Synology
Surveillance Station Web API

ver: 3.11

REVISION HISTORY			
VERSION	**DATE**	**DESCRIPTION**	**NAME**
0.1	2012/03/07	Creation of this document.	Wai Chi Kan
0.2	2012/04/18	Add “SYNO.SurveillanceStation.Info”.	Sheldon Lin
0.3	2012/04/23	Document format modification.	Sheldon Lin
0.4	2012/04/24	Rename to “Synology Surveillance Station Web API.”	Sheldon Lin
0.5	2012/04/25	'offset', 'limit' parameters as optional.	Sheldon Lin
0.6	2012/04/25	More info in “SYNO.SurveillanceStation.Info”.	Sheldon Lin
0.7	2012/05/25	Error code, VS status in Device API.	Claire Huang
0.8	2012/05/30	info.cgi for non-login users.	Claire Huang
0.9	2012/05/31	Modify SYNO.API.Auth.	Claire Huang
0.10	2012/06/01	Modify SYNO.Surveillance.Event Audio Format.	Claire Huang
0.11	2012/07/19	Merge Chad's modification, rephrase, RecTime.	Claire Huang
0.12	2012/08/08	Add SYNO.API.Auth version = 2.	Claire Huang
1.0	2012/09/11	Version 1 as official release.	Sheldon Lin
1.1	2012/09/17	Add SYNO.SurveillanceStation.Emap.	Sheldon Lin
1.2	2012/10/01	Implement SYNO.SurveillanceStation.Emap.	Chih-Pei Yang
1.3	2013/11/04	Error Code Update.	Kai Wang
1.4	2014/04/28	1. Update SYNO.Surveillance.Info 2. Add privilege parameter for List, ListGroup in SYNO.Surveillance.Camera	Pei-Wen Wu
1.5	2014/05/20	1. SYNO.Surveillance.Camera - Add method Enable, Disable, GetCapabilityByCamId 2. SYNO.Surveillance.Event - Add mode: None, Edge recording - Add method DeleteMulti, DeleteAll, DeletFilter - Update Query method with ownerDsId and camId	Pei-Wen Wu
1.6	2014/05/21	Replace“SS”with“Surveillance Station”	Kai Wang
1.7	2014/06/12	1. Add sections - SYNO.SurveillanceStation.AudioStream - SYNO.SurveillanceStation.VideoStream - SYNO.SurveillanceStation.Notification 2. Add methods of - SYNO.SurveillanceStation.PTZ (Focus, Iris, AutoFocus, AbsPtz) 3. Modify parameters - SYNO.SurveillanceStation.PTZ	Pei-Wen Wu

		- SYNO.SurveillanceStation.Device - SYNO.SurveillanceStation.Camera 4. Replace “Slave DS” with “DS”	
1.8	2014/8/14	Fix typo in example of Camera Enable and Disable	Pei-Wen Wu
1.9	2014/12/26	1. Remove “Motion Detection and Alarm Recording” 2. Add “Custom Recording” 3. Add audio out caps in GetCapability and GetCapabilityByCamId	Josh Lin
2.0	2015/3/13	Add Document of Following APIs Door Camera.Event Camera Event Camera.Wizard ActionRule CMS.SlavedsWizard CMS.GetDsStatus Camera.Import CMS DigitalOutput LogPTZ StreamEvent.Export Event.Mount Notification Notification.Email Notification.SMS Notification.SMS.ServiceProvider Notification.PushService Notification.Filter Notification.Schedule Snapshot VisualStation Analytics AddOn Analytics_Setting	Chuan-Che Yen Bismarck Hsu Ben Tsai
2.1	2015/10/16	Update calling examples using entry.cgi Request Info Camera Enable External Recording Addons GetUpdateInfo	Chuan-Che Yen
2.2	2015/12/16	Update calling example which refer to _sid Add Document the API “External Event”	Chuan-Che Yen
2.3	2016/3/9	Correct old version webapi path Add example of PTZ webapi GoPreset method	Septem Hsu

		Update description of Camera webapi SaveOptimizeParam method	

2.4	16/3/23	Add document of following APIs
		• IOModule
		• IOModule.search
		
		Add document of following methods
		• SYNO.SurveillanceStation.Camera
		  ○ GetStmUrlPath
		• SYNO.SurveillanceStation.Notification
		  ○ SetAdvSetting
		  ○ GetAdvSetting
		• SYNO.SurveillanceStation.Log
		  ○ GetSetting
		  ○ SetSetting
			Chuan-Che Yen
			Septem Hsu
			David Lai

2.5	16/7/28	Rename following APIs
		• Event → Recording
		• Analytics → Alert
		
		Add document of following APIs
		• SYNO.SurveillanceStation.Camera.Status
		• SYNO.SurveillanceStation.PTZ.Preset
		• SYNO.SurveillanceStation.PTZ.Patrol
		• SYNO.SurveillanceStation.Camera.Search
		
		Add document of following methods
		• SYNO.SurveillanceStation.Recording
		  ○ CheckEventValid
		  ○ EventFlushHeader
		• SYNO.SurveillanceStation.PTZ
		  ○ Home
		  ○ AutoPan
		  ○ ObjTracking
		• SYNO.API.Auth
			Jack

2.6	17/1/11	Rename following methods
		• SYNO.SurveillanceStation.Camera
		  ○ GetStmUrlPath → GetLiveViewPath
		• SYNO.SurveillanceStation.Recording
		  ○ DeleteMulti → Delete
		Modify request/response parameter of following methods
		• SYNO.SurveillanceStation.Camera
		  ○ List
		  ○ Enable
		  ○ Disable
			Terry

		◦ Delete ◦ GetSnapshot • SYNO.SurveillanceStation.Recording ◦ List ◦ Lock ◦ Unlock ◦ Download Add document of following methods • SYNO.SurveillanceStation.Camera ◦ Save • SYNO.SurveillanceStation.Recording ◦ Stream Remove following methods • SYNO.SurveillanceStation.Recording ◦ EventFlushHeader	
2.7	17/9/8	Add document of following APIs • SYNO.SurveillanceStation.HomeMode ◦ GetInfo ◦ Switch • SYNO.SurveillanceStation.Transactions.Device ◦ Enum • SYNO.SurveillanceStation.Transactions.Transaction ◦ Enum ◦ Lock ◦ Unlock ◦ Delete ◦ Begin ◦ Complete ◦ Cancel ◦ AppendData	James Chan Kayle Chang
2.8	18/7/5	Add document of following methods • SYNO.SurveillanceStation.Emap.Image ◦ Load • SYNO.SurveillanceStation.CMS.SlavedsList ◦ Load Modify document of following methods • SYNO.SurveillanceStation.Emap ◦ List ◦ Load • SYNO.SurveillanceStation.Camera ◦ GetInfo ◦ ListGroup ◦ GetCapabilityByCamId ◦ MigrationEnum ◦ Migrate	Blake Lin

		◦ CountByCategory ◦ RecountEventSize ◦ SaveOptimizeParam ◦ GetOccupiedSize ◦ CheckCamValid ◦ MigrationCancel Remove following methods • SYNO.SurveillanceStation.AudioStream ◦ Stream ◦ Query ◦ Open ◦ Close • SYNO.SurveillanceStation.VideoStream ◦ Stream ◦ Query • SYNO.SurveillanceStation.Device ◦ ListVS ◦ ListCMS ◦ GetServiceSetting • SYNO.SurveillanceStation.Streaming ◦ LiveStream ◦ EventStream	
2.9	18/11/16	Add document of following methods • SYNO.SurveillanceStation.Archiving.Pull ◦ SaveTask ◦ DeleteTask ◦ ListTask ◦ EnableTask ◦ DisableTask ◦ BatchEditTask ◦ GetBatchEditProgress ◦ BatchEditProgressDone ◦ LoginSourceDS	hungchengl
3	18/12/28	Modify document of following methods • SYNO.SurveillanceStation.SnapShot ◦ List • SYNO.SurveillanceStation.Camera ◦ MDParamSave • SYNO.SurveillanceStation.License ◦ Load	Saipher
3.1	19/1/9	Add document of following methods • SYNO.SurveillanceStation.YoutubeLive ◦ Load ◦ Save ◦ CloseLive	Saipher

3.2	19/5/27	Modify document of following methods • SYNO.SurveillanceStation.Recording ◦ Download	Saipher
3.3	19/7/10	Modify document of following methods • SYNO.SurveillanceStation.Notification.Email ◦ SetSetting Add document of following methods • SYNO.SurveillanceStation.Recording ◦ DeleteFilter ◦ CountByCategory ◦ LockFilter ◦ UnLockFilter • SYNO.SurveillanceStation.Notification.Email ◦ GetSetting Remove following methods • SYNO.SurveillanceStation.Camera.Wizard ◦ CamSaveAll *Please use SYNO.SurveillanceStation.Camera Save method V9 instead.	Alan Lyu
3.4	20/3/17	Add document of following APIs • SYNO.SurveillanceStation.IVA ◦ ListTask ◦ GetCount	Star Chen
3.5	20/3/23	Add document of following APIs • SYNO.SurveillanceStation.Recording ◦ RangeExport ◦ GetRangeExportProgress ◦ OnRangeExportDone	David Lai
3.6	20/10/28	Modify document of following methods • SYNO.API.Auth ◦ login ◦ logout	Ruby Lin
3.7	21/5/31	Add document of of following APIs • SYNO.SurveillanceStation.Face • SYNO.SurveillanceStation.Face.Result	Septem Hsu
3.8	21/6/2	Modify document of following APIs • SYNO.SurveillanceStation.IVA • SYNO.SurveillanceStation.IVA.Report Add document of of following APIs • SYNO.SurveillanceStation.IVA.Recording • SYNO.SurveillanceStation.IVA.TaskGroup	Leon Luo
3.9	21/6/4	Add document of of following APIs • SYNO.SurveillanceStation.Recording.Bookmark ◦ SaveBookmark ◦ DeleteBookmark	Star Chen

		Add document of how to list bookmarks in • SYNO.SurveillanceStation.Recording ◦ List	
3.10	21/6/22	Add request parameter "recordSchedule" of following method • SYNO.SurveillanceStation.Camera ◦ Save	Tom Chueh
3.11	21/12/30	Modify document of following methods • SYNO.SurveillanceStation.Camera ◦ GetInfo ◦ Save ◦ GetLiveViewPath	Andy Huang

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1. Overview

Surveillance Station provides a programmable interface allowing the 3rd party integrator/installer to develop application that is highly integrated with Surveillance Station. This interface is called “Surveillance Station Web API”, refer to Figure 1-1 for the entire structure:

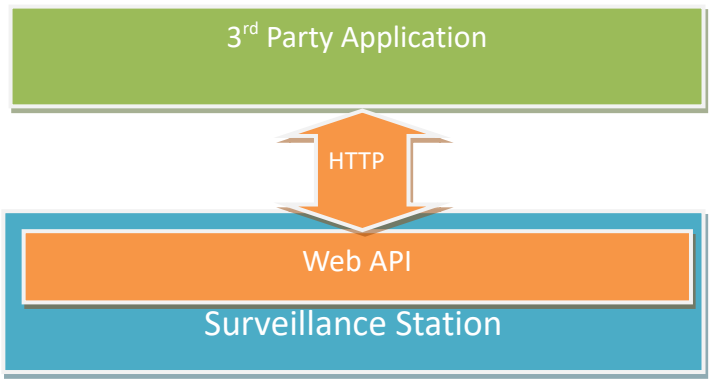

Figure 1-1 Surveillance Station Web API architecture

Surveillance Station Web API is based on HTTP protocol, including functions like camera configuration, PTZ control, live view streaming, video playback, and … etc.

2. Surveillance Station Web API Specification

2.1 Concept

Surveillance Station Web API provides a set of API interface allowing the 3rd party application to interact with Surveillance Station via HTTP Request/Response call.

2.1.1 API Definition

Every API will define the following items:

- **Name**
  It will go after "SYNO.XXX.YYY". **XXX** will represent the application name, **YYY** will represent the feature category. For example, **SYNO.SurveillanceStation.Camera**, **SurveillanceStation** means the API is provided by the Surveillance Station, **Camera** means this API will retrieve the camera configurations.

- **URL path**
  Surveillance Station Web API does not preserve a constant URL for every API. Instead, 3rd party applications need to use the command **SYNO.API.Info** to retrieve every API's URL path. **SYNO.API.Info** is the only API with constant URL, and it does not need authorization, its path is /webapi/query.cgi

- **Method**
  Every method is unique in its own API, and it has to be defined when you use the API. For example, **SYNO.SurveillanceStation.Camera API**, call the method **GetInfo** will retrieve some camera configurations.

- **Version**
  Surveillance Station Web API will require you designate an API version to ensure the result is within the expectation. SYNO.API.Info will return every API's supported versions. "Not supported version" will be returned if API is not supported. We may drop the support on the old API version, make sure you keep this in mind.

2.1.2 Operation flow

Ensure your application has followed the protocols below to interact with Surveillance Station via Surveillance Station Web API:

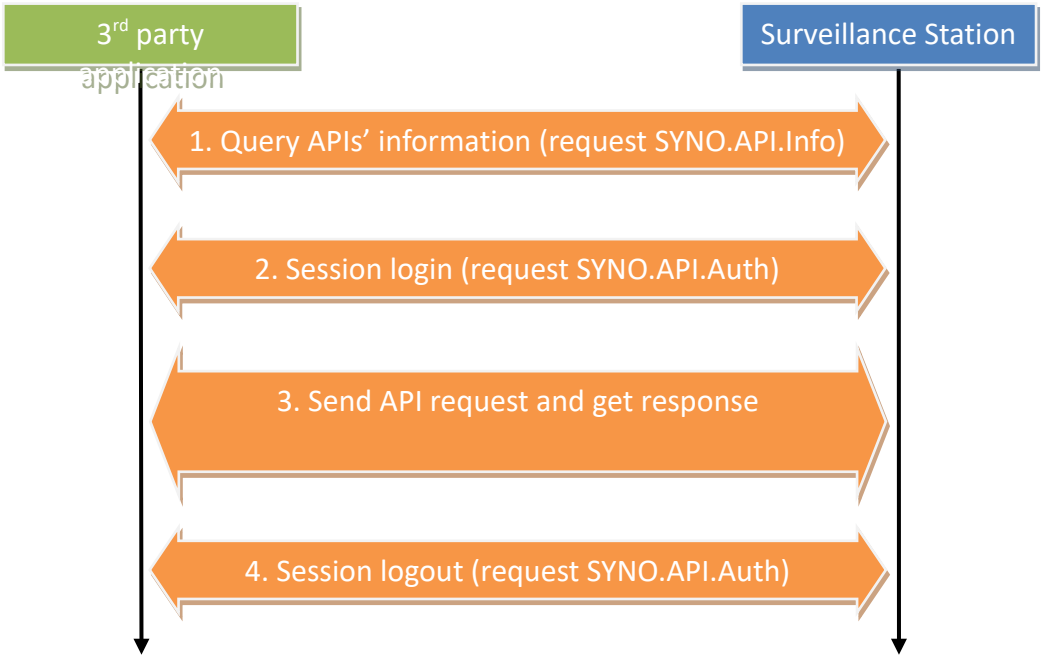

Figure 2-1 Operation flow of Web API

Step 1. Query APIs' information

Surveillance Station Web API will require you to log in a session before sending any API request. However, the URL of SYNO.API.Auth remains unknown until you have queried it using **Query** in SYNO.API.Info. All the others' API URL, versions will also be retrieved in this step.

Step 2. Session login

After retrieving the URL for SYNO.API.Auth from step 1, your application can call **Login** method to complete the login process. A HTTP Session Cookie will be returned for authentication after you have successfully log in.

Step 3. Send API request and get response

Your application may now start calling any API requests to interact with Surveillance Station, like retrieving camera configurations, live view streaming, or search recorded clips.

Step 4. Session logout

When the communication is over, your application should call **Logout** method in SYNO.API.Auth to end the session.

2.2 Request & Response Structure

Surveillance Station Web API is based on HTTP protocol, and Request/Response as the communication structure.

2.2.1 Request

Use HTTP Get/Post to send the request with API's URL.

Usage:

```
GET /webapi/<URL_PATH>?
api=<API>&method=<METHOD>&version=<VERSION>[&_sid=<SESSION_ID>][&<PARAM_LIST>]
```

Tag	Description
<URL_PATH>	API's URL path
<API>	Name of the API
<METHOD >	Name of the API method
<VERSION>	The version of API
<SESSION_ID>	Optional, the designate session ID. See 2.3.2
<PARAM_LIST>	Optional, the parameters of the API method

An Example to retrieve the camera list:

```
GET /webapi/entry.cgi?
api=SYNO.SurveillanceStation.Camera&method=List&version=1&start=10&limit=3&_sid="Jn5dZ9aS95wh2"
```

<URL_PATH>: entry.cgi

<API>: SYNO.SurveillanceStation.Camera

<METHOD >: List

<VERSION>: 1

<PARAM_LIST>: start=10&limit=3

<SESSION_ID> : "Jn5dZ9aS95wh2", should be quoted by ""

To get more detail of session ID, please refer to SYNO.API.Auth.

2.2.2 Response

After receiving the request, API will return the response to the 3rd party application in JSON format.

JSON Containers:

Attribute	Value	Description
success	<boolean>	Whether this request is successful or not.

data	<Result Object>	Optional. It will return data info if this request is successful, for more details please refer to chapters for each API method.
error	<Error Object>	Optional. It will return the error info if this request fails.

<Error Object> Definitions:

Attribute	Value	Description
code	<integer>	The error code defined in 2.2.3.

Example 1: Unable to retrieve the camera list when the API version is wrong

```
{
        "success": false,
        "error": {
                "code": 104
        }
}
```

Example 2: Retrieve the camera list successfully

```
{
        "success": true,
        "data": {
                “total”: 38,
                “offset”: 10,
                “cameras”: {…}
        }
}
```

2.2.3 Common API Error Code

The table shown below describes the general error codes which might be returned by all APIs. For customized error codes of each API, please refer to the corresponding API method sections to get more details.

Error Code	Description
100	Unknown error
101	Invalid parameters
102	API does not exist
103	Method does not exist
104	This API version is not supported
105	Insufficient user privilege
106	Connection time out
107	Multiple login detected

2.3 API List

The following table is the overview of all APIs defined in this section:

API Name	Description	Section
SYNO.API.Info	Discover all API information	2.3.1
SYNO.API.Auth	Perform session login and logout	2.3.2
SYNO.SurveillanceStation.Info	Retrieve Surveillance Station-related general information	2.3.3
SYNO.SurveillanceStation.Camera	Retrieve camera-related information	2.3.4
SYNO.SurveillanceStation.PTZ	Perform camera PTZ actions	2.3.9
SYNO.SurveillanceStation.ExternalRecording	Control external recording of cameras	2.3.10
SYNO.SurveillanceStation.Recording	Query recording information	2.3.11
SYNO.SurveillanceStation.Emap	Get information of defined E-Maps.	2.3.22
SYNO.SurveillanceStation.Emap.Image	Get Image of defined E-Maps.	2.3.23
SYNO.SurveillanceStation.Notification	Get authorized token of DS.	2.3.24

Each API has its following definition:

I. Basic Information
   i. Name: The API name to replace <API> in Web API request syntax.
   ii. Availability: The version of DSM or Surveillance Station which start to support this API.
   iii. Version: The current version of this API.

II. Methods
   i. Request: The request parameters of this method.
   ii. Response: The returned data object containing response keys.

Name of a method is in upper camel case, while name of a request parameter or a response key is in lower camel case for discrimination.

III. Error Code

   Corresponding error codes to each API.

2.3.1 SYNO.API.Info

This is the starter API which has its fixed URL path /webapi/query.cgi. The 3rd party application must retrieve other APIs' information by calling “Query” method.

API Name	Version	Availability
SYNO.API.Info	1	DSM 3.1-1594

Method Name	Section	Availability
Query	2.3.1.1	1 and onward

2.3.1.1 Query method

Discover available APIs and corresponding information.

Request

Parameter	Value	Description	Availability
query	ALL, <string>	• ALL: Get information of all available APIs. • <string>: The list of <API Query Unit> to be queried concatenated by “,”.	1 and onward

<API Query Unit> definition:

Notation	Value	Description	Availability
<API Query Unit>	<API Query Name>, <API Query Prefix>	Unit of API query target. It could be full name of an API, or prefix of APIs.	1 and onward
<API Query Name>	<string>	Full name of API to be queried. Must be in “SYNO.XXX.YYY” format. Ex: SYNO.API.Auth.	1 and onward
<API Query Prefix>	<string>	Prefix of APIs to be queried. Must be in “SYNO.XX.” format and ended with “.”. Ex: “SYNO.SurveillanceStation.” will return the information of APIs with this prefix such as “SYNO.SurveillanceStation.Camera”, “SYNO.SurveillanceStation.PTZ”, etc.	1 and onward

Example:

Get information of SYNO.SurveillanceStation.Camera

```
GET /webapi/query.cgi?
api=SYNO.API.Info&method=Query&version=1&query=SYNO.SurveillanceStation.Camera
```

Get information of APIs with the prefix “SYNO.SurveillanceStation.”.

```
GET /webapi/query.cgi?
api=SYNO.API.Info&method=Query&version=1&query=SYNO.SurveillanceStation.
```


Get information of SYNO.API.Auth and the APIs with the prefix “SYNO.SurveillanceStation.”.

```
GET /webapi/query.cgi?
api=SYNO.API.Info&method=Query&version=1&query=SYNO.API.Auth,SYNO.SurveillanceStation.
```

Response

Object contains <API Description Objects> list of the requested API(s).

<API Description Object> definition:

Key	Value	Description	Availability
key	<string>	The string of API name	1 and onward
path	<string>	The string of URL path	1 and onward
minVersion	<integer>	The minimum supported API version	1 and onward
maxVersion	<integer>	The maximum supported API version	1 and onward

Example: Return information of SYNO.API.Auth and the APIs with the prefix “SYNO.SurveillanceStation.”.

```
{
	"SYNO.API.Auth": {
		"path": "auth.cgi",
		"minVersion": 1,
		"maxVersion": 1
	},
	"SYNO.SurveillanceStation.Info": {
		"path": "entry.cgi",
		"minVersion": 1,
		"maxVersion": 1
	},
	"SYNO.SurveillanceStation.Camera": {
		"path": "entry.cgi",
		"minVersion": 1,
		"maxVersion": 2
	},
	"SYNO.SurveillanceStation.PTZ": {
		"path": "entry.cgi",
		"minVersion": 1,
		"maxVersion": 1
	},
	"SYNO.SurveillanceStation.ExternalRecording": {
		"path": "entry.cgi",
		"minVersion": 1,
		"maxVersion": 1
	},
	"SYNO.SurveillanceStation.Recording": {
		"path": "entry.cgi",
		"minVersion": 1,
		"maxVersion": 1
	},
	"SYNO.SurveillanceStation.Emap": {
		"path": "entry.cgi",
```



```
                "minVersion": 1,
                "maxVersion": 1
        }
}
```

2.3.2 SYNO.API.Auth

API used to perform session login and logout.

API Name	Version	Availability
SYNO.API.Auth	1	DSM 3.2
	2	DSM 4.1
	3	DSM 4.2
	4	DSM 5.2
	5	DSM 6.0 beta 1
	6	DSM 6.0 beta2

Method Name	Section	Availability
login	2.3.2.1	1 and onward
logout	2.3.2.2	1 and onward

2.3.2.1 login method

Create new login session. Different accounts have different privilege settings; accounts in DSM admin group will have the highest privilege to all camera, camera groups, and Slave DiskStations.

Request

Parameter	Value	Description	Availability
account	<string>	Login account name	1 and onward
passwd	<string>	Login account password	1 and onward
session	<string>	*Optional.* Application session name. User can assign “SurveillanceStation” to this parameter to login SurveilllanceStation. If not specified, default session is DSM, and SurveillanceStation is also available.	1 and onward
enable_syno_token	<string>	*Optional.* Return synotoken if value is "yes".	3 and onward
format	cookie, sid	*Optional.* If format is “cookie”, session ID is included in both response header and response json data. If format is “sid”, se ssion ID is not included in response header, but response json data only. User can append this session ID manually to get access to any other Web API without interrupting other logins. If not specified, default login format is “cookie.”	2 and onward
otp_code	<integer>	*Optional.* 6-digit OTP code.	3 and onward
enable_device_token	<string>	*Optional.* yes or no, default to no.	6 and onward

device_id	<string>	*Optional.* Device id (max: 255).	6 and onward
device_name	<string>	*Optional.* Device name (max: 255).	6 and onward

Example1:

```
GET /webapi/auth.cgi?
api=SYNO.API.Auth&method=login&version=1&account=admin&passwd=123456&session=SurveillanceStation
```

Example2:

```
GET /webapi/auth.cgi?
api=SYNO.API.Auth&method=login&version=2&account=admin&passwd=123456&session=SurveillanceStation&format=sid
```

Response

Name	Value	Description	Availability
sid	<string>	Session ID, pass this value by HTTP argument "_sid" or Cookie argument.	2 and onward
did	<string>	Device id, use to skip OTP checking.	6 and onward
synotoken	<string>	If CSRF enabled in DSM, pass this value by HTTP argument "SynoToken"	3 and onward
is_portal_port	<boolean>	Login through app portal	4 and onward

Example:

```
{
        "sid":"Jn5dZ9aS95wh2",
        "is_portal_port":false
}
```

If login format is “cookie”, server will deliver header information including Cookie ID.

```
HTTP/1.1 200 OK
Date: Thu, 31 May 2012 09:40:43 GMT
Server: Apache/2.2.22 (Unix)
P3P: CP="IDC DSP COR ADM DEVi TAIi PSA PSD IVAi IVDi CONi HIS OUR IND CNT"
Set-Cookie: id=Jn5dZ9aS95wh2;path=/
Vary: Accept-Encoding
Content-Encoding: gzip
Content-Length: 37
Keep-Alive: timeout=5, max=100
Connection: Keep-Alive
Content-Type: text/plain; charset="UTF-8"
```

If the login format is “sid”, user should append the returned sid in any webapi request.

Example:

```
GET /webapi/camera.cgi?
api=SYNO.SurveillanceStation.Camera&method=List&version=1&_sid=”Jn5dZ9aS95wh2”
```

By sid format login and appending _sid to other webapi, the sessions would not affect each others and different privilege settings can be applied simultaneously.

2.3.2.2 logout method

Destroy current login session.

Request

Name	Value	Description	Availability
session	<string>	*Optional.* Application session name. User can assign “SurveillanceStation” to this parameter to logout SurveillanceStation. If not specified, default session is DSM.	2 and onward

Example1:

```
GET /webapi/auth.cgi?
api=SYNO.API.Auth&method=logout&version=1&session=SurveillanceStation
```

Example2:

```
GET /webapi/auth.cgi?
api=SYNO.API.Auth&method=logout&version=2&session=SurveillanceStation&_sid=”Jn5dZ9aS95wh2”
```

Response

This method has no specific response data. It returns an empty success response if it completes without error.

2.3.2.3 API Error Code

Code	Description
100	Unknown error.
101	The account parameter is not specified.
400	Invalid password.
401	Guest or disabled account.
402	Permission denied.
403	One time password not specified.
404	One time password authenticate failed.
405	App portal incorrect.
406	OTP code enforced.
407	Max Tries (if auto blocking is set to true).

408	Password Expired Can not Change.
409	Password Expired.
410	Password must change (when first time use or after reset password by admin).
411	Account Locked (when account max try exceed).

2.3.3 SYNO.SurveillanceStation.Info

This API provides a method to acquire Surveillance Station related information such as package version, package UI path, and the total number of camera and installed licenses.

API Name	Version	Availability
SYNO.SurveillanceStation.Info	1	Surveillance Station 6.0-2337
	4	Surveillance Station 6.3-3316
	5	Surveillance Station 7.0-3718

Method Name	Section	Availability
GetInfo	2.3.3.1	1 and onward

2.3.3.1 GetInfo method

Get Surveillance Station related general information. If the user is logged in, the complete information is provided. Otherwise only version and path information is sent.

Request

No parameter is required.

Example:

```
GET /webapi/entry.cgi?
api=SYNO.SurveillanceStation.Info&method=GetInfo&version=1
```

Response

Name	Value	Description	Availability
version	<Version Object>	Version object to represent package version of Surveillance Station. For all users.	1 and onward
path	<string>	UI path to Surveillance Station. For all users.	1 and onward
customizedPortHttp	<integer>	*Optional.* Customized port of Surveillance Station (HTTP). For Surveillance-login users only.	1 and onward
customizedPortHttps	<integer>	*Optional.* Customized port of Surveillance Station (HTTPS). For Surveillance-login users only.	1 and onward
cameraNumber	<integer>	The total number of installed cameras. For Surveillance-login users only.	1 and onward
licenseNumber	<integer>	The total number of installed licenses. For Surveillance-login users only.	1 and onward
maxCameraSupport	<integer>	Maximum number of camera support for this DS. For Surveillance-login users only.	1 and onward
serial	<string>	DS serial number	2 and onward

		For Surveillance-login users only.	
isAdmin	<boolean>	Login user is admin or not. For Surveillance-login users only.	2 and onward
userPriv	<integer>	PRIV_AUTH_NO_ACCESS = 0x00 PRIV_AUTH_ADMIN = 0x01 PRIV_AUTH_MANAGER = 0x02 PRIV_AUTH_VIEWER= 0x04 PRIV_AUTH_ALL = 0xFF For Surveillance-login users only.	3 and onward
isLicenseEnough	<boolean>	Is license enough or not. For Surveillance-login users only.	3 and onward
allowSnapshot	<boolean>	If user has privilege to take snapshot or not. For Surveillance-login users only.	4 and onward
allowManualRec	<boolean>	If user has privilege to do manual recording or not. For Surveillance-login users only.	4 and onward
allowDeleteRec	<boolean>	If user has privilege to delete recordings or not. For Surveillance-login users only.	4 and onward

<Version Object> definition:

Name	Value	Description	Availability
major	<integer>	Major version of Surveillance Station.	1 and onward
minor	<integer>	Minor version of Surveillance Station.	1 and onward
build	<integer>	Build number of Surveillance Station.	1 and onward

Example:

```
{
        "version": {
                "major": 6,
                "minor": 0,
                "build": 2250
        },
        "path": "/webman/3rdparty/SurveillanceStation",
        "customizedPortHttp": 9900,
        "customizedPortHttps": 9901,
        "cameraNumber": 20,
        "licenseNumber": 30,
        "maxCameraSupport": 40,
        "serial":"A1CDE23456",
        "userPriv":1,
        "isLicenseEnough": 1,
        "allowSnapshot": true,
        "allowManualRec": true,
        "alllowDeleteRec": true
}
```

2.3.3.2 API Error Code

Code	Description

400	Execution failed.

2.3.4 SYNO.SurveillanceStation.Camera

This API provides a set of methods to acquire camera-related information and to enable/disable cameras.

API Name	Version	Availability
SYNO.SurveillanceStation.Camera	1	Surveillance Station 6.0-2337
	2	Surveillance Station 6.1
	6	Surveillance Station 6.3
	9	Surveillance Station 8.0

Method Name	Section	Availability
Save	2.3.4.1	9 and onward
List	2.3.4.2	9 and onward
GetInfo	2.3.4.3	From 1 to 8
ListGroup	2.3.4.4	From 1 to 8
GetSnapshot	2.3.4.5	9 and onward
Enable	2.3.4.6	3 and onward
Disable	2.3.4.7	3 and onward
GetCapabilityByCamId	2.3.4.8	From 4 to 8
MigrationEnum	2.3.4.9	From 7 to 8
Migrate	2.3.4.10	From 7 to 8
CountByCategory	2.3.4.11	From 7 to 8
RecountEventSize	2.3.4.12	From 7 to 8
SaveOptimizeParam	2.3.4.13	From 7 to 8
GetOccupiedSize	2.3.4.14	From 7 to 8
CheckCamValid	2.3.4.15	From 7 to 8
MigrationCancel	2.3.4.16	From 7 to 8
Delete	2.3.4.17	7 and onward
GetLiveViewPath	2.3.4.18	9 and onward

2.3.4.1 Save method

Add new camera or edit existing camera setting.

Request

Parameter	Value	Description	Availability
id	<CAMERA_ID>	*Optional*. Camera id to be edited. If equal to 0, add new camera according to request parameter.	9 and onward
name	<string>	*Optional*. Camera name to be edited. Note that this parameter is only valid when “id” is not specified and “dsId“ is specified.	9 and onward

dsId	<integer>	*Optional.* Camera owner ds id.	9 and onward
newName	<string>	*Optional (Needed when add case).* Camera new name.	9 and onward
ip	<string>	*Optional (Needed when add case).* Camera ip.	9 and onward
port	<integer>	*Optional (Needed when add case).* Camera port.	9 and onward
vendor	<string>	*Optional (Needed when add case).* Camera vendor.	9 and onward
model	<string>	*Optional (Needed when add case).* Camera model.	9 and onward
userName	<string>	*Optional (Needed when add case).* Camera login user name.	9 and onward
password	<string>	*Optional (Needed when add case).* Camera login password.	9 and onward
videoCodec	<integer>	*Optional.* Camera video codec. • 0 - Unknown • 1 - MJPEG • 2 - MPEG4 • 3 - H264 • 5 - MXPEG • 6 - H265 • 7 - H264+	9 and onward
audioCodec	<integer>	*Optional.* Camera audio codec. • 0 - Unknown • 1 - PCM • 2 - G711 • 3 - G726 • 4 - AAC • 5 - AMR • 6 - UserDefine (use only with user define camera)	9 and onward
tvStandard	<integer>	*Optional.* Camera tv standard. • 1 - NTSC • 2 - PAL	9 and onward

channel	<string>	*Optional.* Camera channel.	9 and onward
userDefinePath	<string>	*Optional (Needed when add user define camera).* Camera streaming path. This parameter only valid when camera vendor is "User" and model is "Define".	9 and onward
fov	<string>	*Optional.* Camera field of view.	9 and onward
streamXX	<Stream Setting object>	*Optional.* XX – Stream number.	9 and onward
recordTime	<integer>	*Optional.* The recording length in minute.	9 and onward
preRecordTime	<integer>	*Optional.* Extra recording time before the start of each recording in second.	9 and onward
postRecordTime	<integer>	*Optional.* Extra recording time after the end of each recording in second.	9 and onward
enableRecordingKeepDays	<boolean>	*Optional.* Does the rotation occur when the limit time is reached.	9 and onward
recordingKeepDays	<integer>	*Optional.* The upper bound indicating how long a file can be store before rotation.	9 and onward
enableRecordingKeepSize	<boolean>	*Optional.* Does the rotation occur when the limit space is reached.	9 and onward
recordingKeepSize	<integer>	*Optional.* The upper bound that total file size can reach before rotation.	9 and onward
enableLowProfile	<boolean>	*Optional.* Does low bandwidth profile enabled.	9 and onward
recordSchedule	Array of <integer>	*Optional.* A string consists of 48*7 digits to represent the scheduling. Note that each digit stands for the schedule type of half-hour: 0: No scheduled plan 1: Continuous Recording 2: Motion Detection Recording 3: Custom Detection 1	9 and onward

		4: Custom Detection 2	
rtspPathTimeout	<integer>	*Optional.* The timeout of share stream. • 0 - One hour • 1 - Forever	9 and onward

<Stream Setting Object> definition:

Key	Value	Description	Availability
fps	<integer>	*Optional.* Frames per second of the stream	9 and onward
resolution	<string>	*Optional.* Denoted as width * height	9 and onward
bitrateCtrl	<integer>	*Optional.* The bitrate control type. • 0 - None • 1 - Variable bitrate • 2 - Constant bitrate	9 and onward
quality	<integer>	*Optional.* An integer ranged from 1 to 5 to indicate the quality of the stream. This parameter only valid when using variable bitrate.	9 and onward
constantBitrate	<integer>	*Optional.* The constant bitrate value. This parameter only valid when using constant bitrate.	9 and onward

Example1: Adding camera with specific vendor, model.

```
http://192.168.1.1:5000/webapi/entry.cgi?
api=SYNO.SurveillanceStation.Camera&method="Save"&version=9&newName="test"&vendor="ABUS"&m
odel="TVIP72500"&ip="192.168.1.2"&port=80&userName="admin"&password="123456"
```

Example2: Edit stream 1 resolution and fps of a local camera named "test".

```
http://192.168.1.1:5000/webapi/entry.cgi?
api="SYNO.SurveillanceStation.Camera"&method="Save"&version=9&name="test"&dsId=0&stream1={"res
olution":"1920x1080","fps":15}
```

Response

Key	Value	Description	Availability
id	<CAMERA_ID>	The add/edit camera id.	9 and onward
camera	<Camera List object>	The detail information of add/edit camera.	9 and onward

2.3.4.2 List method

Get the list of all cameras.

Request

Parameter	Value	Description	Availability
idList	<string>	*Optional.* The list of <CAMERA_ID> to be queried concatenated by “,”.	9 and onward
offset	<integer>	*Optional*. The offset to be shifted in the total result. If not specified, the offset will be 0.	9 and onward
limit	<integer>	*Optional*. Number of cameras to be returned. If not specified, return cameras to the end of camera list.	9 and onward
blFromCamList	<boolean>	*Optional* Indicating if the caller is from cam list Set to be *false* if not specified.	9 and onward
blIncludeDeletedCam	<boolean>	*Optional* Indicating if deleted cameras should be listed or not set to be *false* if not specified	9 and onward
privCamType	0 … 15	Weighted sum indicated the types of the camera 0x00: NONE 0x01: LIVEVIEW 0x02: PLAYBACK 0x04: LENS 0x08: AUDIO	9 and onward
basic	<boolean>	*Optional* Indicating to show basic settings or not set to be *false* if not specified	9 and onward
streamInfo	<boolean>	*Optional* Indicating to show streaming information or not set to be *false* if not specified	9 and onward
blPrivilege	<boolean>	*Optional* Indicating if the user privilege should be checked or not set to be *false* if not specified	9 and onward
camStm	0, 1, 2	Stream number of the camera live view • 0: Live stream • 1: Recording stream • 2: Mobile stream (default value)	9 and onward

Example: List 2 cameras starting from offset 10 with all additional information.

```
http://192.168.1.1:5000/webapi/entry.cgi?
privCamType=3&version="8"&blIncludeDeletedCam=true&streamInfo=true&blPrivilege=false&start=10&a
pi="SYNO.SurveillanceStation.Camera"&limit=2&basic=true&blFromCamList=true&camStm=1&method="Li
```



```
st"
```

Response

Key	Value	Description	Availability
total	<integer>	The number of total installed cameras.	9 and onward
cameras	Array of <Camera List Object>	The list of queried cameras.	9 and onward

<Camera List Object> definition:

Key	Value	Description	Availability
DONum	<integer>	Digital output number	9 and onward
DINum	<integer>	Digital input number	9 and onward
audioCodec	<integer>	Camera audio codec. • 0 - Unknown • 1 - PCM • 2 - G711 • 3 - G726 • 4 - AAC • 5 - AMR • 6 - UserDefine (use only with user define camera)	9 and onward
channel	<string>	Camera channel id	9 and onward
dsId	<integer>	The id of the owner of this camera	9 and onward
enableLowProfile	<boolean>	Does low bandwidth profile enabled.	9 and onward
fov	<string>	Field of view of the camera	9 and onward
streamXX	<Stream Setting object>	XX – Stream number.	9 and onward
status	1 … 18	Indicating the camera status • 1: Normal • 2: Deleted • 3: Disconnected • 4: Unavailable • 5: Ready • 6: Inaccessible • 7: Disabled • 8: Unrecognized • 9: Setting • 10: Server disconnected • 11: Migrating • 12: Others • 13: Storage removed • 14: Stopping • 15: Connect hist failed • 16: Unauthorized • 17: RTSP error • 18: No video	9 and onward
ip	<string>	IP address of the camera	9 and onward
id	<CAMERA_ID>	Camera ID	9 and onward

enableRecordingKeepDays	<boolean>	Does the rotation occur when the limit time is reached.	9 and onward
model	<string>	Model name of the Camera	9 and onward
name	<string>	Name of the camera	9 and onward
port	<integer>	Port of the camera	9 and onward
recordingKeepDays	<integer>	The parameter for replacement strategy	9 and onward
recordingKeepSize	<string>	The parameter for replacement strategy	9 and onward
tvStandard	<integer>	Indicating the TV Standard • 0: None • 1: NTSC • 2: PAL	9 and onward
videoCodec	<integer>	*Optional.* Camera video codec. • 0 - Unknown • 1 - MJPEG • 2 - MPEG4 • 3 - H264 • 5 - MXPEG • 6 - H265 • 7 - H264+	9 and onward
vendor	<string>	Vendor of the camera	9 and onward

Example:


```
{
 "cameras": [
   {
     "DINum":0,
     "DONum":0,
     "stream1":
       {
          "bitrateCtrl":1,
          "constantBitrate":"1000",
          "fps":10,
          "quality":"5",
          "resolution":"640x480"
       },
     "audioCodec":0,
     "channel":"1",
     "dsId":0,
     "enableLowProfile":false,
     "enableRecordingKeepDays":false,
     "enableRecordingKeepSize":true,
     "fov":"",
     "id":144,
     "ip":"10.13.22.37",
     "model":"TVIP72500",
     "newName":"ABUS – TVIP72500",
     "port":80,
     "postRecordTime":5,
```



```
      "preRecordTime":5,
      "recordTime":30,
      "recordingKeepDays":30,
      "recordingKeepSize":"10",
      "status":1,
      "tvStandard":0,
      "vendor":"ABUS",
      "videoCodec":3
    },
    {
      "DINum":2,
      "DONum":0,
      "stream1":
        {
          "bitrateCtrl":1,
          "constantBitrate":"1000",
          "fps":10,
          "quality":"5",
          "resolution":"1280x720"
        },
      "stream2":
        {
          "bitrateCtrl":1,
          "constantBitrate":"0",
          "fps":10,
          "quality":"5",
         "resolution":"704x480"
        },
      "audioCodec":2,
      "channel":"1",
      "dsId":0,
      "enableLowProfile":false,
      "enableRecordingKeepDays":false,
      "enableRecordingKeepSize":true,
      "fov":"",
      "id":154,
      "ip":"10.13.23.15",
      "model":"Generic_ONVIF",
      "newName":"ONVIF",
      "port":80,
      "postRecordTime":5,
      "preRecordTime":5,
      "recordTime":30,
      "recordingKeepDays":30,
      "recordingKeepSize":"10",
      "status":1,
      "tvStandard":0,
      "vendor":"ONVIF",
      "videoCodec":3
```



```
}
```

2.3.4.3 GetInfo method

Get specific camera settings.

Request

Parameter	Value	Description	Availability
cameraIds	<string>	The list of <CAMERA_ID> to be queried concatenated by “,”.	From 1 to 8
privCamType	0 … 15	*Optional*. Weighted sum indicated the types of the camera • 0x00: NONE • 0x01: LIVEVIEW • 0x02: PLAYBACK • 0x04: LENS • 0x08: AUDIO	From 1 to 8
blIncludeDeletedCam	<boolean>	*Optional*. Is deleted cameras included	From 4 to 8
basic	<boolean>	*Optional*. Is basic information included	From 4 to 8
streamInfo	<boolean>	*Optional*. Is stream information included	From 4 to 8
optimize	<boolean>	*Optional*. Is optimization information included	From 4 to 8
ptz	<boolean>	*Optional*. Is PTZ information included	From 4 to 8
eventDetection	<boolean>	*Optional*. Is event detection information included	From 4 to 8
deviceOutCap	<boolean>	*Optional*. Is information of device output capability included	From 4 to 8
fisheye	<boolean>	*Optional*. Is fisheye information included	From 4 to 8
camAppInfo	<boolean>	*Optional*. Is information of camera Application included	From 4 to 8

Example: Get camera information

```
http://192.168.1.1:5000/webapi/entry.cgi?
version="8"&cameraIds="89"&blIncludeDeletedCam=true&deviceOutCap=true&streamInfo=true&method
="GetInfo"&api="SYNO.SurveillanceStation.Camera"&ptz=true&basic=true&privCamType=3&camAppInfo=t
rue&optimize=true&fisheye=true&eventDetection=true
```

Response

Key	Value	Description	Availability
cameras	Array of <Camera Information Object>	The list of all queried cameras.	From 1 to 8

<Camera Information Object> definition:

Key	Value	Description	Availability
ADCap	<integer>	Audio detection capability	From 4 to 8
DINum	<integer>	Digital input number	From 4 to 8
DONum	<integer>	Digital output number	From 4 to 8
MDCap	<integer>	Which codec has MD capability	From 4 to 8
TDCap	<integer>	Tamper detection capability	From 4 to 8
analyticsBeep	<boolean>	Point out that beep or not	From 4 to 8
analyticsDirection	0, 1	• 0 : one way • 1 : two way	From 4 to 8
analyticsDwellTime	<integer>	Analytics dwellTime for ANALYTICS_TYPE_LOITERING	From 4 to 8
analyticsFrame	<boolean>	Point out that show frame or not	From 4 to 8
analyticsHeight	<integer>	Parameter for the live detection(no longer relevent)	From 4 to 8
analyticsLine	<boolean>	Point out that show line or not	From 4 to 8
analyticsObjSize	<integer>	Analytics objSize for ANALYTICS_TYPE_FOREIGN_OBJ	From 4 to 8
analyticsRegion	<string>	Analytics region	From 4 to 8
analyticsSens	1, 2, 3	• 1: LOW • 2: MEDIUM • 3: HIGH	From 4 to 8
analyticsType	1 … 9	• 1: NONE • 2: MOTION • 3: MISSING_OBJ • 4: FOREIGN_OBJ • 5: CAM_OCCLUSION • 6: FOCUS_LOST • 7: LOITERING • 8: OBJ_COUNTING • 9: VIRTUAL_FENCE	From 4 to 8
analyticsVirtualFence	<boolean>	Point out that show virtual fence or not	From 4 to 8
analyticsWidth	<integer>	Parameter for the live detection(no longer relevent)	From 4 to 8
audioCap	<boolean>	Audio capability	From 4 to 8
audioOut	<boolean>	Does the camera support audioOut	From 4 to 8
audioType	<integer>	Audio type	From 4 to 8
autoFocus	<boolean>	Auto focus	From 4 to 8
autoPan	<integer>	Auto pan	From 4 to 8
blLiveviewPriv	<boolean>	live view privilege	From 4 to 8
blPresetSpeed	<boolean>	Can speed pre-setted	From 4 to 8
camIdOnRecServer	<integer>	Camera ID on recording server	From 4 to 8
camLiveMode	0, 1	Determing the source of live view • 0: DS • 1: Camera	From 4 to 8
camMountType	0, 1, 2	How camera is mounted • 0: CEILING • 1: WALL	From 4 to 8

		• 2: FLOOR	
camPath	<string>	Camera Path	From 4 to 8
camStatus	0 … 4	Indicating the camera status • 0: Normal • 1: Disconnected • 2: Disabled • 3: Deleted • 4: Others	From 4 to 8
channel_id	<string>	Camera channel id	From 4 to 8
daybegin	<integer>	Camera optimization exposure mode day begin time	From 4 to 8
dayend	<integer>	Camera optimization exposure mode day end time	From 4 to 8
deleted	<boolean>	Is deleted	From 4 to 8
detailInfo	<Camera DerailInfo Object>	Detail information of the camera	From 4 to 8
deviceType	1 … 15	Using weighted sum to verify the device type • 0x01: CAMERA • 0x02: VIDEO_SERVER • 0x04: PTZ • 0x08: FISHEYE	From 4 to 8
dsIp	<string>	IP of the DS	From 4 to 8
dsPort	<integer>	Port of the DS	From 4 to 8
enabled	<boolean>	Is the camera enabled?	From 4 to 8
exposure_control	0 … 6	Indicating type of exposure control • 0: AUTO • 1: 50HZ • 2: 60HZ • 3: HOLD • 4: OUTDOOR • 5: NONE • 6: UNKNOWN	From 4 to 8
exposure_mode	0 … 4	Indicating exposure mode • 0: AUTO • 1: DAY • 2: NIGHT • 3: SCHEDULE • 4: UNKNOWN	From 4 to 8
feRegionList	Array of <Fisheye Region Object>	List of fisheye camera regions	From 4 to 8
fisheyeDispMode	<string>	The display mode of fisheye camera	From 4 to 8
fisheyeType	<integer>	The type of fisheye	From 4 to 8
folder	<string>	Path to the recorded video	From 4 to 8
fps	<integer>	The fps of recording stream	From 4 to 8
hasCamParam	<boolean>	True if the camera has parameter capability	From 4 to 8
host	<string>	IP address of the camera	From 4 to 8
id	<integer>	Camera ID	From 4 to 8
imageEnhancement	<Image Enhancement	The parameters of the image enhancement	From 4 to 8

	Object>		
isStatusUnrecognized	<boolean>	Is status of the camera unrecognized	From 4 to 8
is_rotated_by_date	<boolean>	Indicating if the replacing strategy "rotation_by_date" is enabled	From 4 to 8
is_rotated_by_space	<boolean>	Indicating if the replacing strategy "rotation_by_space" is enabled	From 4 to 8
model	<string>	Model name of the Camera	From 4 to 8
multiDI	<boolean>	Is there multi digital input	From 4 to 8
mute	<boolean>	Is the camera mute	From 4 to 8
name	<string>	Name of the camera	From 4 to 8
objTrack	<boolean>	Is the camera with capability of object tracking	From 4 to 8
osd_format	0 … 3	Indicating the format of OSD is • 0: NON • 1: DATE • 2: TIME • 3: TEXT	From 4 to 8
osd_position	<integer>	The position of osd	From 4 to 8
osd_status	<boolean>	Is the OSD on/off	From 4 to 8
ownerDsId	<integer>	The id of the owner of this camera	From 4 to 8
param_chklist	0 … 127	Weighted sum indicating the check list of parameters • 0x00: NONE • 0x01: TIME_SERVER • 0x02: VIDEO_MIRROR • 0x04: VIDEO_FLIP • 0x08: VIDEO_ROTATE • 0x10: EXPOSURE_CONTROL • 0x20: EXPOSURE_MODE • 0x40: OSD_TIMESTAMP	From 4 to 8
port	<integer>	Port of the camera	From 4 to 8
presetNum	<integer>	The maximal number of preset regions for the PTZ camera	From 4 to 8
ptzCap	<integer>	Capability of PTZ camera	From 4 to 8
ptzContinuous	<integer>	Is PTZ moving in continuous mode	From 4 to 8
ptzDirection	<integer>	The number of directions PTZ camera supports	From 4 to 8
quality	<string>	Quality of the recording stream	From 4 to 8
recBitrateCtrl	0, 1, 2	Indicating the bitrate of recording stream • 0: NONE • 1: VARIABLE • 2: CONSTANT	From 4 to 8
recCbrBitrate	<integer>	A constant indicating the bitrate	From 4 to 8
recStatus	<integer>	Indicating the recording method	From 4 to 8
resolution	<string>	Resolution of the camera	From 4 to 8
rotation_by_date	<integer>	The parameter for replacement strategy	From 4 to 8
rotation_by_space	<string>	The parameter for replacement strategy	From 4 to 8
rotation_option	<integer>	The recording option when rotation occurs	From 4 to 8
setDICap	<boolean>	Does camera have the capability of digital input	From 4 to 8
setDOCap	<boolean>	Does camera have the capability of digital	From 4 to 8

		output	
singleStream	<boolean>	Does the camera provide only single stream	From 4 to 8
snapshot_path	<string>	The path for obtaining snapshop	From 4 to 8
status	<integer>	Indicating the status of the camera • 0: ENABLED • 1: DISABLED • 2: ACCTIVATING • 3: DISABLING • 4: RESTARTING • 5: UNKNOWN	From 4 to 8
status_flags	<integer>	Flags of the camera status	From 4 to 8
stmFisheyeType	0 … 18	Type of the Fisheye camera • 0: NONE • 1: VIVOTEK • 2: MOBOTIX • 3: PIXORD • 4: AXIS • 5: DLINK • 6: GEOVISION • 7: PANASONIC • 8: BRICKCOM • 9: ACTI • 10: ACTI_KCM • 11: ACTI_I51 • 12: SAMSUNG • 13: 3S • 14: SONY • 15: ONCAMGRANDEYE • 16: MOBOTIX_Q25M • 17: A_MTK • 18: SENTRY	From 4 to 8
stm_info	Array of <Stream Information Object>	Information of each stream profile Length of Array is 3. Array[0]: High quality stream profile. Array[1]: Balanced stream profile. Array[2]: Low bandwidth stream profile.	From 4 to 8
profileSettingList	<string>	Stream profile of each functionality concatenated by ",". Functionality in order: • Liveview • Mobile • Recording Stream - continuous • Recording Stream - motion detection • Recording Stream - customize1 • Recording Stream - customize2 • (deprecated) • (deprecated) • (deprecated)	From 4 to 8

		• Recording Stream - edge • (deprecated) • Liveview dynamic switch profile • Advanced recording • Video analysis	
time_server	<string>	The NTP server	From 4 to 8
tvStandard	0, 1, 2	Indicating the TV Standard • 0: NTSC • 1: PAL • 2: NONE	From 4 to 8
type	<integer>	Type of the camera	From 4 to 8
update_time	<integer>	The last update time in timestamp	From 4 to 8
vendor	<string>	Vendor of the camera	From 4 to 8
videoCapList	Array of <Video Capability Object>	List of the video capability	From 4 to 8
video_flip	<boolean>	Is the video flip	From 4 to 8
video_mirror	<boolean>	Is the video mirror	From 4 to 8
video_rotation	<integer>	Is the video rotated	From 4 to 8
volume	<integer>	Size of the volume	From 4 to 8
volume_space	<string>	The size of the recorded videos of the camera	From 4 to 8

From 4 to 8

<Camera DetailInfo Object> definition:

Key	Value	Description	Availability
camAudioType	0 … 5	Indicating audio type • 0: UNKNOWN • 1: PCM • 2: G711 • 3: G726 • 4: AAC • 5: AMR	From 4 to 8
camChannel	<string>	Channel of the output video	From 4 to 8
camFolder	<string>	Folder to store configuration and video	From 4 to 8
camFov	<string>	Field of view of the camera	From 4 to 8
camFps	<integer>	The fps of recording stream	From 4 to 8
camIP	<string>	IP address of the camera	From 4 to 8
camIsRotByDate	<boolean>	Does the rotation occur when the limit time is reached	From 4 to 8
camIsRotBySpace	<boolean>	Does the rotation occur when the limit space is reached	From 4 to 8
camLiveBitrateCtrl	0, 1, 2	Indicating the bitrate of live stream • 0: NONE • 1: Variable • 2: Constant	From 4 to 8
camLiveCbrBitrate	<integer>	A constant indicating the bitrate	From 4 to 8
camLiveFps	<integer>	The fps of live stream	From 4 to 8
camLiveMode	0, 1	Determining the source of live view • 0: DS • 1: Camera	From 4 to 8
camLiveQuality	<string>	The quality of live stream	From 4 to 8

camLiveResolution	<string>	The resolution of live stream	From 4 to 8
camLiveStreamNo	<integer>	The stream number of live stream	From 4 to 8
camMobileBitrateCtrl	0, 1, 2	Indicating the bitrate of mobile stream • 0: NONE • 1: Variable • 2: Constant	From 4 to 8
camMobileCbrBitrate	<integer>	A constant indicating the bitrate	From 4 to 8
camMobileFps	<integer>	The fps of mobile stream	From 4 to 8
camMobileQuality	<string>	The quality of mobile stream	From 4 to 8
camMobileResolution	<string>	The resolution of mobile stream	From 4 to 8
camMobileStreamNo	<integer>	The stream number of mobile stream	From 4 to 8
camModel	<string>	Model name of the camera	From 4 to 8
camMountType	0, 1, 2	How camera is mounted • 0: CEILING • 1: WALL • 2: FLOOR	From 4 to 8
camName	<string>	Camera name	From 4 to 8
camPassWord	<string>	Password of the camera	From 4 to 8
camPort	<integer>	Port of the camera	From 4 to 8
camPostRecTime	<integer>	Extra recording time after the end of each recording	From 4 to 8
camPreRecTime	<integer>	Extra recording time before the start of each recording	From 4 to 8
camPrefix	<string>	The prefix of the recording file name	From 4 to 8
camQuality	<string>	The quality of recording stream	From 4 to 8
camRecBitrateCtrl	0, 1, 2	Indicating the bitrate of recording stream • 0: NONE • 1: Variable • 2: Constant	From 4 to 8
camRecCbrBitrate	<integer>	A constant indicating the bitrate	From 4 to 8
camRecStreamNo	<integer>	Stream number of recording stream	From 4 to 8
camRecTime	<integer>	The recording length in minute	From 4 to 8
camResolution	<string>	The resolution of recording stream	From 4 to 8
camRotByDate	<integer>	The upper bound indicating how long a file can be store before rotation	From 4 to 8
camRotBySpace	<integer>	The upper bound that total file size can reach before rotation	From 4 to 8
camRotOption	<integer>	Indicating the behavior when the space is full, rotate/stop	From 4 to 8
camRtspProtocol	0 … 4	Indicating the protocol of RTSP • 0: NONE • 1: UDP • 2: TCP • 3: HTTP • 4: Auto	From 4 to 8
camSchedule	Array of <integer>	This variable is actually a 2-dimension, 48*7 array indicating the recording schedule at each half hour	From 4 to 8
camServer	<integer>	The DS Id on which the camera is mounted	From 4 to 8
camTvStandard	<integer>	Indicating the TV Standard	From 4 to 8

		• 0: NTSC • 1: PAL • 2: NONE	
camUserName	<string>	User name to access the camera	From 4 to 8
camVendor	<string>	Vendor of the camera	From 4 to 8
camVideoType	<string>	Indicating video type • 0: UNKNOWN • 1: MJPEG • 2: MPEG4 • 3: H264 • 4: EMAP • 5: MXPEG	From 4 to 8
customAlarmDetect	<integer>	Determining the type of alarm in the schedule field	From 4 to 8
customDetect	<integer>	Determining the type of motion detection in the schedule field	From 4 to 8
edgeStgDownloadSch	Array of <integer>	This variable is actually a 2-dimension, 48*7 array indicating the recording schedule at each half hour	From 4 to 8
edgeStgEnabled	<boolean>	Is the edge storage enabled	From 4 to 8
edgeStgRecDays	<integer>	Using an weighted sum for verifying which day to record	From 4 to 8
edgeStgRecMode	1 … 15	A weighted sum indicating the recording mode • 0x01: CONTINUOUS • 0x02: MD • 0x04: DI • 0x08: AUDIO_DET	From 4 to 8
edgeStgRecStartTime	<string>	The start time of edge storage recording	From 4 to 8
edgeStgRecStopTime	<string>	The stop time of edge storage recording	From 4 to 8
edgeStgRetrieveAction	0, 1, 2, 3	Indicating the retrieve action is • 0: NONE • 1: DOWNLOAD • 2: GET_LOST • 3: NO_RETRIEVE	From 4 to 8

<Fisheye Region Object> definition:

Key	Value	Description	Availability
camId	<integer>	Camera ID	From 4 to 8
id	<integer>	Region ID	From 4 to 8
name	<string>	Name of the Region	From 4 to 8
posX	<integer>	X-coordinate value of the dewarping region	From 4 to 8
posY	<integer>	Y-coordinate value of the dewarping region	From 4 to 8
regions	Array of <Fisheye Sub-region Object>	List of sub regions of the camera	From 4 to 8
type	-1 … 6	Type of fisheye region. • -1: FISHEYE_NOT_REGION • 0: FISHEYE_REGION • 1: FISHEYE_PANORAMA	From 4 to 8

		• 2: FISHEYE_DOUBLE_PANORAMA • 3: FISHEYE_TRIPLE_VIEW • 4: FISHEYE_QUAD_VIEW • 5: FISHEYE_SUB_REGION • 6: FISHEYE_SUB_PANORAMA	
zoom	<integer>	Zoom value	From 4 to 8

<Fisheye Sub-region Object> definition:

Key	Value	Description	Availability
camId	<integer>	Camera ID	From 4 to 8
id	<integer>	Region ID	From 4 to 8
name	<string>	Name of the sub-region	From 4 to 8
location	<integer>	Location of the Region	From 4 to 8
posX	<integer>	X-coordinate value of the dewarping region	From 4 to 8
posY	<integer>	Y-coordinate value of the dewarping region	From 4 to 8
strSubRegionInfo	<string>	Information about sub-region	From 4 to 8
type	-1 … 6	Type of fisheye region. • -1: FISHEYE_NOT_REGION • 0: FISHEYE_REGION • 1: FISHEYE_PANORAMA • 2: FISHEYE_DOUBLE_PANORAMA • 3: FISHEYE_TRIPLE_VIEW • 4: FISHEYE_QUAD_VIEW • 5: FISHEYE_SUB_REGION • 6: FISHEYE_SUB_PANORAMA	From 4 to 8
zoom	<integer>	Zoom value	From 4 to 8

<Image Enhancement Object> definition:

Key	Value	Description	Availability
brightness	<integer>	Brightness of images	From 4 to 8
contrast	<integer>	Degree of contrast of images	From 4 to 8
saturation	<integer>	Saturation of images	From 4 to 8
sharpness	<integer>	Sharpness of images	From 4 to 8

Example: Get camera information response.


```
{
   "camera": [
      {
         "audioOut": true,
         "mute": false,
         "recStatus": 0,
         "analyticsType": 0,
         "ptzCap": 111,
         "audioType": 4,
         "ptzContinuous": 39,
         "is_rotated_by_date": false,
```



```
            "ADCap": 5,
            "blLiveviewPriv": true,
            "videoCapList": [
               {
                  "stList": [
                     "RTSP"
                  ],
                  "vt": "H.264"
               },
               {
                  "stList": [
                     "HTTP"
                  ],
                  "vt": "MJPEG"
               }
            ],
            "isStatusUnrecognized": false,
            "is_rotated_by_space": true,
            "osd_position": 6,
            "fisheyeType": 0,
            "recBitrateCtrl": 1,
            "video_mirror": true,
            "vendor": "AXIS",
            "video_rotation": 0,
            "stmFisheyeType": 0,
            "dsPort": 5000,
            "TDCap": 0,
            "camMountType": 0,
            "exposure_control": 6,
            "name": "P5415-E-0011",
            "ownerDsId": 0,
            "osd_status": true,
            "fisheyeDispMode": "",
            "channel_id": "1",
            "setDICap": false,
            "param_chklist": 0,
            "analyticsBeep": false,
            "status_flags": 32,
            "feRegionList": [],
            "objTrack": false,
            "port": 80,
            "video_flip": true,
            "osd_format": 0,
            "autoPan": 0,
            "deleted": false,
            "deviceType": 4,
            "hasCamParam": true,
            "DINum": 2,
            "snapshot_path":
"/webapi/_____entry.cgi?
api=SYNO.SurveillanceStation.Camera&method=GetSnapshot&version=1&cameraId=70×tamp=142491912
```



```
9&preview=true",
        "dsIp": "",
        "host": "10.13.12.165",
        "rotation_by_date": 30,
        "autoFocus": true,
        "volume_space": "9.617",
        "analyticsHeight": 0,
        "MDCap": 5,
        "rotation_by_space": "10",
        "analyticsVirtualFence": false,
        "analyticsObjSize": 0,
        "analyticsDirection": 1,
        "analyticsRegion": "",
        "quality": "5",
        "multiDI": false,
        "type": 3,
        "stm_info": [
          {
            "camPath": "cnRzcDovL2FkbWluOnN5bm8xMjM0QDEwLjE3LjUyLjIwOTo1NTQvbGl2ZTEuc2
Rw",
            "fps": 15,
            "quality": "5",
            "resolution": "2592x1944",
            "stmNo": 1,
             "type": 0
          },
          {
            "camPath": "cnRzcDovL2FkbWluOnN5bm8xMjM0QDEwLjE3LjUyLjIwOTo1NTQvbGl2ZTEuc2
Rw",
            "fps": 15,
            "quality": "5",
            "resolution": "2592x1944",
            "stmNo": 1,
             "type": 1
          },
          {
            "camPath": "cnRzcDovL2FkbWluOnN5bm8xMjM0QDEwLjE3LjUyLjIwOTo1NTQvbGl2ZTEuc2
Rw",
            "fps": 15,
            "quality": "5",
            "resolution": "2592x1944",
            "stmNo": 1,
             "type": 2
          }
        ],
        "camLiveMode": 0,
        "volume": 50,
        "ptzDirection": 32,
        "dayend": 18,
        "folder": "/var/services/surveillance/P5415-E-001",
        "tvStandard": 0,
```



```
        "singleStream": false,
        "imageEnhancement": {
            "saturation": 0,
            "sharpness": 0,
            "contrast": 0,
            "brightness": 0
        },
        "audioCap": true,
        "camIdOnRecServer": 0,
        "detailInfo": {
            "camRecTime": 30,
            "edgeStgEnabled": false,
            "camIsRotByDate": false,
            "camRecStreamNo": 0,
            "camRotByDate": 30,
            "camTvStandard": 0,
            "camMountType": 0,
            "camRecCbrBitrate": 1000,
            "camIsRotBySpace": true,
            "camLiveResolution": "800x450",
            "camRecBitrateCtrl": 1,
            "camMobileStreamNo": 0,
            "camLiveQuality": "5",
            "edgeStgRecStopTime": "23:59",
            "camLiveStreamNo": 0,
            "camResolution": "800x450",
            "camMobileQuality": "5",
            "camLiveMode": 0,
            "camPreRecTime": 5,
            "camIP": "10.13.12.165",
            "camLiveBitrateCtrl": 1,
            "camModel": "P5415-E",
            "edgeStgRecStartTime": "00:00",
            "camPostRecTime": 5,
            "camLiveCbrBitrate": 1000,
            "camMobileResolution": "800x450",
            "camUserName": "root",
            "camFps": 10,
            "camVendor": "AXIS",
            "camMobileFps": 10,
            "camFov": "",
            "camMobileCbrBitrate": 1000,
            "camRotBySpace": 10,
            "edgeStgDownloadSch":
[0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,
0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0
,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,
0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0
,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,
0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0],
            "customAlarmDetect": 3,
```



```
                "camLiveFps": 10,
                "camChannel": "1",
                "camRotOption": 0,
                "camQuality": "5",
                "camPrefix": "P5415-E-001",
                "edgeStgRetrieveAction": 2,
                "camSchedule":
[1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,
1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1
,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,
1,1,1,1],
                "edgeStgRecMode": 2,
                "customDetect": 5,
                "camPassWord": "%EF%BC%83%EF%BC%83%EF%BC%83%EF%BC%83%EF%BC%83%EF%BC
%83%EF%BC%83%EF%BC%83",
                "camVideoType": "H.264",
                "camMobileBitrateCtrl": 1,
                "MdDetSrc": 0,
                "camServer": 0,
                "camFolder": "P5415-E-001",
                "edgeStgRecDays": 127,
                "camPort": 80,
                "camRtspProtocol": 4,
                "camName": "P5415-E-0011",
                "camAudioType": 4
            },
            "enabled": true,
            "analyticsSens": 1,
            "analyticsWidth": 0,
            "recCbrBitrate": 1000,
            "blPresetSpeed": false,
            "DONum": 0,
            "id": 70,
            "setDOCap": false,
            "analyticsFrame": true,
            "analyticsLine": false,
            "daybegin": 8,
            "fps": 10,
            "status": 1,
            "update_time": 1424919129,
            "exposure_mode": 4,
            "time_server": "",
            "rotation_option": 0,
            "presetNum": 32,
            "camStatus": 9,
            "analyticsDwellTime": 5,
            "camPath":
"cnRzcDovL3Jvb3Q6bmF0bWFzdGVyQDEwLjEzLjEyLjE2NTo1NTQvYXhpcy1tZWRpYS9tZWRpYS5hbXA/Y2FtZ
XJhPTEmdmlkZW9jb2RlYz1oMjY0JnJlc29sdXRpb249ODAweDQ1MCZmcHM9MTAmdmlkZW9rZXlmcmFtZWl
udGVydmFsPTEwJmNvbXByZXNzaW9uPTIw",
            "model": "P5415-E",
```



```
        "resolution": "800x450"
      }
   ]
}
```

2.3.4.4 ListGroup method

Get all camera group information.

Request

Parameter	Value	Description	Availability
offset	<integer>	*Optional*. The offset to be shifted in the total result. If not specified, the offset will be 0.	From 1 to 8
limit	<integer>	*Optional*. Number of camera groups to be returned. If not specified, return camera groups to the end of camera group list.	From 1 to 8

Example:

```
http://192.168.1.1:5000/webapi/entry.cgi?
method="ListGroup"&api="SYNO.SurveillanceStation.Camera"&limit=3&version="8"&offset=10
```

Response

Key	Value	Description	Availability
total	<integer>	The number of total camera groups.	From 1 to 8
offset	<integer>	The shifted offset in the total result.	From 1 to 8
cameraGroups	Array of <Camera Group Object>	The camera group list.	From 1 to 8

<Camera Group Object> definition:

Key	Value	Description	Availability
id	<CAMERA_GROUP_ID>	Unique camera group ID.	From 1 to 8
name	<string>	Camera group name.	From 1 to 8
cameraIds	Array of <CAMERA_ID>	The list of camera ID within this group.	From 1 to 8
description	<string>	The description of the camera group.	From 1 to 8
privilege	<integer>	The user privilege about this camera group. Use bit operation to get the privilege. • 0x01: liveview • 0x02: playback • 0x04: lens • 0x08: audio	From 4 to 8

Example:

```
{
        "total": 38,
        "offset": 10,
        "cameraGroups": [
                {
```



```
                "id": 1,
                "name": "Group 1F",
                "cameraIds": [10,11,12],
                "description": "The camera group of 1F cameras",
                "privilege": 10
            }, {
                "id": 2,
                "name": "Group 2F",
                "cameraIds": [13,14,15],
                "description": "The camera group of 2F cameras",
                "privilege": 3
            }, {
                "id": 3,
                "name": "Group 3F",
                "cameraIds": [16,17],
                "description": "The camera group of 3F cameras",
                "privilege": 15
            }
        ]
}
```

2.3.4.5 GetSnapshot method

Get the up-to-date snapshot of the selected camera in JPEG format.

Request

Parameter	Value	Description	Availability
id	<CAMERA_ID>	Unique camera ID.	9 and onward
name	<string>	*Optional.* The name of queried camera. This parameter only valid when “id” is not specified and “dsId“ is specified.	9 and onward
dsId	<integer>	*Optional.* The owner ds id of queried camera. Used only combined with “name“ parameter.	9 and onward
profileType	<integer>	*Optional.* Profile type of selected camera. Default value is 1. • 0 - High quality • 1 - Balanced • 2 - Low bandwidth	9 and onward

Example:

```
http://192.168.1.1:5000/webapi/entry.cgi?
version=9&id=18&api="SYNO.SurveillanceStation.Camera"&method="GetSnapshot"&profileType=0
```

Response

The binary JPEG image data.

Example: HTTP response with image data

```
HTTP/1.0 200 OK
Content-Type: image/jpeg

<Binary JPEG image data>
```

2.3.4.6 Enable method

Enable cameras.

Request

Parameter	Value	Description	Availability
idList	<string>	The list of <CAMERA_ID> to be queried concatenated by “,”.	9 and onward

Example: Enable cameras which ids are 2 and 10.

```
GET /webapi/entry.cgi?
api="SYNO.SurveillanceStation.Camera"&method="Enable"&version=9&idList="2,10"
```

Response

This method has no specific response data. It returns an empty success response if it completes without error.

2.3.4.7 Disable method

Disable cameras.

Request

Parameter	Value	Description	Availability
idList	<string>	The list of <CAMERA_ID> to be queried concatenated by “,”.	9 and onward

Example: Disable cameras which ids are 2 and 10.

```
http://192.168.1.1:5000/webapi/entry.cgi?
&api="SYNO.SurveillanceStation.Camera"&version=9&method="Disable"&idList="2,10"
```

Response

This method has no specific response data. It returns an empty success response if it completes without error.

2.3.4.8 GetCapabilityByCamId method

Get capability of a specific camera by its camera Id.

Request

Parameter	Value	Description	Availability

cameraId	<CAMERA_ID>	Unique camera ID.	From 4 to 8

Example: Get capability of camera which id is 90

```
http://192.168.1.1:5000/webapi/entry.cgi?
api="SYNO.SurveillanceStation.Camera"&version="8"&cameraId=90&method="GetCapabilityByCamId"
```

Response

Key	Value	Description	Availability
ptzPan	<boolean>	Capability to perform pan action.	From 4 to 8
ptzTilt	<boolean>	Capability to perform tilt action.	From 4 to 8
ptzZoom	<boolean>	Capability to perform zoom action.	From 4 to 8
ptzHome	<boolean>	Capability to perform home action.	From 4 to 8
ptzPresetNumber	<integer>	The maximum number of preset supported by the model. 0 stands for preset incapability.	From 4 to 8
ptzPan	<integer>	0: doesn't support pan action. 1: support step operation 2: support continuous operation	From 5 to 8
ptzTilt	<integer>	0: doesn't support tilt action. 1: support step operation 2: support continuous operation	From 5 to 8
ptzZoom	<integer>	0: doesn't support zoom action. 1: support step operation 2: support continuous operation	From 5 to 8
ptzIris	<integer>	0: doesn't support iris action. 1: support step operation 2: support continuous operation	From 5 to 8
ptzFocus	<integer>	0: doesn't support focus action. 1: support step operation 2: support continuous operation	From 5 to 8
ptzAbs	<boolean>	Capability to perform absolute PTZ action.	From 6 to 8
ptzAutoFocus	<boolean>	Capability to perform auto focus action.	From 6 to 8
ptzDirection	<integer>	The PTZ directions that camera support	From 6 to 8
ptzSpeed	<boolean>	Capability to perform change speed.	From 6 to 8
audioOut	<boolean>	Capability to perform audio output to camera.	From 1 to 8

Example:


```
{
	"ptzHome":false,
	"ptzPresetNumber":255,
	"ptzPan":2,
	"ptzTilt":2,
	"ptzZoom":2,
	"ptzIris":0,
	"ptzFocus":2,
	"ptzAbs":false,
	"ptzAutoFocus":false,
	"ptzDirection":8,
	"ptzSpeed":true,
```



```
        "audioOut":true
}
```

2.3.4.9 MigrationEnum method

Enumerates current status of migration

Request

Parameter	Value	Description	Availability
start	<integer>	The beginning of the enumeration list	From 7 to 8
limit	<integer>	Amount of the events for showing	From 7 to 8
ownerDsId	<integer>	The source DS ID in the CMS table	From 7 to 8

Example:

```
http://192.168.1.1:5000/webapi/entry.cgi?
version="8"&ownerDsId=0&start=0&api="SYNO.SurveillanceStation.Camera"&limit=1&method="Migration
Enum"
```

Response

Key	Value	Description	Availability
camInfo	Array of <Migration Info Object>	Information of each listed migration event	From 7 to 8
total	<integer>	The total number of events in the database	From 7 to 8

<Migration Info Object> definition:

Key	Value	Description	Availability
from	<integer>	The source DS of the migration	From 7 to 8
id	<integer>	ID of selected migration event	From 7 to 8
ip	<string>	IP of camera	From 7 to 8
is_rotated_by_space	<boolean>	Replacement policy once the space is full	From 7 to 8
name	<string>	Name of the camera specified at the source DS	From 7 to 8
occupied	<string>	Occupied space in the destination DS denoted in GB	From 7 to 8
progress	<float>	The completeness of the event	From 7 to 8
rotation_by_space	<string>	Parameter of the replacement policy	From 7 to 8
status	<integer>	Status of the migration event	From 7 to 8
to	<integer>	The destination DS	From 7 to 8

Example:

```
{
"data": {
   "total": 3,
   "camInfo": [
```



```
      {
         "status": -1,
         "to": 1,
         "rotation_by_space": "0",
         "from": 0,
         "name": "iPUX",
         "progress": 10.0,
         "ip": "10.13.11.195",
         "is_rotated_by_space": false,
         "occupied": "0",
         "id": 1
      }
   ]
}
```


2.3.4.10 Migrate method

Migrating Cameras and recorded video (optional) to specified DS

Request

Parameter	Value	Description	Availability
serverId	<integer>	The destination of the migration	From 7 to 8
camIdList	<string>	List of To-Be-Migrated cameras	From 7 to 8
delMode	<integer>	Choosing to preserve, remove or migrate recorded videos	From 7 to 8

Example:

```
http://192.168.1.1:5000/webapi/entry.cgi?
delMode=2&camIdList="45"&version="8"&api="SYNO.SurveillanceStation.Camera"&serverId=1&method="
Migrate"
```

Response

This method has no specific response data. It returns an empty success response if it completes without error.

2.3.4.11 CountByCategory method

This method lists groups along with number of cameras which belong to according to specified criteria

Request

Parameter	Value	Description	Availability
start	<integer>	The starting offset in the list of cameras	From 7 to 8
limit	<integer>	The number of cameras to show	From 7 to 8

Example:

```
http://192.168.1.1:5000/webapi/entry.cgi?
start=0&api="SYNO.SurveillanceStation.Camera"&limit=0&version="8"&method="CountByCategory"
```

Response

Key	Value	Description	Availability
cam_brand	Array of <Group Status Object>	List of camera counts categorized by brand	From 7 to 8
cam_device	Array of <Group Status Object>	The list of camera counts categorized by devic	From 7 to 8
cam_group	Array of <Group Status Object>	The list of camera counts categorized by user defined groups	From 7 to 8
cam_status	Array of <Group Status Object>	The list of camera counts categorized by camera status	From 7 to 8
server	Array of <Group Status Object>	The list of camera counts categorized by owner DS	From 7 to 8
total	<integer>	The amount of cameras	From 7 to 8

<Group Status Object> definition:

Key	Value	Description	Availability
id	<string>	The identifier of status in the selected group	From 7 to 8

Example:

```
{
   "cam_brand": [
      {
         "id": "-1: 2"
      },
      {
         "id": "ABUS: 1"
      },
      {
         "id": "iPUX: 1"
      }
   ],
   "cam_group": [
      {
         "id": "-1: 2"
      },
      {
         "id": "1: 1"
      }
   ],
   "cam_status": [
      {
         "id": "-1: 2"
      },
      {
```

```
            "id": "1: 1"
        },
        {
            "id": "12: 0"
        },
        {
            "id": "2: 0"
        },
        {
            "id": "3: 0"
        },
        {
            "id": "7: 1"
        }
    ],
    "server": [
        {
            "id": "-1: 2"
        },
        {
            "id": "0: 2"
        },
        {
            "id": "1: 0"
        }
    ],
    "cam_device": [
        {
            "id": "-1: 2"
        },
        {
            "id": "1: 1"
        },
        {
            "id": "2: 0"
        },
        {
            "id": "4: 1"
        },
        {
            "id": "8: 0"
        }
    ],
    "total": 2
}
```


2.3.4.12 RecountEventSize method

To activate the "getOccupiedSize" API for real-time size-calculating.

Request

Parameter	Value	Description	Availability
camId	<integer>	Specified cam	From 7 to 8

Example:

```
http://192.168.1.1:5000/webapi/entry.cgi?
api="SYNO.SurveillanceStation.Camera"&camId=27&version="8"&method="RecountEventSize"
```

Response

Key	Value	Description	Availability
size	<float>	The total size of the migrated data	From 7 to 8

Example:

```
{
   "size": 207.3548631668091
}
```

2.3.4.13 SaveOptimizeParam method

This API is able to save the configuration of Optimization panel

Request

Parameter	Value	Description	Availability
cameraIds	<integer>	Specified cam	From 7 to 8
camParamChkList	<integer>	*Optional.* Record the overall bitwise OR operation status of each checkbox. • time server: 1 • video mirror: 2 • video mirror: 4 • video rotate: 8 • exposure control: 16 • exposure mode: 32 • osd timestamp: 64	From 7 to 8
timeServer	<string>	*Optional.* Specified NTP server	From 7 to 8
vdoMirror	<boolean>	*Optional.* 1 for turning on while 0 for turning off	From 7 to 8
vdoFlip	<boolean>	*Optional.* 1 for turning on while 0 for turning off	From 7 to 8
vdoRotation	<boolean>	*Optional.* 1 for turning on while 0 for turning off	From 7 to 8

expCtrl	<integer>	*Optional.* Degree of exposure control	From 7 to 8
expMode	<integer>	*Optional.* Modes for days and nights respectively	From 7 to 8
dayBegin	<integer>	*Optional.* Determine the start hour for the schedule of day mode	From 7 to 8
dayEnd	<integer>	*Optional.* Determine the end hour for the schedule of day mode	From 7 to 8
osdStatus	<boolean>	*Optional.* Specify whether osd is turned on/off	From 7 to 8
osdFormat	<integer>	*Optional.* Determine the format of osd if supported	From 7 to 8
osdPosition	<integer>	*Optional.* Determin the position of osd	From 7 to 8

Example:

```
http://192.168.1.1:5000/webapi/entry.cgi?
vdoMirror=true&camParamChkList=1&version="8"&vdoRotation=false&vdoFlip=true&osdPosition=0&exp
Mode=0&timeServer="pool.ntp.org"&cameraIds=28&api="SYNO.SurveillanceStation.Camera"&osdStatus=f
alse&osdFormat=0&dayEnd=18&expCtrl=2&method="SaveOptimizeParam"&dayBegin=8
```

Response

Key	Value	Description	Availability
id	<integer>	Return the camera id	From 7 to 8

Example:

```
{
   "id": 28
}
```

2.3.4.14 GetOccupiedSize method

This method returns the occupied volume in GigaBytes

Request

Parameter	Value	Description	Availability
camIdList	<string>	The list of <CAMERA_ID> to be queried concatenated by “,”.	From 7 to 8

Example:

```
http://192.168.1.1:5000/webapi/entry.cgi?
```



```
api="SYNO.SurveillanceStation.Camera"&camIdList="46,48"&version="8"&method="GetOccupiedSize"
```

Response

Key	Value	Description	Availability
ID	<string>	This field is actually replaced by camera ID dynamically, as a consequence the result for example should be {"46":"0.260","48":"0.050"}	From 7 to 8

Example:

```
{
   "104":"9.961",
   "99":"9.955"
}
```

2.3.4.15 CheckCamValid method

Check if the shortcut item is valid

Request

Parameter	Value	Description	Availability
cameraId	<CAMERA_ID>	Specified Cam ID	From 7 to 8

Example:

```
http://192.168.1.1:5000/webapi/entry.cgi?
api="SYNO.SurveillanceStation.Camera"&version="8"&cameraId=27&method="CheckCamValid"
```

Response

Key	Value	Description	Availability
categEntryVal	<string>	The mapped entry for specified camera	From 7 to 8
itemStatus	integer	Status of the shortcut	From 7 to 8

Example:

```
{
   "categEntryVal": "iPUX",
   "itemStatus": 0
}
```

2.3.4.16 MigrationCancel method

Deleting selected tasks

Request

Parameter	Value	Description	Availability
taskIds	<string>	To-Be-Deleted tasks	From 7 to 8

Example:

```
http://192.168.1.1:5000/webapi/entry.cgi?
api="SYNO.SurveillanceStation.Camera"&taskIds="1,4,7"&version="8"&method="MigrationCancel"
```

Response

This method has no specific response data. It returns an empty success response if it completes without error.

2.3.4.17 Delete method

Deleting selected cameras

Request

Parameter	Value	Description	Availability
idList	<string>	The list of <CAMERA_ID> to be queried concatenated by “,”.	9 and onward
keepRecording	<boolean>	To delete recorded videos or not	9 and onward

Response

This method has no specific response data. It returns an empty success response if it completes without error.

2.3.4.18 GetLiveViewPath method

Get live view url path by camera id.

Note

The effective time of the streaming path can be set by parameter rtspPathTimeout of method SYNO.SurveillanceStation.Camera.Save.

Request

Parameter	Value	Description	Availability
idList	<string>	The list of <CAMERA_ID> to be queried concatenated by “,”.	9 and onward

Example:

```
http://192.168.1.1:5000/webapi/entry.cgi?
api="SYNO.SurveillanceStation.Camera"&method="GetLiveViewPath"&version=9&idList="14,15"
```


Response

Key	Value	Description	Availability
data	Array of <PathInfo Object>	Detail path information of quried cameras.	9 and onward

<PathInfo Object> definition:

Key	Value	Description	Availability
id	<integer>	ID of the camera.	9 and onward
mjpegHttpPath	<string>	Mjpeg stream path(over http) of the camera	9 and onward
multicstPath	<string>	Multi-cast path of the camera.	9 and onward
mxpegHttpPath	<string>	mxpeg stream path of the camera.	9 and onward
rtspOverHttpPath	<string>	RTSP stream(over http) path of the camera.	9 and onward
rtspPath	<string>	RTSP stream path of the camera.	9 and onward

Example:


```
{
    "data" : [
      {
        "id" : 14,
        "mjpegHttpPath" : "http://10.13.13.9:5000/webapi/entry.cgi?
api=SYNO.SurveillanceStation.VideoStreaming&version=1&method=Stream&format=mjpeg&cameraId=14
&StmKey=\"faaa8c5e0d20b71038e35e7e3635b0ee\"",
        "multicstPath" :
"rtsp://admin:faaa8c5e0d20b71038e35e7e3635b0ee@10.13.13.9:554/Sms=14.multicast",
        "mxpegHttpPath" : "http://10.13.13.9:5000/webapi/entry.cgi?
api=SYNO.SurveillanceStation.VideoStreaming&version=1&method=Stream&format=mxpeg&cameraId=14
&StmKey=\"faaa8c5e0d20b71038e35e7e3635b0ee\"",
        "rtspOverHttpPath" : "rtsp://10.13.13.9:5000/webman/3rdparty/SurveillanceStation/cgi/rtsp.cgi?
Sms=14.unicast&DsId=0&StmKey=faaa8c5e0d20b71038e35e7e3635b0ee",
        "rtspPath" :
"rtsp://admin:faaa8c5e0d20b71038e35e7e3635b0ee@10.13.13.9:554/Sms=14.unicast"
      },
      {
        "id" : 15,
        "mjpegHttpPath" : "http://10.13.13.9:5000/webapi/entry.cgi?
api=SYNO.SurveillanceStation.VideoStreaming&version=1&method=Stream&format=mjpeg&cameraId=15
&StmKey=\"faaa8c5e0d20b71038e35e7e3635b0ee\"",
        "multicstPath" :
"rtsp://admin:faaa8c5e0d20b71038e35e7e3635b0ee@10.13.13.9:554/Sms=15.multicast",
        "mxpegHttpPath" : "http://10.13.13.9:5000/webapi/entry.cgi?
api=SYNO.SurveillanceStation.VideoStreaming&version=1&method=Stream&format=mxpeg&cameraId=15
&StmKey=\"faaa8c5e0d20b71038e35e7e3635b0ee\"",
        "rtspOverHttpPath" : "rtsp://10.13.13.9:5000/webman/3rdparty/SurveillanceStation/cgi/rtsp.cgi?
Sms=15.unicast&DsId=0&StmKey=faaa8c5e0d20b71038e35e7e3635b0ee",
        "rtspPath" :
"rtsp://admin:faaa8c5e0d20b71038e35e7e3635b0ee@10.13.13.9:554/Sms=15.unicast"
      }
    ]
```



```
}
```

2.3.4.19 API Error Code

Code	Description
400	Execution failed.
401	Parameter invalid.
402	Camera disabled.

2.3.5 SYNO.Surveillance.Camera.Event

Event Detection related WebAPI. e.g. Enumerate detection parameters or long polling for alarm status or save detection parameters.

API Name	Version	Availability
SYNO.Surveillance.Camera.Event	1	Surveillance Station 7.0

Method Name	Section	Availability
AudioEnum	2.3.5.1	Surveillance Station 7.0
AlarmEnum	2.3.5.2	Surveillance Station 7.0
TamperingEnum	2.3.5.3	Surveillance Station 7.0
MDParamSave	2.3.5.4	Surveillance Station 7.0
MotionEnum	2.3.5.5	Surveillance Station 7.0
ADParamSave	2.3.5.6	Surveillance Station 7.0
DIParamSave	2.3.5.7	Surveillance Station 7.0
AlarmStsPolling	2.3.5.8	Surveillance Station 7.0
TDParamSave	2.3.5.9	Surveillance Station 7.0

2.3.5.1 AudioEnum method

Enumerate audio detection parameters. e.g. keep setting, detect source, level(capability, minimum value, maximum value and current value).

Request

Parameter	Value	Description	Availability
camId	<CAMERA_ID>	The selected camera id.	4 and onward

Example:

```
http://192.168.1.1:5000/webapi/entry.cgi?
api="SYNO.SurveillanceStation.Camera.Event"&camId=280&version="1"&method="AudioEnum"
```

Response

Key	Value	Description	Availability
ADParam	<ADParam Object>	The audio detection parameters.	4 and onward

<ADParam Object> Definition:

Key	Value	Description	Availability
keep	<boolean>	Define the keep the camera original setting.	4 and onward
source	<integer>	Define the detection source. e.g. -1:disable, 0:by_camera.	4 and onward
level	<Level Object>	The level's detail informations.	4 and onward

<Level Object> Definition:

Key	Value	Description	Availability
cap	<boolean>	Define if support the level detection argument.	4 and onward
minValue	<integer>	Define the minimum value of level.	4 and onward
maxValue	<integer>	Define the maximun value of level.	4 and onward
value	<integer>	Define the current value of level.	4 and onward

Example:

```
{
   "ADParam": {
      "source": 0,
      "level": {
         "cap": true,
         "maxValue": 100,
         "value": 50,
         "minValue": 0
      },
      "keep": true
   }
}
```

2.3.5.2 AlarmEnum method

Enumerate alarm setting list. e.g. normal and keep

Request

Parameter	Value	Description	Availability
camId	<CAMERA_ID>	The selected camera id.	4 and onward

Example:

```
http://192.168.1.1:5000/webapi/entry.cgi?
api="SYNO.SurveillanceStation.Camera.Event"&camId=280&version="1"&method="AlarmEnum"
```

Response

Key	Value	Description	Availability
DIParam	Array of <AlarmSettingList Object>	The updated alarm setting list.	4 and onward

<AlarmSettingList Object> Definition:

Key	Value	Description	Availability
keep	<boolean>	Define the keep the camera original setting.	4 and onward
idx	<integer>	The index of alarm.	4 and onward
normal	<integer>	The normal state of this alarm. e.g. 0:open_circuit, 1:ground_circuit.	4 and onward

Example:

```
{
   "DIParam": [
      {
         "normal": 0,
         "idx": 0,
         "keep": true
      }
   ]
}
```

2.3.5.3 TamperingEnum method

Enumerate tampering detection parameters. e.g. keep setting, detect source, duration(capability, minimum value, maximum value and current value).

Request

Parameter	Value	Description	Availability
camId	<CAMERA_ID>	The selected camera id.	4 and onward

Example:

```
http://192.168.1.1:5000/webapi/entry.cgi?
api="SYNO.SurveillanceStation.Camera.Event"&camId=280&version="1"&method="TamperingEnum"
```

Response

Key	Value	Description	Availability
TDParam	<TDParam Object>	The tampering detection parameters.	4 and onward

<TDParam Object> Definition:

Key	Value	Description	Availability
keep	<boolean>	Define the keep the camera original setting.	4 and onward
source	<integer>	Define the detection source. e.g. -1:disable, 0:by_camera.	4 and onward
duration	<Duration Object>	The duration's detail informations.	4 and onward

<Duration Object> Definition:

Key	Value	Description	Availability
cap	<boolean>	Define if support the duration detection argument.	4 and onward
minValue	<integer>	Define the minimum value of duration.	4 and onward
maxValue	<integer>	Define the maximun value of duration.	4 and onward
value	<integer>	Define the current value of duration.	4 and onward

Example:

```
{
   "TDParam": {
      "duration": {
         "cap": true,
         "maxValue": 100,
         "value": 50,
         "minValue": 0
      },
      "source": 0,
      "keep": true
   }
}
```

2.3.5.4 MDParamSave method

Save motion detection parameters. e.g. Sensitivity, Threshold, objectSize and percentage.

Request

Parameter	Value	Description	Availability
camId	<CAMERA_ID>	The selected camera id.	4 and onward
source	<integer>	*Optional.* Define the detection source. e.g. -1:disable, 0:by_camera and 1:by_surveillance.	4 and onward
mode	<integer>	*Optional.* Define the keep thie camera original setting. e.g. 0:keep camera setting and 1:not keep camera setting.	4 and onward
sensitivity	<integer>	*Optional.* Define the sensitivity number.	4 and onward
threshold	<integer>	*Optional.* Define the threshold number.	4 and onward
objectSize	<integer>	*Optional.* Define the object size you want to detect.	4 and onward
percentage	<integer>	*Optional.* Define the percentage number.	4 and onward

Example:

```
http://192.168.1.1:5000/webapi/entry.cgi?
objectSize=50&source=0&camId=16&version="1"&api="SYNO.SurveillanceStation.Camera.Event"&threshol
d=20&sensitivity=90&percentage=50&method="MDParamSave"&mode=1
```

Response

Key	Value	Description	Availability
camId	<CAMERA_ID>	The selected camera id.	4 and onward

Example:

```
{
   "data" : {
      "camId" : 16
   },
   "httpd_restart" : false,
   "success" : true
}
```

2.3.5.5 MotionEnum method

Enumerate motion detection parameters. e.g. keep setting, detect source, sensitivity, threshold, objectSize and percentage.

Request

Parameter	Value	Description	Availability
camId	<CAMERA_ID>	The selected camera id.	4 and onward

Example:

```
http://192.168.1.1:5000/webapi/entry.cgi?
api="SYNO.SurveillanceStation.Camera.Event"&camId=280&version="1"&method="MotionEnum"
```

Response

Key	Value	Description	Availability
MDParam	<MDParam Object>	The motion detection parameters.	4 and onward

<MDParam Object> Definition:

Key	Value	Description	Availability
keep	<boolean>	Define the keep the camera original setting.	4 and onward
source	<integer>	Define the detection source. e.g. -1:disable, 0:by_camera, 1:by_surveillance.	4 and onward
sensitivity	<Sensitivity Object>	The sensitivity's detail informations.	4 and onward
threshold	<Threshold Object>	The threshold's detail informations.	4 and onward
objectSize	<ObjectSize Object>	The objectSize's detail informations.	4 and onward
percentage	<Percentage Object>	The percentage's detail informations.	4 and onward

<Threshold Object> Definition:

Key	Value	Description	Availability
camCap	<boolean>	Define if camera support the threshold detection argument.	4 and onward
ssCap	<boolean>	Define if surveillance station support the threshold detection argument.	4 and onward
minValue	<integer>	Define the minimum value of threshold.	4 and onward

maxValue	<integer>	Define the maximun value of threshold.	4 and onward
value	<integer>	Define the current value of threshold.	4 and onward

<ObjectSize Object> Definition:

Key	Value	Description	Availability
camCap	<boolean>	Define if camera support the objectSize detection argument.	4 and onward
ssCap	<boolean>	Define if surveillance station support the objectSize detection argument.	4 and onward
minValue	<integer>	Define the minimum value of objectSize.	4 and onward
maxValue	<integer>	Define the maximun value of objectSize.	4 and onward
value	<integer>	Define the current value of objectSize.	4 and onward

<Percentage Object> Definition:

Key	Value	Description	Availability
camCap	<boolean>	Define if camera support the percentage detection argument.	4 and onward
ssCap	<boolean>	Define if surveillance station support the percentage detection argument.	4 and onward
minValue	<integer>	Define the minimum value of percentage.	4 and onward
maxValue	<integer>	Define the maximun value of percentage.	4 and onward
value	<integer>	Define the current value of percentage.	4 and onward

Example:


```
{
   "MDParam": {
      "objectSize": {
         "camCap": true,
         "minValue": 0,
         "maxValue": 100,
         "value": 50,
         "ssCap": false
      },
      "sensitivity": {
         "camCap": true,
         "minValue": 0,
         "maxValue": 100,
         "value": 50,
         "ssCap": true
      },
      "keep": true,
      "source": 0,
      "threshold": {
         "camCap": false,
         "minValue": 0,
         "maxValue": 100,
         "value": 50,
```



```
            "ssCap": true
        },
        "percentage": {
            "camCap": true,
            "minValue": 0,
            "maxValue": 100,
            "value": 50,
            "ssCap": false
        }
    }
}
```


2.3.5.6 ADParamSave method

Save motion detection parameters. e.g. Sensitivity, Threshold, objectSize and percentage.

Request

Parameter	Value	Description	Availability
camId	<CAMERA_ID>	The selected camera id.	4 and onward
source	<integer>	*Optional.* Define the detection source. e.g. -1:disable, 0:by_camera and 1:by_surveillance.	4 and onward
keep	<boolean>	*Optional.* Define the keep thie camera original setting.	4 and onward
level	<integer>	*Optional.* Define the level number.	4 and onward

Example:

```
http://192.168.1.1:5000/webapi/entry.cgi?
camId=280&version="1"&level=90&keep=true&source=0&api="SYNO.SurveillanceStation.Camera.Event"&
method="ADParamSave"
```

Response

Key	Value	Description	Availability
camId	<CAMERA_ID>	The selected camera id.	4 and onward

Example:


```
{
    "camId": 280
}
```


2.3.5.7 DIParamSave method

Save digital input parameters. e.g. normal

Request

Parameter	Value	Description	Availability
camId	<CAMERA_ID>	The selected camera id.	4 and onward
idx	<integer>	Define digital input index.	4 and onward
keep	<boolean>	*Optional.* Define the keep thie camera original setting.	4 and onward
normal	<integer>	*Optional.* Define the normal status. e.g. 0:open_circuit, 1:ground_circuit	4 and onward

Example:

```
http://192.168.1.1:5000/webapi/entry.cgi?camId=280&version="1"&idx=0&normal=0&keep=true&api="SYNO.SurveillanceStation.Camera.Event"&method="DIParamSave"
```

Response

Key	Value	Description	Availability
camId	<CAMERA_ID>	The selected camera id.	4 and onward

Example:

```
{
   "camId": 280
}
```

2.3.5.8 AlarmStsPolling method

Enumerate alarm trigger state list.

Request

Parameter	Value	Description	Availability
camId	<CAMERA_ID>	The selected camera id.	4 and onward
timeOut	<integer>	*Optional.* Define the maximum waiting time for polling alarm trigger status if no changed.	4 and onward
list	Array of <AlarmStateList>	*Optional.* Define the keep thie camera original setting.	4 and onward

< AlarmStateList Object> Definition:

Key	Value	Description	Availability
idx	<integer>	The index of alarm.	4 and onward
trigger	<integer>	The trigger state of this alarm. e.g. 0:untrigger, 1:triggered.	4 and onward

Example:

```
http://192.168.1.1:5000/webapi/entry.cgi?camId=280&version="1"&list=[{"trigger": 0, "idx":
0}]&api="SYNO.SurveillanceStation.Camera.Event"&timeOut=5000&method="AlarmStsPolling"
```

Response

Key	Value	Description	Availability
list	Array of <AlarmStateList>	The updated alarm state list.	4 and onward

Example:

```
{
   "list": [
      {
         "trigger": 0,
         "idx": 0
      }
   ]
}
```

2.3.5.9 TDParamSave method

Save tampering detection parameters. e.g. Duration

Request

Parameter	Value	Description	Availability
camId	<CAMERA_ID>	The selected camera id.	4 and onward
source	<integer>	*Optional.* Define the detection source. e.g. -1:disable, 0:by_camera.	4 and onward
keep	<boolean>	*Optional.* Define the keep thie camera original setting.	4 and onward
duration	<integer>	*Optional.* Define the duration number.	4 and onward

Example:

```
http://192.168.1.1:5000/webapi/entry.cgi?
camId=280&api="SYNO.SurveillanceStation.Camera.Event"&keep=true&source=0&version="1"&duration=
90&method="TDParamSave"
```

Response

Key	Value	Description	Availability
camId	<CAMERA_ID>	The selected camera id.	4 and onward

Example:

```
{
```



```
    "camId": 280
}
```

2.3.5.10 API Error Code

Code	Description
400	Execution failed.
401	Parameter invalid.
402	Camera disabled.
407	CMS closed.

2.3.6 SYNO.SurveillanceStation.Camera.Group

This API provides operations for camera groups

API Name	Version	Availability
SYNO.SurveillanceStation.Camera.Group	1	Surveillance Station 7.0

Method Name	Section	Availability
Enum	2.3.6.1	4 and onward
Save	2.3.6.2	4 and onward
Delete	2.3.6.3	4 and onward

2.3.6.1 Enum method

Enumerate group information. e.g. Group list and camera list in the group.

Request

Parameter	Value	Description	Availability
privCamType	<integer>	The privilege type in enumeration groups.	4 and onward

Example:

```
http://192.168.1.1:5000/webapi/entry.cgi?
api="SYNO.SurveillanceStation.Camera.Group"&privCamType=1&version="1"&method="Enum"
```

Response

Key	Value	Description	Availability
allCamGrpInfo	Array of <allCamGrpInfo Object>	The list of all groups.	4 and onward
data	Array of <data Object>	The group list in the seleted privilege and the camera list in this group.	4 and onward

<allCamGrpInfo Object> definition:

Key	Value	Description	Availability
dsId	<integer>	The DS ID of the group.	4 and onward
id	<integer>	The group ID	4 and onward
name	<string>	The name of the group.	4 and onward
uniqueId	<string>	True unique ID of the group.	4 and onward

<data Object> definition:

Key	Value	Description	Availability
CamList	Array of <CamList Object>	The camera list of the group.	4 and onward
dsId	<integer>	The DS ID of the group.	4 and onward

id	<integer>	The group ID	4 and onward
name	<string>	The name of the group.	4 and onward
desc	<string>	The description of the group.	4 and onward
uniqueId	<string>	True unique ID of the group.	4 and onward

<CamList Object> definition:

Key	Value	Description	Availability
dsId	<integer>	The DS ID of the camera.	4 and onward
id	<integer>	The camera ID	4 and onward
name	<string>	The name of the camera.	4 and onward
camIdOnRecServer	<integer>	True camera ID on the recording server.	4 and onward
dsName	<string>	The DS name of the camera.	4 and onward
dsStatus	<integer>	The DS status of the camera.	4 and onward
ip	<string>	The IP address of the camera.	4 and onward
preview	<string>	The webAPI preview path of the camera.	4 and onward
Resolution	<string>	The resolution of the camera.	4 and onward

Example:


```
{
"data": {
   "allCamGrpInfo": [
      {
         "dsId": 0,
         "id": 1,
         "uniqueId": "0 1",
         "name": "GrpName"
      }
   ],
   "data": [
      {
         "name": "GrpName",
         "uniqueId": "0 1",
         "camList": [
            {
               "status": 1,
               "dsStatus": 0,
               "ip": "192.168.0.1",
               "camIdOnRecServer": 0,
               "dsName": "Local",
               "resolution": "640x480",
               "preview":
"/webapi/_____entry.cgi?
api=SYNO.SurveillanceStation.Camera&method=GetSnapshot",
               "dsId": 0,
               "id": 9,
               "name": "CameraName"
            }
         ],
         "dsId": 0,
```



```
        "id": 1,
        "desc": "GrpDesc"
      }
   ]
}
```

2.3.6.2 Save method

Save the specific groups.

Request

Parameter	Value	Description	Availability
groupList	Array of <groupList Object>	The Saved group list.	4 and onward

<allCamGrpInfo Object> definition:

Key	Value	Description	Availability
camList	Array of <CamList Object>	The camera list of the group.	4 and onward
id	<integer>	The group ID	4 and onward
name	<string>	The name of the group.	4 and onward
desc	<string>	The description of the group.	4 and onward

Example:

```
http://192.168.1.1:5000/webapi/entry.cgi?groupList=[{"camList": [{"camIdOnRecServer": 0, "dsName":
"DS_Name", "dsId": 4, "id": 10, "name": "CameraName"}], "desc": "GrpDesc", "id": 9, "name":
"GrpName"}]&api="SYNO.SurveillanceStation.Camera.Group"&version="1"&method="Save"
```

Response

Key	Value	Description	Availability
groupList	Array of <groupList Object>	The Saved group list.	4 and onward

Example:

```
{
   "groupList": [
      {
         "camList": [
            {
               "camIdOnRecServer": 0,
               "dsName": "DS_Name",
               "dsId": 4,
               "id": 10,
               "name": "CameraName"
```



```
            }
         ],
         "desc": "GrpDesc",
         "id": 9,
         "name": "GrpName"
      }
   ]
}
```


2.3.6.3 Delete method

Delete the specific groups.

Request

Parameter	Value	Description	Availability
Id	<string>	The deleted group ID list in a string format. ex: "1,3,9"	4 and onward

Example:

```
http://192.168.1.1:5000/webapi/entry.cgi?
api="SYNO.SurveillanceStation.Camera.Group"&id="1"&version="1"&method="Delete"
```

Response

This method has no specific response data. It returns an empty success response if it completes without error.

2.3.6.4 API Error Code

Code	Description
400	Execution failed.
401	Parameter invalid.
402	Camera disabled.
407	CMS closed.

2.3.7 SYNO.SurveillanceStation.Camera.Import

This API provides operations for importing camera

API Name	Version	Availability
SYNO.SurveillanceStation.Camera.Import	1	Surveillance Station 7.0

Method Name	Section	Availability
Save	2.3.7.1	4 and onward
ArchiveCamEnum	2.3.7.2	4 and onward
ArchiveEnum	2.3.7.3	4 and onward

2.3.7.1 Save method

Enumerate group information. e.g. Group list and camera list in the group.

Request

Parameter	Value	Description	Availability
camServerId	<integer>	The privilege type in enumeration groups.	4 and onward
shareName	<string>	The share folder which contains the archive	4 and onward
archiveName	<string>	The name of the archive	4 and onward
camlist	Array of <CamImportList Object>	The detail object of the import	4 and onward
actFromHost	<boolean>	Is the method called by CMS host	4 and onward

<CamImportList Object> definition:

Key	Value	Description	Availability
channel	<string>	Channel of the camera	4 and onward
checked	<boolean>	Indicating if the camera is chosen	4 and onward
enable_quota	<boolean>	Indicating if the replacing strategy "rotation_by_space" is enabled	4 and onward
folder	<string>	Path to the recorded video	4 and onward
id	<integer>	Camera id	4 and onward
idx	<integer>	The index in the archive	4 and onward
ipaddr	<string>	ip address of the camera	4 and onward
model	<string>	The camera model	4 and onward
name	<string>	The name of the camera	4 and onward
port	<integer>	Port of the Camera	4 and onward
rotatequota	<integer>	Parameter of the replacing strategy if enable_quota is true	4 and onward
vendor	<string>	Vendor of the camera	4 and onward

Example:


```
http://192.168.1.1:5000/webapi/entry.cgi?
archiveName="SSCamExport_XD"&version="1"&camServerId=0&shareName="kuoDownload"&api="SYNO.
SurveillanceStation.Camera.Import"&actFromHost=false&camlist=[{"model": "ICS8220", "vendor": "iPUX",
"enable_quota": true, "rotatequota": 10, "id": 5, "checked": true, "name": "rbxTesting-001", "idx": 0,
"ipaddr": "10.13.11.189", "port": 80, "folder": "rbxTesting-001", "channel": "1"}]&method="Save"
```

Response

Key	Value	Description	Availability
camera	Array of <Camera Information Object>	The detail object of camera information	4 and onward
keyUsedCnt	<integer>	The total key used in the CMS system	4 and onward

Example:


```
{
      "camera": [
        {
           "audioOut": true,
           "mute": false,
           "recStatus": 0,
           "analyticsType": 0,
           "ptzCap": 111,
           "audioType": 4,
           "ptzContinuous": 39,
           "is_rotated_by_date": false,
           "ADCap": 5,
           "blLiveviewPriv": true,
           "videoCapList": [
              {
                 "stList": [
                    "RTSP"
                 ],
                 "vt": "H.264"
              },
              {
                 "stList": [
                    "HTTP"
                 ],
                 "vt": "MJPEG"
              }
           ],
           "isStatusUnrecognized": false,
           "is_rotated_by_space": true,
           "osd_position": 6,
           "fisheyeType": 0,
           "recBitrateCtrl": 1,
           "video_mirror": true,
           "vendor": "AXIS",
           "video_rotation": 0,
           "stmFisheyeType": 0,
```



```
            "dsPort": 5000,
            "TDCap": 0,
            "camMountType": 0,
            "exposure_control": 6,
            "name": "P5415-E-0011",
            "ownerDsId": 0,
            "osd_status": true,
            "fisheyeDispMode": "",
            "channel_id": "1",
            "setDICap": false,
            "param_chklist": 0,
            "analyticsBeep": false,
            "status_flags": 32,
            "feRegionList": [],
            "objTrack": false,
            "port": 80,
            "video_flip": true,
            "osd_format": 0,
            "autoPan": 0,
            "deleted": false,
            "deviceType": 4,
            "hasCamParam": true,
            "DINum": 2,
            "snapshot_path":
"/webapi/_____entry.cgi?
api=SYNO.SurveillanceStation.Camera&method=GetSnapshot&version=1&cameraId=70×tamp=142491912
9&preview=true",
            "dsIp": "",
            "host": "10.13.12.165",
            "rotation_by_date": 30,
            "autoFocus": true,
            "volume_space": "9.617",
            "analyticsHeight": 0,
            "MDCap": 5,
            "rotation_by_space": "10",
            "analyticsVirtualFence": false,
            "analyticsObjSize": 0,
            "analyticsDirection": 1,
            "analyticsRegion": "",
            "quality": "5",
            "multiDI": false,
            "type": 3,
            "stm_info": [
               {
                  "camPath":
"cnRzcDovL2FkbWluOnN5bm8xMjM0QDEwLjE3LjUyLjIwOTo1NTQvbGl2ZTEuc2Rw",
                  "fps": 15,
                  "quality": "5",
                  "resolution": "2592x1944",
                  "stmNo": 1,
                  "type": 0
```



```
                },
                {
                    "camPath":
"cnRzcDovL2FkbWluOnN5bm8xMjM0QDEwLjE3LjUyLjIwOTo1NTQvbGl2ZTEuc2Rw",
                    "fps": 15,
                    "quality": "5",
                    "resolution": "2592x1944",
                    "stmNo": 1,
                    "type": 1
                },
                {
                    "camPath":
"cnRzcDovL2FkbWluOnN5bm8xMjM0QDEwLjE3LjUyLjIwOTo1NTQvbGl2ZTEuc2Rw",
                    "fps": 15,
                    "quality": "5",
                    "resolution": "2592x1944",
                    "stmNo": 1,
                    "type": 2
                }
            ],
            "camLiveMode": 0,
            "volume": 50,
            "ptzDirection": 32,
            "dayend": 18,
            "folder": "/var/services/surveillance/P5415-E-001",
            "tvStandard": 0,
            "singleStream": false,
            "imageEnhancement": {
                "saturation": 0,
                "sharpness": 0,
                "contrast": 0,
                "brightness": 0
            },
            "audioCap": true,
            "camIdOnRecServer": 0,
            "detailInfo": {
                "camRecTime": 30,
                "edgeStgEnabled": false,
                "camIsRotByDate": false,
                "camRecStreamNo": 0,
                "camRotByDate": 30,
                "camTvStandard": 0,
                "camMountType": 0,
                "camRecCbrBitrate": 1000,
                "camIsRotBySpace": true,
                "camLiveResolution": "800x450",
                "camRecBitrateCtrl": 1,
                "camMobileStreamNo": 0,
                "camLiveQuality": "5",
                "edgeStgRecStopTime": "23:59",
                "camLiveStreamNo": 0,
```


"camResolution": "800x450",
"camMobileQuality": "5",
"camLiveMode": 0,
"camPreRecTime": 5,
"camIP": "10.13.12.165",
"camLiveBitrateCtrl": 1,
"camModel": "P5415-E",
"edgeStgRecStartTime": "00:00",
"camPostRecTime": 5,
"camLiveCbrBitrate": 1000,
"camMobileResolution": "800x450",
"camUserName": "root",
"camFps": 10,
"camVendor": "AXIS",
"camMobileFps": 10,
"camFov": "",
"camMobileCbrBitrate": 1000,
"camRotBySpace": 10,
"edgeStgDownloadSch":
[0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,
0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0
,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,
0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0
,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,
0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0],
"customAlarmDetect": 3,
"camLiveFps": 10,
"camChannel": "1",
"camRotOption": 0,
"camQuality": "5",
"camPrefix": "P5415-E-001",
"edgeStgRetrieveAction": 2,
"camSchedule":
[1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,
1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1
,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,
1,1,1,1],
"edgeStgRecMode": 2,
"customDetect": 5,
"camPassWord": "%EF%BC%83%EF%BC%83%EF%BC%83%EF%BC%83%EF%BC%83%EF%BC
%83%EF%BC%83%EF%BC%83",
"camVideoType": "H.264",
"camMobileBitrateCtrl": 1,
"MdDetSrc": 0,
"camServer": 0,
"camFolder": "P5415-E-001",
"edgeStgRecDays": 127,
"camPort": 80,
"camRtspProtocol": 4,
"camName": "P5415-E-0011",
"camAudioType": 4


```
            },
            "enabled": true,
            "analyticsSens": 1,
            "analyticsWidth": 0,
            "recCbrBitrate": 1000,
            "blPresetSpeed": false,
            "DONum": 0,
            "id": 70,
            "setDOCap": false,
            "analyticsFrame": true,
            "analyticsLine": false,
            "daybegin": 8,
            "fps": 10,
            "status": 1,
            "update_time": 1424919129,
            "exposure_mode": 4,
            "time_server": "",
            "rotation_option": 0,
            "presetNum": 32,
            "camStatus": 9,
            "analyticsDwellTime": 5,
            "camPath":
"cnRzcDovL3Jvb3Q6bmF0bWFzdGVyQDEwLjEzLjEyLjE2NTo1NTQvYXhpcy1tZWRpYS9tZWRpYS5hbXA/Y2FtZXJhPTEmdmlkZW9jb2RlYz1oMjY0JnJlc29sdXRpb249ODAweDQ1MCZmcHM9MTAmdmlkZW9rZXlmcmFtZWludGVydmFsPTEwJmNvbXByZXNzaW9uPTIw",
            "model": "P5415-E",
            "resolution": "800x450"
         }
      ],
      "keyUsedCnt": 8
   }
```


2.3.7.2 ArchiveCamEnum method

Enumerating cameras in the selected archive

Request

Parameter	Value	Description	Availability
shareName	<string>	The share folder which stores archives	4 and onward
archiveName	<string>	The target archive	4 and onward
serverId	<integer>	The destination DS which camera imports to	4 and onward

Example:

```
http://192.168.1.1:5000/webapi/entry.cgi?
archiveName="SSCamExport_XD"&version="1"&shareName="kuoDownload"&api="SYNO.SurveillanceStation.Camera.Import"&serverId=1&method="ArchiveCamEnum"
```


Response

Key	Value	Description	Availability
camlist	Array of <CamImportList Object>	The imported cameras	4 and onward

Example:

```
{
   "camlist": [
      {
         "vendor": "iPUX",
         "enable_quota": true,
         "rotatequota": 10,
         "folder": "rbxTesting-001",
         "checked": false,
         "name": "rbxTesting-001",
         "idx": 0,
         "ipaddr": "10.13.11.189",
         "id": 5,
         "port": 80,
         "model": "ICS8220",
         "channel": "1"
      }
   ]
}
```

2.3.7.3 ArchiveEnum method

Enumerate archives in the selected folder

Request

Parameter	Value	Description	Availability
shareName	<string>	Folder selected to enumerate the archives	4 and onward

Example:

```
http://192.168.1.1:5000/webapi/entry.cgi?
shareName="testingFolder"&api="SYNO.SurveillanceStation.Camera.Import"&version="1"&method="Archi
veEnum"
```

Response

Key	Value	Description	Availability
archivelist	Array of <Archive Object>	The archives inside the folder	4 and onward

<CamImportList Object> definition:

Key	Value	Description	Availability
display	<string>	The display name of the archive	4 and onward
value	<string>	The folder name of the archive	4 and onward

2.3.7.4 API Error Code

Code	Description
400	Execution failed.
401	Parameter invalid.
402	Camera disabled.
407	CMS closed.

2.3.8 SYNO.SurveillanceStation.Camera.Wizard

This API provides Saving/Editing operations for camera

API Name	Version	Availability
SYNO.SurveillanceStation.Camera.Wizard	1	Surveillance Station 7.0

Method Name	Section	Availability
CheckSDCardSize	2.3.8.1	4 and onward
CheckQuota	2.3.8.2	4 and onward
CamBatAddSaveAll	2.3.8.3	4 and onward
FormatSDCard	2.3.8.4	4 and onward
QuickCreate	2.3.8.5	4 and onward

2.3.8.1 CheckSDCardSize method

Check the available size in SD card

Request

Parameter	Value	Description	Availability
camId	<CAMERA_ID>	Specified camera ID	4 and onward
host	<string>	Address of the camera	4 and onward
port	<string>	Port of the camera	4 and onward
user	<string>	The user who tries to log in	4 and onward
pass	<string>	The Correlated password	4 and onward
vendor	<string>	Vendor of the camera	4 and onward
model	<string>	Model of the camera	4 and onward
ch	<string>	*Optional*. parameter for decoding real password	4 and onward

Example:

```
http://192.168.1.1:5000/webapi/entry.cgi?
camId=62&vendor="AXIS"&version="1"&api="SYNO.SurveillanceStation.Camera.Wizard"&method="Check
SDCardSize"&host="10.13.12.165"&ch="1"&user="root"&pass="%EF%BC%83%EF%BC%83%EF%BC%83%EF
%BC%83%EF%BC%83%EF%BC%83%EF%BC%83%EF%BC%83"&model="P5415-E"&port="80"
```

Response

Key	Value	Description	Availability
size	<integer>	The remaining size of the SD card in KB	4 and onward
status	<integer>	The status of the camera	4 and onward

Example:

```
{
   "status": 0,
   "size": 29022484
}
```

2.3.8.2 CheckQuota method

This method enables users to check the usage of the licence

Request

This method specifies no parameter for request.

Example:

```
http://192.168.1.1:5000/webapi/entry.cgi?
api="SYNO.SurveillanceStation.Camera.Wizard"&version="1"&method="CheckQuota"
```

Response

Key	Value	Description	Availability
iKeyTotal	<integer>	Total amount of licence in the CMS system	4 and onward
iKeyUsed	<integer>	Used amount of licence in the CMS system	4 and onward
localCamNum	<integer>	Used amount of licence in the local DS	4 and onward
localMaxCamNum	<integer>	The maximal number of camera that can be mount at current platform	4 and onward

Example:

```
{
   "localMaxCamNum": 10,
   "iKeyUsed": 2,
   "iKeyTotal": 12,
   "localCamNum": 0
}
```

2.3.8.3 CamBarAddSaveAll method

This API saves the configuration from batch add

Request

Parameter	Value	Description	Availability
camServerId	<integer>	The DS id on which cameras mounted	4 and onward
data	<CamBatAdd Object>	The data of To-Be-Added cameras	4 and onward

<CamBatAdd Object> definition:

Key	Value	Description	Availability
camList	Array of <CamCreate Object>	The list of To-Be-Added cameras	4 and onward
tvStandard	<string>	Standard of the input video	4 and onward
camMountType	<string>	How camera is mounted • 0: CEILING • 1: WALL • 2: FLOOR	4 and onward
camChannel	<string>	Channel of the output video	4 and onward
name	<string>	The type of the creation	4 and onward

<CamCreate Object> definition:

Key	Value	Description	Availability
vendor	<string>	Vendor of the camera	4 and onward
model	<string>	Model of the camera	4 and onward
ip	<string>	IP address of the camera	4 and onward
port	<integer>	port of the camera	4 and onward
username	<string>	The user trying to access the camera	4 and onward
password	<string>	Password of the user	4 and onward
name	<string>	The name of the camera stored in the database	4 and onward

Example:

http://192.168.1.1:5000/webapi/entry.cgi?
camId=62&vendor="AXIS"&version="1"&api="SYNO.SurveillanceStation.Camera.Wizard"&method="Check
SDCardSize"&host="10.13.12.165"&ch="1"&user="root"&pass="%EF%BC%83%EF%BC%83%EF%BC%83%EF
%BC%83%EF%BC%83%EF%BC%83%EF%BC%83%EF%BC%83"&model="P5415-
E"&port="80"http://192.168.1.1:5000/webapi/entry.cgi?
camServerId=0&api="SYNO.SurveillanceStation.Camera.Wizard"&data={"camChannel": "", "camList":
[{"username": "admin", "vendor": "ABUS", "name": "TVIP20000-001", "ip": "10.13.12.200", "model":
"TVIP20000", "password": "synoss", "port": 80}, {"username": "root", "vendor": "AXIS", "name": "P5415-E-
001", "ip": "10.13.12.165", "model": "P5415-E", "password": "natmaster", "port": 80}, {"username":
"admin", "vendor": "iPUX", "name": "ICS8220-001", "ip": "10.13.11.195", "model": "ICS8220", "password":
"admin", "port": 80}], "camMountType": "", "mode": "quick", "tvStandard":


```
""}&version="1"&method="CamBatAddSaveAll"
```

Response

Key	Value	Description	Availability
pid	<integer>	The process id for other API to trace the creation process	4 and onward

Example:

```
{
   "pid": 3585
}
```

2.3.8.4 FormatSDCard method

Format the SD card in the specified camera which offers edge storage service

Request

Parameter	Value	Description	Availability
camId	<CAMERA_ID>	Specified camera ID	4 and onward
host	<string>	Address of the camera	4 and onward
port	<string>	Port of the camera	4 and onward
user	<string>	The user who tries to log in	4 and onward
pass	<string>	The Correlated password	4 and onward
vendor	<string>	Vendor of the camera	4 and onward
model	<string>	Model of the camera	4 and onward
ch	<string>	*Optional*. parameter for decoding real password	4 and onward
timeout	integer	Setting the expired time in seconds	4 and onward

Example:

```
http://192.168.1.1:5000/webapi/entry.cgi?
camId=62&vendor="AXIS"&version="1"&api="SYNO.SurveillanceStation.Camera.Wizard"&method="Forma
tSDCard"&host="10.13.12.165"&ch="1"&user="root"&timeout=300&pass="%EF%BC%83%EF%BC%83%EF
%BC%83%EF%BC%83%EF%BC%83%EF%BC%83%EF%BC%83%EF%BC%83"&model="P5415-E"&port="80"
```

Response

Key	Value	Description	Availability
result	<integer>	The occupied space in the SD card	4 and onward

Example:


```
{
   "result": 0
}
```

2.3.8.5 QuickCreate method

This API provides the capability of quick-creating single camera

Request

Parameter	Value	Description	Availability
camServerId	<integer>	The DS id on which this camera mounted	4 and onward
actFromHost	<boolean>	Indicating if the api is called from CMS host	4 and onward
camStreamingType	<string>	The streaming protocol of the camera	4 and onward
camName	<string>	User-defined name of the camera	4 and onward
camIP	<string>	IP address of the camera	4 and onward
camPort	<string>	Port of the camera	4 and onward
camVendor	<string>	Vendor of the camera	4 and onward
camModel	<string>	Model name of the camera	4 and onward
camMountType	<string>	How camera is mounted, for example, on the wall, ceiling	4 and onward
camChannel	<string>	Channel number of the camera	4 and onward
camVideoType	<string>	Video type of the camera	4 and onward
camAudioType	<string>	Indicating audio type • 0: UNKNOWN • 1: PCM • 2: G711 • 3: G726 • 4: AAC • 5: AMR	4 and onward
camSourcePath	<string>	Path of recorded videos	4 and onward
camUserName	<string>	The input camera user	4 and onward
camPassWord	<string>	The input camera password	4 and onward

Example:

```
http://192.168.1.1:5000/webapi/entry.cgi?
camUserName="admin"&api="SYNO.SurveillanceStation.Camera.Wizard"&camServerId=0&camPassWord=
"%EF%BC%83%EF%BC%83%EF%BC%83%EF%BC%83%EF%BC%83%EF%BC%83%EF%BC%83%EF%BC
%83"&camVideoType="H.264"&version="1"&camVendor="iPUX"&camPort="80"&camChannel="1"&meth
od="QuickCreate"&camName="xx"&camModel="ICS8220"&camIP="10.13.11.195"&actFromHost=false&ca
mStreamingType="RTSP"&camMountType="0"&camAudioType="2"&camSourcePath="%E4%BD%BF
%E7%94%A8%E9%A0%90%E8%A8%AD%E5%BD%B1%E5%83%8F%E8%B7%AF%E5%BE%91%"
```

Response

Key	Value	Description	Availability
camId	<CAMERA_ID>	The remaining size of the SD card in KB	4 and onward
Camera	Array of <Camera Information Object>	The added camera object	4 and onward
keyUsedCnt	<integer>	The status of the camera	4 and onward

Example:


```
{
    "camId": 80,
    "camera": [
      {
        "audioOut": true,
        "mute": false,
        "recStatus": 0,
        "analyticsType": 0,
        "ptzCap": 111,
        "audioType": 4,
        "ptzContinuous": 39,
        "is_rotated_by_date": false,
        "ADCap": 5,
        "blLiveviewPriv": true,
        "videoCapList": [
          {
            "stList": [
              "RTSP"
            ],
            "vt": "H.264"
          },
          {
            "stList": [
              "HTTP"
            ],
            "vt": "MJPEG"
          }
        ],
        "isStatusUnrecognized": false,
        "is_rotated_by_space": true,
        "osd_position": 6,
        "fisheyeType": 0,
        "recBitrateCtrl": 1,
        "video_mirror": true,
        "vendor": "AXIS",
        "video_rotation": 0,
        "stmFisheyeType": 0,
        "dsPort": 5000,
        "TDCap": 0,
        "camMountType": 0,
        "exposure_control": 6,
        "name": "P5415-E-0011",
```



```
            "ownerDsId": 0,
            "osd_status": true,
            "fisheyeDispMode": "",
            "channel_id": "1",
            "setDICap": false,
            "param_chklist": 0,
            "analyticsBeep": false,
            "status_flags": 32,
            "feRegionList": [],
            "objTrack": false,
            "port": 80,
            "video_flip": true,
            "osd_format": 0,
            "autoPan": 0,
            "deleted": false,
            "deviceType": 4,
            "hasCamParam": true,
            "DINum": 2,
            "snapshot_path":
"/webapi/_____________________________________________________entry.cgi?
api=SYNO.SurveillanceStation.Camera&method=GetSnapshot&version=1&cameraId=70×tamp=142491912
9&preview=true",
            "dsIp": "",
            "host": "10.13.12.165",
            "rotation_by_date": 30,
            "autoFocus": true,
            "volume_space": "9.617",
            "analyticsHeight": 0,
            "MDCap": 5,
            "rotation_by_space": "10",
            "analyticsVirtualFence": false,
            "analyticsObjSize": 0,
            "analyticsDirection": 1,
            "analyticsRegion": "",
            "quality": "5",
            "multiDI": false,
            "type": 3,
            "stm_info": [
               {
                  "camPath":
"cnRzcDovL2FkbWluOnN5bm8xMjM0QDEwLjE3LjUyLjIwOTo1NTQvbGl2ZTEuc2Rw",
                  "fps": 15,
                  "quality": "5",
                  "resolution": "2592x1944",
                  "stmNo": 1,
                  "type": 0
               },
               {
                  "camPath":
"cnRzcDovL2FkbWluOnN5bm8xMjM0QDEwLjE3LjUyLjIwOTo1NTQvbGl2ZTEuc2Rw",
                  "fps": 15,
```



```
                    "quality": "5",
                    "resolution": "2592x1944",
                    "stmNo": 1,
                    "type": 1
                },
                {
                    "camPath":
"cnRzcDovL2FkbWluOnN5bm8xMjM0QDEwLjE3LjUyLjIwOTo1NTQvbGl2ZTEuc2Rw",
                    "fps": 15,
                    "quality": "5",
                    "resolution": "2592x1944",
                    "stmNo": 1,
                    "type": 2
                }
            ],
            "camLiveMode": 0,
            "volume": 50,
            "ptzDirection": 32,
            "dayend": 18,
            "folder": "/var/services/surveillance/P5415-E-001",
            "tvStandard": 0,
            "singleStream": false,
            "imageEnhancement": {
                "saturation": 0,
                "sharpness": 0,
                "contrast": 0,
                "brightness": 0
            },
            "audioCap": true,
            "camIdOnRecServer": 0,
            "detailInfo": {
                "camRecTime": 30,
                "edgeStgEnabled": false,
                "camIsRotByDate": false,
                "camRecStreamNo": 0,
                "camRotByDate": 30,
                "camTvStandard": 0,
                "camMountType": 0,
                "camRecCbrBitrate": 1000,
                "camIsRotBySpace": true,
                "camLiveResolution": "800x450",
                "camRecBitrateCtrl": 1,
                "camMobileStreamNo": 0,
                "camLiveQuality": "5",
                "edgeStgRecStopTime": "23:59",
                "camLiveStreamNo": 0,
                "camResolution": "800x450",
                "camMobileQuality": "5",
                "camLiveMode": 0,
                "camPreRecTime": 5,
                "camIP": "10.13.12.165",
```



```
            "camLiveBitrateCtrl": 1,
            "camModel": "P5415-E",
            "edgeStgRecStartTime": "00:00",
            "camPostRecTime": 5,
            "camLiveCbrBitrate": 1000,
            "camMobileResolution": "800x450",
            "camUserName": "root",
            "camFps": 10,
            "camVendor": "AXIS",
            "camMobileFps": 10,
            "camFov": "",
            "camMobileCbrBitrate": 1000,
            "camRotBySpace": 10,
            "edgeStgDownloadSch":
[0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,
0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0
,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,
0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0
,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,
0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0],
            "customAlarmDetect": 3,
            "camLiveFps": 10,
            "camChannel": "1",
            "camRotOption": 0,
            "camQuality": "5",
            "camPrefix": "P5415-E-001",
            "edgeStgRetrieveAction": 2,
            "camSchedule":
[1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,
1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1
,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,
1,1,1,1],
            "edgeStgRecMode": 2,
            "customDetect": 5,
            "camPassWord": "%EF%BC%83%EF%BC%83%EF%BC%83%EF%BC%83%EF%BC%83%EF%BC
%83%EF%BC%83%EF%BC%83",
            "camVideoType": "H.264",
            "camMobileBitrateCtrl": 1,
            "MdDetSrc": 0,
            "camServer": 0,
            "camFolder": "P5415-E-001",
            "edgeStgRecDays": 127,
            "camPort": 80,
            "camRtspProtocol": 4,
            "camName": "P5415-E-0011",
            "camAudioType": 4
        },
        "enabled": true,
        "analyticsSens": 1,
        "analyticsWidth": 0,
        "recCbrBitrate": 1000,
```



```
            "blPresetSpeed": false,
            "DONum": 0,
            "id": 70,
            "setDOCap": false,
            "analyticsFrame": true,
            "analyticsLine": false,
            "daybegin": 8,
            "fps": 10,
            "status": 1,
            "update_time": 1424919129,
            "exposure_mode": 4,
            "time_server": "",
            "rotation_option": 0,
            "presetNum": 32,
            "camStatus": 9,
            "analyticsDwellTime": 5,
            "camPath":
"cnRzcDovL3Jvb3Q6bmF0bWFzdGVyQDEwLjEzLjEyLjE2NTo1NTQvYXhpcy1tZWRpYS9tZWRpYS5hbXA/Y2FtZXJhPTEmdmlkZW9jb2RlYz1oMjY0JnJlc29sdXRpb249ODAweDQ1MCZmcHM9MTAmdmlkZW9rZXlmcmFtZWludGVydmFsPTEwJmNvbXByZXNzaW9uPTIw",
            "model": "P5415-E",
            "resolution": "800x450"
         }
      ],
      "keyUsedCnt": 8
}
```


2.3.8.6 API Error Code

Code	Description
400	Execution failed.
401	Parameter invalid.
402	Camera disabled.
407	CMS closed.

2.3.9 SYNO.SurveillanceStation.PTZ

This API provides a set of methods to execute PTZ action, and to acquire PTZ related information such as patrol list or patrol schedule of a camera.

API Name	Version	Availability
SYNO.SurveillanceStation.PTZ	1	Surveillance Station 6.0-2337
	2	Surveillance Station 6.1
	3	Surveillance Station 6.3

Method Name	Section	Availability
Move	2.3.9.1	1 and onward
Zoom	2.3.9.2	1 and onward
ListPreset	2.3.9.3	1 and onward
GoPreset	2.3.9.4	1 and onward
ListPatrol	2.3.9.5	1 and onward
RunPatrol	2.3.9.6	2 and onward
Focus	2.3.9.7	3 and onward
Iris	2.3.9.8	3 and onward
AutoFocus	2.3.9.9	3 and onward
AbsPtz	2.3.9.10	3 and onward
Home	2.3.9.11	5 and onward
AutoPan	2.3.9.12	5 and onward
ObjTracking	2.3.9.13	5 and onward

2.3.9.1 Move method

Control the PTZ camera to move its lens.

Request

Parameter	Value	Description	Availability
cameraId	<CAMERA_ID>	Unique camera ID.	1 and onward
direction	up, down, left, right, dir_n	Direction to move. • up: Move lens up. • down: Move lens down. • left: Move lens left. • right: Move lens right. • dir_n: n is in the range of [0 to ptzDirection-1]	3 and onward
speed	<integer>	*Optional*. 1 to 5 1 slowest 5 fastest	3 and onward
moveType	Start, Stop	*Optional*. Start continous move Stop continous move	3 and onward

Parameter	Description
dir_n	n is an integer. 360 degrees is divided into ptzDirection parts. 0 means direction of right, and the following numbers represent the direction in counterclockwise order. For exmaple, dir_2 is move up for ptz camera which support 8 directions.

Example: Move lens of a camera to left with lowest speed and move continously.

```
GET /webapi/entry.cgi?
api=SYNO.SurveillanceStation.PTZ&method=Move&version=1&cameraId=10&direction=left&speed=1&moveType=Start
```

Response

This method has no specific response data. It returns an empty success response if it completes without error.

2.3.9.2 Zoom method

Control the PTZ camera to zoom in or zoom out.

Request

Parameter	Value	Description	Availability
cameraId	<CAMERA_ID>	Unique camera ID.	1 and onward
control	in, out	Zoom control. in: Make camera to zoom in. out: Make camera to zoom out.	1 and onward
moveType	Start,	*Optional*.	3 and onward

	Stop	Start continous move Stop continous move	

Example: Control a camera to do zoom in.

```
GET /webapi/entry.cgi?
api=SYNO.SurveillanceStation.PTZ&method=Zoom&version=1&cameraId=10&control=in&moveType=Start
```

Response

This method has no specific response data. It returns an empty success response if it completes without error.

2.3.9.3 ListPreset method

List all presets of the PTZ camera.

Request

Parameter	Value	Description	Availability
cameraId	<CAMERA_ID>	Unique camera ID.	1 and onward
offset	<integer>	*Optional*. The offset to be shifted in the total result. If not specified, the offset will be 0.	1 and onward
limit	<integer>	*Optional*. Number of presets to be returned. If not specified, return presets to the end of preset list.	1 and onward

Example:

```
GET /webapi/entry.cgi?
api=SYNO.SurveillanceStation.PTZ&method=ListPreset&version=1&offset=10&limit=3&cameraId=10
```

Response

Key	Value	Description	Availability
total	<integer>	The number of total presets.	1 and onward
offset	<integer>	The shifted offset in the total result.	1 and onward
presets	Array of <Preset Object>	The preset list of the target camera.	1 and onward

<Preset Object> definition:

Key	Value	Description	Availability
id	<PRESET_ID>	Unique preset ID.	1 and onward
name	<string>	Preset name.	1 and onward

Example:

```
{
```



```
        “total”: 38,
        “offset”: 10,
        “presets”: [{
                        "id": 100,
                        "name": “My Preset 1”
                }, {
                        "id": 101,
                        "name": “My Preset 2”
                }, {
                        "id": 102,
                        "name": “My Preset 3”
        }]
}
```

2.3.9.4 GoPreset method

Move the camera lens to a pre-defined preset position.

Request

Parameter	Value	Description	Availability
cameraId	<CAMERA_ID>	Unique camera ID.	1 and onward
presetId	<PRESET_ID>	Unique preset ID.	1 ~ 3
position	<PRESET_POS_INDEX>	Unique preset position index.	4 and onward
speed	<PRESET_SPEED>	Go preset speed.	4 and onward
type	<PRESET_TYPE>	Preset type. 0 for normal preset, and 1 for home preset.	4 and onward
isPatrol	<boolean>	Whether the command is to trigger preset in patrol or not	4 and onward

Example 1:

```
GET /webapi/entry.cgi?
api=SYNO.SurveillanceStation.PTZ&method=GoPreset&version=1&cameraId=10&presetId=10
```

Example 2:

```
GET /webapi/entry.cgi?
cameraId=5&position=1&speed=3&type=0&isPatrol=true&api=SYNO.SurveillanceStation.PTZ&method=Go
Preset&version=4
```

Response

This method has no specific response data. It returns an empty success response if it completes without error.

2.3.9.5 ListPatrol method

Enumerate the patrol list of a PTZ camera.

Request

Parameter	Value	Description	Availability
cameraId	<CAMERA_ID>	Unique camera ID.	1 and onward
offset	<integer>	*Optional*. The offset to be shifted in the total result. If not specified, the offset will be 0.	1 and onward
limit	<integer>	*Optional*. Number of patrols to be returned. If not specified, list patrols to the end of patrol list.	1 and onward

Example:

```
GET /webapi/entry.cgi?
api=SYNO.SurveillanceStation.PTZ&method=ListPatrol&version=1&offset=10&limit=2&cameraId=10
```

Response

Key	Value	Description	Availability
total	<integer>	The number of total patrols.	1 and onward
offset	<integer>	The shifted offset in the total result.	1 and onward
patrols	Array of <Patrol Object>	The patrol list of the target camera.	1 and onward

<Patrol Object> definition:

Key	Value	Description	Availability
id	<PATROL_ID>	Unique patrol ID.	1 and onward
name	<string>	Patrol name.	1 and onward
stayTime	5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60	The stay time of one preset position (seconds).	1 and onward
sequence	Array of <PRESET_ID>	The preset execution sequence list.	1 and onward

Example:

```
{
        "total": 38,
        "offset": 10,
        “patrols”: [
                {
                        "id": 10,
                        "name": “My Patrol 1”,
                        "stayTime": 5,
                        "sequence": [100, 101, 102]
                },
                {
                        "id": 11,
                        "name": “My Patrol 2”,
                        "stayTime": 60,
                        "sequence": [103, 104]
```



```
                }
        ]
}
```

2.3.9.6 RunPatrol method

Force the camera to execute the specific patrol.

Request

Parameter	Value	Description	Availability
cameraId	<CAMERA_ID>	Unique camera ID.	2 and onward
patrolId	<PATROL_ID>	Unique patrol ID.	2 and onward

Example:

```
GET /webapi/entry.cgi?
api=SYNO.SurveillanceStation.PTZ&method=RunPatrol&version=2&cameraId=10&patrolId=11
```

Response

This method has no specific response data. It returns an empty success response if it completes without error.

2.3.9.7 Focus method

Control the camera to focus in or focus out.

Request

Parameter	Value	Description	Availability
cameraId	<CAMERA_ID>	Unique camera ID.	3 and onward
control	In, out	Focus control. in: Make camera to focus in. out: Make camera to focus out.	3 and onward
moveType	Start, Stop	*Optional*. Start continous move Stop continous move	3 and onward

Example: Control a camera to do focus out.

```
GET /webapi/entry.cgi?
api=SYNO.SurveillanceStation.PTZ&method=Focus&version=3&cameraId=10&control=out&moveType=Sta
rt
```

Response

This method has no specific response data. It returns an empty success response if it completes without error.

2.3.9.8 Iris method

Control the camera to iris in or iris out.

Request

Parameter	Value	Description	Availability
cameraId	<CAMERA_ID>	Unique camera ID.	3 and onward
control	in, out	Iris control. in: Make camera to iris in. out: Make camera to iris out.	3 and onward
moveType	Start, Stop	*Optional*. Start continous move Stop continous move	3 and onward

Example:

```
GET /webapi/entry.cgi?
api=SYNO.SurveillanceStation.PTZ&method=Iris&version=3&cameraId=10&control=in&moveType=Start
```

Response

This method has no specific response data. It returns an empty success response if it completes without error.

2.3.9.9 AutoFocus method

Let camera adjust its focus automatically.

Request

Parameter	Value	Description	Availability
cameraId	<CAMERA_ID>	Unique camera ID.	3 and onward

Example:

```
GET /webapi/entry.cgi?api=SYNO.SurveillanceStation.PTZ&method=AutoFocus&version=3&cameraId=10
```

Response

This method has no specific response data. It returns an empty success response if it completes without error.

2.3.9.10 AbsPtz method

Move the camera lens to an abosule position on screen.

Request

Parameter	Value	Description	Availability

cameraId	<CAMERA_ID>	Unique camera ID.	3 and onward
posX	<integer>	[0 to 640] Absolutely position in horizontal-axis on screen. > 320: move right < 320: move left	3 and onward
posY	<integer>	[0 to 480] Absolutely position in vertical-axis on screen. >240: move up <240: 240 move down	3 and onward

Example:

```
GET /webapi/entry.cgi?
api=SYNO.SurveillanceStation.PTZ&method=AbsPtz&version=3&cameraId=10&poxX=240&posY=400
```

Response

This method has no specific response data. It returns an empty success response if it completes without error.

2.3.9.11 Home method

Move the camera PTZ to Home position.

Request

Parameter	Value	Description	Availability
cameraId	<CAMERA_ID>	Unique camera ID.	5 and onward

Example:

```
GET /webapi/entry.cgi?api=SYNO.SurveillanceStation.PTZ&method=Home&version=5&cameraId=10
```

Response

This method has no specific response data. It returns an empty success response if it completes without error.

2.3.9.12 AutoPan method

Start or stop the camera auto pan.

Request

Parameter	Value	Description	Availability
cameraId	<CAMERA_ID>	Unique camera ID.	5 and onward
moveType	<string>	*Optional.* Start or Stop camera auto pan, default to start. "Step": Start "Stop": Stop	5 and onward

Example:

```
GET /webapi/entry.cgi?api=SYNO.SurveillanceStation.PTZ&method=AutoPan&version=5&cameraId=10
```

Response

This method has no specific response data. It returns an empty success response if it completes without error.

2.3.9.13 ObjTracking method

Start or stop the camera moving object tracking.

Request

Parameter	Value	Description	Availability
cameraId	<CAMERA_ID>	Unique camera ID.	5 and onward
moveType	<string>	*Optional.* Start or Stop object tracking, default to start. "Step": Start "Stop": Stop	5 and onward

Example:

```
GET /webapi/entry.cgi?api=SYNO.SurveillanceStation.PTZ&method=ObjTracking&version=5&cameraId=10
```

Response

This method has no specific response data. It returns an empty success response if it completes without error.

2.3.9.14 API Error Code

Code	Description
400	Execution failed.
401	Parameter invalid.
402	Camera disabled.

2.3.10 SYNO.SurveillanceStation.ExternalRecording

This API provides methods to start or stop external recording of a camera.

API Name	Version	Availability
SYNO.SurveillanceStation.ExternalRecording	1	Surveillance Station 6.0-2337
	2	Surveillance Station 6.1

Method Name	Section	Availability
Record	2.3.10.1	1 and onward

2.3.10.1 Record method

Start or stop external recording of a camera.

Request

Parameter	Value	Description	Availability
cameraId	<CAMERA_ID>	Unique camera ID.	1 and onward
action	start, stop	Start or stop external recording.	1 and onward

Example:

Start external recording of target camera.

```
GET /webapi/entry.cgi?
api=SYNO.SurveillanceStation.ExternalRecording&method=Record&version=1&cameraId=10&action=start
```

Stop external recording of target camera.

```
GET /webapi/entry.cgi?
api=SYNO.SurveillanceStation.ExternalRecording&method=Record&version=1&cameraId=10&action=stop
```

Response

Key	Value	Description	Availability
success	<boolean>	Whether starting/stopping recording is successful or not.	2 and onward

2.3.10.2 API Error Code

Code	Description
400	Execution failed.
401	Parameter invalid.
402	Camera disabled.

2.3.11 SYNO.SurveillanceStation.Recording

This API provides method to query recording information.

API Name	Version	Availability
SYNO.SurveillanceStation.Recording	1	Surveillance Station 6.0-2337
	3	Surveillance Station 6.3
	4	Surveillance Station 7.0
	6	Surveillance Station 8.0

Method Name	Section	Availability
List	2.3.11.1	6 and onward
Delete	2.3.11.2	6 and onward
DeleteFilter	2.3.11.3	3 and onward
DeleteAll	2.3.11.4	3 and onward
ApplyAdvanced	2.3.11.5	4 and onward
CountByCategory	2.3.11.6	4 and onward
Keepalive	2.3.11.7	4 and onward
Trunc	2.3.11.8	4 and onward
LoadAdvanced	2.3.11.9	4 and onward
LockFilter	2.3.11.10	4 and onward
UnLock	2.3.11.11	6 and onward
UnLockFilter	2.3.11.12	4 and onward
Lock	2.3.11.13	6 and onward
Download	2.3.11.14	6 and onward
CheckEventValid	2.3.11.15	4 and onward
Stream	2.3.11.16	6 and onward
RangeExport	2.3.11.17	6 and onward
GetRangeExportProgress	2.3.11.18	6 and onward
OnRangeExportDone	2.3.11.19	6 and onward

2.3.11.1 List method

Query event list by specific filter conditions.

Request

Parameter	Value	Description	Availability
offset	<integer>	*Optional*. The offset to be shifted in the total result. If not specified, the offset will be 0.	6 and onward
limit	<integer>	*Optional*. Number of recordings to be returned. If not specified, return recordings to the end of recording list.	6 and onward
cameraIds	<string>	*Optional*. The list of <CAMERA_ID> to be queried concatenated by ",". If not specified, this parameter will be ignored and get all	6 and onward

		related events.	
fromTime	<integer>	*Optional*. Query start time. If not specified, the default value is 0.	6 and onward
toTime	<integer>	*Optional*. Query stop time. If not specified, the default value is 0.	6 and onward
dsId	<integer>	*Optional.* The owner ds id of queried recordings.	6 and onward
mountId	<integer>	*Optional.* The mount id of queried recording.	6 and onward

Example:

```
GET /webapi/entry.cgi?
version=6&cameraIds="1,2"&api="SYNO.SurveillanceStation.Recording"&toTime=0&offset=0&limit=80&fro
mTime=0&method="List"
```

Response

Key	Value	Description	Availability
total	<integer>	The number of total recordings.	total
recordings	Array of <recordings>	List of the queried recordings.	recordings
dsId	<integer>	The belonged ds id of queried recordings.	dsId

<recordings> definition:

Key	Value	Description
id	<integer>	The id of the recording
videoCodec	<integer>	The video codec of the recording. • 0 - Unknown • 1 - MJPEG • 2 - MPEG4 • 3 - H264 • 5 - MXPEG • 6 - H265 • 7 - H264+
audioCodec	<integer>	The audio codec of the recording. • 0 - Unknown • 1 - PCM • 2 - G711 • 3 - G726 • 4 - AAC • 5 - AMR • 6 - UserDefine (use only with user define camera)
height	<integer>	The image height of the recording.
width	<integer>	The image width of the recording.
cameraId	<integer>	The belonged camera id of the recording.
cameraName	<integer>	The belonged camera name of the recording.
sizeByte	<integer>	The size of the recording.
filePath	<integer>	The file path of the recording.

locked	<boolean>	The recording is locked or not.

Example:


```
{
   "dsId": 0,
   "total": 3,
   "recordings": [
      {
         "audioCodec": "",
         "videoCodec": "MJPEG",
         "width": 640,
         "filePath": "20141030PM/TVIP2155220141030-224911-1414680551.avi",
         "id": 46,
         "cameraName": "TVIP21552",
         "cameraId": 13,
         "sizeByte": 1041280,
         "height": 480,
      },
      {
         "audioCodec": "",
         "videoCodec": "MJPEG",
         "width": 640,
         "filePath": "20141030PM/TVIP2155220141030-224911-1414680851.avi",
         "id": 47,
         "cameraName": "TVIP21552",
         "cameraId": 13,
         "sizeByte": 1041280,
         "height": 480,
      },
      {
         "audioCodec": "",
         "videoCodec": "MJPEG",
         "width": 640,
         "filePath": "20141030PM/TVIP2155220141030-224911-1414681151.avi",
         "id": 48,
         "cameraName": "TVIP21552",
         "cameraId": 13,
         "sizeByte": 1041280,
         "height": 480,
      }
   ]
}
```


2.3.11.2 Delete method

Delete recordings with selection.

Request

Parameter	Value	Description	Availability
idList	<string>	The list of recording id to be deleted concatenated by ",".	6 and onward
dsId	<integer>	*Optional.* The owner ds id of recording to be deleted.	6 and onward

Example:

```
GET /webapi/entry.cgi?
api="SYNO.SurveillanceStation.Recording"&idList="13,14"&version=6&method="Delete"
```

Response

This method has no specific response data. It returns an empty success response if it completes without error.

2.3.11.3 DeleteFilter method

Delete events by specific filter conditions.

Request

Parameter	Value	Description	Availability
reason	<string>	*Optional*. The list of recording mode to be queried concatenated by ",". • 0: None • 1: Continuous Recording • 2: Motion Detection Recording • 3: Alarm Recording • 4 Custom Recording • 5: Manual Recording • 6: External Recording • 7: Analytics Recording • 8: Edge Recording • 9: Action Rule Recording • 10: Advanced Continuous	3 and onward
cameraIds	<string>	*Optional*. The list of <Camera ID> to be queried concatenated by ",". If not specified, this parameter will be ignored and get all related events.	3 and onward
fromTime	<timestamp>	*Optional*. Query start time. If not specified, this parameter will be ignored and get all related events.	3 and onward
toTime	<timestamp>	*Optional*.	3 and onward

		Query stop time. If not specified, this parameter will be ignored and get all related events.	
locked	<integer>	Query locked.	4 and onward
evtSrcType	0, 1, 2, 3	*Optional*. The filtered source. • 0: None • 1: Local • 2: Recording Server • 3: Mount If not specified, the default value is 0.	4 and onward
evtSrcId	<integer>	*CONDITIONAL "depend": Param("evtSrcType").valid()* The specific slave ds or mount id. If not specified, the default value is -1.	4 and onward
blIncludeSnapshot	<boolean>	Include snapshot or not. If not specified, the default value is false.	4 and onward
includeAllCam	<boolean>	Include all camera or not. If not specified, the default value is false.	4 and onward
from_end	<integer>	Time from end. If not specified, the default value is 0.	4 and onward
from_start	<integer>	Time from start. If not specified, the default value is 0.	4 and onward

Example:

```
GET /webapi/entry.cgi?
locked=0&version="3"&blIncludeSnapshot=true&cameraIds=""&evtSrcType=2&reason=""&api="SYNO
.SurveillanceStation.Recording"&evtSrcId=-
1&toTime=0&from_start=1423497600&fromTime=0&method="DeleteFilter"&from_end=1423584000&inc
ludeAllCam=true
```

Response

This method has no specific response data. It returns an empty success response if it completes without error.

2.3.11.4 DeleteAll method

Delete all events that the user has authorized.

Request

No parameter is required.

Example:

```
GET /webapi/entry.cgi?api="SYNO.SurveillanceStation.Recording"&version="4"&method="DeleteAll"
```

Response

This method has no specific response data. It returns an empty success response if it completes without error.

2.3.11.5 ApplyAdvanced method

Apply the setting in advance tab.

Request

Parameter	Value	Description	Availability
rotateUnrecogCam	<boolean>	*Optional*. Rotate unrecognized camera nor not. If not specified, the default value will be false.	4 and onward

Example:

```
GET /webapi/entry.cgi?
rotateUnrecogCam=true&api="SYNO.SurveillanceStation.Recording"&version="4"&method="ApplyAdvanced"
```

Response

Key	Value	Description	Availability
rotateUnrecogCam	<boolean>	*Optional*. Rotate unrecognized camera nor not. If not specified, the default value will be false.	4 and onward

Example:

```
{
   "rotateUnrecogCam": true
}
```

2.3.11.6 CountByCategory method

Get the count number of Event in category.

Request

Parameter	Value	Description	Availability
offset	<integer>	*Optional*. Offset of timezone. If not specified, the offset will be 0.	4 and onward
limit	<integer>	*Optional*. Number of events to be returned. If not specified, return events to the end of event list.	4 and onward
reason	<string>	*Optional*. The list of recording mode to be queried concatenated by ",".	4 and onward

		• 0: None • 1: Continuous Recording • 2: Motion Detection Recording • 3: Alarm Recording • 4: Custom Recording • 5: Manual Recording • 6: External Recording • 7: Analytics Recording • 8: Edge Recording • 9: Action Rule Recording • 10: Advanced Continuous	
cameraIds	<string>	*Optional*. The list of <Camera ID> to be queried concatenated by “,”. If not specified, this parameter will be ignored and get all related events.	4 and onward
fromTime	<integer>	*Optional*. Query start time. If not specified, the default value is 0.	4 and onward
toTime	<integer>	*Optional*. Query stop time. If not specified, the default value is 0.	4 and onward
locked	<integer>	Query locked.	4 and onward
evtSrcType	0, 1, 2, 3	*Optional*. The filtered source. • 0: None • 1: Local • 2: Recording Server • 3: Mount If not specified, the default value is 0.	4 and onward
evtSrcId	<integer>	*CONDITIONAL "depend": Param("evtSrcType").valid()* The specific slave ds or mount id. If not specified, the default value is -1.	4 and onward
blIncludeSnapshot	<boolean>	Include snapshot or not. If not specified, the default value is false.	4 and onward
includeAllCam	<boolean>	Include all camera or not. If not specified, the default value is false.	4 and onward

Example:

```
GET /webapi/entry.cgi?
locked=0&version="4"&blIncludeSnapshot=true&cameraIds=""&evtSrcType=2&reason=""&api="SYNO.SurveillanceStation.Recording"&evtSrcId=-1&toTime=0&limit=0&fromTime=0&method="CountByCategory"&timezoneOffset=480&includeAllCam=true
```

Response

Key	Value	Description	Availability
date	Array of <day_cnt>	Number of Event of each day. -1: Total number count. yyyy/mm/dd: Number count of yyyy/mm/dd. (Ex:1990/05/09)	4 and onward
evt_cam	Array of <evt_cam_ds_info>	Information of event camera.	4 and onward
total	<integer>	Total number of Event.	4 and onward

<day_cnt> definition:

Key	Value	Description	Availability
-1	<integer>	Total number count.	4 and onward
yyyy/mm/dd	<time_cnt>	Number count of log of yyyy/mm/dd. (Ex:1990/05/09)	4 and onward

<time_cnt> definition:

Key	Value	Description	Availability
-1	<integer>	Total number count.	4 and onward
am	<integer>	Number count of log in am.	4 and onward
pm	<integer>	Number count of log in pm.	4 and onward

<evt_cam_ds_info> definition:

Key	Value	Description	Availability
-1	<integer>	Total number count.	4 and onward
X	<evt_cam_info>	X is the local DS id.	4 and onward

<evt_cam_info> definition:

Key	Value	Description	Availability
-1	<integer>	Total number count.	4 and onward
CAMERA_NAME	<integer>	CAMERA_NAME is the name of camera. (Ex: "39-FD8171-001":98)	4 and onward

Example:

```
{
   date":{
      "-1":243,
      "2015/03/11":{
         "-1":156,
         "am":0,
         "pm":156
      },
      "2015/03/12":{
         "-1":87,
         "am":69,
         "pm":18
      }
```

```
    },
    "evt_cam":{
       "-1":243,
       "0":{
          "-1":243,
          "17-IP7135":48,
          "18-E33":195
       }
    },
    "total":243
}
```


2.3.11.7 Keepalive method

Keep event play alive

Request

No parameter is required.

Example:

```
GET /webapi/entry.cgi?api="SYNO.SurveillanceStation.Recording"&version="4"&method="Keepalive"
```

Response

This method has no specific response data. It returns an empty success response if it completes without error.

2.3.11.8 Trunc method

A method to stop a recording event.

Request

Parameter	Value	Description	Availability
idList	Array of <idList>	*Optional*. Event id lists.	4 and onward

<idList> definition:

Parameter	Value	Description	Availability
id	<string>	Unique camera ID with Unique event ID. "CAMERA_ID : EVENT_ID"	3 and onward
dsId	<integer>	Event's owner dsId	3 and onward

Example:


```
GET /webapi/entry.cgi?api="SYNO.SurveillanceStation.Recording"&idList=[{"dsId": 0, "id": "0:4295"}]&version="4"&method="Trunc"
```

Response

This method has no specific response data. It returns an empty success response if it completes without error.

2.3.11.9 LoadAdvanced method

Load the setting in advance tab.

Request

No parameter is required.

Example:

```
GET /webapi/entry.cgi?api="SYNO.SurveillanceStation.Recording"&version="4"&method="LoadAdvanced"
```

Response

Key	Value	Description	Availability
rotateUnrecogCam	<boolean>	Rotate unrecognized camera nor not.	4 and onward

Example:

```
{
  "rotateUnrecogCam": true
}
```

2.3.11.10 LockFilter method

Lock the selected events in filter.

Request

Parameter	Value	Description	Availability
reason	<string>	*Optional*. The list of recording mode to be queried concatenated by ",". • 0: None • 1: Continuous Recording • 2: Motion Detection Recording • 3: Alarm Recording • 4: Custom Recording • 5: Manual Recording	4 and onward

		• 6: External Recording • 7: Analytics Recording • 8: Edge Recording • 9: Action Rule Recording • 10: Advanced Continuous	
cameraIds	<string>	*Optional*. The list of <Camera ID> to be queried concatenated by ",". If not specified, this parameter will be ignored and get all related events.	4 and onward
fromTime	<integer>	*Optional*. Query start time. If not specified, the default value is 0.	4 and onward
toTime	<integer>	*Optional*. Query stop time. If not specified, the default value is 0.	4 and onward
locked	<integer>	Query locked.	4 and onward
evtSrcType	0, 1, 2, 3	*Optional*. The filtered source. • 0: None • 1: Local • 2: Recording Server • 3: Mount If not specified, the default value is 0.	4 and onward
evtSrcId	<integer>	*CONDITIONAL "depend": Param("evtSrcType").valid()* The specific slave ds or mount id. If not specified, the default value is -1.	4 and onward

Example:

```
GET /webapi/entry.cgi?
reason="1,3,8"&api="SYNO.SurveillanceStation.Recording"&locked=0&version="4"&toTime=0&cameraIds=
"1,2,3"&evtSrcType=2&fromTime=0&method="LockFilter"&evtSrcId=3
```

Response

This method has no specific response data. It returns an empty success response if it completes without error.

2.3.11.11 UnLock method

Unlock the selected recordings.

Request

Parameter	Value	Description	Availability
idList	<string>	The list of recording id to be unlocked concatenated by ",".	6 and onward
dsId	<integer>	*Optional.*	6 and onward

		The belonged ds id of recordings to be unlocked.	

Example:

```
GET /webapi/entry.cgi?
api="SYNO.SurveillanceStation.Recording"&idList="13,14"&dsId=0&version=6&method="UnLock"
```

Response

This method has no specific response data. It returns an empty success response if it completes without error.

2.3.11.12 UnLockFilter method

Unlock the selected events in filter.

Request

Parameter	Value	Description	Availability
reason	<string>	*Optional*. The list of recording mode to be queried concatenated by ",". • 0: None • 1: Continuous Recording • 2: Motion Detection Recording • 3: Alarm Recording • 4: Custom Recording • 5: Manual Recording • 6: External Recording • 7: Analytics Recording • 8: Edge Recording • 9: Action Rule Recording • 10: Advanced Continuous	4 and onward
cameraIds	<string>	*Optional*. The list of <Camera ID> to be queried concatenated by “,”. If not specified, this parameter will be ignored and get all related events.	4 and onward
fromTime	<integer>	*Optional*. Query start time. If not specified, the default value is 0.	4 and onward
toTime	<integer>	*Optional*. Query stop time. If not specified, the default value is 0.	4 and onward
locked	<integer>	Query locked.	4 and onward
evtSrcType	0, 1, 2,	*Optional*. The filtered source. • 0: None	4 and onward

	3	• 1: Local • 2: Recording Server • 3: Mount If not specified, the default value is 0.	
evtSrcId	<integer>	*CONDITIONAL "depend": Param("evtSrcType").valid()* The specific slave ds or mount id. If not specified, the default value is -1.	4 and onward

Example:

```
GET /webapi/entry.cgi?
reason="1,3,8"&api="SYNO.SurveillanceStation.Recording"&locked=0&version="4"&toTime=0&cameraIds=
"1,2,3"&evtSrcType=2&fromTime=0&method="UnLockFilter"&evtSrcId=3
```

Response

This method has no specific response data. It returns an empty success response if it completes without error.

2.3.11.13 Lock method

Lock the selected recordings

Request

Parameter	Value	Description	Availability
idList	<string>	The list of recording id to be locked concatenated by ",".	6 and onward
dsId	<integer>	*Optional.* The belonged ds id of recordings to be locked.	6 and onward

Example:

```
GET /webapi/entry.cgi?
api="SYNO.SurveillanceStation.Recording"&idList="13,14"&version=6&method="Lock"
```

Response

This method has no specific response data. It returns an empty success response if it completes without error.

2.3.11.14 Download method

Download recording.

Request

Parameter	Value	Description	Availability
id	<integer>	Id of recording.	6 and onward

		If not specified, the default value will be 0.	
mountId	<integer>	*Optional*. Mount id of recording. If not specified, the default value will be 0.	6 and onward
offsetTimeMs	<integer>	*Optional*. The start time offset of the download recording.	6 and onward
playTimeMs	<integer>	*Optional.* The duration of the download recording.	6 and onward

Example:

```
GET /webapi/entry.cgi/test.mp4?
id=5753&version=6&mountId=0&api="SYNO.SurveillanceStation.Recording"&method="Download"&offsetT
imeMs=2000
```

Response

MP4 file data.

Note

You could assign download file name in the webapi. The example show the case which downloaded the file name is “test.mp4”.

2.3.11.15 CheckEventValid method

Check if recording playable.

Request

Parameter	Value	Description	Availability
eventId	<integer>	*Optional*. Id of event. If not specified, the default value will be 0.	4 and onward
chkDetail	<boolean>	*Optional*. Default value: true. Check camera playback privilege and recording existence.	4 and onward
mountId	<integer>	*Optional*. Default value: 0. Check if mount status normal for mounted recording.	4 and onward
dsId	<integer>	*Optional*. Default value: 0. Check if recording server status normal for recording on slave ds.	4 and onward

Example:

```
GET /webapi/entry.cgi?
eventId=5753&version="4"&api="SYNO.SurveillanceStation.Recording"&method="CheckEventValid"
```


Response

Key	Value	Description	Availability
itemStatus	<integer>	If recording playable. 0: Normal 1: Not Exist 2: No Privilege	4 and onward

Example:

```
{
  "itemStatus": 0
}
```

2.3.11.16 Stream method

Play a specific recording.

Request

Parameter	Value	Description	Availability
recordingId	<integer>	*Optional*. Id of recording.	6 and onward
dsId	<integer>	*Optional*. Owner ds id of recording.	6 and onward
mountId	<integer>	*Optional*. Mount id of recording.	6 and onward
alertRecording	<boolean>	*Optional*. True if played recording is triggered by live view alert. The default value is false.	6 and onward
videoCodec	<integer>	*Optional.* Recording video codec. Only valid when playing non local recordings. • 0 - Unknown • 1 - MJPEG • 2 - MPEG4 • 3 - H264 • 5 - MXPEG • 6 - H265 • 7 - H264+	6 and onward

Example:

```
GET /webapi/entry.cgi?
recordingId=5753&version=6&api="SYNO.SurveillanceStation.Recording"&method="Stream"&dsId=0
```

Response

For MJPEG recording, server will deliver a server push multipart image stream in response. Some HTTP headers may be inserted between the boundary string and the data chunk, as listed below:

Example 1: MJPEG recording stream

```
HTTP/1.1 200 OK
Date: Fri, 25 May 2012 05:59:39 GMT
Server: nginx
Keep-Alive: timeout=20
Connection: Keep-Alive
Transfer-Encoding: chunked
Content-Type: multipart/x-mixed-replace;boundary=myboundary

--myboundary
Content-Type: image/jpeg
Content-Length: 46414

<JPEG image data>
--myboundary
Content-Type: image/jpeg
Content-Length: 59831

<JPEG image data>
--myboundary
Content-Type: image/jpeg
Content-Length: 36914

<JPEG image data>
...
```

For other codec recording, server will deliver a 206 Partial Content response containing the following headers:

Header	Description
Accept-Ranges	Let clients know that server accept byte range request.
Content-Length	The data length of the data chunk actually returned.
Content-Range	The requested range of byte for the data in the body.
Content-Type	video/mp4 – MPEG4/H.264 format recording.

Example 2: MPEG4 recording stream**.**

```
HTTP/1.1 206 Partial Content
Date: Mon, 05 Mar 2012 15:50:34 GMT
Server: nginx
Accept-Ranges: bytes
Content-Length: 9298055
Content-Range: bytes 19244797-28542851/28542852
Connection: keep-alive
Content-Type: video/mp4

<MPEG4 recording file data>
```


2.3.11.17 RangeExport method

Download the merged files of UTC time range recordings of target camera.

If there are different resolution or codec within UTC time range, the recordings will merge as much as possible and downlod file will be a zip file.

Request

Parameter	Value	Description	Availability
camId	<integer>	Id of camera.	6 and onward
fromTime	<integer>	The start of UTC time range.	6 and onward
toTime	<integer>	The end of UTC time range.	6 and onward
fileName	<string>	Download file name without file extension. Use for included recording name if zip file needed.	6 and onward

Example:

```
GET /webapi/entry.cgi?
camId=366&fileName="video"&fromTime=1584933650&toTime=1584934152&api="SYNO.SurveillanceStation.Recording"&method="RangeExport"&version=6
```

Response

Name	Value	Description	Availability
dlid	<integer>	The download id of this range export task.	6 and onward

Note

This method will start a task which have keep-alive mechanism.

Use GetRangeExportProgress method to get newest progress and keep-alive.

After receiving progress 100, use OnRangeExportDone method to download exported recording within 1 minutes.

If you want to cancel range export task, just do not send GetRangeExportProgress method or OnRangeExportDone method. System will cleanup processed files itself.

2.3.11.18 GetRangeExportProgress method

Get newest progress and keep-alive of RangeExport method.

Request

Parameter	Value	Description	Availability
dlid	<integer>	Response of RangeExport method.	6 and onward

Example:

```
GET /webapi/entry.cgi?
api="SYNO.SurveillanceStation.Recording"&method="GetRangeExportProgress"&version=6&dlid=20069
```


Response

Name	Value	Description	Availability
progress	<integer>	The progress of target RangeExport method task. Receive -1 if task failed.	6 and onward
fileExt	<string>	"zip", “mp4" or empty. Reval response data of OnRangeExportDone method if progress is 100.	6 and onward

Note

OnRangeExportDone method must send within each 20 seconds to keep RangeExport method task alive.

2.3.11.19 OnRangeExportDone method

Download recording from target RangeExport method.

Request

Parameter	Value	Description	Availability
dlid	<integer>	Response of RangeExport method.	6 and onward
fileName	<string>	Download file name without file extension. Use for zip file name if zip file needed.	6 and onward

Example:

```
GET /webapi/entry.cgi?
api="SYNO.SurveillanceStation.Recording"&method="OnRangeExportDone"&version=6&dlid=20069&&file
Name="video"
```

Response

MP4 or zip file data.

The response type can be found in fileExt of GetRangeExportProgress method response when progress 100.

Note

GetRangeExportProgress method must be sent within 1 minute after corresponding RangeExport method task is completed, otherwise the exported recordings will be cleared.

2.3.11.20 API Error Code

Code	Description
400	Execution failed.
401	Parameter invalid.
405	CMS server connection failed.
414	Some events not exist.

439	Too many items selected.

2.3.12 SYNO.SurveillanceStation.Recording.Export

This API provides several methods to access the information of exporting task of Surveillance Station. (Ex: Get information/count number of events in task, Check the availability of task name and exporting task, Save/Load event task)

API Name	Version	Availability
SYNO.SurveillanceStationEvent.Recording .Export	1	Surveillance Station 7.0

Method Name	Section	Availability
Load	2.3.12.1	1 and onward
CheckName	2.3.12.2	1 and onward
CamEnum	2.3.12.3	1 and onward
CheckAvailableExport	2.3.12.4	1 and onward
Save	2.3.12.5	1 and onward
GetEvtExpInfo	2.3.12.6	1 and onward

2.3.12.1 Load method

Handle load event export.

Request

Parameter	Value	Description	Availability
start	<integer>	*Optional*. The offset to be shifted in the total result. If not specified, the default value will be 0.	1 and onward
limit	<integer>	*Optional*. Number of Visual Stations to be returned. If not specified, the default value will be 0.	1 and onward

Example:

```
GET /webapi/entry.cgi?
start=0&api="SYNO.SurveillanceStation.Recording.Export"&limit=100&version="1"&method="Load"
```

Response

Key	Value	Description	Availability
evtexptotal	<integer>	Total number of export task.	1 and onward
exporttask	Array of <exporttask_info>	Information of export task.	1 and onward

<exporttask_info> definition:

Key	Value	Description	Availability
id	<integer>	Id of export task.	1 and onward

name	<string>	Name of export task.	1 and onward
srcDsId	<integer>	Id of source DS.	1 and onward
dstDsId	<integer>	Id of destination DS.	1 and onward
dstdir	<string>	Directory of destination.	1 and onward
start_time	<integer>	Start time of event.	1 and onward
stop_time	<integer>	Stop time of event.	1 and onward
status	<integer>	Status of export task.	1 and onward
total_count	<integer>	Total count number of events.	1 and onward

Example:


```
{
   "exporttask": [
      {
         "status": 0,
         "srcDsId": 0,
         "exported_count": 1,
         "start_time": 1425398400,
         "name": "asdf",
         "dstdir": "test",
         "total_count": 30,
         "dstDsId": 0,
         "id": 5,
         "stop_time": 1425484800
      }
   ],
   "evtexptotal": 1
}
```


2.3.12.2 CheckName method

Check the name of export event.

Request

Parameter	Value	Description	Availability
dsId	<integer>	*Optional*. DS Id. If not specified, the default value will be 0.	1 and onward
name	<string>	*Optional*. Name of the export event.	1 and onward
share	<string>	*Optional*. Export destination.	1 and onward

Example:

```
GET /webapi/entry.cgi?
name="asdf"&share="test"&api="SYNO.SurveillanceStation.Recording.Export"&version="1"&dsId=0&method="CheckName"
```


Response

Key	Value	Description	Availability
conflict	<integer>	The current status of the VS. • 0: None • 1: Overwrite • 2: Cannot overrite.	1 and onward

Example:

```
{
       "conflict": 0
}
```

2.3.12.3 CamEnum method

Get list information of all cameras.

Request

Parameter	Value	Description	Availability
dsId	<integer>	*Optional*. DS Id. If not specified, the default value will be -1.	1 and onward

Example:

```
GET /webapi/entry.cgi?
api="SYNO.SurveillanceStation.Recording.Export"&dsId=0&version="1"&method="CamEnum"
```

Response

Key	Value	Description	Availability
camlist	Array of <camlist_info>	Camera list.	1 and onward

<camlist_info>definition:

Key	Value	Description	Availability
checked	<boolean>	Is the camera checked or not.	1 and onward
id	<integer>	Id of camera.	1 and onward
idOnRecServ	<integer>	Id of camera on recording server.	1 and onward
enable	<boolean>	Is the mount event enabled or not.	1 and onward
name	<string>	Name of camera.	1 and onward
ipaddr	<string>	IP address of camera.	1 and onward
status	<integer>	Status of mount event. • 0: Normal • 1: Disable	1 and onward

		• 2: Unreachable • 3: Server disconnected • 4: Configuring • 5: Deleting	
deleted	<boolean>	Is the camera being deleted.	1 and onward

Example:

```
{
   "camlist": [
      {
         "status": 3,
         "enable": true,
         "checked": false,
         "name": "M1031-W",
         "deleted": false,
         "idOnRecServ": 0,
         "ipaddr": "10.13.22.115",
         "id": 32
      }
   ]
}
```

2.3.12.4 CheckAvailableExport method

Check if the destination folder is available for export or not.

Request

Parameter	Value	Description	Availability
freeSize	<integer>	*Optional*. Free size (MB). If not specified, the default value will be 0.	1 and onward
startTime	<integer>	*Optional*. Start time of event. If not specified, the default value will be 0.	1 and onward
stopTime	<integer>	*Optional*. Stop time of event. If not specified, the default value will be 0.	1 and onward
camIdList	<string>	*Optional*. List of camera Id.	1 and onward

Example:

```
GET /webapi/entry.cgi?
```



```
camIdList="32,33,34"&version="1"&freeSize=881508&method="CheckAvailableExport"&api="SYNO.SurveillanceStation.Recording.Export"&startTime=1425398400&stopTime=1425484800
```

Response

Key	Value	Description	Availability
result	<integer>	The feasibility of exporting target events. • 0: Normal • 1: Error • 2: No event • 3: Oversize	1 and onward

Example:

```
{
  "result": 0
}
```

2.3.12.5 Save method

Handle save event export.

Request

Parameter	Value	Description	Availability
name	<string>	Name of export task.	1 and onward
srcDsId	<integer>	*Optional*. Id of source DS. If not specified, the default value will be 0.	1 and onward
dstDsId	<integer>	*Optional*. Id of destination DS. If not specified, the default value will be 0.	1 and onward
dstdir	<string>	Directory of destination.	1 and onward
freesize	<integer>	*Optional*. Free size (MB). If not specified, the default value will be 0.	1 and onward
start_time	<integer>	*Optional*. Start time of event. If not specified, the default value will be 0.	1 and onward
stop_time	<integer>	*Optional*. Stop time of event. If not specified, the default value will be 0.	1 and onward
isoverwrite	<integer>	Remove the conflict dir with user's confirm. • 0: false • 1: true	1 and onward
camlistid	<string>	List of camera Id.	1 and onward

Example:

```
GET /webapi/entry.cgi?
srcDsId=0&isoverwrite=0&name="asdf"&dstdir="test"&start_time=1425398400&freesize=881508&method="Save"&api="SYNO.SurveillanceStation.Recording.Export"&stop_time=1425484800&version="1"&camlistid="32,33,34"&dstDsId=0
```

Response

This method has no specific response data. It returns an empty success response if it completes without error.

2.3.12.6 GetEvtExpInfo method

Get event export information from recording server.

Request

Parameter	Value	Description	Availability
startTime	<integer>	*Optional*. Start time of event. If not specified, the default value will be 0.	1 and onward
stopTime	<integer>	*Optional*. Stop time of event. If not specified, the default value will be 0.	1 and onward
camIdList	<string>	List of camera Id.	1 and onward

Example:

```
GET /webapi/entry.cgi?
camIdList="32,33,34"&version="1"&method="GetEvtExpInfo"&api="SYNO.SurveillanceStation.Recording.Export"&startTime=1425398400&stopTime=1425484800
```

Response

Key	Value	Description	Availability
camEvtInfoList	Array of <camEvtInfoList_info>	Information list of target events.	1 and onward
eventIdList	<string>	List of event Id.	
fisheyeIdList	<string>	List of fisheye Id.	
totalEvtCnt	<integer>	Total count number of events.	
totalEvtSize	<integer>	Total size of events. (MB)	

<camEvtInfoList_info>definition:

Key	Value	Description	Availability
camEvtList	Array of <camEvtList_info>	Information of target camera event.	1 and onward
camId	<integer>	Id of camera.	1 and onward

camStoragePath	<string>	Storage path of the camera.	1 and onward

<camEvtList_info>definition:

Key	Value	Description	Availability
path	<string>	Detail path of target camera event.	1 and onward

Example:

```
{
   "eventIdList": "",
   "totalEvtCnt": 0,
   "fisheyeIdList": "",
   "totalEvtSize": 0,
   "camEvtInfoList": [
      {
         "camId": 32,
         "camEvtList": [],
         "camStoragePath": "/var/services/surveillance/M1031-W"
      }
   ]
}
```

2.3.12.7 API Error Code

Code	Description
400	Execution failed.
401	Parameter invalid.
405	CMS server connection failed.
414	Some events not exist.
439	Too many items selected.

2.3.13 SYNO.SurveillanceStation.Recording.Mount

This API provides a method to load information of event mount in Surveillance Station.

API Name	Version	Availability
SYNO.SurveillanceStation.Recording.Mount	1	Surveillance Station 7.0

Method Name	Section	Availability
Load	2.3.13.1	1 and onward

2.3.13.1 Load method

Load the event mount.

Request

No parameter is required.

Example:

```
GET /webapi/entry.cgi?api="SYNO.SurveillanceStation.Recording.Mount"&version="1"&method="Load"
```

Response

Key	Value	Description	Availability
eventmount	Array of <mount_element>	Mount event.	1 and onward
total	<integer>	Total number of mount event.	1 and onward

<mount_element> definition:

Key	Value	Description	Availability
camlist	Array of <cam_info>	Camera List.	1 and onward
dsId	<integer>	Id of DS.	1 and onward
enable	<boolean>	Is the mount event enabled or not.	1 and onward
expid	<string>	Export info.	1 and onward
id	<integer>	Id of mount event.	1 and onward
name	<string>	Name of mount event.	1 and onward
start_time	<integer>	Start time of mount event.	1 and onward
status	<integer>	Status of mount event. • 0: Normal • 1: Disable • 2: Unreachable • 3: Server disconnected • 4: Configuring • 5: Deleting	1 and onward
stop_time	<integer>	Stop time of mount event.	1 and onward

<cam_info> definition:

Key	Value	Description	Availability
analyticsDirection	<integer>	Analytics type of liveview. • 0: One way direction in analytics • 1: Two way direction in analytics	1 and onward
analyticsDwellTime	<integer>	Setting of dwelling time in liveview analytics.	1 and onward
analyticsObjSize	<integer>	Setting of object size in liveview analytics. • 0: One forth object size • 1: One ninth object size • 2: One sixteenth object size	1 and onward
analyticsRegion	<string>	Setting of analytics Region in liveview analytics. • 0: Unset • 1: Set	1 and onward
analyticsSens	<integer>	Analytics type of liveview. • 0: Low • 1: Medium • 2: High	1 and onward
analyticsType	<integer>	Analytics type of liveview. • 0: None • 1: Motion • 2: Missing object • 3: Foreign object • 4: Camera occlusion • 5: Focus lost • 6: Loitering • 7: Object counting • 8: Virtual fence • 9: Total	1 and onward
camMountType	<integer>	Type of mounted camera. • 0: ceiling • 1: wall • 2: floor • 3: CNT	1 and onward
feRegionList	Array of <feRegion_info>	List of fisheye region.	1 and onward
fisheyeType	<integer>	Type of fisheye. • 0: no fisheye • other than 0: one of vendor	1 and onward
id	<integer>	Camera Id.	1 and onward
name	<string>	Camera name.	1 and onward

<feRegion_info> definition:

Key	Value	Description	Availability
camId	<integer>	Camera Id.	1 and onward
id	<integer>	Id of fisheye region.	1 and onward
name	<string>	Name of fisheye region.	1 and onward
posX	<integer>	Position X of fisheye region.	1 and onward
posY	<integer>	Position Y of fisheye region.	1 and onward
type	<integer>	Type of fisheye region.	1 and onward

		• -1: FISHEYE_NOT_REGION • 0: FISHEYE_REGION • 1: FISHEYE_PANORAMA • 2: FISHEYE_DOUBLE_PANORAMA • 3: FISHEYE_TRIPLE_VIEW • 4: FISHEYE_QUAD_VIEW • 5: FISHEYE_SUB_REGION • 6: FISHEYE_SUB_PANORAMA	
zoom	<integer>	Zoom value.	1 and onward

Example:

```
{
    "total": 1,
    "eventmount": [
        {
            "status": 0,
            "enable": true,
            "start_time": 1424016000,
            "name": "12314144",
            "expid": "20150216095031-0011323CC391",
            "camlist": [
                {
                    "analyticsDirection": 0,
                    "analyticsType": 1,
                    "analyticsDwellTime": 5,
                    "analyticsRegion":
"0000000000000000000000000000000000000000000000000000000000000000000000000000000000000
00000000000000000000000000000000000000000000000000000000000000000000000000000000000000
00000000000000000000000000000000001111111111111111111111111111111111100000111111111111
11111111111111111111111000001111111111111111111111111111111111100000111111111111111111
11111111111111111000001111111111111111111111111111111111100000111111111111111111111111
11111111111000001111111111111111111111111111111111100000111111111111111111111111111111
11111000001111111111111111111111111111111111100000111111111111111111111111111111111110
00001111111111111111111111111111111111100000111111111111111111111111111111111110000011
11111111111111111111111111111111100000111111111111111111111111111111111110000011111111
11111111111111111111111111100000111111111111111111111111111111111110000011111111111111
11111111111111111111100000111111111111111111111111111111111110000011111111111111111111
11111111111111100000111111111111111111111111111111111110000011111111111111111111111111
11111111100000111111111111111111111111111111111110000011111111111111111111111111111111
11100000111111111111111111111111111111111110000011111111111111111111111111111111111",
                    "camMountType": 0,
                    "id": 38,
                    "name": "FE8172-001",
                    "analyticsSens": 1,
                    "feRegionList": [
                        {
                            "camId": 38,
                            "name": "Default Region",
                            "zoom": 25,
```



```
                    "posX": 500,
                    "posY": 500,
                    "type": 0,
                    "id": 26
                },
                {
                    "camId": 38,
                    "name": "Default Panorama",
                    "zoom": 25,
                    "posX": 500,
                    "posY": 250,
                    "type": 1,
                    "id": 27
                },
                {
                    "camId": 38,
                    "name": "Default Double Panorama",
                    "zoom": 25,
                    "posX": 500,
                    "posY": 250,
                    "type": 2,
                    "id": 28
                },
                {
                    "camId": 38,
                    "name": "Default Triple View",
                    "zoom": 25,
                    "posX": 500,
                    "posY": 250,
                    "type": 3,
                    "id": 29
                },
                {
                    "camId": 38,
                    "name": "Default Quad View",
                    "zoom": 25,
                    "posX": 500,
                    "posY": 250,
                    "type": 4,
                    "id": 30
                }
            ],
            "fisheyeType": 1,
            "analyticsObjSize": 2
        }
    ],
    "dsId": 0,
    "id": 4,
    "stop_time": 1424102400
  }
]
```



```
}
```

2.3.13.2 API Error Code

Code	Description
400	Execution failed.
401	Parameter invalid.
405	CMS server connection failed.
414	Some events not exist.
439	Too many items selected.

2.3.14 SYNO.SurveillanceStation.CMS

This API provides several methods to access ds in CMS. (Ex: Get information, Apply option, Lock, Modify share privilege, Check Samba Enabled/Enable samba, Redirect, Get snapshot)

API Name	Version	Availability
SYNO.SurveillanceStation.CMS	1	Surveillance Station 7.0

Method Name	Section	Availability
Redirect	2.3.14.1	1 and onward
ModifySharePriv	2.3.14.2	1 and onward
ApplyOption	2.3.14.3	1 and onward
GetInfo	2.3.14.4	1 and onward
DoSyncData	2.3.14.5	1 and onward
CheckSambaEnabled	2.3.14.6	1 and onward
BatCheckSambaService	2.3.14.7	1 and onward
GetMDSnapshot	2.3.14.8	1 and onward
GetCMSStatus	2.3.14.9	1 and onward
EnableSamba	2.3.14.10	1 and onward
NotifyCMSBreak	2.3.14.11	1 and onward
LockSelf	2.3.14.12	1 and onward

2.3.14.1 Redirect method

Redirect the webAPI to target DS.

Request

Parameter	Value	Description	Availability
dsId	<integer>	*Optional*. DS Id.	1 and onward
webAPI	Array of <webAPI_info>	*Optional*. Webapi.	1 and onward

Example:

```
GET /webapi/entry.cgi?webAPI={"api": "SYNO.SurveillanceStation.AddOns", "version": 1, "method": "List"}&api="SYNO.SurveillanceStation.CMS"&dsId=3&version="1"&method="Redirect"
```

Response

This method has no specific response data. It returns an empty success response if it completes without error.

2.3.14.2 ModifySharePriv method

Modify share privilege.

Request

Parameter	Value	Description	Availability
privSet	<integer>	*Optional*. Privilege setting. If not specified, the default value will be 0.	1 and onward
shareName	<string>	*Optional*. Name of share folder.	1 and onward

Example:

```
GET /webapi/entry.cgi?
shareName=""&privSet=0&api="SYNO.SurveillanceStation.CMS"&version="1"&method="ModifySharePriv"
```

Response

Key	Value	Description	Availability
privOrg	<integer>	Original privilege setting.	1 and onward

Example:

```
{
   "privOrg": 0
}
```

2.3.14.3 ApplyOption method

Apply the option setting.

Request

Parameter	Value	Description	Availability
central_auto_video_relay	<boolean>	*Optional*. Is auto video relay enabled or not. If not specified, the default value will be false.	1 and onward
central_enable	<boolean>	*Optional*. Is central enable or not. If not specified, the default value will be false.	1 and onward
central_mode	<string>	*Optional*. Central CMS mode. • 0: Disable • 1: Host server	1 and onward

		• 2: Rec server	
central_rec_mask_mode	<boolean>	*Optional*. Prevent other user to change the setting of recording server. If not specified, the default value will be false.	1 and onward
central_rec_sync_time	<boolean>	*Optional*. Is the time of recording server syncronized with host. If not specified, the default value will be false.	1 and onward
nvr_enable	<boolean>	*Optional*. Is NVR enabled. If not specified, the default value will be false.	1 and onward
nvr_lang	<string>	*Optional*. Language of NVR.	1 and onward

Example:

```
GET /webapi/entry.cgi?central_auto_video_relay=false¢ral_rec_sync_time=false
¢ral_mode="1"&api="SYNO.SurveillanceStation.CMS"&version="1"¢ral_rec_mask_mode=false&method="
ApplyOption"¢ral_enable=true
```

Response

Key	Value	Description	Availability
central_auto_video_relay	<boolean>	Is auto video relay enabled or not.	1 and onward
central_enable	<boolean>	Is central enable or not.	1 and onward
central_host_ip	<string>	IP of paired host.	1 and onward
central_locked	<boolean>	Is recServer locked or not.	1 and onward
central_mode	<string>	Central CMS mode. • 0: Disable • 1: Host server • 2: Rec server	1 and onward
central_paired_host_model	<string>	Model of paired host.	1 and onward
central_paired_host_name	<string>	Name of paired host.	1 and onward
central_rec_mask_mode	<boolean>	Prevent other user to change the setting of recording server.	1 and onward
central_rec_status	<integer>	Status of recServer.	1 and onward

		• 0: normal • 1: disable • 3: disconnect	
central_rec_sync_time	<boolean>	Is the time of recording server syncronized with host.	1 and onward
confirm_key	<string>	Confirm key.	1 and onward
enable_video_relay	<boolean>	Enable video relay or not.	1 and onward
key	<string>	Key.	1 and onward
nvr_enable	<boolean>	Is NVR enabled.	1 and onward
nvr_lang	<string>	Language of NVR.	1 and onward
vs_enable	<boolean>	Is VisualStation enabled.	1 and onward
success	<boolean>	Success or not.	1 and onward

Example:


```
{
    "central_paired_host_model": "",
    "central_rec_status": 1,
    "central_auto_video_relay": true,
    "enable_video_relay": false,
    "confirm_key": "********",
    "central_paired_host_name": "",
    "nvr_enable": true,
    "central_rec_sync_time": false,
    "success": true,
    "central_mode": "1",
    "central_locked": false,
    "key": "********",
    "vs_enable": true,
    "central_rec_mask_mode": false,
    "central_host_ip": "",
    "nvr_lang": "",
    "central_enable": true
}
```


2.3.14.4 GetInfo method

Get CMS related info.

Request

Parameter	Value	Description	Availability
isPolling	<boolean>	*Optional*.	1 and onward

		Prevent access DB while polling. If not specified, the default value will be false.	

Example:

```
GET /webapi/entry.cgi?
isPolling=false&api="SYNO.SurveillanceStation.CMS"&version="1"&method="GetInfo"
```

Response

Key	Value	Description	Availability
central_auto_video_relay	<boolean>	Is auto video relay enabled or not.	1 and onward
central_enable	<boolean>	Is central enable or not.	1 and onward
central_host_ip	<string>	IP of paired host.	1 and onward
central_locked	<boolean>	Is recServer locked or not.	1 and onward
central_mode	<string>	Central CMS mode. • 0: Disable • 1: Host server • 2: Rec server	1 and onward
central_paired_host_model	<string>	Model of paired host.	1 and onward
central_paired_host_name	<string>	Name of paired host.	1 and onward
central_rec_mask_mode	<boolean>	Prevent other user to change the setting of recording server.	1 and onward
central_rec_status	<integer>	Status of recServer. • 0: normal • 1: disable • 3: disconnect	1 and onward
central_rec_sync_time	<boolean>	Is the time of recording server syncronized with host.	1 and onward
confirm_key	<string>	Confirm key.	1 and onward
enable_video_relay	<boolean>	Enable video relay or not.	1 and onward
key	<string>	Key.	1 and onward
nvr_enable	<boolean>	Is NVR enabled.	1 and onward
nvr_lang	<string>	Language of NVR.	1 and onward
vs_enable	<boolean>	Is VisualStation enabled.	1 and onward
success	<boolean>	Success or not.	1 and onward

Example:


```
{
   "central_paired_host_model": "",
   "central_rec_status": 1,
   "central_auto_video_relay": true,
   "enable_video_relay": false,
   "confirm_key": "********",
   "central_paired_host_name": "",
   "nvr_enable": true,
   "central_rec_sync_time": false,
   "success": true,
   "central_mode": "1",
   "central_locked": false,
   "key": "********",
   "vs_enable": true,
   "central_rec_mask_mode": false,
   "central_host_ip": "",
   "nvr_lang": "",
   "central_enable": true
}
```


2.3.14.5 DoSyncData method

Get log/recording data from the target DS.

Request

Parameter	Value	Description	Availability
syncType	<integer>	*Optional*. Privilege setting. If not specified, the default value will be 0.	1 and onward
syncTargetId	<integer>	*Optional*. Syncronized target DS Id. If not specified, the default value will be 1.	1 and onward
limit	<integer>	*Optional*. limit in SQL. If not specified, the default value will be 0.	1 and onward

Example:

```
GET /webapi/entry.cgi?
version="1"&syncType=0&syncTargetId=1&api="SYNO.SurveillanceStation.CMS"&limit=0&method="DoSyncData"
```

Response

Key	Value	Description	Availability

remainCnt	<integer>	Count number of unsyncronized data.	1 and onward
syncDataList	Array of <syncDataList_info>	Syncronized data list.	1 and onward

<syncDataList_info> definition

Key	Value	Description	Availability
event_msg	<string>	Event messeage.	1 and onward
id	<integer>	Id of Log.	1 and onward
itemId	<integer>	Id of Item.	1 and onward
level	<integer>	Level of log message.	1 and onward
logGrp	<integer>	Group of message.	1 and onward
logType	<integer>	Type of Log.	1 and onward
timestamp	<integer>	Time stamp.	1 and onward

Example:

```
{
   "remainCnt": 0,
   "syncDataList": [
      {
         "itemId": 0,
         "level": 1,
         "logType": 321912959,
         "timestamp": 1422347919,
         "event_msg": "This recording server was disabled by [DS1813p_WC].",
         "logGrp": 0,
         "id": 9
      }
   ]
}
```

2.3.14.6 CheckSambaEnabled method

Check Samba service.

Request

No parameter is required.

Example:

```
GET /webapi/entry.cgi?api="SYNO.SurveillanceStation.CMS"&version="1"&method="CheckSambaEnabled"
```

Response

Key	Value	Description	Availability
sambaEnabled	<boolean>	Check Samba of target DS enabled or not.	1 and onward

Example:

```
{
   "sambaEnabled": true
}
```

2.3.14.7 BatCheckSambaService method

Check if samba service on all related rec servers is enabled.

Request

Parameter	Value	Description	Availability
dsIdList	<string >	*Optional*. DS Id list.	1 and onward

Example:

```
GET /webapi/entry.cgi?
dsIdList="3"&api="SYNO.SurveillanceStation.CMS"&version="1"&method="BatCheckSambaService"
```

Response

Key	Value	Description	Availability
allSambaEnabled	<boolean>	All Samba enabled or not.	1 and onward

Example:

```
{
   "allSambaEnabled": true
}
```

2.3.14.8 GetMDSnapshot method

Get encoded single-image snapshot of target camera.

Request

Parameter	Value	Description	Availability
camId	<integer>	*Optional*. Camera Id. If not specified, the default value will be 0.	1 and onward

Example:

```
GET /webapi/entry.cgi?
```



```
api="SYNO.SurveillanceStation.CMS"&camId=0&version="1"&method="GetMDSnapshot"
```

Response

Key	Value	Description	Availability
snapshot	<string>	Encoded MD snapshot.	1 and onward

Example:

```
{
   "snapshot": (CONTENT OF ENCODED MD SNAPSHOT)
}
```

2.3.14.9 GetCMSStatus method

Get CMS status.

Request

Parameter	Value	Description	Availability
camId	<integer>	*Optional*. Camera Id. If not specified, the default value will be 0.	1 and onward

Example:

```
GET /webapi/entry.cgi?
api="SYNO.SurveillanceStation.CMS"&camId=1&version="1"&method="GetCMSStatus"
```

Response

Key	Value	Description	Availability
CMSEnabled	<boolean>	The camera is enabled in CMS.	1 and onward

Example:

```
{
   "CMSEnabled": true
}
```

2.3.14.10 EnableSamba method

Enable Samba service.

Request

No parameter is required.

Example:

```
GET /webapi/entry.cgi?api="SYNO.SurveillanceStation.CMS"&version="1"&method="EnableSamba"
```

Response

This method has no specific response data. It returns an empty success response if it completes without error.

2.3.14.11 NotifyCMSBreak method

Notify the target slave DS to disconnect.

Request

No parameter is required.

Example:

```
GET /webapi/entry.cgi?api="SYNO.SurveillanceStation.CMS"&version="1"&method="NotifyCMSBreak"
```

Response

This method has no specific response data. It returns an empty success response if it completes without error.

2.3.14.12 LockSelf method

Lock the recording server to prevent the changing of settings from other server.

Request

Parameter	Value	Description	Availability
locked	<boolean>	*Optional*. Setting of locked recording server or not. If not specified, the default value will be false.	1 and onward

Example:

```
GET /webapi/entry.cgi?
api="SYNO.SurveillanceStation.CMS"&locked=false&version="1"&method="LockSelf"
```

Response

This method has no specific response data. It returns an empty success response if it completes without error.

2.3.14.13 API Error Code

Code	Description
400	Execution failed.
401	Invalid parameter.
415	message connect failed.

2.3.15 SYNO.SurveillanceStation.CMS.GetDsStatus

This API provides several methods to access the status information of slave ds in CMS. (Ex: Enable CMS, Unpair/Pair CMS, GetFreeSpace, Lock, Test, Logout/Login)

API Name	Version	Availability
SYNO.SurveillanceStation.CMS.GetDsStatus	1	Surveillance Station 7.0

Method Name	Section	Availability
EnableCMS	2.3.15.1	1 and onward
UnPair	2.3.15.2	1 and onward
GetFreeSpace	2.3.15.3	1 and onward
Lock	2.3.15.4	1 and onward
Test	2.3.15.5	1 and onward
Logout	2.3.15.6	1 and onward
Pair	2.3.15.7	1 and onward
Login	2.3.15.8	1 and onward

2.3.15.1 EnableCMS method

Enable DS into recording server mode.

Request

Parameter	Value	Description	Availability
adminUsername	<string>	*Optional*. User name. If not specified, the default value will be "admin" .	1 and onward
adminPasswd	<string>	Password.	1 and onward
central_rec_mask_mode	<string>	*Optional*. Prevent other user to change the setting of recording server. If not specified, the default value will be "false" .	1 and onward
central_rec_sync_time	<string>	*Optional*. Is the time of recording server syncronized with host. If not specified, the default value will be "false" .	1 and onward

Example:

```
GET /webapi/entry.cgi?
api="SYNO.SurveillanceStation.CMS.GetDsStatus"¢ral_rec_sync_time="false"&adminPasswd="123456"&
version="1"&adminUsername="admin"¢ral_rec_mask_mode="false"&method="EnableCMS"
```

Response

Key	Value	Description	Availability
status	<integer>	Status of slave DS connection. • 0: Normal • 1: Disable • 2: Unauthorized • 3: Disconnect • 4: Deleted • 5: Inaccessible • 6: Occupied • 7: Configuring • 8: Wrong type • 9: Licnese duplicated • 10: Not admin user • 11: Insufficient license • 12: Server Duplicated • 13: Unknown • 14: Rec storage removed • 15: Incompatible • 16: License invalid	1 and onward

Example:

```
{
   "status": 0
}
```

2.3.15.2 UnPair method

Unpair recording server from the host.

Request

Parameter	Value	Description	Availability
dminUsername	<string>	*Optional.* User name. If not specified, the default value will be “admin”.	1 and onward
key	<string>	*Optional.* Key.	1 and onward
mac	<string>	*Optional.*	1 and onward

		Mac address.	
cmsMode	<integer>	*Optional.* Mode of CMS. • 0: Disable • 1: Host server • 2: Rec server If not specified, the default value will be 0.	1 and onward

Example:

```
GET /webapi/entry.cgi?
cmsMode=2&api="SYNO.SurveillanceStation.CMS.GetDsStatus"&version="1"&method="UnPair"
```

Response

This method has no specific response data. It returns an empty success response if it completes without error.

2.3.15.3 GetFreeSpace method

Get free size of memory in MB.

Request

No parameter is required.

Example:

```
GET /webapi/entry.cgi?
api="SYNO.SurveillanceStation.CMS.GetDsStatus"&version="1"&method="GetFreeSpace"
```

Response

Key	Value	Description	Availability
freeSizeMb	<integer>	Free size of memory in MB.	1 and onward

Example:

```
{
   "freeSizeMb": 922467
}
```

2.3.15.4 Lock method

Handle lock slave ds.

Request

Parameter	Value	Description	Availability
lock	<boolean>	*Optional.* Lock setting. If not specified, the default value will be false.	1 and onward
adminUsername	<string>	*Optional.* User name of Host. If not specified, the default value will be “admin”.	1 and onward
key	<string>	*Optional.* Key of Host.	1 and onward
mac	<string>	*Optional.* Mac address of Host.	1 and onward
masterAuthKey	<string>	*Optional.* Authorized key of Host.	1 and onward

Example:

```
GET /webapi/entry.cgi?
masterAuthKey="14C0MON392200"&version="1"&lock=false&mac="0011323CC393"&api="SYNO.SurveillanceStation.CMS.GetDsStatus"&key="123456"&adminUsername="admin"&method="Lock"
```

Response

Key	Value	Description	Availability
status	<integer>	Status of slave DS connection. • 0: Normal • 1: Disable • 2: Unauthorized • 3: Disconnect • 4: Deleted • 5: Inaccessible • 6: Occupied • 7: Configuring • 8: Wrong type • 9: Licnese duplicated • 10: Not admin user • 11: Insufficient license • 12: Server Duplicated • 13: Unknown • 14: Rec storage removed • 15: Incompatible	1 and onward

		• 16: License invalid	

Example:

```
{
   "status": 0
}
```

2.3.15.5 Test method

Get the information of target DS.

Request

Parameter	Value	Description	Availability
slaveDsIp	<string>	*Optional*. IP of slave Ds.	1 and onward

Example:

```
GET /webapi/entry.cgi?
slaveDsIp=""&api="SYNO.SurveillanceStation.CMS.GetDsStatus"&version="1"&method="Test"
```

Response

Key	Value	Description	Availability
auth_key	<string>	Authorized Key.	1 and onward
cms_locked	<boolean>	Prevent the changing of settings from other server.	1 and onward
dsModel	<string>	Model of DS.	1 and onward
keyTotal	<integer>	Total number of key.	1 and onward
keyUsed	<integer>	Used number of key.	1 and onward
licenseList	<string>	List of license.	1 and onward
mac	<string>	Mac address.	1 and onward
status	<integer>	Status of slave DS connection. • 0: Normal • 1: Disable • 2: Unauthorized • 3: Disconnect • 4: Deleted • 5: Inaccessible • 6: Occupied • 7: Configuring	1 and onward

		• 8: Wrong type • 9: Licnese duplicated • 10: Not admin user • 11: Insufficient license • 12: Server Duplicated • 13: Unknown • 14: Rec storage removed • 15: Incompatible • 16: License invalid	

Example:

```
{
   "mac": "0011323CC393",
   "dsModel": "DS2015xs",
   "cms_locked": false,
   "status": 8,
   "keyTotal": 0,
   "auth_key": "14C0MON392200",
   "licenseList": "",
   "keyUsed": 0
}
```

2.3.15.6 Logout method

Handle logout slave ds.

Request

Parameter	Value	Description	Availability
adminUsername	<string>	*Optional*. User name.	1 and onward
key	<string>	*Optional*. Key.	1 and onward
mac	<string>	*Optional*. Mac address.	1 and onward

Example:

```
GET /webapi/entry.cgi?
version="1"&mac=""&api="SYNO.SurveillanceStation.CMS.GetDsStatus"&key=""&adminUsername="admin
"&method="Logout
```

Response

Key	Value	Description	Availability
status	<integer>	Status of slave DS connection. • 0: Normal • 1: Disable • 2: Unauthorized • 3: Disconnect • 4: Deleted • 5: Inaccessible • 6: Occupied • 7: Configuring • 8: Wrong type • 9: Licnese duplicated • 10: Not admin user • 11: Insufficient license • 12: Server Duplicated • 13: Unknown • 14: Rec storage removed • 15: Incompatible • 16: License invalid	1 and onward

Example:

```
{
   "status": 3
}
```

2.3.15.7 Pair method

Handle pair slave ds.

Request

Parameter	Value	Description	Availability
dsname	<string>	*Optional*. DS name of Host.	1 and onward
slaveDsIp	<string>	*Optional*. Slave DS Ip.	1 and onward
port	<integer>	*Optional*. Port of Host. If not specified, the default value will be 0.	1 and onward
masterAuthKey	<string>	*Optional*. Authorized Key of Host.	1 and onward

model	<string>	*Optional*. Model of Host.	1 and onward
mac	<string>	*Optional*. Mac address of Host.	1 and onward
cms_locked	<boolean>	*Optional*. Prevent the changing of settings from other server. If not specified, the default value will be false.	1 and onward
cms_masked	<boolean>	*Optional*. Prevent other user to change the setting of recording server. If not specified, the default value will be false.	1 and onward
cms_sync_time	<boolean>	*Optional*. Is the time of recording server syncronized with host. If not specified, the default value will be false.	1 and onward

Example:

```
GET /webapi/entry.cgi?
cms_sync_time=true&masterAuthKey="14C0MON392200"&version="1"&slaveDsIp="10.13.21.18"&dsnam
e="DiskStation"&cms_locked=true&method="Pair"&mac="00113235D696"&api="SYNO.SurveillanceStatio
n.CMS.GetDsStatus"&cms_masked=true&model="DS414j"&port=5000
```

Response

Key	Value	Description	Availability
auth_key	<string>	Authorized Key of slave DS.	1 and onward
mac	<string>	Mac address of slave DS.	1 and onward
ds_model	<string>	Model of slave DS.	1 and onward
cookie	<string>	Cookie.	1 and onward
dp_version	<string>	Device package version of slave DS.	1 and onward
dsm_version	<string>	DSM version of slave DS.	1 and onward
serial_num	<string>	Serial number of slave DS.	1 and onward
ss_version	<string>	Surveillance Station version of slave DS.	1 and onward
status	<integer>	Status of slave DS connection. • 0: Normal • 1: Disable • 2: Unauthorized • 3: Disconnect • 4: Deleted • 5: Inaccessible	

		• 6: Occupied • 7: Configuring • 8: Wrong type • 9: Licnese duplicated • 10: Not admin user • 11: Insufficient license • 12: Server Duplicated • 13: Unknown • 14: Rec storage removed • 15: Incompatible • 16: License invalid	

Example:

```
{
   "status": 2,
   "mac": "",
   "dp_version": "3.2-0604",
   "cookie": "",
   "ss_version": "7.1-3900",
   "auth_key": "",
   "ds_model": "",
   "dsm_version": "5.1-5022",
   "serial_num": "14C0MON392200"
}
```

2.3.15.8 Login method

Handle login slave ds.

Request

Parameter	Value	Description	Availability
adminUsername	<string>	*Optional*. User name of host. If not specified, the default value will be “admin”.	1 and onward
key	<string>	*Optional*. Key of host.	1 and onward
mac	<string>	*Optional*. Mac address of host.	1 and onward
masterAuthKey	<string>	*Optional*. Authorized key of host.	1 and onward
hostName	<string>	*Optional*.	1 and onward

		Host name.	
hostPort	<integer>	*Optional*. Port of host. If not specified, the default value will be 0.	1 and onward
ignoreAuthError	<string>	*Optional*. Ignore Authorized error or not. If not specified, the default value will be “no”.	1 and onward
hostDisconnect	<boolean>	*Optional*. Is host disconnected. If not specified, the default value will be false.	1 and onward
blUpdateVolSpace	<boolean>	*Optional*. Update Volume space or not. If not specified, the default value will be false.	1 and onward
enable_rec	<boolean>	*Optional*. Enable recording server or not. If not specified, the default value will be false.	1 and onward
cms_locked	<boolean>	*Optional*. Prevent the changing of settings from other server. If not specified, the default value will be true.	1 and onward
cms_masked	<boolean>	*Optional*. Prevent other user to change the setting of recording server. If not specified, the default value will be true.	1 and onward
cms_sync_time	<boolean>	*Optional*. Is the time of recording server syncronized with host. If not specified, the default value will be true.	1 and onward

Example:

```
GET /webapi/entry.cgi?
enable_rec=false&masterAuthKey=""&version="1"&hostName=""&hostDisconnect=false&mac=""&api="SY
NO.SurveillanceStation.CMS.GetDsStatus"&ignoreAuthError="no"&key=""&hostPort=0&adminUsername="
admin"&blUpdateVolSpace=false&method="Login"
```

Response

Key	Value	Description	Availability
cam_count	<integer>	Number of camera.	1 and onward
camera_info	Array of <camera_info_obj>	information of cameras.	1 and onward
cms_locked	<boolean>	Prevent the changing of settings from other server.	1 and onward

cms_masked	<boolean>	Prevent other user to change the setting of recording server.	1 and onward
cms_sync_time	<boolean>	Is the time of recording server syncronized with host.	1 and onward
cookie	<string>	Cookie.	1 and onward
default_license_cnt	<integer>	Number of default license of slave ds.	1 and onward
dp_version	<string>	Device package version of slave ds.	1 and onward
dsm_version	<string>	DSM version of slave ds of slave ds.	1 and onward
serial_num	<string>	Serial number of slave ds.	1 and onward
ss_version	<string>	Surveillance Station version of slave ds.	1 and onward
status	<integer>	Status of slave DS connection. • 0: Normal • 1: Disable • 2: Unauthorized • 3: Disconnect • 4: Deleted • 5: Inaccessible • 6: Occupied • 7: Configuring • 8: Wrong type • 9: Licnese duplicated • 10: Not admin user • 11: Insufficient license • 12: Server Duplicated • 13: Unknown • 14: Rec storage removed • 15: Incompatible • 16: License invalid	1 and onward

<camera_info_obj>

Key	Value	Description	Availability
id	<integer>	Camera Id.	1 and onward
status	<integer>	Camera connection status. • 0: Unknown • 1: Normal • 2: Connection fail • 3: Unauthorized	1 and onward

		• 4: Content error • 5: Resolution error • 6: Activating • 7: Stopping	
recStatus	<integer>	Camera recording status. • 0: None recording schedule • 1: Continue recording schedule • 2: Motion detect recording schedule • 3: Digital input recording schedule • 4: Digital input recording schedule • 5: Manual recording schedule • 6: External • 7: Analytics	1 and onward
occupied	<integer>	Occuppied size.	1 and onward
statusFlags	<integer>	Status flag.	1 and onward
livePort	<integer>	live port.	1 and onward
livePath	<string>	live path.	1 and onward

Example:

```
{
   "cms_sync_time": false,
   "default_license_cnt": 2,
   "cms_locked": false,
   "cookie": "",
   "camera_info": [],
   "dsm_version": "5.1-5022",
   "cam_count": 0,
   "serial_num": "14C0MON392200",
   "dp_version": "3.2-0604",
   "status": 3,
   "ss_version": "7.1-3900",
   "cms_masked": false
}
```

2.3.15.9 API Error Code

Code	Description
400	Execution failed.
401	Invalid parameter.
415	message connect failed.

2.3.16 SYNO.SurveillanceStation.CMS.SlavedsWizard

This API provides a method to save the setting of slave ds in CMS of Surveillance Station.

API Name	Version	Availability
SYNO.SurveillanceStation.CMS.SlavedsWizard	1	Surveillance Station 7.0

Method Name	Section	Availability
Save	2.3.16.1	1 and onward

2.3.16.1 Save method

Handle save slave ds

Request

Parameter	Value	Description	Availability
slavedsName	<string>	*Optional*. Name of slave Ds.	1 and onward
slavedsModel	<string>	*Optional*. Model of slave Ds.	1 and onward
slavedsPort	<integer>	*Optional*. Port of slave Ds. If not specified, the default value will be 0.	1 and onward
slavedsVersion	<string>	*Optional*. Surveillance version of slave Ds.	1 and onward
slavedsMaxCamNum	<integer>	*Optional*. Maximum number of camera of slave Ds. If not specified, the default value will be -1.	1 and onward
slavedsId	<string>	*Optional*. Id of slave Ds.	1 and onward
slavedsIP	<string>	*Optional*. IP of slave Ds.	1 and onward
slavedsEnable	<integer>	*Optional*. Is slave Ds enabled. • 0: false • 1: true If not specified, the default value will be 0.	1 and onward
slavedsCamCnt	<integer>	*Optional*. Count number of camera in slave Ds. If not specified, the default value will be -1.	1 and onward
adminUsername	<string>	*Optional*. Admin username.	1 and onward

		If not specified, the default value will be "admin" .	
adminPasswd	<string>	*Optional*. Admin password.	1 and onward
cms_locked	<boolean>	*Optional*. Prevent the changing of settings from other server. If not specified, the default value will be false .	1 and onward
cms_masked	<boolean>	*Optional*. Prevent other user to change the setting of recording server or not. If not specified, the default value will be false .	1 and onward
cms_sync_time	<boolean>	*Optional*. Is the time of recording server syncronized with host. If not specified, the default value will be false .	1 and onward

Example:

```
GET /webapi/entry.cgi?
cms_sync_time=true&slavedsPort=5000&version="1"&slavedsCamCnt=1&slavedsIP="10.13.21.16"&slaved
sName="DiskStation"&adminUsername="admin"&cms_locked=true&api="SYNO.SurveillanceStation.CMS.Sl
avedsWizard"&slavedsVersion="7.0-
3736"&slavedsEnable=1&cms_masked=true&adminPasswd="123456"&slavedsModel="DS414j"&slavedsM
axCamNum=8&slavedsId=""&method="Save"
```

Response

This method has no specific response data. It returns an empty success response if it completes without error.

2.3.16.2 API Error Code

Code	Description
400	Execution failed.
401	Invalid parameter.
415	message connect failed.

2.3.17 SYNO.SurveillanceStation.CMS.SlavedsList

This API provides a method to list the setting of slave ds in CMS of Surveillance Station.

API Name	Version	Availability
SYNO.SurveillanceStation.CMS.SlavedsList	1	Surveillance Station 8.0

Method Name	Section	Availability
Load	2.3.17.1	1 and onward

2.3.17.1 Load method

Handle Load slave ds list.

Request

Parameter	Value	Description	Availability
blNeedStatus	<boolean>	*Optional*. Get DS status or not. If false, Get enabled DS only. If not specified, the default value will be false.	1 and onward
blGetSortInfo	<boolean>	*Optional*. Get list sort info or not. If not specified, the default value will be false.	1 and onward
blRuntimeInfo	<boolean>	*Optional*. Consider “Under failover” case or not. If true, The DS under failover and in the specified mode will be filtered out. If not specified, the default value will be true.	1 and onward
slaveMode	-1 … 1	*Optional*. Load only specified mode DS. • -1: All slave mode. • 0: Recording mode only. • 1: Failover mode only. If not specified, the default value will be -1.	1 and onward
dsIds	<string>	*Optional*. The list of <DS_ID> to be queried concatenated by “,”. If not specified, this parameter will be ignored and get all DS.	1 and onward
sortInfo	<Type, Order>	*Optional*. Set sort info, blGetSortInfo must be true. Type: • id	1 and onward

		• name • ip • version Order: • asc • desc	

Example:

```
GET /webapi/entry.cgi?
api=SYNO.SurveillanceStation.CMS.SlavedsList&version=1&method=Load&blNeedStatus=true&blGetSortInfo=true&sortInfo="ip,asc"
```

Response

Key	Value	Description	Availability
slaveds	Array of <DS Object>	The list of queried slave DS.	1 and onward
sortInfo	<Type,Order>	The sort info of slave DS list.	1 and onward
total	<integer>	Total number of slave DS.	1 and onward

<DS Object> definition:

Key	Value	Description	Availability
accessToken	<string>	Access token of slaves DS.	1 and onward
cms_locked	<boolean>	Does slave DS locked or not.	1 and onward
cms_masked	<boolean>	Does slave DS masked or not.	1 and onward
connectType	0 ... 1	Connect type of slaves DS. • 0: Connect by IP or domain name. • 1: Connect by Quickconnect.	1 and onward
cookie	<string>	Cookie token of slave DS.	1 and onward
curr_cam_num	<integer>	Current number of cameras used.	1 and onward
curr_dev_num	<integer>	Current number of all device used.	1 and onward
curr_io_num	<integer>	Current number of iomodule used.	1 and onward
curr_speaker_dev_num	<integer>	Current number of speaker used.	1 and onward
curr_trans_dev_num	<integer>	Current number of transactions device used.	1 and onward
default_license	<integer>	Default license number of slaves DS.	1 and onward
dp_version	<string>	Device Pack version of slaves DS.	1 and onward
ds_model	<string>	Model name of slaves DS.	1 and onward
dsm_version	<string>	DSM version of slaves DS.	1 and onward
enable	<boolean>	Does slave DS enabled or not.	1 and onward
failoverReason	0 ... 6	Reason for failover. • 0: None • 1: Disconnected • 2: Volume crashed • 3: Volume degraded	1 and onward

		• 4: Manual • 5: Package uninstalled • 6: Package disabled	
failoverServer	<string>	Id of failover server.	1 and onward
failoverServerSts	0 … 20	Connection status of failover server. • 0: Normal • 1: Disable • 2: Unauthorized • 3: Disconnect • 4: Deleted • 5: Inaccessible • 6: Occupied • 7: Configuring • 8: Wrong type (CMS mode does not match expectations) • 9: License duplicated • 10: Not admin user • 11: Insufficient license • 12: Server duplicated • 13: Unknow • 14: Recording storage removed • 15: Incompatible • 16: License invalid • 17: Normal in one way (Only host can connect to slave) • 18: Failovered • 19: Slave mode mismatch • 20: Unpaired	1 and onward
failoverStatus	0 … 4	Failover execution status • 0: None • 1: Failovering • 2: Recovering • 3: Failover error • 4: Wait manual restore	1 and onward
failover_pair_id	<integer>	Pair ID of failover DS.	1 and onward
id	<integer>	ID of slave DS.	1 and onward
ip	<string>	IP of slave DS.	1 and onward
key_total	<integer>	The total number of licenses	1 and onward
key_used	<integer>	The used number of licenses	1 and onward
max_cam_num	<integer>	Maximum number of cameras can be set.	1 and onward
max_io_num	<integer>	Maximum number of iomodules can be set.	1 and onward
max_speaker_dev_num	<integer>	Maximum number of speakers can be set.	1 and onward
max_trans_dev_num	<integer>	Maximum number of transactinos devices can be set.	1 and onward
name	<string>	Name of slave DS.	1 and onward
pkgStatus	0 … 12	Package execution status • 0: Unknow • 1: Running • 2: Stop	1 and onward

		• 3: Installing • 4: Not installed • 5: Upgrading • 6: Repairing • 7: Uninstalling • 8: Starting • 9: Stopping • 10: Need to upgrade • 11: Broken • 12: Unavailable	
port	<integer>	Port of slave DS.	1 and onward
quickConnectId	<string>	QuickConnect Id of slave DS.	1 and onward
recoverProgress	<integer>	Recovering progress.	1 and onward
serial_num	<string>	Serial number of slave DS.	1 and onward
slave_mode	-1 … 1	Slave mode of slave DS. • -1: All • 0: Recording • 1: Failover	1 and onward
ss_version	<string>	Surveillance Station version of slave DS.	1 and onward
status	0 … 20	Connection status of slave DS. • 0: Normal • 1: Disable • 2: Unauthorized • 3: Disconnect • 4: Deleted • 5: Inaccessible • 6: Occupied • 7: Configuring • 8: Wrong type (CMS mode does not match expectations) • 9: License duplicated • 10: Not admin user • 11: Insufficient license • 12: Server duplicated • 13: Unknow • 14: Recording storage removed • 15: Incompatible • 16: License invalid • 17: Normal in one way (Only host can connect to slave) • 18: Failovered • 19: Slave mode mismatch • 20: Unpaired	1 and onward
status_flags	0,1,2,4,16,32	Execution status of slave DS. • 0: None • 1: Enabling • 2: Disabling • 4: Deleting • 8: Locking • 16: Unlocking	1 and onward

		• 32: Configuring	
useHttps	<boolean>	Does slave DS used https or not.	1 and onward
volSpace	<double>	Volume space of slave DS.	1 and onward
volStatus	0 … 2	Volume status of slave DS. • 0: Normal • 1: Degrade • 2: Crash	1 and onward

Example:


```
{
   "data": {
      "slaveds": [
         {
            "accessToken": "y2ogsFzTM5DCQ1680O7N631502",
            "cms_locked": true,
            "cms_masked": false,
            "connectType": 0,
            "cookie": "",
            "curr_cam_num": 1,
            "curr_dev_num": 3,
            "curr_io_num": 0,
            "curr_speaker_dev_num": 1,
            "curr_trans_dev_num": 1,
            "default_license": 2,
            "dp_version": "5.7.0-2602",
            "ds_model": "DS716+II",
            "dsm_version": "6.2-23739",
            "enable": false,
            "failoverReason": 0,
            "failoverServer": "",
            "failoverServerSts": 0,
            "failoverStatus": 0,
            "failover_pair_id": -1,
            "id": 3,
            "ip": "10.13.21.110",
            "key_total": 2,
            "key_used": 0,
            "max_cam_num": 40,
            "max_io_num": 40,
            "max_speaker_dev_num": 40,
            "max_trans_dev_num": 40,
            "name": "Blake716",
            "pkgStatus": 2,
            "port": 5000,
            "quickConnectId": "",
            "recoverProgress": 0,
            "serial_num": "1680O7N631502",
            "slave_mode": 0,
            "ss_version": "8.2.0-5705",
```



```
            "status": 1,
            "status_flags": 0,
            "useHttps": false,
            "volSpace": 889.826252,
            "volStatus": 0
        },
        {
            "accessToken": "lgojFoTfgr2xk1680NEN426804",
            "cms_locked": true,
            "cms_masked": false,
            "connectType": 0,
            "cookie": "id=HdAclolPThLeo",
            "curr_cam_num": 0,
            "curr_dev_num": 0,
            "curr_io_num": 0,
            "curr_speaker_dev_num": 0,
            "curr_trans_dev_num": 0,
            "default_license": 2,
            "dp_version": "5.7.0-2602",
            "ds_model": "DS216play",
            "dsm_version": "6.1.6-15266",
            "enable": true,
            "failoverReason": 0,
            "failoverServer": "",
            "failoverServerSts": 0,
            "failoverStatus": 0,
            "failover_pair_id": -1,
            "id": 4,
            "ip": "10.13.21.111",
            "key_total": 2,
            "key_used": 0,
            "max_cam_num": 15,
            "max_io_num": 15,
            "max_speaker_dev_num": 15,
            "max_trans_dev_num": 15,
            "name": "blake216",
            "pkgStatus": 1,
            "port": 5000,
            "quickConnectId": "",
            "recoverProgress": 0,
            "serial_num": "1680NEN426804",
            "slave_mode": 0,
            "ss_version": "8.2.0-5706",
            "status": 0,
            "status_flags": 0,
            "useHttps": false,
            "volSpace": 5540.297660827637,
            "volStatus": 0
        }
    ],
    "total": 2
```



```
    },
    "success": true
}
```

2.3.17.2 API Error Code

Code	Description
400	Execution failed.
401	Invalid parameter.
415	message connect failed.

2.3.18 SYNO.SurveillanceStation.Log

This API provides several methods to access log information of Surveillance Station. (Ex: get/clear log information detail, count log information)

API Name	Version	Availability
SYNO.SurveillanceStation.Log	1	Surveillance Station 7.0

Method Name	Section	Availability
CountByCategory	2.3.18.1	1 and onward
Clear	2.3.18.2	1 and onward
List	2.3.18.3	1 and onward
GetSetting	2.3.18.4	1 and onward
SetSetting	2.3.18.5	1 and onward

2.3.18.1 CountByCategory method

Get the count number of log in category.

Request

Parameter	Value	Description	Availability
slavedsName	<string>	*Optional*. Name of slave Ds.	1 and onward
start	<integer>	*Optional*. Value of offset in SQL. If not specified, the default value will be 0 .	1 and onward
limit	<integer>	*Optional*. Value of limit in SQL. If not specified, the default value will be 0 .	1 and onward
level	<string>	*Optional*. Type of log. • 0: None • 1: Information • 2: Warning • 3: Error If not specified, the default value will be “0”.	1 and onward
filterCamera	<string>	*Optional*. Apply camera filter or not.	1 and onward
cameraIds	<string>	*Optional*. Id list of camera.	1 and onward

from	<integer>	*Optional*. From time of filter. If not specified, the default value will be 0.	1 and onward
to	<integer>	*Optional*. To time of filter. If not specified, the default value will be 0.	1 and onward
keyword	<string>	*Optional*. Keyword.	1 and onward
keywordDsId	<string>	*Optional*. Keyword of DS id.	1 and onward
time2String	<string>	*Optional*. Decide the format of time. If not specified, the default value will be “yes”.	1 and onward
dsId	<integer>	*Optional*. Id of DS. If not specified, the default value will be -1.	1 and onward
srcType	<integer>	*Optional*. Source type of log. • 0: None • 1: Local • 2: Slaveds • 4: Camera group If not specified, the default value will be 0.	1 and onward
timezoneOffset	<integer>	*Optional*. Offset of time zone. If not specified, the default value will be 0.	1 and onward

Example:

```
GET /webapi/entry.cgi?
from=0&keywordDsId=""&keyword=""&level=""&cameraIds=""&method="CountByCategory"&to=0&api="
SYNO.SurveillanceStation.Log"&limit=0&srcType=0&version="1"&filterCamera="false"&dsId=-
1&start=0&timezoneOffset=480&time2String="no"
```

Response

Key	Value	Description	Availability
date	<day_cnt>	Number of log of each day. -1: Total number count. yyyy/mm/dd: Number count of yyyy/mm/dd. (Ex:1990/05/09)	1 and onward
log_type	<type_cnt>	Number of log of each log type.	1 and onward

		• -1: Total number count. • 1: Number count of Information type. • 2: Number count of Warning type. • 3: Number count of Error type.	
server	<server_cnt>	Number of log of each server. • -1: Total number count. • X: Number count of server with X Id.	1 and onward
total	integer	Total number of log.	1 and onward

<day_cnt> definition:

Key	Value	Description	Availability
-1	<integer>	Total number count.	1 and onward
yyyy/mm/dd	<time_cnt>	Number count of log of yyyy/mm/dd. (Ex:1990/05/09)	1 and onward

<time_cnt> definition:

Key	Value	Description	Availability
-1	<integer>	Total number count.	1 and onward
am	<integer>	Number count of log in am.	1 and onward
pm	<integer>	Number count of log in pm.	1 and onward

<type_cnt> definition:

Key	Value	Description	Availability
-1	<integer>	Total number count.	1 and onward
1	<integer>	Number count of Information type.	1 and onward
2	<integer>	Number count of Warning type.	1 and onward
3	<integer>	Number count of Error type.	1 and onward

<server_cnt> definition:

Key	Value	Description	Availability
-1	<integer>	Total number count.	1 and onward
X	<integer>	Number count of log with X server Id.	1 and onward

Example:

```
{
   "date": {
      "-1": 2,
      "yyyy/mm/dd": {
         "am": 0,
         "-1": 2,
         "pm": 2
      }
   },
   "total": 2,
```



```
    "log_type": {
      "1": 2,
      "3": 0,
      "2": 0,
      "-1": 2514
    },
    "server": {
      "X": 2,
      "-1": 2
    }
}
```

2.3.18.2 Clear method

Clear the selected logs.

Request

Parameter	Value	Description	Availability
blClearAll	<boolean>	*Optional*. Clear all log or not. If not specified, the default value will be true.	1 and onward
level	<integer>	*Optional*. Type of log. • 0: None • 1: Information • 2: Warning • 3: Error If not specified, the default value will be 0.	1 and onward
dsId	<integer>	*Optional*. Id of DS. If not specified, the default value will be -1.	1 and onward
srcType	<integer>	*Optional*. Source type of log. • 0: None • 1: Local • 2: Slaveds • 4: Camera group If not specified, the default value will be 0.	1 and onward
filterCamera	<string>	*Optional*. Apply camera filter or not.	1 and onward
cameraIds	<string>	*Optional*. Id list of camera.	1 and onward

from	<integer>	*Optional*. From time of filter. If not specified, the default value will be 0.	1 and onward
to	<integer>	*Optional*. To time of filter. If not specified, the default value will be 0.	1 and onward
keyword	<string>	*Optional*. Keyword.	1 and onward
keywordDsId	<string>	*Optional*. Keyword of DS id.	1 and onward
timezoneOffset	<integer>	*Optional*. Offset of time zone. If not specified, the default value will be 0.	1 and onward

Example:

```
GET /webapi/entry.cgi?
from=0&version="1"&keyword=""&level=3&cameraIds=""&to=0&api="SYNO.SurveillanceStation.Log"&blClearAll=false&srcType=0&filterCamera="false"&dsId=-1&method="Clear"&keywordDsId=""
```

Response

Key	Value	Description	Availability
success	<boolean>	Success or not.	1 and onward

Example:

```
{
   "success": true
}
```

2.3.18.3 List method

Get the detail information of log.

Request

Parameter	Value	Description	Availability
start	<integer>	*Optional*. Value of offset in SQL. If not specified, the default value will be 0.	1 and onward
limit	<integer>	*Optional*. Value of limit in SQL. If not specified, the default value will be 0.	1 and onward

level	<string>	*Optional*. Type of log. • 0: None • 1: Information • 2: Warning • 3: Error If not specified, the default value will be “0”.	1 and onward
filterCamera	<string>	*Optional*. Apply camera filter or not.	1 and onward
cameraIds	<string>	*Optional*. Id list of camera.	1 and onward
from	<integer>	*Optional*. From time of filter. If not specified, the default value will be 0.	1 and onward
to	<integer>	*Optional*. To time of filter. If not specified, the default value will be 0.	1 and onward
keyword	<string>	*Optional*. Keyword.	1 and onward
keywordDsId	<string>	*Optional*. Keyword of DS id.	1 and onward
time2String	<string>	*Optional*. Decide the format of time. If not specified, the default value will be “yes”.	1 and onward
dsId	<integer>	*Optional*. Id of DS. If not specified, the default value will be -1.	1 and onward
srcType	<integer>	*Optional*. Source type of log. • 0: None • 1: Local • 2: Slaveds • 4: Camera group If not specified, the default value will be 0.	1 and onward
all	<boolean>	*Optional*. List all log or not.	1 and onward
blIncludeRecCnt	<string>	*Optional*. Include recent count or not.	1 and onward
blIncludeAuInfo	<string>	*Optional*. Include audio information or not.	1 and onward

Example:

```
GET /webapi/entry.cgi?
all=false&from=0&version="1"&keyword=""&level=""&cameraIds=""&blIncludeRecCnt=""&method="List"
&api="SYNO.SurveillanceStation.Log"&to=0&blIncludeAuInfo=""&limit=0&srcType=0&filterCamera="false"
&dsId=-1&start=0&keywordDsId=""&time2String="no"
```

Response

Key	Value	Description	Availability
log	Array of <log_detail>	Information detail of log.	1 and onward
recCntData	<rec_cnt>	Recent count of log information.	1 and onward
success	<boolean>	Success or not.	1 and onward
timestamp	<string>	Time stamp.	1 and onward
total	<integer>	Total number of log.	1 and onward

<log_detail> definition:

Key	Value	Description	Availability
desc	<string>	Description of log.	1 and onward
dsId	<integer>	Id of DS.	1 and onward
id	<string>	Id of log.	1 and onward
time	<integer>	Time of log.	1 and onward
pm	<integer>	Type of log.	1 and onward
pm	<integer>	Update time of log.	1 and onward

<rec_cnt> definition:

Key	Value	Description	Availability
date	<day_cnt>	Number of log of each day. • -1: Total number count. • yyyy/mm/dd: Number count of yyyy/mm/dd. (Ex:1990/05/09)	1 and onward
log_type	<type_cnt>	Number of log of each log type. • -1: Total number count. • 1: Number count of Information type. • 2: Number count of Warning type. • 3: Number count of Error type.	1 and onward
server	<server_cnt>	Number of log of each server. • -1: Total number count. • X: Number count of server with X Id.	1 and onward

total	integer	Total number of log.	1 and onward

<day_cnt> definition:

Key	Value	Description	Availability
-1	<integer>	Total number count.	1 and onward
yyyy/mm/dd	<time_cnt>	Number count of log of yyyy/mm/dd. (Ex:1990/05/09)	1 and onward

<time_cnt> definition:

Key	Value	Description	Availability
-1	<integer>	Total number count.	1 and onward
am	<integer>	Number count of log in am.	1 and onward
pm	<integer>	Number count of log in pm.	1 and onward

<type_cnt> definition:

Key	Value	Description	Availability
-1	<integer>	Total number count.	1 and onward
1	<integer>	Number count of Information type.	1 and onward
2	<integer>	Number count of Warning type.	1 and onward
3	<integer>	Number count of Error type.	1 and onward

<server_cnt> definition:

Key	Value	Description	Availability
-1	<integer>	Total number count.	1 and onward
X	<integer>	Number count of log with X server Id.	1 and onward

Example:


```
{
   "timestamp": "1423806343",
   "total": 2514,
   "log": [
      {
         "update_time": 1423801204,
         "dsId": 0,
         "time": 1423801204,
         "type": 1,
         "id": "0_5932",
         "desc": "Recordings of camera [FE8172-001] reached size limit. [52] events was deleted."
      }
   ],
   "success": true,
   "recCntData": {
      "date": {
         "-1": 2,
         "yyyy/mm/dd": {
```



```
            "am": 0,
            "-1": 2,
            "pm": 2
          }
      },
      "total": 2,
      "log_type": {
          "1": 2,
          "3": 0,
          "2": 0,
          "-1": 2514
      },
      "server": {
          "X": 2,
          "-1": 2
      }
   }
}
```

2.3.18.4 GetSetting method

Get advanced setting of logs.

Request

No parameter is required.

Example:

```
http://192.168.1.1:5000/webapi/entry.cgi?
api="SYNO.SurveillanceStation.Log"&version="1"&method="GetSetting"
```

Response

Key	Value	Description	Availability
data	Array of <log_advanced_setting>	The list of all log advanced setting.	1 and onward
success	<boolean>	Get setting successly or not.	1 and onward

<log_advanced_setting> definition:

Key	Value	Description	Availability
SSLogType	<integer>	Type of log.	1 and onward
enable	<integer>	Enable of log. If the value is 1, the corrsponding log type is recorded and vice versa.	1 and onward
logGrp	<integer>	Group of log.	1 and onward
logTypeKey	<string>	Key of log.	1 and onward

Example:

```
{
   "data":[
      {
         "SSLogType":321912835,
         "enable":1,
         "logGrp":0,
         "logTypeKey":"msg_started"
      }, … ,{
         "SSLogType":321913037,
         "enable":1,
         "logGrp":2,
         "logTypeKey":"msg_alert_rotate_size_limit"
      }
   ],
   "success":true
}
```

2.3.18.5 SetSetting method

Set advanced setting of logs.

Request

Key	Value	Description	Availability
data	Array of <log_advanced_setting>	*Required.* The list of log advanced setting.	1 and onward

<log_advanced_setting> definition:

Key	Value	Description	Availability
SSLogType	<integer>	*Required.* Type of log.	1 and onward
enable	<integer>	*Required.* Enable of log. If the value is 1, the corrsponding log type is recorded and vice versa.	1 and onward

Example:

```
http://192.168.1.1:5000/webapi/entry.cgi?
api=SYNO.SurveillanceStation.Log&method=SetSetting&version=1&data=[{"SSLogType":321912835,"enabl
e":1},{"SSLogType":321912836,"enable":0}]
```

Response

This method has no specific response data. It returns an empty success response if it completes without error.

2.3.18.6 API Error Code

Code	Description
400	Execution failed.

2.3.19 SYNO.SurveillanceStation.License

This API provides a method to acquire information of license in Surveillance Station and check if the number of license is sufficient or not.

API Name	Version	Availability
SYNO.SurveillanceStation.License	1	Surveillance Station 7.0

Method Name	Section	Availability
Load	2.3.19.1	1 and onward
CheckQuota	2.3.19.2	1 and onward

2.3.19.1 Load method

Load license data.

Request

Parameter	Value	Description	Availability
num_only	<integer>	*Optional*. Load the detail info of every License or not. • 0: false • 1: true If not specified, the default value will be 0.	1 and onward

Example:

```
GET /webapi/entry.cgi?
api="SYNO.SurveillanceStation.License"&num_only=1&version="1"&method="Load"
```

Response

Key	Value	Description	Availability
blCMSLosthost	<boolean>	Is CMS host lost.	1 and onward
keyPostponedCnt	<integer>	Number of postponed key.	1 and onward
key_max	<integer>	Maximum IP camera number in NAS.	1 and onward
key_total	<integer>	Number of total license.	1 and onward
key_used	<integer>	Number of used license.	1 and onward
license_num	<integer>	Number of license key.	1 and onward
localAcsCnt	<integer>	Number of AXIS control door.	1 and onward
localCamCnt	<integer>	Number of Acting Camera.	1 and onward
localIOCnt	<integer>	Number of IO module.	1 and onward

localKeyTotal	<integer>	Number of license in this NAS.	1 and onward
localSpeakerCnt	<integer>	Number of IP speaker.	1 and onward
localTransCnt	<integer>	Number of transaction.	1 and onward
slaveDsCnt	<integer>	Number of slave DS.	1 and onward
success	<boolean>	Load successly or not.	1 and onward

Example:

```
{
  "data" : {
    "blCMSLosthost" : true,
    "keyPostponedCnt" : 0,
    "key_max" : 12,
    "key_total" : 4,
    "key_used" : 0,
    "license_num" : 1,
    "localAcsCnt" : 0,
    "localCamCnt" : 0,
    "localIOCnt" : 0,
    "localKeyTotal" : 4,
    "localSpeakerCnt" : 0,
    "localTransCnt" : 0,
    "slaveDsCnt" : 0,
    "success" : true
  },
  "httpd_restart" : false,
  "success" : true
}
```

2.3.19.2 CheckQuota method

Check the quota of license.

Request

Parameter	Value	Description	Availability
camList	Array of <CamInfo>	*Optional*. List of camera on the server.	1 and onward
camServerId	<integer>	*Optional*. Camera Server Id.	1 and onward

<CamInfo> definition:

Key	Value	Description	Availability
ip	<string>	IP of the camera.	1 and onward
port	<integer>	Port of the camera.	1 and onward

vendor	<string>	Vendor of the camera.	1 and onward
model	<string>	Model of the camera.	1 and onward

Example:

```
GET /webapi/entry.cgi?camServerId=1&camList=[{"ip": "10.13.22.141", "model": "DCS-3110", "vendor": "D-Link", "port": 80}]&api="SYNO.SurveillanceStation.License"&version="1"&method="CheckQuota"
```

Response

This method has no specific response data. It returns an empty success response if it completes without error.

2.3.19.3 API Error Code

Code	Description
400	Execution failed.
407	CMS closed.
412	Need to add license.
413	Reach the maximum of platform.

2.3.20 SYNO.SurveillanceStation.Stream

This API provides methods to get Live View or Event video stream.

API Name	Version	Availability
SYNO.SurveillanceStation.Stream	1	Surveillance Station 7.0

Method Name	Section	Availability
EventStream	2.3.20.1	1 and onward

2.3.20.1 EventStream method

Get HTTP video stream of the specific recording event

Request

Parameter	Value	Description	Availability
writeHeader	<boolean>	*Optional*. Write Header or not. If not specified, the default value will be true.	1 and onward
analyevent	<boolean>	*Optional*. Is it an analytics event or not. If not specified, the default value will be false.	1 and onward
mountId	<integer>	*Optional*. Mount Id. If not specified, the default value will be 0.	1 and onward

Example:

```
GET /webapi/entry.cgi?
version="1"&writeHeader=true&mountId=0&api="SYNO.SurveillanceStation.Stream"&analyevent=false&method="EventStream"
```

Response

This method has no specific response data. It returns an empty success response if it completes without error.

2.3.20.2 API Error Code

Code	Description
400	Execution failed.

2.3.21 SYNO.SurveillanceStation.ActionRule

This API provides a method to acquire information of ActionRule in Surveillance Station. (Ex: Save/List/Delete, Enable/Disable, DeleteHistory/ListHistory/DownloadHistory)

API Name	Version	Availability
SYNO.SurveillanceStation.ActionRule	1	Surveillance Station 7.0

Method Name	Section	Availability
Save	2.3.21.1	1 and onward
DownloadHistory	2.3.21.2	1 and onward
SendData2Player	2.3.21.3	1 and onward
DeleteHistory	2.3.21.4	1 and onward
List	2.3.21.5	1 and onward
Disable	2.3.21.6	1 and onward
Enable	2.3.21.7	1 and onward
ListHistory	2.3.21.8	1 and onward
Delete	2.3.21.9	1 and onward

2.3.21.1 Save method

Save the action rule.

Request

Parameter	Value	Description	Availability
id	<integer>	*Required.* Unique rule id.	1 and onward
name	<string>	*Required.* The name of the rule.	1 and onward
ruleType	<integer>	*Required.* The rule type. • 0: Triggered. • 1: Scheduled.	1 and onward
actType	<integer>	*Required.* The action type. • 0: Interruptible. • 1: Uninterruptible.	1 and onward
evtSrc	<integer>	*Conditional. When 'ruleType' is equal to 0,* The event source.	1 and onward

		• 0: Camera. • 1: External event. • 2: Door. • 3: Access controller.	
evtDsId	<integer>	*Conditional. When (not 'evtSrc' is equal to 1),* The server id of event device.	1 and onward
evtDevId	<integer>	*Conditional. When (not 'evtSrc' is equal to 1),* The device id of event device.	1 and onward
evtId	<integer>	*Required.* When the event source is external event, this is the event id. Otherwise, • 0: None. • 1: Camera enabled. • 2: Camera disabled. • 3. Camera connection lost. • 4. Camera resumed. • 5. Camera motion detected. • 6. Camera alarm detected. • 7. Camera tampering detected. • 8. Camera audio detected. • 9. Door access granted. • 10. Door access denied. • 11. Door alarm detected. • 12. Door tampering detected. • 13. Controller alarm logged. • 14. Controller casing open.	1 and onward
evtItem	<integer>	*Conditional.* When the camera support per alarm detection, can choose the alarm channel. -1: All alarm channel.	1 and onward
evtMinIntvl	<integer>	*Conditional.* The minimum interval to triggered rule. It would be needed when the event is detected for many times in the short time.	1 and onward
Actions	Array of <Action> Object	*Required* The specified Action to this rule.	1 and onward
actSchedule	<string>	*Required.* The schedule of the rule to execute.	1 and onward

<Action> Definition

Parameter	Value	Description	Availability
Id	<integer>	*Required* The action id	1 and onward
actSrc	<integer>	*Required.* The action source. • 0: Camera. • 1: External command. • 4: Surveillance Web Client	1 and onward
actDsId	<integer>	*Conditional.* The server id of action device.	1 and onward
actDevId	<integer>	*Conditional.* The device id of action device.	1 and onward
actId	<integer>	*Required.* • 0: None. • 1: Camera enabled. • 2: Camera disabled. • 3. Camera start recording. • 4. Camera take snapshot. • 5. Camera move to preset. • 6. Camera patrol. • 7. Camera auto pan. • 8. Camera object tracking. • 9. Camera audio output. • 10. Camera digital output. • 11. Surveillance Web Client audio output.	1 and onward
actTimes	<integer>	*Conditional. When (('actId' is equal to 6 and 'ruleType' is equal to 1) or ('actId' is equal to 4 and 'ruleType' is equal to 0) or ('actId' is equal to 6 and 'ruleType' is equal to 0) or ('actId' is equal to 9 and 'ruleType' is equal to 0) or ('actId' is equal to 11 and 'ruleType' is equal to 0)), Value should be between (1, 10)* The executed times of the action.	1 and onward
actTimeUnit	<integer>	*Required.* The time unit of the time duration. • -2: Forever.	1 and onward

		• 0: None. • 1: Second. • 2: Minute. • 3: Hour.	
actTimeDur	<integer>	*Required.* The duration or interval of the executed action.	1 and onward
actItemId	<integer>	*Conditional. When ('actId' is equal to 5 or 'actId' is equal to 6 or 'actId' is equal to 9 or 'actId' is equal to 10 or 'actId' is equal to 11)* It might be preset position, patrol id, digital output channel, audio pattern id.	1 and onward
actRetPos	<integer>	*Conditional. When ('actId' is equal to 5 or 'actId' is equal to 6 or 'actId' is equal to 7 or 'actId' is equal to 8)* The return position after doing action related to PTZ. • -2: None. • -1: Home	1 and onward
extUrl	<string>	*Conditional. When 'actSrc' is equal to 1,* The url command to be executed.	1 and onward
userName	<string>	*Conditional. When 'actSrc' is equal to 1,* The user name of the device to execute external command.	1 and onward
password	<string>	*Conditional. When 'actSrc' is equal to 1,* The password of the device to execute external command.	1 and onward

Example:

```
GET /webapi/entry.cgi?
multiRuleId=1&name="1231"&ruleType=0&actType=0&evtSrc=1&evtDsId=0&evtDevId=-
1&evtId=1&evtItem=-1&evtMinIntvl=10&actions=%5B
%7B"id"%3A1,"actSrc"%3A4,"actDsId"%3A0,"actDevId"%3A0,"actId"%3A11,"actItemId"%
3A15,"actTimes"%3A1,"actTimeUnit"%3A1,"actTimeDur"%3A"10","actRetPos"%3A-
1,"extUrl"%3A"","userName"%3A"","password"%3A""%7D
%5D&actSchedule="11111111111111111111111111111111111111111111111111111111111111
1111111111111111111111111111111111111111111111111111111111111111111111111111111
1111111111111111111111111111111111111111111111111111111111111111111111111111111
1111111111111111111111111111111111111111111111111111111111111111111111111111111
1111111111111111111111111111111111111"&api=SYNO.SurveillanceStation.ActionRule&
method=Save&version=2
```


Response

This method has no specific response data. It returns an empty success response if it completes without error.

2.3.21.2 DownloadHistory method

Download action rule histories.

Request

No parameter is required.

Example:

```
GET /webapi/entry.cgi?
api="SYNO.SurveillanceStation.ActionRule"&version="1"&method="DownloadHistory"
```

Response

This method has no specific response data. It returns an empty success response if it completes without error.

2.3.21.3 SendData2Player method

This method is called by player to build the connection of Surveillance Web Client. It will output audio data through http multiple response. The audio data format is 2 channel, 8000Hz, Sample size 16, Sample type signed integer, byte order littleEndian, u-law.

Request

No parameter is required.

Example:

```
GET /webapi/entry.cgi?
api="SYNO.SurveillanceStation.ActionRule"&version="1"&method="SendData2Player"
```

Response

Response is raw data

2.3.21.4 DeleteHistory method

Delete all histories of action rule.

Request

Parameter	Value	Description	Availability
idList	<string>	*Required.* The list of rule id to be queried concatenated by ",". -1 can delete all histories.	1 and onward

Example:

```
GET /webapi/entry.cgi?
api="SYNO.SurveillanceStation.ActionRule"&idList="1,2,3"&version="1"&method="DeleteHistory"
```

Response

This method has no specific response data. It returns an empty success response if it completes without error.

2.3.21.5 List method

List action rules.

Request

Parameter	Value	Description	Availability
Start	<integer>	*Optional.* The start to be shifted in the total result. If not specified, the default value will be 0.	1 and onward
limit	<integer>	*Optional.* Number of action rules to be returned. If not specified, return rules to the end of rule list.	1 and onward

Example:

```
GET /webapi/entry.cgi?
start=0&api="SYNO.SurveillanceStation.ActionRule"&limit=0&version="1"&method="List"
```

Response

Key	Value	Description	Availability
actRule	Array of <ActionRule>	The list of action rule.	1 and onward
total	<integer>	The total number of rules.	1 and onward

Example:

```
{
   "actRule": [
      {
         "ruleType": 0,
```

```
            "extUrl": "",
            "actDevName": "axis p3384",
            "evtDevName": "axis p3384",
            "actType": 0,
            "id": 82,
            "actId": 9,
            "actSchedule":
"111111111111111111111111111111111111111111111111111111111111111111111111111111
1111111111111111111111111111111111111111111111111111111111111111111111111111111
1111111111111111111111111111111111111111111111111111111111111111111111111111111
1111111111111111111111111111111111111111111111111111111111111111111111111",
            "actDevId": 63,
            "actTimes": 1,
            "evtId": 8,
            "actRetItem": {
                "id": -1,
                "name": ""
            },
            "status": 2,
            "userName": "",
            "actTimeDur": 1,
            "actDsId": 0,
            "evtSrc": 0,
            "password": "",
            "actTimeUnit": 1,
            "evtDsId": 0,
            "name": "p3384 audio detected p3384 audio output",
            "actItem": {
                "id": 20,
                "name": "syno1"
            },
            "actSrc": 0,
            "evtDevId": 63,
            "evtItem": -1
        }
    ],
    "total": 1
}
```


2.3.21.6 Disable method

Disable action rules.

Request

Parameter	Value	Description	Availability
idList	<string>	*Required.* The list of rule id to be queried concatenated by ","	1 and onward

Example:

```
GET /webapi/entry.cgi?
api="SYNO.SurveillanceStation.ActionRule"&idList="1,2"&version="1"&method="Disable"
```

Response

This method has no specific response data. It returns an empty success response if it completes without error.

2.3.21.7 Enable method

Enable action rules.

Request

Parameter	Value	Description	Availability
idList	<string>	*Required.* The list of rule id to be queried concatenated by ","	1 and onward

Example:

```
GET /webapi/entry.cgi?
api="SYNO.SurveillanceStation.ActionRule"&idList="1,2"&version="1"&method="Enable"
```

Response

This method has no specific response data. It returns an empty success response if it completes without error.

2.3.21.8 ListHistory method

List all histories of action rule.

Request

Parameter	Value	Description	Availability
start	<integer>	*Required.* The start to be shifted in the total result. If not specified, the default value will be 0.	1 and onward
limit	<integer>	*Required.* Number of histories to be returned. If not specified, return histories to the end of history list.	

Example: