ImageMan/VBX Scanner Control

Description

The scanner control provides the ability to control scanners and other digital image capturing devices from your Visual Basic application. It can be used with the ImageMan/VBX Image control or by itself. The control has the ability to save images into BMP format, on the clipboard or into ImageMan/VBX image controls. All TWAIN compliant scanners, digital cameras and video capture cards are supported.

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About Property

Description
Returns a string containing the Version of the ImageMan/VBX Scanner control.

Usage
ScanControl.**About**

Data Type
String

Destination Property

Description
Specifies or Returns a string specifying where the image data resulting from a scan should be stored.

Usage
ScanControl.**Destination**[= DestName$]

Remarks
The following table lists the values for the Destination property:

Setting	Description
Clipboard	Scanned images will be pasted on the Windows Clipboard in CF_DIB format.
File	Scanned images will be stored in files using the filename specified in the Filename Property.
ImageMan/VBX Control Name	Scanned images will be sent to the specified ImageMan/VBX control.

The "File" and "Clipboard" options are used primarily when the scanned image data is to be used with other image controls or applications.

Data Type
String

PixelType Property

Description
Specifies or Returns the color format of the image data to be scanned when scanning without the scanner's dialog.

Usage
ScanControl.**PixelType**[= setting%]

Remarks
The following table lists the value for the PixelType property.

Setting	Description
PIXEL_DEFAULT(-1)	Sets the color format to the device's default format.
PIXEL_BW (0)	Sets the color format to Black and White (1 Bit per pixel.)
PIXEL_GRAY(1)	Sets the color format to Greyscale (8 Bits per pixel.)
PIXEL_RGB(2)	Sets the color format to Color (24 Bits per pixel.)

Data Type
Integer (Enumerated)

MaxPages Property

Description
Specifies or Returns the maximum number of pages to be scanned after setting the ScanCommand property.

Usage
ScanControl.**MaxPages**[=NoPages%]

Remarks
This property is primarily of use with scanners that equipped with Automatic Document Feeders since it allows the application to specify how many pages should be scanned after setting the ScanCommand property. If using an ADF without the scanner's dialog and less that MaxPages pages exist in the scanner then the control will scan only the number of pages that exist.

If this property is set to a value >1 when scanning using the scanner's dialog, the dialog will not close down until MaxPages number of pages have been scanned or the user selects the Cancel or Done option in the dialog. If the user selects Done or Cancel before MaxPages number of pages have been scanned then the control will send a Scan event with an Event code of SOURCE_CLOSED (2) indicating the user closed the scanner's dialog.

The default value of this property is one.

Data Type
Integer

ScanCommand Property

Description
Specifies that the control should perform the specified scanning operation.

Usage
ScanControl.**ScanCommand** = {0 | 1 | 2}

Remarks
The following table lists the value for the ScanCommand property.

Setting	Description
SCAN_LIST (0)	Displays a dialog allowing the user to select a scanner for subsequent use.
SCAN_SCAN (1)	Begins a scan operation using the scanner's dialog.
SCAN_DIRECT (2)	Begins a scan operation without the scanner's dialog.

Data Type
Integer(Enumerated)

Scanner Control Custom Properties

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ErrCode   ErrString   FileName
MaxPages   PixelType   Resolution
ScanCommand   ScanBottom   ScanLeft
ScanRight   ScanTop   SourceCount
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Scanner Control Custom Events

[Scan](#)

Scan Event

Description
Occurs when the scanner completes an operation and when the scanner dialog is closed.

Syntax
Sub ctlname_Scan (Index As Integer, Event As Integer, Status As Integer, Filename As String)

Remarks
The argument Index uniquely identifies a control if it is in a control array.

The Event argument specifies what action occurred. The possible values are:

Value	Description
SCAN_COMPLETE(1)	Specifies that a scan operation completed. Whether the operation was successful can be determined by looking at the Status argument.
SOURCE_CLOSED(2)	Specified that the user closed the scanner's dialog. The value of the Status argument is undefined.

The Status argument specifies the completion status of a scan operation. The possible return values are:

Value	Description
SCAN_OK(0)	Specifies that the scan completed successfully.
SCAN_BUMMER(1)	Specifies that an unspecified TWAIN error occurred.
SCAN_NOMEM(2)	Specifies that the TWAIN source was unable to allocate sufficient memory.
SCAN_NODS(3)	Specifies that no TWAIN source was specified.
SCAN_BUSY(4)	Specifies that the selected source was Busy.
SCAN_CAPERR(6)	Specifies that a Capability negotiation error occurred.
SCAN_PROTERR(9)	Specifies that a TWAIN protocol error has occurred.
SCAN_BADVAL(10)	Specifies that a bad value was used when configuring the TWAIN source.
SCAN_BADSEQ(11)	Specifies that a message was received by the Source out of sequence.
SCAN_BADSRC(12)	Specifies an unknown destination source.

The Filename argument specifies the name of the file used to store the image when the **Destination** property is set to "File."

Device Property

Description
Specifies or Returns the name of the TWAIN device device to be used when scanning.

Usage
*ScanControl.***Device**[= DeviceName$]

Remarks
This property should be set to the value of the TWAIN device to be used when scanning. A list of the available TWAIN devices is available from the **Sources** property. This property can also be set to an empty string to indicate that the default TWAIN device should be used when scanning.

Data Type
String

ScanLeft, ScanTop Properties

Description
Sets or Returns the coordinates of the upper left corner of the scan area.

Usage
ScanControl.**ScanLeft**[= Left]
ScanControl.**ScanTop**[= Top]

Remarks
These values along with the ScanRight and ScanBottom properties define a bounding rectangle which defines the area of the image to acquire when scanning. These values should be expressed in inches.

To set the capture area to the device's default set these properties to (-1).

Data Type
Real

ScanRight, ScanBottom Properties

Description
Sets or Returns the coordinates of the bottom right corner of the scan area.

Usage
ScanControl.**ScanRight**[= Right]
ScanControl.**ScanBottom**[= Bottom]

Remarks
These values along with the ScanTop and ScanLeft properties define a bounding rectangle which defines the area of the image to acquire when scanning. These values should be expressed in inches.

To set the capture area to the device's default set these properties to (-1).

Data Type
Real

ErrString Property

Description
Returns a string describing the completion status of the last scanner operation.

Usage
ScanControl.**ErrString**

Remarks
This property returns a string which describes the status of the last scan operation.

Data Type
String

ErrCode Property

Description
Returns the completion code of the last scanner operation.

Usage
*ScanControl.***ErrCode**

Remarks
This is set   to zero if the last operation completed successfully otherwise it's set to an error value.

Data Type
Integer

Sources Property

Description
Returns the names of the TWAIN devices configured on the system.

Usage
ScanControl.**Sources**

Remarks
This array contains the names of each TWAIN device found on the system and includes **SourceCount** entries.

Data Type
String (Array)

SourceCount Property

Description
Returns the number of TWAIN devices found on the system.

Usage
ScanControl.**SourceCount**

Remarks
If this value is zero then no TWAIN devices are available and therefore no scanning can take place.

Data Type
Integer

TWAIN is an industry standard specification for a scanner independent interface.
TWAIN is an acronym for "Toolkit Without An Interesting Name."

AppName Property

Description
Specifies or Returns a string containing the name of the user's application.

Usage
ScanControl.**AppName**[=ApplicationName$]

Remarks
This property is primarily of use when scanning without the scanner's dialog since some TWAIN devices display a dialog containing the application's name.

Data Type
String

Filename Property

Description
Specifies or Returns a string containing the base filename to use when scanning.

Usage
ScanControl.**Filename**[=FileName$]

Remarks
This property is used to specify the base name of the file(s) into which the scanned data should be placed when the **Destination** property is set to "File."

If more than one page is scanned then the number of the page scanned will be appended to the filename specified. The control will generate the filename by replacing any zeros at the end of the filename with the page number of the current scan. For example, specifying a Filename property of Image000.bmp and scanning 3 pages would result in the following file names: Image000.bmp, Image001.bmp and Image002.bmp.

If the filename doesn't contains any trailing zeros and is already 8 characters long, the control will replace the last 2 characters of the filename with the page count if >1 page is to be scanned. If the filename is less than 8 characters the 2 page count digits will be appended. For example, specifying a Filename property of ImageCap.bmp and scanning 3 pages would result in the following file names: ImageC00.bmp, ImageC01.bmp and ImageC02.bmp.

Data Type
String

Resolution Property

Description
Specifies or Returns the resolution in to use when scanning without the scanner's dialog..

Usage
ScanControl.**Resolution**[=Res%]

Remarks
This values for this property are specified in dots per inch. If the scanner cannot scan at the resolution specified it will use the closest resolution it can generate.

Data Type
Integer

Scanner Error Codes

Value	Description

SCAN_OK(0) Specifies that the scan completed successfully.
SCAN_BUMMER(1) Specifies that an unspecified TWAIN error occurred.
SCAN_NOMEM(2) Specifies that the TWAIN source was unable to allocate sufficient memory.
SCAN_NODS(3) Specifies that no TWAIN source was specified.
SCAN_BUSY(4) Specifies that the selected source was Busy.
SCAN_CAPERR(6) Specifies that a Capability negotiation error occurred.
SCAN_PROTERR(9) Specifies that a TWAIN protocol error has occurred.
SCAN_BADVAL(10) Specifies that a bad value was used when configuring the TWAIN source.
SCAN_BADSEQ(11) Specifies that a message was received by the Source out of sequence.
SCAN_BADSRC(12) Specifies an unknown destination source.

ImageMan/VBX Technical Support

You may obtain technical support for the ImageMan/VBX controls by Email, Phone, FAX, CompuServe and our own StarMan Bulletin Board system.

Data Techniques, Inc.
300 Pensacola Road
Burnsville, NC 28714

Internet: support@data-tech.com
Web: www.data-tech.com
FTP: ftp.data-tech.com
Tech Support: 704-682-4111   9am to 5pm EST
Fax: 704-682-0025
BBS: 704-682-4356 (28.8 V.34)
Compuserve: GO DATATECH

To get automatic notifications of updates and other important product information, join the ImageMan Mailing List. Send email to: *ImageMan-Request@data-tech.com* with the word *subscribe* in the message body.

TWAIN Information

The TWAIN specification was created by a small, ad hoc group of software and hardware companies in response to specific requests for such a gruop to author a proposed specification for the imaging industry. This working group was chartered to provide an open, multi-platform solution to solve the problem of interconnecting   raster input devices with application software.

The TWAIN specification allows applications written to it to work with any TWAIN compatible image acquisition device and conversly any compliant scanner, digital camera or video capture card to work with any TWAIN compliant application.

UseADF Property

Description
Specifies if the control should use the Automatic Document Feeder on a scanner.

Usage
ScanControl.**UseADF**[=TRUE | FALSE]

Remarks
If this property is set to TRUE then paper will be fed from the Scanner's ADF if it has one.

Data Type
Integer (Boolean)

Brightness Property

Description
Specifies or Returns the brightness to be used when scanning.

Usage
ScanControl.**Brightness**[=Brightness%]

Remarks
The Brightness property can be set to a range of -1000 to 1000. A setting of zero will use the device's default contrast.

The default value of this property is zero.

Data Type
Integer

Contrast Property

Description
Specifies or Returns the Contrast to be used when scanning.

Usage
ScanControl.**Contrast**[=Contrast%]

Remarks
The Contrast property can be set to a range of -1000 to 1000. A setting of zero will use the device's default contrast.

The default value of this property is zero.

Data Type
Integer

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Scanner Control
Online Help
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