

ServerManager
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ServerManager
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1. OVERVIEW

1.1. Introduction

This document describes how to use the ServerManager module to get/set system parameters or status for your server.

In old type of server, we use the ServerUtl module to do it. But in new type of servers, they have a brand new parameter retrieving system. So we need different way to get/set them and it is the goal of the ServerManager.

Furthermore the communicate way with server is improved. It become more efficient and more resource saving.

The ServerManager is the module to integrate new module and ServerUtl. It wraps two different style of server control interface as one. The users do not need to know which module supports which models. The single and simple interface provides the users an easy way to control the server.

It includes get/set system parameters, get/set DIDO, send PTZ commands and read/write serial port. To use the ServerManager component, user should include "ControlCommon. h" and "ServerManager.h" in their application.

1.2. File Structure

FILE	DESCRIPTION
doc\VNDP_ServerManager_API.doc	This manual
lib\d_ServerManager.lib	The dynamic linking library
lib\NetScheduler.dll	The dynamic runtime library
lib\ServerController.dll	The dynamic runtime library
lib\ServerControllerLoader.dll	The dynamic runtime library
lib\ServerManager.dll	The dynamic runtime library
lib\ServerUtilityLoader.dll	The dynamic runtime library
lib\ServerUtl.dll	The dynamic runtime library
lib\SrvDepResource.dll	The dynamic runtime library
inc\ControlCommon.h	Common definition file
inc\ServerManager.h	ServerManager Header file
inc\ServerManagerError.h	ServerManager error code definition

2. PROGRAMMER'S GUIDE



2.1. Using ServerChannel Module

Create an Access to the Camera Server

Before controlling the camera server, you must first gain the access. Call ServerManager_Initial() to get the ServerManager control handle and specify the maximum device number that it can control.

After get the control handle, you can use this handle to create device instance by calling ServerManager_CreateDevice. Then, you can set the property to the created device instance by call ServerManager_SetDeviceProperty().

Finally, calling ServerManager_OpenDevice() or ServerManager_OpenDeviceBlock() to gain the access to the camera server.

After the above, you can start to get/set system parameters, get/set DIDO, send PTZ commands and read/write serial port.

3. Sample Code



3.1. Get/Set Network Information

DESCRIPTION

Create a device and get network information.

SAMPLE CODE

STEP 1. Initial ServerManager and Create a Device

STEP 2. Set Device Property

```
TSRVMNGR_DEV_PROPERTY tDevProperty = {0};
strcpy(tDevProperty.tServerProperty.szHost, "192.168.1.100");
strcpy(tDevProperty.tServerProperty.szUserName, "root");
strcpy(tDevProperty.tServerProperty.szPassword, "123");
tDevProperty.tServerProperty.dwHttpPort = 80;
tDevProperty.tServerProperty.dwTimeout = 30000;

// Update device property
```

ServerManager_SetDeviceProperty(hDevice, &tDevProperty);

STEP 3. Gain an Access to the Server

```
// Open device (block mode)
```

// param lpszModelName The char pointer to receive the retrieved model name

// param dwMaxSize The maximum size of model name

char szModel[MAX_PATH + 1] = {0};

ServerManager_OpenDeviceBlock(hDevice, szModel, MAX_PATH);

STEP 4. Get Network Information, ex. Rtsp Port

```
char szValue[MAX_PATH + 1] = \{0\};
```

DWORD dwBufSize = MAX PATH;

// param pszName The pointer to the name of the key you want to get the value.

// param pdwValueSize The pointer to the DWORD to indicate the size of buffer.

// After the function returned, it will be filled with the length of value.

ServerManager_GetValueByName(hDevice, "network_rtsp_port", szValue, &dwBufSize);

STEP 5. Set Network Information, ex. Rtsp Port

```
// Set Network Information : ex. Set Server Rtsp port
```

// param pszName The pointer to the name of the key you want to update the value.

// param pszValue The pointer to the buffer which contain the value.

// param bMustExist The key must exist or not.

ServerManager_SetValueByName(hDevice, "network_rtsp_port", "554", TRUE);

STEP 6. Update the Local Change to the Remote Server

ServerManager UpdateRemoteConfigBlock(hDevice);

STEP 7. Delete Device and Release ServerManager

```
ServerManager DeleteDevice(&hDevice);
```

ServerManager_Release(&hSrvMgr);

TIPS

ServerManager_GetValueByName()/ServerManager_SetValueByName() function is geting/seting the local information that retrieved by ServerManager_OpenDeviceBlock.If you want to update the local changes to the camera server, you must call ServerManager_UpdateRemoteConfigBlock() or ServerManager_UpdateRemoteConfig().

The key name can be retrievaled from the server by send HTTP request "/cgi-bin/admin/

getparam.cgi", or you can call ServerManager_GetNameList() and input "" to the second parameter and it will return all key names.

You can refer to the SDK package for full sample code.



3.2. Send PTZ Command

DESCRIPTION

Create a device and send a PTZ command.

SAMPLE CODE

STEP 1. Initial ServerManager and Create a Device

This code is similar to the above

STEP 2. Set Device Property

This code is similar to the above

STEP 3. Gain an Access to the Server

This code is similar to the above

STEP 4. Send a PTZ Command

// Send PTZ command to server (blocking)

// starting as 1. Otherwise it will be ignored.

// Param ePtzCommand The ESRVCTRL_PTZ_COMMAND.

// Param pszExtraCmd The extra information for certain PTZ command.

// Param bWaitRes The boolean value to wait for the server's response or not.

ServerManager_SendPTZCommandBlock(hDevice, 1, eSrvCtrlPTZMoveDown, "", TRUE);

STEP 5. Delete Device and Release ServerManager

This code is similar to the above

MPS

You can refer to the SDK package for full sample code.

3.3. Get/Set DO

STEP 1. Initial ServerManager and Create a Device

This code is similar to the above

STEP 2. Set Device Property

This code is similar to the above

STEP 3. Gain an Access to the Server

This code is similar to the above

STEP 4. Get DO Information from Server

ESrvCtrlDiDoLevel aeDOStatus[CONST_MAX_DIDO_NUM];

DWORD dwDoNum = CONST_MAX_DIDO_NUM;

// Get DO status

// Param peDOStatus The pointer to a ESrvCtrlDiDoLevel array.

// Param pdwMaxDONum The pointer to a DWORD to represent the size value of DO

// status array buffer. And the module will replace it with the actual size value

// of DO status array. If the actual size is more than *pdwMaxDINum,

// the module will return error. And the give buffer will not be filled.

ServerManager_GetDOStatusBlock(hDevice, aeDOStatus, &dwDoNum);

STEP 5. Change DO array and set to the server.

```
for(iIndex = 0; iIndex < (int) dwDoNum; iIndex++)
{
  if (aeDOStatus[iIndex] == eSrvCtrlDiDoLow)
  {
         // set DO to eSrvCtrlDiDoHigh;
         aeDOStatus[iIndex] = eSrvCtrlDiDoHigh;
  }
  else
  {
         // set DO to eSrvCtrlDiDoLow
          aeDOStatus[iIndex] = eSrvCtrlDiDoLow;
  }
}
// Set DO status
// Param peDOStatus The pointer to a ESrvCtrlDiDoLevel array.
// Param dwMaxDONum The size value of DO status array
// Param bWaitRes The Boolean value to wait for the server's response or not.
ServerManager_SetDOStatusBlock(hDevice, aeDOStatus, dwDoNum, FALSE);
```

STEP 6. Delete Device and Release ServerManager

This code is similar to the above

TIPS

You can refer to the SDK package for full sample code.

3.4. Send HTTP Command to Server (Non-Blocking Mode)

STEP 1. Prepare the callback functions

SCODE __stdcall ProcNotify(TSVRCTRL_NOTIFY_CONT *ptContext)

STEP 2. Initial ServerManager and Create a Device

This code is similar to the above

STEP 3. Set Device Property

This code is similar to the above

STEP 4. Gain an Access to the Server (Non-Blocking)

// Non-block setting, Callback infomation
tCBContent.hEvent = hWaitEvent;
tNotify.pvContext = &tCBContent;
tNotify.pfCB = ProcNotify;
// Open device (non-block mode)
ServerManager OpenDevice(hDevice, &tNotify);

STEP 5. Send HTTP Command

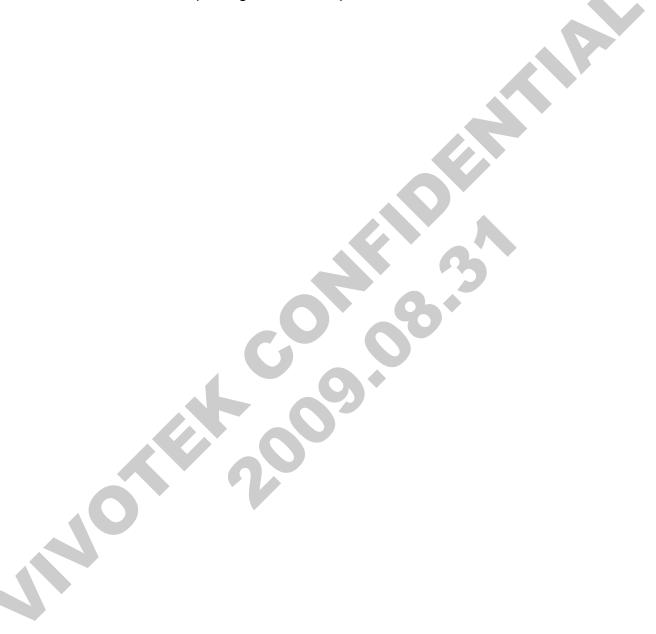
```
// Non-block setting, Callback infomation
tCBContent.hEvent = hWaitEvent;
tNotify.pvContext = &tCBContent;
tNotify.pfCB = ProcNotify;
// STEP 7: Semd HTTP command (non-block) to server
// Param pszCommand The string pointer to an http command.
// Param bPost
                  True is for POST, false for GET
// Param ptNotify The pointer TSVRCTRL_NOTIFY contains the callback function and
//
                 related information. It cannot be null and the content should be valid.
// Param phProc The pointer to a http operation handle. The http operation handle
//
                  is used to read more data. The module will pass a handle to the caller
//
                  if there is more data to be read. If none, the phOper will be null.
//
                 The users do not need to free the http operation handle.
```

ServerManager_SendHttpCommand(hDevice, "/cgi-bin/admin/setparam.cgi?system_ PAGE 15

TIPS

The ServerManager_OpenDevice() function and ServerManager_SendHttpCommand() function are asynchronous functions, the result should be get in SVRCTRL_STATUS_CALLBACK call back function.

You can refer to the SDK package for full sample code.



4. API Reference

This chapter contains the API function calls for the ServerManager.

4.1. Enumeration

The enumeration used is depicted here.



EJOYSTICK_ZOOMING_COMMAND

This enumeration indicates the simulation of joystick zooming commands.

```
typedef enum
{
    eJoystickZoomStop,
    eJoystickZoomWide,
    eJoystickZoomTele,
} EJOYSTICK_ZOOMING_COMMAND;
```

Values

eJoystickZoomStop

Stop the zooming operation.

eJoystickZoomWide

Start zooming wide.

eJoystickZoomTele

Start zooming tele.

Remarks

Requirements

ESrvCtrlDiDoLevel

This enumeration indicates the DIDO status

```
typedef enum
{
    eSrvCtrlDiDoNone,
    eSrvCtrlDiDoLow,
    eSrvCtrlDiDoHigh
} ESrvCtrlDiDoLevel;
```

Values

eSrvCtrlDiDoNone

This type means the server does not have digital output

eSrvCtrlDiDoLow

This type means the digital output status of server is at low level

eSrvCtrlDiDoHigh

This type means the digital output status of server is at high level

Remarks

Requirements

ESrvCtrlPTZType

This enumeration indicates the PTZ type.

```
typedef enum
{
    eSrvCtrlPPTZ,
    eSrvCtrlEPTZ
} ESrvCtrlPTZType;
```

Values

eSrvCtrIPPTZ

Use physical PTZ command.

eSrvCtrlEPTZ

Use digital PTZ command.

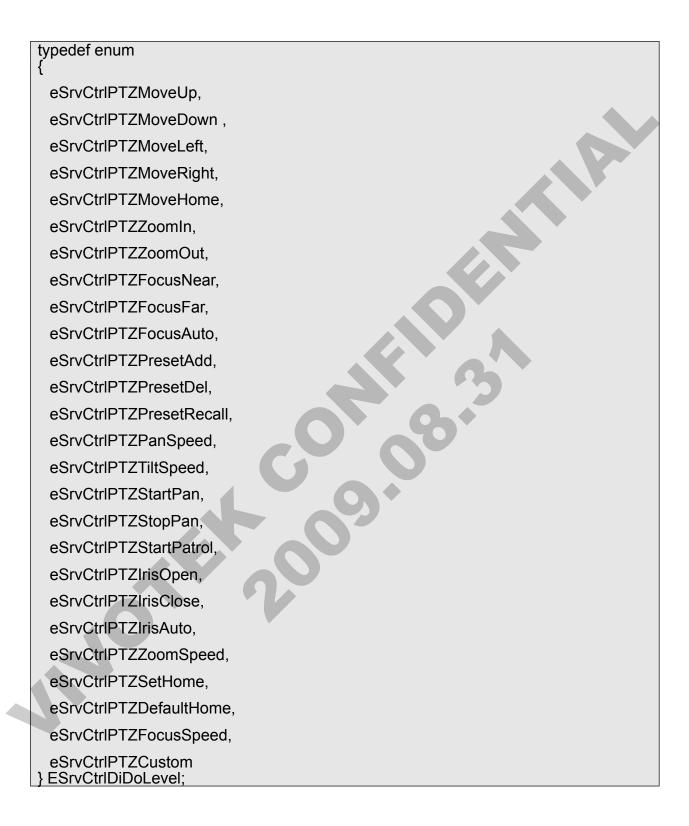
Remarks

Make sure the camera server support digital PTZ command if you wnat to conrol the camera by digital PTZ commands.

Requirements

ESRVCTRL_PTZ_COMMAND

This enumeration indicates the PTZ commands



Values

eSrvCtrlPTZMoveUp

Move the camera one step up. The step is decided on tilt speed.

eSrvCtrlPTZMoveDown

Move the camera one step down. The step is decided on tilt speed.

eSrvCtrlPTZMoveLeft

Move the camera one step left. The step is decided on pan speed.

eSrvCtrlPTZMoveRight

Move the camera one step right. The step is decided on pan speed.

eSrvCtrlPTZMoveHome

Move the camera back to its home position. Usually, this is the position when camera boots up.

eSrvCtrlPTZZoomIn

Zoom in the camera to see more details. Note that this command only works for camera that supports zooming. The return code will be OK even if the camera does not support zooming. The OK means the command is sent to server successfully.

eSrvCtrlPTZZoomOut

Zoom out the camera to see wider view. Note that this command only works for camera that supports zooming. The return code will be OK even if the camera does not support zooming. The OK means the command is sent to server successfully.

eSrvCtrlPTZFocusNear

Set the focus of the camera to shorter focal distance. Note that this command only works for camera that supports focus adjustment. The return code will be OK even if the camera does not support focus adjustment. The OK means the command is sent to server successfully.

eSrvCtrlPTZFocusFar

Set the focus of the camera to longer focal distance. Note that this command only works for camera that supports focus adjustment. The return code will be OK even if the camera does not support focus adjustment. The OK means the command is sent to server successfully.

eSrvCtrlPTZFocusAuto

Let the camera adjust focal distance automatically. After this command is set, every time when camera move, the camera will try to locate the proper focal distance. Note that this command only works for camera that supports focus adjustment. The return code will be OK even if the camera does not support focus adjustment. The OK means the command is sent to server successfully.

eSrvCtrlPTZPresetAdd

Add a new preset location. The preset location is a string that indicates a saved coordinate in camera.

eSrvCtrlPTZPresetDel

Remove a preset location in camera.

eSrvCtrlPTZPresetRecall

Move the camera to a preset location

eSrvCtrlPTZPanSpeed

Adjust the camera's pan speed.

eSrvCtrlPTZTiltSpeed

Adjust the camera's tilt speed. eSrvCtrlPTZStartPan

Let PT or PTZ camera (both are built in IP camera) to start pan for a round.

eSrvCtrlPTZStopPan

Stop the auto pan or patrol in PT or PTZ camera (both are built in IP camera).

eSrvCtrlPTZStartPatrol

Let PT or PTZ camera (both are built in IP camera) to patrol the predefined route. User must setup the patrol route before this command takes effect.

eSrvCtrlPTZIrisOpen

Increase the IRIS level.

eSrvCtrlPTZIrisClose

Decrease the IRIS level.

eSrvCtrlPTZIrisAuto

Set the IRIS to auto mode

eSrvCtrlPTZZoomSpeed

Adjust the camera's zoom speed

eSrvCtrlPTZSetHome

Set the new home position

eSrvCtrlPTZDefaultHome

Set back to default home position

eSrvCtrlPTZFocusSpeed

Adjust he camera's focus speed.

eSrvCtrlPTZCustom

Call custom command. This is useful for video server that might connect to analog camera that provides more commands except the standard pan and tilt command.

Remarks

Requirements

4.2. Callback Function

The Callback function is depicted here.



SVRCTRL_STATUS_CALLBACK

This status callback is used when non-blocking mode is specified. Non-blocking mode let application to submit a work and go ahead to handle other task. This module will call application back when work done through this callback.

Syntax

typedef SCODE (__stdcall *SVRCTRL_STATUS_CALLBACK) (TSVRCTRL_NOTIFY_CONT); *ptContent

Parameters

ptContent

[in] it is the pointer to TSVRCTRL_NOTIFY_CONT that contain the callback information.

Return Values

Ignored

Remarks

Requirements

4.3. Data Structure

The data structure is depicted here.



TSRVCTRL_DEV_PROPERTY

This structure indicates the properties of device. When opening the device, you must set the properties for the device.

```
typedef struct
 char
                     szHost [SRVCTRL MAX HOST LEN+1];
                     szUserName [SRVCTRL MAX USERNAME LEN+1];
 char
 char
                     szPassword [SRVCTRL MAX USERPASS LEN+1];
 DWORD
                     dwFtpPort;
 DWORD
                     dwHttpPort;
 DWORD
                     dwTimeout;
 BOOL
                     bUseSSL;
 TSRVCTRL_DEV_PROPERTY, *PTSRVCTRL DEV_PROPERTY:
```

Members

szHost

IP address

szUserName

User name

szPassword

Password

dwHttpPort

Http port for the server

dwFtpPort

Ftp port for the server

dwTimeout

This is the timeout for the operation in milliseconds.

bUseSSL

Connect to server by using SSL protocol

Remarks

Requirements

TSRVCTRL_DEV_PROPERTYW

This structure indicates the properties of device. When opening the device, you must set the properties for the device. This is wide-character version of TSRVCTRL_DEV_PROPERTY.

```
typedef struct
 wchar t
                      szHost [SRVCTRL MAX HOST LEN+1] t;
 wchar t
                      szUserName [SRVCTRL MAX USERNAME]
                      LEN+1];
 wchar t
                      szPassword [SRVCTRL MAX USERPASS LEN+1];
 DWORD
                      dwHttpPort;
 DWORD
                      dwFtpPort;
 DWORD
                      dwTimeout;
 BOOL
                      bUseSSL:
} TSRVCTRL DEV PROPERTYW, *PTSRVCTRL DEV PROPERTYW;
```

Members

szHost

IP address

szUserName

User name

szPassword

Password

dwHttpPort

Http port for the server

dwFtpPort

Ftp port for the server

dwTimeout

This is the timeout for the operation in milliseconds.

bUseSSL

Connect to server by using SSL protocol

Remarks

Requirements

TSRVCTRL_MODETECT_INFO

This structure contains the information of one motion detection window.

typedef struct {	
TCHAR	szName[SRVCTRL_MAX_
int	WINDOWNAME+1];
int	nX;
int	nY;
int	nW;
int	nH;
int	nPercent;
BOOL	nSensitivity;
2002	bWindowEnabled;
} TSRVCTRL_MODETECT_INFO;	

Members

szName

This is the name for the motion detection window.

nΧ

Specify the x coordinate for the window related to the upper left corner of the video. The value is for normal size image. If the image is shown in other size, translation is needed.

nΥ

Specify the x coordinate for the window related to the upper left corner of the video. The value is for normal size image. If the image is shown in other size, translation is needed. .

nW

Specify the width for the window. The value is for normal size image. If the image is shown in other size, translation is needed.

nΗ

Specify the height for the window. The value is for normal size image. If the image is shown in other size, translation is needed.

nPercent

Specify the percentage of the pixels in the specified window that the difference of two adjacent frames is larger than the threshold (as specified in nSensitivity) to be judged as triggered for motion detection.

nSensitivity

Specify the threshold that one pixel in the window is called "moved" if the difference of two adjacent frame of the same pixel is larger than this value.

bWindowEnabled

Specify the window is enabled or not.

Remarks

Requirements

TSRVCTRL_PRIVATEMASK_INFO

This structure contains the information of one private mask window.

Members

szName

This is the name for the private mask window.

nΧ

Specify the x coordinate for the window related to the upper left corner of the video. The value is for normal size image. If the image is shown in other size, translation is needed

nΥ

Specify the x coordinate for the window related to the upper left corner of the video. The value is for normal size image. If the image is shown in other size, translation is needed. .

nW

Specify the width for the window. The value is for normal size image. If the image is shown in other size, translation is needed.

nH

Specify the height for the window. The value is for normal size image. If the image is shown in other size, translation is needed.

bWindowEnabled

Specify the window is enabled or not.

Remarks

Requirements

TSVRCTRL_NOTIFY

This structure is used to specify the notification interface and parameter for asynchronous operation.

```
typedef struct
{
SVRCTRL_STATUS_CALLBACK pfCB;
void * pvContext;
} TSVRCTRL_NOTIFY;
```

Members

pfCB

the <u>SVRCTRL_STATUS_CALLBACK</u> that specify the callback function to be used to notify.

pvContext

Specify the context value that is to be sent back when callback function gets called.

Remarks

Requirements

TSVRCTRL_NOTIFY_CONT

The structure is used to hold the notified data when callback is called.

```
typedef struct
{

HANDLE pfCB;

void * pvContext;

SCODE scStatusCode;

void * pvParam1;

void * pvParam2;
} TSVRCTRL_NOTIFY_CONT;
```

Members

pfCB

Specify the callback function to be used to notify.

pvContext

Specify the context value that is to be sent back when callback function gets called.

scStatusCode

Specify the context value that is to be sent back when callback function gets called. pvParam1

Specify the context value that is to be sent back when callback function gets called. pvParam2

Specify the context value that is to be sent back when callback function gets called.

Remarks

Requirements

TSRVMNGR_DEV_PROPERTY

The structure is used to hold the property of target host and the priority interface to connect the server.

Members

tServerProperty;

The TSRVCTRL DEV PROPERTY contain the property of target host.

bServerUtlPriority;

It indicates that we first use ServerUtl module or not. We will use ServerUtl module to connect first, if fail, we will automatically roll to ServerController to do it. If the user does not know which module to use first, just set it false.

Remarks

Requirements

ServerManager.h

TSRVMNGR_DEV_PROPERTYW

The structure is used to hold the property of target host and the priority interface to connect the server. This is wide-character version of TSRVMNGR_DEV_PROPERTY.

Members

tServerProperty;

The TSRVCTRL DEV PROPERTYW contain the property of target host.

bServerUtlPriority;

It indicates that we first use ServerUtl module or not. We will use ServerUtl module to connect first, if fail, we will automatically roll to ServerController to do it. If the user does not know which module to use first, just set it false.

Remarks

Requirements

ServerManager.h

TVersionInfo

This structure contains version information.

typedef struct
{

WORD wMajor;

WORD wMinor;

WORD wBuild;

WORD wRevision;
} TVersionInfo;

Members

wMajor

Major version number.

wMinor

Minor version number

wBuild

The build number.

wRevision

The revision number.

Remarks

Requirements

ControlCommon.h

4.4. Basic API Definition

The API definition is depicted here.



ServerManager_Initial

Create a ServerManager object instance and initialize it.

Syntax

SCODE ServerManagerInitial (HANDLE *phObject
	DWORD dwMaxDevice
	DWORD dwFlag
	TVersionInfo* ptVersion);

Parameters

*phObject

[out] the pointer to a handle to receive the ServerManager object instance.

dwMaxDevice

[in] the maximum number of devices are allowed to open

dwFlag

[in] the flag to use in the ServerManager module

ptVersion

[in] the pointer to a <u>TVersionInfo</u> contain the version of the ServerManager module

Return Values

Returns S_OK if successful, or an error value otherwise.

Remarks

Requirements

ServerManager.h

See Also

ServerManager_Release

ServerManager_Release

Delete a ServerManager object instance. This function must be called to prevent the resource leaking whenever the ServerManager handle is no longer used.

Syntax

SCODE ServerManager_Release (HANDLE *phObject);

Parameters

phObject

[in out] the pointer to the handle of the ServerManager object instance be released. It returned from <u>ServerManager Initial</u>.

Return Values

Returns S_OK if successful, or an error value otherwise.

Remarks

Requirements

ServerManager.h

See Also

ServerManager Initial

ServerManager_GetVersionInfo

This function is used to retrieve the version information of the current module.

Syntax

SCODE ServerManager_GetVersionInfo (TVersionInfo *ptVersion);

Parameters

ptVersion

[in out] the pointer to the struct of the module's version information.

Return Values

Returns S_OK if successful, or an error value otherwise.

Remarks

Requirements

ServerManager.h

See Also

ServerManager Initial

ServerManager_CreateDevice

Create a device object instance. The device is used to control a server. We must create a device handle first. And we can manage the device base on this handle

Syntax

SCODE ServerManager_CreateDevice (HANDLE hObject,	
	HANDLE *phDevice,);

Parameters

hObject

[in] the handle of the ServerManager object instance. It returned from <u>ServerManager_Initial</u>.

phDevice

[out] the pointer to a handle to receive the created device object instance.

Return Values

Returns S OK if successful, or an error value otherwise.

Remarks

.

Requirements

ServerManager.h

See Also

<u>ServerManager_Initial</u> <u>ServerManager_DeleteDevice</u>

ServerManager_DeleteDevice

Delete the specified device object instance

Syntax

SCODE ServerManager_DeleteDevice (HANDLE *phDevice);

Parameters

phDevice

[in out] the pointer to the handle of the device object. It returned from <u>ServerManager_CreateDevice</u>

Return Values

Returns S_OK if successful, or an error value otherwise.

Remarks

Requirements

ServerManager.h

See Also

ServerManager CreateDevice

ServerManager_SetDeviceProperty

Set the property of the specified device object.

Syntax

SCODE ServerManager_ SetDeviceProperty (HANDLE hDevice
	TSRVMNGL_DEV_PROERTY *ptDevProperty

Parameters

hDevice

[in] the handle of the device object. It returned from ServerManager CreateDevice.

ptDevProperty

[in] the pointer to <u>TSRVMNGL_DEV_PROERTY</u> to store to store the property of target host

Return Values

Returns S_OK if successful, or an error value otherwise.

Remarks

If you want to setup a used device handle, the module may call <u>ServerManager_StopRequest</u> to stop the unfinished or pending request. And it will set bBlocking as true to avoid unexpected time delay response problem. So it may take times to wait for the function return and then it could set up the device property.

Requirements

ServerManager.h

See Also

ServerManager CreateDevice ServerManager StopRequest

ServerManager_SetDevicePropertyW

Set the property of the specified device object. This is wide-character version of ServerManager_SetDeviceProperty.

Syntax

SCODE	HANDLE hDevice
ServerManager_ SetDevicePropertyW (TSRVMNGL_DEV_PROERTYW);
	*ptDevPropertyW

Parameters

hDevice

[in] the handle of the device object. It returned from ServerManager CreateDevice.

ptDevPropertyW

[in] the pointer to <u>TSRVMNGL_DEV_PROERTYW</u> to store to store the property of target host

Return Values

Returns S_OK if successful, or an error value otherwise.

Remarks

If you want to setup a used device handle, the module may call <u>ServerManager_StopRequest</u> to stop the unfinished or pending request. And it will set bBlocking as true to avoid unexpected time delay response problem. So it may take times to wait for the function return and then it could set up the device property.

Requirements

ServerManager.h

See Also

ServerManager_SetDeviceProperty

ServerManager_GetNameList

Retrieve the value entries under the specified name.

Only the first layer names under root key are retrieved. The name will be cascaded with root name to get full name. If the buffer size is not enough error will be returned, and *pdwValueSize will give the idea how large the buffer is needed

Syntax

SCODE ServerManager_GetNameList (HANDLE hDevice,
	const TCHAR* pszName,
	TCHAR* pszNameList,
	DWORD * pdwValueSize);

Parameters

hDevice

[in] the handle of the targeted device. It returned from ServerManager CreateDevice

pszName

[in] the pointer to the name of the key you want to get the value.

pszNameList

[out] the pointer to the buffer to receive the value.

pdwValueSize

[in out] the pointer to the DWORD to indicate the size of buffer. After the function returned, it will be filled with the length of value.

Return Values

Returns S OK if successful, or an error value otherwise.

Remarks

In ServerUtl applied case, this function may not find the appropriate one to do it. The module will return ERR_NOT_IMPLEMENT.

Requirements

ServerManager.h

See Also

<u>ServerManager_CreateDevice ServerManager_SetDeviceProperty ServerManager_OpenDeviceBlock</u>

ServerManager_GetValueByName

Get a value from local buffer.

Syntax

SCODE ServerManager_GetValueByName (HANDLE hDevice,	
	const TCHAR* pszName,	
	TCHAR* pszValue,	
	DWORD * pdwValueSize);

Parameters

hDevice

[in] the handle of the targeted device. It returned from ServerManager CreateDevice

pszName

[in] the pointer to the name of the key you want to get the value.

pszValue

[out] the pointer to the buffer to receive the value.

pdwValueSize

[in out] the pointer to the DWORD to indicate the size of buffer. After the function returned, it will be filled with the length of value.

Return Values

Returns S_OK if successful, or an error value otherwise.

Remarks

Requirements

ServerManager.h

See Also

<u>ServerManager_CreateDevice</u> <u>ServerManager_SetDeviceProperty</u> <u>ServerManager_</u> OpenDevice ServerManager OpenDeviceBlock

ServerManager_SetValueByName

Set a value to local buffer.

Syntax

SCODE ServerManager_SetValueByName (HANDLE hDevice,
	const TCHAR* pszName,
	const TCHAR* pszValue,
	BOOL bMustExist);

Parameters

hDevice

[in] the handle of the targeted device. It returned from <u>ServerManager_CreateDevice</u>.

pszName

[in] the pointer to the name of the key you want to update the value.

pszValue

[in] the pointer to the buffer which contain the value.

bMustExist

[in] the key must exist or not.

Return Values

Returns S_OK if successful, or an error value otherwise.

Remarks

Requirements

ServerManager.h

See Also

<u>ServerManager_CreateDevice ServerManager_SetDeviceProperty ServerManager_OpenDeviceBlock</u>

ServerManager_FreeOperator

Return the operator to hDevice.

Syntax

SCODE ServerManager_FreeOperator (HANDLE hOper);

Parameters

hOper

[in] the http operation handle. It returned from $\underline{ServerController_SendHttpCommand} \ or \\ \underline{ServerController_SendHttpCommandReadBlock}$

Return Values

Returns S_OK if successful, or an error value otherwise.

Remarks

Requirements

ServerManager.h

See Also

ServerController SendHttpCommand ServerController SendHttpCommandReadBlock

ServerManager_SetPTZType

Set PTZ command type, physical or digital.

Syntax

SCODE ServerManager_SetPTZType (HANDLE hDevice	
	ESrvCtrlPTZType ePTZType);

Parameters

hDevice

[in] the handle of the targeted device. It returned from <u>ServerManager CreateDevice</u>.

ePTZType

[in] the type of PTZ command send by ServerManager_SendPTZCommand, ServerManager_MoveCamera, ServerManager_SendPTZCommandBlock, ServerManager MoveCameraBlock.

Return Values

Returns S_OK if successful, or an error value otherwise.

Remarks

Requirements

ServerManager.h

See Also

ServerManager_SendPTZCommand, ServerManager_MoveCamera, ServerManager_SendPTZCommandBlock, ServerManager_MoveCameraBlock.

ServerManager_StopRequest

This function is used to stop all pending or unfinished requests for a device handle. If you are calling this before calling ServerManager_DeleteDevice, set the bBlocking flag to FALSE.

Syntax

SCODE ServerManager_StopRequest (HANDLE hDevice,	
	BOOL bBlocking);

Parameters

hDevice

[in] the handle of the targeted device. It returned from ServerManager CreateDevice.

bBlocking

[in] the boolean value to stop request in block mode. If yes, it will block until all connections done. You better set block mode when you want to reuse this device to operate another different host

Return Values

Returns S_OK if successful, all request are stopped successfully.

Remarks

Requirements

ServerManager.h

See Also

ServerManager CreateDevice ServerManager DeleteDevice

4.5. Non-blocking mode API Definition

The non-blocking API definition is depicted here.

The non-block mode functions are all asynchronous. Calling any non-block function will not block the process and it will notify the user with the callback function after the operation is done.

Every non-block function has a parameter which type is pointer of <u>TSVRCTRL_NOTIFY</u>. It contains the information of the callback function and user's context value. The user can install the callback function and user's data while call non-block function. Once the operation has been done and the callback function is raised, it will pass that value to the user to specify whatever data user wants.

Non-block function also has a parameter which type is pointer of handle. It is used to receive the instance of the http operation process. The user can control the process base on this handle. If does not use this operation before the callback function is notified, the user can call ServerManager_AbortProcess to abort the operation.

ServerManager_GetDIStatus

Get current DI information of the server.

Syntax

SCODE ServerManager_GetDIStatus (HANDLE hDevice,	
	TSVRCTRL_NOTIFY * ptNotify,	
	HANDLE * phProc);	

Parameters

hDevice

[in] the handle of the targeted device. It returned from <u>ServerManager CreateDevice</u>.

ptNotify

[in] the pointer <u>TSVRCTRL_NOTIFY</u> contains the callback function and related information. It cannot be null and the content should be valid.

phProc

[out] the pointer to a http operation handle. The http operation handle is used to read more data. The module will pass a handle to the caller if there is more data to be read. If none, the phOper will be null. The users do not need to free the http operation handle. It is kept internally

Return Values

Returns S OK if successful, or an error value otherwise.

Remarks

The function will return soon. And callback function will be raised when the operation is really done. In the successful callback function, the pvParam1 contains the number of DI the server has. And pvParam2 would be the ESrvCtrlDiDoLevel array that contains each DI status. The array is invalid after callback returns, so the caller must copy the value if he needs that value later

Requirements

ServerManager.h

See Also

<u>ServerManager_CreateDevice ServerManager_SetDeviceProperty ServerManager_OpenDeviceBlock ServerManager_AbortProcess</u>

ServerManager_GetDOStatus

Get current DO information of the server.

Syntax

SCODE ServerManager_GetDOStatus (HANDLE hDevice,
	TSVRCTRL_NOTIFY * ptNotify,
	HANDLE * phProc);

Parameters

hDevice

[in] the handle of the targeted device. It returned from <u>ServerManager CreateDevice</u>.

ptNotify

[in] the pointer <u>TSVRCTRL_NOTIFY</u> contains the callback function and related information. It cannot be null and the content should be valid.

phProc

[out] the pointer to a http operation handle. The http operation handle is used to read more data. The module will pass a handle to the caller if there is more data to be read. If none, the phOper will be null. The users do not need to free the http operation handle. It is kept internally.

Return Values

Returns S OK if successful, or an error value otherwise.

Remarks

The function will return soon. And callback function will be raised when the operation is really done. In the success notification the pvParam1 contains the number of DO the server has. And pvParam2 would be the ESrvCtrlDiDoLevel array that contains each DO status. The array is invalid after callback returns, so the caller must copy the value if he needs that value later.

In ServerUtl applied case, this function may not find the appropriate one to do it. The module will return ERR NOT IMPLEMENT.

Requirements

ServerManager.h

See Also

<u>ServerManager_CreateDevice ServerManager_SetDeviceProperty ServerManager_</u> OpenDevice ServerManager_OpenDeviceBlock ServerManager_AbortProcess

ServerManager_GetMotionDetectionInfo

Get current motion detection setting information of the server.

Syntax

SCODE	HANDLE hDevice,
ServerManager_GetMotionDectionInfo (DWORD dwCamera,
	TSVRCTRL_NOTIFY * ptNotify,
	HANDLE * phProc);

Parameters

hDevice

[in] the handle of the targeted device. It returned from <u>ServerManager_CreateDevice</u>.

dwCamera

[in] in the multiple camera model, it indicate the order from the right with starting as 1. Otherwise the module will ignore it.

ptNotify

[in] the pointer <u>TSVRCTRL_NOTIFY</u> contains the callback function and related information. It cannot be null and the content should be valid.

phProc

[out] the pointer to a http operation handle. The http operation handle is used to read more data. The module will pass a handle to the caller if there is more data to be read. If none, the phOper will be null. The users do not need to free the http operation handle. It is kept internally

Return Values

Returns S OK if successful, or an error value otherwise.

Remarks

The function will return soon. And callback function will be raised when the operation is really done. In the success notification, pvParam1 is the TSRVCTRL_MODETECT_INFO array that contains motion window information. The array is invalid after callback returns, so the caller must copy the value if he needs that value later.

Requirements

ServerManager.h

See Also

<u>ServerManager_CreateDevice ServerManager_SetDeviceProperty ServerManager_</u> OpenDevice ServerManager_OpenDeviceBlock ServerManager_AbortProcess



ServerManager_GetPrivateMaskInfo

Get the current private mask setting information of the server.

Syntax

SCODE ServerManager_GetPrivateMaskInfo (HANDLE hDevice,
	DWORD dwCamera,
	TSVRCTRL_NOTIFY * ptNotify,
	HANDLE * phProc);

Parameters

hDevice

[in] the handle of the targeted device. It returned from <u>ServerManager_CreateDevice</u>.

dwCamera

[in] in the multiple camera model, it indicate the order from the right with starting as 1. Otherwise the module will ignore it.

ptNotify

[in] the pointer <u>TSVRCTRL_NOTIFY</u> contains the callback function and related information. It cannot be null and the content should be valid.

phProc

[out] the pointer to a http operation handle. The http operation handle is used to read more data. The module will pass a handle to the caller if there is more data to be read. If none, the phOper will be null. The users do not need to free the http operation handle. It is kept internally

Return Values

Returns S OK if successful, or an error value otherwise.

Remarks

The function will return soon. And callback function will be raised when the operation is really done. In the success notification, pvParam1 is the ISRVCTRL_PRIVATEMASK_INFO array that contains private mask window information. The array is invalid after callback returns, so the caller must copy the value if he needs that value later.

Requirements

ServerManager.h

See Also

<u>ServerManager_CreateDevice ServerManager_SetDeviceProperty ServerManager_</u> OpenDevice ServerManager_OpenDeviceBlock ServerManager_AbortProcess



ServerManager_MoveCamera

Move the camera by the specified coordinate.

Syntax

SCODE ServerManager_MoveCamera (HANDLE hDevice,
	DWORD dwCamera,
	DWORD dwStream,
	DWORD dwX,
	DWORD dwY,
	DWORD dwDisplayWidth,
	DWORD dwDisplayHeight,
	TSVRCTRL_NOTIFY * ptNotify,
	HANDLE * phProc);

Parameters

hDevice

[in] the handle of the targeted device. It returned from <u>ServerManager_CreateDevice</u>.

dwCamera

[in] in the multiple camera model, it indicates the order from the right with starting as 1. Otherwise it will be ignored.

dwStream

[in] in the dual-stream camera model, it indicates resolution of which stream will be get for computing the target position.

dwX

[in] the x coordinate for the new position. This position is related to the left-upper corner of current camera view. The camera will treat this value as the new center x coordinate. This value should be the normal size of camera video size

dwY

[in] the y coordinate for the new position. This position is related to the left-upper corner of current camera view. The camera will treat this value as the new center y coordinate. This value should be the normal size of camera video size.

dwDisplayWidth

[in] The weight of the display video size.

dwDisplayHeight

[in] The height of the display video size

ptNotify

[in] the pointer <u>TSVRCTRL_NOTIFY</u> contains the callback function and related information. It cannot be null and the content should be valid.

phProc

[out] the pointer to a http operation handle. The http operation handle is used to read more data. The module will pass a handle to the caller if there is more data to be read. If none, the phOper will be null. The users do not need to free the http operation handle. It is kept internally

Return Values

Returns S OK if successful, or an error value otherwise.

Remarks

The function will return soon. And callback function will be raised when the operation is really done.

For supporting digital move command, you must set the device to EPTZ mode by call the ServerManager_SetPTZType.

Requirements

ServerManager.h

See Also

<u>ServerManager_CreateDevice ServerManager_SetDeviceProperty ServerManager_</u>
<u>OpenDevice ServerManager_OpenDeviceBlock ServerManager_AbortProcess</u>

ServerManager_OpenDevice

Open the specified device to access some information. It will connect to the server and retrieve the server model.

Syntax

SCODE ServerManager_OpenDevice (HANDLE hDevice,	
	TSVRCTRL_NOTIFY * ptNotify);

Parameters

hDevice

[in] the handle of the targeted device. It returned from <u>ServerManager CreateDevice</u>.

ptNotify

[in] the pointer <u>TSVRCTRL_NOTIFY</u> contains the callback function and related information. It cannot be null and the content should be valid.

Return Values

Returns S_OK if successful, or an error value otherwise.

Remarks

If you want to control the device or get some information from the device, you must open the device first.

The function will return soon. And callback function will be raised when the operation is really done. In the success notification, the pvParam1 contains the string for the model value. User could also use the ServerManager_GetValueByName to get the server model value

Requirements

ServerManager.h

See Also

ServerManager CreateDevice

ServerManager_ReadData

This function is used to read the data from the http connection. User must ensure that the connection is already connected. Or error will be returned.

Syntax

SCODE ServerManager_ReadData (HANDLE hOper,	
	BYTE *pbyBuffer,	
	DWORD *pdwBufLen,	
	TSVRCTRL_NOTIFY * ptNotify);

Parameters

hOper

[in] the http operation handle. It reutrned from <u>ServerController_SendHttpCommand</u> or <u>ServerController_SendHttpCommandReadBlock</u>

pbyBuffer

[out] the pointer to buffer to receive the http response data

pdwBufLen

[in out] t the pointer to a DWORD to represent the length of the buffer. After the function return, it will be replaced with the actual length value

ptNotify

[in] the pointer <u>TSVRCTRL_NOTIFY</u> contains the callback function and related information. It cannot be null and the content should be valid.

phProc

[out] the pointer to a http operation handle. The http operation handle is used to read more data. The module will pass a handle to the caller if there is more data to be read. If none, the phProc will be null. The users do not need to free the http operation handle. It is kept internally

Return Values

Returns S OK if successful, or an error value otherwise.

Remarks

In ServerUtl applied case, this function may not find the appropriate one to do it. The module will return ERR NOT IMPLEMENT.

Requirements

ServerManager.h

See Also

<u>ServerManager_CreateDevice ServerManager_SetDeviceProperty ServerManager_OpenDeviceBlock ServerManager_AbortProcess</u>



ServerManager_SendHttpCommand

This function is used to send an http command to server. For POST, the parameter is also put after the question mark as GET does. The result of the command is ignored by this function.

If need to read response data, please use ServerController_SendHttpCommandReadBlock.

Syntax

SCODE ServerManager_SendHttpCommand(HANDLE hDevice,
	const TCHAR *pszCommand,
	BOOL bPost,
	TSVRCTRL_NOTIFY * ptNotify,
	HANDLE * phOper);

Parameters

hDevice

[in] the handle of the targeted device. It returned from <u>ServerManager CreateDevice</u>.

pszCommand

[in] the string pointer to an http command.

bPost

[in] Is the command sends by POST or GET? True is for POST, false for GET.

ptNotify

[in] the pointer <u>TSVRCTRL_NOTIFY</u> contains the callback function and related information. It cannot be null and the content should be valid.

phOper

[out] the pointer to a http operation handle. The http operation handle is used to read more data. The module will pass a handle to the caller if there is more data to be read. If none, the phOper will be null. The users do not need to free the http operation handle. It is kept internally

Return Values

Returns S OK if successful, or an error value otherwise.

Remarks

The function will return soon. And callback function will be raised when the operation is really done.

Requirements

ServerManager.h

See Also

<u>ServerManager_CreateDevice ServerManager_SetDeviceProperty ServerManager_OpenDeviceServerManager_AbortProcess</u>

ServerManager_SendPTZCommand

Send the PTZ command to the server.

Syntax

SCODE ServerManager_SendPTZCommand (
	HANDLE hDevice,
	DWORD dwCamera,
	ESRVCTRL_PTZ_COMMAND ePtzCommand,
	const TCHAR * pszExtraCmd,
	TSVRCTRL_NOTIFY * ptNotify,
	HANDLE * phProc);

Parameters

hDevice

[in] the handle of the targeted device. It returned from <u>ServerManager CreateDevice</u>.

dwCamera

[in] in the multiple camera model, it indicates the order from the right with starting as 1. Otherwise it will be ignored.

ePtzCommand

[in] the <u>ESRVCTRL_PTZ_COMMAND</u> to represent a command will be sent to the target device. Not all commands are accepted in every camera, so you may check the user's manual to make sure it

pszExtraCmd

[in] the extra information for certain PTZ command. Here is a list for the command

- eSrvCtrlPTZPresetAdd: the pointer to the name of the new preset location
- eSrvCtrlPTZPresetDel: the pointer to the name of preset location to be deleted
- eSrvCtrlPTZPresetRecall: the pointer to the name of the preset location to be recalled
- eSrvCtrlPTZPanSpeed: the pointer to the pan speed in string (number presented in string format)
- eSrvCtrlPTZTiltSpeed: the pointer to the tilt speed in string (number presented in string format)
- eSrvCtrlPTZFocusSpeed: the pointer to the tilt speed in string (number presented in string format)

 eSrvCtrlPTZCustom: the pointer to the customed command ID in string (number presented in string format)

ptNotify

[in] the pointer <u>TSVRCTRL_NOTIFY</u> contains the callback function and related information. It cannot be null and the content should be valid.

phProc

[out] the pointer to a http operation handle. The http operation handle is used to read more data. The module will pass a handle to the caller if there is more data to be read. If none, the phProc will be null. The users do not need to free the http operation handle. It is kept internally

Return Values

Returns S OK if successful, or an error value otherwise.

Remarks

The function will return soon. And callback function will be raised when the operation is really done.

For supporting digital PTZ command, you must set the device to EPTZ mode by call the ServerManager SetPTZType, otherwise the device will use physical PTZ command.

In EPTZ mode, you may need to input stream index by set the high word of dwCamera, the low word is camera index, the stream index is start from 1.

Requirements

ServerManager.h

See Also

<u>ServerManager_CreateDevice ServerManager_SetDeviceProperty ServerManager_</u> OpenDevice ServerManager_OpenDeviceBlock ServerManager_AbortProcess

ServerManager_SetDOStatus

Set current DO information of the server. If DO is not to be set, put eSrvCtrlDiDoNone in the corresponding position of the array.

Syntax

SCODE ServerManager_SetDOStatus (HANDLE hDevice,
	ESrvCtrlDiDoLevel * peDOStatus,
	DWORD dwMaxDONum,
	TSVRCTRL_NOTIFY * ptNotify,
	HANDLE * phProc);

Parameters

hDevice

[in] the handle of the targeted device. It returned from <u>ServerManager CreateDevice</u>.

peDOStatus

[in] the pointer to a <u>ESrvCtrlDiDoLevel</u> to update the DO status of the server. It is the pointer of the first element of the DO status array.

dwMaxDONum

[in]the size value of DO status array

ptNotify

[in] the pointer <u>TSVRCTRL_NOTIFY</u> contains the callback function and related information. It cannot be null and the content should be valid.

phProc

[out] the pointer to a http operation handle. The http operation handle is used to read more data. The module will pass a handle to the caller if there is more data to be read. If none, the phProc will be null. The users do not need to free the http operation handle. It is kept internally

Return Values

Returns S OK if successful, or an error value otherwise.

Remarks

The function will return soon. And callback function will be raised when the operation is really done.

Requirements

ServerManager.h

See Also

<u>ServerManager_CreateDevice ServerManager_SetDeviceProperty ServerManager_OpenDeviceServerManager_OpenDeviceBlock ServerManager_AbortProcess</u>



ServerManager_SetMotionDetectionInfo

Set current motion detection setting information of the server.

Syntax

SCODE	HANDLE hDevice,
ServerManager_SetMotionDectionInfo (DWORD dwCamera,
	const TSRVCTRL_MODETECT_INFO *ptMDInfo
	TSVRCTRL_NOTIFY * ptNotify,
	HANDLE * phProc

Parameters

hDevice

[in] the handle of the targeted device. It returned from <u>ServerManager_CreateDevice</u>.

dwCamera

[in] in the multiple camera model, it indicate the order from the right with starting as 1. Otherwise the module will ignore it.

ptMDInfo

[in] the pointer to a <u>TSRVCTRL_MODETECT_INFO</u> to store the motion detection to update to the server.

ptNotify

[in] the pointer TSVRCTRL_NOTIFY contains the callback function and related information. It cannot be null and the content should be valid.

phProc

[out] the pointer to a http operation handle. The http operation handle is used to read more data. The module will pass a handle to the caller if there is more data to be read. If none, the phProc will be null. The users do not need to free the http operation handle. It is kept internally

Return Values

Returns S OK if successful, or an error value otherwise.

Remarks

The function will return soon. And callback function will be raised when the operation is really done.

Requirements

ServerManager.h

See Also

<u>ServerManager_CreateDevice ServerManager_SetDeviceProperty ServerManager_OpenDeviceServerManager_AbortProcess</u>

ServerManager_SetPrivateMaskInfo

Set current private mask setting information of the server.

Syntax

SCODE	HANDLE hDevice,
ServerManager_SetPrivateMaskInfo (DWORD dwCamera,
	const TSRVCTRL_PRIVATEMASK_INFO * ptPMInfo
	TSVRCTRL_NOTIFY * ptNotify,
	HANDLE * phProc

Parameters

hDevice

[in] the handle of the targeted device. It returned from <u>ServerManager_CreateDevice</u>.

dwCamera

[in] in the multiple camera model, it indicate the order from the right with starting as 1. Otherwise the module will ignore it.

ptPMInfo

[out] the pointer to a <u>TSRVCTRL_PRIVATEMASK_INFO</u> to receive the private mask setting information to be update to the serve.

ptNotify

[in] the pointer TSVRCTRL_NOTIFY contains the callback function and related information. It cannot be null and the content should be valid.

phProc

[out] the pointer to a http operation handle. The http operation handle is used to read more data. The module will pass a handle to the caller if there is more data to be read. If none, the phProc will be null. The users do not need to free the http operation handle. It is kept internally

Return Values

Returns S OK if successful, or an error value otherwise.

Remarks

The function will return soon. And callback function will be raised when the operation is really done.

Requirements

ServerManager.h

See Also

<u>ServerManager_CreateDevice ServerManager_SetDeviceProperty ServerManager_OpenDeviceServerManager_AbortProcess</u>

ServerManager_UartRead

Read responded data from device's serial port. Note that the server will not cache the UART data. So if the timing is incorrect, the data may lose.

Syntax

SCODE ServerManager_UartRead (HANDLE hDevice,
	DWORD dwPort,
	BYTE *pszResponse,
	DWORD dwReadLen,
	BOOL bFlush,
	DWORD dwWaitTime,
	TSVRCTRL_NOTIFY * ptNotify,
	HANDLE * phProc);

Parameters

hDevice

[in] the handle of the targeted device. It returned from <u>ServerManager CreateDevice</u>.

dwPort

[in] the com port.

pszResponse

[out] the pointer to the string to receive the response data

dwReadLen

[in out] the pointer to a DWORD to represent the length of the buffer. After the function return, it will be replaced with the actual length value.

bFlush

[in] the boolean value to the server should flush the Uart or not before it begin to read data..

dwWaitTime

[in] the milliseconds unit value for the server to wait for the specified amount of data

ptNotify

[in] the pointer <u>TSVRCTRL_NOTIFY</u> contains the callback function and related information. It cannot be null and the content should be valid.

phProc

[out] the pointer to a http operation handle. The http operation handle is used to read more data. The module will pass a handle to the caller if there is more data to be read. If none, the phProc will be null. The users do not need to free the http operation handle. It is kept internally

Return Values

Returns S_OK if successful, or an error value otherwise.

Remarks

The function will return soon. And callback function will be raised when the operation is really done.

Requirements

ServerManager.h

See Also

<u>ServerManager_CreateDevice ServerManager_SetDeviceProperty ServerManager_OpenDeviceServerManager_OpenDeviceBlock ServerManager_AbortProcess</u>

ServerManager_UartReadAFWrite

Read responded data from device's serial port after send the command to the server. Note that the server will not cache the UART data. So if the timing is incorrect, the data may lose.

Syntax

SCODE ServerManager_UartRead (HANDLE hDevice,
	DWORD dwPort,
	const BYTE *pbyCommand,
	DWORD dwLen,
	BYTE *pszResponse,
	DWORD dwReadLen,
	BOOL bFlush,
	DWORD dwWaitTime,
	TSVRCTRL_NOTIFY * ptNotify,
	HANDLE * phProc);

Parameters

hDevice

[in] the handle of the targeted device. It returned from <u>ServerManager CreateDevice</u>.

dwPort

[in] the com port.

pbyCommand

[in] the pointer to the command string.

dwLen

[in] the length value of the command.

pszResponse

[out] the pointer to the string to receive the response data

dwReadLen

[in out] the pointer to a DWORD to represent the length of the buffer. After the function return, it will be replaced with the actual length value.

bFlush

[in] the boolean value to the server should flush the Uart or not before it begin to read data..

dwWaitTime

[in] the milliseconds unit value for the server to wait for the specified amount of data

ptNotify

[in] the pointer <u>TSVRCTRL_NOTIFY</u> contains the callback function and related information. It cannot be null and the content should be valid.

phProc

[out] the pointer to a http operation handle. The http operation handle is used to read more data. The module will pass a handle to the caller if there is more data to be read. If none, the phProc will be null. The users do not need to free the http operation handle. It is kept internally

Return Values

Returns S_OK if successful, or an error value otherwise.

Remarks

The function will return soon. And callback function will be raised when the operation is really done.

Requirements

ServerManager.h

See Also

<u>ServerManager_CreateDevice ServerManager_SetDeviceProperty ServerManager_OpenDeviceServerManager_OpenDeviceBlock ServerManager_AbortProcess</u>

ServerManager_UartWrite

Send data to device's serial port.

Syntax

SCODE ServerManager_UartWrite (HANDLE hDevice,
	DWORD dwPort,
	const BYTE *pbyCommand,
	DWORD dwLen,
	TSVRCTRL_NOTIFY * ptNotify,
	HANDLE * phProc);

Parameters

hDevice

[in] the handle of the targeted device. It returned from <u>ServerManager_CreateDevice</u>.

dwPort

[in] the com port.

pbyCommand

[in] the pointer to the command string.

dwLen

[in] the length value of the command.

ptNotify

[in] the pointer <u>TSVRCTRL_NOTIFY</u> contains the callback function and related information. It cannot be null and the content should be valid.

phProc

[out] the pointer to a http operation handle. The http operation handle is used to read more data. The module will pass a handle to the caller if there is more data to be read. If none, the phProc will be null. The users do not need to free the http operation handle. It is kept internally

Return Values

Returns S_OK if successful, or an error value otherwise.

Remarks

The function will return soon. And callback function will be raised when the operation is really done.

Requirements

ServerManager.h

See Also

<u>ServerManager_CreateDevice ServerManager_SetDeviceProperty ServerManager_OpenDeviceServerManager_AbortProcess</u>

ServerManager_UpdateLocalConfig

Update the local system parameter. It means to retrieve the configuration file from server again. Any change made locally is overwritten.

Syntax

SCODE ServerManager_UpdateLocalConfig (HANDLE hDevice, TSVRCTRL_NOTIFY * ptNotify);

Parameters

hDevice

[in] the handle of the targeted device. It returned from <u>ServerManager CreateDevice</u>.

ptNotify

[in] the pointer <u>TSVRCTRL_NOTIFY</u> contains the callback function and related information. It cannot be null and the content should be valid.

Return Values

Returns S OK if successful, or an error value otherwise.

Remarks

The function will return soon. And callback function will be raised when the operation is really done.

Requirements

ServerManager.h

See Also

<u>ServerManager_CreateDevice ServerManager_SetDeviceProperty ServerManager_OpenDeviceBlock ServerManager_AbortProcess</u>

ServerManager_UpdateRemoteConfig

Update the remote system parameters. It means upload the local configuration file to remote server. The server will reboot after the file is uploaded by default. To prevent server rebooting, please set the eSystemResetSystem item to "No". But some change of the configuration will take effect only if server reboot, such as the new IP address.

Syntax

Parameters

hDevice

[in] the handle of the targeted device. It returned from ServerManager CreateDevice.

ptNotify

[in] the pointer <u>TSVRCTRL_NOTIFY</u> contains the callback function and related information. It cannot be null and the content should be valid.

Return Values

Returns S_OK if successful, or an error value otherwise.

Remarks

The function will return soon. And callback function will be raised when the operation is really done.

Requirements

ServerManager.h

See Also

<u>ServerManager_CreateDevice ServerManager_SetDeviceProperty ServerManager_</u>
OpenDevice ServerManager_OpenDeviceBlock ServerManager_AbortProcess

ServerManager_AbortProcess

Abort the process of the non-block mode operation.

Syntax

SCODE ServerManager_AbortProcess (HANDLE hProc);

Parameters

hProc

[in] the handle to the non-block mode operation handle. The handle is returned when calling non-blocking operation.

Return Values

Returns S_OK if successful, or an error value otherwise.

Remarks

In ServerUtl applied case, this function will return ERR_NOT_IMPLEMENT.

Requirements

ServerManager.h

4.6. Block mode API Definition

The blocking mode API definition is depicted here.



ServerManager_GetDIStatusBlock

Get current DI information of the server. This is a synchronous function and it will operate in block way

Syntax

SCODE ServerManager_GetDIStatusBlock (HANDLE hDevice,
	ESrvCtrlDiDoLevel * peDIStatus,
	DWORD *pdwMaxDINum);

Parameters

hDevice

[in] the handle of the targeted device. It returned from ServerManager CreateDevice

peDIStatus

[out] the pointer to a <u>ESrvCtrlDiDoLevel</u> array buffer to receive the retrieved DI status from the server.

pdwMaxDINum

[in out] the pointer to a DWORD to represent the size value of DI status array buffer. And the module will replace it with the actual size value of DI status array. If the actual size is more than *pdwMaxDINum, the module will return error. And the give buffer will not be filled

Return Values

Returns S OK if successful, or an error value otherwise.

Remarks

The function will not return the result until the whole operation has been done. But you can use ServerManager StopRequest to abort it.

Requirements

ServerManager.h

See Also

<u>ServerManager_CreateDevice ServerManager_SetDeviceProperty ServerManager_OpenDeviceServerManager_OpenDeviceBlock</u>

ServerManager_GetDOStatusBlock

Get current DO information of the server. This is a synchronous function and it will operate in block way

Syntax

SCODE ServerManager_GetDOStatusBlock (HANDLE hDevice,
	ESrvCtrlDiDoLevel * peDOStatus,
	DWORD *pdwMaxDONum);

Parameters

hDevice

[in] the handle of the targeted device. It returned from <u>ServerManager_CreateDevice</u>.

peDOStatus

[out] the pointer to a <u>ESrvCtrlDiDoLevel</u> array buffer to receive the retrieved DO status from the server.

pdwMaxDONum

[in out] the pointer to a DWORD to represent the size value of DO status array buffer. And the module will replace it with the actual size value of DO status array. If the actual size is more than *pdwMaxDINum, the module will return error. And the give buffer will not be filled

Return Values

Returns S OK if successful, or an error value otherwise.

Remarks

The function will not return the result until the whole operation has been done. But you can use ServerManager StopRequest to abort it.

In ServerUtl applied case, this function may not find the appropriate one to do it. The module will return ERR_NOT_IMPLEMENT.

Requirements

ServerManager.h

See Also

ServerManager_GetMotionDetectionInfoBlock

Get current motion detection setting information of the server. This is a synchronous function and it will operate in block way

Syntax

SCODE	HANDLE hDevice,
ServerManager_GetMotionDetectionInfoBlock (DWORD dwCamera,
	TSRVCTRL_MODETECT_INFO * ptMDInfo):

Parameters

hDevice

[in] the handle of the targeted device. It returned from <u>ServerManager CreateDevice</u>.

dwCamera

[in] in the multiple camera model, it indicate the order from the right with starting as 1. Otherwise the module will ignore it.

ptMDInfo

[out] the pointer to a TSRVCTRL_MODETECT_INFO to receive the motion detection setting information .

Return Values

Returns S_OK if successful, or an error value otherwise.

Remarks

The function will not return the result until the whole operation has been done. But you can use ServerManager StopRequest to abort it.

Requirements

ServerManager.h

See Also

ServerManager_GetPrivateMaskInfoBlock

Get current private mask setting information of the server. This is a synchronous function and it will operate in block way

Syntax

SCODE	HANDLE hDevice,
ServerManager_GetGetPrivateMaskInfoBlock (DWORD dwCamera,
	TSRVCTRL_PRIVATEMASK_INFO * ptPMInfo

Parameters

hDevice

[in] the handle of the targeted device. It returned from <u>ServerManager_CreateDevice</u>.

dwCamera

[in] in the multiple camera model, it indicate the order from the right with starting as 1. Otherwise the module will ignore it.

ptPMInfo

[out] the pointer to a <u>TSRVCTRL_PRIVATEMASK_INFO</u> to receive the private mask setting information .

Return Values

Returns S_OK if successful, or an error value otherwise.

Remarks

The function will not return the result until the whole operation has been done. But you can use ServerManager StopRequest to abort it.

Requirements

ServerManager.h

See Also

ServerManager_MoveCameraBlock

Move the camera by the specified coordinate. This is a synchronous function and it will operate in block way

Syntax

SCODE ServerManager_MoveCameraBlock (HANDLE hDevice,
	DWORD dwCamera,
	DWORD dwStream,
	DWORD dwX,
	DWORD dwY,
	DWORD dwDisplayWidth,
	DWORD dwDisplayHeight,
	BOOL bWaitRes);

Parameters

hDevice

[in] the handle of the targeted device. It returned from <u>ServerManager CreateDevice</u>.

dwCamera

[in] in the multiple camera model, it indicates the order from the right with starting as 1. Otherwise it will be ignored.

dwStream

[in] in the dual-stream camera model, it indicates resolution of which stream will be get for computing the target position.

dwX

[in] the x coordinate for the new position. This position is related to the left-upper corner of current camera view. The camera will treat this value as the new center x coordinate. This value should be the normal size of camera video size

dwY

[in] the y coordinate for the new position. This position is related to the left-upper corner of current camera view. The camera will treat this value as the new center y coordinate. This value should be the normal size of camera video size.

dwDisplayWidth

[in] The weight of the display video size.

dwDisplayHeight

[in] The height of the display video size.

bWaitRes

[in] the boolean value to wait for the server's response or not.

Return Values

Returns S OK if successful, or an error value otherwise.

Remarks

If you want to control the device or get some information from the device, you must open the device first.

The function will not return the result until the whole operation has been done. But you can use ServerManager_StopRequest to abort it.

For supporting digital move command, you must set the device to EPTZ mode by call the ServerManager SetPTZType.

Requirements

ServerManager.h

See Also

<u>ServerManager_CreateDevice ServerManager_SetDeviceProperty ServerManager_</u> OpenDevice ServerManager_OpenDeviceBlock

ServerManager_OpenDeviceBlock

Open the specified device to access some information. It will connect to the server and retrieve the server model and configuration file. This is a synchronous function and it will operate in block way

Syntax

SCODE ServerManager_OpenDeviceBlcok (HANDLE hDevice,
	TCHAR *lpszModelName,
	DWORD dwMaxSize);

Parameters

hDevice

[in] the handle of the specified device. It returned from ServerManager CreateDevice.

IpszModelName

[in] the pointer the TCHAR to receive the retrieved model name

dwMaxSize

[in] the model name of the specified device

Return Values

Returns S_OK if successful, or an error value otherwise.

Remarks

If you want to control the device or get some information from the device, you must open the device first.

The function will not return the result until the whole operation has been done. But you can use ServerManager_StopRequest to abort it.

Requirements

ServerManager.h

See Also

<u>ServerManager_CreateDevice ServerManager_SetDeviceProperty ServerManager_</u>
<u>OpenDevice ServerManager_OpenDeviceBlock</u>

ServerManager_OpenDeviceBlockW

Open the specified device to access some information. It will connect to the server and retrieve the server model and configuration file. This is a synchronous function and it will operate in block way. This is wide-character version of ServerManager OpenDeviceBlock.

Syntax

SCODE ServerManager_OpenDeviceBlcokW (HANDLE hDevice,
	wchar_t *lpszModelName,
	DWORD dwMaxSize);

Parameters

hDevice

[in] the handle of the specified device. It returned from ServerManager_CreateDevice.

IpszModelName

[in] the pointer the wchar t to receive the retrieved model name

dwMaxSize

[in] the model name of the specified device

Return Values

Returns S OK if successful, or an error value otherwise.

Remarks

If you want to control the device or get some information from the device, you must open the device first.

The function will not return the result until the whole operation has been done. But you can use ServerManager StopRequest to abort it.

Requirements

ServerManager.h

See Also

ServerManager OpenDeviceBlock

ServerManager_OpenDeviceLiteBlock

Open the specified device to access some information. It will connect to the server and retrieve the server model, but it will not to retrieve configuration file. You can retrieve configuration file later by using ServerManager_UpdateLocalConfig or ServerManager_UpdateLocalConfigBlock. This is a synchronous function and it will operate in block way.

Syntax

SCODE ServerManager_OpenDeviceLiteBlcok (HANDLE hDevice,
	TCHAR *lpszModelName,
	DWORD dwMaxSize);

Parameters

hDevice

[in] the handle of the specified device. It returned from <u>ServerManager_CreateDevice</u>.

IpszModelName

[in] the pointer the TCHAR to receive the retrieved model name

dwMaxSize

[in] the model name of the specified device

Return Values

Returns S OK if successful, or an error value otherwise.

Remarks

If you want to control the device or get some information from the device, you must open the device first.

The function will not return the result until the whole operation has been done. But you can use ServerManager_StopRequest to abort it.

The function is faster than ServerManager_OpenDeviceBlock, because it will not retrieve configuration file. But it will make some functions about processing configuration file failed until you call ServerManager_UpdateLocalConfig or ServerManager_UpdateLocalConfigBlock.

Requirements

ServerManager.h

See Also

ServerManager CreateDevice ServerManager SetDeviceProperty ServerManager



ServerManager_OpenDeviceLiteBlockW

Open the specified device to access some information. It will connect to the server and retrieve the server model, but it will not to retrieve configuration file. You can retrieve configuration file later by using ServerManager_UpdateLocalConfig or ServerManager_UpdateLocalConfigBlock. This is a synchronous function and it will operate in block way. This is wide-character version of ServerManager_OpenDeviceLiteBlock.

Syntax

SCODE ServerManager_OpenDeviceLiteBlcokW (HANDLE hDevice,
	wchar_t *lpszModelName,
	DWORD dwMaxSize);

Parameters

hDevice

[in] the handle of the specified device. It returned from ServerManager CreateDevice.

IpszModelName

[in] the pointer the wchar_t to receive the retrieved model name

dwMaxSize

[in] the model name of the specified device

Return Values

Returns S OK if successful, or an error value otherwise.

Remarks

If you want to control the device or get some information from the device, you must open the device first.

The function will not return the result until the whole operation has been done. But you can use ServerManager StopRequest to abort it.

The function is faster than ServerManager_OpenDeviceBlock, because it will not retrieve configuration file. But it will make some functions about processing configuration file failed until you call ServerManager_UpdateLocalConfig or ServerManager_UpdateLocalConfigBlock.

Requirements

ServerManager.h



ServerManager_ReadDataBlock

This function is used to read the data from a http connection. User must ensure that the connection is already connected. Or error will be returned. If the data is still not enough, the same success code is returned. Use this function again to read futher data.

The user must make sure the http connection is already established. Or it will return error.

Syntax

SCODE ServerManager_ReadDataBlock (HANDLE hOper,
	BYTE *pbyBuffer,
	DWORD *pdwBufLen);

Parameters

hOper

[in] the http operation handle. It reutrned from <u>ServerController_SendHttpCommand</u> or ServerController_SendHttpCommandReadBlock

pbyBuffer

[out] the pointer to buffer to receive the http response data

pdwBufLen

[in out] t the pointer to a DWORD to represent the length of the buffer. After the function return, it will be replaced with the actual length value

Return Values

Returns S_OK if successful, or an error value otherwise.

Remarks

In ServerUtl applied case, this function may not find the appropriate one to do it. The module will return ERR_NOT_IMPLEMENT.

Requirements

ServerManager.h

See Also

ServerManager_SendHttpCommandBlock

This function is used to send an http command to server. For POST, the parameter is also put after the question mark as GET does. The result of the command is ignored by this function.

If need to read response data, please use ServerController_SendHttpCommandReadBlock.

This is a synchronous function and it will operate in block way

Syntax

SCODE	HANDLE hDevice,	
ServerManager_SendHttpCommandBlock (const TCHAR *pszCommand,	
	BOOL bPost);

Parameters

hDevice

[in] the handle of the targeted device. It returned from <u>ServerManager_CreateDevice</u>.

pszCommand

[in] the string pointer to an http command.

bPost

[in] Is the command sends by POST or GET? True is for POST, false for GET.

Return Values

Returns S OK if successful, or an error value otherwise.

Remarks

The function will not return the result until the whole operation has been done. But you can use ServerManager_StopRequest to abort it.

Requirements

ServerManager.h

See Also

ServerManager_SendHttpCommandBlockW

This function is used to send an http command to server. For POST, the parameter is also put after the question mark as GET does. The result of the command is ignored by this function.

If need to read response data, please use ServerController_SendHttpCommandReadBlock or . ServerController SendHttpCommandReadBlockW for wide-character version.

This is a synchronous function and it will operate in block way. This is wide-character version of ServerManager SendHttpCommandBlock.

Syntax

SCODE	HANDLE hDevice,	
ServerManager_SendHttpCommandBolckW (const wchar_t *pszCommand,	
	BOOL bPost):

Parameters

hDevice

[in] the handle of the targeted device. It returned from <u>ServerManager_CreateDevice</u>.

pszCommand

[in] the string pointer to an http command.

bPost

[in] Is the command sends by POST or GET? True is for POST, false for GET.

Return Values

Returns S OK if successful, or an error value otherwise.

Remarks

The function will not return the result until the whole operation has been done. But you can use ServerManager_StopRequest to abort it.

Requirements

ServerManager.h

See Also

ServerManager SendHttpCommandBlock

ServerManager_SendHttpCommandReadBlock

This function is used to send an http command to server. For POST, the parameter is also put after the question mark as GET does. The result is read into pbyData until reaches the buffer length or connection is closed. If there are more data, special success code is returned and the phOper could hold the operation handle. Use ServerManager_ReadDataBlock to read futher data.

This is a synchronous function and it will operate in block way

Syntax

SCODE	HANDLE hDevice,
ServerManager_SendHttpCommandReadBlock (const TCHAR *pszCommand,
	BOOL bPost
	BYTE *pbyData,
	DWORD *pdwBuflen,
	HANDLE *phOper);

Parameters

hDevice

[in] the handle of the targeted device. It returned from <u>ServerManager CreateDevice</u>.

pszCommand

[in] the string pointer to an http command.

bPost

[in] Is the command sends by POST or GET? True is for POST, false for GET.

pbyData

[out] the pointer to buffer to receive the http response data

pdwBuflen

[in out] the pointer to a DWORD to represent the length value of buffer. It will be repleaced with the length value of the response data.

phOper

[out] the pointer to a http operation handle. The http operation handle is used to read more data. The module will pass a handle to the caller if there is more data to be read. If none, the phOper will be null. The users do not need to free the http operation handle. It is kept internally.

Return Values

Returns S OK if successful, or an error value otherwise.

Remarks

The function will not return the result until the whole operation has been done. But you can use ServerManager_StopRequest to abort it.

Requirements

ServerManager.h

See Also

<u>ServerManager_CreateDevice ServerManager_SetDeviceProperty ServerManager_OpenDeviceServerManager_OpenDeviceBlock</u>

ServerManager_SendHttpCommandReadBlockW

This function is used to send an http command to server. For POST, the parameter is also put after the question mark as GET does. The result is read into pbyData until reaches the buffer length or connection is closed. If there are more data, special success code is returned and the phOper could hold the operation handle. Use ServerManager_ReadDataBlock or ServerManager_ReadDataBlockW for wide-character version to read further data.

This is a synchronous function and it will operate in block way. This is wide-character version of ServerManager_SendHttpCommandReadBlock.

Syntax

SCODE	HANDLE hDevice,
ServerManager_SendHttpCommandReadBlockW (const wchar_t *pszCommand,
	BOOL bPost
	BYTE *pbyData,
	DWORD *pdwBuflen,
	HANDLE *phOper);

Parameters

hDevice

[in] the handle of the targeted device. It returned from <u>ServerManager_CreateDevice</u>.

pszCommand

[in] the string pointer to an http command.

bPost

[in] Is the command sends by POST or GET? True is for POST, false for GET.

pbyData

[out] the pointer to buffer to receive the http response data

pdwBuflen

[in out] the pointer to a DWORD to represent the length value of buffer. It will be repleaced with the length value of the response data.

phOper

[out] the pointer to a http operation handle. The http operation handle is used to read more data. The module will pass a handle to the caller if there is more data to be read. If none, the phOper will be null. The users do not need to free the http operation handle. It is kept internally.

Return Values

Returns S OK if successful, or an error value otherwise.

Remarks

The function will not return the result until the whole operation has been done. But you can use ServerManager_StopRequest to abort it.

Requirements

ServerManager.h

See Also

 $\underline{ServerManager_SendHttpCommandReadBlock}$

ServerManager_SendPTZCommandBlock

Send the PTZ command to the server. This is a synchronous function and it will operate in block way

Syntax

SCODE	HANDLE hDevice,
ServerManager_ SendPTZCommandBlock(DWORD dwCamera,
	ESRVCTRL_PTZ_COMMAND PtzCommand,
	const TCHAR * pszExtraCmd,
	BOOL bWaitRes

Parameters

hDevice

[in] the handle of the targeted device. It returned from <u>ServerManager_CreateDevice</u>.

dwCamera

[in] in the multiple camera model, it indicates the order from the right with starting as 1. Otherwise it will be ignored.

ePtzCommand

[in] the <u>ESRVCTRL_PTZ_COMMAND</u> to represent a command will be sent to the target device. Not all commands are accepted in every camera, so you may check the user's manual to make sure it.

pszExtraCmd

[in] the extra information for certain PTZ command. Here is a list for the command

- eSrvCtrlPTZPresetAdd: the pointer to the name of the new preset location
- eSrvCtrlPTZPresetDel: the pointer to the name of preset location to be deleted
- eSrvCtrlPTZPresetRecall: the pointer to the name of the preset location to be recalled
- eSrvCtrlPTZPanSpeed: the pointer to the pan speed in string (number presented in string format)
- eSrvCtrlPTZTiltSpeed: the pointer to the tilt speed in string (number presented in string format)
- eSrvCtrlPTZFocusSpeed: the pointer to the tilt speed in string (number presented in string format)
- eSrvCtrlPTZCustom: the pointer to the customed command ID in string PAGE 103

(number presented in string format)

bWaitRes

[in] the boolean value to wait for the server's response or not.

Return Values

Returns S OK if successful, or an error value otherwise.

Remarks

The function will not return the result until the whole operation has been done. But you can use ServerManager StopRequest to abort it.

For supporting digital PTZ command, you must set the device to EPTZ mode by call the ServerManager_SetPTZType, otherwise the device will use physical PTZ command.

In EPTZ mode, you may need to input stream index by set the high word of dwCamera, the low word is camera index, the stream index is start from 1.

Requirements

ServerManager.h

See Also

ServerManager_SetDOStatusBlock

Set current DO information of the server. This is a synchronous function and it will operate in block way

Syntax

SCODE	HANDLE hDevice,
ServerManager_SetDOStatusBlock (ESrvCtrlDiDoLevel * peDOStatus,
	DWORD dwMaxDONum,
	BOOL bWaitRes);

Parameters

hDevice

[in] the handle of the targeted device. It returned from <u>ServerManager CreateDevice</u>.

peDOStatus

[in] the pointer to a <u>ESrvCtrlDiDoLevel</u> to update the DO status of the server. It is the pointer of the first element of the DO status array.

dwMaxDONum

[in]the size value of DO status array

bWaitRes

[in] the Boolean value to wait for the server's response or not.

Return Values

Returns S OK if successful, or an error value otherwise.

Remarks

The function will not return the result until the whole operation has been done. But you can use ServerManager_StopRequest to abort it.

Requirements

ServerManager.h

See Also

<u>ServerManager_CreateDevice ServerManager_SetDeviceProperty ServerManager_</u>
<u>OpenDevice ServerManager_OpenDeviceBlock</u>

ServerManager_SetMotionDetectionInfoBlock

Set current motion detection setting information of the server. This is a synchronous function and it will operate in block way

Syntax

SCODE	HANDLE hDevice,
ServerManager_SetMotionDetectionInfoBlock (DWORD dwCamera,
	TSRVCTRL_MODETECT_INFO * ptMDInfo,
	BOOL bWaitRes

Parameters

hDevice

[in] the handle of the targeted device. It returned from <u>ServerManager CreateDevice</u>.

dwCamera

[in] in the multiple camera model, it indicate the order from the right with starting as 1. Otherwise the module will ignore it.

ptMDInfo

[in] the pointer to a <u>TSRVCTRL_MODETECT_INFO</u> to store the motion detection to update to the server.

bWaitRes

[in] the Boolean value to wait for the server's response or not.

Return Values

Returns S OK if successful, or an error value otherwise.

Remarks

The function will not return the result until the whole operation has been done. But you can use ServerManager StopRequest to abort it.

Requirements

ServerManager.h

See Also

ServerManager_SetPrivateMaskInfoBlock

Set current private mask setting information of the server. This is a synchronous function and it will operate in block way

Syntax

SCODE	HANDLE hDevice,
ServerManager_SetPrivateMaskInfoBlock (DWORD dwCamera,
	TSRVCTRL_PRIVATEMASK_INFO *ptPMInfo,
	BOOL bWaitRes

Parameters

hDevice

[in] the handle of the targeted device. It returned from <u>ServerManager CreateDevice</u>.

dwCamera

[in] in the multiple camera model, it indicate the order from the right with starting as 1. Otherwise the module will ignore it.

ptPMInfo

[out] the pointer to a <u>TSRVCTRL_PRIVATEMASK_INFO</u> to receive the private mask setting information.

bWaitRes

[in] the Boolean value to wait for the server's response or not.

Return Values

Returns S OK if successful, or an error value otherwise.

Remarks

The function will not return the result until the whole operation has been done. But you can use ServerManager_StopRequest to abort it.

Requirements

ServerManager.h

See Also

ServerManager_UartReadBlock

Read responded data from device's serial port. Note that the server will not cache the UART data. So if the timing is incorrect, the data may lose. This is a synchronous function and it will operate in block way

Syntax

SCODE ServerManager_UartReadBlock (HANDLE hDevice,
	DWORD dwPort,
	BYTE *pszResponse,
	DWORD *pdwReadLen,
	BOOL bFlush,
	DWORD dwWaitTime,);

Parameters

hDevice

[in] the handle of the targeted device. It returned from ServerManager CreateDevice.

dwPort

[in] the com port.

pszResponse

[out] the pointer to the string to receive the response data

pdwReadLen

[in out] the pointer to a DWORD to represent the length of the buffer. After the function return, it will be replaced with the actual length value.

bFlush

[in] the Boolean value to the server should flush the Uart or not before it begin to read data..

dwWaitTime

[in] the milliseconds unit value for the server to wait for the specified amount of data

Return Values

Returns S OK if successful, or an error value otherwise.

Remarks

The function will not return the result until the whole operation has been done. But you can use ServerManager_StopRequest to abort it.

Requirements

ServerManager.h

See Also

ServerManager_UartReadAFWriteBlock

Read responded data from device's serial port after send the command to the server. Note that the server will not cache the UART data. So if the timing is incorrect, the data may lose. This is a synchronous function and it will operate in block way

Syntax

SCODE ServerManager_UartReadAFWriteBlock (HANDLE hDevice,
	DWORD dwPort,
	onst BYTE *pbyCommand,
	DWORD dwLen,
	BYTE *pszResponse,
	DWORD dwReadLen,
	BOOL bFlush,
	DWORD dwWaitTime,);

Parameters

hDevice

[in] the handle of the targeted device. It returned from <u>ServerManager_CreateDevice</u>.

dwPort

[in] the com port.

pbyCommand

[in] the pointer to the command string.

dwLen

[in] the length value of the command.

pszResponse

[out] the pointer to the string to receive the response data

dwReadLen

[in out] the pointer to a DWORD to represent the length of the buffer. After the function return, it will be replaced with the actual length value.

bFlush

[in] the Boolean value to the server should flush the Uart or not before it begin to read data..

dwWaitTime

[in] the milliseconds unit value for the server to wait for the specified amount of data

Return Values

Returns S OK if successful, or an error value otherwise.

Remarks

The function will not return the result until the whole operation has been done. But you can use ServerManager_StopRequest to abort it.

Requirements

ServerManager.h

See Also

ServerManager_UartWriteBlock

Send data to device's serial port.. This is a synchronous function and it will operate in block way.

Syntax

SCODE ServerManager_UartWriteBlock (HANDLE hDevice,
	DWORD dwPort,
	const BYTE *pbyCommand,
	DWORD dwLen,
	TSVRCTRL_NOTIFY * ptNotify,
	HANDLE * phProc,
	BOOL bWaitRes);

Parameters

hDevice

[in] the handle of the targeted device. It returned from <u>ServerManager_CreateDevice</u>.

dwPort

[in] the com port.

pbyCommand

[in] the pointer to the command string.

dwLen

[in] the length value of the command.

bWaitRes

[in] the boolean value to wait for the server's response or not.

Return Values

Returns S OK if successful, or an error value otherwise.

Remarks

The function will not return the result until the whole operation has been done. But you can use ServerManager_StopRequest to abort it.

Requirements

ServerManager.h

See Also

<u>ServerManager_CreateDevice ServerManager_SetDeviceProperty ServerManager_</u>
<u>OpenDevice ServerManager_OpenDeviceBlock</u>



ServerManager_UpdateLocalConfigBlock

Update the local system parameter. It means to retrieve the configuration file from server again. Any change made locally is overwritten. This is a synchronous function and it will operate in block way

Syntax

SCODE ServerManager_UpdateLocalConfigBlock(HANDLE hDevice);

Parameters

hDevice

[in] the handle of the specified device. It returned from <u>ServerManager CreateDevice</u>.

Return Values

Returns S_OK if successful, or an error value otherwise.

Remarks

The function will not return the result until the whole operation has been done. But you can use ServerManager StopRequest to abort it.

Requirements

ServerManager.h

See Also

ServerManager_UpdateRemoteConfigBlock

Update the remote system parameters. It means upload the local configuration file to remote server. The server will reboot after the file is uploaded by default. To prevent server rebooting, please set the eSystemResetSystem item to "No". But some change of the configuration will take effect only if server reboot, such as the new IP address.

This is a synchronous function and it will operate in block way

Syntax

SCODE ServerManager_UpdateRemoteConfigBlock(HANDLE hDevice);

Parameters

hDevice

[in] the handle of the specified device. It returned from <u>ServerManager_CreateDevice</u>.

Return Values

Returns S_OK if successful, or an error value otherwise.

Remarks

The function will not return the result until the whole operation has been done. But you can use ServerManager_StopRequest to abort it.

Requirements

ServerManager.h

See Also

5. Append

5.1. Error Code

SVRMNGR_E_TOOMANY_DEVICE - 0x80090000

It has created too many devices in ServerManager

SVRMNGR_E_NOTLOAD_SRVCTRLLIB - 0x80090001

ServerController library is not loaded successfully

SVRMNGR E NOTLOAD SRVUTILLIB - 0x80090002

ServerUtility library is not loaded successfully

SVRMNGR_E_DEVICE_NOT_OPEN - 0x80090003

ServerManager is not open device yet (not call ServerManager_OpenDeviceBlock or ServerManager OpenDevice)

SVRMNGR E PARTIAL NOT IMPLEMENT - 0x80090004

It may not find the appropriate function to work in some conditions

SVRMNGR E NOT MAPPING - 0x80090005

It can not find corresponding ServerUtility config item index of parameter item in RX (new model)

SVRMNGR E KEY NOT FOUND - 0x80090006

It can not find the item in functions ServerManager_SetValueByNameBlock and ServerManager GetValueByName

SVRMNGR W MUST UPDATEREMOTE FIRST - 0x80090007

This is warning that you may do ServerManager_UpdateRemoteConfigBlock or ServerManager_UpdateRemoteConfig first

SVRMNGR E TIMEOUT - 0x80090008

ServerManager occur timeout

SVRMNGR E AUTH - 0x80090009

It occurs authentication failed when trying to connect to server

SVRMNGR_E_CONNECT_FAILED - 0x8009000a

ServerManager connect to server failed.

SVRMNGR_E_PAGE_NOT_FOUND - 0x8009000b

It can not find the page in Http request

SVRMNGR E ERROR MODEL - 0x8009000c

Use wrong library between ServerController and ServerUtility.

SVRMNGR_E_CONVERT_UNITOMB - 0x8009000d

It occurs error when converting Unicode to multi-byte string.

SVRMNGR_E_READ_DATA_ERROR - 0x8009000e

The data that read from server is something wrong

SVRMNGR_E_FTP_GETFILE - 0x8009000f

Get data from ftp server failed.

SVRMNGR_E_FTP_PETFILE - 0x80090010

Put data to ftp server failed.

SVRMNGR E OPENFILE - 0x80090011

Open file failed.

SVRMNGR E ABORTING - 0x80090012

The request is be aborted.

SVRMNGR_E_LOAD_LIBRARY - 0x80090013

Both libraries are not loaded.

SVRMNGR_E_TOOMANY_NONBLOCK_OPER - 0x80090014

Too many non-blocking operations are proceeding.

