TechSmith Snagit™

COM Server Guide

Version 2018
Jan 2018

Table of Contents

Introduction to the Snagit COM Server

Using Snagit's COM server, you can easily incorporate Snagit's screen capture functionality into your organization's proprietary applications. The COM server lets you customize capture instructions for Snagit, automate the capture process, and programmatically control Snagit's entire array of image and video capture features from within your own application.

You can access Snagit's capture functionality from any programming language that supports COM, including the following:

- C#
- C/C++
- Visual Basic
- Fox Pro 9
- Ruby
- VBScript

To view sample projects in various programming languages that demonstrate how to use Snagit to take image captures and video recordings from your own application, go to https://github.com/TechSmith/Snagit-COM-Samples.

This Snagit COM Server Guide assumes you are familiar with COM programming. If you need more information about COM, please consult your development environment's documentation.

Installation Information

The Snagit COM server is built into Snagit. Download and install Snagit. This automatically registers the Snagit COM server and makes it available to other applications.

The Snagit COM server is implemented as an out-of-process COM server. The Snagit setup program registers the Snagit COM server after you install Snagit. If you need to manually register the COM server, use an elevated command prompt and type the following from the Snagit program folder:

```
Snagit32.exe /register
```

Application Deployment and Licensing

Each desktop using the Snagit COM server must have Snagit installed. Any commercially distributed software application using the Snagit COM server must comply with the restrictions located in the Snagit Software License Agreement in the license.txt file in the Snagit application folder.

> If you are using the Snagit trial version, the COM server is fully functional during the trial period. Once the trial has expired, invoking the capture method fails, and the COM server gives a **serrSnagitExpired** error, and **LastError** is set to **serrSnagitExpired**. All programs using the Snagit COM server should check the **LastError** property or subscribe to the events from the capture interfaces, so that this error case is handled correctly.

System Requirements

An application using the Snagit COM server must meet the following system requirements:
- Microsoft Windows 10, Windows 8, Windows 7 SP1 (32-bit and 64-bit), or Windows Server 2012 R2
- .NET 4.6 Full or later
- 2.4 GHz single core processor (dual core i5 required for video capture)
- 1 GB of RAM (4 GB required for video capture)
- 400 MB of hard-disk space for program installation
- Windows 7 compatible video and audio hardware
- Video Capture on Windows N requires the Media Feature Pack for Windows N

What's New

The following changes have been made for the most recent version of Snagit:

Version 13.1.0

- Added webcam support
- Added method to get the audio length from a video recording

Version 13.0

- Removed capturing links/hotspots
- Removed custom scroll input
- Removed saving to the Flash SWF file type
- Removed the Halftone color conversion

Version 12.0

- Added link to new code samples
- Fastest scrolling method option has been exposed
- Text Capture has been removed

Version 11.1

- Added the following:

    - Enumerations:

        - snagVideoInput
        - snagVideoOutput
        - snagVideoFileType
        - snagRecorderError
        - snagRecorderState

    - Interfaces:

        - IVideoCapture
        - IVideoFormat
        - IMP4Format
        - IVideoFile

- Events:

    - _IRecorderEventsMethods

- The default setting for IImageFile and IImageFile2 for the FileType property was changed from siftBMP to siftPNG to reflect our default of PNG in Snagit Editor.

- The Snagit 11 COM server will not be registered if a previous version of Snagit is already installed. You will need to register the new COM server manually by running "Snagit32.exe /register" at a Admin command prompt.

- The AppendToFile property for the ITextFile2 interface is ignored if the UseFormattedText property is set.

Version 11.0

- Some enumerated types have had values removed.

    - snagImageInput:

        - siiDOSScreen
        - siiProgramFile
        - siiEllipse
        - siiRoundedRect
        - siiTriangle
        - siiPolygon
        - siiWallpaper
        - siiDirectX

    - snagTextInput:

        - stiDOSScreen

    - snagImageFileType:

        - siftPCX
        - siftMSP
        - siftCAL
        - siftGEM
        - siftIOCAR
        - siftIOCAW

- siftPICT
- siftLEAD

- snagColorConversionMethod:

    - sccmCustom = 4

- Other enumerated types were removed entirely.

    - snagDitherPalette
    - snagDitherMethod

- Color depth filters were removed.

    - IImageColorConversion properties:

        - snagImageColorDepth
        - snagDitherMethod
        - snagDitherPalette

Version 10.0

- New image input setting, **siiCapture**, for All-in-One Capture ®.

Getting Started

The Snagit COM server should be accessible from any language that supports COM. Only basic data types are used. See Data Types for more information.

> The Snagit COM server is not an automation server. None of the changes made through the COM server are saved in the Snagit application or the registry. You can use the COM server from multiple clients, so check return values on calls to methods in case a conflict has occurred.

How It Works

All the interfaces, properties, and methods described in this user guide are accessible from any COM enabled language.

Interfaces	These define the properties, methods, and events for a given COM object.
Properties	Values stored in an interface that may be set or retrieved. Some properties are read-only; all interfaces are read-only.
Methods	Functions in interfaces that interact with the COM server.
Events	Events may be sent from the COM server to the client program. The client program must "subscribe" to the event interface to receive the events. This is a language dependent option, and not all programming languages can receive events.
Enumerations	There are many enumerations used in the Snagit COM server. These are described individually in the Enumerations section.

To access the COM object's functionality, you must first create an instance of the object in your client program.

- **C++ MFC and ATL Users**
  The TLB is embedded into the Snagit32.exe that is located in the Snagit Install folder. Use the Microsoft Visual C++ #import statement on Snagit32.exe to create a smart-pointer wrapper classes for the COM server.

- **Visual Basic Users**
  A reference to the SNAGIT 1.0 Type Library should be added in the References dialog accessed from the **Project > References** menu.

- **VB.NET and C# Users**

Choose **Project > Add Reference** to add a reference to the SNAGIT 1.0 Type Library. Note that the entry is on the COM tab page.

Image Capture Code Tutorial

This section gives you step-by-step instructions on the basic methods and properties you need to create an image capture. The source code fragments use Microsoft's Visual Basic programming language.

> To view more sample projects in various programming languages that demonstrate how to use Snagit to take image captures and video recordings from your own application, go to https://github.com/TechSmith/Snagit-COM-Samples.

Step 1 – Add a Reference to the SNAGIT 1.0 Type Library

To add a reference in Visual Studio 2013, do the following:

1. Open the project properties and click the **References** tab.

2. Click on the **Add** button to browse the COM objects on your system.

3. Locate the SNAGIT 1.0 Type Library and click **OK**.

Step 2 – Creating the Capture Object

Create the capture object.

```
Dim ImageCapture1 As SNAGITLib.ImageCapture

Set ImageCapture1 = CreateObject("Snagit.ImageCapture.1")
```

Step 3 – Setting the Capture Properties

Configure various capture object properties. All object properties use default values if the property is not specified. Configure different properties based on what you want to do with the capture object.

```
// Configure to capture the window and save to the clipboard

ImageCapture1.Input = siiWindow

ImageCapture1.Output = sioClipboard
```

If you do not know the current capture setting, you can retrieve these values.

```
Dim bUsePreview

bUsePreview = ImageCapture1.EnablePreviewWindow
Dim CaptureCursor CaptureCursor = ImageCapture1.IncludeCursor
```

Step 4 – Starting the Capture

Once the capture object is configured correctly, start the capture session.

```
ImageCapture1.Capture
```

> The Capture call is asynchronous. The capture object may still be completing the operation after the function returns.

Step 5 – Getting Capture Information

During or after a capture, you may want to monitor the state of the capture.

```
Dim capState As snagCaptureState

capState = ImageCapture1.CaptureState

Dim capDone

capDone = ImageCapture1.IsCaptureDone
```

The capture state information resets when a new capture is started.

> Specific interfaces send event callbacks to which a client can subscribe. This allows the client program to update without polling.

Interfaces

Interfaces define the methods and properties of the COM object.

When available, methods are listed before properties on interface pages. Properties can be "write" or "read-only." Any property that is used to access another interface is read-only.

The following interfaces are available:

- IAutoScrollOptions
- IAutoScrollOptions2
- IClipboardOptions
- IDelayOptions
- IExtendedWindowOptions
- IFTPOptions
- IImageAnnotation
- IImageBorder
- IImageCaptionOptions
- IImageCapture
- IImageCapture2
- IImageCaptureResults
- IImageColorConversion
- IImageColorEffects
- IImageColorSubstitution
- IImageFile
- IImageFilters
- IImageResolution
- IImageScale
- IImageTrim
- IImageWatermark
- IMailOptions
- IMenuOptions
- IMP4Format
- IPrinterOptions

- IPrinterPageLayoutOptions
- IRegionOptions
- ISelectedArea
- ITextFont
- ITWAINOptions
- IVideoCapture
- IVideoCapture2
- IVideoFile
- IVideoFormat
- IWindowOptions

IAutoScrollOptions

The **IAutoScrollOptions** interface contains the settings for scrolling captures. These settings are only valid when the input of the capture object is set to **siiWindow** or **siiRegion** on an image capture object.

Properties

Property (type)	Default	Read / Write	Notes
AutoScrollMethod (snagAutoScrollMethod)	sasmNone	Write	Sets the type of automatic scrolling for the next capture. See snagAutoScrollMethod for information on possible options.
ForegroundScrollingWindow (Boolean)	True	Write	If enabled, the next capture performed brings the window to be scrolled to the foreground and displays the window while scrolling.
Delay (long)	0	Write	The time, in seconds, to wait between foregrounding the window and capturing. Valid values are 0 to 300000.
StartingPosition (snagAutoScrollStartingPosition)	sasspTopLeft	Write	The position from which the window is scrolled. For more information, see snagAutoScrollStartingPosition.

IAutoScrollOptions2

The IAutoScrollOptions2 interface extends the IAutoScrollOptions interface by exposing the option to enable/disable using the fastest image scrolling method.

> The IImageCapture interface was not versioned to directly reference IAutoScrollOptions2. You will need to cast the IAutoScrollOptions pointer to a IAutoScrollOptions2 pointer in order to access this option.

Property (type)	Default	Read / Write	Notes
FastestScrollingMethod (Boolean)	True	Write	If disabled, Snagit reverts back to using older scrolling technology.

IClipboardOptions

The **IClipboardOptions** interface is used to set the options related to Clipboard capture input.

Properties

Property (type)	Default	Read / Write	Notes
WidthInPixels (long)	640	Write	Controls the width (in pixels) of Clipboard capture images. Set this value to zero to use the Windows desktop width and height for image dimensions.

IDelayOptions

The **IDelayOptions** interface specifies the number of seconds to wait before taking a capture.

Properties

Property (type)	Default	Read / Write	Notes
EnableDelayedCapture (Boolean)	False	Write	If set to true, the Snagit COM server waits for the period of time specified in the **DelaySeconds**

Property (type)	Default	Read / Write	Notes
			property before performing the capture.
DelaySeconds (long)	10	Write	Specifies the number of seconds to delay before performing a capture. Ignored if **EnableDelayedCapture** is set to false.
EnableCountdownWindow (Boolean)	True	Write	If set to true, a countdown is displayed showing the number of seconds left before the capture occurs. Ignored if **EnableDelayedCapture** is set to false.

IExtendedWindowOptions

The **IExtendedWindowOptions** interface contains all the settings for an extended window capture. Extended window capture allows you to resize a window to any width/height before capturing (potentially bigger than the screen). The window is restored to its original width/height after the capture is completed. You can also use this option to capture a window partially off the screen.

This is only valid when capturing an image object using the **siiExtendedWindow** input.

Properties

Property (type)	Default	Read / Write	Notes
EnablePreview (Boolean)	True	Write	If true, the user sets the height and width for the extended window capture. Ignored if **UseSpecifiedCaptureSize** is false.
Height (long)	600	Write	The height to size the window before taking the capture. Must be a positive integer.
Width (long)	800	Write	The width to size the window before taking the capture. Must be a positive integer.

IFTPOptions

The **IFTPOptions** interface is used when the output is set to **sioFTP** or **stoFTP**. The capture image or text is sent to an FTP server. At a minimum, the server and filename must be set in order to use FTP output.

Properties

Filename (string)	"" (empty string)	Write	File name to use if **UseAutomaticFileNaming** is false, or the prefix of the file name if **UseAutomaticFileNaming** is true.
Password (string)	"" (empty string)	Write	Password on the FTP server, if it requires authentication. Use with **ServerRequiresAuthentication**.
Port (long)	21	Write	The port of the FTP server to upload to.
ProxyServer (string)	"" (empty string)	Write	Specifies both the proxy server name and the port in the format "server:port". Only used if **UseProxyServer** is true.
RemotePath (string)	"" (empty string)	Write	Path to a directory on the remote server to put the output file. This can be relative or absolute, but must exist.
SequenceLimit (long)	0	Write	Limits the number of auto-named files stored on the FTP server (oldest file is deleted). Use 0 for no limit.
Server (string)	"" (empty string)	Write	Location of the FTP server to upload to. This does not need the "ftp://" prefix.
ServerRequiresAuthentication (Boolean)	False	Write	Use with **UserName** and **Password**.
UseAutomaticFileNaming (Boolean)	False	Write	When true, the file is automatically named. Numbers are appended to the end of the file name, starting with 1. Files of separate types (extensions) have separate numbering.
UsePassiveFTP (Boolean)	False	Write	Enable or disable passive FTP mode.
UseProxyServer (Boolean)	False	Write	Use when routing transfers through a proxy server.
UserName (string)	"" (empty string)	Write	User name on the FTP server, if it requires authentication. Use with **ServerRequiresAuthentication**.
UseTempFileReplace (Boolean)	True	Write	When true, the file is uploaded under a temporary name and then renamed to the appropriate output file name.

IImageAnnotation

The **IImageAnnotation** interface allows for overlaying user or system captions on the captured image. This interface allows you to set caption formatting options and caption types.

- To set placement and text effects, such as text color, shadow, outline and background color, see IImageCaptionOptions.
- Caption font styles may also be set using the **ITextFont** interface, which can be accessed from IImageCaptionOptions.

> The text will be truncated in the caption if the text length extends beyond the width of the image or the width of the printed page.

Properties

Property (type)	Default	Read / Write	Notes
EnableCaption (Boolean)	False	Write	Enables the text caption.
PromptForCaption (Boolean)	False	Write	Prompts the user for caption text. Ignored if **EnableCaption** is set to false.
CaptionText (string)	"" (empty string)	Write	The text used in the caption.
IncludeComputerName (Boolean)	False	Write	Appends the name of the computer to the caption.
IncludeUserName (Boolean)	False	Write	Appends the name of the current user to the caption.
IncludeTimeDate (Boolean)	False	Write	Appends the time and/or date to the system caption.
TimeDateDisplayOrder (snagTimeDateOrder)	stdoTimeThenDate	Write	Defines if, and in what order, to display the time and date.
UseWindowsTimeFormat (Boolean)	True	Write	Uses current Windows standard format for time.
UseWindowsDateFormat (Boolean)	True	Write	Uses current Windows standard format for date.

Property (type)	Default	Read / Write	Notes
CustomTimeFormat (string)	"" (empty string)	Write	Text representing the format of the time, such as "h:mm:ss tt".
CustomDateFormat (string)	"" (empty string)	Write	Text representing the format of the date, such as "M/d/yyyy".
PrintCaptionsAtPageBottom (Boolean)	True	Write	If true, the caption is not printed over the image, but instead added to the bottom.
CaptionOptions (IImageCaptionOptions)		Read	An interface containing settings for the text displayed as a caption.
SystemCaptionOptions (IImageCaptionOptions)		Read	An interface containing settings for the text displayed as a caption.

IImageBorder

The **IImageBorder** interface is a filter that creates a border around the edge of an image. This filter may increase the size of the original captured image.

Properties

Property (type)	Default	Read / Write	Notes
EnableBorder (Boolean)	False	Write	Enables the border filter.
FrameOutsideImage (Boolean)	True	Write	If true, draws the border outside the bounds of the captured image.
Use3DEffect (Boolean)	True	Write	Uses three colors to create a 3D effect.
TotalWidth (long)	8	Write	The total width of the border, in pixels.
ShadowWidth (long)	2	Write	The width of the shadow effect, in pixels. Valid values are 0 to one half of the value of **TotalWidth**.

Property (type)	Default	Read / Write	Notes
MainColor (long)	RGB (192, 192, 192)	Write	The default border color. Any RGB color is a valid value. This is the only color used if **Use3DEffect** is false.
HighlightColor (long)	RGB (255, 255, 255)	Write	The highlight color of the 3D border effect. Any RGB color is a valid value. This color is used only if **Use3DEffect** is true.
ShadowColor (long)	RGB (128, 128, 128)	Write	The shadow color of the 3D border effect. Any RGB color is a valid value. This color is used only if **Use3DEffect** is true.

For more information on RGB color values, see Colors.

IImageCaptionOptions

The **IImageCaptionOptions** interface contains the settings for caption text on image captures. This interface provides access to caption placement and text effects.

- To set the font for the caption text, see ITextFont.
- To set the type of caption, see IImageAnnotation.

Properties

Property (type)	Default	Read / Write	Notes
BackgroundColor (long)	RGB (0, 0, 0)	Write	The background color of the rectangle on which the text is displayed. Any RGB color is a valid value. If **UseTransparentBackground** is true, this property is not used.
CaptionStyle (snagCaptionTextStyle)	sctsNormal	Write	Text style for the caption.

Property (type)	Default	Read / Write	Notes
Font (ITextFont)		Read	Interface that exposes the font style settings.
OutlineColor (long)	RGB (255, 255, 255)	Write	The color of the outline that surrounds the text. Any RGB color is a valid value.
Placement (snagPlacement)	spCenterTop	Write	Where the text is placed on the captured image.
ShadowColor (long)	RGB (192, 192, 192)	Write	The color of the drop shadow effect for the text. Any RGB color is a valid value.
TextColor (long)	RGB (0, 0, 0)	Write	The font color. Any RGB color is a valid value.
UseTransparentBackground (Boolean)	False	Write	Hides the rectangle on which the text is displayed.
UseWordWrap (Boolean)	True	Write	Wraps the text to a new line if the text is wider than the display area.

For more information on RGB color values, see Colors.

IImageCapture

The **IImageCapture** interface is the base capture interface for image captures. All image capture actions and settings are contained within it.

If your users have Snagit version 8.1.0 or later, use the IImageCapture2 interface for image captures.

Methods

Name	Action	Notes
Capture	Invokes an image capture	Moves the Snagit COM server into a busy state while the capture is performed. This is always non-blocking except when the output mode is set to

Name	Action	Notes
		sioFile with the Editor window disabled. To know when a capture finishes, subscribe to either the **_ICaptureEvents** or poll the **IsCaptureDone** property.

Properties

Property (type)	Default	Read / Write	Notes
AutoScrollOptions (IAutoScrollOptions)		Read-only	An interface containing the settings for scrolling captures.
BackgroundColor (Long)	RGB(255, 255, 255)	Write	Sets the background color to use outside the capture area for the next capture performed. Any RGB color value is valid (see Colors).
CaptureMultipleAreas (Boolean)	False	Write	Enables or disables multiple area selection for the next capture performed.
CaptureState (snagCaptureState)	scsIdle	Read-only	Returns the current capture state set by the Snagit COM server. Instead of subscribing to the event interface, you can poll this property for the state of the Snagit COM server.
ClipboardOptions (IClipboardOptions)		Read-only	An interface to set options related to Clipboard capturing inputs.
DelayOptions (IDelayOptions)		Read-only	An interface that allows for a capture to be called after a specified number of seconds.
EnablePreviewWindow (Boolean)	False	Write	Enables or disables the Editor window for the next capture.
Filters (IImageFilters)		Read-only	A collection of interfaces for adjusting a captured image.
ForegroundPreview (Boolean)	True	Write	When enabled, this forces the Editor window into the foreground (gives it focus) after making a capture. Only valid if **EnablePreviewWindow** is set to true.

Property (type)	Default	Read / Write	Notes
IncludeCursor (Boolean)	True	Write	Enables or disables the inclusion of the mouse cursor for the next capture performed.
Input (snagImageInput)	siiWindow	Write	Changes the input mode for the next capture performed. The input mode determines where the Snagit COM server captures the bitmap from.
InputExtendedWindowOptions (IExtendedWindowOptions)		Read-only	An interface containing all settings for an Extended Window capture.
InputMenuOptions (IMenuOptions)		Read-only	An interface containing all settings for a Menu capture (input set to **siiMenu**).
InputRegionOptions (IRegionOptions)		Read-only	An interface containing all the settings for a Region capture (input set to **siiRegion** or **stiRegion**).
InputTWAINOptions (ITWAINOptions)		Read-only	An interface containing all the settings for a TWAIN capture (input mode set to **siiTwain**).
InputWindowOptions (IWindowOptions)		Read-only	An interface containing the settings for a Window capture (input set to **siiWindow** or **stiWindow**).
IsCaptureDone (Boolean)	False	Read-only	After a call to the **Capture** method has been made, this property tests to see if the capture has been completed. This property blocks and performs a polling to see when the capture state goes back to **scsIdle**.
LastCaptureSucceeded (Boolean)	True	Read-only	Returns true if the last capture attempt was successful. Returns false if the last capture attempt was unsuccessful.
LastError (snagError)	serrNone	Read-only	Holds the last error set in the Snagit COM server. If an application subscribes to the **OnStateChange** event of the _ICaptureEvents interface, this property can be read for the error on a **scsCaptureFailed** state change. This property is reset to **serrNone** when a new call to the **Capture** method is made.

Property (type)	Default	Read / Write	Notes
LastFileWritten (string)	"" (empty string)	Read-only	If the last capture used **sioFile** as the output, this property contains the whole path for the resulting image file.
NotificationType (snagNotificationType)	sntNone	Write	Sets the messages the Snagit COM server displays. For more information on notifications see the snagNotificationType enumeration description.
Output (snagImageOutput)	sioFile	Write	Changes the output mode for the next capture performed. The output mode determines what the Snagit COM server does with the resulting bitmap from the capture.
OutputFTPOptions (IFTPOptions)		Read-only	An interface containing settings for sending the capture out to FTP (output set to **sioFTP** or **stoFTP**). At a minimum, server and filename must be set.
OutputImageFile (IImageFile)		Read-only	An interface for the configuration of an output image file.
OutputMailOptions (IMailOptions)		Read-only	An interface for setting email output information. Either all information is specified and the email is sent immediately, or the user is prompted for all information.
OutputPrinterOptions (IPrinterPageLayoutOptions)		Read-only	An interface used to specify the formatting of an output being sent to a printer (output set to **sioPrinter** or **stoPrinter**).
UseMagnifierWindow (Boolean)	True	Write	When enabled, a magnifier window shows next to the capture crosshairs for precision when defining capture regions.

IImageCapture2

The **IImageCapture** interface is the base capture interface for image captures. All image capture actions and settings are contained within it.

> **IImageCapture2** replaces **IImageCapture** for users of versions 8.1.0 and later.

Methods

Name	Action	Notes
Capture	Invokes an image capture	Moves the Snagit COM server into a busy state while the capture is performed. This is always non-blocking except when the output mode is set to **sioFile** with the Editor window disabled. In order to know when a capture finishes, subscribe to either **_ICaptureEvents** or poll the **IsCaptureDone** property.

Properties

Property (type)	Default	Read/Write	Notes
AutoScrollOptions (IAutoScrollOptions)		Read-only	An interface containing the settings for scrolling captures.
BackgroundColor (long)	RGB(255, 255, 255)	Write	Sets the background color to use outside the capture area for the next capture performed. Any RGB color value is valid (see Colors).
CaptureMultipleArea (Boolean)	False	Write	Enables or disables multiple area selection for the next capture performed.
CaptureResults (IImageCaptureResults)		Read-only	An interface that stores information about what happened during a capture.
CaptureState (snagCaptureState)	scsIdle	Read-only	Returns the current capture state set by the Snagit COM server. Instead of subscribing to the event interface, you can poll this property for the state of the Snagit COM server.
ClipboardOptions (IClipboardOptions)		Read-only	An interface to set options related to Clipboard capturing inputs.
DelayOptions (IDelayOptions)		Read-only	An interface that allows for a capture to be called after a specified number of seconds.
EnablePreviewWindow (Boolean)	False	Write	Enables or disables the Editor

TechSmith®

Property (type)	Default	Read/Write	Notes
			window for the next capture.
Filters (IImageFilters)		Read-only	A collection of interfaces for adjusting a captured image.
ForegroundPreviewWindow (Boolean)	True	Write	When enabled, this forces the Editor window into the foreground (gives it focus) after making a capture. Only valid if **EnablePreviewWindow** is set to true.
IncludeCursor (Boolean)	True	Write	Enables or disables the inclusion of the mouse cursor for the next capture performed.
Input (snagImageInput)	siiWindow	Write	Changes the input for the next capture. Input determines where the bitmap is captured from.
InputExtendedIWindowOptions (IExtendedWindowOptions)		Read-only	An interface containing all settings for an Extended Window capture.
InputMenuOptions (IMenuOptions)		Read-only	An interface containing all settings for a Menu capture (input set to **siiMenu**).
InputRegionOptions (IRegionOptions)		Read-only	An interface containing all the settings for a Region capture (input set to **siiRegion** or **stiRegion**).
InputTWAINOptions (ITWAINOptions)		Read-only	An interface containing all the settings for a TWAIN capture (input mode set to **siiTwain**).
InputWindowOptions (IWindowOptions)		Read-only	An interface containing the settings for a Window capture (input set to **siiWindow** or **stiWindow**).
IsCaptureDone (Boolean)	False	Read-only	After a call to the **Capture** method has been made, this property tests to see if the capture has been completed. This property blocks

Property (type)	Default	Read/Write	Notes
			and performs a polling to see when the capture state goes back to **scsIdle**.
LastCaptureSucceeded (Boolean)	True	Read-only	Returns true if the last capture attempt was successful. Returns false if the last capture attempt was unsuccessful.
LastError (snagError)	serrNone	Read-only	Holds the last error set in the Snagit COM server. If an application subscribes to the **OnStateChange** event of the **_ICaptureEvents** interface, this property can be read for the error on a **scsCaptureFailed** state change. This property is reset to **serrNone** when a new call to the **Capture** method is made.
LastFileWritten (string)	"" (empty string)	Read-only	If the last capture used **sioFile** as the output, this property contains the whole path for the resulting image file.
NotificationType (snagNotificationType)	sntNone	Write	Sets the messages the Snagit COM server displays. For more information on notifications see the snagNotificationType enumeration description.
Output (snagImageOutput)	sioFile	Write	Changes the output for the next capture. Output determines what happens to the captured bitmap.
OutputFTPOptions (IFTPOptions)		Read-only	An interface containing settings for sending the capture out to FTP (output set to **sioFTP** or **stoFTP**). At a minimum, server and filename must be set.
OutputImageFile (IImageFile)		Read-only	An interface for the configuration of an output image file.
OutputMailOptions (IMailOptions)		Read-only	An interface for setting email output information. Either all information is specified and the email is sent immediately, or the

Property (type)	Default	Read/Write	Notes
			user is prompted for all information.
OutputPrinterPageLayoutOptions (IPrinterPageLayoutOptions)		Read-only	An interface used to specify the formatting of output going to a printer. Only used when **sioPrinter** or **stoPrinter** is selected as the output.
OutputPrinterOptions (IPrinterOptions)		Read-only	An interface for use with printer output. If **UseDefault:Printer** is set to true, then other values set programmatically by **SetData** or by the user with the **ShowSelectionDialog** are ignored.
UseMagnifierWindow (Boolean)	True	Write	When enabled, a magnifier window shows next to the capture crosshairs for precision when defining capture regions.

IImageCaptureResults

The **IImageCaptureResults** interface contains information about what happened during a capture.

Properties

Property (type)	Default	Read/Write	Notes
LastFileWritten (string)	"" (empty string)	Read-only	The file path for the image file if **sioFile** was used as the output.
SelectedArea (ISelectedArea)		Read-only	An interface that exposes the bounding box around the captured area. For a freehand region, this is the bounding box around the total area (e.g. the leftmost or rightmost point of the selection).

IImageColorConversion

The **IImageColorConversion** interface sets an image's color resolution during capture.

Properties

Property (type)	Default	Read / Write	Notes
ConversionMethod (snagColorConversionMethod)	sccmNone	Write	By default, no color conversion occurs. If set to **sccmMonochrome**, the **MonochromeThreshold** is used.
MonochromeThreshold (long)	50	Write	A percentage value that determines the quantity of black and white that shows in the output image. Valid values are from 0 -100.

IImageColorEffects

The **IImageColorEffects** interface is a collection of filters that modify the colors of a captured image. Note that these ranges are different than those presented in Snagit.

Properties

Property (type)	Default	Read / Write	Notes
Brightness (long)	0	Write	Changes the intensity (brightness) of the image. Valid values are -1000 to 1000.
Contrast (long)	0	Write	Changes the contrast between light and dark portions of the image. Valid values are -1000 to 1000.
Hue (long)	0	Write	Changes the hue of colors in the image (similar to rotating a color wheel to select a different mixture of colors). Valid values are -360 to 360.
Saturation (long)	0	Write	Changes the saturation of colors in the image. Saturation is the quantity of a color in a pixel, from gray at the lowest saturation to rich color in the highest. Valid values are -1000 to 1000.

Property (type)	Default	Read / Write	Notes
Gamma (long)	100	Write	Adjusts the intensity of colors in an image by changing the gamma constant used to map the intensity values. Gamma correction changes brightness using a logarithmic scale for visual perception; gamma is a constant used to calculate the progression. Valid values are 1 to 499.

IImageColorSubstitution

The **IImageColorSubstitution** interface allows colors in the captured image to be replaced. Multiple rules for color substitution can be added with the **AddColorSub** method.

> Call **ClearColorSub** between captures to clear the current list of color substitutions.

Methods

Method	Action	Parameters	Notes
AddColorSub(long, OrigColor, long NewColor, long Accuracy, Boolean SwapColors)	Adds a color substitution to the list.	[in] **OrigColor** (long): The color to be replaced. [in] **NewColor** (long): The color to replace the original color. [in] **Accuracy** (long): How close the color should be to the color being replaced. [in] **SwapColors** (Boolean): If true, colors are swapped instead of replaced.	Colors are selected using COLORREF values (0x00bbggrr).
ClearColorSub( )	Clears the current list of color substitutions.		

Method	Action	Parameters	Notes
ShowColorSubDialog (long IParentHandle, Boolean dialogAccepted)	Immediately shows the color substitution dialog.	[in] **IParentHandle** (long): Handle to window (hwnd) in 32‑bit integer format. If the handle is not available, set to 0. [out] **dialogAccepted** (Boolean): True if the user selects OK to select a new color substitution. False if the user selects Cancel.	

Properties

Property (type)	Default	Read / Write	Notes
ColorSubMethod (snagColorSubMethod)	scsmNone	Write	Used to substitute colors for other colors.

> For more information on RGB colors, see Colors.

IImageFile

The **IImageFile** interface allows for the configuration of an output image file. Always call **LoadImageDefaults** after changing the **FileType** property.

Methods

Method	Action	Parameters
LoadImageDefaults (snagImageFileType, newFileType)	Sets the file type and loads the default attributes for that type (subtype, quality, etc).	[in] newFileType (snagImageFileType): The file type to load default settings for.
ShowFileSettingDialog (long IParentHandle, snagImageFileType,	Shows the dialog for a given file type and sets the file type if the user accepts	[in] IParentHandle (long): Handle to windows (hwnd) in 32‑bit integer

Method	Action	Parameters
newFileType, Boolean dialogAccepted)	the dialog.	format. If handle is not available, set value to 0. [out] dialogAccepted (Boolean): True if the user clicked OK to set new file type settings. False if the user clicked Cancel.

Properties

Property (type)	Default	Read / Write	Notes
AutoFilePrefix (string)	"SNAG-"	Write	When the **FileNamingMethod** is set to **sofnmAuto**, this string is the prefix used to automatically name files.
AutoNumPrefixDigits (long)	4	Write	When **FileNamingMethod** is set to **sofnmAuto**, this property specifies the number of digits to include in the automatically named output file.
ColorDepth (snagImageColorDepth)	sicdAuto	Write	Number of bits used for color encoding.
Directory (string)	"" (empty string)	Write	Sets the directory for the output file. If the **FileNamingMethod** is not set to **sofnmPrompt**, the Snagit COM server fails if this property is not set.
Filename (string)	"SNAGIT"	Write	Specifies the output filename to use. This is only used if **FileNamingMethod** is set to **sofnmFixed**.
FileNamingMethod (snagOutputFileNamingMethod)	sofnmPrompt	Write	Method for naming the output file.
FileType (snagImageFileType)	siftPNG	Write	The format of the output file. Use **LoadImageDefaults** to avoid unexpected results.
FileSubType (snagImageFileSubType)	-indeterminate-	Write	Further specifies the type of image file

Property (type)	Default	Read / Write	Notes
			to save. Do not assume a default subtype; instead choose a compatible subtype, call **LoadImageDefaults**, or use the **ShowFileSettingDialog** function.
ProgressiveOption (long)	0 - 12	Write	Sets the number of scans for a progressively encoded image. A value of 0 means no progressive scan. This property is only valid is the **FileType** is set to **siftJPEG**.
Quality (long)	25	Write	Sets the quality of the compression on the image file. This property is only valid if the **FileType** property is set to **siftJPEG**. Valid values are 1 - 100.

IImageFilters

The **IImageFilters** interface is a collection of interfaces for adjusted captured images. Most filters can be used in conjunction if all choices are compatible.

Properties

Property (type)	Notes
Annotation (IImageAnnotation)	An interface for adding annotations to image captures.
Border (IImageBorder)	An interface for adding borders to image captures.
ColorConversion (IImageColorConversion)	An interface to convert colors in image captures.
ColorEffects (IImageColorEffects)	An interface for adding color effects to image captures.
ColorSubstitution (IImageColorSubstitution)	An interface for substituting colors in image captures.
Resolution (IImageResolution)	An interface for changing the resolution of image captures.
Scale (IImageScale)	An interface for resizing image captures.

Property (type)	Notes
Trim (IImageTrim)	An interface for trimming image captures.
Watermark (IImageWatermark)	An interface to add a watermark to image captures.

IImageResolution

The **IImageResolution** interface sets the number of dots per inch (DPI) of the image. These settings have no effect on how the Snagit COM server displays or prints the image.

Properties

Property (type)	Default	Read / Write	Notes
Resolution (long)	96	Write	If **UseAutoResolution** is false, sets the DPI resolution of the image.
UseAutoResolution (Boolean)	True	Write	If true, the Snagit COM server chooses the image resolution. If false, the value specified by **Resolution** is used.

IImageScale

The **IImageScale** interface resizes a captured image. Rounded, or even proportioned, percentage settings scale faster than irregular ones. If you use a factor that is not proportional (58%, for example), enable **UseSmoothScaling** to improve the image's appearance.

Properties

Property (type)	Default	Read / Write	Notes
Factor (long)	0	Write	Percentage of the original width and height.
FactorHeight (long)	100	Write	Percentage of the original height. This property only applies when scaling by Factor.

Property (type)	Default	Read / Write	Notes
FactorWidth (long)	100	Write	Percentage of the original width. This property only applies when scaling by Factor.
Height (long)	200	Write	Height, in pixels. This property does not apply when scaling by Factor.
KeepAspectRatio (Boolean)	True	Write	Keeps the image aspect ratio fixed while changing the width or height.
ScaleBy (snagImageScaleBy)	sisbFactor	Write	Determines the units for scale (by width, by height, by width and height, or by percentage).
ScaleMethod (snagImageScaleMethod)	sismNone	Write	This option disables scaling or specifies scaling to be based on a percentage or custom width/height values.
UseSmoothScaling (Boolean)	True	Write	This applies a "smoothing" effect to images, removing the appearance of jagged edges.
Width (long)	320	Write	Width, in pixels. This property does not apply when scaling by Factor.

IImageTrim

The **IImageTrim** interface removes pixels from the edges of an image. If the **TrimMethod** is set to **stmAuto**, none of the other values in this interface are used.

Properties

Property (type)	Default	Read / Write	Notes
Bottom (long)	0	Write	The number of pixels to trim from the bottom of the image. Only valid if **TrimMethod** is set to **stmManual**.
Left (long)	0	Write	The number of pixels to trim from the left of the

Property (type)	Default	Read / Write	Notes
			image. Only valid if **TrimMethod** is set to **stmManual**.
Right (long)	0	Write	The number of pixels to trim from the right of the image. Only valid if **TrimMethod** is set to **stmManual**.
Top (long)	0	Write	The number of pixels to trim from the top of the image. Only valid if **TrimMethod** is set to **stmManual**.
TrimMethod (snagTrimMethod)	stmNone	Write	Determines the method for how pixels are trimmed from an image.

IImageWatermark

The **IImageWatermark** interface is used to create a watermark on a captured image.

Properties

Property (type)	Default	Read / Write	Notes
ImageFilename (string)	"" (empty string)	Write	The filename of the image to be used for the watermark.
IncludeWatermark (Boolean)	False	Write	If true, a watermark is added in a fixed location to the image.
KeepAspectRatio (Boolean)	True	Write	If true, scaling performed on the watermark image retains the ratio between the width and height of the watermark source image file.
OffsetHorizontal (long)	10	Write	The amount the watermark is offset horizontally, by a percentage of overall image

Property (type)	Default	Read / Write	Notes
			size, from the placement set in the **Position** property. Valid values are 1 - 100.
OffsetVertical (long)	10	Write	The amount the watermark is offset vertically, by a percentage of overall image size, from the placement set in the **Position** property. Valid values are 1 - 100.
Position (snagPlacement)	spCenterBottom	Write	Sets the position of the watermark in the output image.
Scale (long)	15	Write	The level of scaling (by percentage) done to the watermark image before it is added to the capture. Valid values are 1 - 100. In Visual Basic, the "Scale" property is a reserved keyword. Use "ScaleSize" instead. (For Snagit version 8.1.0 or later.)
TransparentColor (long)	RGB (128, 128, 128)	Write	Any color in the watermark image matching the RGB value specified is not drawn over the captured image. This property is ignored unless **UseTransparentColor** is set to true.
UseEmboss (Boolean)	False	Write	If true, the watermark image is embossed on the capture.
UseOverlay (Boolean)	False	Write	If true, the watermark is placed on top of the image.
UseSmoothScaling (Boolean)	True	Write	If true, the watermark image is smoothed using interpolation.

TechSmith®

Property (type)	Default	Read / Write	Notes
UseTransparentColor (Boolean)	False	Write	If true, any colors in the watermark image that are the same as the color in the **TransparentColor** property become transparent in the output image.

IMailOptions

The **IMailOptions** interface sets email output related items. Either all information must be specified and the email is sent immediately, or the user is prompted for all information.

Properties

Property (type)	Default	Read / Write	Notes
Address (string)	"" (empty string)	Write	The email recipient's email address.
MessageText (string)	"" (empty string)	Write	The body text of the email.
Name (string)	"" (empty string)	Write	The email sender's name.
PromptForSettings (Boolean)	False	Write	If false, name, address, subject, and text must be specified programmatically. If true, the user's mail client is shown and the information must be provided by the user. When true, setting other values has no effect.
Subject (string)	"" (empty string)	Write	The subject line of the email.

IMenuOptions

The **IMenuOptions** interface contains all the settings for a menu capture (input set to **siiMenu**).

Properties

Property (type)	Default	Read / Write	Notes
CaptureCascaded (Boolean)	False	Write	When false, only the current menu is included in the capture. When true, the current menu and all parent menus are included in the capture.
IncludeBar (Boolean)	False	Write	Enable or disable inclusion of the menu bar in the capture.

IMP4Format

The IMP4Format sets the default video format.

Property (type)	Default	Read / Write	Notes
VideoFileType (**snagVideoFileType**)	svftMP4	Read-only	Returns current format.
DisableMOOVAtomOptimization (Boolean)	FalseFALSE	Write	Enables/disables the re-ordering of the MP4 atoms to optimize the file for streaming from the internet.

IPrinterOptions

The **IPrinterOptions** interface is used with printer output. If **UseDefault:Printer** is set to true then any other values set programmatically by **SetData** or by the user with **ShowSelectionDialog** are ignored.

Methods

Method	Action	Parameters	Notes
GetData (string PrinterName, string DriverName, string Port)	Retrieves data about the selected printer.	[out] PrinterName (string): The name of the selected printer. [out] DriverName (string): The name of the driver installed for the printer. [out] Port (string): The port of the selected printer.	
SetData (string PrinterName, string DriverName, string Port)	Sets the printer for the Snagit capture object to use.	[in] PrinterName (string): The name of the printer to use. [in] DriverName (string): The name of the printer driver to use. [in] Port (string): The port of the selected printer.	If **UseDefault:Printer** is true, data set with this call is overwritten.
ShowSelectionDialog (long IParentHandle, Boolean dialogAccepted)	Displays a printer selection dialog to the user. If a user clicks OK in the dialog, the printer selected in the dialog becomes the selected printer for the Snagit capture object.	[in] IParentHandle (long): Handle to windows (hwnd) in 32-bit integer format. If handle is not available, set value to 0. [out] dialogAccepted (Boolean): True if the user clicked OK to select a new printer. False if the user clicked Cancel.	If the user clicks OK on the printer selection dialog, any data set by a call to **SetData** is overwritten. If **UseDefault:Printer** is set to true, any selection made by the user is ignored.

Properties

Property (type)	Default	Read / Write	Notes
UseDefault:Printer (Boolean)	True	Write	If true, the capture is sent to the system default printer. When set to true, this property overrides any other printer settings.

IPrinterPageLayoutOptions

The **IPrinterPageLayoutOptions** interface is used to specify how to format the output going to the printer. These options are only used when either **sioPrinter** or **stoPrinter** is selected as the output for the capture object.

Properties

Property (type)	Default	Read / Write	Notes
Height (long)	4000	Write	The height, in thousandths of an inch, of the capture as it appears on the printed page.
LayoutPosition (snagPlacement)	spLeftTop	Write	Sets the placement of the capture as it appears on the printed page.
MarginBottom (long)	0	Write	Sets the minimum distance, in thousandths of an inch, placed between the bottom edge of the printed page and the bottom of the capture.
MarginLeft (long)	0	Write	Sets the minimum distance, in thousandths of an inch, placed between the right edge of the printed page and the right side of the capture.
MarginRight (long)	0	Write	Sets the minimum distance, in thousandths of an inch, placed between the right edge of the printed page and the top of the capture.
MarginTop	0	Write	Sets the minimum distance, in thousandths of an inch,

Property (type)	Default	Read / Write	Notes
(long)			placed between the top edge of the printed page and the top of the capture.
Scale (long)	100	Write	Sets the scale of the capture on the printed page as a percentage.
ScalingType (snagPrintScale)	spsFixedSize	Write	Sets the type of scaling to perform. See snagPrintScale for the available options.
Width (long)	4000	Write	The width, in thousandths of an inch, of the capture as it appears on the printed page.

IRegionOptions

The **IRegionOptions** interface contains all the settings for a region capture (input set to **siiRegion** or **stiRegion**). These options are only valid when using **siiRegion** or **stiRegion** as the input type.

Properties

Property (type)	Default	Read / Write	Notes
Height (long)	240	Write	Sets the height for the rectangular region to capture. Must be a positive integer.
SelectionMethod (snagRegionSelectionMethod)	srsmInteractive	Write	Sets the type of region capture to perform. The default allows the user to click and drag to select a region.
StartX (long)	0	Write	Sets the starting X coordinate in pixels of the rectangular region to capture. Ignored if **UseStartPosition** is set to false.
StartY (long)	0	Write	Sets the starting Y coordinate in pixels of the rectangular region to capture. Ignored if **UseStartPosition** is set to false.
UseStartPosition (Boolean)	False	Write	When true, the capture is performed with no user input. The capture region is

Property (type)	Default	Read / Write	Notes
			defined by the **Height**, **Width**, **StartX**, and **StartY** properties.
Width (long)	320	Write	Sets the width for the rectangular region to capture. Must be a positive integer.

ISelectedArea

The **ISelectedArea** interface exposes the bounding box around the captured area. For a rectangular region, this is exactly the same. For an irregular region like a freehand area, this is the bounding box around that area (left-most point in the area, right-most, etc).

Properties

Property (type)	Default	Read / Write	Notes
StartX (long)	0	Write	The X coordinate of the upper left corner of the bounding box.
StartY (long)	0	Write	The Y coordinate of the upper left corner of the bounding box.
Height (long)	0	Write	Sets the height, in "ems," to use for the font. The system uses the nearest height to the specified value that does not exceed it.
Weight (long)	0	Write	Sets the weight, or thickness, of the font.

ITextFont

The **ITextFont** interface specifies font properties for text captions set by the IImageAnnotation interface. The **ITextFont** interface can be accessed through the **Font** property in the IImageCaptionOptions interface.

Properties

Property (type)	Default	Read / Write	Notes
Height (long)	12	Write	Sets the height, in "ems," to use for the font. The system uses the nearest height to the specified value that does not exceed it.
Weight (long)	400	Write	Sets the weight, or thickness, of the font. Use a value of 400 for normal text and 700 for bold text. Valid values are 0 - 1000.
Italic (long)	0	Write	If true, the text is written in italics.
Underline (long)	0	Write	If true, the text is underlined.
PitchFamily (long)	1	Write	For more information, see the LOGFONT struct in the Microsoft documentation.
CharacterSet (long)	0	Write	For more information, see the LOGFONT struct in the Microsoft documentation.
FaceName (string)	"Arial"	Write	The font face name such as "Courier," "Times New Roman," or "Sans Serif" to use.

ITWAINOptions

The **ITWAINOptions** interface contains all the settings for a TWAIN capture (input set to **siiTwain**).

Methods

Method	Action	Parameters	Notes
ShowSelectionDialog (Long, IParentHandle, Boolean dialogAccepted)	Displays a TWAIN device selection dialog to the user. If the user clicks OK in the dialog, the TWAIN device selected in the dialog becomes the selected TWAIN device for the Snagit capture object.	[in] **lParentHandle** (long): Handle to windows (hwnd) in 32-bit integer format. If handle is not available, set value to 0.	If this dialog is shown to the user and a TWAIN device is selected, it has no effect unless the input of the image capture object is set to **siiTwain**.

Method	Action	Parameters	Notes
		[out] **dialogAccepted** (Boolean): True if the user clicked OK to select a TWAIN device and false if the user clicked Cancel.	

Properties

Property (type)	Default	Read / Write	Notes
Source (string)	"" (empty string)	Write	Specifies the TWAIN source to use.

IVideoCapture

The **IVideoCapture** interface contains the video capture settings.

Snagit version 11.1 or later is required.

Methods

Name	Action	Notes
Capture	Invokes the video recording.	This could include selecting the region to record when using the Snagit Recording interface. You can poll the **IsCaptureDone** property or subscribe to **_ICaptureEvents** to determine when the recording is finished.
Start	Begins recording video.	This can be called, instead of

TechSmith®

Name	Action	Notes
		Capture, to invoke a recording and is intended for clients that implement their own recording interface.
Pause	Pauses a recording.	This is intended for clients that implement their own recording interface.
Resume	Continues a recording.	This is intended for clients that implement their own recording interface.
Stop	Stops a recording.	This is intended for clients that implement their own recording interface.
AudioDevices	Obtains a list of audio recording devices that are available on a system.	Outputs[out]: SAFEARRAY(BSTR) audio device names, SAFEARRAY (LONG) device IDs.

Properties

Property (type)	Default	Read / Write	Notes
AudioDevice (long)	Windows default device	Write	Sets the audio device to record with. Returns: The currently selected audio device ID.
AverageFrameRate (float)		Read-only	Gets the overall average frame rate.
CaptureState (snagCaptureState)	scsIdle	Read-only	Gets the current capture state.
EnablePreviewWindow (Boolean)	FalseFALSE	Write	Sets previewing the video in the editor.
EncoderErrorCode (unsigned int)		Read-only	Gets the internal encoder error code.

Property (type)	Default	Read / Write	Notes
ForegroundPreview (Boolean)	Enabled	Write	When enabled, forces the editor window to the foreground after making a recording. This is only valid if the **EnablePreviewWindow** property has been enabled.
FrameCount (unsigned long)		Read-only	Gets the current total frames recorded.
HideRecordingUI (Boolean)	FalseFALSE	Write	Enables/disables the Snagit video recording interface. Disable this if you want to show your own recording interface.
IncludeCursor (Boolean)	TrueTRUE	Write	Enables/disables including the mouse cursor in the video recording.
Input (**snagVideoInput**)	sviCapture	Write	Changes the selection input type.
InputRegionOptions (**IRegionOptions**)		Read-only	An interface containing all the settings for a Region capture (input set to **siiRegion** or **stiRegion**).
InputWindowOptions (**IWindowOptions**)		Read-only	An interface containing the settings for a Window capture (input set to **siiWindow** or **stiWindow**).
IsCaptureDone (Boolean)	FalseFALSE	Read-only	After a call to the **Capture** method has been made, this property tests to see if the capture has been completed. This property blocks and performs a polling to see when the capture state goes back to **scsIdle**.
LastCaptureSucceeded (Boolean)	TrueTRUE	Read-only	Returns true if the last capture attempt was successful. Returns false if the last capture attempt was unsuccessful.

Property (type)	Default	Read / Write	Notes
LastError (**snagError**)	serrNone	Read-only	Holds the last error set in the Snagit COM server. If an application subscribes to the **OnStateChange** event of the **_ ICaptureEvents** interface, this property can be read for the error on a **scsCaptureFailed** state change. This property is reset to **serrNone** when a new call to the **Capture** method is made.
LastRecorderError (See "snagRecorderError" on page 62)	srErrNone	Read-only	Returns the last recorder error. You may want to get the specific error code by using the **EncoderErrorCode** or **RecorderErrorCode** property before contacting technical support.
MuteMic (Boolean)	FalseFALSE	Write	Enables/disables recording audio from the selected microphone.
MuteSystemAudio (Boolean)	FalseFALSE	Write	Enables/disables recording system audio sounds.
Output (**snagVideoOutput**)	svoFile	Write	Set this to specify where to output your video recording (file, FTP, or preview in editor).
OutputFTPOptions (IFTPOptions)		Read-only	An interface containing settings for sending the capture out to FTP (output set to **sioFTP** or **stoFTP**). At a minimum, server and filename must be set.
OutputVideoFile (IVideoFile)		Read-only	An interface for the configuration of the output file (location and naming).

TechSmith®

Property (type)	Default	Read / Write	Notes
RecorderErrorCode (int)		Read-only	Returns the internal recorder error code.
RecordingDuration (unsigned long)		Read-only	Returns the total duration of the video recording.
UseMagnifierWindow (Boolean)	True	Read-only	When enabled, a magnifier window shows next to the capture crosshairs for precision when defining capture regions.
VideoFormat (**IVideoFormat**)	MP4	Read-only	At this time, you do not need to specify the output video file type since we only currently offer MP4.

IVideoCapture2

The **IVideoCapture2** interface contains the settings for controlling the web cameras attached to the system.

Methods

Name	Action	Notes
GetAvailableCameras	Returns a list of camera devices that are available to the system.	Fills two lists: A list of the camera names and a list of IDs to identify each camera device.
ToggleRecordingCamera	Enable/Disable the webcam from recording.	Use boolean values (True = Record camera, FALSE = Record screen). Use long value to set a parent window for a camera preview.

Properties

Property (type)	Default Properties	Read / Write	Notes
Camera Returns a string		Write	Get/Set the camera to record based on the device ID.
TargetFrameRate Returns an int	15 FPS	Write	Get/Set the max desired frame rate.
RecordingCamera Returns a bool	FALSE	Read	Snagit can switch between recording the screen and the selected webcam. This property returns true if it is recording the webcam.
ScaleVideoTo1080p Returns a bool	TRUE	Write	Get/Set this property to select if Snagit should scale the video down to 1080p.
UseHardwareEncoding Returns a bool	TRUE	Write	Get/Set this property to select if Snagit should use hardware to encode video.
VideoQuality Returns an int	80	Write	Get/Set this property to specify the video quality.
ShowVideoCountdown Returns a bool	TRUE	Write	Get/Set this property to select if Snagit should display a countdown before starting the recording.
ShowQuickControlsIfFullscreen Returns a bool	TRUE	Write	Get/Set this property to select if Snagit should show the quick recorder controls when recording the fullscreen.

IVideoFile

The **IVideoFile** interface contains the settings for the configuration of the output video file. It provides control over the file naming options and output location.

Properties

Property (type)	Default	Read/Write	Notes
AutoFilePrefix (string)	"SNAG-"	Write	When the **FileNamingMethod** is set to **sofnmAuto**, this string is the prefix used to automatically name files.
AutoNumPrefixDigits (long)	4	Write	When **FileNamingMethod** is set to **sofnmAuto**, this property specifies the number of digits to include in the automatically named output file.
Directory (string)	"" empty string	Write	Sets the directory for the output file. If the **FileNamingMethod** is not set to **sofnmPrompt**, the Snagit COM server fails if this property is not set.
Filename (string)	"SNAGIT"	Write	Specifies the output filename to use. This is only used if **FileNamingMethod** is set to **sofnmFixed**.
FileNamingMethod (**snagOutputFileNamingMethod**)	sofnmPrompt	Write	Method for naming the output file.

IVideoFormat

The IVideoFormat interface contains the settings for the video file format. Currently, MP4 is the only video file format supported by Snagit.

Properties

Property (type)	Default	Read/Write	Notes
VideoFileType (**snagVideoFileType**)	MP4	Read-only	Returns current format.

IWindowOptions

TechSmith®

The **IWindowOptions** interface contains the settings for window captures. These options are only valid when using **siiWindow** or **stiWindow** as the input type.

Properties

Property (type)	Default	Read / Write	Notes
SelectionMethod (snagWindowSelectionMethod)	swsmInteractive	Write	Specifies the method used to select the window for capture.
Handle (string)	0 (long)	Write	Specifies the window handle of the window to capture.
XPos (string)	0 (long)	Write	Specifies the X coordinate of a point on the screen. Used in combination with the Y coordinate to capture the window under that point.
YPos (string)	0 (long)	Write	Specifies the Y coordinate of a point on the screen. Used in combination with the X coordinate to capture the window under that point.

Enumerations

The following section describes pre-defined data objects used throughout the Snagit COM server.

- snagAutoScrollMethod
- snagAutoScrollStartingPosition
- snagCaptionTextStyle
- snagCaptureState
- snagColorConversionMethod
- snagColorSubMethod
- snagCompassDirection
- snagError
- snagImageColorDepth
- snagImageFileSubType
- snagImageFileType
- snagImageInput
- snagImageOutput
- snagImageScaleBy
- snagImageScaleMethod
- snagNotificationType
- snagOutputFileNamingMethod
- snagPlacement
- snagPrintScale
- snagRecorderError
- snagRecorderState
- snagRegionSelectionMethod
- snagTimeDateOrder
- snagTrimMethod
- snagVideoFileType
- snagVideoInput
- snagVideoOutput
- snagWindowSelectionMethod

snagAutoScrollMethod

An enumeration used to scroll windows or regions automatically.

Name	Value	Description
sasmNone	0	Do not automatically scroll a window or region.
sasmVertical	1	Automatically scroll the window or region down vertically.
sasmHorizontal	2	Automatically scroll the window or region to the right horizontally.
sasmBoth	3	Automatically scroll the window or region both down and to the right.

snagAutoScrollStartingPosition

An enumeration used to set the starting location for automatically scrolling a window.

Name	Value	Description
sasspCurrent	0	Begin the automatic scroll from the current position.
sasspTop	1	Scroll to the top of the window before starting the automatic scrolling capture.
sasspLeft	2	Scroll to the left of the window before starting the automatic scrolling capture.
sasspTopLeft	3	Scroll to the top and left of the window before starting the automatic scrolling capture.

snagCaptionTextStyle

An enumeration used to set the text style in captions placed in images.

Name	Value	Description
sctsNormal	0	Text captions on an image have no special effect.
sctsDropShadow	1	Text captions on an image have a drop shadow.
sctsOutlinedShadow	2	Text captions on an image have an outlined shadow.

snagCaptureState

An enumeration used to set the state of the Snagit COM server during capture.

Name	Value	Description
scsIdle	0	The Snagit COM server is not currently taking a capture.
scsCaptureSucceeded	10	The capture was completed successfully.
scsCaptureFailed	11	The capture failed or was canceled.
scsBusy	12	The capture process has not yet completed (e.g. waiting for user input on a dialog).

snagColorConversionMethod

An enumeration used to change image colors.

Name	Value	Description
sccmNone	0	No color conversion.
sccmMonochrome	1	Change the captured image to monochrome (black and white).
sccmGrayscale	3	Change the captured image to grayscale.

snagColorSubMethod

An enumeration used to set how colors are replaced in an image.

Name	Value	Description
scsmNone	0	Leave the same colors in the image.
scsmInvert	1	Invert the color values (255 - x for each of Red, Blue, and Green).
scsmCustom	2	Use the values specified by the user.

snagCompassDirection

An enumeration used to set direction specifications.

Name	Value	Description
scdNorth	0	Up
scdNorthEast	1	Up and right
scdEast	2	Right
scdSouthEast	3	Down and right
scdSouth	4	Down
scdSouthWest	5	Down and left
scdWest	6	Left
scdNorthwest	7	Up and left

snagError

An enumeration used to set the type of error reported by the Snagit COM server.

Name	Value	Description
serrUnknown	-1	An unknown error occurred
serrNone	0	No error
serrSnagitExpired	1	Expired trial version of Snagit
serrInvalidInput	2	An invalid input was specified for the capture object
serrInvalidOutput	3	An invalid output was specified for the capture object
serrEngineBusy	4	The capture engine is currently busy
serrInvalidScrollDelay	5	The scroll delay specified for the automatic scrolling parameter was invalid
serrInvalidDelay	6	Delay capture has an invalid delay time
serrInvalidColorEffectValue	7	One of the values set for a color effect is invalid
serrInvalidFileProgressiveValue	8	The progressive value setting in **ImageFile** us not valid

Name	Value	Description
serrInvalidFileQualityValue	9	The file quality setting in **ImageFile** is not valid
serrInvalidFileDirectory	10	A valid directory is not specified for **ImageFile** output
serrInvalidColorConversionValue	11	An invalid color conversion value was specified in the **ImageColorConversion** settings
serrInvalidImageResolution	12	An invalid image resolution value was specified in the **ImageResolution** settings

snagImageColorDepth

An enumeration used to set the number of bits used to represent a color in an image.

Name	Value	Description
sicdAuto	0	Automatically choose the color depth for the image.
sicd1Bit	1	Use 1-bit to specify the color (monochrome)
sicd2Bit	2	Use 2-bit color
sicd3Bit	3	Use 3-bit color
sicd4Bit	4	Use 4-bit color
sicd5Bit	5	Use 5-bit color
sicd6Bit	6	Use 6-bit color
sicd7Bit	7	Use 7-bit color
sicd8Bit	8	Use 8-bit color
sicd16Bit	16	Use 16-bit color
sicd24Bit	24	Use 24-bit color (true color)
sicd32bit	32	Use 32-bit color (true color plus transparency information)

snagImageFileSubType

An enumeration used to set the subtypes for image file formats.

Name	Value	Description
sifstUnknown	-1	Unknown format
sifstBMP_Uncompressed	0x0000001	Uncompressed Windows bitmap
sifstBMP_RLE	0x0000002	Windows bitmap with Run-Length Encoding
sifstGIF_NonInterlaced	0x0000004	Non-interlaced GIF
sifstGIF_Interlaced	0x0000008	Interlaced GIF
sifstJFIF_444	0x0000010	JPEG non-progressive 4:4:4
sifstJFIF_422	0x0000020	JPEG non-progressive 4:2:2
sifstJFIF_411	0x0000040	JPEG non-progressive 4:1:1
sifstJFIF_444_Progressive	0x0000080	JPEG progressive 4:4:4
sifstJFIF_422_Progressive	0x0000100	JPEG progressive 4:2:2
sifstJFIF_411_Progressive	0x0000200	JPEG progressive 4:1:1
sifstJFIF_Gray	0x0000400	JPEG non-progressive grayscale
sifstJFIF_Gray_Progressive	0x0000800	JPEG progressive grayscale
sifstCCITT	0x0001000	TIFF subtype for fax
sifstCCITT_Group3_1Dimension	0x0002000	TIFF subtype for fax
sifstCCITT_Group3_2Dimension	0x0004000	TIFF subtype for fax
sifstCCITT_Group4	0x0008000	TIFF subtype for fax
sifstTIF_Uncompressed	0x0010000	Uncompressed TIFF
sifstTIF_PackBits	0x0020000	PackBits compressed TIFF
sifstTIF_LZW	0x0040000	LZW compressed TIFF
sifstJTIF_Gray	0x0080000	JPEG compressed grayscale TIFF
sifstTIF_CMYK	0x0100000	Uncompressed TIFF using CMYK color space
sifstTIF_YCC	0x0200000	Uncompressed TIFF using YCC color space
sifstTIF_PACK_CMYK	0x0400000	PackBits compressed TIFF using CMYK color space

Name	Value	Description
sifstTIF_PACK_YCC	0x0800000	PackBits compressed TIFF using YCC color space
sifstTIF_LZW_CMYK	0x1000000	LZW compressed TIFF using CMYK color space
sifstTIF_LZW_YCC	0x2000000	LZW compressed TIFF using YCC color space
sifstJTIF_444	0x4000000	JPEG compressed TIFF 4:4:4
sifstJTIF_422	0x8000000	JPEG compressed TIFF 4:2:2
sifstJTIF_411	0x10000000	JPEG compressed TIFF 4:1:1

snagImageFileType

An enumeration used to set the format of an image file.

Formats with values from 7 to 27 are only available for Snagit version 8.1 or later.

Name	Value	Description
siftUnknown	-1	Unknown format
siftBMP	0	Windows bitmap
siftTIFF	2	Tagged Image File Format
siftJPEG	3	JPEG
siftGIF	4	CompuServe GIF
siftPNG	5	Portable Network Graphic
siftTGA	6	Truevision Targa
siftRAS	7	SUN Raster
siftWMF	9	Windows Metafile
siftEPS	11	Encapsulated Postscript

Name	Value	Description
siftOS2	17	OS/2 Bitmap
siftWFX	18	WinFax
siftEMF	19	Windows Enhanced Metafile
siftWPG	20	WordPerfect
siftPSD	21	Adobe PhotoShop 3.0
siftICO	22	Windows icon
siftCUR	23	Windows cursor
siftPDF	24	Adobe PDF
siftSNAG	25	Snagit Capture File
siftMHT	27	Web Page with Image (MHTML)

snagImageInput

An enumeration used to set the type of capture.

Name	Value	Description
siiDesktop	0	Capture the full screen
siiWindow	1	Capture one window
siiRegion	4	Capture a region of the screen
siiGraphicFile	6	Capture an existing graphic file
siiClipboard	7	Capture the contents of the Clipboard
siiMenu	9	Capture a menu
siiObject	10	Capture an object (user interactive)
siiFreehand	12	Capture a user drawn freehand region of the screen
siiTWAIN	19	Capture from a TWAIN source (usually a scanner)

Name	Value	Description
siiExtendedWindow	23	Resize a window before capture. The size of the window (potentially larger than the screen resolution) is specified in advance or by the user.
siiCapture	25	Capture using the All-in-One Capture ® input, allowing window, region or scrolling window capture.

snagImageOutput

An enumeration used to set the output of a captured image.

Name	Value	Description
sioNone	0	No output is set
sioPrinter	1	Send the captured image directly to the printer
sioFile	2	Save the image to a file. The filename can be specified, automatically generated, or prompted for.
sioClipboard	4	Place the captured image in the system Clipboard
sioMail	8	Send the image as an attachment in an email. This start the system default email client. Uses settings in IMailOptions.
sioFTP	32	Upload an image file to an FTP server. See IFTPOptions.

snagImageScaleBy

An enumeration used to set the scaling dimensions of the image.

Name	Value	Description
sisbFactor	0	Scale the width and height based on a percentage. The sisbFactor type is only used when the **IImageScale::ScaleMethod** is set to sismCustom.

Name	Value	Description
		It is used to independently scale the width and height based on a percentage. The scaling percentage is set through the IImageScale::FactorHeight and IImageScale::FactorWidth properties. Make sure to set IImageScale::KeepAspectRatio to False in order to scale the height and width independently. If the aspect ratio is set to True then it will scale, both height and width, based on the value set in the IImageScale::Factor property.
sisbWidthAndHeight	1	Scale width and height to a specified value.
sisbWidth	2	Scale width to match a specified value.
sisbHeight	3	Scale height to match a specified value.

snagImageScaleMethod

An enumeration used to change the size of a captured image.

Name	Value	Description
sismCustom	0	Uses the custom scaling options defined in the IImageScale interface. To specify the scaling factor, you must set the FactorHeight and FactorWidth within the IImageScale properties.
sismPercentage	1	Scale by a percentage and always maintain the original aspect ratio. This scaling method can only be used with the **Factor** and **UseSmoothScaling** properties defined in **IImageScale**.
sismNone	2	Do not scale the image.

snagNotificationType

An enumeration used to set the types of messages Snagit displays. These are not related to event handling.

Name	Value	Description
sntNone	0	No notifications are displayed
sntInformation	1	Informational dialogs are displayed
sntErrors	2	Error messages are displayed
sntAll	3	Both error and informational dialogs are displayed

snagOutputFileNamingMethod

An enumeration used to determine how files are named during file output.

Name	Value	Description
sofnmPrompt	0	The user is prompted for the name and location to save the file. Use with **sioFile** and **stoFile**.
sofnmFixed	1	The file is saved with a fixed file name specified by the program. Specified in **IImageFile** or **IImageFile2**.
sofnmAuto	2	The file is saved with an automatically generated name.

snagPlacement

An enumeration used to set the placement of objects.

Name	Value	Description
spUnknown	-1	Placement unknown
spLeftTop	0	Place in upper left
spRightTop	1	Place in upper right
spLeftBottom	2	Place in lower left

Name	Value	Description
spRightBottom	3	Place in lower right
spCenterMiddle	4	Place in the center
spCenterTop	5	Place in the center of the top
spLeftMiddle	6	Place in the middle of the left
spRightMiddle	7	Place in the middle of the right
spCenterBottom	8	Place in the center of the bottom
spOutsideTop	9	Place on the outside top of the capture
spOutsideLeft	10	Place on the outside left of the capture
spOutsideBottom	11	Place on the outside bottom of the capture
spOutsideRight	12	Place on the outside right of the capture

snagPrintScale

An enumeration used to set how an image is fitted on a page for printer output.

Name	Value	Description
spsSinglePage	0	The image, regardless of size, is scaled to fit on one page.
spsPercentScale	1	A scaling percentage is applied to decrease or increase the image's size on the printed page. An image printed at 100 percent is the same as one printed with the **spsProportionalToScreen** setting.
spsProportionalToScreen	2	The relationship between the width of the area captured and the width of the screen is used to calculate the width of the printed image in relation to the width of the printed page.
spsFixedSize	3	The width and height are fixed, scaling or distorting the image if necessary.
spsSinglePageMaximize	4	The image is made as large as possible while still fitting on one page. This setting preserves the aspect ratio of the original image.
spsAutoScale	5	The width of the image is scaled to the width of the page. The length is scaled in proportion and can be more than one page.

snagRecorderError

An enumeration used to set the type of recording error reported by the Snagit COM server.

Name	Value	Description
srErrNone	0	No errors
srErrInitRecorderFailed	1	Error occurred while initializing the video recorder
srErrInitRecorderFailed	2	Error occurred while initializing the video encoder
srErrRecorderThrownCode	3	There was a recorder error. The specific error code can be retrieved.
srErrEncoderThrownCode	4	There was an encoder error. The specific error code can be retrieved.
srErrStarting	5	There was an error trying to start the recording.
srErrPausing	6	There was an error trying to pause the recording.
srErrResuming	7	There was an error when trying to resume recording.
srErrStopping	8	There was an error stopping the recording.
srErrDiskSpaceLow	9	The disk drive that contains the user's \AppData\Local\Temp folder is running out of free space.
srErrInvalidRecordingRect	10	The selected region to record is outside of the Snagit recording limits minimum 64 x 64 pixels, maximum 1920 x 1080 pixels.
srErrSystemAudioNotAvailable	11	No device was found in which to record your system audio.
srErrSystemAudioSetupFailed	12	Initialization of device audio capture failed.
srErrNoWebcamSamples	13	Initialization of the webcam failed.
srErrNoScreenSamples	14	Initialization of screen recording failed.

Name	Value	Description
SrrErrNoAudioSamples	15	Initialization of device audio capture failed.
srErrUnknown	99	Unknown error

snagRecorderState

An enumeration used to set the state of the Snagit COM server recording.

Name	Value	Description
srStateInitialized	-1	This is the initial recorder state.
srStateCounting	0	This state is only used when the recording UI is enabled and indicates that it is doing the count down.
srStateRecording	1	The recorder is now capturing video.
srStatePausing	2	The recorder is pausing.
srStateStopping	3	The recorder is stopping.
srReselecting	4	This state is only used when the recording interface is enabled and indicates that the user is re-selecting a recording area.

snagRegionSelectionMethod

An enumeration used to specify what method to use when capturing a region.

Name	Value	Description
srsmInteractive	0	Interactively click and drag a region to be captured.
srsmFixed	1	Use values provided to capture a region of fixed size. This may still be interactive if a starting X and Y position is not given.

snagTimeDateOrder

An enumeration used to set the order of time and date for timestamps.

Name	Value	Description
stdoTimeThenDate	0	Show the time and then the date
stdoTimeOnly	1	Show only the time
stdoDateThenTime	2	Show the date and then the time
stdoDateOnly	3	Show only the date

snagTrimMethod

An enumeration used to cut the outside borders of captured images.

Name	Value	Description
stmNone	0	No trimming is performed
stmManual	1	The edge of the image is trimmed by the number of pixels specified
stmAuto	2	Automatically trim blank areas from the edges of captured images. A blank area on an image is one that has no change in color.

snagVideoFileType

An enumeration used to set the format of the video file.

Name	Value	Description
svftUnknown	-1	Unknown file format
svftMP4	0	MPEG-4 file (default)

snagVideoInput

An enumeration used to set the input selection type.

Name	Value	Description
sviWindow	1	Record a window
sviRegion	4	Record a region of the screen
sviCapture	25	Record using the All-in-One input, allowing for selecting a region or a window

snagVideoOutput

An enumeration used to set the output of the recording.

Name	Value	Description
svoNone	0	Preview the recording in Snagit Editor
svoFile	2	Save the video to a file. The filename can be specified, automatically generated, or prompted for
svoFTP	32	Upload a recording to a FTP server

snagWindowSelectionMethod

An enumeration used to specify how to make a window selection.

Name	Value	Description
swsmInteractive	0	The user selects a window to capture
swsmActive	1	Capture the currently active window
swsmHandle	2	Capture the window with the given window handle (as a long value)
swsmPoint	3	Capture the window under the point specified with X and Y coordinates

Events

ICaptureEvents

The _ICaptureEvents interface is an event interface used for callbacks. A client program may choose to subscribe to events from the Snagit COM Object.

Methods

Name	Action	Parameters	DispID
OnError	Occurs when there is an error in the capture object.	[in] Error (snagError): The code for the error that occurred.	1
OnStateChange	Occurs when there is a state change in the capture object.	[in] State (snagCaptureState): The code for the state change that occurred.	2
OnFileWritten	Occurs when a file is written to notify the client program of the filename.	[in] Filename (string): The filename that was written.	3

_IRecorderEvents Methods

The **_IRecorderEvents** is an event interface used for callbacks for clients that implement their own recording interface. A client program may choose to subscribe to events from the Snagit COM Object.

Name	Action	Parameters	DispID
OnAudioVolumeLevel	The recorder sends volume level events as a percentage (0 − 100).	(int) Percent	1
OnRecorderError	Occurs when there is an error by Snagit Recorder. This is not the same as the OnError from the _ ICaptureEvents interface	(**snagRecorderError**) Error	2
OnRecorderStateChange	Occurs when the Snagit Recorder changes recording states.	(**snagRecorderState**) newState	3
OnMuteDeviceChanged	Occurs when using the Snagit Recording interface and the user clicks the mute device control.	(VARIANT_BOOL) bMuted	4
OnMuteSystemAudioChanged	Occurs when using the Snagit Recording interface and the user clicks the Mute System Audio option.	(VARIANT_BOOL) bMuted	5
OnSelectedRecordingRegion	Occurs when using the Snagit selection interface and the user has finished selecting the region to record.	(long) xOffset, (long) yOffset, (long) rectWidth, (long) rectHeight	6

TechSmith®

Data Types

Boolean

True (-1) or False (0)

> Some languages, such as C++, do not define "True" as -1. In these cases, you should use the COM VARIANT_BOOL values rather than the Boolean type defined by the programming language. Visual Basic .NET, Visual Basic Script and C# correctly define the default true and false values.

Long

32-bit signed integer

String

Variable length string

- C++/ATL: BSTR or CComBSTR

Interface

All interfaces are derived from IDispatch for use in scripting languages such as Visual Basic Script.

Colors

Colors are represented as long values where the format is:
0x00bbggrr
Languages such as MFC and Visual Basic define the macro RGB(r, g, b) that correctly creates this value from the three component values.

Code Samples

Using Snagit's COM server, you can easily incorporate Snagit's screen capture functionality into your organization's proprietary applications. The COM server lets you customize capture instructions for Snagit, automate the capture process, and programmatically control Snagit's entire array of image and video capture features from within your own application.

You can access Snagit's capture functionality from any programming language that supports COM, including the following:

- C#
- C/C++
- Visual Basic
- Fox Pro 9
- Ruby
- VBScript

To view sample projects in various programming languages that demonstrate how to use Snagit to take image captures and video recordings from your own application, go to https://github.com/TechSmith/Snagit-COM-Samples.