn 2:Dyndns.org(dyndns) 3:Dyndns.org(statdns) 4:Dyndns.org(custom) 5: Reserved 6: Reserved 7: Reserved 8:3322.org(dyndns) 9:3322.org(statdns)
ddns_user	Ddns user
ddns_pwd	Ddns password
ddns_host	Ddns host
ddns_proxy_svr	Proxy server (only used in china)
ddns_proxy_port	Proxy port
mail_svr	Mailbox server
mail_port	Mailbox server port
mail_user	Mail user name
mail_pwd	Mail password
mail_sender	The sender mailbox
mail_receiver1	The receiver1 mailbox
mail_receiver2	The receiver2 mailbox
mail_receiver3	The receiver3 mailbox
mail_receiver4	The receiver4 mailbox
mail_inet_ip	Mail send internet IP 0:disable 1:enable
ftp_svr	FTP server
ftp_port	FTP server port
ftp_user	User name
ftp_pwd	password

ftp_dir	catalogue
ftp_mode	0:post 1:pasv
ftp_upload_interval	Upload interval (Seconds) 0:disable
alarm_motion_armed	0:motion disable 1:enable

alarm_motion_sensitivity	Sensitivity 0:high 1:medium
	                        2:low
	                        3:ultra low

alarm_input_armed	0:input detect disable 1:enable
alarm_iolinkage	0:when alarm disable IO linkage 1:enable
alarm_mail	0:when alarm disable mail send 1:enable
alarm_upload_interval	Upload interval (Seconds) 0:disable

upgrade_firmware.cgi

description	Upgrade firmware
Permission	Administrator
Syntax	/upgrade_firmware.cgi[?next_url=]
Note	Must use POST method.

upgrade_htmls.cgi

description	Upgrade Web UI firmware
Permission	Administrator
Syntax	/upgrade_htmls.cgi[?next_url=]
Note	Must use POST method.

set_alias.cgi

description	Set device alias
Permission	Administrator
Syntax	/set_alias.cgi?alias=[&next_url=]
Parameters	Alias:length <=20

set_datetime.cgi

description	Set device data time
Permission	Administrator
Syntax	/set_datetime.cgi?tz=&ntp_enable=&ntp_svr=[&now=&next_url=]
Parameters	now: The count of seconds form 1970-1-1 0:0:0 to now;if use, the device will calibration time depend on it. tz:set time zone. The current time zone settings contrast with the standard time zone GMT (Unit: Seconds) ntp_enable:0:disable 1:enable ntp_svr:ntp server length <= 64

set_users.cgi

description	Set device user settings
Permission	Administrator
Syntax	/set_users.cgi?user1=&pwd1=&pri1=&user2=&pwd2=&pri2=&user3=&pwd3=&pri3=&user4=&pwd4=&pri4=&user5=&pwd5=&pri5=&user6=&pwd6=&pri6=&user7=&pwd7=&pri7=&user8=&pwd8=&pri8=[&next_url=]

Parameters	user1: user1 name length <= 12
	 pwd1: user1 password length <= 12
	 pri1: user1 Permission 0:visitor 1:operator 2: administrator
	 …
	 user8: user1 name length <= 12
	 pwd8: user1 password length <= 12
	 pri8: user1 Permission 0:visitor
	                                        1:operator
	                                        2: administrator

set_devices.cgi

description	Set muilt device
Permission	Administrator
Syntax	/set_devices.cgi?dev2_alias=&dev2_host=&dev2_port=&dev2_user=&dev2_pwd=&dev3_alias=&dev3_host=&dev3_port=&dev3_user=&dev3_pwd=

	&dev4_alias=&dev4_host=&dev4_port=&dev4_user=&dev4_pwd=&dev5_alias=&dev5_host=&dev5_port=&dev5_user=&dev5_pwd=&dev6_alias=&dev6_host=&dev6_port=&dev6_user=&dev6_pwd=&dev7_alias=&dev7_host=&dev7_port=&dev7_user=&dev7_pwd=&dev8_alias=&dev8_host=&dev8_port=&dev8_user=&dev8_pwd=&dev9_alias=&dev9_host=&dev9_port=&dev9_user=&dev9_pwd=[&next_url=]
Parameters	dev2_alias:The 2nd Device alias dev2_host:The 2nd Device host(IP or Domain name) dev2_port:The 2nd Device port dev2_user:The 2nd Device user name dev2_pwd:The 2nd Device password ... … dev9_alias:The 9th Device alias dev9_host:The 9th Device host(IP or Domain name) dev9_port:The 9th Device port dev9_user:The 9th Device user name dev9_pwd:The 9th Device password

set_network.cgi

description	Set device basic net settings
Permission	Administrator
Syntax	/set_network.cgi?ip=&mask=&gateway=&dns=&port=[&next_url=]
Parameters	Ip:ip address; if ip set null,The device will DHCP Ip mask: mask gateway: gateway dns: dns server port: port number

set_wifi.cgi

description	Set device wireless settings (wifi)
Permission	Administrator
Syntax	/set_wifi.cgi?enable=&ssid=&encrypt=&defkey=&key1=&key2=&key3=&key4=&authtype=&keyformat=&key1_bits=&key2_bits=&key3_bits=&key4_bits=&channel=&mode=&wpa_psk=[&next_url=]
Parameters	enable: 0:disable 1:enable ssid: wifi SSID

	encrypt: 0:disable encrypt
	1:web
	2:wpa tkip
	3:wpa aes
	4:wpa2 aes
	5:wpa2 tkip+aes
	defkey: 0~3(web encrypt)
	key1:wep key1
	…
	key4:wep key4
	authtype: Authetication type 0:open
	1:share
	keyformat: Keyformat 0:Hex
	1:ASCII
	key1_bits: 0:64 bits
	1:128 bits
	…
	key4_bits: 0:64 bits
	1:128 bits
	channel: Channel (default 5)
	mode: Mode (default 0)
	wpa_psk: wpa_psk length <= 64;if not use,set null.

set_pppoe.cgi

description	Set device pppoe settings
Permission	Administrator
Syntax	/set_pppoe.cgi?enable=&user=&pwd= [&next_url=]
Parameters	enable: 0:disable pppoe
	1:enable
	user: user name length <=40
	pwd: password length <=20

set_upnp.cgi

description	Set UPNP settings
Permission	Administrator
Syntax	/set_upnp.cgi?enable=[&next_url=]
Parameters	enable: 0:disable UPNP

	1:enable

set_ddns.cgi

description	Set device DDNS settings
Permission	Administrator
Syntax	/set_ddns.cgi?service=&user=&pwd=&host=&proxy_svr=&proxy_port= [&next_url=]

Parameters	service :
	    0:disable DDNS;
	    1:oray.cn;
	    2: DynDns.org(dyndns);
	    3: DynDns.org(statdns);
	    4: DynDns.org(custom)
	    5: Reserved
	    6: Reserved
	    7: Reserved
	    8:3322.org(dyndns)
	    9:3322.org(statdns)
	 user: user name length <=20
	 pwd: password length <=20
	 host:DDNS domain name length <=40
	 proxy_svr: Proxy server length <=20 (only used in china Mainland or HongKong)
	 proxy_port : Proxy port

set_ftp.cgi

description	Set device FTP settings
Permission	Administrator
Syntax	/set_ftp.cgi?svr=&port=&user=&pwd=&mode=&dir=&upload_interval=[&next_url=]
Parameters	svr: FTP server length <=64 port: FTP server port user: User name pwd: password dir: FTP upload catalogue mode: 0:post 1:pasv

	upload_interval: Upload interval (Seconds) 0:disable (range:0-65535)

set_mail.cgi

description	Set device mail settings
Permission	Administrator
Syntax	/set_mail.cgi?svr=&port=&user=&pwd=&sender=&receiver1=&receiver2=&receiver3=&receiver4=&mail_inet_ip=[&next_url=]
Parameters	svr: mail server length <=64 port: Mailbox server port user: User name length <=20 pwd: password length <=20 sender: The sender mailbox length <=40 receiver1: The receiver1 mailbox length <=40 receiver2: The receiver2 mailbox length <=40 receiver3: The receiver3 mailbox length <=40 receiver4: The receiver4 mailbox length <=40 mail_inet_ip: 0:disable 1:enable

set_alarm.cgi

description	Set device alarm settings
Permission	Administrator
Syntax	/set_alarm.cgi?motion_armed=&motion_sensitivity=&input_armed=&iolinkage=&mail=&upload_interval=[&next_url=]
Parameters	motion_armed: 0:motion disable 1:enable motion_sensitivity: Sensitivity 0:high 1:medium 2:low 3:ultra low input_armed: 0:input detect disable 1:enable iolinkage: 0:when alarm disable IO linkage 1:enable mail: 0:when alarm disable mail send 1:enable upload_interval: Upload interval (Seconds) 0:disable (range:0-65535)

Comm_write.cgi

description	Sending data through camera serial port. Only support few model
Permission	Operator

Syntax	/comm_write.cgi?port=&baud=&bytes=&data=[&next_url=]
Parameters	Port: 0-3
	Baud:
	9: B1200
	11: B2400
	12: B4800
	13: B9600
	14: B19200
	15: B38400
	4097: B57600
	4098: B115200
	Bytes: < 256
	Data: use url code

Set_forbidden.cgi

description	Setting the forbidden for checking video/audio
Permission	administrator
Syntax	/set_forbidden.cgi?schedule_enable=&schedule_sun_0=&schedule_sun_1=&schedule_sun_2=&schedule_mon_o=&schedule_mon_1=&schedule_mon_2=&schedule_tue_0=&schedule_tue_1=&schedule_tue_2=&schedule_wed_0=&schedule_wed_1=&schedule_web_2=&schedule_thu_0=&schedule_thu_1=&schedule_thu_2=&schedule_fri_0=&schedule_fri_1=&schedule_fri_2=&schedule_sat_0=&schedule_sat_1=&schedule_sat_2=[&next_url=]

Parameters	Schedule_enable	Plan to forbidding for audio/video
	Schedule_sun_0	Sunday plan. 24hours/day.
	Schedule_sun_1	Divided 24hours to 96 time
	Schedule_sun_2	district, each district for 15
		munites.
		Bit0-95: 0: not forbid, 1: forbid
	Schedule_mon_0	
	Schedule_mon_1	
	Schedule_mon_2	
	Schedule_tue_0	
	Schedule_tue_1	
	Schedule_tue_2	
	Schedule_wed_0	
	Schedule_wed_1	
	Schedule_wed_2	
	Schedule_thu_0	
	Schedule_thu_1	

	Schedule_thu_2	
	Schedule_fri_0	
	Schedule_fri_1	
	Schedule_fri_2	
	Schedule_sat_0	
	Schedule_sat_1	
	Schedule_sat_2	

get_forbidden.cgi

description	Access the forbidding for checking audio/video
Permission	Administrator
Syntax	/get_forbidden.cgi
return	See set_forbidden.cgi

Set_misc.cgi

description	Set rotational Parameters of camera
Permission	Administrator
Syntax	/set_misc.cgi? [led_mode=&ptz_center_onstart=&ptz_auto_patrol_interval=&ptz_auto_pa trol_type=&ptz_patrol_h_rounds=&ptz_patrol_v_rounds=&next_url=]
Parameters	Led_mode: 0:mode1 1:model2 2:shut off the led Ptz_center_onstart: =1 Ptz_auto_patrol_interval, =0: no auto rotating Ptz_auto_patrol_type: 0:no rotate 1:horizontal 2: vertical 3: horizontal + vertical

Ptz_patrol_h_round:	0: Infinite
Ptz_patrol_v_round:	0: Infinite
Ptz_patrol_rate:	0-100, 0: the fastest
Ptz_patrol_up_rate:	0-100, 0: the slowest
Ptz_patrol down_rate	0-100, 0: the slowest
Ptz_patrol left_rate:	0-100, 0: the slowest
Ptz_patrol right_rate:	0-100, 0: the slowest

get_misc.cgi

description	Obtain rotational Parameters of camera
Permission	Administrator
Syntax	/get_misc.cgi?
Parameters	See get_misc.cgi

set_decoder.cgi

description	Set the parameter for decoder
Permission	Administrator
Syntax	/set_decoder.cgi?baud=[&next_url=]
Parameters	Baud: 9:B1200 11: B2400 12: B4800 13: B9600 14: B19200 15: B38400 4097: B57600 4098: B115200