Visio[®] 2003 Developer's Survival Pack

Graham Wideman

Reference Chapters Online Supplement

This book is accompanied by tools, samples and reference materials available on the companion website. See Chapter 1 for details.

www.diagramantics.com

Version Information

Visio 2003 Developer's Survival Pack Book version 3.00 September 2003

Copyright Information

© Copyright 2003 by Graham Wideman

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the written prior permission of the author. Contact the author via diagramantics.com or Trafford Publishing. Printed in Victoria, Canada

National Library of Canada Cataloguing in Publication Data

```
Wideman, Graham, 1956-
    Visio 2003 developer's survival pack / Graham Wideman.
Includes index.
ISBN 1-4120-1112-4
    1. Microsoft Visio. 2. Computer graphics. I. Title.
T385.W52 2004 006.6'869 C2003-904491-2
```

Trademark Information

Various brand and product names mentioned in this book may be trademarked and are the properties of their respective owners. These are known to include:

Microsoft Corporation: Visio, ShapeSheet, Access, Excel, Visual Basic, VBA

Borland: Delphi

Adobe: Acrobat, FrameMaker The LEGO Group: Lego

Disclaimer

While the publisher and author have used their best efforts in preparing this work, neither assumes any responsibility for errors or omissions. Neither is any liability assumed for damages resulting from the use of the information contained herein or accompanying materials. No patent liability is assumed with respect to the use of information contained herein.

Production Info

Desktop Publishing in Adobe FrameMaker 5.5.6 for Windows. Diagrams in Visio 2000/2002/2003 Data gathered and prepared in Borland Delphi, Microsoft Access and VBA, and Frame MIF Cover prepared in Visio 2003



This book was published *on-demand* in cooperation with Trafford Publishing.

On-demand publishing is a unique process and service for making a book available for retail sale to the public taking advantage of on-demand manufacturing and Internet marketing. **On-demand publishing** includes promotions, retail sales, manufacturing, order fulfilment, accounting and collecting royalties on behalf of the author.

Suite 6E, 2333 Government St., Victoria, B.C. V8T 4P4, CANADA

Phone 250-383-6864 Toll-free 1-888-232-4444 (Canada and US)

Fax 250-383-6804 E-mail sales@trafford.com

Web site www.trafford.com

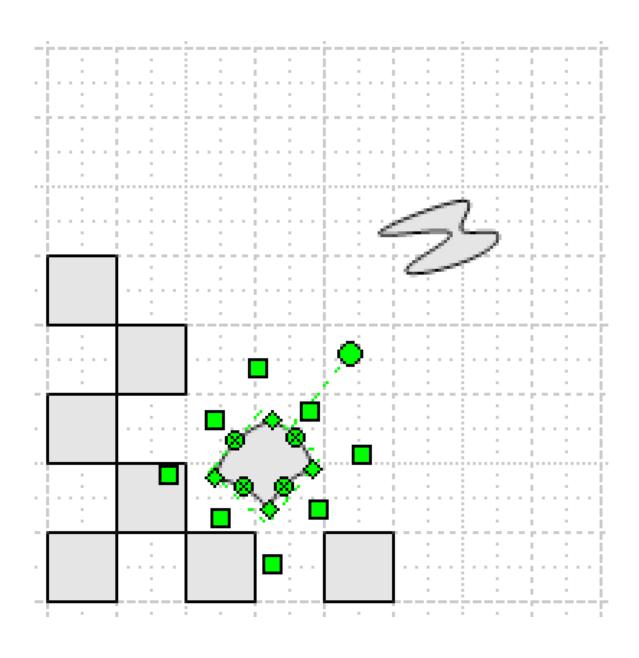
Trafford catalogue # www.trafford.com
Trafford Publishing is a division of Trafford Holdings Ltd.

Table of Contents

Part 5: Browsable Reference to Visio Structure	5
Chapter 36: ShapeSheet Section-Row-Cell Structure	7
Reading The Tables	7
Constants	7
Finding The Section Of Interest	8
Chapter 37: ShapeSheet Functions	29
Chapter 38: Visio Objects, Properties and Methods	39
Object/Property/Method Table Organization	39
Object Summary Table	
COM-Related Columns	
Event DispInterfaces	43
Chapter 39: Events Table	113

PART 5

Browsable Reference to Visio Structure



Chapter 36

ShapeSheet Section-Row-Cell Structure

In This Chapter...

• Complete Breakdown of ShapeSheet Sections, Rows, Cells and Constant Values

his chapter contains a complete breakdown of all Sections and Rows in Visio's ShapeSheet structure. This is also in some ways a follow-on from Chapter 5: *ShapeSheet Structure and Functions Introduction* so if you have not done so you may wish to read that chapter first.

Recall that, from an object model perspective, a ShapeSheet is essentially a collection of properties for the object that owns it—Shape, Page, Master, Document or Style. Indeed most of the properties of such an object are contained in its ShapeSheet.

Hence, as you build your understanding of all the objects in the "document" branch of the object model, you will be studying each object's direct properties and methods (Chapter 38: *Visio Objects, Properties and Methods*) in conjunction with its complement of ShapeSheet sections, rows and cells (in this Chapter) to complete your picture.

Reading The Tables

Bear in mind that not all ShapeSheet sections and rows pertain to every object that has a ShapeSheet. Table 5-2 on page 67 provides a concise listing of which ShapeSheet sections apply to which objects

Since the cells are grouped into rows and sections more or less by feature area, the organization of the tables in this chapter brings related cell-housed properties together by theme. I should also note that many cells have take integer constants, which are listed in the table, and from which you can glean the meaning of the cell.

Constants

The tables are organized around a number constants that are defined in Visio's Automation type library for Section, Row, Cell and cell value. (These constants can be used in Visual Basic (and

VBA) along with other languages that can import a type library's information). Since they represent authoritative information, I have generated the tables based on these constants and their values.

In the tables you will see that where constants are involved, these is usually a lengthy prefix that applies to a whole range of constants. To make the table much easier to read quickly, I've "factored out" that prefix separately.

Example: Looking at the very first table:

• Section Constant: visSectionObject

• **Row Constant:** visRow... + XFormOut means visRowXFormOut

• Row Tag: default

• **Cell (column) index constant:** visXForm... + PinX means visXFormPinX

• **Cell value:** visXFormResize... + DontCare means visXFormResizeDontCare

Finding The Section Of Interest

Tables for the ShapeSheet sections are presented in order of Section Constant, then Row Constant, then Cell (column) Constant. If you are unfamiliar with Visio's sections, you can use Table 5-2 on page 67 to find your way to a section of interest.

Table 36-1: Rows and Cells for ShapeSheet Section Object

								Obje
SectionCon	st = vis	SectionObjec	t = 1					
This section	contains	all singleton o	cells, organized ir	nto rows according to	theme.			
Row	/	RowTag					Cell	
visRow	Val	Const	Prefix	Const	lx	Ver	Type/ prefix	Const/Val
XFormOut	1	default	visXForm	PinX	0	v06	Real	
				PinY	1	v06	Real	
		Width	2	v06	Real			
				Height	3	v06	Real	
				LocPinX	4	v06	Real	
				LocPinY	5	v06	Real	
				Angle	6	v06	Real	
				FlipX	7	v06	Bool	
				FlipY	8	v06	Bool	
				ResizeMode	9	v06	visXFormResize	0 DontCare 1 Spread 2 Scale

Table 36-1: Rows and Cells for ShapeSheet Section Object (Continued)

		SectionObjec						
			ells, organized	into rows according to	theme.			
Ro		RowTag			T		Cell	
visRow	Val	Const	Prefix	Const	lx	Ver	Type/ prefix	Const/Val
_ine	2	default	visLine	Weight	0	v06	Real	
				Color	1	v06	VisDefaultColors_ Normal	
				Pattern	2	v06	vis	0 NoFill 1 Solid 2 WideUpDiagonal 3 WideCross 4 WideDiagonalCross 5 WideDownDiagonal 6 WideHorz 7 WideVert 8 BackDotsMini 9 HalfAndHalfand 15 more.
				Rounding	3	v06	Real	
				EndArrowSize	4	v06	integer	
				BeginArrow	5	v06	visArrowSize	0 VerySmall 1 Small 2 Medium 3 Large 4 VeryLarge 5 Jumbo 6 Colossal
				EndArrow	6	v06	visArrowSize	0 VerySmall 1 Small 2 Medium 3 Large 4 VeryLarge 5 Jumbo 6 Colossal
				EndCap	7	v06	??? 0/1	
				BeginArrowSize	8	v06	integer	
				ColorTrans	9	v10	Real	

Table 36-1: Rows and Cells for ShapeSheet Section Object (Continued)

SectionCon	St = VIS	SectionObject	i = 1					
This section	contains	all singleton o	ells, organized in	to rows according to th	eme.			
Rov	V	RowTag					Cell	
visRow	Val	Const	Prefix	Const	lx	Ver	Type/ prefix	Const/Val
Fill	3	default	visFill	Foregnd	0	v06	Color	
				Bkgnd	1	v06	Color	
				ShdwForegnd ShdwBkgnd ShdwPattern	3 4 5	v06 v06 v06	Color Color vis	0 NoFill 1 Solid 2 WideUpDiagonal 3 WideCross 4 WideDiagonalCross 5 WideDownDiagonal 6 WideHorz 7 WideVert 8 BackDotsMini 9 HalfAndHalfand 15 more. 0 NoFill 1 Solid 2 WideUpDiagonal 3 WideCross 4 WideDiagonalCross
								5 WideDownDiagonal 6 WideHorz 7 WideVert 8 BackDotsMini 9 HalfAndHalf and 15 more.
				ForegndTrans	6	v10	Real	
				BkgndTrans	7	v10	Real	
				ShdwForegndTrans	8	v10	Real	
				ShdwBkgndTrans	9	v10	Real	
				ShdwType	10	v11	visFST	0 PageDefault1 Simple2 Oblique
				ShdwOffsetX	11	v11	Real	
				ShdwOffsetY	12	v11	Real	
				ShdwObliqueAngle	13	v11	Real	
				ShdwScaleFactor	14	v11	Percent	
XForm1D	4	default	vis1D	BeginX	0	v06	Real	
				BeginY	1	v06	Real	
				EndX	2	v06	Real	
				EndY	3	v06	Real	
Event	5	default	visEvtCell	TheData	0	v06	Event	
				TheText	1	v06	Event	
				DblClick	2	v06	Event	
				XFMod	3	v06	Event	
				Drop	4	v06	Event	
LayerMem	6	default		visLayerMember	0	v06	Integer	
Guide	7	default		visGuideFlags	2	v06	Obsolete	

Table 36-1: Rows and Cells for ShapeSheet Section Object (Continued)

SectionCor	st = vis	SectionObjec	t = 1					
This section	contains	all singleton o	cells, organized in	to rows according to th	eme.			
Rov	N	RowTag					Cell	
visRow	Val	Const	Prefix	Const	lx	Ver	Type/ prefix	Const/Val
Style	8	default	visStyle	IncludesLine	0	v06	Bool	
				IncludesFill	1	v06	Bool	
				IncludesText	2	v06	Bool	
				Hidden	3	v06	Bool	
Foreign	9	default	visFrgnImg	OffsetX	0	v06	Real	
				OffsetY	1	v06	Real	
				Width	2	v06	Real	
				Height	3	v06	Real	
Page	10	default	visPage	Width	0	v06	Real	
				Height	1	v06	Real	
				ShdwOffsetX	2	v06	Real	
				ShdwOffsetY	3	v06	Real	
				Scale	4	v06	Real	
				DrawingScale	5	v06	Real	
				DrawSizeType DrawScaleType InhibitSnap	7	v06 v06	vis Vis	0 PrintSetup 1 Tight 2 Standard 3 Custom 4 Logical 5 DSMetric 6 DSEngr 7 DSArch 0 NoScale 1 Architectural 2 Engineering 3 ScaleCustom 4 ScaleMechanical
				UIVisibility	34	v11	Bool	
				ShdwType	35	v11	visFST	0 PageDefault 1 Simple 2 Oblique
				ShdwObliqueAngle	36	v11	Real	
				ShdwScaleFactor	37	v11	Percent	
Text	11	default	visTxtBlk	LeftMargin	0	v06	Real	
				RightMargin	1	v06	Real	
				TopMargin	2	v06	Real	
				BottomMargin	3	v06	Real	
				VerticalAlign	4	v06	visVert	0 Top 1 Middle 2 Bottom
				Bkgnd	5	v06	Color	
			DefaultTabStop	6	v06	Real		
			Direction	10	v06	visTxtBlk	0 LeftToRight 1 TopToBottom	
				BkgndTrans	11	v10	Real	

Table 36-1: Rows and Cells for ShapeSheet Section Object (Continued)

								Object (Continue
		SectionObject		nto rows according t	a thama			
Row		RowTag	elis, organized ir	ito rows according to	o trierrie.		Cell	
visRow	Val	Const	Prefix	Const	lx	Ver	Type/ prefix	Const/Val
TextXForm	12	default	visXForm	PinX		vei v06	Real	Collstyval
iexixroiiii	12	delault	VISAFOIII	PinY	0	v06	Real	
				Width	1	v06	Real	
					2			
				Height	3	v06	Real	
				LocPinX	4	v06	Real	
				LocPinY	5	v06	Real	
				Angle	6	v06	Real	
				FlipX	7	v06	Bool	
				FlipY	8	v06	Bool	
				ResizeMode	9	v06	visXFormResize	0 DontCare1 Spread2 Scale
Align	14	default	visAlign	Left	0	v06	Bool	
9		aoiaan	7.67 mg	Center	1	v06	Bool	
				Right	2	v06	Bool	
			Тор	3	v06	Bool		
				Middle	4	v06	Bool	
				Bottom	5	v06	Bool	
_ock	15	default	visLock	Width	0	v06	Bool	
-00.1		adiadit	7.0200	Height	1	v06	Bool	
				MoveX	2	v06	Bool	
				MoveY	3	v06	Bool	
				Aspect	4	v06	Bool	
				Delete	5	v06	Bool	
				Begin	6	v06	Bool	
				End	7	v06	Bool	
				Rotate	8	v06	Bool	
				Crop	9	v06	Bool	
				VtxEdit	10	v06	Bool	
				TextEdit	11	v06	Bool	
				Format	12	v06	Bool	
				Group	13	v06	Bool	
				CalcWH	14	v06	Bool	
				Select	15	v06	Bool	
				CustProp	16	v11	Bool	
HelpCopy-	16	default	vis	ObjHelp	0	v06	String	
right	10	uciauli	VIS	Copyright	1	v06	String	

Table 36-1: Rows and Cells for ShapeSheet Section Object (Continued)

This section	contains	all singleton o	cells, organized	d into rows according to the	neme.			
Ro	w	RowTag					Cell	
visRow	Val	Const	Prefix	Const	lx	Ver	Type/ prefix	Const/Val
Misc	17	default	vis	NoObjHandles NonPrinting NoCtlHandles	0 1	v06 v06	Bool	
				NoAlignBox	3	v06 v06	Bool Bool	
				UpdateAlignBox	4	v06	Bool	
				HideText	5	v06	Bool	
				VerticalText	6	v06	Bool	
				DynFeedback	8	v06	Bool	
				GlueType	9	v06	visGlueType	0 Default 1 Trigger 2 Walking 4 NoWalking 8 NoWalkingTo
				WalkPref	10	v06	visWalkPref	1 BegNS 2 EndNS
				BegTrigger	11	v06	Special	
			EndTrigger	12	v06	Special		
				LOFlags	13	v06	visLOFlags	0 VisDecides 1 Placable 2 Routable 4 Dont 8 PNRGroup
				LOInteraction	14	v06	Obsolete	
				LOBehavior	15	v06	Obsolete	
				Comment	16	v06	string	
				DropSource	17	v06	Bool	
				NoLiveDynamics	18	v06	Bool	
				ObjLocalizeMerge	19	v11	Bool	
				ObjCalendar	25	v11	visCal	0 Western 1 ArabicHijri 2 HebrewLunar 3 ChineseTaiwan 4 JapaneseEmperor 5 ThaiBuddhism 6 KoreanDanki 7 SakaEra 8 TranslitEnglish 9 TranslitFrench
				ObjLangID	26	v11	Integer	
				ObjKeywords	27	v11	String	
				ObjDropOnPageS-cale	28	v11	Percent	

Table 36-1: Rows and Cells for ShapeSheet Section Object (Continued)

SectionCons	st = vis	SectionObjec	t = 1						
				nto rows according to t	theme				
Row		RowTag	Jene, organized r	nto rowo docording to t	incino.		Cell		
visRow	Val	Const	Prefix	Const	lx	Ver	Type/ prefix	Co	nst/Val
RulerGrid	18	default	vis	XRulerDensity	0	v06	visRuler	0	Fixed
nueranu	10	uelauli	VIS	Artuler Defisity		VOO	visi tulei	8 16 32	Coarse Normal Fine
				YRulerDensity	1	v06	visRuler	0 8 16 32	Fixed Coarse Normal Fine
				XRulerOrigin	4	v06	Real		
				YRulerOrigin	5	v06	Real		
				XGridDensity	6	v06	visGrid	0 2 4 8	Fixed Coarse Normal Fine
				YGridDensity	7	v06	visGrid	0 2 4 8	Fixed Coarse Normal Fine
				XGridSpacing	8	v06	Real		
				YGridSpacing	9	v06	Real		
				XGridOrigin	10	v06	Real		
				YGridOrigin	11	v06	Real		
Hyperlink	perlink 19 default		default	0	v06	???			
Doc	20	default	visDoc	OutputFormat	0	v06	??? 0/1/2		
				LockPreview	1	v06	Bool		
			Metric	2	v10	(Reserved)			
				AddMarkup	3	v11	Bool		
				ViewMarkup	4	v11	Bool		
				PreviewQuality	9	v06	visDocPre- viewQuality	0	Draft Detailed
				PreviewScope	10	v06	visDocPreviewS- cope	0 1 2	1stPage None AllPages
				LangID	19	v11	Integer		
lmage	21	default	vislmage	Gamma	0	v06	Real		
				Contrast	1	v06	Percent		
				Brightness	2	v06	Percent		
				Sharpen	3	v06	Percent		
				Blur	4	v06	Percent		
				Denoise	5	v06	Percent		
				Transparency	6	v10	Real		
Group	22	default	visGroup	SelectMode	0	v06	visGrpSelMode	0 1 2	GroupOnly Group1st Members1st
				DisplayMode	1	v06	visGrpDispMode	0 1 2	None Back Front
				IsDropTarget	2	v06	Bool		
				IsSnapTarget	3	v06	Bool		
				IsTextEditTarget	4	v06	Bool	L	
				DontMoveChildren	5	v06	Bool		

Table 36-1: Rows and Cells for ShapeSheet Section Object (Continued)

		SectionObject						
. 1115 56611011 6	ontains			into rows according to	theme.			
Row		RowTag					Cell	
/isRow	Val	Const	Prefix	Const	lx	Ver	Type/ prefix	Const/Val
ShapeLayout		default	visSLO	PermX	0	v06	Bool	CONSU Vai
mape∟ayout	23	delault	VISSLO					
				PermY	1	v06	Bool	
				PermeablePlace	2	v06	Bool	
				FixedCode	8	v06	visSLOFixed	1 Placement 2 Plow 4 PermeablePlow 32 ConnPtsIgnore 64 ConnPtsOnly 128 NoFoldToShape
				PlowCode	9	v06	visSLOPlow	0 Default1 Never2 Always
				RouteStyle	10	v06	visLORoute	0 Default 1 RightAngle 2 Straight 3 OrgChartNS 4 OrgChartWE 5 FlowchartNS 6 FlowchartWE 7 TreeNS 8 TreeWE 9 Networkand 13 more.
				ConFixedCode	12	v06	visSLOConFixed	0 RerouteFreely 1 RerouteAsNeeded 2 RerouteNever 3 RerouteOnCrossover 4 ByAlgFrom 5 ByAlgTo 6 ByAlgFromTo
				JumpCode	13	v06	visSLOJump	0 Default 1 Never 2 Always 3 Other 4 Neither
				JumpStyle	14	v06	visLOJumpStyle	0 Default 1 Arc 2 Gap 3 Square 4 Triangle 5 2Point 6 3Point 7 4Point 8 5Point 9 6Point
				JumpDirX	16	v06	visLOJumpDirX	0 Default 1 Up 2 Down
				JumpDirY	17	v06	visLOJumpDirY	0 Default 1 Left 2 Right
				PlaceFlip	18	v10	visLOFlip	0 Default 1 X 2 Y

Table 36-1: Rows and Cells for ShapeSheet Section Object (Continued)

								Object (Continued
SectionCons	t = vis	SectionObjec	t = 1					
This section co	ontains	all singleton o	ells, organized	into rows according to	theme.			
Row		RowTag					Cell	
visRow	Val	Const	Prefix	Const	lx	Ver	Type/ prefix	Const/Val
ShapeLayout cont'd	23	default	visSLO	LineRouteExt	19	v10	visLORouteExt	0 Default 1 Straight 2 NURBS
				Split	20	v11	visSLOSplit	0 None 1 Allow
				Splittable	21	v11	visSLOSplittable	0 None 1 Allow

Table 36-1: Rows and Cells for ShapeSheet Section Object (Continued)

SectionCons	t = vis9	SectionObjec	t = 1					
		-		into rows according to	theme			
Row	- name	RowTag	, organized	rone according to			Cell	
visRow	Val	Const	Prefix	Const	lx	Ver	Type/ prefix	Const/Val
PageLayout	24	default	visPLO	ResizePage	0	v06	Bool	
9,				EnableGrid	1	v06	Bool	
				DynamicsOff	2	v06	Bool	
				CtrlAsInput	3	v06	Bool	
				PlaceStyle	8	v06	visPLOPlace	0 Default
								1 TopToBottom 2 LeftToRight 3 Radial 4 BottomToTop 5 RightToLeft 6 Circular 7 CompactDownRight 8 CompactRightDown 9 CompactRightUpand 5 more.
				RouteStyle	9	v06	visLORoute	0 Default 1 RightAngle 2 Straight 3 OrgChartNS 4 OrgChartWE 5 FlowchartNS 6 FlowchartWE 7 TreeNS 8 TreeWE 9 Networkand 13 more.
				PlaceDepth	10	v06	visPLOPlaceDe- pth	0 Default 1 Medium 2 Deep 3 Shallow
				PlowCode	11	v06	visPLOPlow	0 None 1 All
				JumpCode	12	v06	visPLOJump	0 None 1 Horizontal 2 Vertical 3 LastRouted 4 DisplayOrder 5 ReverseDisplayOrder 6 ProhibitAll
				JumpStyle	13	v06	visLOJumpStyle	 Default Arc Gap Square Triangle 2Point 3Point 4Point 5Point 6Point
				JumpDirX	14	v06	visLOJumpDirX	0 Default
								1 Up 2 Down
				JumpDirY	15	v06	visLOJumpDirY	O Default Left Right
				LineToNodeX	16	v06	Real	J
				LineToNodeY	17	v06	Real	

Table 36-1: Rows and Cells for ShapeSheet Section Object (Continued)

SectionCons	t = viss	SectionObject	t = 1								
This section o	ontains	all singleton o	cells, organized in	to rows according to	theme.						
Row		RowTag					Cell				
visRow	Val	Const	Prefix	Const	lx	Ver	Type/ prefix	Const/Val			
PageLayout	24	default	visPLO	BlockSizeX	18	v06	Real				
cont'd				BlockSizeY	19	v06	Real				
				AvenueSizeX	20	v06	Real				
				AvenueSizeY	21	v06	Real				
				LineToLineX	22	v06	Real				
				LineToLineY	23	v06	Real				
				JumpFactorX	24	v06	Real				
							JumpFactorY	25	v06	Real	
				LineAdjustFrom	26	v06	visPLOLineAdjust- From	0 NotRelated 1 All 2 None 3 RoutingDefault			
				LineAdjustTo	27	v06	visPLOLineAd- justTo	0 Default 1 All 2 None 3 Related			
		F	PlaceFlip	28	v10	visLOFlip	0 Default 1 X 2 Y 4 Rotate 8 None				
				LineRouteExt	29	v10	visLORouteExt	0 Default 1 Straight 2 NURBS			
				Split	30	v11	visPLOSplit	0 None 1 Allow			
PrintProper-	25	default	visPrintProp-	LeftMargin	0	v11	Real				
es			erties	RightMargin	1	v11	Real				
				TopMargin	2	v11	Real				
				BottomMargin	3	v11	Real				
				ScaleX	4	v11	Percent				
				ScaleY	5	v11	Percent				
				PagesX	6	v11	Integer				
				PagesY	7	v11	Integer				
				CenterX	8	v11	Bool				
				CenterY	9	v11	Bool				
				OnPage	10	v11	Bool				
				PrintGrid	11	v11	Bool				
			<u> </u>	PageOrientation	16	v11	visPPO	0 SameAsPrinter1 Portrait2 Landscape			
				PaperKind	17	v11	Integer				
				PaperSource	18	v11	Integer				

Table 36-2: Rows and Cells for ShapeSheet Section Character

								Characte
SectionCon	st = visS	ectionChara	cter = 3					
Rov		RowTag					Cell	
visRow	Val	Const	Prefix	Const	lx	Ver	Type/ prefix	Const/Val
default	n>=0	default	visCharac-	Font	0	v06	Font	
			ter	Color	1	v06	Color	
				Style	2	v06	vis	1 Bold 2 Italic 4 UnderLine 8 SmallCaps 16 ComplexBold 32 ComplexItalic
				Case	3	v06	visCase	0 Normal 1 AllCaps 2 InitialCaps
				Pos	4	v06	visPos	0 Normal 1 Super 2 Sub
				FontScale	5	v06	Percent	
				Locale	6	v06	???	
				Size	7	v06	Real	
				DblUnderline	8	v06	Bool	
				Overline	9	v06	Bool	
				Strikethru	10	v06	Bool	
				Perpendicular	12	v06	Bool	
				DoubleStrikethrough	13	v11	Bool	
				RTLText	14	v11	Bool	
				UseVertical	15	v11	Bool	
				Letterspace	16	v06	Real	
				ColorTrans	17	v10	Real	
				AsianFont	51	v11	Integer	
				ComplexScriptFont	52	v11	Integer	
				LocalizeFont	53	v11	visLocFont	0 IfArialOrSym 1 Always 2 Never
				ComplexScriptSize	54	v11	Real	
				LangID	57	v11	Integer	

Table 36-3: Rows and Cells for ShapeSheet Section Paragraph

								Paragrap
		ectionParagi	raph = 4				Oall	
Ro		RowTag			1.		Cell	0 10/1
visRow	Val	Const	Prefix	Const	lx	Ver	Type/ prefix	Const/Val
default	n>=0	default	vis	IndentFirst	0	v06	Real	
				IndentLeft	1	v06	Real	
				IndentRight	2	v06	Real	
				SpaceLine	3	v06	Real	
				SpaceBefore	4	v06	Real	
				SpaceAfter	5	v06	Real	
				HorzAlign	6	v06	visHorz	 0 Left 1 Center 2 Right 3 Justify 4 Force 4 Distribute 5 JustifyLow 6 JustifyMedium 7 JustifyHigh
				BulletIndex	7	v06	??? 0-7	
				BulletString	8	v06	String	
				BulletFont	9	v11	Integer	
				LocalizeBulletFont	10	v11	visLocFont	0 IfArialOrSym 1 Always 2 Never
				BulletFontSize	11	v11	Integer	
				TextPosAfterBullet	12	v11	Real	
				Flags	13	v11	Integer	

Table 36-4: Rows and Cells for ShapeSheet Section Tab

	15t = V153	ectionTab = 5								
			repetitions of	the triplets of cells. I	Names fol			(B1,C1,D1) (W1,Z1,AA1)		
Ro	N	RowTag		Cell						
visRow	Val	Const	Prefix	Const StopCount	lx	Ver	Type/ prefix	Const/Val		
default	n>=0	visTagTab0	visTab	StopCount	0	v06	Integer			
				Pos	1	v06	Real			
				Align	2	v06	visTabStop	0 Left 1 Center 2 Right 3 Decimal 4 Comma		
		visTagTab2	visTab	StopCount	0	v06	Integer			
				Pos	1	v06	Real			
				Align	2	v06	visTabStop	0 Left 1 Center 2 Right 3 Decimal 4 Comma		
		visTagTab10	visTab	StopCount	0	v06	Integer			
				Pos	1	v06	Real			
				Align	2	v06	visTabStop	0 Left 1 Center 2 Right 3 Decimal 4 Comma		
		visTagTab60	visTab	StopCount	0	v06	Integer			
				Pos	1	v06	Real			
				Align	2	v06	visTabStop	0 Left 1 Center 2 Right 3 Decimal 4 Comma		

Table 36-5: Rows and Cells for ShapeSheet Section Scratch

									Scratch
SectionCon	st = visS	ectionScrato	:h = 6						
Scratch rows	s cannot l	oe named.							
Rov	v	RowTag					Cell		
visRow	Val	Const	Prefix	Const	lx	Ver	Type/ prefix	Const/Val	
default	n>=0	default	visScratch	Х	0	v06	any		
				Υ	1	v06	any		
				Α	2	v06	any		
				В	3	v06	any		
				С	4	v06	any		
				D	5	v06	any		

Table 36-6: Rows and Cells for ShapeSheet Section ConnectionPts

								ConnectionP		
SectionCon	st = visS	ectionConnect	ionPts = 7							
Rows in this	section c	an be named.								
Rov		RowTag	Cell							
visRow	Val	Const	Prefix	Const	lx	Ver	Type/ prefix	Const/Val		
default	n>=0	visTagCnnctP	visCnnct	X	0	v06	Real			
		t		Υ	1	v06	Real			
				DirX	2	v06	Real			
			DirY	3	v06	Real				
			Туре	4	v06	visCnnctType	0 Inward 1 Outward 2 InwardOutward			
			AutoGen	5	v06	Bool				
		visTagCnnct-	visCnnct	Х	0	v06	Real			
		Named		Υ	1	v06	Real			
				DirX	2	v06	Real			
				DirY	3	v06	Real			
				Туре	4	v06	visCnnctType	0 Inward 1 Outward 2 InwardOutward		
				AutoGen	5	v06	Bool			
		visTagCnnctP	visCnnct	Х	0	v06	Real			
		tABCD		Υ	1	v06	Real			
				Α	2	v06	Real			
				В	3	v06	Real			
				С	4	v06	Real			
				D	5	v06	Real			
		visTagCnnct-	visCnnct	Х	0	v06	Real			
		NamedABCD		Υ	1	v06	Real			
				Α	2	v06	Real			
				В	3	v06	Real			
				С	4	v06	Real			
				D	5	v06	Real			

Table 36-7: Rows and Cells for ShapeSheet Section TextField

Coolie - Oc-		actionT4F'	ald 0					TextFie
		ectionTextFi	eia = 8 his shape's Text					
Rov		RowTag	Inc chape o rox	·			Cell	
visRow	Val	Const	Prefix	Const	lx	Ver	Type/ prefix	Const/Val
default	n>=0	default	visField	Cell	0	v06	???	
				EditMode	1	v06	Reserved	
				Format	2	v06	FormatPicture	
			Туре	3	v06	visPropType	0 String 1 ListFix 2 Number 3 Bool 4 ListVar 5 Date 6 Duration 7 Currency	
				UlCategory	4	v06	visFCat	0 Custom 1 DateTime 2 Document 3 Geometry 4 Object 5 Page 6 Notes
				UlCode	5	v06	VisFieldCodes	
				UlFormat	6	v06	visFmt	0 NumGenNoUnits 1 NumGenDefUnits 2 OPINoUnits 3 OPIDefUnits 4 1PINoUnits 5 1PIDefUnits 6 2PINoUnits 7 2PIDefUnits 8 3PINoUnits 9 3PIDefUnitsand 100 more.
				Calendar	7	v11	visCal	0 Western 1 ArabicHijri 2 HebrewLunar 3 ChineseTaiwan 4 JapaneseEmperor 5 ThaiBuddhism 6 KoreanDanki 7 SakaEra 8 TranslitEnglish 9 TranslitFrench
				ObjectKind	10	v11	visTFOK	0 Standard 1 HorizontalInVertical

Table 36-8: Rows and Cells for ShapeSheet Section Controls

SectionCon	st = visS	ectionControls	s = 9						
Rov	v	RowTag					Cell		
isRow	Val	Const	Prefix	Const	lx	Ver	Type/ prefix	Const/Val	
efault	n>=0	visTagCtlPt	visCtl	Х	0	v06	Real		
				Υ	1	v06	Real		
				XDyn	2	v06	Real		
				YDyn	3	v06	Real		
					YCon	5	v06	visCtl	0 Proportional 1 Locked 2 OffsetMin 3 OffsetMid 4 OffsetMax 5 ProportionalHidden 6 LockedHidden 7 OffsetMinHidden 8 OffsetMidHidden 9 OffsetMaxHidden 0 Proportional 1 Locked 2 OffsetMin 3 OffsetMin 4 OffsetMax 5 ProportionalHidden 6 LockedHidden 7 OffsetMin 8 OffsetMin 9 OffsetMinHidden 9 OffsetMinHidden
				Glue	6	v06	Bool		
				Туре	7	v06	Reserved		
		visTagCtlPt-	gCtlPt- visCtl	X	0	v06	Real		
		Tip		Υ	1	v06	Real		
				XDyn	2	v06	Real		
				YDyn	3	v06	Real		
					XCon	4	v06	visCtl	0 Proportional 1 Locked 2 OffsetMin 3 OffsetMid 4 OffsetMax 5 ProportionalHidden 6 LockedHidden 7 OffsetMinHidden 8 OffsetMidHidden 9 OffsetMaxHidden
		YCon		5	v06	visCtl	0 Proportional 1 Locked 2 OffsetMin 3 OffsetMid 4 OffsetMax 5 ProportionalHidden 6 LockedHidden 7 OffsetMinHidden 8 OffsetMidHidden 9 OffsetMaxHidden		
				Glue	6	v06	Bool		
				Туре	7	v06	Reserved		
			.,,,,	1.					

Table 36-9: Rows and Cells for ShapeSheet Section Geometry

			nponent = 10	. N	-			
	multiple		mponent") secti	ons. Note first row is s	pecia			
Row	1	RowTag		T	1.		Cell	
/isRow	Val	Const	Prefix	Const	lx	Ver	Type/ prefix	Const/Val
Component	0	visTagCom- ponent	visCompNo	Fill	0	v06	Bool	
		ponent		Line	1	v06	Bool	
				Show	2	v06	Bool	
				Snap	3	v06	Bool	
default1	n>=1	visTag- MoveTo	vis	X	0	v06	Real	
				Υ	1	v06	Real	
		visTagLineTo	vis	X	0	v06	Real	
				Υ	1	v06	Real	
		visTagArcTo	vis	X	0	v06	Real	
				Υ	1	v06	Real	
			Bow	2	v06	Real		
	visTagInfinite-	visInfinite-	X1	0	v06	Real		
		Line	Line	Y1	1	v06	Real	
				X2	2	v06	Real	
				Y2	3	v06	Real	
		visTagEllipse	visEllipse	CenterX	0	v06	Real	
				CenterY	1	v06	Real	
				MajorX	2	v06	Real	
				MajorY	3	v06	Real	
				MinorX	4	v06	Real	
			MinorY	5	v06	Real		
		visTagEllipti-	vis	X	0	v06	Real	
		calArcTo		Υ	1	v06	Real	
				ControlX	2	v06	Real	
				ControlY	3	v06	Real	
				EccentricityAngle	4	v06	Real	
				AspectRatio	5	v06	Real	
		visTag-	vis	X	0	v06	Real	
		SplineBeg	.=	Y	1	v06	Real	
				SplineKnot	2	v06	Real	
				SplineKnot2	3	v06	Real	
				SplineKnot3	4	v06	Real	
				SplineDegree	5	v06	Real	
		visTag-	vis	X	0	v06	Real	
		SplineSpan	v15	Y			Real	
					1	v06		
		vieTe ::	vio	SplineKnot	2	v06	Real	
		visTag- PolylineTo	vis	X	0	v06	Real	
		7 Glyllille 10		Y	1	v06	Real	
				PolylineData	2	v06	String	
		visTagNURB-	vis	X	0	v06	Real	
		STo		Υ	1	v06	Real	
				NURBSKnot	2	v06	Real	
				NURBSWeight	3	v06	Real	
				NURBSKnotPrev	4	v06	Real	
				NURBSWeightPrev	5	v06	Real	
				NURBSData	6	v06	String	

Table 36-10: Rows and Cells for ShapeSheet Section Action

								Actio		
SectionCor	st = visS	ectionAction	n = 240							
Ro	W	RowTag	Cell							
visRow	Val Const		Prefix	Const	lx	Ver	Type/ prefix	Const/Val		
default n>=0 defau	default	visAction	Menu	0	v06	String				
				Prompt	1	v06	String			
				Help	2	v06	Reserved			
				Action	3	v06	Formula			
				Checked	4	v06	Bool			
				Disabled	5	v06	Bool			
				ReadOnly	6	v11	Bool			
				Invisible	7	v11	Bool			
				BeginGroup	8	v11	Bool			
				TagName	14	v11	String			
				ButtonFace	15	v11	String			
				SortKey	16	v11	String			

Table 36-11: Rows and Cells for ShapeSheet Section Layer

								Layer		
SectionCor	nst = visS	ectionLayer	= 241							
Ro	w	RowTag	Cell							
visRow	Val Const		Prefix	Const	lx	Ver	Type/ prefix	Const/Val		
default	n>=0	default	visLayer	Name	0	v06	String			
				Color	2	v06	Color			
				Status	3	v06	???			
				Visible	4	v06	Bool			
				Print	5	v06	Bool			
				Active	6	v06	Bool			
				Lock	7	v06	Bool			
				Snap	8	v06	Bool			
				Glue	9	v06	Bool			
				NameUniv	10	v06	String			
				ColorTrans	11	v10	Real			

Table 36-12: Rows and Cells for ShapeSheet Section User

									User
SectionCon	st = visS	ectionUser = 2	242						
Rows in this	section c	an be named.							
Rov	w RowTag Cell								
visRow	Val	Const	Prefix	Const	lx	Ver	Type/ prefix	Const/Val	
default	n>=0	default	visUser	Value	0	v06	String		
				Prompt	1	v06	String		
		visTa- gRowVoid		default	0	v06	Real		

Table 36-13: Rows and Cells for ShapeSheet Section Prop

at vico	a atiam Dua :-	242					Pro
	_	•				Cell	
Val	Const	Prefix	Const	lx	Ver		Const/Val
n>=0	default	visCust-	Value	0	v06	Variant	
		Props	Prompt	1	v06	String	
		Label	2	v06	String		
			Format	3	v06	FormatPicture	
			SortKey	4	v06	Integer	
			Туре	5	v06	visPropType	0 String 1 ListFix 2 Number 3 Bool 4 ListVar 5 Date 6 Duration 7 Currency
			Invis	6	v06	Bool	
			Ask	7	v06	Bool	
			LangID	14	v11	Integer	
			Calendar	15	v11	visCal	0 Western 1 ArabicHijri 2 HebrewLunar 3 ChineseTaiwan 4 JapaneseEmperor 5 ThaiBuddhism 6 KoreanDanki 7 SakaEra 8 TranslitEnglish 9 TranslitFrench
	section c w Val	s section can be named w RowTag Val Const	Val Const Prefix n>=0 default visCust-	RowTag Val Const Prefix Const n>=0 default visCust-Props Prompt Label Format SortKey Type Invis Ask LangID	RowTag Val Const Prefix Const Ix	RowTag Val Const Prefix Const Value 0 Vo6	

Table 36-14: Rows and Cells for ShapeSheet Section Hyperlink

								Hyperlink
SectionCor	st = visS	ectionHyper	link = 244					
Rows in this	section c	an be named	. Note significan	t differences in Hype	rlink feat	ures b	etween V4.5, V5 a	and V2000.
Ro	W	RowTag					Cell	
visRow	Val	Const	Prefix	Const	lx	Ver	Type/ prefix	Const/Val
default	n>=0	default	visHLink	Description	0	v06	String	
				Address	1	v06	String	
				SubAddress	2	v06	String	
				ExtraInfo	3	v06	String	
				Frame	4	v06	String	
				NewWin	5	v06	Bool	
				Default	7	v06	Bool	
				Invisible	8	v11	Bool	
				SortKev	15	v11	Strina	

Table 36-15: Rows and Cells for ShapeSheet Section Reviewer

									Reviewer
SectionCon	st = visS	ectionReviev	ver = 245						
Row RowTag Cell									
visRow	Val	Const	Prefix	Const	lx	Ver	Type/ prefix	Const/Val	
default	n>=0	default	visReviewer	Name	0	v11	String		
				Initials	1	v11	String		
				Color	2	v11	Color		
				ReviewerID	3	v11	String		
				CurrentIndex	4	v11	Integer		

Table 36-16: Rows and Cells for ShapeSheet Section Annotation

								Annotation
SectionCor	nst = visS	ectionAnnot	ation = 246					
Ro	w	RowTag					Cell	
visRow	Val	Const	Prefix	Const	lx	Ver	Type/ prefix	Const/Val
default n	n>=0	default	visAnnota-	X	0	v11	Real	
			tion	Υ	1	v11	Real	
				ReviewerID	2	v11	String	
				MarkerIndex	3	v11	Integer	
				Date	4	v11	DateTime	
				Comment	5	v11	String	
				LangID	6	v11	Integer	

Table 36-17: Rows and Cells for ShapeSheet Section SmartTag

SectionCor	st = visS	ectionSmart	Tag = 247					SmartT			
Rows in this	section c	an be named									
Ro	N	RowTag		Cell							
visRow	Val	Const	Prefix	Const	lx	Ver	Type/ prefix	Const/Val			
default	n>=0	default	visSmart-	Х	0	v11	Real				
			Tag	Υ	1	v11	Real				
				Name	2	v11	String				
				XJustify	3	v11	visSmartTagXJus- tify	0 Left 1 Center 2 Right			
				YJustify	4	v11	visSmartTagYJus- tify	0 Top 1 Middle 2 Bottom			
				DisplayMode	5	v11	visSmartTagDisp- Mode	0 MouseOver 1 ShapeSelected 2 Always			
				ButtonFace	6	v11	String				
				Disabled	7	v11	Bool				
				Description	15	v11	String				

Data Sources: Basic data from Type Library Visio 2000 SR-1. All cell-value constants categorized into subtypes by hand. Sub-types linked to specific cells by hand. (GW_ShapeSheetStruc.mdb DBToFM.exe)

Chapter 37

ShapeSheet Functions

In This Chapter...

Complete Categorized Breakdown of ShapeSheet Functions, with Explanations

his chapter presents a complete breakdown of all ShapeSheet functions. By organizing the functions into categories, and keeping the explanations brief, you can see related functions near to each other. Hopefully never again will a reader miss the overlapping functionality of, say, CALLTHIS and RUNADDON.

You can use this chapter to gain an overview of the entire suite of ShapeSheet functions.

You can also use this chapter while programming a ShapeSheet to find functions pertinent to a task at hand. Once you have located the useful-looking functions, you should probably also look at the corresponding Developer Help listings where more extensive description is available.

Tip: Do not underestimate the power of ShapeSheet functions simply because they are called "functions". Though many indeed return values, many others perform procedural, conditional and even "code-writing" functions. Take a look at the functions in the Control Flow categories to gain an appreciation of what's available in this realm.

Table 37-1: ShapeSheet Function Categories

Main Category	Detail Catagory
Functions	Geometry
	Coordinate Transformation
	Math
	Logic
	String
	Date and Time
	Color
	Connector and Glue
Properties	Document
	Page
	Shape
	Object
Control Flow	Conditionals
	Events and Actions
	Calls
	Cell Manipulations
Utility	Errors

Table 37-2: Visio ShapeSheet Functions

Function	Ver	Syntax and Description				
Functions Geometry						
_ELLIPSE_ECC	V06	Used in ElliptalArcTo Geometry formulas.				
_ELLIPSE_THETA	V06	Used in ElliptalArcTo Geometry formulas.				
ACOS	V06	ACOS(number) arccosine				
ANG360	V06	ANG360(angle) Normalizes an angle to be 0 <= angle < 360 degrees (or equivalent in radians).				
ASIN	V06	ASIN(number) arcsine				
ATAN	V06	ATAN(number) arctangent				
ATAN2	V06	ATAN2(y,x) Returns the angle between the vector represented by x,y and the direction of the x axis.				
cos	V06	COS(angle) cosine				
COSH	V06	COSH(angle) hyperbolic cosine				
DEG	V06	DEG(angle) Converts the value of an angle from radians to degrees. See also RAD				
GRAVITY	V06	GRAVITY(angle,limit1,limit2) Returns 180 degrees if angle is between limit1 and limit2, else 0 degres. Used to set angle of text block so that text remains readable (ie: not upside down) even when shape is rotated.				
INTERSECTX	V06	INTERSECTX(x1,y1,angle1,x2,y2,angle2) X coordinate of Intersection of two lines				
INTERSECTY	V06	INTERSECTY(x1,y1,angle1,x2,y2,angle2) Y coordinate of Intersection of two lines				
MAGNITUDE	V06	MAGNITUDE(constantA,A,constantB,B) Length of vector				
NURBS	V06	NURBS(knotLast, degree, xType, yType, x1, y1, knot1, weight1,) Special function to populate E cell of NURBSTo Geometry rows.				
PI	V06	PI() Constant pi				

Table 37-2: Visio ShapeSheet Functions (Continued)

Function	Ver	Syntax and Description
POLYLINE	V06	POLYLINE(xType, yType, x1, y1) Special function is used in the A cell of PolyLineTo geometry rows.
RAD	V06	RAD(angle) Converts the value of an angle from degrees to radians. Idiosyncracy: Use RAD(DEG(Angle)) to get radian version of Angle cell (avoids double conversion).
RECTSECT	V06	RECTSECT(width,height,x,y,option) Calculates the sector of a rectangle associated with x and y and returns an integer 0 to 4, indicating the sector. Useful for orienting subshapes and connected shapes.
SIN	V06	SIN(angle) sine
SINH	V06	SINH(angle) hyperbolic sine
TAN	V06	TAN(angle) tangent
TANH	V06	TANH(angle) hyperbolic tangent
Functions Co	ordinate	e Transformation
ANGLETOLOC	V06	ANGLETOLOC(srcAngle, srcRef, dstRef) Converts an angle from local coordinates in a source shape to the local coordinates in a destination shape.
ANGLETOPAR	V06	ANGLETOPAR(srcAngle, srcRef, dstRef) Converts an angle from local coordinates in a source shape to the coordinates relative to the parent (group or page) of the destination shape.
LOC	V06	LOC(point) Takes a point defined in another shape's local coordinates and returns the equivalent point expressed in the local coordinates of this shape.
LOCTOLOC	V06	LOCTOLOC(srcPoint, srcRef, dstRef) Takes a point in the coordinates of one shape and transforms it to coordinates relative to another shape.
LOCTOPAR	V06	LOCTOPAR(srcPoint, srcRef, dstRef) Takes a point in one shape's coordinates and transforms it to coordinates of another shape's parent group or page.
PAR	V06	PAR(point) Takes a point in some other shape's coordinates and transforms to point in this shape's (group or page) parent's coordinates
PNT	V06	PNT(x,y) Converts X and Y values to shapesheet point type.
PNTX	V06	PNTX(point) Extracts X value from shapesheet point type value.
PNTY	V06	PNTY(point) Extracts Y value from shapesheet point type value.
Functions Ma	th	
ABS	V06	ABS(number) Absolute value of a number
BOUND	V11	BOUND (value, type, ignore, value1, value2 [ignore(n), value1(n), value2(n),]) Cell accepts UI-driven value into "value", and constrains it between bounds (possibly 2 or more bounds sets).
CEILING	V06	CEILING(number, multiple) Rounds number away from 0 (zero) to the next multiple of arg multiple (or multiple of 1 if arg multiple is not supplied).
СҮ	V06	CY(value, cyID) Converts number to a currency type value.
FLOOR	V06	FLOOR(number,multiple) Rounds number toward 0 (zero) to the next multiple of arg multiple (or multiple of 1 if arg multiple is not supplied).
INT	V06	INT(number) Rounds a number down to the next integer
INTUP	V06	INTUP(number) Rounds a number up to the next integer.

Table 37-2: Visio ShapeSheet Functions (Continued)

Function	Ver	Syntax and Description
LN	V06	LN(number) Natural logarithm
LOG10	V06	LOG10(number) Base 10 logarithm
MAX	V06	MAX(number1,number2,,numberN) Returns the largest number from a list
MIN	V06	MIN(number1,number2,,numberN) Returns the smallest number from a list.
MODULUS	V06	MODULUS(number,divisor) Returns the remainder (modulus) resulting when a number is divided by a divisor.
POW	V06	POW(number,exponent) Returns number raised to the power of an exponent
RAND	V06	RAND() Returns different random number every time it is evaluated AND Visio forces a re-evaluation once per minute ("for animation"). Not very useful probably want to use VBA Rnd instead. See also Registry: Visio 2000/application/animation key
ROUND	V06	ROUND(number,numberofdigits) Rounds to specified number of digits to right of decimal place if numberofdigits is positive, or to left of decimal place if numberofdigits is negative.
SIGN	V06	SIGN(number,fuzz) Returns 1 if number is positive, 0 if number is zero, or -1 if number is negative, with specifiable fuzz factor.
SQRT	V06	SQRT(number) Square root
SUM	V06	SUM(number1,number2,,number14) Sum of a list of numbers
TRUNC	V06	TRUNC(number,numberofdigits) Number truncated to numberofdigits
Functions Logic	;	
AND	V06	AND(logical expression1,logical expression2,,logical expressionN) Takes any number of expressions, and returns TRUE (1) if all are True (non-zero).
BITAND	V06	BITAND(binarynumber1,binarynumber2) Bitwise AND of two arguments interpreted as 16-bit numbers. Useful for interpreting some flag properties.
BITNOT	V06	BITNOT(binary number) Bitwise Inversion of bits in argument interpreted as 16-bit number.
BITOR	V06	BITOR(binary number1,binary number2) Bitwise OR of two arguments interpreted as 16-bit numbers.
BITXOR	V06	BITXOR(binary number1,binary number2) Bitwise XOR of two arguments interpreted as 16-bit numbers.
NOT	V06	NOT(logicalexpression) Returns FALSE (0) if argument is non-zero (TRUE)
OR	V06	OR(logicalexpression1,logicalexpression2,,logicalexpressionN) Takes any number of expressions, and returns TRUE (1) if any are True (non-zero).
Functions String	3	
BLOB	V11	BLOB(bintext) Encloses a blob of binary data, exposed in the UI or automation as text in Base64 format
CHAR	V06	CHAR(number) Returns a ANSI character from number argument.
DECIMALSEP	V06	DECIMALSEP() The decimal separator string for the current user locale.
EVALTEXT	V06	EVALTEXT(shapename!theText) Evaluates the text in shape as if it were a formula and returns the result.
FIELDPICTURE	V06	FIELDPICTURE (code) Returns a format picture string that matches the Visio internal text field format code.
FIND	V11	FIND (find_text, within_text ,[start_num], [ignore_case]) Returns starting position of find_text within within_text.

Table 37-2: Visio ShapeSheet Functions (Continued)

Function	Ver	Syntax and Description
FORMAT	V06	FORMAT(expression, "format picture")
FORMATEX	V06	returns a string with the result of expression formatted according to supplied format picture. FORMATEX(expression, "formatpicture" [, inputunit] [, outputunit])
		Similar to FORMAT, but includes unit conversion.
INDEX	V06	INDEX(index,"list"[,[delimiter][,[errorvalue]]]) Returns Nth string from list. (First item for N = 0). See also LOOKUP.
LEFT	V11	LEFT(text, num_chars) Leftmost N characters of a string. Like VB Left\$
LEN	V11	LEN (text) Length of string. Like VB Len
LISTSEP	V06	LISTSEP () Returns the list separator string for the current user locale.
LOOKUP	V06	LOOKUP("key","list"[,"delimiter"]) Returns (zero-based) index of first occurence of a substring ("key") in a list, otherwise -1. Can set list delimiter or default to semicolon. See also INDEX.
LOTUSNOTES	V06	LOTUSNOTES("field") Reads info from Lotus Notes field.
LOWER	V06	LOWER(expression) Returns string converted to lower case.
MID	V11	MID (text, start_num, num_chars) Returns portion of a string. Like VB Mid\$
REPLACE	V11	REPLACE (old_text, start_num, num_chars, new_text) Replaces segment of string at particular position with another string segment. See also SUBSTITUTE.
REPT	V11	REPT (text, number_times) Create a string by repeating provided text. 0: ""; Non-integer is truncated.
REWIDEN	V11	REWIDEN(srcCharSet, dstCharSet, text) Convert to Unicode from one character set to another.
RIGHT	V11	RIGHT(text [,num_chars_opt]) Returns rightmost portion of a string. Like VB Right\$
STRSAME	V06	STRSAME ("string1", "string2", ignoreCase) Compares strings or string expressions. TRUE for same. Optional case ignore.
STRSAMEEX	V06	STRSAMEEX ("string1", "string2", localeID, flag) Similar to STRSAME except handles multibyte strings and locale-specific case rules.
SUBSTITUTE	V11	SUBSTITUTE (text, old_text, new_text[, start_num][,ignore_case_opt) Substitutes section of string matching old_text with new_text. See also REPLACE.
TRIM	V11	TRIM (text) Removes spaces surrounding string, and also reduces whitespace within string to single spaces.
UNICHAR	V11	UNICHAR (number) Returns a character corresponding to Unicode value provided. For 0-127, same as CHAR.
UPPER	V06	UPPER(expression) Returns string converted to upper case.
Functions Date	and 1	
DATE	V06	DATE(year,month,day) Converts numeric Year, Month, Day to datetime type value.
DATETIME	V06	DATETIME("datetime"lexpression[,lcid]) Converts string to ShapeSheet datetime type
DATEVALUE	V06	DATEVALUE("datetime"lexpression[,lcid]) Extracts date part of datetime from string or datetime expression.
DAY	V06	DAY("datetime"lexpression[,lcid]) Returns day-of-month from string or datetime expression.
DAYOFYEAR	V06	DAYOFYEAR("datetime"lexpression[,lcid]) Returns day-of-year from string or datetime expression.
HOUR	V06	HOUR("datetime"lexpression[,lcid]) Returns hour-of-day from string or datetime expression.
MINUTE	V06	MINUTE("datetime"lexpression[,lcid]) Returns minute-of-hour from string or datetime expression.

Table 37-2: Visio ShapeSheet Functions (Continued)

Function	Ver	Syntax and Description
MONTH	V06	MONTH("datetime" expression[,lcid])
		Returns numeric month-of-year from string or datetime expression.
NOW	V06	NOW() Returns current datetime.
SECOND	V06	SECOND("datetime" expression[,lcid])
0200112		Returns second-of-minute from string or datetime expression.
TIME	V06	TIME(hour,minute,second)
		Converts hour-minute-second to a datetime type value.
TIMEVALUE	V06	TIMEVALUE("datetime"lexpression[,lcid]) Extracts the time-of-day from string of datetime expression
WEEKDAY	V06	WEEKDAY("datetime"lexpression[,lcid]) Returns numeric day-of-week from string or datetime expression.
YEAR	V06	YEAR("datetime"lexpression[,lcid]) Returns Gregorian year from string or datetime expression.
Functions Color		
BLUE	V06	BLUE(expression) The blue component of a color expression.
GREEN	V06	GREEN(expression) The green component of a color expression.
HSL	V06	HSL(hue,saturation,luminosity) Index in the document's color palette.
HUE	V06	HUE(expression) A color's hue component.
LUM	V06	LUM(expression) A color's luminosity component.
RED	V06	RED(expression) The red component of a color.
RGB	V06	RGB(red,green,blue) Index in the document's color palette
SAT	V06	SAT(expression) A color's saturation component.
Functions Conn	ecto	r and Glue
_GLUExxx	V06	CLUELOC CLUELOCDOT CLUEDAD CLUEDADDOT undecumented
MARKER	V06	_GLUELOC, _GLUELOCPCT, _GLUEPAR, _GLUEPARPCT, undocumented _MARKER(num)
_MATINETI	V 00	Used in Alignment Section formulas for glue to Guides. Return value is num. Appears to just mark the cell as not participating in the glue.
_UCON_xxx	V06	Various
		_UCON_X1/Y1/C1/D1/X2/Y2/C2/D2/X3/Y3/C3/D3/BEGTYP/ENDTYPE/GEOTYPE/SIMPLE Used to implement the Universal Connector. Undocumented by Visio, though function can be deduced from their behavior. See the chapter on Connectors.
_WALKGLUE	V06	_WALKGLUE(BegTrigger,EndTrigger,WalkPreference)
		When dynamic-glued, Visio puts this funciton in the BeginX and BeginY (or EndX/Y) cells of a connector. The function returns a point (X,Y), and the cell extracts the X or Y values as needed. (See also _XFTRIGGER)
_XFTRIGGER	V06	_XFTRIGGER(ConnecteeShape!EventXFMod)
		"TransForm trigger": When dynamic-glued, Visio puts this function in a connector's BegTrigger/EndTrigger cells to trigger recalc of dependent cells in connector(eg: endpoints) when connectee shape is moved. (See also _WALKGLUE)
USERUI	V06	USERUI(state,defaultexpression,userexpression)
		Used in Universal Connector Control.X/Y cells to merge changes from Control point gesture versus fixed formula. State 0 = return second arg, state 1 = return third arg. Visio writes state and third arg at various times. Broken in V2K through SR-1.
	I	<u> </u>

Table 37-2: Visio ShapeSheet Functions (Continued)

Function	Ver	Syntax and Description
Properties Docu	ımen	
CATEGORY	V06	CATEGORY () Document.Category property.
COMPANY	V06	COMPANY () Document.Company property
CREATOR	V06	CREATOR () Document.Creator property
DESCRIPTION	V06	DESCRIPTION () Document.Description property
DIRECTORY	V06	DIRECTORY () Full path of the directory in which a document is saved
DOCCREATION	V06	DOCCREATION () The datetime that a document was created
DOCLASTEDIT	V11	The datetime that a document was last edited
DOCLASTPRINT	V06	DOCLASTPRINT () The datetime a document was last printed
DOCLASTSAVE	V06	DOCLASTSAVE () The datetime a document was last saved
FILENAME	V06	FILENAME () Document's filename
HYPERLINKBASE	V06	HYPERLINKBASE () Document.HyperlinkBase property
KEYWORDS	V06	KEYWORDS () Document.Keywords property
MANAGER	V06	MANAGER () Document.Manager property
PAGECOUNT	V06	PAGECOUNT () Number of foreground pages in a document.
SUBJECT	V06	SUBJECT () Document.Subject property
TITLE	V06	TITLE () Document.Title property
Properties Page		
BKGPAGENAME	V06	BKGPAGENAME (langID_opt) Background page name as a string.
PAGENAME	V06	PAGENAME (langID_opt) Page.Name property
PAGENUMBER	V06	PAGENUMBER() Returns the number of the containing page. le: the index of this drawing page in the Document.Pages list.
Properties Shap	е	
DATA1	V06	DATA1 () Shape.Data1
DATA2	V06	DATA2 () Shape.Data2
DATA3	V06	DATA3 () Shape.Data3
ID	V06	ID () Shape.ID
MASTERNAME	V06	MASTERNAME (langID_opt) A sheet's master name as a string, or the string, "no master" if the sheet doesn't have a master. MASTERNAME(0) for default local name. MASTERNAME(750) for universal name (NameU property).
NAME	V06	NAME (langID_opt) Shape.Name property. NAME(0) for default local name. NAME(750) for universal name (NameU property).

Table 37-2: Visio ShapeSheet Functions (Continued)

Function	Ver	Syntax and Description
SHAPETEXT	V06	SHAPETEXT (shapename!TheText,flag) Shape.Text property
TEXTHEIGHT	V06	TEXTHEIGHT(shapename!TheText,maximumwidth) The height of Shape.Text if composed within specified width
TEXTWIDTH	V06	TEXTWIDTH(shapename!TheText,maximumwidth) The width of Shape.Text up to a maximum.
Properties Object	ct	
ТҮРЕ	V06	TYPE () object.ObjectType property as a number
TYPEDESC	V06	TYPEDESC () ObjectType translated to a descriptive string
Control Flow Co	nditi	onals
IF	V06	IF(logicalexpression, valueiffrue, valueiffalse) Based on condition expression, evaluates/executes one of two other expressions (like VB IIF function) and returns the result.
Control Flow Ev	ents	and Actions
DEFAULTEVENT	V06	DEFAULTEVENT() Performs the default event associated with the object.
GOTOPAGE	V06	GOTOPAGE("pagename") Displays the named page in the currently active window. If Visio page of that name not found, treats as URL and launches web browser.
HELP	V06	HELP("filename.hlp!keyword") or HELP("filename.chm!keyword") HELP("filename.hlp!#number") or HELP("filename.chm#number") Activates the help system and displays the keyword or numbered topic.
HYPERLINK	V06	HYPERLINK("address"[,"subaddress","extrainfo",window,"frame"]) Navigates user's web browser to hyperlink address.
OPENFILE	V06	OPENFILE("filename") Opens a Visio document and activates the document window.
OPENGROUPWIN	V06	OPENGROUPWIN() If this object is a group, then opens the Group window.
OPENPAGE	V06	OPENPAGE("pagename") Opens the named page in a new window (or activates it if already open.). If Visio page of that name not found, treats as URL and launches web browser.
OPENSHEETWIN	V06	OPENSHEETWIN() Opens the ShapeSheet window for this object.
OPENTEXTWIN	V06	OPENTEXTWIN() Opens the text-block to allow user to edit this shape's text.
PLAYSOUND	V06	PLAYSOUND("filename" "alias",isAlias,beep,synch) Plays a sound file or system sound.
QUEUEMARKER- EVENT	V11	QUEUEMARKEREVENT (event_string) Fires an OLE Automation Marker event. Allows ShapeSheet formula to fire event, which receiver can identify via event_string. Use RUNADDONWARGS("QueueMarkerEvent") in V2002SR1.
Control Flow Ca	lls	
CALLTHIS	V06	CALLTHIS("procedure",["project"],[arg1,arg2,]) Calls a procedure in a VBA project.
DOCMD	V06	DOCMD(CmdNum) The ShapeSheet equivalent of Application.DoCmd. Especially useful in the Events section of the ShapeSheet, amongst other places. For a list of DoCmd values, use the VBA Object Browser.
DOOLEVERB	V06	DOOLEVERB("verb") Applies if this shape is an OLE Object. Executes a verb for the OLE object.
RUNADDON	V06	RUNADDON("string") Passes an add-on or code to be executed to the VBA project of this document.
RUNADDONWARGS	V06	RUNADDONWARGS("filename", "arguments") Runs external program and passes the command line arguments to the program as a string.
RUNMACRO	V11	RUNMACRO (macroname [, projname_opt]) Runs a VBA procedure. Similar to CALLTHIS, but without the arguments or Shape reference

Table 37-2: Visio ShapeSheet Functions (Continued)

Function	Ver	Syntax and Description
Control Flow Ce	II Ma	nipulations
DEPENDSON	V06	DEPENDSON(cellref[,cellref2,]) Cell-reference dependency. Causes this cell to re-evaluate if the refered-to cell(s) changes.
FORMULAEXISTS	V11	FORMULAEXISTS (cellref) Returns 1 if cell contains a formula, else 0 (See also LOCALFORMULAEXISTS)
GETREF	V06	GETREF(cellname) References a cell but doesn't recalculate this formula when the refered-to cell changes.
GETVAL	V06	GETVAL(cellname) Gets the value of a cell and doesn't recalculate this formula when the refered-to cell's value changes.
GUARD	V06	GUARD(expression) Protects enclosed expression from deletion and change by actions performed in the drawing window, for example, moving, sizing, grouping, or ungrouping shapes.
LOCALFORMULAEX- ISTS	V11	LOCALFORMULAEXISTS (cellref) Returns 1 if cell contains a local formula; else 0 if no formula or formula is inherited.
		(See also FORMULAEXISTS)
SETATREF	V11	SETATREF(reference [,set_expression [,ignore_eval]]) In a cell receiving a UI-driven formula, redirects formula to different cell
SETATREFEVAL	V11	SETATREFEVAL(expr) Evaluates formula for SETATREF before pushing to other cell.
SETATREFEXPR	V11	SETATREFEXPR ([expr_opt]) Receives formula that Visio would normally place in this cell
SETF	V06	SETF(GETREF(cell), formula) SETF(GETREF(cell), "formula") SETF(GETREF(cell), """formula""") SETF("cell",formula) SETF("cell","formula") SETF("cell",""formula""") Sets another cell's formula. Visio checks GETREF form for syntax and cell available. Quoted form is useful to avoid error result.
USE	V06	USE("name") In a line-pattern, fill-pattern or line-end cell, applies the named pattern to this cell.
Utility Errors		
ISERR	V06	ISERR(cellreference) Returns TRUE if the value of refered-to cell is any error type except #N/A; otherwise, it returns FALSE.
ISERRNA	V06	ISERRNA(cellreference) Returns TRUE if the value of refered-to cell is error type #N/A! (not available); otherwise, it returns FALSE.
ISERROR	V06	ISERROR(cellreference) Returns TRUE if the value of refered-to cell is any error type; otherwise, it returns FALSE.
ISERRVALUE	V06	ISERRVALUE(cellreference) Returns TRUE if the value of refered-to cell is error type #VALUE, ie: an argument in the formula is the wrong type.
NA	V06	NA() Returns the constant error value #NA!, which means no value available.
REF	V06	REF() Returns the error value #REF!

Data Sources: Almost full list of functions parsed from Developer Help. Several undocumented functions added (notably functions whose names start with underscore.) Summary explanations added. (GW_ShapeSheetFuncs.mdb DBToFM.exe)

Chapter 38

Visio Objects, Properties and **Methods**

In This Chapter...

- Why and How to Read This Chapter
- Table Summarizing All Visio Objects and Their Interfaces
- Tables Covering All Objects, Properties, Methods and Applicable Constants

Object/Property/Method Table Organization

We've already seen a fairly detailed object model in Fig. 4 - 1 With that in one hand (make a copy if that helps!), you can then visit each object in this chapter. The objects themselves are collected into four broad branches or categories:

Top

The top-most objects in the Visio object hierarchy, such as Application, from which your Automation program can get references to all other objects.

Doc Data

All the object types that together capture the data of a Visio document.

UI & View

Here are all the types of object that provide access to the User Interface and Windows in the Visio environment.

Utility

Here numerous helper and utility object types are listed.

Within each category, object types are listed alphabetically.

Table 38-1: Overview of all Visio Automation object types

Basic Categorization of Visio Object Types		Interface informa	Interface information for COM-savvy programmers					
Branch	TypeName	CoClass	Interface	DispInterface	Event DispInterface	Item Type		
Тор	Application	Application	IVApplication	IVApplication	EApplication			
	Global	Global	IVGlobal	IVGlobal				
	InvisibleApp	InvisibleApp	IVInvisibleApp	IVInvisibleApp	EApplication			
Doc Data	Cell	Cell	IVCell	IVCell	ECell			
	Characters	Characters	IVCharacters	IVCharacters	ECharacters			
	Color	Color	IVColor	IVColor				
	Colors	Colors	IVColors	IVColors		Color		
	Connect	Connect	IVConnect	IVConnect				
	Connects	Connects	IVConnects	IVConnects		Connect		
	Curve	Curve	IVCurve	IVCurve				
	Document	Document	IVDocument	IVDocument	EDocument			
	Documents	Documents	IVDocuments	IVDocuments	EDocuments	Document		
	Font	Font	IVFont	IVFont				
	Fonts	Fonts	IVFonts	IVFonts		Font		
	Hyperlink	Hyperlink	IVHyperlink	IVHyperlink				
	Hyperlinks	Hyperlinks	IVHyperlinks	IVHyperlinks		Hyperlink		
	Layer	Layer	IVLayer	IVLayer				
	Layers	Layers	IVLayers	IVLayers		Layer		
	Master	Master	IVMaster	IVMaster	EMaster			
	Masters	Masters	IVMasters	IVMasters	EMasters	Master		
	MasterShortcut	MasterShortcut	IVMasterShortcut	IVMasterShortcut				
	MasterShortcuts	MasterShortcuts	IVMasterShortcuts	IVMasterShortcuts		MasterShortcut		
	OLEObject	OLEObject	IVOLEObject	IVOLEObject				
	OLEObjects	OLEObjects	IVOLEObjects	IVOLEObjects		OLEObject		
	Page	Page	IVPage	IVPage	EPage			
	Pages	Pages	IVPages	IVPages	EPages	Page		
	Path	Path	IVPath	IVPath		Curve		
	Paths	Paths	IVPaths	IVPaths		Path		
	Row	Row	IVRow	IVRow	ERow			
	Section	Section	IVSection	IVSection	ESection			
	Shape	Shape	IVShape	IVShape	EShape			
	Shapes	Shapes	IVShapes	IVShapes		Shape		
	Style	Style	IVStyle	IVStyle	EStyle			
	Styles	Styles	IVStyles	IVStyles	EStyles	Style		

Table 38-1: Overview of all Visio Automation object types (Continued)

Basic Categorization of Visio Object Types		Interface informa	Interface information for COM-savvy programmers					
Branch	TypeName	CoClass	Interface	DispInterface	Event DispInterface	Item Type		
JI&View	Accelltem	Accelltem	IVAccelltem	IVAccelltem				
	Accelltems	Accelltems	IVAccelltems	IVAccelltems		Accelltem		
	AccelTable	AccelTable	IVAccelTable	IVAccelTable				
	AccelTables	AccelTables	IVAccelTables	IVAccelTables		AccelTable		
	IEnumVAccelItem		IEnumVAccelItem					
	IEnumVAccelTable		IEnumVAccelTable					
	IEnumVMenu		IEnumVMenu					
	IEnumVMenuItem		IEnumVMenuItem					
	IEnumVMenuSet		IEnumVMenuSet					
	IEnumVStatusBar		IEnumVStatusBar					
	IEnumVStatus- Barltem		IEnumVStatusBarItem					
	IEnumVToolbar		IEnumVToolbar					
	IEnumVToolbarItem		IEnumVToolbarItem					
	IEnumVToolbarSet		IEnumVToolbarSet					
	Menu	Menu	IVMenu	IVMenu				
	MenuItem	Menultem	IVMenuItem	IVMenuItem				
	MenuItems	Menultems	IVMenuItems	IVMenuItems		MenuItem		
	Menus	Menus	IVMenus	IVMenus		Menu		
	MenuSet	MenuSet	IVMenuSet	IVMenuSet				
	MenuSets	MenuSets	IVMenuSets	IVMenuSets		MenuSet		
	StatusBar	StatusBar	IVStatusBar	IVStatusBar				
	StatusBarltem	StatusBarItem	IVStatusBarItem	IVStatusBarItem				
	StatusBarltems	StatusBarItems	IVStatusBarItems	IVStatusBarItems		StatusBarItem		
	StatusBars	StatusBars	IVStatusBars	IVStatusBars		StatusBar		
	Toolbar	Toolbar	IVToolbar	IVToolbar				
	ToolbarItem	ToolbarItem	IVToolbarItem	IVToolbarItem				
	ToolbarItems	ToolbarItems	IVToolbarItems	IVToolbarItems		ToolbarItem		
	Toolbars	Toolbars	IVToolbars	IVToolbars		Toolbar		
	ToolbarSet	ToolbarSet	IVToolbarSet	IVToolbarSet				
	ToolbarSets	ToolbarSets	IVToolbarSets	IVToolbarSets		ToolbarSet		
	UIObject	UIObject	IVUIObject	IVUIObject				
	Window	Window	IVWindow	IVWindow	EWindow			
	Windows	Windows	IVWindows	IVWindows	EWindows	Window		

Table 38-1: Overview of all Visio Automation object types (Continued)

Basic Categorization of Visio Object Types		Interface information for COM-savvy programmers					
Branch TypeName		CoClass	Interface	DispInterface	Event DispInterface	Item Type	
Util	Addon	Addon	IVAddon	IVAddon			
	Addons	Addons	IVAddons	IVAddons		Addon	
	ApplicationSettings	ApplicationSet- tings	IVApplicationSettings	IVApplicationSet- tings			
	Event	Event	IVEvent	IVEvent			
	EventList	EventList	IVEventList	IVEventList		Event	
	Extender	Extender	IVExtender	IVExtender	EShape		
	IVAmbients			IVAmbients			
	IVBUndoManager			IVBUndoManager			
	IVBUndoUnit			IVBUndoUnit			
	IVClientSite		IVClientSite				
	IVisEventProc			IVisEventProc			
	IVisLibOcxSupport		IVisLibOcxSupport				
	KeyboardEvent	KeyboardEvent	IVKeyboardEvent	IVKeyboardEvent			
	MouseEvent	MouseEvent	IVMouseEvent	IVMouseEvent			
	MSGWrap	MSGWrap	IVMSGWrap	IVMSGWrap			
	Selection	Selection	IVSelection	IVSelection		Shape	

Then, for each object, I've presented every property and method, and categorized them according to "feature area". This lets you see the relatively few feature areas that define the nature of each object, something which is difficult to perceive if you are confronted with an undifferentiated alphabetical list with many dozens of individual properties and methods. This approach also brings together properties and methods that you would normally use together.

Needless to say, this property/method categorization is somewhat subjective, and you may disagree with some of my choices. However it is much better than no categorization at all.

Finally, for each integer property I have identified the list of allowed constants to give a further quick idea of what a property is all about.

Object Summary Table

Preceding the full set of Object/Property/Method tables is the *Overview of Visio Automation Types Table*. The left-most columns in the table act as a "Table of Contents" letting you get a full overview of all Visio object types, and which branch/ category I have allocated each to. Most importantly this lets you know where to find each object (they are also in the main index).

COM-Related Columns

The columns to the right of the *Overview* table are for COM-savvy programmers. The names of object types exposed in VB/VBA are actually the names of what are called in COM terminology "CoClasses". In Visio, each CoClass implements a so-called "dual interface"—two different kinds of COM interface, one known as simply an "Interface", and the other as a "DispInterface". It is these interfaces which define the set of properties and methods for the object.

For what it's worth, Interface and DispInterface support different ways for programs to refer to an Automation objects and its properties and methods. These issues are generally not a concern to VB/VBA developers, but C++, Delphi and other language developers will match this up with the COM customs and documentation for their environments.

You will notice that in a few cases, a particular CoClass implements an Interface or DispInterface that has a distinctly different name. For example CoClass InvisibleApp implements IVApplication. This simply means that the properties and methods for InvisibleApp are identical to those for Application, so to find out about InvisibleApp read the Application section.

Event DispInterfaces

Many of the objects shown also sport Event DispInterfaces. For example, CoClass Page offers EPage. These are interfaces that allow you to create objects that receive event notifications. EPage can call your code when a ShapeAdded event occurs, for example. These Event DispInterfaces are not available by default when you create a Visio object, but they are enabled if you use the VB WithEvents keyword (or use the COM Connection Points API from other languages – not to be confused with Visio Connection Points!).

Chapter 39 Events Table lists Events in detail, and presents an overall chart of objects versus events reported. Because that is a much more compact way to present the event interfaces, I have only included one E-interface in this chapter (EApplication) to give you a general idea of what they look like.

Table 38-2: Key to details Object-Property-Method tables

Column	Values	Meaning
P/M	Prop	Property or
	Meth	Method
Name		Name of property or method
RW H	R	Readable property
	W	Writable property
	Н	Hidden (either deprecated or for internal use)
Syntax/Type		Show Visual Basic syntax of property or method, and for those returning an enumerated integer, shows the constants defined for that type.

			[Branch: Top] Application
Торт	ost object in Visio object i	hierarchy	
P/M	Name	RW H	Syntax/Type
ld/Ord	der/Label/Type		
Prop	Application	R	returns {IVApplication} = Application ; Property type: IVApplication
	Build	R	returns {I4} = Build ; Property type: Integer; -
	FullBuild	R	returns {I4} = FullBuild ; Property type: Integer; -
	InstanceHandle	RH	returns {12} = InstanceHandle ; Property type: Integer; Handle
	InstanceHandle32	R	returns {I4} = InstanceHandle32 ; Property type: Integer; Handle
	IsVisio16	RH	returns {I2} = IsVisio16 ; Property type: Integer; Bool
	IsVisio32	RH	returns {12} = IsVisio32 ; Property type: Integer; Bool
	Name	R	returns {BStr} = Name ; Property type: String
	ObjectType	R	returns {12} = ObjectType ; Property type: Integer; =visObjTypeApp
	ProcessID	R	returns {I4} = ProcessID ; Property type: Integer; ID
	ProductName	RH	returns {BStr} = ProductName ; Property type: String
	TypelibMajorVersion	R	returns {12} = TypelibMajorVersion ; Property type: Integer; -
	TypelibMinorVersion	R	returns {12} = TypelibMinorVersion ; Property type: Integer; -
	Version	R	returns {BStr} = Version ; Property type: String
	Window	R	returns {IVWindow} = Window ; Property type: IVWindow
	WindowHandle	RH	returns {12} = WindowHandle ; Property type: Integer; Handle
	WindowHandle32	R	returns {I4} = WindowHandle32 ; Property type: Integer; Handle
Beha	viorVariants		
Prop	AlertResponse	RW	returns {12} = AlertResponse ; Property type: Integer; IDxxx
	DeferRecalc	RW	returns {12} = DeferRecalc ; Property type: Integer; Bool
	Language	R	returns {I4} = Language ; Property type: Integer; Lang Id as in VERSIONINFO.???
	LanguageHelp	R	returns {I4} = LanguageHelp ; Property type: Integer; Lang Id as in VERSIONINFO.???
	LiveDynamics	RW	returns {Bool} = LiveDynamics ; Property type: Boolean
	ProfileName	RH	returns {BStr} = ProfileName ; Property type: String
	PromptForSummary	RW	returns {12} = PromptForSummary ; Property type: Integer; Bool
	ScreenUpdating	RW	returns {12} = ScreenUpdating ; Property type: Integer; Bool
	ShowChanges	RW	returns {Bool} = ShowChanges ; Property type: Boolean
Objec	t Life/Enable/Visible/St	ate	
Prop	Active	R	returns {I2} = Active ; Property type: Integer; Bool
	CommandLine	R	returns {BStr} = CommandLine ; Property type: String
	Settings	R	returns {IVApplicationSettings} = Settings ; Property type: IVApplicationSettings
	Stat	R	returns {12} = Stat ; Property type: Integer; VisStatCodes; Values: 0=visStatNormal; 1=vis-StatAppHasShutdown; 2=visStatDeleted; 4=visStatTouched; 8=visStatClosed; 16=visStatSuspended;
	UserName	RW	returns {BStr} = UserName ; Property type: String
	Visible	RW	returns {Bool} = Visible ; Property type: Boolean
Meth	GetUsageStatistic	Н	returns {Variant} = GetUsageStatistic(nWhichStatistic {I4 [In]})
	OnComponentEnter- State		OnComponentEnterState uStateID {VisOnComponentEnterCodes [In]}, bEnter {Bool [In]}
	Quit		Quit

			[Branch: Top] Application (Continued)
Topm	ost object in Visio object h	nierarchy	
P/M	Name	RW H	Syntax/Type
Conta	inee Mgt: DiagramData	l	
Prop	ActiveDocument	R	returns {IVDocument} = ActiveDocument ; Property type: IVDocument
	ActivePage	R	returns {IVPage} = ActivePage ; Property type: IVPage
	DefaultAngleUnits	RW	returns {Variant} = DefaultAngleUnits; Property type: Variant; Values: 32=visNumber; 33=visPercent; 36=visAcre; 37=visHectare; 40=visDate; 42=visDurationUnits; 43=visElapsedWeek; 44=visElapsedDay; 45=visElapsedHour; 46=visElapsedMin; and 37 more.
	DefaultDurationUnits	RW	returns {Variant} = DefaultDurationUnits ; Property type: Variant; Values: 32=visNumber; 33=visPercent; 36=visAcre; 37=visHectare; 40=visDate; 42=visDurationUnits; 43=visElapsedWeek; 44=visElapsedDay; 45=visElapsedHour; 46=visElapsedMin; and 37 more.
	DefaultPageUnits	RWH	returns {Variant} = DefaultPageUnits ; Property type: Variant; Values: 32=visNumber; 33=vis-Percent; 36=visAcre; 37=visHectare; 40=visDate; 42=visDurationUnits; 43=visElapsedWeek; 44=visElapsedDay; 45=visElapsedHour; 46=visElapsedMin; and 37 more.
	DefaultTextUnits	RW	returns {Variant} = DefaultTextUnits ; Property type: Variant; Values: 32=visNumber; 33=vis-Percent; 36=visAcre; 37=visHectare; 40=visDate; 42=visDurationUnits; 43=visElapsedWeek; 44=visElapsedDay; 45=visElapsedHour; 46=visElapsedMin; and 37 more.
	Documents	R	returns {IVDocuments} = Documents ; Property type: IVDocuments
Conta	ninee Mgt: UI		
Prop	BuiltInMenus	R	returns {IVUIObject} = BuiltInMenus ; Property type: IVUIObject
	BuiltInToolbars	R	returns {IVUIObject} = BuiltInToolbars(fIgnored {I2 [In]}) ; Property type: IVUIObject
	CommandBars	R	returns {Dispatch} = CommandBars ; Property type: Dispatch
	CustomMenus	R	returns {IVUIObject} = CustomMenus ; Property type: IVUIObject
	CustomMenusFile	RW	returns {BStr} = CustomMenusFile ; Property type: String
	CustomToolbars	R	returns {IVUIObject} = CustomToolbars ; Property type: IVUIObject
	CustomToolbarsFile	RW	returns {BStr} = CustomToolbarsFile ; Property type: String
	ShowMenus	RWH	returns {I2} = ShowMenus ; Property type: Integer; Bool
	ShowProgress	RW	returns {12} = ShowProgress ; Property type: Integer; Bool
	ShowStatusBar	RW	returns {12} = ShowStatusBar ; Property type: Integer; Bool
	ShowToolbar	RW	returns {I2} = ShowToolbar ; Property type: Integer; Bool
	ToolbarStyle	RWH	returns {12} = ToolbarStyle ; Property type: Integer; ???
Meth	ClearCustomMenus		ClearCustomMenus
	ClearCustomToolbars		ClearCustomToolbars
	SetCustomMenus		SetCustomMenus MenusObject {IVUIObject [In]}
	SetCustomToolbars		SetCustomToolbars ToolbarsObject {IVUIObject [In]}
Conta	ninee Mgt: Windows		
Prop	ActiveWindow	R	returns {IVWindow} = ActiveWindow; Property type: IVWindow
	ConnectorTool- DataObject	R	returns {Unknown} = ConnectorToolDataObject ; Property type: Unknown
	DefaultZoomBehavior	RW	returns {VisZoomBehavior} = DefaultZoomBehavior ; Property type: VisZoomBehavior
	DialogFont	R	returns {IFontDisp} = DialogFont ; Property type: IFontDisp
	InhibitSelectChange	RW	returns {Bool} = InhibitSelectChange ; Property type: Boolean
	Windows	R	returns {IVWindows} = Windows ; Property type: IVWindows
Shap	eSheet		
Meth	ConvertResult		$\label{eq:convertResult} $$ returns \{R8\} = ConvertResult(StringOrNumber \{Variant [In]\}, UnitsIn \{Variant [In]\}, UnitsOut \{Variant [In]\}) $$$
	FormatResult		returns {BStr} = FormatResult(StringOrNumber {Variant [In]}, UnitsIn {Variant [In]}, UnitsOut {Variant [In]}, Format {BStr [In]})
	FormatResultEx		returns {BStr} = FormatResultEx(StringOrNumber {Variant [In]}, UnitsIn {Variant [In]}, UnitsOut {Variant [In]}, Format {BStr [In]}, LangID {14 []}, CalendarID {14 []})

			[Branch: Top] Application (Continued)
Торто	ost object in Visio object h	nierarchv	
P/M	Name	RW H	Syntax/Type
File/D	ir		
Prop	AddonPaths	RW	returns {BStr} = AddonPaths ; Property type: String
	AutoRecoverInterval	RW	returns {12} = AutoRecoverInterval ; Property type: Integer; minutes
	DrawingPaths	RW	returns {BStr} = DrawingPaths ; Property type: String
	FilterPaths	RWH	returns {BStr} = FilterPaths ; Property type: String
	HelpPaths	RW	returns {BStr} = HelpPaths ; Property type: String
	Path	R	returns {BStr} = Path ; Property type: String
	SaveAsWebObject	R	returns {Dispatch} = SaveAsWebObject ; Property type: Dispatch
	StartupPaths	RW	returns {BStr} = StartupPaths ; Property type: String
	StencilPaths	RW	returns {BStr} = Startup attiss , Froperty type. String returns {BStr} = StencilPaths ; Property type: String
N 4 - 11-	TemplatePaths	RW	returns {BStr} = TemplatePaths ; Property type: String
Meth	EnumDirectories		EnumDirectories PathsString {BStr [In]}, NameArray {SafeArray BStr [Out]}
	SaveWorkspaceAs	Н	SaveWorkspaceAs FileName {BStr [In]}
	nFunctionality		
Prop	Addons	R	returns {IVAddons} = Addons ; Property type: IVAddons
	COMAddins	R	returns {Dispatch} = COMAddIns ; Property type: Dispatch
	old_Addins	RH	returns {Dispatch} = old_Addins ; Property type: Dispatch
	VBAEnabled	R	returns {Bool} = VBAEnabled ; Property type: Boolean
	Vbe	R	returns {Dispatch} = Vbe ; Property type: Dispatch
Event	s/Actions/Commands		
	CurrentScope	R	returns {I4} = CurrentScope ; Property type: Integer; ID
	EventInfo	R	returns {BStr} = EventInfo(eventSeqNum {I4 [In]}) ; Property type: String
	EventList	R	returns {IVEventList} = EventList ; Property type: IVEventList
	EventsEnabled	RW	returns {12} = EventsEnabled ; Property type: Integer; Bool
	IsInScope	R	returns {Bool} = IsInScope(nCmdID {I4 [In]}) ; Property type: Boolean
	PersistsEvents	R	returns {I2} = PersistsEvents ; Property type: Integer; Bool
	TraceFlags	RW	returns {I4} = TraceFlags ; Property type: Integer; VisTraceCodes; Values: 1=visTraceEvents;
			2=visTraceAdvises; 4=visTraceAddonInvokes; 8=visTraceCallsToVBA;
Meth	DoCmd		DoCmd CommandID {I2 [In]}
	QueueMarkerEvent		returns {I4} = QueueMarkerEvent(ContextString {BStr [In]})
Help		•	
Meth	InvokeHelp		InvokeHelp bstrHelpFileName {BStr [In]}, Command {I4 [In]}, Data {I4 [In]}
Layou	ıt		
Prop	AutoLayout	RW	returns {Bool} = AutoLayout ; Property type: Boolean
OLEA	ctiveX		
Prop	OnDataChangeDelay	RW	returns {I4} = OnDataChangeDelay ; Property type: Integer; -
	ng/Paper	1	
Prop	ActivePrinter	RW	returns {BStr} = ActivePrinter ; Property type: String
	AvailablePrinters	R	returns {SafeArray BStr} = AvailablePrinters ; Property type: String
Undo		1	Troporty type daming
Prop	IsUndoingOrRedoing	R	returns {Bool} = IsUndoingOrRedoing ; Property type: Boolean
op	UndoEnabled	RW	returns {Bool} = UndoEnabled ; Property type: Boolean
Meth	AddUndoUnit		AddUndoUnit pUndoUnit {Unknown [In]}
WIGHT	BeginUndoScope		returns {I4} = BeginUndoScope(bstrUndoScopeName {BStr [In]})
	EndUndoScope	1	
	•		EndUndoScope nScopeID {I4 [In]}, bCommit {Bool [In]}
	PurgeUndo		PurgeUndo
	Redo	<u> </u>	Redo
	RenameCurrentScope		RenameCurrentScope bstrScopeName {BStr [In]}
	Undo		Undo

			[Branch: Top] EApplicatio
	ple Event DispInterface. S	1	
P/M	Name	RW H	Syntax/Type
	- App		Lie and a series of the series
/leth	AfterModal		AfterModal app {IVApplication [In]}
	AfterResume		AfterResume app {IVApplication [In]}
	AppActivated		AppActivated app {IVApplication [In]}
	AppDeactivated		AppDeactivated app {IVApplication [In]}
	AppObjActivated		AppObjActivated app {IVApplication [In]}
	AppObjDeactivated		AppObjDeactivated app {IVApplication [In]}
	BeforeModal		BeforeModal app {IVApplication [In]}
	BeforeQuit		BeforeQuit app {IVApplication [In]}
	BeforeSuspend		BeforeSuspend app {IVApplication [In]}
	DesignModeEntered		DesignModeEntered doc {IVDocument [In]}
	EnterScope		EnterScope app {IVApplication [In]}, nScopeID {I4 [In]}, bstrDescription {BStr [In]}
	ExitScope		ExitScope app {IVApplication [In]}, nScopeID {14 [In]}, bstrDescription {BStr [In]}, bErrOrCancelled {Bool [In]}
	MarkerEvent		MarkerEvent app {IVApplication [In]}, SequenceNum {I4 [In]}, ContextString {BStr [In]}
	MasterAdded		MasterAdded Master {IVMaster [In]}
	MustFlushScopeBe- ginning		MustFlushScopeBeginning app {IVApplication [In]}
	MustFlushScop- eEnded		MustFlushScopeEnded app {IVApplication [In]}
	NoEventsPending		NoEventsPending app {IVApplication [In]}
	QueryCancelQuit		QueryCancelQuit app {IVApplication [In]}, lpboolRet {Bool []}
	QueryCancelSuspend		QueryCancelSuspend app {IVApplication [In]}, lpboolRet {Bool []}
	QuitCanceled		QuitCanceled app {IVApplication [In]}
	RunModeEntered		RunModeEntered doc {IVDocument [In]}
	SuspendCanceled		SuspendCanceled app {IVApplication [In]}
	VisioIsIdle		VisioIsIdle app {IVApplication [In]}
vent	- Doc		visioiside app (14/application [m])
leth	BeforeDocument-		BeforeDocumentClose doc {IVDocument [In]}
reur	Close		Before Document close ave {1 v Document [m]}
	BeforeDocumentSave		BeforeDocumentSave doc {IVDocument [In]}
	BeforeDocument-		BeforeDocumentSaveAs doc {IVDocument [In]}
	SaveAs		Sector Section (1. Section (III))
	DocumentChanged		DocumentChanged doc {IVDocument [In]}
	DocumentCloseCan- celed		DocumentCloseCanceled doc {IVDocument [In]}
	DocumentCreated		DocumentCreated doc {IVDocument [In]}
	DocumentOpened	1	DocumentOpened doc {IVDocument [In]}
	DocumentSaved		DocumentSaved doc {IVDocument [In]}
	DocumentSavedAs	1	DocumentSavedAs doc {IVDocument [In]}
	QueryCancelDocu- mentClose		QueryCancelDocumentClose doc {IVDocument [In]}, lpboolRet {Bool []}
vent	: - Page	1	
/leth	BeforePageDelete		BeforePageDelete Page {IVPage [In]}
	PageAdded		PageAdded Page [IVPage [In]]
	PageChanged	1	PageChanged Page {IVPage [In]}
	PageDeleteCanceled	1	PageDeleteCanceled Page [IN]]
	QueryCancelPageDe-		QueryCancelPageDelete Page {IVPage [In]}, lpboolRet {Bool []}

v

			[Branch: Top] EApplication (Continued)				
Exam	ple Event DispInterface. S	See Event	s Chapter for details.				
P/M	Name	RW H	Syntax/Type				
Event	: - Shape						
Meth	BeforeShapeDelete		BeforeShapeDelete Shape [In]}				
	BeforeShapeTextEdit		BeforeShapeTextEdit Shape [In]}				
	ConvertToGroupCan- celed		ConvertToGroupCanceled Selection {IVSelection [In]}				
	QueryCancelConvert- ToGroup		QueryCancelConvertToGroup Selection {IVSelection [In]}, lpboolRet {Bool []}				
	QueryCancelUngroup		QueryCancelUngroup Selection {IVSelection [In]}, lpboolRet {Bool []}				
	ShapeAdded		ShapeAdded Shape {IVShape [In]}				
	ShapeChanged		ShapeChanged Shape {IVShape [In]}				
	ShapeExitedTextEdit		ShapeExitedTextEdit Shape [IN]}				
	ShapeParentChanged		ShapeParentChanged Shape [IN]}				
	TextChanged		TextChanged Shape [In]}				
	UngroupCanceled		UngroupCanceled Selection [IN]				
Event	- Master						
Meth	BeforeMasterDelete		BeforeMasterDelete Master {IVMaster [In]}				
	MasterChanged		MasterChanged Master {IVMaster [In]}				
	MasterDeleteCan- celed		MasterDeleteCanceled Master {IVMaster [In]}				
	QueryCancelMaster- Delete		QueryCancelMasterDelete Master {IVMaster [In]}, lpboolRet {Bool []}				
Event	- Cell	'					
Meth	CellChanged		CellChanged Cell {IVCell [In]}				
	FormulaChanged		FormulaChanged Cell {IVCell [In]}				
Event	- Conn	•					
Meth	ConnectionsAdded		ConnectionsAdded Connects {IVConnects [In]}				
	ConnectionsDeleted		ConnectionsDeleted Connects [IVConnects [In]]				

			[Branch: Top] EApplication (Continued)
Exam	ple Event DispInterface. S	See Event	s Chapter for details.
P/M	Name	RW H	Syntax/Type
Event	- Window		
Meth	BeforeWindowClosed		BeforeWindowClosed Window {IVWindow [In]}
	BeforeWindowPag- eTurn		BeforeWindowPageTurn Window {IVWindow [In]}
	BeforeWindowSelDe- lete		BeforeWindowSelDelete Window [IVWindow [In]]
	KeyDown		KeyDown KeyCode {I4 [In]}, KeyButtonState {I4 [In]}, CancelDefault {Bool [In/Out]}
	KeyPress		KeyPress KeyAscii {14 [In]}, CancelDefault {Bool [In/Out]}
	KeyUp		KeyUp KeyCode {I4 [In]}, KeyButtonState {I4 [In]}, CancelDefault {Bool [In/Out]}
	MouseDown		$\label{lem:mouseDownButton} MouseDown\textit{Button}\{I4[In]\},\textit{KeyButtonState}\{I4[In]\},x\{R8[In]\},y\{R8[In]\},\textit{CancelDefault}\{Bool[In/Out]\}$
	MouseMove		$\label{lem:mouseMoveButton} MouseMove\ \textit{Button}\ \{I4\ [In]\},\ \textit{KeyButtonState}\ \{I4\ [In]\},\ x\ \{R8\ [In]\},\ y\ \{R8\ [In]\},\ \textit{CancelDefault}\ \{Bool\ [In/Out]\}$
	MouseUp		$\label{lem:mouseUpButton} \begin{tabular}{l} MouseUp\ Button\ \{I4\ [In]\},\ KeyButtonState\ \{I4\ [In]\},\ x\ \{R8\ [In]\},\ y\ \{R8\ [In]\},\ CancelDefault\ \{Bool\ [In/Out]\} \end{tabular}$
	OnKeystrokeMes- sageForAddon		OnKeystrokeMessageForAddon MSG {IVMSGWrap [In]}, lpboolRet {Bool []}
	QueryCancelWindow- Close		QueryCancelWindowClose Window [In]}, lpboolRet {Bool []}
	ViewChanged		ViewChanged Window [IVWindow [In]]
	WindowActivated		WindowActivated Window [IVWindow [In]]
	WindowChanged		WindowChanged Window [IVWindow [In]]
	WindowCloseCan- celed		WindowCloseCanceled Window [IvWindow [In]]
	WindowOpened		WindowOpened Window [IVWindow [In]]
	WindowTurnedToPage		WindowTurnedToPage Window {IVWindow [In]}
Event	- Selection	!	
Meth	BeforeSelectionDelete		BeforeSelectionDelete Selection [In]}
	QueryCancelSelectionDelete		QueryCancelSelectionDelete Selection {IVSelection [In]}, lpboolRet {Bool []}
	SelectionAdded		SelectionAdded Selection [IN]}
	SelectionChanged		SelectionChanged Window [IVWindow [In]]
	SelectionDeleteCan- celed		SelectionDeleteCanceled Selection [In]}
Event	- Style	•	
Meth	BeforeStyleDelete		BeforeStyleDelete Style {IVStyle [In]}
	QueryCancelStyleDe- lete		QueryCancelStyleDelete Style {IVStyle [In]}, lpboolRet {Bool []}
	StyleAdded		StyleAdded Style [In]}
	StyleChanged		StyleChanged Style {IVStyle [In]}
	StyleDeleteCanceled		StyleDeleteCanceled Style {IVStyle [In]}

			[Branch: Top]	InvisibleApp
Same	e as Application, except ru	ıns invisib	ly. Progld: "Visio.InvisibleApp"	
P/M	Name	RW H	Syntax/Type	
ld/Or	der/Label/Type			
	Application		returns {HResult} = Application(lpdispRet {Ptr IVApplication []})	
	Build		returns {HResult} = Build(pnBuild {I4 []})	
	FullBuild		returns {HResult} = FullBuild(pnFullBuild {I4 []})	
	InstanceHandle	Н	returns {HResult} = InstanceHandle(lpi2Ret {I2 []})	
	InstanceHandle32		returns {HResult} = InstanceHandle32(lpi4Ret {I4 []})	
	IsVisio16	Н	returns {HResult} = IsVisio16(lpi2Ret {I2 []})	
	IsVisio32	Н	returns {HResult} = IsVisio32(lpi2Ret {I2 []})	
	Name		returns {HResult} = Name(pbstrName {BStr []})	
	ObjectType		returns {HResult} = ObjectType(lpi2Ret {I2 []})	
	ProcessID		returns {HResult} = ProcessID(lpi4Ret {I4 []})	
	ProductName	Н	returns {HResult} = ProductName(lpbstrRet {BStr []})	
	TypelibMajorVersion		returns {HResult} = TypelibMajorVersion(lpi2Ret {I2 []})	
	TypelibMinorVersion		returns {HResult} = TypelibMinorVersion(lpi2Ret {I2 []})	
	Version		returns {HResult} = Version(lpbstrRet {BStr []})	
	Window		returns {HResult} = Window(lpdispRet {Ptr IVWindow []})	
	WindowHandle	Н	returns {HResult} = WindowHandle(lpi2Ret {I2 []})	
	WindowHandle32		returns {HResult} = WindowHandle32(lpi4Ret {I4 []})	
Beha	viorVariants			
	AlertResponse		returns {HResult} = AlertResponse(lpi2Ret {I2 []})	
	DeferRecalc		returns {HResult} = DeferRecalc(lpi2Ret {I2 []})	
	Language		returns {HResult} = Language(lpi4Ret {I4 []})	
	LanguageHelp		returns {HResult} = LanguageHelp(lpi4Ret {I4 []})	
	LiveDynamics		returns {HResult} = LiveDynamics(pbRet {Bool []})	
	ProfileName	Н	returns {HResult} = ProfileName(lpbstrRet {BStr []})	
	PromptForSummary		returns {HResult} = PromptForSummary(lpi2Ret {12 []})	
	ScreenUpdating		returns {HResult} = ScreenUpdating(lpi2Ret {I2 []})	
	ShowChanges	+	returns {HResult} = ShowChanges(pbRet {Bool []})	

			[Branch: Top] InvisibleApp (Continue
			ly. Progld: "Visio.InvisibleApp"
P/M	Name	RW H	Syntax/Type
Objec	t Life/Enable/Visible/Sta	ite	
	Active		returns {HResult} = Active(lpi2Ret {12 []})
	CommandLine		returns {HResult} = CommandLine(pbstrCmdLine {BStr []})
	GetUsageStatistic	Н	returns {HResult} = GetUsageStatistic(nWhichStatistic {I4 [In]}, pvStatistic {Variant []})
	OnComponentEnter- State		returns {HResult} = OnComponentEnterState(uStateID {VisOnComponentEnterCodes [In]}, bEnter {Bool [In]})
	Quit		returns {HResult} = Quit
	Settings		returns {HResult} = Quit returns {HResult} = Settings(lpSettingRet {Ptr IVApplicationSettings []})
	Stat		returns {HResult} = Settings(tp)settings(et {12 []})
	UserName		returns {HResult} = Statisfizer {12 []}) returns {HResult} = UserName(lpbstrRet {BStr []})
	Visible		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Conta			$returns \{HResult\} = Visible(pbVisible \{Bool []\})$
Conta	ainee Mgt: DiagramData ActiveDocument		(HD ands) Astin D annual (LL) and (Dec. B/D annual (LL))
			returns {HResult} = ActiveDocument(lpdispRet {Ptr IVDocument []})
	ActivePage DefaultAngleUnits		returns {HResult} = ActivePage(lpdispRet {Ptr IVPage []}) returns {HResult} = DefaultAngleUnits(pUnitsNameOrCode {Variant []})
	DefaultAngleUnits DefaultDurationUnits		
		Н	returns {HResult} = DefaultDurationUnits(pUnitsNameOrCode {Variant []})
	DefaultPageUnits DefaultTextUnits	П	returns {HResult} = DefaultPageUnits(pUnitsNameOrCode {Variant []})
	Documents		returns {HResult} = DefaultTextUnits(pUnitsNameOrCode {Variant []})
>			returns {HResult} = Documents(lpdispRet {Ptr IVDocuments []})
Jonta	ninee Mgt: UI	I	(III) b) D'M (L' D (D) BUHO! (II))
	BuiltInMenus		returns {HResult} = BuiltInMenus(lpdispRet {Ptr IVUIObject []})
	BuiltInToolbars		returns {HResult} = BuiltInToolbars(fIgnored {12 [In]}, lpdispRet {Ptr IVUIObject []})
	ClearCustomMenus		returns {HResult} = ClearCustomMenus
	ClearCustomToolbars		returns {HResult} = ClearCustomToolbars
	CommandBars		returns {HResult} = CommandBars(lpdispRet {Dispatch []})
	CustomMenus		returns {HResult} = CustomMenus(lpdispRet {Ptr IVUIObject []})
	CustomMenusFile		returns {HResult} = CustomMenusFile(lpbstrRet {BStr []})
	CustomToolbars		returns {HResult} = CustomToolbars(lpdispRet {Ptr IVUIObject []})
	CustomToolbarsFile		returns {HResult} = CustomToolbarsFile(lpbstrRet {BStr []})
	SetCustomMenus		returns {HResult} = SetCustomMenus(MenusObject {IVUIObject [In]})
	SetCustomToolbars		returns {HResult} = SetCustomToolbars(ToolbarsObject {IVUIObject [In]})
	ShowMenus	Н	returns {HResult} = ShowMenus(lpi2Ret {I2 []})
	ShowProgress		returns {HResult} = ShowProgress(lpi2Ret {I2 []})
	ShowStatusBar		returns {HResult} = ShowStatusBar(lpi2Ret {12 []})
	ShowToolbar		returns {HResult} = ShowToolbar(lpi2Ret {12 []})
_	ToolbarStyle	Н	returns {HResult} = ToolbarStyle(lpi2Ret {12 []})
Conta	ninee Mgt: Windows	1	
	ActiveWindow		returns {HResult} = ActiveWindow(lpdispRet {Ptr IVWindow []})
	ConnectorTool- DataObject		returns {HResult} = ConnectorToolDataObject(lpdispRet {Unknown []})
	DefaultZoomBehavior		waterway (HD coult) = Default/2comPehavior(mr/2comPehavior (Vic/2comPehavior [1])
	DialogFont		returns {HResult} = DefaultZoomBehavior(pnZoomBehavior {VisZoomBehavior []})
			returns {HResult} = DialogFont(ppFontDisp {Ptr IFontDisp []})
	InhibitSelectChange Windows		returns {HResult} = InhibitSelectChange(pbRet {Bool []})
Shore	Windows		returns {HResult} = Windows(lpdispRet {Ptr IVWindows []})
энар			waterway (HD agult) = ConvertDogult/Cenie a Continue on (Variant II-1) Heisel. (Variant II-1) Heisel.
	ConvertResult		returns {HResult} = ConvertResult(StringOrNumber {Variant [In]}, UnitsIn {Variant [In]}, UnitsOut{Variant [In]}, lpr8Ret {R8 []})
	FormatResult		returns {HResult} = FormatResult(StringOrNumber {Variant [In]}, UnitsIn {Variant [In]}, UnitsOut {Variant [In]}, Format {BStr [In]}, IpbstrRet {BStr []})
	FormatResultEx		returns {HResult} = FormatResultEx(StringOrNumber {Variant [In]}, UnitsIn {Variant [In]}, UnitsIn {Variant [In]}, Format {BStr [In]}, LangID {I4 []}, CalendarID {I4 []}, lpbstrRet {BStr []})

			[Branch: Doc Data] Cell
A Sha	apeSheet cell		
P/M	Name	RW H	Syntax/Type
ld/Ord	der/Label/Type		1 ' '
Prop	Column	R	returns {12} = Column ; Property type: Integer; Index
	LocalName	R	returns {BStr} = LocalName; Property type: String
	Name	R	returns {BStr} = Name ; Property type: String
	ObjectType	R	returns {12} = ObjectType ; Property type: Integer; =visObjTypeCell
	RowName	RW	returns {BStr} = RowName ; Property type: String
	RowNameU	RW	returns {BStr} = RowNameU ; Property type: String
Obied	t Life/Enable/Visible/Sta	nte	
Prop		R	returns {12} = Stat ; Property type: Integer; VisStatCodes; Values: 0=visStatNormal; 1=vis-StatAppHasShutdown; 2=visStatDeleted; 4=visStatTouched; 8=visStatClosed; 16=visStatSuspended;
Core	Attributes		
Prop	Error	R	returns {12} = Error ; Property type: Integer; VisCellError; Values: 0=visErrorSuccess; 39=visErrorDivideByZero; 47=visErrorValue; 55=visErrorReference; 61=visErrorName; 68=visErrorNumber; 74=visErrorNotAvailable;
	Formula	RW	returns {BStr} = Formula ; Property type: String
	FormulaForce	W	FormulaForce = {BStr} ; Property type: None
	FormulaForceU	W	FormulaForceU = {BStr} ; Property type: None
	FormulaU	RW	returns {BStr} = FormulaU ; Property type: String
	IsConstant	R	returns {12} = IsConstant ; Property type: Integer; Bool
	Precedents	R	returns {SafeArray Ptr IVCell} = Precedents ; Property type: IVCell
	Result	RW	returns {R8} = Result(UnitsNameOrCode {Variant [In]}) ; Property type: Real
	ResultForce	W	ResultForce(UnitsNameOrCode {Variant}) = {R8} ; Property type: None
	ResultFromInt	W	ResultFromInt(<i>UnitsNameOrCode</i> {Variant}) = {I4} ; Property type: None
	ResultFromIntForce	W	ResultFromIntForce(UnitsNameOrCode {Variant}) = {I4} ; Property type: None
	Resultint	R	$ returns \ \{I4\} = ResultInt(UnitsNameOrCode \ \{Variant \ [In]\}, fRound \ \{I2 \ [In]\}) ; Property \ type: Integer; - $
	ResultIU	RW	returns {R8} = ResultIU ; Property type: Real
	ResultIUForce	W	ResultIUForce = {R8} ; Property type: None
	ResultStr	R	returns {BStr} = ResultStr(UnitsNameOrCode {Variant [In]}) ; Property type: String
	Units	R	returns {12} = Units ; Property type: Integer; VisUnitCodes; Values: 32=visNumber; 33=vis-Percent; 36=visAcre; 37=visHectare; 40=visDate; 42=visDurationUnits; 43=visElapsedWeek; 44=visElapsedDay; 45=visElapsedHour; 46=visElapsedMin; and 37 more.
Meth	Trigger		Trigger
Core	Associations		
Prop	Dependents	R	returns {SafeArray Ptr IVCell} = Dependents ; Property type: IVCell
	InheritedFormula- Source	R	returns {IVCell} = InheritedFormulaSource ; Property type: IVCell
	InheritedValueSource	R	returns {IVCell} = InheritedValueSource ; Property type: IVCell
	IsInherited	R	returns {I2} = IsInherited ; Property type: Integer; Bool
Meth	GlueTo		GlueTo CellObject {IVCell [In]}
	GlueToPos		GlueToPos SheetObject {IVShape [In]}, xPercent {R8 [In]}, yPercent {R8 [In]}

			[Branch: Doc Data] Cell (Continued)
A Sha	apeSheet cell		
P/M	Name	RW H	Syntax/Type
Conta	ained By		
Prop	Application	R	returns {IVApplication} = Application ; Property type: IVApplication
	ContainingMasterID	R	returns {I4} = ContainingMasterID ; Property type: Integer; ID
	ContainingPageID	R	returns {I4} = ContainingPageID ; Property type: Integer; ID
	ContainingRow	R	returns {IVRow} = ContainingRow; Property type: IVRow
	Document	R	returns {IVDocument} = Document ; Property type: IVDocument
	Row	R	returns {I2} = Row ; Property type: Integer; Index
	Section	R	returns {I2} = Section ; Property type: Integer; VisSectionIndices_Actual; Values: 1=visSectionObject; 2=visSectionMember; 3=visSectionCharacter; 4=visSectionParagraph; 5=visSectionTab; 6=visSectionScratch; 7=visSectionConnectionPts; 7=visSectionExport; 8=visSectionTextField; 9=visSectionControls; and 9 more.
	Shape	R	returns {IVShape} = Shape ; Property type: IVShape
	Style	R	returns {IVStyle} = Style ; Property type: IVStyle
Even	ts/Actions/Commands	•	
Prop	EventList	R	returns {IVEventList} = EventList ; Property type: IVEventList
	PersistsEvents	R	returns {I2} = PersistsEvents ; Property type: Integer; Bool

	[Branch: Doc Data]	ECell
Event DispInterface. See Events Chapter for details.		

			[Branch: Doc Data] Characters		
Stores	Stores attributes to be applied to a set of characters in a Shape's Text				
P/M	Name	RW H	Syntax/Type		
Id/Ord	der/Label/Type				
Prop	ObjectType	R	returns {12} = ObjectType ; Property type: Integer; =visObjTypeChars		
Objec	t Life/Enable/Visible/S	State			
Prop	Stat	R	returns {I2} = Stat ; Property type: Integer; VisStatCodes; Values: 0=visStatNormal; 1=vis-StatAppHasShutdown; 2=visStatDeleted; 4=visStatTouched; 8=visStatClosed; 16=visStatSuspended;		
Meth	Delete		Delete		
Core	Attributes				
Prop	Begin	RW	returns {I4} = Begin ; Property type: Integer; Index		
	CharCount	R	returns {I4} = CharCount ; Property type: Integer; Count		
	CharProps	W	CharProps(CellIndex {I2}) = {I2} ; Property type: None		
	CharPropsRow	R	returns {I2} = CharPropsRow(BiasLorR {I2 [In]}) ; Property type: Integer; Index		
	End	RW	returns {I4} = End ; Property type: Integer; Index		
	IsField	R	returns {I2} = IsField ; Property type: Integer; Bool		
	ParaProps	W	ParaProps(CellIndex {I2}) = {I2} ; Property type: None		
	ParaPropsRow	R	returns {I2} = ParaPropsRow(BiasLorR {I2 [In]}) ; Property type: Integer; VisCellIndices_Para; Values: 0=visIndentFirst; 1=visIndentLeft; 2=visIndentRight; 3=visSpaceLine; 4=visSpaceBefore; 5=visSpaceAfter; 6=visHorzAlign; 7=visBulletIndex; 8=visBulletString; 9=visBulletFont; and 4 more.		
	RunBegin	R	returns {I4} = RunBegin(RunType {I2 [In]}) ; Property type: Integer; Index		
	RunEnd	R	returns {I4} = RunEnd(RunType {I2 [In]}) ; Property type: Integer; Index		
	TabPropsRow	R	returns {12} = TabPropsRow(BiasLorR {12 [In]}) ; Property type: Integer; VisCharsBias; Values: 0=visBiasLetVisioChoose; 1=visBiasLeft; 2=visBiasRight;		
	Text	RW	returns {Variant} = Text ; Property type: Variant		
	TextAsString	RH	returns {BStr} = TextAsString ; Property type: String		

			[Branch: Doc Data] Characters (Continued)
Stores	attributes to be applied	to a set of	characters in a Shape's Text
P/M	Name	RW H	Syntax/Type
Conta	inee Mgt: Field		
Prop	FieldCategory	R	returns {12} = FieldCategory ; Property type: Integer; VisFieldCategories; Values: 0=visFCat-Custom; 1=visFCatDateTime; 2=visFCatDocument; 3=visFCatGeometry; 4=visFCatObject; 5=visFCatPage; 6=visFCatNotes;
	FieldCode	R	returns {12} = FieldCode ; Property type: Integer; VisFieldCodes
	FieldFormat	R	returns {12} = FieldFormat ; Property type: Integer; VisFieldFormats; Values: 0=visFmtNum-GenNoUnits; 1=visFmtNumGenDefUnits; 2=visFmt0PlNoUnits; 3=visFmt0PlDefUnits; 4=visFmt1PlNoUnits; 5=visFmt1PlDefUnits; 6=visFmt2PlNoUnits; 7=visFmt2PlDefUnits; 8=visFmt3PlNoUnits; 9=visFmt3PlDefUnits; and 100 more.
	FieldFormula	R	returns {BStr} = FieldFormula ; Property type: String
	FieldFormulaU	R	returns {BStr} = FieldFormulaU ; Property type: String
Meth	AddCustomField		AddCustomField Formula {BStr [In]}, Format {I2 [In]}
	AddCustomFieldU		AddCustomFieldU Formula {BStr [In]}, Format {12 [In]}
	AddField		AddField Category {I2 [In]}, Code {I2 [In]}, Format {I2 [In]}
	AddFieldEx		AddFieldEx Category {VisFieldCategories [In]}, Code {VisFieldCodes [In]}, Format {VisFieldFormats [In]}, LangID {I4 []}, CalendarID {I4 []}
Conta	ined By		
Prop	Application	R	returns {IVApplication} = Application ; Property type: IVApplication
	ContainingMasterID	R	returns {I4} = ContainingMasterID ; Property type: Integer; ID
	ContainingPageID	R	returns {I4} = ContainingPageID ; Property type: Integer; ID
	Document	R	returns {IVDocument} = Document ; Property type: IVDocument
	Shape	R	returns {IVShape} = Shape ; Property type: IVShape
Clipbe	pard		
Meth	Сору		Сору
	Cut		Cut
	Paste		Paste
Event	s/Actions/Commands		
Prop	EventList	R	returns {IVEventList} = EventList ; Property type: IVEventList
	PersistsEvents	R	returns {12} = PersistsEvents ; Property type: Integer; Bool

	[Branch: Doc Data]	ECharacters
Event DispInterface. See Events Chapter for details.		

			[Branch: Doc Data]	Color			
Stores	Stores a color currently in use in the document						
P/M	/M Name RW H Syntax/Type						
Id/Ord	Id/Order/Label/Type						
Prop	Index	R	returns {14} = Index ; Property type: Integer; Index				
	Index16	RH	returns {12} = Index16 ; Property type: Integer; Index				
	ObjectType	R	returns {I2} = ObjectType ; Property type: Integer; =visObjTypeColor				

Document

returns {IVDocument} = Document ; Property type: IVDocument

			[Branch: Doc Data] Colors	
Collec	ction of Colors			
P/M	Name	RW H	Syntax/Type	
Id/Ord	der/Label/Type			
Prop	ObjectType	R	returns {12} = ObjectType ; Property type: Integer; =visObjTypeColors	
Objec	t Life/Enable/Visible	e/State		
Prop	Stat	R	returns {I2} = Stat ; Property type: Integer; VisStatCodes; Values: 0=visStatNormal; 1=vis-StatAppHasShutdown; 2=visStatDeleted; 4=visStatTouched; 8=visStatClosed; 16=visStatSuspended;	
Conta	ainee Mgt			
Prop	_NewEnum	R	returns {Unknown} = _NewEnum ; Property type: Unknown	
	Count	R	returns {I4} = Count ; Property type: Integer; Count	
	Count16	RH	returns {12} = Count16 ; Property type: Integer; Count	
	Item	R	$returns \{IVColor\} = Item(Index \{I4 [In]\})$; Property type: IVColor	
	Item16	RH	$returns \{IVColor\} = Item16(Index \{I2 [In]\})$; Property type: IVColor	
Conta	Contained By			
Prop	Application	R	returns {IVApplication} = Application ; Property type: IVApplication	
	Document	R	returns {IVDocument} = Document ; Property type: IVDocument	

			[Branch: Doc Data] Connect
Repo	rts on a single connection	n to/from a	shape or on a page or master
P/M	Name	RW H	Syntax/Type
Id/Or	der/Label/Type		
Prop	Index	R	returns {I4} = Index ; Property type: Integer; Index
	Index16	RH	returns {12} = Index16 ; Property type: Integer; Index
	ObjectType	R	returns {I2} = ObjectType ; Property type: Integer; =visObjTypeConnect
Objec	t Life/Enable/Visible/S	tate	
Prop	Stat	R	returns {I2} = Stat ; Property type: Integer; VisStatCodes; Values: 0=visStatNormal; 1=vis-StatAppHasShutdown; 2=visStatDeleted; 4=visStatTouched; 8=visStatClosed; 16=visStatSuspended;

			[Branch: Doc Data] Connect (Continued)	
Repo	rts on a single connection	to/from a	shape or on a page or master	
P/M	Name	RW H	Syntax/Type	
Core	Associations			
Prop	FromCell	R	returns {IVCell} = FromCell ; Property type: IVCell	
	FromPart	R	returns {I2} = FromPart ; Property type: Integer; VisFromParts; Values: -1=visConnectFromError; 0=visFromNone; 1=visLeftEdge; 2=visCenterEdge; 3=visRightEdge; 4=visBottomEdge; 5=visMiddleEdge; 6=visTopEdge; 7=visBeginX; 8=visBeginY; and 7 more.	
	FromSheet	R	returns {IVShape} = FromSheet ; Property type: IVShape	
	ToCell	R	returns {IVCell} = ToCell ; Property type: IVCell	
	ToPart	R	returns {I2} = ToPart ; Property type: Integer; VisToParts; Values: -1=visConnectToError; -1=visConnectError; 0=visToNone; 0=visNone; 1=visGuideX; 2=visGuideY; 3=visWhole-Shape; 4=visGuideIntersect; 7=visToAngle; 100=visConnectionPoint;	
	ToSheet	R	returns {IVShape} = ToSheet ; Property type: IVShape	
Conta	ained By			
Prop	Application	R	returns {IVApplication} = Application ; Property type: IVApplication	
	ContainingMasterID	R	returns {I4} = ContainingMasterID ; Property type: Integer; ID	
	ContainingPageID	R	returns {I4} = ContainingPageID ; Property type: Integer; ID	
	Document	R	returns {IVDocument} = Document ; Property type: IVDocument	

			[Branch: Doc Data] Connects	
Repoi	Reports on a set of glued connections to/from a shape or on a page or master			
P/M	Name	RW H	Syntax/Type	
Id/Ord	der/Label/Type			
Prop	ObjectType	R	returns {I2} = ObjectType ; Property type: Integer; =visObjTypeConnects	
Objec	t Life/Enable/Visible/St	ate		
Prop	Stat	R	returns {12} = Stat ; Property type: Integer; VisStatCodes; Values: 0=visStatNormal; 1=vis-StatAppHasShutdown; 2=visStatDeleted; 4=visStatTouched; 8=visStatClosed; 16=visStatSuspended;	
Core	Associations			
Prop	FromSheet	R	returns {IVShape} = FromSheet ; Property type: IVShape	
	ToSheet	R	returns {IVShape} = ToSheet ; Property type: IVShape	
Conta	ninee Mgt			
Prop	_NewEnum	R	returns {Unknown} = _NewEnum ; Property type: Unknown	
	Count	R	returns {I4} = Count ; Property type: Integer; Count	
	Count16	RH	returns {12} = Count16 ; Property type: Integer; Count	
	Item	R	returns {IVConnect} = Item(Index {I4 [In]}) ; Property type: IVConnect	
	Item16	RH	returns {IVConnect} = Item16(Index {I2 [In]}) ; Property type: IVConnect	
Conta	Contained By			
Prop	Application	R	returns {IVApplication} = Application ; Property type: IVApplication	
	Document	R	returns {IVDocument} = Document ; Property type: IVDocument	

			[Branch: Doc Data] Curve
Interfa	ace to read primitive draw	ing points	
P/M	Name	RW H	Syntax/Type
Id/Ord	der/Label/Type		
Prop	ObjectType	R	returns {12} = ObjectType ; Property type: Integer; =visObjTypeCurve
Core	Attributes	•	
Prop	Closed	R	returns {12} = Closed ; Property type: Integer; Bool
	End	R	returns {R8} = End ; Property type: Real
	Start	R	returns {R8} = Start ; Property type: Real
Meth	Point		Point t {R8 [In]}, x {R8 [Out]}, y {R8 [Out]}
	PointAndDerivatives		PointAndDerivatives t {R8 [In]}, n {I2 [In]}, x {R8 [Out]}, y {R8 [Out]}, $dxdt$ {R8 [Out]}, $dydt$ {R8 [Out]}, $ddxdt$ {R8 [Out]}, $ddydt$ {R8 [Out]}
	Points		Points Tolerance {R8 [In]}, xyArray {SafeArray R8 [Out]}
Conta	nined By	4	
Prop	Application	R	returns {IVApplication} = Application ; Property type: IVApplication

			[Branch: Doc Data] Document
A con	nplete drawing, stencil or	template.	
P/M	Name	RW H	Syntax/Type
Id/Ord	der/Label/Type	*	
Prop	BuildNumberCreated	R	returns {I4} = BuildNumberCreated ; Property type: Integer; -
	BuildNumberEdited	R	returns {I4} = BuildNumberEdited ; Property type: Integer; -
	ClassID	R	returns {BStr} = ClassID ; Property type: String
	ID	R	returns {I4} = ID ; Property type: Integer; ID
	Index	R	returns {12} = Index ; Property type: Integer; Index
	Name	R	returns {BStr} = Name ; Property type: String
	ObjectType	R	returns {I2} = ObjectType ; Property type: Integer; =visObjTypeDoc
	ProgID	R	returns {BStr} = ProgID ; Property type: String
	Туре	R	returns {VisDocumentTypes} = Type ; Property type: VisDocumentTypes; Values: 0=visDoc- TypeInval; 1=visTypeDrawing; 2=visTypeStencil; 3=visTypeTemplate;
	Version	RW	returns {VisDocVersions} = Version ; Property type: VisDocVersions; Values: 0=visVersionUnsaved; 65571=visVersion10; 131072=visVersion20; 196611=visVersion30; 262144=visVersion40; 327680=visVersion50; 393216=visVersion100; 393216=visVersion60; 720896=visVersion110;
Behav	viorVariants	•	
Prop	Language	RWH	returns {I4} = Language ; Property type: Integer; Lang Id as in VERSIONINFO.???

DocID; 0=visDocModeRun; 1=visDocModeDesign;				[Branch: Doc Data] Document (Continued)
Object Life/Enable/Visible/State From Full Suid Number Full Su	A com	plete drawing, stencil or t	template.	
Property ContainsWorkspace R returns [Boot] = ContainsWorkspace ; Property type: Boolean FullBuildNumberCreated Property type: Integer; -	P/M	Name	RW H	Syntax/Type
FullBuildNumberCreated returns [14] = FullBuildNumberCreated Property type: Integer; - ated	Objec	t Life/Enable/Visible/Sta	ite	
ated	Prop	ContainsWorkspace	R	returns {Bool} = ContainsWorkspace ; Property type: Boolean
InPlace			R	returns {I4} = FullBuildNumberCreated ; Property type: Integer; -
MacrosEnabled R			R	returns {I4} = FullBuildNumberEdited ; Property type: Integer; -
Mode		InPlace	R	returns {12} = InPlace ; Property type: Integer; Bool
DocID: 0=visDocModeRun: 1=visDocModeDesign: Old_Mode		MacrosEnabled	R	returns {Bool} = MacrosEnabled ; Property type: Boolean
O=visDocModeRun; 1=visDocModeDesign;		Mode	RW	
old_SavePreviewMod e old_SavePreviewMod e old_SavePreviewMode e old_Version RWH returns [12] = old_SavePrevDetailed SavePrevDraft1st; 2=visSavePrevDetailed1st; 4=visSavePrevDraft 8=visSavePrevDetailedAll; old_Version RWH returns [14] = old_Version; Property type: Integer; - Password WH Password(bstrExistingPassword {Variant}] = {BStr}; Property type: None Protection RW returns {VisProtection} = Protection(bstrPassword {Variant} [In Optional]}); Property type: VisProtection ReadOnly R returns {Date} = ReadOnly; Property type: Boolean returns {VisSavePreviewMode}; Property type: VisSavePreviewMode; Property type: VisSavePr		old_Mode	RWH	returns {12} = old_Mode ; Property type: Integer; VisDocModeArgs; Values: -1=visInvalDocID; 0=visDocModeRun; 1=visDocModeDesign;
CovisSavePrevNone; 1=visSavePrevDraft1st; 2=visSavePrevDetailed1st; 4=visSavePrevDraft 8=visSavePrevDraft 8=visSavePrevDraft 8=visSavePrevDraft 8=visSavePrevDraft 8=visSavePrevDraft 8=visSavePrevDraft 8=visSavePrevDraft 8=visSavePrevDraft 8=visSavePrevDraft 1st; 2=visSavePrevDraft 1st; 2=visSavePrevDraft 1st; 2=visSavePrevIvppe: None Protection		old_Saved	RWH	returns {12} = old_Saved ; Property type: Integer; Bool
Password WH Password(bstrExistingPassword {Variant}) = {BStr} ; Property type: None		· · - · · · · · · · · · · · · · · · · · · ·	RWH	returns {I2} = old_SavePreviewMode ; Property type: Integer; VisOpenSaveArgs_Prev; Values: 0=visSavePrevNone; 1=visSavePrevDraft1st; 2=visSavePrevDetailed1st; 4=visSavePrevDraftAll; 8=visSavePrevDetailedAll;
Protection		old_Version	RWH	returns {I4} = old_Version ; Property type: Integer; -
NisProtection NisProtection NisProtection NisProtection NisProtection NisProtection NisProtection NisProtection NisProtection Ni		Password	WH	Password(bstrExistingPassword {Variant}) = {BStr} ; Property type: None
Saved RW returns {Bool} = Saved Property type: Boolean		Protection	RW	
SavePreviewMode RW returns {VisSavePreviewMode} SavePreviewMode Property type: VisSavePreviewMode ues: 0=visSavePrevDone; 1=visSavePrevDraft1st; 2=visSavePrevDetailed1st; 4=visSave vDraftAll; 8=visSavePrevDetailedAll; Stat		ReadOnly	R	returns {12} = ReadOnly ; Property type: Integer; Bool
ues: 0=visSavePrevNone; 1=visSavePrevDraft1st; 2=visSavePrevDetailed1st; 4=visSaveVDraftAll; 8=visSavePrevDetailedAll; Stat R		Saved	RW	returns {Bool} = Saved ; Property type: Boolean
StatAppHasShutdown; 2=visStatDeleted; 4=visStatTouched; 8=visStatClosed; 16=visStat. Time R returns {Date} = Time ; Property type: Time/Date TimeCreated R returns {Date} = TimeCreated ; Property type: Time/Date TimeEdited R returns {Date} = TimeEdited ; Property type: Time/Date TimePrinted R returns {Date} = TimePrinted ; Property type: Time/Date TimeSaved R returns {Date} = TimePrinted ; Property type: Time/Date TimeSaved R returns {Date} = TimeSaved ; Property type: Time/Date Clean Targets {Variant [In Optional]}, nActions {Variant [In Optional]}, nAlerts {Variant [In Optional]}, nActions {Variant [In Optional]}, nAlerts {Variant [In Optional]}, nReserved {Variant		SavePreviewMode	RW	
TimeCreated R returns {Date} = TimeCreated ; Property type: Time/Date TimeEdited R returns {Date} = TimeEdited ; Property type: Time/Date TimePrinted R returns {Date} = TimePrinted ; Property type: Time/Date TimeSaved R returns {Date} = TimeSaved ; Property type: Time/Date Meth Clean Clean nTargets {Variant [In Optional]}, nActions {Variant [In Optional]}, nAlerts {Variant [In Optional]}, nFixes {Variant [In Optional]}, nStopOnError {Variant [In Optional]}, bLogFileName {Variant [In Optional]}, nReserved {Variant [In Optional]}, nR		Stat	R	StatAppHasShutdown; 2=visStatDeleted; 4=visStatTouched; 8=visStatClosed; 16=visStatSus-
TimeEdited R returns {Date} = TimeEdited ; Property type: Time/Date TimePrinted R returns {Date} = TimePrinted ; Property type: Time/Date TimeSaved R returns {Date} = TimeSaved ; Property type: Time/Date Meth Clean Clean Targets {Variant [In Optional]}, nActions {Variant [In Optional]}, nAlerts {Variant [In Optional]}, nFixes {Variant [In Optional]}, nReserved {Variant [In Optional]}, nLogFileName {Variant [In Optional]}, nReserved {Variant [In Optional]}, nReserved {Variant [In Optional]}, nReserved {Variant [In Optional]} Close Close Close OpenStencilWindow returns {IVWindow} = OpenStencilWindow Save returns {I2} = Save SaveAs returns {I2} = SaveAs(FileName {BStr [In]}) SaveAsEx SaveAsEx FileName {BStr [In]}, SaveFlags {I2 [In]} Containee Mgt: DiagramData		Time	R	returns {Date} = Time ; Property type: Time/Date
TimePrinted R returns {Date} = TimePrinted ; Property type: Time/Date TimeSaved R returns {Date} = TimeSaved ; Property type: Time/Date Meth Clean Clean nTargets {Variant [In Optional]}, nActions {Variant [In Optional]}, nAlerts {Variant [In Optional]}, nExes {Variant [In Opti		TimeCreated	R	returns {Date} = TimeCreated ; Property type: Time/Date
TimeSaved R returns {Date} = TimeSaved ; Property type: Time/Date Meth Clean Clean nTargets {Variant [In Optional]}, nActions {Variant [In Optional]}, nAlerts {Variant [In Optional]}, bLogFileName {Variant [In Optional]}, nReserved {Variant [In		TimeEdited	R	returns {Date} = TimeEdited ; Property type: Time/Date
Meth Clean Clean nTargets {Variant [In Optional]}, nActions {Variant [In Optional]}, nAlerts {Variant [In Optional]}, nAlerts {Variant [In Optional]}, nEsserved {Variant [In Optional]}, nEsserved {Variant [In Optional]}, nEsserved {Variant [In Optional]} Close Close OpenStencilWindow returns {IVWindow} = OpenStencilWindow Save returns {I2} = Save SaveAs returns {I2} = SaveAs(FileName {BStr [In]}) SaveAsEx SaveAsEx FileName {BStr [In]}, SaveFlags {I2 [In]} Containee Mgt: DiagramData		TimePrinted	R	returns {Date} = TimePrinted ; Property type: Time/Date
Optional]}, nFixes {Variant [In Optional]}, bStopOnError {Variant [In Optional]}, bLogFileName {Variant [In Optional]}, nReserved {Variant [In Optional]}, nReserved {Variant [In Optional]}} Close OpenStencilWindow returns {IVWindow} = OpenStencilWindow Save returns {I2} = Save SaveAs returns {I2} = SaveAs(FileName {BStr [In]}) SaveAsEx SaveAsEx FileName {BStr [In]}, SaveFlags {I2 [In]}} Containee Mgt: DiagramData		TimeSaved	R	returns {Date} = TimeSaved ; Property type: Time/Date
OpenStencilWindow returns {IVWindow} = OpenStencilWindow Save returns {I2} = Save SaveAs returns {I2} = SaveAs(FileName {BStr [In]}) SaveAsEx SaveAsEx FileName {BStr [In]}, SaveFlags {I2 [In]} Containee Mgt: DiagramData	Meth	Clean		Optional]}, nFixes {Variant [In Optional]}, bStopOnError {Variant [In Optional]}, bLogFileName
OpenStencilWindow returns {IVWindow} = OpenStencilWindow Save returns {I2} = Save SaveAs returns {I2} = SaveAs(FileName {BStr [In]}) SaveAsEx SaveAsEx FileName {BStr [In]}, SaveFlags {I2 [In]} Containee Mgt: DiagramData		Close		
Save returns {I2} = Save SaveAs returns {I2} = SaveAs(FileName {BStr [In]}) SaveAsEx SaveAsEx FileName {BStr [In]}, SaveFlags {I2 [In]} Containee Mgt: DiagramData				returns {IVWindow} = OpenStencilWindow
SaveAsEx SaveAsEx FileName {BStr [In]}, SaveFlags {12 [In]} Containee Mgt: DiagramData		•		•
Containee Mgt: DiagramData		SaveAs		returns {I2} = SaveAs(FileName {BStr [In]})
		SaveAsEx		SaveAsEx FileName {BStr [In]}, SaveFlags {12 [In]}
Pron Pages R returns [IVPages] - Pages Property type: IVPages	Conta	inee Mgt: DiagramData	<u> </u>	
Trop rages Trages Trages Troperty type: Trages	Prop	Pages	R	returns {IVPages} = Pages ; Property type: IVPages

			[Branch: Doc Data] Document (Continued,		
A con	nplete drawing, stencil or t	template.			
P/M	Name	RW H	Syntax/Type		
Conta	inee Mgt: Resources				
Prop	Colors	R	returns {IVColors} = Colors ; Property type: IVColors		
	DefaultFillStyle	RW	returns {BStr} = DefaultFillStyle ; Property type: String		
	DefaultLineStyle	RW	returns {BStr} = DefaultLineStyle ; Property type: String		
	DefaultStyle	RW	returns {BStr} = DefaultStyle ; Property type: String		
	DefaultTextStyle	RW	returns {BStr} = DefaultTextStyle ; Property type: String		
	Fonts	R	returns {IVFonts} = Fonts ; Property type: IVFonts		
	GestureFormatSheet	R	returns {IVShape} = GestureFormatSheet ; Property type: IVShape		
	Masters	R	returns {IVMasters} = Masters ; Property type: IVMasters		
	MasterShortcuts	R	returns {IVMasterShortcuts} = MasterShortcuts ; Property type: IVMasterShortcuts		
	Styles	R	returns {IVStyles} = Styles ; Property type: IVStyles		
Meth	ClearGestureFormat-		ClearGestureFormatSheet		
	Sheet				
	Drop		returns {IVMaster} = Drop(ObjectToDrop {Unknown [In]}, xPos {I2 [In]}, yPos {I2 [In]})		
Conta	inee Mgt: UI	•			
Prop	CustomMenus	R	returns {IVUIObject} = CustomMenus ; Property type: IVUIObject		
	CustomMenusFile	RW	returns {BStr} = CustomMenusFile ; Property type: String		
	CustomToolbars	R	returns {IVUIObject} = CustomToolbars ; Property type: IVUIObject		
	CustomToolbarsFile	RW	returns {BStr} = CustomToolbarsFile ; Property type: String		
Meth	ClearCustomMenus		ClearCustomMenus		
	ClearCustomToolbars		ClearCustomToolbars		
	SetCustomMenus		SetCustomMenus MenusObject {IVUIObject [In]}		
	SetCustomToolbars		SetCustomToolbars ToolbarsObject {IVUIObject [In]}		
Conta	ined By				
Prop	Application	R	returns {IVApplication} = Application ; Property type: IVApplication		
	Container	R	returns {Dispatch} = Container ; Property type: Dispatch		
Shape	eSheet				
Prop	DocumentSheet	R	returns {IVShape} = DocumentSheet ; Property type: IVShape		
Descr	riptive/User Attribs				
Prop	Category	RW	returns {BStr} = Category ; Property type: String		
	Company	RW	returns {BStr} = Company ; Property type: String		
	Creator	RW	returns {BStr} = Creator ; Property type: String		
	Description	RW	returns {BStr} = Description ; Property type: String		
	Keywords	RW	returns {BStr} = Keywords ; Property type: String		
	Manager	RW	returns {BStr} = Manager ; Property type: String		
	RemovePersonalInfor-	RW	returns {Bool} = RemovePersonalInformation; Property type: Boolean		
	mation	1	Troporty type: Bostom		
	Subject	RW	returns {BStr} = Subject ; Property type: String		
	Title	RW	returns {BStr} = Title ; Property type: String		
Doc-V	Doc-Window Relationship				
			returns {BStr} = DefaultGuideStyle ; Property type: String		
	DynamicGridEnabled	RW	returns {Bool} = DynamicGridEnabled ; Property type: Boolean		
	GlueEnabled	RW	returns {Bool} = GlueEnabled ; Property type: Boolean		
	GlueSettings	RW	returns {VisGlueSettings} = GlueSettings ; Property type: VisGlueSettings		
	SnapAngles	RW	returns {SafeArray R8} = SnapAngles ; Property type: Real		
	SnapEnabled	RW	returns {Bool} = SnapEnabled ; Property type: Boolean		
	SnapExtensions	RW	returns {VisSnapExtensions} = SnapExtensions ; Property type: VisSnapExtensions		
	SnapSettings	RW	returns {VisSnapSettings} = SnapSettings ; Property type: VisSnapSettings		
	ZoomBehavior	RW	returns {VisZoomBehavior} = ZoomBehavior ; Property type: VisZoomBehavior		
	20011Dellaviol	1144	returns (viszoonibenavior) – zoonibenavior , Froperty type: viszoonibenavior		

			[Branch: Doc Data] Document (Continued)
A con	nplete drawing, stencil or	template.	
P/M	Name	RW H	Syntax/Type
File/D	ir		
	PreviewPicture		returns {IPictureDisp} = PreviewPicture
Prop	AlternateNames	RW	returns {BStr} = AlternateNames ; Property type: String
	AutoRecover	RW	returns {Bool} = AutoRecover ; Property type: Boolean
	EmailRoutingData	R	returns {SafeArray Variant} = EmailRoutingData ; Property type: Variant
	FullName	R	returns {BStr} = FullName ; Property type: String
	Path	R	returns {BStr} = Path ; Property type: String
	Template	R	returns {BStr} = Template ; Property type: String
Meth	CopyPreviewPicture		CopyPreviewPicture pSourceDoc {IVDocument [In]}
Нуре	rlink		
Prop	HyperlinkBase	RW	returns {BStr} = HyperlinkBase ; Property type: String
Meth	FollowHyperlink		FollowHyperlink <i>Address</i> {BStr [In]}, <i>SubAddress</i> {BStr [In]}, <i>ExtraInfo</i> {Variant [In Optional]}, <i>Frame</i> {Variant [In Optional]}, <i>NewWindow</i> {Variant [In Optional]}, <i>res1</i> {Variant [In Optional]}, <i>res3</i> {Variant [In Optional]}
	FollowHyperlink45	Н	FollowHyperlink45 Target {BStr [In]}, Location {BStr [In]}
Icon			
Meth	GetIcon	Н	GetIcon ID {12 [In]}, FileName {BStr [In]}
	SetIcon	Н	SetIcon ID {12 [In]}, Index {12 [In]}, FileName {BStr [In]}
AddO	nFunctionality		
Prop	VBProject	R	returns {Dispatch} = VBProject ; Property type: Dispatch
	VBProjectData	R	returns {SafeArray UI1} = VBProjectData ; Property type: Integer
Meth	ExecuteLine		ExecuteLine Line {BStr [In]}
	ParseLine		ParseLine {Ine {BStr [In]}
Event	s/Actions/Commands	+	
Prop	EventList	R	returns {IVEventList} = EventList ; Property type: IVEventList
	PersistsEvents	R	returns {I2} = PersistsEvents ; Property type: Integer; Bool
File S	haring	<u>'</u>	
Prop	SharedWorkspace	R	returns {Dispatch} = SharedWorkspace ; Property type: Dispatch
Meth	CanCheckIn		returns {Bool} = CanCheckIn
	Checkin		CheckIn SaveChanges {Bool []}, Comments {Variant [In Optional]}, MakePublic {Bool []}
OLEA	ctiveX		
Prop	OLEObjects	R	returns {IVOLEObjects} = OLEObjects ; Property type: IVOLEObjects
Printi	ng/Paper	•	
	HeaderFooterFont		returns {IFontDisp} = HeaderFooterFont

			[Branch: Doc Data] Document (Continued)		
A con	plete drawing, stencil or t	emplate.			
P/M	Name	RW H	Syntax/Type		
Prop	BottomMargin	RW	returns {R8} = BottomMargin(UnitsNameOrCode {Variant [In Optional]}) ; Property type: Real		
	FooterCenter	RW	returns {BStr} = FooterCenter ; Property type: String		
	FooterLeft	RW	returns {BStr} = FooterLeft ; Property type: String		
	FooterMargin	RW	returns {R8} = FooterMargin(UnitsNameOrCode {Variant [In Optional]}) ; Property type: Real		
	FooterRight	RW	returns {BStr} = FooterRight ; Property type: String		
	HeaderCenter	RW	returns {BStr} = HeaderCenter ; Property type: String		
	HeaderFooterColor	RW	returns {OLE_COLOR} = HeaderFooterColor ; Property type: OLE_COLOR		
	HeaderLeft	RW	returns {BStr} = HeaderLeft ; Property type: String		
	HeaderMargin	RW	returns {R8} = HeaderMargin(UnitsNameOrCode {Variant [In Optional]}) ; Property type: Real		
	HeaderRight	RW	returns {BStr} = HeaderRight ; Property type: String		
	LeftMargin	RW	returns {R8} = LeftMargin(UnitsNameOrCode {Variant [In Optional]}) ; Property type: Real		
	old_PaperSize	RWH	returns {I2} = old_PaperSize ; Property type: Integer; MS DEVMODE.Papersize		
	old_PrintCenteredH	RWH	returns {I2} = old_PrintCenteredH ; Property type: Integer; Bool		
	old_PrintCenteredV	RWH	returns {12} = old_PrintCenteredV ; Property type: Integer; Bool		
	old_PrintFitOnPages	RWH	returns {I2} = old_PrintFitOnPages ; Property type: Integer; Bool		
	old_PrintLandscape	RWH	returns {12} = old_PrintLandscape ; Property type: Integer; Bool		
	PaperHeight	R	returns {R8} = PaperHeight(UnitsNameOrCode {Variant [In]}) ; Property type: Real		
	PaperSize RW		returns {VisPaperSizes} = PaperSize ; Property type: VisPaperSizes; Values: 0=visPaperSizeUn-known; 1=visPaperSizeLetter; 5=visPaperSizeLegal; 8=visPaperSizeA3; 9=visPaperSizeA4; 11=visPaperSizeA5; 12=visPaperSizeB4; 13=visPaperSizeB5; 14=visPaperSizeFolio; 18=vis-		
			PaperSizeNote; and 3 more.		
	PaperWidth	R	returns {R8} = PaperWidth(UnitsNameOrCode {Variant [In]}) ; Property type: Real		
	PrintCenteredH	RW	returns {Bool} = PrintCenteredH ; Property type: Boolean		
	PrintCenteredV	RW	returns {Bool} = PrintCenteredV ; Property type: Boolean		
	PrintCopies	RWH	returns {14} = PrintCopies ; Property type: Integer; Count		
	Printer	RW	returns {BStr} = Printer ; Property type: String		
	PrintFitOnPages	RW	returns {Bool} = PrintFitOnPages ; Property type: Boolean		
	PrintLandscape	RW	returns {Bool} = PrintLandscape ; Property type: Boolean		
	PrintPagesAcross	RW	returns {12} = PrintPagesAcross ; Property type: Integer; Count		
	PrintPagesDown	RW	returns {12} = PrintPagesDown ; Property type: Integer; Count		
	PrintScale	RW	returns {R8} = PrintScale ; Property type: Real		
	RightMargin	RW	returns {R8} = RightMargin(UnitsNameOrCode {Variant [In Optional]}) ; Property type: Real		
	TopMargin	RW	returns {R8} = TopMargin(UnitsNameOrCode {Variant [In Optional]}) ; Property type: Real		
Meth	Print		Print		
	PrintOut		PrintOut PrintRange {VisPrintOutRange [In]}, FromPage {I4 []}, ToPage {I4 []}, ScaleCurrentView-ToPaper {Bool []}, PrinterName {BStr []}, PrintToFile {Bool []}, OutputFileName {BStr []}, Copies {I4 []}, Collate {Bool []}, ColorAsBlack {Bool []}		
Undo					
Prop	UndoEnabled	RW	returns {Bool} = UndoEnabled ; Property type: Boolean		

			[Branch: Doc Data] Document (Continued)		
A con	A complete drawing, stencil or template.				
P/M	Name	RW H	Syntax/Type		
Meth	AddUndoUnit		AddUndoUnit pUndoUnit {Unknown [In]}		
	BeginUndoScope		returns {I4} = BeginUndoScope(bstrUndoScopeName {BStr [In]})		
	EndUndoScope		EndUndoScope nScopeID {I4 [In]}, bCommit {Bool [In]}		
	PurgeUndo		PurgeUndo		
	RenameCurrentScope		RenameCurrentScope bstrScopeName {BStr [In]}		
XML					
Prop	SolutionXMLElement	RW	returns {BStr} = SolutionXMLElement(ElementName {BStr [In]}) ; Property type: String		
	SolutionXMLElement- Count	R	returns {I4} = SolutionXMLElementCount ; Property type: Integer; Count		
	SolutionXMLElement- Exists	R	returns {Bool} = SolutionXMLElementExists(ElementName {BStr [In]}) ; Property type: Boolean		
	SolutionXMLElement- Name	R	returns {BStr} = SolutionXMLElementName(Index {I4 [In]}) ; Property type: String		
Meth	DeleteSolutionXM- LElement		DeleteSolutionXMLElement ElementName {BStr [In]}		
Unkn	own/Undocumented		1		
Prop	CodeName	RH	returns {BStr} = CodeName ; Property type: String		
	Sync	R	returns {Dispatch} = Sync ; Property type: Dispatch		

	[Branch: Doc Data]	EDocument
Event DispInterface. See Events Chapter for details.		

			[Branch: Doc Data] Documents
Collec	ction of all drawings, stend	cils and te	mplates that are open.
P/M	Name	RW H	Syntax/Type
Id/Ord	der/Label/Type		
Prop	ObjectType	R	returns {12} = ObjectType ; Property type: Integer; =visObjTypeDocs
Conta	ninee Mgt		
Prop	_NewEnum	R	returns {Unknown} = _NewEnum ; Property type: Unknown
	Count	R	returns {12} = Count ; Property type: Integer; Count
	Item	R	returns {IVDocument} = Item(NameOrIndex {Variant [In]}) ; Property type: IVDocument
	ItemFromID	R	returns {IVDocument} = ItemFromID(ObjectID {I4 [In]}) ; Property type: IVDocument
Meth	Add		returns {IVDocument} = Add(FileName {BStr [In]})
	AddEx		returns {IVDocument} = AddEx(FileName {BStr [In]}, MeasurementSystem {VisMeasurementSystem []}, Flags {I4 []}, LangID {I4 []})
	GetNames		GetNames NameArray {SafeArray BStr [Out]}
	Open		returns {IVDocument} = Open(FileName {BStr [In]})
	OpenEx		returns {IVDocument} = OpenEx(FileName {BStr [In]}, Flags {I2 [In]})
Conta	nined By		
Prop	Application	R	returns {IVApplication} = Application ; Property type: IVApplication
Event	s/Actions/Commands		
Prop	EventList	R	returns {IVEventList} = EventList ; Property type: IVEventList
	PersistsEvents	R	returns {12} = PersistsEvents ; Property type: Integer; Bool
File S	haring		
Meth	CanCheckOut		returns {Bool} = CanCheckOut(FileName {BStr [In]})
	CheckOut		CheckOut FileName {BStr [In]}

	[Branch: Doc Data]	EDocuments
Event DispInterface. See Events Chapter for details.		

			[Branch: Doc Data] Font
A For	nt available in this docu	ment	
P/M	Name	RW H	Syntax/Type
ld/Or	der/Label/Type	·	
Prop	ID	R	returns {I4} = ID ; Property type: Integer; ID
	ID16	RH	returns {I2} = ID16 ; Property type: Integer; ID
	Index	R	returns {I2} = Index ; Property type: Integer; Index
	Name	R	returns {BStr} = Name ; Property type: String
	ObjectType	R	returns {I2} = ObjectType ; Property type: Integer; =visObjTypeFont
Objec	t Life/Enable/Visible/	State	
Prop	Stat	R	returns {I2} = Stat ; Property type: Integer; VisStatCodes; Values: 0=visStatNormal; 1=vis-StatAppHasShutdown; 2=visStatDeleted; 4=visStatTouched; 8=visStatClosed; 16=visStatSuspended;
Core	Attributes	<u>'</u>	
Prop	Attributes	R	returns {I2} = Attributes ; Property type: Integer; VisFontAttributes; Values: 16=visFontRaster; 32=visFontDevice; 64=visFontScalable; 128=visFontOAlias;
	CharSet	R	returns {I2} = CharSet ; Property type: Integer; CharSetCode
	PitchAndFamily	R	returns {12} = PitchAndFamily ; Property type: Integer; MS LOGFONT.lfPitchAndFamily
Conta	ained By	'	
Prop	Application	R	returns {IVApplication} = Application ; Property type: IVApplication
	Document	R	returns {IVDocument} = Document ; Property type: IVDocument

			[Branch: Doc Data] Fonts		
List of	ist of fonts available in a document				
P/M	Name	RW H	Syntax/Type		
ld/Ord	der/Label/Type				
Prop	ObjectType	R	returns {12} = ObjectType ; Property type: Integer; =visObjTypeFonts		
Objec	t Life/Enable/Visible	e/State			
Prop	Stat	R	returns {I2} = Stat ; Property type: Integer; VisStatCodes; Values: 0=visStatNormal; 1=vis-StatAppHasShutdown; 2=visStatDeleted; 4=visStatTouched; 8=visStatClosed; 16=visStatSuspended;		
Conta	inee Mgt	·			
Prop	_NewEnum	R	returns {Unknown} = _NewEnum ; Property type: Unknown		
	Count	R	returns {12} = Count ; Property type: Integer; Count		
	Item	R	returns {IVFont} = Item(NameOrIndex {Variant [In]}) ; Property type: IVFont		
	ItemFromID	R	returns {IVFont} = ItemFromID(ObjectID {I4 [In]}) ; Property type: IVFont		
Contained By					
Prop	Application	R	returns {IVApplication} = Application ; Property type: IVApplication		
	Document	R	returns {IVDocument} = Document ; Property type: IVDocument		

			[Branch: Doc Data] Hyperlink		
Altern	Alternative interface to a row in a Shape's ShapeSheet Hyperlink section.				
P/M	Name	RW H	Syntax/Type		
Id/Orc	ler/Label/Type	·			
Prop	Name	RW	returns {BStr} = Name ; Property type: String		
	NameU	RW	returns {BStr} = NameU ; Property type: String		
	ObjectType	R	returns {I2} = ObjectType ; Property type: Integer; =visObjTypeHyperlink		
Objec	t Life/Enable/Visible/	State			
Prop	Stat	R	returns {I2} = Stat ; Property type: Integer; VisStatCodes; Values: 0=visStatNormal; 1=vis-StatAppHasShutdown; 2=visStatDeleted; 4=visStatTouched; 8=visStatClosed; 16=visStatSuspended;		
Meth	Delete		Delete		
Core	Attributes	•			
Prop	Address	RW	returns {BStr} = Address ; Property type: String		
	Description	RW	returns {BStr} = Description ; Property type: String		
	Extrainfo	RW	returns {BStr} = ExtraInfo ; Property type: String		
	Frame	RW	returns {BStr} = Frame ; Property type: String		
	IsDefaultLink	RW	returns {I2} = IsDefaultLink ; Property type: Integer; Bool		
	NewWindow	RW	returns {I2} = NewWindow ; Property type: Integer; Bool		
	SubAddress	RW	returns {BStr} = SubAddress ; Property type: String		
Meth	AddToFavorites		AddToFavorites FavoritesTitle {Variant [In Optional]}		
	CreateURL		returns {BStr} = CreateURL(CanonicalForm {I2 [In]})		
	Follow		Follow		
Conta	ined By	*			
Prop	Application	R	returns {IVApplication} = Application ; Property type: IVApplication		
	Shape	R	returns {IVShape} = Shape ; Property type: IVShape		
Shape	Sheet				
Prop	Row	R	returns {I2} = Row ; Property type: Integer; Index		
Clipbe	oard	•			
Meth	Сору		Сору		

			[Branch: Doc Data] Hyperlinks
Altern	ative interface to a S	Shape's Shape	Sheet Hyperlink section.
P/M	Name	RW H	Syntax/Type
ld/Ord	der/Label/Type		
Prop	ObjectType	R	returns {I2} = ObjectType ; Property type: Integer; =visObjTypeHyperlinks
Objec	t Life/Enable/Visibl	le/State	
Prop	Stat	R	returns {I2} = Stat ; Property type: Integer; VisStatCodes; Values: 0=visStatNormal; 1=vis-StatAppHasShutdown; 2=visStatDeleted; 4=visStatTouched; 8=visStatClosed; 16=visStatSuspended;
Conta	ninee Mgt		
Prop	_NewEnum	R	returns {Unknown} = _NewEnum ; Property type: Unknown
	Count	R	returns {12} = Count ; Property type: Integer; Count
	Item	R	returns {IVHyperlink} = Item(NameOrIndex {Variant [In]}) ; Property type: IVHyperlink
	ItemU	R	returns {IVHyperlink} = ItemU(NameOrIndex {Variant [In]}) ; Property type: IVHyperlink
Meth	Add		returns {IVHyperlink} = Add
Conta	Contained By		
Prop	Application	R	returns {IVApplication} = Application ; Property type: IVApplication
	Shape	R	returns {IVShape} = Shape ; Property type: IVShape

			[Branch: Doc Data] Layer		
Altern	Alternative interface to a row in a Page's ShapeSheet Layer section				
P/M	Name	RW H	Syntax/Type		
Id/Order/Label/Type					
Prop	Index	R	returns {12} = Index ; Property type: Integer; Index		
	Name	RW	returns {BStr} = Name ; Property type: String		
	NameU	RW	returns {BStr} = NameU ; Property type: String		
	ObjectType	R	returns {12} = ObjectType ; Property type: Integer; =visObjTypeLayer		
Objec	t Life/Enable/Visible/Sta	ate			
Prop	Stat	R	returns {I2} = Stat ; Property type: Integer; VisStatCodes; Values: 0=visStatNormal; 1=vis-StatAppHasShutdown; 2=visStatDeleted; 4=visStatTouched; 8=visStatClosed; 16=visStatSuspended;		
Meth	Delete		elete fDeleteShapes {I2 [In]}		
Core Associations: DiagramData					
Meth	Add		Add SheetObject {IVShape [In]}, fPresMems {I2 [In]}		
	Remove		Remove SheetObject {IVShape [In]}, fPresMems {12 [In]}		
Conta	nined By				
Prop	Application	R	returns {IVApplication} = Application ; Property type: IVApplication		
	Document	R	returns {IVDocument} = Document ; Property type: IVDocument		
	Master	R	returns {IVMaster} = Master ; Property type: IVMaster		
	Page	R	returns {IVPage} = Page ; Property type: IVPage		
Shape	ShapeSheet				
Prop	CellsC	R	returns {IVCell} = CellsC(Column {12 [In]}) ; Property type: IVCell		
	Row	R	returns {12} = Row ; Property type: Integer; Index		
Event	s/Actions/Commands				
Prop	EventList	R	returns {IVEventList} = EventList ; Property type: IVEventList		
	PersistsEvents	R	returns {12} = PersistsEvents ; Property type: Integer; Bool		

	[Branch: Doc Data] Layers				
Altern	Alternative interface to a Page's ShapeSheet Layer section				
P/M	Name	RW H	Syntax/Type		
ld/Ord	der/Label/Type				
Prop	ObjectType	R	returns {12} = ObjectType ; Property type: Integer; =visObjTypeLayers		
Objec	t Life/Enable/Visible/Sta	ite			
Prop	Stat	R	returns {12} = Stat ; Property type: Integer; VisStatCodes; Values: 0=visStatNormal; 1=vis-StatAppHasShutdown; 2=visStatDeleted; 4=visStatTouched; 8=visStatClosed; 16=visStatSuspended;		
Conta	ninee Mgt				
Prop	_NewEnum	R	returns {Unknown} = _NewEnum ; Property type: Unknown		
	Count	R	returns {12} = Count ; Property type: Integer; Count		
	Item	R	returns {IVLayer} = Item(NameOrIndex {Variant [In]}) ; Property type: IVLayer		
	ItemU	R	returns {IVLayer} = ItemU(NameOrIndex {Variant [In]}) ; Property type: IVLayer		
Meth	Add		returns {IVLayer} = Add(LayerName {BStr [In]})		
Conta	nined By				
Prop	Application	R	returns {IVApplication} = Application ; Property type: IVApplication		
	Document	R	returns {IVDocument} = Document ; Property type: IVDocument		
	Master	R	returns {IVMaster} = Master ; Property type: IVMaster		
	Page	R	returns {IVPage} = Page ; Property type: IVPage		
Event	s/Actions/Commands				
Prop	EventList	R	returns {IVEventList} = EventList ; Property type: IVEventList		
	PersistsEvents	R	returns {I2} = PersistsEvents ; Property type: Integer; Bool		

0	[Branch: Doc Data] Master			
One item on a stencil. Note similarity of structure to Page				
P/M	Name	RW H	Syntax/Type	
	ler/Label/Type BaseID	T-D	(DC) D ID D (C)	
Prop	ID	R	returns {BStr} = BaseID ; Property type: String	
	ID16	RH	returns {I4} = ID ; Property type: Integer; ID	
	Index	R	returns {12} = ID16 ; Property type: Integer; ID returns {12} = Index ; Property type: Integer; Index	
	Index	RW	returns {12} = Index , Froperty type: Integer, Index returns {12} = IndexInStencil ; Property type: Integer; Index	
	Name	RW	returns {BStr} = Name ; Property type: String	
	NameU	RW	returns {BStr} = NameU; Property type: String	
	NewBaseID	R	returns {BStr} = NewBaseID ; Property type: String	
	ObjectType	R	returns {12} = ObjectType ; Property type: Integer; =visObjTypeMaster	
	OneD	R	returns {12} = OneD ; Property type: Integer; Bool	
	PatternFlags	RW	returns {12} = One D , Property type: Integer, Boot returns {12} = PatternFlags ; Property type: Integer; VisMasterProperties	
	Prompt	RW	returns {BStr} = Prompt ; Property type: String	
	UniqueID	R	returns {BStr} = UniqueID ; Property type: String	
Rehay	/iorVariants	11	returns (1991) - Omquein , Troperty type, String	
Prop	MatchByName	RW	returns {12} = MatchByName ; Property type: Integer; Bool	
	t Life/Enable/Visible/St		remins (12) - Matembyrianic , Troporty type: meger, Boor	
Prop	Hidden	RW	returns {12} = Hidden ; Property type: Integer; Bool	
Пор	IsChanged	R	returns {Bool} = IsChanged ; Property type: Boolean	
	Stat	R	returns {12} = Stat ; Property type: Integer; VisStatCodes; Values: 0=visStatNormal; 1=vis-	
	Stat		StatAppHasShutdown; 2=visStatDeleted; 4=visStatTouched; 8=visStatClosed; 16=visStatSuspended;	
Meth	Close		Close	
	CreateShortcut		returns {IVMasterShortcut} = CreateShortcut	
	Delete		Delete	
	Open		returns {IVMaster} = Open	
Conta	inee Mgt			
Prop	Connects	R	returns {IVConnects} = Connects ; Property type: IVConnects	
	EditCopy	R	returns {IVMaster} = EditCopy ; Property type: IVMaster	
	Layers	R	returns {IVLayers} = Layers ; Property type: IVLayers	
	Original	R	returns {IVMaster} = Original ; Property type: IVMaster	
	Shapes	R	returns {IVShapes} = Shapes ; Property type: IVShapes	
Meth	AddGuide		$returns \{IVShape\} = AddGuide(Type \{I2 [In]\}, xPos \{R8 [In]\}, yPos \{R8 [In]\})$	
	Drop		returns {IVShape} = Drop(ObjectToDrop {Unknown [In]}, xPos {R8 [In]}, yPos {R8 [In]})	
	DropMany		returns {I2} = DropMany(ObjectsToInstance {SafeArray Variant [In]}, xyArray {SafeArray R8 [In]}, IDArray {SafeArray I2 [Out]})	
	DropManyU		returns {12} = DropManyU(ObjectsToInstance {SafeArray Variant [In]}, xyArray {SafeArray R8 [In]}, IDArray {SafeArray I2 [Out]})	
	OpenDrawWindow		returns {IVWindow} = OpenDrawWindow	
	OpenIconWindow		returns {IVWindow} = OpenIconWindow	
	Paste		Paste Flags {Variant [In Optional]}	
	PasteSpecial		PasteSpecial Format {14 [In]}, Link {Variant [In Optional]}, DisplayAsIcon {Variant [In Optional]}	
	ResizeToFitContents		ResizeToFitContents	
Containee Mgt: DiagramData				
Meth	CreateSelection		returns {IVSelection} = CreateSelection(SelType {VisSelectionTypes [In]}, IterationMode {VisSelect Mode []}, Data {Variant [In Optional]})	
Conta	ined By			
Prop	Application	R	returns {IVApplication} = Application ; Property type: IVApplication	
	Document	R	returns {IVDocument} = Document ; Property type: IVDocument	
Shape	Sheet			
Prop	PageSheet	R	returns {IVShape} = PageSheet ; Property type: IVShape	

			[Branch: Doc Data] Master (Continued)
One i	tem on a stencil. Note s	imilarity of s	structure to Page
P/M	Name	RW H	Syntax/Type
Meth	GetFormulas		GetFormulas SID_SRCStream {SafeArray I2 [In]}, formulaArray {SafeArray Variant [Out]}
	GetFormulasU		GetFormulasU SID_SRCStream {SafeArray I2 [In]}, formulaArray {SafeArray Variant [Out]}
	GetResults		GetResults SID_SRCStream {SafeArray I2 [In]}, Flags {I2 [In]}, UnitsNamesOrCodes {SafeArray Variant [In]}, resultArray {SafeArray Variant [Out]}
	SetFormulas		returns {I2} = SetFormulas(SID_SRCStream {SafeArray I2 [In]}, formulaArray {SafeArray Variant [In]}, Flags {I2 [In]})
	SetResults		returns {I2} = SetResults(SID_SRCStream {SafeArray I2 [In]}, UnitsNamesOrCodes {SafeArray Variant [In]}, resultArray {SafeArray Variant [In]}, Flags {I2 [In]})
Appe	arance		
Prop	AlignName	RW	returns {I2} = AlignName ; Property type: Integer; VisMasterProperties_HorzAlign; Values: 1=visLeft; 2=visCenter; 3=visRight;
Forei	gn		
Prop	Picture	R	returns {IPictureDisp} = Picture ; Property type: IPictureDisp
Meth	Export		Export FileName {BStr [In]}
	Import		returns {IVShape} = Import(FileName {BStr [In]})
	InsertFromFile		returns {IVShape} = InsertFromFile(FileName {BStr [In]}, Flags {I2 [In]})
Geon	netry		
Prop	SpatialSearch	R	
Meth	BoundingBox		BoundingBox Flags {I2 [In]}, lpr8Left {R8 [Out]}, lpr8Bottom {R8 [Out]}, lpr8Right {R8 [Out]}, lpr8Top {R8 [Out]}
	DrawArcByThree- Points		returns {IVShape} = DrawArcByThreePoints(xBegin {R8 [In]}, yBegin {R8 [In]}, xEnd {R8 [In]}, yEnd {R8 [In]}, xControl {R8 [In]}, yControl {R8 [In]})
	DrawBezier		returns {IVShape} = DrawBezier(xyArray {SafeArray R8 [In]}, degree {I2 [In]}, Flags {I2 [In]})
	DrawCircularArc		$returns \{IVShape\} = DrawCircularArc(xCenter \{R8 [In]\}, yCenter \{R8 [In]\}, Radius \{R8 [In]\}, StartAngle \{R8 []\}, EndAngle \{R8 []\})$
	DrawLine		returns {IVShape} = DrawLine(xBegin {R8 [In]}, yBegin {R8 [In]}, xEnd {R8 [In]}, yEnd {R8 [In]})
	DrawNURBS		returns {IVShape} = DrawNURBS(degree {I2 [In]}, Flags {I2 [In]}, xyArray {SafeArray R8 [In]}, knots {SafeArray R8 [In]}, weights {Variant [In Optional]})
	DrawOval		$returns \{IVShape\} = DrawOval(x1 \{R8 [In]\}, y1 \{R8 [In]\}, x2 \{R8 [In]\}, y2 \{R8 [In]\})$
	DrawPolyline		returns {IVShape} = DrawPolyline(xyArray {SafeArray R8 [In]}, Flags {I2 [In]})
	DrawQuarterArc		returns {IVShape} = DrawQuarterArc(xBegin {R8 [In]}, yBegin {R8 [In]}, xEnd {R8 [In]}, yEnd {R8 [In]}, SweepFlag {VisArcSweepFlags [In]})
	DrawRectangle		returns {IVShape} = DrawRectangle(x1 {R8 [In]}, y1 {R8 [In]}, x2 {R8 [In]}, y2 {R8 [In]})
	DrawSpline		returns {IVShape} = DrawSpline(xyArray {SafeArray R8 [In]}, Tolerance {R8 [In]}, Flags {I2 [In]})
lcon	•		
	Icon		returns {IPictureDisp} = Icon
Prop	IconSize	RW	returns {I2} = IconSize ; Property type: Integer; VisMasterProperties_IconShape; Values: 1=vis Normal; 2=visTall; 3=visWide; 4=visDouble;
	IconUpdate	RW	returns {I2} = IconUpdate ; Property type: Integer; VisMasterProperties_AutoMan; Values: 0=visManual; 1=visAutomatic;

			[Branch: Doc Data] Master (Continued)
One it	em on a stencil. Note sin	nilarity of s	structure to Page
P/M	Name	RW H	Syntax/Type
Meth	Exporticon		ExportIcon FileName {BStr [In]}, Flags {I2 [In]}, TransparentRGB {Variant [In Optional]}
	ExportIconTranspar- entAsBlack	Н	ExportIconTransparentAsBlack FileName {BStr [In]}, Flags {I2 [In]}
	Importicon		ImportIcon FileName {BStr [In]}
Event	s/Actions/Commands	<u>'</u>	
Prop	EventList	R	returns {IVEventList} = EventList ; Property type: IVEventList
	PersistsEvents	R	returns {I2} = PersistsEvents ; Property type: Integer; Bool
Layou	ıt	<u> </u>	
Meth	CenterDrawing		CenterDrawing
	Layout		Layout
OLEA	OLEActiveX		
Prop	OLEObjects	R	returns {IVOLEObjects} = OLEObjects ; Property type: IVOLEObjects
Meth	InsertObject		returns {IVShape} = InsertObject(ClassOrProgID {BStr [In]}, Flags {I2 [In]})

	[Branch: Doc Data]	EMaster
Event DispInterface. See Events Chapter for details.		

			[Branch: Doc Data] Masters		
Collec	Collection of Masters (ie: all local items on an entire stencil).				
P/M	/M Name RW H Syntax/Type				
Id/Ord	ld/Order/Label/Type				
Prop	ObjectType	R	returns {12} = ObjectType ; Property type: Integer; =visObjTypeMasters		
Objec	t Life/Enable/Visible/S	tate			
Prop	Stat	R	returns {12} = Stat ; Property type: Integer; VisStatCodes; Values: 0=visStatNormal; 1=vis-StatAppHasShutdown; 2=visStatDeleted; 4=visStatTouched; 8=visStatClosed; 16=visStatSuspended;		
Core	Associations: Diagrar	nData			
Meth	Drop		returns {IVMaster} = Drop(ObjectToDrop {Unknown [In]}, xPos {I2 [In]}, yPos {I2 [In]})		
Conta	inee Mgt				
Prop	_NewEnum	R	returns {Unknown} = _NewEnum ; Property type: Unknown		
	Count	R	returns {12} = Count ; Property type: Integer; Count		
	Item	R	returns {IVMaster} = Item(NameUIDOrIndex {Variant [In]}) ; Property type: IVMaster		
	ItemFromID	R	returns {IVMaster} = ItemFromID(nID {I4 [In]}) ; Property type: IVMaster		
	ItemU	R	returns {IVMaster} = ItemU(NameUIDOrIndex {Variant [In]}) ; Property type: IVMaster		
Meth	Add		returns {IVMaster} = Add		
	GetNames		GetNames localeSpecificNameArray {SafeArray BStr [Out]}		
	GetNamesU		GetNamesU localeIndependentNameArray {SafeArray BStr [Out]}		
	Paste		Paste Flags {Variant [In Optional]}		
Conta	Contained By				
Prop	Application	R	returns {IVApplication} = Application ; Property type: IVApplication		
	Document	R	returns {IVDocument} = Document ; Property type: IVDocument		
Event	s/Actions/Commands	•			
Prop	EventList	R	returns {IVEventList} = EventList ; Property type: IVEventList		
	PersistsEvents	R	returns {I2} = PersistsEvents ; Property type: Integer; Bool		

	[Branch: Doc Data]	EMasters
Event DispInterface. See Events Chapter for details.		

			[Branch: Doc Data] MasterShortcut	
Refer	Reference to a stencil item in another file.			
P/M	Name	RW H	Syntax/Type	
Id/Ord	der/Label/Type			
Prop	ID	R	returns {I4} = ID ; Property type: Integer; ID	
	Index	R	returns {I2} = Index ; Property type: Integer; Index	
	IndexInStencil	RW	returns {12} = IndexInStencil ; Property type: Integer; Index	
	Name	RW	returns {BStr} = Name ; Property type: String	
	NameU	RW	returns {BStr} = NameU ; Property type: String	
	ObjectType	R	returns {12} = ObjectType ; Property type: Integer; =visObjTypeMasterShortcut	
	Prompt	RW	returns {BStr} = Prompt ; Property type: String	
Objec	t Life/Enable/Visible/Sta	te		
Prop	Stat	R	returns {I2} = Stat ; Property type: Integer; VisStatCodes; Values: 0=visStatNormal; 1=vis-StatAppHasShutdown; 2=visStatDeleted; 4=visStatTouched; 8=visStatClosed; 16=visStatSuspended;	
Meth	Delete		Delete	
Core Attributes				
Prop	DropActions	RW	returns {BStr} = DropActions ; Property type: String	
	TargetBaseID	RWH	returns {BStr} = TargetBaseID ; Property type: String	
	TargetDocumentName	RW	returns {BStr} = TargetDocumentName ; Property type: String	
	TargetMasterName	RW	returns {BStr} = TargetMasterName ; Property type: String	
Core	Associations: Windows			
Meth	OpenIconWindow		returns {IVWindow} = OpenIconWindow	
Contained By				
Prop	Application	R	returns {IVApplication} = Application ; Property type: IVApplication	
	Document	R	returns {IVDocument} = Document ; Property type: IVDocument	
Appe	arance			
Prop	AlignName	RW	returns {I2} = AlignName ; Property type: Integer; VisMasterProperties_HorzAlign; Values: 1=visLeft; 2=visCenter; 3=visRight;	
Icon				
	Icon		returns {IPictureDisp} = Icon	
Prop	IconSize	RW	returns {I2} = IconSize ; Property type: Integer; VisMasterProperties_IconShape; Values: 1=vi Normal; 2=visTall; 3=visWide; 4=visDouble;	
Meth	Exporticon		ExportIcon FileName {BStr [In]}, Flags {I2 [In]}, TransparentRGB {Variant [In Optional]}	
	Importicon		ImportIcon FileName {BStr [In]}	
Help				
Prop	ShapeHelp	RW	returns {BStr} = ShapeHelp ; Property type: String	
	1	1		

			[Branch: Doc Data] MasterShortcuts			
Collection of MasterShortcuts						
P/M	Name	RW H	Syntax/Type			
Id/Ord	Id/Order/Label/Type					
Prop	ObjectType	R	returns {12} = ObjectType ; Property type: Integer; =visObjTypeMasterShortcuts			
Objec	t Life/Enable/Visible/Sta	ite				
Prop	Stat	R	returns {12} = Stat ; Property type: Integer; VisStatCodes; Values: 0=visStatNormal; 1=vis-StatAppHasShutdown; 2=visStatDeleted; 4=visStatTouched; 8=visStatClosed; 16=visStatSuspended;			
Core	Core Associations: DiagramData					
Meth	Drop		returns {IVMasterShortcut} = Drop(ObjectToDrop {Unknown [In]}, xPos {I2 [In]}, yPos {I2 [In]})			
Conta	inee Mgt	•				
Prop	_NewEnum	R	returns {Unknown} = _NewEnum ; Property type: Unknown			
	Count	R	returns {12} = Count ; Property type: Integer; Count			
	Item	R	$\label{eq:returns} returns \ \{ IVMasterShortcut \} = Item(NameOrIndex \ \{ Variant \ [In] \}) ; Property \ type: IVMasterShortcut$			
	ItemFromID	R	returns {IVMasterShortcut} = ItemFromID(nID {I4 [In]}) ; Property type: IVMasterShortcut			
	ItemU	R	returns {IVMasterShortcut} = ItemU(NameOrIndex {Variant [In]}) ; Property type: IVMaster-Shortcut			
Meth	GetNames		GetNames localeSpecificNameArray {SafeArray BStr [Out]}			
	GetNamesU		GetNamesU localeIndependentNameArray {SafeArray BStr [Out]}			
	Paste		Paste Flags {Variant [In Optional]}			
Contained By						
Prop	Application	R	returns {IVApplication} = Application ; Property type: IVApplication			
	Document	R	returns {IVDocument} = Document ; Property type: IVDocument			

			[Branch: Doc Data] OLEObject
Stores	s info on embedded	or linked OLE o	object (eg: Excel spreadsheet)
P/M	Name	RW H	Syntax/Type
ld/Ord	der/Label/Type		
Prop	ClassID	R	returns {BStr} = ClassID ; Property type: String
	ObjectType	R	returns {I2} = ObjectType ; Property type: Integer; =visObjTypeOLEObject
	ProgID	R	returns {BStr} = ProgID ; Property type: String
Objec	t Life/Enable/Visible	le/State	
Prop	Stat	R	returns {I2} = Stat ; Property type: Integer; VisStatCodes; Values: 0=visStatNormal; 1=vis-StatAppHasShutdown; 2=visStatDeleted; 4=visStatTouched; 8=visStatClosed; 16=visStatSuspended;
Core	Attributes	·	
Prop	ForeignType	R	returns {12} = ForeignType ; Property type: Integer; VisShapeTypes; Values: 0=visTypeInval; 1=visTypePage; 2=visTypeGroup; 3=visTypeShape; 4=visTypeForeignObject; 5=visTypeGuide; 6=visTypeDoc; 16=visTypeMetafile; 32=visTypeBitmap; 64=visTypeInk; and 4 more.
	Object	R	returns {Dispatch} = Object ; Property type: Dispatch
Conta	ained By	<u>.</u>	
Prop	Application	R	returns {IVApplication} = Application ; Property type: IVApplication
	Shape	R	returns {IVShape} = Shape ; Property type: IVShape

			[Branch: Doc Data] OLEObjects				
Collec	Collection of OLEObject						
P/M	Name	RW H	Syntax/Type				
Id/Ord	Id/Order/Label/Type						
Prop	ObjectType	R	returns {12} = ObjectType ; Property type: Integer; =visObjTypeOLEObjects				
Object Life/Enable/Visible/State							
Prop	Stat	R	returns {12} = Stat ; Property type: Integer; VisStatCodes; Values: 0=visStatNormal; 1=vis-StatAppHasShutdown; 2=visStatDeleted; 4=visStatTouched; 8=visStatClosed; 16=visStatSuspended;				
Containee Mgt							
Prop	_NewEnum	R	returns {Unknown} = _NewEnum ; Property type: Unknown				
	Count	R	returns {I4} = Count ; Property type: Integer; Count				
	Count16	RH	returns {12} = Count16 ; Property type: Integer; Count				
	Item	R	returns {IVOLEObject} = Item(NameOrIndex {Variant [In]}) ; Property type: IVOLEObject				
Contained By							
Prop	Application	R	returns {IVApplication} = Application ; Property type: IVApplication				

			[Branch: Doc Data] Page
Data i	for single drawing page		[=:::::::==============================
P/M	Name	RW H	Syntax/Type
	ler/Label/Type	1100 11	Зупахтурс
Prop	ID	R	returns {I4} = ID ; Property type: Integer; ID
	ID16	RH	returns {12} = ID16 ; Property type: Integer; ID
	Index	RW	returns {12} = Index; Property type: Integer; Index
	Name	RW	returns {BStr} = Name ; Property type: String
	NameU	RW	returns {BStr} = NameU ; Property type: String
	ObjectType	R	returns {12} = ObjectType ; Property type: Integer; =visObjTypePage
	Туре	R	returns {VisPageTypes} = Type ; Property type: VisPageTypes; Values: 0=visPageTypeInval; 1=visTypeForeground; 2=visTypeBackground; 3=visTypeMarkup;
Objec	t Life/Enable/Visible/Sta	ate	
Prop	Stat	R	returns {I2} = Stat ; Property type: Integer; VisStatCodes; Values: 0=visStatNormal; 1=vis-StatAppHasShutdown; 2=visStatDeleted; 4=visStatTouched; 8=visStatClosed; 16=visStatSuspended;
Meth	Delete		Delete fRenumberPages {I2 [In]}
Core	Attributes	1	
Prop	Background	RW	returns {12} = Background ; Property type: Integer; Bool
Core	Associations		
Prop	BackPage	RW	returns {Variant} = BackPage ; Property type: Variant
	BackPageAsObj	RH	returns {IVPage} = BackPageAsObj ; Property type: IVPage
	BackPageFromName	WH	BackPageFromName = {BStr} ; Property type: None
Core	Associations: Windows	3	
Meth	OpenDrawWindow		returns {IVWindow} = OpenDrawWindow
Conta	inee Mgt		
Prop	Connects	R	returns {IVConnects} = Connects ; Property type: IVConnects
	Layers	R	returns {IVLayers} = Layers ; Property type: IVLayers
	Shapes	R	returns {IVShapes} = Shapes ; Property type: IVShapes
	SpatialSearch	R	

			[Branch: Doc Data] Page (Continued)
Data t	for single drawing page		
P/M	Name	RW H	Syntax/Type
Meth	AddGuide		returns {IVShape} = AddGuide(Type {I2 [In]}, xPos {R8 [In]}, yPos {R8 [In]})
	DrawArcByThree- Points		returns {IVShape} = DrawArcByThreePoints(xBegin {R8 [In]}, yBegin {R8 [In]}, xEnd {R8 [In]}, yEnd {R8 [In]}, xControl {R8 [In]}, yControl {R8 [In]})
	DrawBezier		returns {IVShape} = DrawBezier(xyArray {SafeArray R8 [In]}, degree {I2 [In]}, Flags {I2 [In]})
	DrawCircularArc		$returns \{IVShape\} = DrawCircularArc(xCenter \{R8 [In]\}, yCenter \{R8 [In]\}, Radius \{R8 [In]\}, StartAngle \{R8 []\}, EndAngle \{R8 []\})$
	DrawLine		returns {IVShape} = DrawLine(xBegin {R8 [In]}, yBegin {R8 [In]}, xEnd {R8 [In]}, yEnd {R8 [In]})
	DrawNURBS		returns {IVShape} = DrawNURBS(degree {I2 [In]}, Flags {I2 [In]}, xyArray {SafeArray R8 [In]}, knots {SafeArray R8 [In]}, weights {Variant [In Optional]})
	DrawOval		$returns \{IVShape\} = DrawOval(x1 \{R8 [In]\}, y1 \{R8 [In]\}, x2 \{R8 [In]\}, y2 \{R8 [In]\})$
	DrawPolyline		returns {IVShape} = DrawPolyline(xyArray {SafeArray R8 [In]}, Flags {I2 [In]})
	DrawQuarterArc		returns {IVShape} = DrawQuarterArc(xBegin {R8 [In]}, yBegin {R8 [In]}, xEnd {R8 [In]}, yEnd {R8 [In]}, SweepFlag {VisArcSweepFlags [In]})
	DrawRectangle		$returns \{IVShape\} = DrawRectangle(x1 \{R8 [In]\}, y1 \{R8 [In]\}, x2 \{R8 [In]\}, y2 \{R8 [In]\})$
	DrawSpline		returns {IVShape} = DrawSpline(xyArray {SafeArray R8 [In]}, Tolerance {R8 [In]}, Flags {I2 [In]})
	Drop		returns {IVShape} = Drop(ObjectToDrop {Unknown [In]}, xPos {R8 [In]}, yPos {R8 [In]})
	DropMany		returns {I2} = DropMany(ObjectsToInstance {SafeArray Variant [In]}, xyArray {SafeArray R8 [In]}, IDArray {SafeArray I2 [Out]})
	DropManyU		returns {I2} = DropManyU(ObjectsToInstance {SafeArray Variant [In]}, xyArray {SafeArray R8 [In]}, IDArray {SafeArray I2 [Out]})
	ResizeToFitContents		ResizeToFitContents
Conta	inee Mgt: DiagramDat	ta	
Meth	CreateSelection		returns {IVSelection} = CreateSelection(SelType {VisSelectionTypes [In]}, IterationMode {VisSelect-Mode []}, Data {Variant [In Optional]})
Conta	ined By		
Prop	Application	R	returns {IVApplication} = Application; Property type: IVApplication
	Document	R	returns {IVDocument} = Document ; Property type: IVDocument
Shape	eSheet		
Prop	PageSheet	R	returns {IVShape} = PageSheet ; Property type: IVShape
Meth	GetFormulas		GetFormulas SID_SRCStream {SafeArray I2 [In]}, formulaArray {SafeArray Variant [Out]}
	GetFormulasU		GetFormulasU SID_SRCStream {SafeArray 12 [In]}, formulaArray {SafeArray Variant [Out]}
	GetResults		$\label{lem:getResults} GetResults \textit{SID_SRCStream} \ \{SafeArray I2 \ [In]\}, \textit{Flags} \ \{I2 \ [In]\}, \textit{UnitsNamesOrCodes} \ \{SafeArray Variant \ [In]\}, \textit{resultArray} \ \{SafeArray Variant \ [Out]\}$
	SetFormulas		$\label{eq:continuous} $$ returns \{I2\} = SetFormulas(SID_SRCStream \{SafeArray I2 [In]\}, formulaArray \{SafeArray Variant [In]\}, Flags \{I2 [In]\}) $$$
	SetResults		$\label{eq:continuous} $$ returns \{I2\} = SetResults(SID_SRCStream \{SafeArray I2 [In]\}, UnitsNamesOrCodes \{SafeArray Variant [In]\}, resultArray \{SafeArray Variant [In]\}, Flags \{I2 [In]\}) $$$
Forei	gn		
Prop	Picture	R	returns {IPictureDisp} = Picture ; Property type: IPictureDisp
Meth	Export		Export FileName {BStr [In]}
	Import		returns {IVShape} = Import(FileName {BStr [In]})
	InsertFromFile		returns {IVShape} = InsertFromFile(FileName {BStr [In]}, Flags {I2 [In]})
Geom	etry		
Meth	BoundingBox		$BoundingBox \textit{Flags} \ \{12 \ [In]\}, \textit{lpr8Left} \ \{R8 \ [Out]\}, \textit{lpr8Bottom} \ \{R8 \ [Out]\}, \textit{lpr8Right} \ \{R8 \ [Out]\}, \textit{lpr8Top} \ \{R8 \ [Out]\}$
Revie	w/Markup		
Prop OriginalPage R returns {IVPage} = OriginalPage ; Property type: I'		returns {IVPage} = OriginalPage ; Property type: IVPage	
Prop	g		

			[Branch: Doc Data] Page (Continued)		
Data t	Data for single drawing page				
P/M	Name	RW H	Syntax/Type		
Clipbe	oard				
Meth	old_Paste	Н	old_Paste		
	old_PasteSpecial	Н	old_PasteSpecial Format {I2 [In]}		
	Paste		Paste Flags {Variant [In Optional]}		
	PasteSpecial		PasteSpecial Format {I4 [In]}, Link {Variant [In Optional]}, DisplayAsIcon {Variant [In Optional]}		
Event	s/Actions/Commands				
Prop	EventList	R	returns {IVEventList} = EventList ; Property type: IVEventList		
	PersistsEvents	R	returns {I2} = PersistsEvents ; Property type: Integer; Bool		
Layou	ıt				
Meth	CenterDrawing		CenterDrawing		
	Layout		Layout		
OLEA	ctiveX				
Prop	OLEObjects	R	returns {IVOLEObjects} = OLEObjects ; Property type: IVOLEObjects		
Meth	InsertObject		returns {IVShape} = InsertObject(ClassOrProgID {BStr [In]}, Flags {I2 [In]})		
Printi	ng/Paper				
Prop	PrintTileCount	R	returns {I4} = PrintTileCount ; Property type: Integer; Count		
Meth	Print		Print		
	PrintTile		PrintTile nTile {I4 [In]}		

	[Branch: Doc Data]	EPage
Event DispInterface. See Events Chapter for details.		

			[Branch: Doc Data] Pages
Collec	ction of all drawing pag	es in a docu	ment
P/M	Name	RW H	Syntax/Type
Id/Ord	der/Label/Type	•	
Prop	ObjectType	R	returns {I2} = ObjectType ; Property type: Integer; =visObjTypePages
Objec	t Life/Enable/Visible/	State	
Prop	Stat	R	returns {12} = Stat ; Property type: Integer; VisStatCodes; Values: 0=visStatNormal; 1=vis-StatAppHasShutdown; 2=visStatDeleted; 4=visStatTouched; 8=visStatClosed; 16=visStatSuspended;
Conta	ainee Mgt		
Prop	_NewEnum	R	returns {Unknown} = _NewEnum ; Property type: Unknown
	Count	R	returns {I2} = Count ; Property type: Integer; Count
	Item	R	returns {IVPage} = Item(NameOrIndex {Variant [In]}) ; Property type: IVPage
	ItemFromID	R	$returns \{IVPage\} = ItemFromID(nID \{I4 [In]\})$; Property type: IVPage
	ItemU	R	returns {IVPage} = ItemU(NameOrIndex {Variant [In]}) ; Property type: IVPage
Meth	Add		returns {IVPage} = Add
	GetNames		GetNames localeSpecificNameArray {SafeArray BStr [Out]}
	GetNamesU		GetNamesU localeIndependentNameArray {SafeArray BStr [Out]}
Conta	ained By	•	
Prop	Application	R	returns {IVApplication} = Application ; Property type: IVApplication
	Document	R	returns {IVDocument} = Document ; Property type: IVDocument
Event	s/Actions/Commands	S	
Prop	EventList	R	returns {IVEventList} = EventList ; Property type: IVEventList
	PersistsEvents	R	returns {I2} = PersistsEvents ; Property type: Integer; Bool

	[Branch: Doc Data]	EPages
Event DispInterface. See Events Chapter for details.		

			[Branch: Doc Data] Path		
Interfa	Interface to read primitive drawing path				
P/M	Name	RW H	Syntax/Type		
Id/Ord	ler/Label/Type				
Prop	ObjectType	R	returns {12} = ObjectType ; Property type: Integer; =visObjTypePath		
Core	Attributes	•			
Prop	Closed	R	returns {12} = Closed ; Property type: Integer; Bool		
Meth	Points		Points Tolerance {R8 [In]}, xyArray {SafeArray R8 [Out]}		
Conta	inee Mgt				
Prop	_NewEnum	R	returns {Unknown} = _NewEnum ; Property type: Unknown		
	Count	R	returns {I4} = Count ; Property type: Integer; Count		
	Count16	RH	returns {12} = Count16 ; Property type: Integer; Count		
	Item	R	returns {IVCurve} = Item(Index {I4 [In]}) ; Property type: IVCurve		
	Item16	RH	returns {IVCurve} = Item16(Index {I2 [In]}) ; Property type: IVCurve		
Conta	Contained By				
Prop	Application	R	returns {IVApplication} = Application ; Property type: IVApplication		

			[Branch: Doc Data] Paths
Interfa	ace to read primitive d	rawing paths	
P/M	Name	RW H	Syntax/Type
ld/Ord	der/Label/Type		
Prop	ObjectType	R	returns {12} = ObjectType ; Property type: Integer; =visObjTypePaths
Conta	ainee Mgt	<u> </u>	
Prop	_NewEnum	R	returns {Unknown} = _NewEnum ; Property type: Unknown
	Count	R	returns {I4} = Count ; Property type: Integer; Count
	Count16	RH	returns {12} = Count16 ; Property type: Integer; Count
	Item	R	returns {IVPath} = Item(Index {I4 [In]}) ; Property type: IVPath
	Item16	RH	$returns \{IVPath\} = Item16(Index \{I2 [In]\})$; Property type: IVPath
Conta	ained By		
Prop	Application	R	returns {IVApplication} = Application ; Property type: IVApplication

			[Branch: Doc Data] Row	
A row	A row of cells in a ShapeSheet			
P/M	Name	RW H	Syntax/Type	
Id/Ord	der/Label/Type			
Prop	Index	R	returns {I2} = Index ; Property type: Integer; Index	
	Name	RW	returns {BStr} = Name ; Property type: String	
NameU RW returns {BStr} = NameU ; Property type: String			returns {BStr} = NameU ; Property type: String	
	ObjectType	R	returns {I2} = ObjectType ; Property type: Integer; =visObjTypeRow	
Objec	t Life/Enable/Visib	le/State		
Prop	Stat	R	returns {I2} = Stat ; Property type: Integer; VisStatCodes; Values: 0=visStatNormal; 1=vis-StatAppHasShutdown; 2=visStatDeleted; 4=visStatTouched; 8=visStatClosed; 16=visStatSuspended;	

			[Branch: Doc Data] Row (Continued)			
A row	A row of cells in a ShapeSheet					
P/M	Name	RW H	Syntax/Type			
Conta	ained By	*				
Prop	Application	R	returns {IVApplication} = Application ; Property type: IVApplication			
	ContainingMasterID	R	returns {I4} = ContainingMasterID ; Property type: Integer; ID			
	ContainingPageID	R	returns {I4} = ContainingPageID ; Property type: Integer; ID			
	ContainingSection	R	returns {IVSection} = ContainingSection ; Property type: IVSection			
	Shape	R	returns {IVShape} = Shape ; Property type: IVShape			
	Style	R	returns {IVStyle} = Style ; Property type: IVStyle			
Shap	eSheet					
Prop	Cell	R	returns {IVCell} = Cell(NameOrIndex {Variant [In]}) ; Property type: IVCell			
	CellU	R	returns {IVCell} = CellU(NameOrIndex {Variant [In]}) ; Property type: IVCell			
	Count	R	returns {12} = Count ; Property type: Integer; Count			
Geon	netry					
Meth	GetPolylineData		GetPolylineData Flags {I2 [In]}, xyArray {SafeArray R8 [Out]}			
Events/Actions/Commands						
Prop	EventList	R	returns {IVEventList} = EventList ; Property type: IVEventList			
	PersistsEvents	R	returns {12} = PersistsEvents ; Property type: Integer; Bool			

	[Branch: Doc Data]	ERow
Event DispInterface. See Events Chapter for details.		

			[Branch: Doc Data] Section			
A sec	section in a ShapeSheet					
P/M	Name	RW H	Syntax/Type			
Id/Ord	ler/Label/Type					
Prop	Index	R	returns {12} = Index ; Property type: Integer; Index			
	ObjectType	R	returns {12} = ObjectType ; Property type: Integer; =visObjTypeSection			
Objec	t Life/Enable/Visible/St	ate				
Prop	Stat	R	returns {I2} = Stat ; Property type: Integer; VisStatCodes; Values: 0=visStatNormal; 1=vis-StatAppHasShutdown; 2=visStatDeleted; 4=visStatTouched; 8=visStatClosed; 16=visStatSuspended;			
Conta	ined By					
Prop	Application	R	returns {IVApplication} = Application ; Property type: IVApplication			
	ContainingMasterID	R	returns {I4} = ContainingMasterID ; Property type: Integer; ID			
	ContainingPageID	R	returns {I4} = ContainingPageID ; Property type: Integer; ID			
	Shape	R	returns {IVShape} = Shape ; Property type: IVShape			
	Style	R	returns {IVStyle} = Style ; Property type: IVStyle			
Shap	eSheet					
Prop	Count	R	returns {12} = Count ; Property type: Integer; Count			
	Row	R	returns {IVRow} = Row(Index {I2 [In]}) ; Property type: IVRow			
Event	s/Actions/Commands					
Prop	EventList	R	returns {IVEventList} = EventList ; Property type: IVEventList			
	PersistsEvents	R	returns {I2} = PersistsEvents ; Property type: Integer; Bool			

	[Branch: Doc Data]	ESection
Event DispInterface. See Events Chapter for details.		

			[Branch: Doc Data] Shape
Repre	sents a Shape on drawin		lso used (non-visually) as container for ShapeSheet in Document, Page and Master
P/M	Name	RW H	Syntax/Type
Id/Ord	ler/Label/Type		
Prop	ClassID	R	returns {BStr} = ClassID ; Property type: String
	ForeignType	R	returns {12} = ForeignType ; Property type: Integer; VisShapeTypes; Values: 0=visTypeInval; 1=visTypePage; 2=visTypeGroup; 3=visTypeShape; 4=visTypeForeignObject; 5=visTypeGuide; 6=visTypeDoc; 16=visTypeMetafile; 32=visTypeBitmap; 64=visTypeInk; and 4 more.
	ID	R	returns {I4} = ID ; Property type: Integer; ID
	ID16	RH	returns {I2} = ID16 ; Property type: Integer; ID
	Index	R	returns {I4} = Index ; Property type: Integer; Index
	Index16	RH	returns {12} = Index16 ; Property type: Integer; Index
	Master	R	returns {IVMaster} = Master ; Property type: IVMaster
	Name	RW	returns {BStr} = Name ; Property type: String
	NamelD	R	returns {BStr} = NameID ; Property type: String
	NameU	RW	returns {BStr} = NameU ; Property type: String
	ObjectType	R	returns {I2} = ObjectType ; Property type: Integer; =visObjTypeShape
	OneD	RW	returns {I2} = OneD ; Property type: Integer; Bool
	ProgID	R	returns {BStr} = ProgID ; Property type: String
	Туре	R	returns {12} = Type ; Property type: Integer; VisShapeTypes; Values: 0=visTypeInval; 1=visTypePage; 2=visTypeGroup; 3=visTypeShape; 4=visTypeForeignObject; 5=visTypeGuide; 6=visTypeDoc; 16=visTypeMetafile; 32=visTypeBitmap; 64=visTypeInk; and 4 more.
	UniqueID	R	returns {BStr} = UniqueID(fUniqueID {I2 [In]}) ; Property type: String
Behav	viorVariants	-	
Prop	Language	RW	returns {I4} = Language ; Property type: Integer; Lang Id as in VERSIONINFO.???
Objec	t Life/Enable/Visible/Sta	ate	
Prop	IsOpenForTextEdit	R	returns {Bool} = IsOpenForTextEdit ; Property type: Boolean
	Stat	R	returns {12} = Stat ; Property type: Integer; VisStatCodes; Values: 0=visStatNormal; 1=vis-StatAppHasShutdown; 2=visStatDeleted; 4=visStatTouched; 8=visStatClosed; 16=visStatSuspended;
Meth	Delete		Delete
	Drop		returns {IVShape} = Drop(ObjectToDrop {Unknown [In]}, xPos {R8 [In]}, yPos {R8 [In]})
	DropMany		returns {I2} = DropMany(ObjectsToInstance {SafeArray Variant [In]}, xyArray {SafeArray R8 [In]}, IDArray {SafeArray I2 [Out]})
	DropManyU		returns {I2} = DropManyU(ObjectsToInstance {SafeArray Variant [In]}, xyArray {SafeArray R8 [In]}, IDArray {SafeArray I2 [Out]})
	Duplicate		returns {IVShape} = Duplicate
Core	Associations		
Prop	Connects	R	returns {IVConnects} = Connects ; Property type: IVConnects
	FromConnects	R	returns {IVConnects} = FromConnects ; Property type: IVConnects
	Layer	R	returns {IVLayer} = Layer(Index {I2 [In]}) ; Property type: IVLayer
	LayerCount	R	returns {I2} = LayerCount ; Property type: Integer; Count
	MasterShape	R	returns {IVShape} = MasterShape ; Property type: IVShape
	RootShape	R	returns {IVShape} = RootShape ; Property type: IVShape
Meth	BringForward		BringForward
	BringToFront		BringToFront
	SendBackward		SendBackward
	SendToBack		SendToBack
Core	Associations: Windows	S	
Meth	OpenDrawWindow		returns {IVWindow} = OpenDrawWindow
	OpenSheetWindow		returns {IVWindow} = OpenSheetWindow
Conta	inee Mgt		
Prop	Shapes	R	returns {IVShapes} = Shapes ; Property type: IVShapes

			[Branch: Doc Data] Shape (Continued,
Repre	sents a Shape on drawir	ng page. A	lso used (non-visually) as container for ShapeSheet in Document, Page and Master
P/M	Name	RW H	Syntax/Type
Meth	AddGuide		returns {IVShape} = AddGuide(Type {I2 [In]}, xPos {R8 [In]}, yPos {R8 [In]})
	ConvertToGroup		ConvertToGroup
	CreateSelection		returns {IVSelection} = CreateSelection(SelType {VisSelectionTypes [In]}, IterationMode {VisSelect-Mode []}, Data {Variant [In Optional]})
	Group		returns {IVShape} = Group
	Offset		Offset Distance {R8 [In]}
	Ungroup		Ungroup
	VoidDuplicate	Н	VoidDuplicate
	VoidGroup	Н	VoidGroup
Conta	inee Mgt: Text		
Prop	Characters	R	returns {IVCharacters} = Characters ; Property type: IVCharacters
	CharCount	R	returns {I4} = CharCount ; Property type: Integer; Count
	Text	RW	returns {BStr} = Text ; Property type: String
Conta	ined By		
Prop	Application	R	returns {IVApplication} = Application ; Property type: IVApplication
	ContainingMaster	R	returns {IVMaster} = ContainingMaster ; Property type: IVMaster
	ContainingMasterID	R	returns {14} = ContainingMasterID ; Property type: Integer; ID
	ContainingPage	R	returns {IVPage} = ContainingPage ; Property type: IVPage
	ContainingPageID	R	returns {14} = ContainingPageID ; Property type: Integer; ID
	ContainingShape	R	returns {IVShape} = ContainingShape ; Property type: IVShape
	Document	R	returns {IVDocument} = Document ; Property type: IVDocument
	Parent	RW	returns {Dispatch} = Parent ; Property type: Dispatch
Shape	Sheet		
Prop	CellExists	R	$\label{eq:continuous} $$returns \{12\} = CellExists(localeSpecificCellName \{BStr [In]\}, fExistsLocally \{12 [In]\}) ; Property type: Integer; Bool$
	CellExistsU	R	returns {I2} = CellExistsU(localeIndependentCellName {BStr [In]}, fExistsLocally {I2 [In]}) ; Property type: Integer; Bool
	Cells	R	returns {IVCell} = Cells(localeSpecificCellName {BStr [In]}) ; Property type: IVCell
	CellsRowIndex	R	returns {12} = CellsRowIndex(localeSpecificCellName {BStr [In]}) ; Property type: Integer; Index
	CellsRowIndexU	R	$\label{eq:returns} \textit{FI2} = CellsRowIndexU(\textit{localeIndependentCellName} \ \{BStr \ [In]\}) ; Property \ type: Integer; Index$
	CellsSRC	R	$\label{eq:returns} returns \ \{IVCell\} = CellsSRC(Section \ \{I2 \ [In]\}, Row \ \{I2 \ [In]\}, Column \ \{I2 \ [In]\}) ; Property \ type: IVCell$
	CellsSRCExists	R	$\label{eq:continuous} $$ returns \{12\} = CellsSRCExists(Section \{12 [In]\}, Row \{12 [In]\}, Column \{12 [In]\}, fExistsLocally \{12 [In]\}) $$; Property type: Integer; Bool$
	CellsU	R	returns {IVCell} = CellsU(localeIndependentCellName {BStr [In]}) ; Property type: IVCell
	GeometryCount	R	returns {12} = GeometryCount ; Property type: Integer; Count
	RowCount	R	returns {12} = RowCount(Section {12 [In]}) ; Property type: Integer; Count
	RowExists	R	$\label{eq:returns} $$\{I2\} = RowExists(Section \{I2 [In]\}, Row \{I2 [In]\}, fExistsLocally \{I2 [In]\}) ; Property type: Integer; Bool$
	RowsCellCount	R	returns {12} = RowsCellCount(Section {12 [In]}, Row {12 [In]}) ; Property type: Integer; Count
	RowType	RW	returns {12} = RowType(Section {12 [In]}, Row {12 [In]}) ; Property type: Integer; VisRowTags
	Section	R	returns {IVSection} = Section(Index {I2 [In]}) ; Property type: IVSection
	SectionExists	R	returns {12} = SectionExists(Section {12 [In]}, fExistsLocally {12 [In]}) ; Property type: Integer; Bool

			[Branch: Doc Data] Shape (Continued)
Repre	sents a Shape on drawir	ng page. A	lso used (non-visually) as container for ShapeSheet in Document, Page and Master
P/M	Name	RW H	Syntax/Type
Meth	AddNamedRow		returns {I2} = AddNamedRow(Section {I2 [In]}, RowName {BStr [In]}, RowTag {I2 [In]})
	AddRow		returns {12} = AddRow(Section {12 [In]}, Row {12 [In]}, RowTag {12 [In]})
	AddRows		returns {12} = AddRows(Section {12 [In]}, Row {12 [In]}, RowTag {12 [In]}, RowCount {12 [In]})
	AddSection		returns {I2} = AddSection(Section {I2 [In]})
	DeleteRow		DeleteRow Section {12 [In]}, Row {12 [In]}
	DeleteSection		DeleteSection Section {I2 [In]}
	GetFormulas		GetFormulas SRCStream {SafeArray I2 [In]}, formulaArray {SafeArray Variant [Out]}
	GetFormulasU		GetFormulasU SRCStream {SafeArray I2 [In]}, formulaArray {SafeArray Variant [Out]}
	GetResults		GetResults SRCStream {SafeArray I2 [In]}, Flags {I2 [In]}, UnitsNamesOrCodes {SafeArray Variant [In]}, resultArray {SafeArray Variant [Out]}
	SetFormulas		returns {12} = SetFormulas(SRCStream {SafeArray 12 [In]}, formulaArray {SafeArray Variant [In]}, Flags {12 [In]})
	SetResults		returns {I2} = SetResults(SRCStream {SafeArray I2 [In]}, UnitsNamesOrCodes {SafeArray Variant [In]}, resultArray {SafeArray Variant [In]}, Flags {I2 [In]})
Style/	Format		
Prop	FillStyle	RW	returns {BStr} = FillStyle ; Property type: String
	FillStyleKeepFmt	W	FillStyleKeepFmt = {BStr} ; Property type: None
	LineStyle	RW	returns {BStr} = LineStyle ; Property type: String
	LineStyleKeepFmt	W	LineStyleKeepFmt = {BStr} ; Property type: None
	Style	RW	returns {BStr} = Style ; Property type: String
	StyleKeepFmt	W	StyleKeepFmt = {BStr} ; Property type: None
	TextStyle	RW	returns {BStr} = TextStyle ; Property type: String
	TextStyleKeepFmt	W	TextStyleKeepFmt = {BStr} ; Property type: None
Descr	iptive/User Attribs		
Prop	Data1	RW	returns {BStr} = Data1 ; Property type: String
	Data2	RW	returns {BStr} = Data2 ; Property type: String
	Data3	RW	returns {BStr} = Data3 ; Property type: String
Foreig	n		7 7 7 7 7 7 0
Prop	ForeignData	R	returns {SafeArray UI1} = ForeignData ; Property type: Integer
- 1	Picture	R	returns {IPictureDisp} = Picture ; Property type: IPictureDisp
Meth	Export		Export FileName {BStr [In]}
	Import		returns {IVShape} = Import(FileName {BStr [In]})
	InsertFromFile		returns {IVShape} = InsertFromFile(FileName {BStr [In]}, Flags {I2 [In]})
Geom			(t
Prop	ArealU	R	returns {R8} = AreaIU(fIncludeSubShapes {Bool []}) ; Property type: Real
.	DistanceFrom	R	returns {R8} = DistanceFrom(OtherShape {IVShape [In]}, Flags {12 [In]}); Property type: Real
	DistanceFromPoint	R	returns {R8} = DistanceFromPoint(x {R8 [In]}, y {R8 [In]}, Flags {I2 [In]}, pvPathIndex {Variant []}, pvCurveIndex {Variant []}, pvt {Variant []}); Property type: Real
	GeomExIf	RH	returns {Unknown} = GeomExIf(ffill {12 [In]}, LineRes {R8 [In]}) ; Property type: Unknown
	LengthIU	R	returns {R8} = LengthIU(fIncludeSubShapes {Bool []}) ; Property type: Real
	old_ArealU	RH	returns {R8} = old_AreaIU ; Property type: Real
	old_LengthIU	RH	returns {R8} = old_Alcare , Property type: Real
	Paths	R	returns {IVPaths} = Paths ; Property type: IVPaths
	PathsLocal	R	returns {IVPaths} = PathsLocal ; Property type: IVPaths
	SpatialNeighbors	R	returns {IVFattis} = FattisLocal , Floperty type: IVFattis returns {IVSelection} = SpatialNeighbors(Relation {I2 [In]}, Tolerance {R8 [In]}, Flags {I2 [In]}, ResultRoot {Variant [In Optional]}) ; Property type: IVSelection
	SpatialRelation	R	returns {I2} = SpatialRelation(OtherShape {IVShape [In]}, Tolerance {R8 [In]}, Flags {I2 [In]}) ; Property type: Integer; VisSpatialRelationCodes; Values: 1=visSpatialOverlap; 2=visSpatialContain; 4=visSpatialContainedIn; 8=visSpatialTouching;
	SpatialSearch	R	

BoundingBox				[Branch: Doc Data] Shape (Continued)	
BoundingBox	Repre	sents a Shape on drawin	g page. A	lso used (non-visually) as container for ShapeSheet in Document, Page and Master	
	P/M	Name	RW H	Syntax/Type	
Points	Meth	BoundingBox			
DrawCircularArc		•			
DrawLine		DrawBezier		returns {IVShape} = DrawBezier(xyArray {SafeArray R8 [In]}, degree {I2 [In]}, Flags {I2 [In]})	
DrawNURBS		DrawCircularArc		$returns \ \{IVShape\} = DrawCircularArc(xCenter \ \{R8 \ [In]\}, yCenter \ \{R8 \ [In]\}, Radius \ \{R8 \ [In]\}, StartAngle \ \{R8 \ []\}, EndAngle \ \{R8 \ []\})$	
		DrawLine		$returns \{IVShape\} = DrawLine(xBegin \{R8 [In]\}, yBegin \{R8 [In]\}, xEnd \{R8 [In]\}, yEnd \{R8 [In]\})$	
DrawPolyline		DrawNURBS		returns {IVShape} = DrawNURBS(degree {I2 [In]}, Flags {I2 [In]}, xyArray {SafeArray R8 [In]}, knots {SafeArray R8 [In]}, weights {Variant [In Optional]})	
DrawQuarterArc		DrawOval		$returns \{IVShape\} = DrawOval(x1 \{R8 [In]\}, y1 \{R8 [In]\}, x2 \{R8 [In]\}, y2 \{R8 [In]\})$	
[In]], SweepFlag {VisArcSweepFlags {In]}) DrawRectangle returns {IVShape} = DrawRectangle(x/ {R8 [In]}, x/ {R8 [In]}, x/ {R8 [In]}, y/ {R8 [In]}) DrawSpline returns {IVShape} = DrawRectangle(x/ {R8 [In]}, x/ {R8 [In]}, x/ {R8 [In]}), y/ {R8 [In]}, Flags {I2 [In]}) FitCurve FitCurve Tolerance {R8 [In]}, Flags {I2 [In]} FilipHorizontal FilipHorizontal FilipHorizontal FilipHorizontal FilipVertical FilipVertical FilipVertical FilipVertical FilipHorizontal FilipHor		DrawPolyline		returns {IVShape} = DrawPolyline(xyArray {SafeArray R8 [In]}, Flags {I2 [In]})	
DrawSpline		DrawQuarterArc		$returns \{IVShape\} = DrawQuarterArc(xBegin \{R8 [In]\}, yBegin \{R8 [In]\}, xEnd \{R8 [In]\}, yEnd $	
[In]		DrawRectangle		$returns \{IVShape\} = DrawRectangle(x1 \{R8 [In]\}, y1 \{R8 [In]\}, x2 \{R8 [In]\}, y2 \{R8 [In]\})$	
FlipHorizontal FlipHorizontal FlipHorizontal FlipVertical FlipVertical		DrawSpline			
FlipVertical		FitCurve		FitCurve Tolerance {R8 [In]}, Flags {I2 [In]}	
HitTest		FlipHorizontal		FlipHorizontal	
ReverseEnds		FlipVertical		FlipVertical	
Rotate90 Rotate90 SetBegin SetBegin xPos {R8 [In]}, yPos {R8 [In]} SetCenter SetCenter xPos {R8 [In]}, yPos {R8 [In]} SetEnd SetEnd xPos {R8 [In]}, yPos {R8 [In]} SwapEnds SwapEnds TransformXYFrom TransformXYFrom OtherShape {IVShape [In]}, x {R8 [In]}, y {R8 [In]}, xprime {R8 [Out]}, yprime {R8 [Out]} TransformXYTO TransformXYTO OtherShape {IVShape [In]}, x {R8 [In]}, y {R8 [In]}, xprime {R8 [Out]}, yprime {R		HitTest		returns {I2} = HitTest(xPos {R8 [In]}, yPos {R8 [In]}, Tolerance {R8 [In]})	
SetBegin SetBegin xPos {R8 [In]}, yPos {R8 [In]} SetCenter SetCenter xPos {R8 [In]}, yPos {R8 [In]} SetEnd SetEnd xPos {R8 [In]}, yPos {R8 [In]} SwapEnds SwapEnds TransformXYFrom TransformXYFrom OtherShape {IVShape [In]}, x {R8 [In]}, y {R8 [In]}, xprime {R8 [Out]}, yprime {R8 [Out]} TransformXYTO TransformXYTO OtherShape {IVShape [In]}, x {R8 [In]}, y {R8 [In]}, xprime {R8 [Out]}, yprime {R8 [Out]} UpdateAlignmentBox UpdateAlignmentBox XYFromPage XYFromPage x {R8 [In]}, y {R8 [In]}, xprime {R8 [Out]}, yprime {R8 [Out]} XYTOPage XYTOPage x {R8 [In]}, y {R8 [In]}, xprime {R8 [Out]}, yprime {R8 [Out]} Hyperlink Prop		ReverseEnds		ReverseEnds	
SetCenter SetCenter xPos {R8 [In]}, yPos {R8 [In]} SetEnd		Rotate90		Rotate90	
SetEnd		SetBegin		SetBegin xPos {R8 [In]}, yPos {R8 [In]}	
SwapEnds TransformXYFrom TransformXYFrom OtherShape {IVShape [In]}, x {R8 [In]}, y {R8 [In]}, xprime {R8 [Out]}, yprime {R8 [Out]} TransformXYTO TransformXYTO OtherShape {IVShape [In]}, x {R8 [In]}, y {R8 [In]}, xprime {R8 [Out]}, yprime {R [Out]} UpdateAlignmentBox XYFromPage XYFromPage x {R8 [In]}, y {R8 [In]}, xprime {R8 [Out]}, yprime {R8 [Out]} XYTOPage XYTOPage x {R8 [In]}, y {R8 [In]}, xprime {R8 [Out]}, yprime {R8 [Out]} Hyperlink Prop Hyperlink RH returns {IVHyperlink} = Hyperlink ; Property type: IVHyperlinks Hyperlink Returns {IVHyperlink} = AddHyperlink Clipboard Meth Copy Copy Flags {Variant [In Optional]} Cut Cut Flags {Variant [In Optional]} old_Copy old_Cut Paste Paste Paste Flags {Variant [In Optional]}		SetCenter		SetCenter xPos {R8 [In]}, yPos {R8 [In]}	
TransformXYFrom TransformXYFrom OtherShape {IVShape [In]}, x {R8 [In]}, y {R8 [In]}, xprime {R8 [Out]}, yprime {R8 [Out]} TransformXYTo TransformXYTo OtherShape {IVShape [In]}, x {R8 [In]}, y {R8 [In]}, xprime {R8 [Out]}, yprime {R [Out]} UpdateAlignmentBox XYFromPage XYFromPage x {R8 [In]}, y {R8 [In]}, xprime {R8 [Out]}, yprime {R8 [Out]} XYToPage XYToPage x {R8 [In]}, y {R8 [In]}, xprime {R8 [Out]}, yprime {R8 [Out]} Hyperlink Prop Hyperlink RH returns {IVHyperlink} = Hyperlink ; Property type: IVHyperlink Hyperlinks R returns {IVHyperlinks} = Hyperlink ; Property type: IVHyperlinks returns {IVHyperlink} = AddHyperlink Clipboard Meth Copy Copy Flags {Variant [In Optional]} Cut Cut Flags {Variant [In Optional]} old_Copy old_Cut Paste Paste Flags {Variant [In Optional]}		SetEnd		SetEnd xPos {R8 [In]}, yPos {R8 [In]}	
RR [Out] TransformXYTO TransformXYTO OtherShape [IVShape [In]], x {R8 [In]}, y {R8 [In]}, xprime {R8 [Out]}, yprime {R [Out]} UpdateAlignmentBox		SwapEnds		SwapEnds	
[Out] UpdateAlignmentBox		TransformXYFrom		$ \begin{tabular}{ll} TransformXYFrom O ther Shape $\{IVShape [In]\}, $x \{R8 [In]\}, $y \{R8 [In]\}, $xprime $\{R8 [Out]\}$ \\ \hline {R8 [Out]} \end{tabular} $	
XYFromPage XYFromPage x {R8 [In]}, y {R8 [In]}, xprime {R8 [Out]}, yprime {R8 [Out]} XYToPage XYToPage x {R8 [In]}, y {R8 [In]}, xprime {R8 [Out]}, yprime {R8 [Out]} XYToPage x {R8 [In]}, y {R8 [In]}, xprime {R8 [Out]}, yprime {R8 [Out]} XYToPage x {R8 [In]}, y {R8 [In]}, xprime {R8 [Out]}, yprime {R8 [Out]} XYToPage x {R8 [In]}, y {R8 [In]}, xprime {R8 [Out]}, yprime {R8 [Out]} XYToPage x {R8 [In]}, y {R8 [In]}, xprime {R8 [Out]}, yprime {R8 [Out]} XYToPage x {R8 [In]}, y {R8 [In]}, xprime {R8 [Out]}, yprime {R8 [Out]} XYToPage x {R8 [In]}, y {R8 [In]}, xprime {R8 [Out]}, yprime {R8 [Out]} XYToPage x {R8 [In]}, xprime {R8 [Out]}, yprime {R8 [Out]} XYToPage x {R8 [In]}, xprime {R8 [Out]}, yprime {R8 [Out]} XYToPage x {R8 [In]}, xprime {R8 [Out]}, yprime {R8 [Out]} XYToPage x {R8 [In]}, xprime {R8 [Out]}, yprime {R8 [Out]} XYToPage x {R8 [In]}, xprime {R8 [Out]}, yprime {R8 [Out]} XYToPage x {R8 [In]}, xprime {R8 [Out]}, yprime {R8 [Out]} XYToPage x {R8 [In]}, xprime {R8 [Out]}, yprime {R8 [Out]} XYToPage x {R8 [In]}, xprime {R8 [Out]}, yprime {R8 [Out]} XYToPage x {R8 [In]}, xprime {R8 [Out]}, yprime {R8 [Out]}, yprime {R8 [Out]} XYToPage x {R8 [In]}, xprime {R8 [Out]}, yprime {R8 [Out]},		TransformXYTo		$\label{thm:continuous} TransformXYTo\ OtherShape\ \{IVShape\ [In]\}, x\ \{R8\ [In]\}, y\ \{R8\ [In]\}, xprime\ \{R8\ [Out]\}, yprime\ \{R8\ [O$	
XYToPage XYToPage x {R8 [In]}, y {R8 [In]}, xprime {R8 [Out]}, yprime {R8 [Out]} XYToPage x {R8 [In]}, y {R8 [In]}, xprime {R8 [Out]} XYToPage x {R8 [In]}, y {R8 [In]}, xprime {R8 [Out]} XYToPage x {R8 [In]}, y {R8 [In]}, xprime {R8 [Out]} XYToPage x {R8 [In]}, xprime {R8 [Out]} XYToPage x {R8 [In]}, xprime {R8 [Out]}, xprime {R8 [Out]} XYToPage x {R8 [In]}, xprime {R8 [Out]}, xprime {R8 [Out]} XYToPage x {R8 [In]}, xprime {R8 [Out]}, xprime {R8 [Out]}, xprime {R8 [Out]}, xprime {R8 [Out]} XYToPage x {R8 [In]}, xprime {R8 [Out]}, xprime {		UpdateAlignmentBox		UpdateAlignmentBox	
Hyperlink RH returns {IVHyperlink } = Hyperlink ; Property type: IVHyperlink Hyperlinks R returns {IVHyperlinks } = Hyperlinks ; Property type: IVHyperlinks Meth AddHyperlink returns {IVHyperlinks } = AddHyperlink		XYFromPage		XYFromPage x {R8 [In]}, y {R8 [In]}, xprime {R8 [Out]}, yprime {R8 [Out]}	
Propage Hyperlink RH		XYToPage		XYToPage x {R8 [In]}, y {R8 [In]}, xprime {R8 [Out]}, yprime {R8 [Out]}	
Hyperlinks R returns {IVHyperlinks} = Hyperlinks ; Property type: IVHyperlinks	Нуре	rlink			
Meth AddHyperlink returns {IVHyperlink} = AddHyperlink Clipboard Copy Copy Flags {Variant [In Optional]} Cut Cut Flags {Variant [In Optional]} old_Copy H old_Copy old_Cut H old_Cut Paste Paste Flags {Variant [In Optional]}	Prop	Hyperlink	RH	returns {IVHyperlink} = Hyperlink ; Property type: IVHyperlink	
Clipboard Meth Copy Copy Flags {Variant [In Optional]} Cut Cut Flags {Variant [In Optional]} old_Copy H old_Copy old_Cut H old_Cut Paste Paste Flags {Variant [In Optional]}		Hyperlinks	R	returns {IVHyperlinks} = Hyperlinks ; Property type: IVHyperlinks	
Meth Copy Copy Flags {Variant [In Optional]} Cut Cut Flags {Variant [In Optional]} old_Copy H old_Copy old_Cut H old_Cut Paste Paste Flags {Variant [In Optional]}	Meth	AddHyperlink		returns {IVHyperlink} = AddHyperlink	
Cut Cut Flags {Variant [In Optional]} old_Copy H old_Copy old_Cut H old_Cut Paste Paste Flags {Variant [In Optional]}	Clipboard				
old_Copy H old_Copy old_Cut H old_Cut Paste Paste Flags {Variant [In Optional]}	Meth	Сору		Copy Flags {Variant [In Optional]}	
old_Cut H old_Cut Paste Paste Flags {Variant [In Optional]}		Cut		Cut Flags {Variant [In Optional]}	
Paste Paste Flags {Variant [In Optional]}		old_Copy	Н	old_Copy	
		old_Cut	Н	old_Cut	
PasteSpecial PasteSpecial Format {I4 [In]}. Link {Variant [In Optional]}. DisplayAsIcon {Variant [In Optional]}		Paste		Paste Flags {Variant [In Optional]}	
		PasteSpecial		PasteSpecial Format {I4 [In]}, Link {Variant [In Optional]}, DisplayAsIcon {Variant [In Optional]}	

			[Branch: Doc Data] Shape (Continued)
Repre	sents a Shape on drawir	ng page. Al	so used (non-visually) as container for ShapeSheet in Document, Page and Master
P/M	Name	RW H	Syntax/Type
Event	s/Actions/Commands		
Prop	EventList	R	returns {IVEventList} = EventList ; Property type: IVEventList
	PersistsEvents	R	returns {I2} = PersistsEvents ; Property type: Integer; Bool
Help			
Prop	Help	RW	returns {BStr} = Help ; Property type: String
Layou	Layout		
Meth	CenterDrawing		CenterDrawing
	Layout		Layout
OLEA	OLEActiveX		
Prop	Object	R	returns {Dispatch} = Object ; Property type: Dispatch
	ObjectIsInherited	R	returns {12} = ObjectIsInherited ; Property type: Integer; Bool
Meth	InsertObject		returns {IVShape} = InsertObject(ClassOrProgID {BStr [In]}, Flags {I2 [In]})

	[Branch: Doc Data]	EShape
Event DispInterface. See Events Chapter for details.		

			[Branch: Doc Data] Shapes		
Collec	Collection of Shapes on Page, Master and Group shape				
P/M	Name	RW H	Syntax/Type		
Id/Ord	der/Label/Type				
Prop	ObjectType	R	returns {12} = ObjectType ; Property type: Integer; =visObjTypeShapes		
Objec	t Life/Enable/Visible/St	ate			
Prop	Stat	R	returns {I2} = Stat ; Property type: Integer; VisStatCodes; Values: 0=visStatNormal; 1=vis-StatAppHasShutdown; 2=visStatDeleted; 4=visStatTouched; 8=visStatClosed; 16=visStatSuspended;		
Conta	ninee Mgt				
Prop	_NewEnum	R	returns {Unknown} = _NewEnum ; Property type: Unknown		
	Count	R	returns {I4} = Count ; Property type: Integer; Count		
	Count16	RH	returns {12} = Count16 ; Property type: Integer; Count		
	Item	R	returns {IVShape} = Item(NameUIDOrIndex {Variant [In]}) ; Property type: IVShape		
	ItemFromID	R	returns {IVShape} = ItemFromID(ObjectID {I4 [In]}) ; Property type: IVShape		
	ItemFromID16	RH	returns {IVShape} = ItemFromID16(ObjectID {I2 [In]}) ; Property type: IVShape		
	ItemU	R	returns {IVShape} = ItemU(NameUIDOrIndex {Variant [In]}) ; Property type: IVShape		
Conta	nined By				
Prop	Application	R	returns {IVApplication} = Application ; Property type: IVApplication		
	ContainingMaster	R	returns {IVMaster} = ContainingMaster ; Property type: IVMaster		
	ContainingPage	R	returns {IVPage} = ContainingPage ; Property type: IVPage		
	ContainingShape	R	returns {IVShape} = ContainingShape ; Property type: IVShape		
	Document	R	returns {IVDocument} = Document ; Property type: IVDocument		
Event	Events/Actions/Commands				
Prop	EventList	R	returns {IVEventList} = EventList ; Property type: IVEventList		
	PersistsEvents	R	returns {12} = PersistsEvents ; Property type: Integer; Bool		
Layou	ut				
Meth	CenterDrawing		CenterDrawing		

			[Branch: Doc Data] Style
			railable to be applied to shapes in a document.
P/M	Name	RW H	Syntax/Type
	der/Label/Type		
Prop	ID	R	returns {I4} = ID ; Property type: Integer; ID
	ID16	RH	returns {12} = ID16 ; Property type: Integer; ID
	Index	R	returns {I4} = Index ; Property type: Integer; Index
	Index16	RH	returns $\{12\}$ = Index16 ; Property type: Integer; Index
	Name	RW	returns {BStr} = Name ; Property type: String
	NameU	RW	returns {BStr} = NameU ; Property type: String
	ObjectType	R	returns {I2} = ObjectType ; Property type: Integer; =visObjTypeStyle
Objec	t Life/Enable/Visible/S	State	
Prop	Hidden	RW	returns {I2} = Hidden ; Property type: Integer; Bool
	Stat	R	returns {I2} = Stat ; Property type: Integer; VisStatCodes; Values: 0=visStatNormal; 1=visStatAppHasShutdown; 2=visStatDeleted; 4=visStatTouched; 8=visStatClosed; 16=visStatSuspended;
Meth	Delete		Delete
Core	Attributes		
Prop	IncludesFill	RW	returns {I2} = IncludesFill ; Property type: Integer; Bool
	IncludesLine	RW	returns {I2} = IncludesLine ; Property type: Integer; Bool
	IncludesText	RW	returns {I2} = IncludesText ; Property type: Integer; Bool
Core	Associations	•	
Prop	BasedOn	RW	returns {BStr} = BasedOn ; Property type: String
	FillBasedOn	RW	returns {BStr} = FillBasedOn ; Property type: String
	LineBasedOn	RW	returns {BStr} = LineBasedOn ; Property type: String
	TextBasedOn	RW	returns {BStr} = TextBasedOn ; Property type: String
Conta	nined By		
Prop	Application	R	returns {IVApplication} = Application; Property type: IVApplication
	Document	R	returns {IVDocument} = Document ; Property type: IVDocument
Shap	eSheet		
Prop	CellExists	R	returns {I2} = CellExists(localeSpecificCellName {BStr [In]}, fExistsLocally {I2 [In]}) ; Property type: Integer; Bool
	CellExistsU	R	returns {I2} = CellExistsU(localeIndependentCellName {BStr [In]}, fExistsLocally {I2 [In]}) ; Property type: Integer; Bool
	Cells	R	returns {IVCell} = Cells(localeSpecificCellName {BStr [In]}) ; Property type: IVCell
	CellsSRC	R	$\label{eq:returns} returns \ \{IVCell\} = CellsSRC(Section \ \{I2 \ [In]\}, Row \ \{I2 \ [In]\}, Column \ \{I2 \ [In]\}) ; Property \ type \ IVCell$
	CellsSRCExists	R	returns {I2} = CellsSRCExists(Section {I2 [In]}, Row {I2 [In]}, Column {I2 [In]}, fExistsLocally {I2 [In]}) ; Property type: Integer; Bool
	CellsU	R	returns {IVCell} = CellsU(localeIndependentCellName {BStr [In]}) ; Property type: IVCell
	Section	R	returns {IVSection} = Section(Index {I2 [In]}) ; Property type: IVSection
Meth	GetFormulas		GetFormulas SRCStream {SafeArray I2 [In]}, formulaArray {SafeArray Variant [Out]}
	GetFormulasU		GetFormulasU SRCStream {SafeArray I2 [In]}, formulaArray {SafeArray Variant [Out]}
	GetResults		GetResults SRCStream {SafeArray I2 [In]}, Flags {I2 [In]}, UnitsNamesOrCodes {SafeArray Variant [In]}, resultArray {SafeArray Variant [Out]}
	SetFormulas		returns {I2} = SetFormulas(SRCStream {SafeArray I2 [In]}, formulaArray {SafeArray Variant [In]}, Flags {I2 [In]})
	SetResults		returns {I2} = SetResults(SRCStream {SafeArray I2 [In]}, UnitsNamesOrCodes {SafeArray Variant [In]}, resultArray {SafeArray Variant [In]}, Flags {I2 [In]})
Event	s/Actions/Commands		
Prop	EventList	R	returns {IVEventList} = EventList ; Property type: IVEventList
	PersistsEvents	R	returns {I2} = PersistsEvents ; Property type: Integer; Bool

	[Branch: Doc Data]	EStyle
Event DispInterface. See Events Chapter for details.		

			[Branch: Doc Data] Styles
Collec	ction of Style objects (eg:	available ii	n this document).
P/M	Name	RW H	Syntax/Type
Id/Ord	der/Label/Type		
Prop	ObjectType	R	returns {12} = ObjectType ; Property type: Integer; =visObjTypeStyles
Objec	t Life/Enable/Visible/Sta	ite	
Prop	Stat	R	returns {12} = Stat ; Property type: Integer; VisStatCodes; Values: 0=visStatNormal; 1=vis-StatAppHasShutdown; 2=visStatDeleted; 4=visStatTouched; 8=visStatClosed; 16=visStatSuspended;
Conta	ainee Mgt		
Prop	_NewEnum	R	returns {Unknown} = _NewEnum ; Property type: Unknown
	Count	R	returns {I4} = Count ; Property type: Integer; Count
	Count16	RH	returns {12} = Count16 ; Property type: Integer; Count
	Item	R	returns {IVStyle} = Item(NameOrIndex {Variant [In]}) ; Property type: IVStyle
	ItemFromID	R	returns {IVStyle} = ItemFromID(ObjectID {I4 [In]}) ; Property type: IVStyle
	ItemFromID16	RH	returns {IVStyle} = ItemFromID16(ObjectID {I2 [In]}) ; Property type: IVStyle
	ItemU	R	returns {IVStyle} = ItemU(NameOrIndex {Variant [Unspecified]}) ; Property type: IVStyle
Meth	Add		$returns \ \{IVStyle\} = Add(StyleName \ \{BStr [In]\}, BasedOn \ \{BStr [In]\}, fIncludesText \ \{I2 [In]\}, fIncludesFill \ \{I2 [In]\})$
	GetNames		GetNames localeSpecificNameArray {SafeArray BStr [Out]}
	GetNamesU		GetNamesU localeIndependentNameArray {SafeArray BStr [Out]}
Conta	Contained By		
Prop	Application	R	returns {IVApplication} = Application ; Property type: IVApplication
	Document	R	returns {IVDocument} = Document ; Property type: IVDocument
Event	ts/Actions/Commands		
Prop	EventList	R	returns {IVEventList} = EventList ; Property type: IVEventList
	PersistsEvents	R	returns {12} = PersistsEvents ; Property type: Integer; Bool

	[Branch: Doc Data]	EStyles
Event DispInterface. See Events Chapter for details.		

			[Branch: UI&View] Accelltem		
Handi	Handles one Accelerator entry				
P/M	Name	RW H	Syntax/Type		
Objec	t Life/Enable/Visib	le/State			
Meth	Delete		Delete		
Core	Attributes	·			
Prop	Alt	RW	returns {12} = Alt ; Property type: Integer; Bool		
	CmdNum	RW	returns {12} = CmdNum ; Property type: Integer; VisUICmds; Values: 0=visCmdHierarchical; 0=visCmdFirst; 1001=visCmdFileNew; 1002=visCmdFileOpen; 1003=visCmdFileClose; 1004=visCmdFileSave; 1005=visCmdFileSaveAs; 1006=visCmdFileSaveWorkspace; 1007=visCmdFileImport; 1009=visCmdFileSummaryInfoDlg; and 508 more.		
	Control	RW	returns {12} = Control ; Property type: Integer; Bool		
	Default	RH	returns {12} = Default ; Property type: Integer; ?		
	Key	RW	returns {12} = Key ; Property type: Integer; ASCII/VK_xxx		
	Shift	RW	returns {12} = Shift ; Property type: Integer; Bool		
Conta	nined By				
Prop	Parent	R	returns {IVAccelItems} = Parent ; Property type: IVAccelItems		
AddOnFunctionality					
Prop	AddOnArgs	RW	returns {BStr} = AddOnArgs ; Property type: String		
	AddOnName	RW	returns {BStr} = AddOnName ; Property type: String		

			[Branch: UI&View] Accelltems			
Collec	Collection of Accelerator entries					
P/M	Name	RW H	Syntax/Type			
Conta	ninee Mgt: UI					
Prop	Prop NewEnum R returns {Unknown} = NewEnum ; Property type: Unknown					
	Count	R	returns {I4} = Count ; Property type: Integer; Count			
	Item	R returns {IVAccelItem} = Item(lIndex {I4 [In]}) ; Property type: IVAccelItem				
Meth	Add		returns {IVAccelItem} = Add			
Conta	Contained By					
Prop	Parent	R	returns {IVAccelTable} = Parent ; Property type: IVAccelTable			

			[Branch: UI&View] AccelTable	
Mana	ges a single Accelltems c	ollection fo	or a particular Visio context	
P/M	Name	RW H	Syntax/Type	
Id/Ord	ler/Label/Type			
Prop	SetID	R returns {14} = SetID ; Property type: Integer; VisUIObjSets; Values: 1=visUIObjSetNoDocument; 2=visUIObjSetDrawing; 3=visUIObjSetSetencil; 4=visUIObjSetShapeSheet; 5=visUIObjSetIcon; 6=visUIObjSetInPlace; 7=visUIObjSetPrintPreview; 8=visUIObjSetText; 9=visUIObjSetCntx_DrawObjSel; 10=visUIObjSetCntx_DrawOleObjSel; and 63 more.		
	TableName	RW	returns {BStr} = TableName ; Property type: String	
Objec	t Life/Enable/Visible/Sta	ite		
Meth	Delete		Delete	
Core	Attributes			
Prop	Default	RH	returns {BStr} = Default ; Property type: String	
Conta	Containee Mgt: UI			
Prop	Accelltems	R	returns {IVAccelItems} = AccelItems ; Property type: IVAccelItems	
Conta	Contained By			
Prop	Parent	R	returns {IVAccelTables} = Parent ; Property type: IVAccelTables	

			[Branch: UI&View] AccelTables		
Collec	Collection of AccelTable objects				
P/M	Name	RW H	Syntax/Type		
Conta	inee Mgt				
Meth	AddAtID		returns {IVAccelTable} = AddAtID(IID {I4 [In]})		
Conta	inee Mgt: UI				
Prop	_NewEnum	R	returns {Unknown} = _NewEnum ; Property type: Unknown		
	Count	R	returns {I4} = Count ; Property type: Integer; Count		
	Item	R	returns {IVAccelTable} = Item(IIndex {I4 [In]}) ; Property type: IVAccelTable		
	ItemAtID	R	returns {IVAccelTable} = ItemAtID(IID {I4 [In]}) ; Property type: IVAccelTable		
Meth	Meth Add returns {IVAccelTable} = Add				
Conta	ined By	<u> </u>			
Prop	Parent	R	returns {IVUIObject} = Parent ; Property type: IVUIObject		

			[Branch: UI&View] IEnumVAccelItem		
Iterat	or for UI items (in	VB use For Each	nstead)		
P/M	P/M Name RW H Syntax/Type				
IEnur	m - Irrelevant				
	Clone		returns {HResult} = Clone(ppenm {Ptr IEnumVAccelItem [Out]})		
	Next returns {HResult} = Next(celt {I4 [In]}, rgelt {Ptr IVAccelItem [Out]}, pceltFetched {I4 [Out]})				
	Reset returns {HResult} = Reset				
	Skip		returns {HResult} = Skip(celt {I4 [In]})		

			[Branch: UI&View]	IEnumVAccelTable			
Iterate	Iterator for UI items (in VB use For Each instead)						
P/M	Name	RW H	Syntax/Type				
IEnur	m - Irrelevant						
	Clone		returns {HResult} = Clone(ppenm {Ptr IEnumVAccelTable [Out]})			
	Next		returns {HResult} = Next(celt {I4 [In]}, rgelt {Ptr IVAccelTable	[Out]}, pceltFetched {I4 [Out]})			
	Reset returns {HResult} = Reset						
	Skip		returns {HResult} = Skip(celt {I4 [In]})				

			[Branch: UI&View]	IEnumVMenu
Iterato	or for UI items (in \	VB use For Each	instead)	
P/M	Name	RW H	Syntax/Type	
IEnun	n - Irrelevant			
	Clone		returns {HResult} = Clone(ppenm {Ptr IEnumVMenu [Out]})	
	Next			
	Reset returns {HResult} = Reset			
	Skip		returns {HResult} = Skip(celt {I4 [In]})	

			[Branch: UI&View] IEnumVMenuItem		
Iterate	or for UI items (in VB use i	For Each i	nstead)		
P/M	Name	RW H	Syntax/Type		
IEnun	n - Irrelevant				
	Clone	returns {HResult} = Clone(ppenm {Ptr IEnumVMenuItem [Out]})			
	Next $returns \{HResult\} = Next(celt \{I4 [In]\}, rgelt \{Ptr IVMenuItem [Out]\}, pceltFetched \{I4 [Out]\})$				
	Reset returns {HResult} = Reset				
	Skip		returns {HResult} = Skip(celt {I4 [In]})		

	[Branch: UI&View] IEnumVMenuSe						
Iterato	or for UI items (in VB use	For Each i	nstead)				
P/M	Name RW H Syntax/Type						
IEnun	n - Irrelevant						
	Clone		returns {HResult} = Clone(ppenm {Ptr IEnumVMenuSet [Out]})				
	Next returns {HResult} = Next(celt {I4 [In]}, rgelt {Ptr IVMenuSet [Out]}, pceltFetched {I4 [Out]})]}, pceltFetched {I4 [Out]})			
	Reset returns {HResult} = Reset						
	Skip		returns {HResult} = Skip(celt {I4 [In]})				

			[Branch: UI&View] IEnumVStatusBar				
Iterat	terator for UI items (in VB use For Each instead)						
P/M	Name	RW H	Syntax/Type				
IEnui	m - Irrelevant						
	Clone		returns {HResult} = Clone(ppenm {Ptr IEnumVStatusBar [Out]})				
	Next		returns {HResult} = Next(celt {I4 [In]}, rgelt {Ptr IVStatusBar [Out]}, pceltFetched {I4 [Out]})				
	Reset returns {HResult} = Reset						
	Skip		returns {HResult} = Skip(celt {I4 [In]})				

			[Branch: UI&View]	IEnumVStatusBarItem
Iterate	or for UI items (in	VB use For Each	instead)	
P/M	Name	RW H	Syntax/Type	
IEnur	n - Irrelevant			
	Clone		returns {HResult} = Clone(ppenm {Ptr IEnumVStatusBar	Item [Out]})
	Next		returns {HResult} = Next(celt {I4 [In]}, rgelt {Ptr IVStatus	BarItem [Out]}, pceltFetched {I4 [Out]})
	Reset		returns {HResult} = Reset	
	Skip		returns {HResult} = Skip(celt {I4 [In]})	

			[Branch: UI&View]	IEnumVToolbar		
Iterat	terator for UI items (in VB use For Each instead)					
P/M	Name	RW H	Syntax/Type			
IEnur	m - Irrelevant					
	Clone		returns {HResult} = Clone(ppenm {Ptr IEnumVToolbar [Out]})			
	Next		returns {HResult} = Next(celt {I4 [In]}, rgelt {Ptr IVToolbar [Out]}, pceltFetched {I4 [Out]})			
	Reset returns {HResult} = Reset					
	Skip		returns {HResult} = Skip(celt {I4 [In]})			

			[Branch: UI&View]	IEnumVToolbarItem
Iterate	or for UI items (in	VB use For Each	instead)	
P/M	Name	RW H	Syntax/Type	
IEnur	IEnum - Irrelevant			
	Clone		returns {HResult} = Clone(ppenm {Ptr IEnumVToolbarItem [Out]})
	Next		returns {HResult} = Next(celt {I4 [In]}, rgelt {Ptr IVToolbarIt	tem [Out]}, pceltFetched {I4 [Out]})
	Reset		returns {HResult} = Reset	
	Skip		returns {HResult} = Skip(celt {I4 [In]})	

			[Branch: UI&View]	IEnumVToolbarSet
Iterat	or for UI items (in	VB use For Each	instead)	
P/M	Name	RW H	Syntax/Type	
IEnui	m - Irrelevant	•		
	Clone		returns {HResult} = Clone(ppenm {Ptr IEnumVToolbarSet [Out	:]})
	Next		returns {HResult} = Next(celt {I4 [In]}, rgelt {Ptr IVToolbarSet	[Out]}, pceltFetched {I4 [Out]})
	Reset		returns {HResult} = Reset	
	Skip		returns {HResult} = Skip(celt {I4 [In]})	

			[Branch: UI&View] Menu
Mana	ges a single Menultems	collection	
P/M	Name	RW H	Syntax/Type
Id/Ord	der/Label/Type		
Prop	BuiltIn	R	returns {Bool} = BuiltIn ; Property type: Boolean
	Caption	RW	returns {BStr} = Caption ; Property type: String
	CntrlID	RWH	returns {12} = CntrlID ; Property type: Integer; VisUICtrlIDs; Values: 1=visCtrlIDOPEN; 2=visCtrlIDOPENSTEN; 3=visCtrlIDSAVE; 4=visCtrlIDPRINT; 5=visCtrlIDPREVIEW; 6=visCtrlIDCUT; 7=visCtrlIDCOPY; 8=visCtrlIDPASTE; 9=visCtrlIDCLEAR; 10=visCtrlIDUNDO; and 184 more.
	CntrlType	RW	returns {12} = CntrlType ; Property type: Integer; VisUICtrlTypes; Values: 0=visCtrlTypeEND; 1=visCtrlTypeSTATE; 2=visCtrlTypeBUTTON; 3=visCtrlTypeSTATE_BUTTON; 4=visCtrlTypeHIERBUTTON; 5=visCtrlTypeSTATE_HIERBUTTON; 8=visCtrlTypeDROPBUTTON; 9=visCtrlTypeSTATE_DROPBUTTON; 16=visCtrlTypePALETTEBUTTON; 16=visCtrlTypeSPLITBUTTON_MRU_COLOR; and 24 more.
	Index	R	returns {I4} = Index ; Property type: Integer; Index
	IsHierarchical	R	returns {12} = IsHierarchical ; Property type: Integer; Bool
	IsSeparator	RH	returns {12} = IsSeparator ; Property type: Integer; Bool
Objec	t Life/Enable/Visible/St	ate	
Prop	Enabled	RW	returns {Bool} = Enabled ; Property type: Boolean
	State	RW	returns {I2} = State ; Property type: Integer; VisUIButtonState; Values: -1=visButtonDown; 0=visButtonUp; 2=visButtonMixed;
	Visible	RW	returns {Bool} = Visible ; Property type: Boolean
Meth	Delete		Delete
Core	Attributes		
Prop	ActionText	RW	returns {BStr} = ActionText ; Property type: String
	CmdNum	RW	returns {12} = CmdNum ; Property type: Integer; VisUICmds; Values: 0=visCmdHierarchical; 0=visCmdFirst; 1001=visCmdFileNew; 1002=visCmdFileOpen; 1003=visCmdFileClose; 1004=visCmdFileSave; 1005=visCmdFileSaveAs; 1006=visCmdFileSaveWorkspace; 1007=visCmdFileImport; 1009=visCmdFileSummaryInfoDlg; and 508 more.
	Default	RH	returns {BStr} = Default ; Property type: String
	MDIWindowMenu	RW	returns {I2} = MDIWindowMenu ; Property type: Integer; Bool
	Priority	RWH	returns {I2} = Priority ; Property type: Integer; -
	TypeSpecific1	RW	returns {12} = TypeSpecific1 ; Property type: Integer; varies
	TypeSpecific2	RW	returns {12} = TypeSpecific2 ; Property type: Integer; varies
Conta	ainee Mgt: UI		
Prop	MenuItems	R	returns {IVMenuItems} = MenuItems ; Property type: IVMenuItems
Conta	nined By		
Prop	Parent	R	returns {IVMenus} = Parent ; Property type: IVMenus
	. —		· ·

			[Branch: UI&View] Menu (Continued)				
Mana	Manages a single Menultems collection						
P/M	Name	RW H	Syntax/Type				
Appe	arance						
Prop	PaletteWidth	RW	returns {I2} = PaletteWidth ; Property type: Integer; Pixels				
	Spacing	RWH	returns {I2} = Spacing ; Property type: Integer; VisUISpacingTypes; Values: 0=visCtrlSpacing-NONE; 1=visCtrlSpacingVARIABLE_BEFORE; 2=visCtrlSpacingVARIABLE_AFTER; 4=visCtrlSpacingFIXED_BEFORE; 8=visCtrlSpacingFIXED_AFTER; 16=visCtrlSpacingNEW_ROW; 32=visCtrlSpacingTB_NOTFIXED; 64=visCtrlSpacingPALET-TERIGHT; 80=visCtrlSpacingNEW_ROW_PALETTERIGHT;				
	Style	RW	returns {I2} = Style ; Property type: Integer; VisUIButtonStyle; Values: 0=visButtonAutomatic; 1=visButtonIcon; 2=visButtonCaption; 3=visButtonIconandCaption;				
	Width	RW	returns {I2} = Width ; Property type: Integer; Pixels				
Icon		<u> </u>					
Prop	FaceID	RW	returns {12} = FaceID ; Property type: Integer; VisUIIconIDs; Values: 0=visIconIXNEW; 1=visIconIXOPEN; 2=visIconIXOPENSTENCIL; 3=visIconIXSAVE; 4=visIconIXPRINT; 5=visIconIXPRINTPREVIEW; 6=visIconIXCUT; 7=visIconIXCOPY; 8=visIconIXPASTE; 9=visIconIXCLEAR; and 236 more.				
Meth	IconFileName		IconFileName IconFileName {BStr [In]}				
AddC	nFunctionality	<u> </u>					
Prop	AddOnArgs	RW	returns {BStr} = AddOnArgs ; Property type: String				
	AddOnName	RW	returns {BStr} = AddOnName ; Property type: String				
Help							
Prop	HelpContextID	RWH	returns {I2} = HelpContextID ; Property type: Integer; ID				
	HelpFile	RWH	returns {BStr} = HelpFile ; Property type: String				
	MiniHelp	RWH	returns {BStr} = MiniHelp ; Property type: String				

			[Branch: UI&View] Menultem
Item o	on a Menu		
P/M	Name	RW H	Syntax/Type
ld/Or	der/Label/Type		
Prop	Builtln	R	returns {Bool} = BuiltIn ; Property type: Boolean
	Caption	RW	returns {BStr} = Caption ; Property type: String
	CntrlID	RWH	returns {I2} = CntrlID ; Property type: Integer; VisUICtrlIDs; Values: 1=visCtrlIDOPEN; 2=visCtrlIDOPENSTEN; 3=visCtrlIDSAVE; 4=visCtrlIDPRINT; 5=visCtrlIDPREVIEW; 6=visCtrlIDCUT; 7=visCtrlIDCOPY; 8=visCtrlIDPASTE; 9=visCtrlIDCLEAR; 10=visCtrlIDUNDO; and 184 more.
	CntrlType	RW	returns {I2} = CntrlType ; Property type: Integer; VisUICtrlTypes; Values: 0=visCtrlTypeEND; 1=visCtrlTypeSTATE; 2=visCtrlTypeBUTTON; 3=visCtrlTypeSTATE_BUTTON; 4=visCtrlTypeHIERBUTTON; 5=visCtrlTypeSTATE_HIERBUTTON; 8=visCtrlTypeDROPBUTTON; 9=visCtrlTypeSTATE_DROPBUTTON; 16=visCtrlTypePALETTEBUTTON; 16=visCtrlTypeSPLITBUTTON_MRU_COLOR; and 24 more.
	Index	R	returns {I4} = Index ; Property type: Integer; Index
	IsHierarchical	R	returns {I2} = IsHierarchical ; Property type: Integer; Bool
	IsSeparator	RH	returns {12} = IsSeparator ; Property type: Integer; Bool
Obje	ct Life/Enable/Visible	e/State	
Prop	Enabled	RW	returns {Bool} = Enabled ; Property type: Boolean
	State	RW	returns {I2} = State ; Property type: Integer; VisUIButtonState; Values: -1=visButtonDown; 0=visButtonUp; 2=visButtonMixed;
	Visible	RW	returns {Bool} = Visible ; Property type: Boolean
Meth	Delete		Delete

			[Branch: UI&View] MenuItem (Continued)
Item c	on a Menu		
P/M	Name	RW H	Syntax/Type
Core	Attributes		
Prop	ActionText	RW	returns {BStr} = ActionText ; Property type: String
	BeginGroup	RW	returns {Bool} = BeginGroup ; Property type: Boolean
	CmdNum	RW	returns {I2} = CmdNum ; Property type: Integer; VisUICmds; Values: 0=visCmdHierarchical; 0=visCmdFirst; 1001=visCmdFileNew; 1002=visCmdFileOpen; 1003=visCmdFileClose; 1004=visCmdFileSave; 1005=visCmdFileSaveAs; 1006=visCmdFileSaveWorkspace; 1007=visCmdFileImport; 1009=visCmdFileSummaryInfoDlg; and 508 more.
	Default	RH	returns {BStr} = Default ; Property type: String
	Priority	RWH	returns {I2} = Priority ; Property type: Integer; -
	TypeSpecific1	RW	returns {I2} = TypeSpecific1 ; Property type: Integer; varies
	TypeSpecific2	RW	returns {I2} = TypeSpecific2 ; Property type: Integer; varies
Conta	ninee Mgt: UI		
Prop	Menultems	R	returns {IVMenuItems} = MenuItems ; Property type: IVMenuItems
Conta	nined By	<u> </u>	
Prop	Parent	R	returns {IVMenuItems} = Parent ; Property type: IVMenuItems
Appe	arance		
Prop	PaletteWidth	RW	returns {I2} = PaletteWidth ; Property type: Integer; Pixels
	Spacing	RWH	returns {I2} = Spacing ; Property type: Integer; VisUISpacingTypes; Values: 0=visCtrlSpacing-NONE; 1=visCtrlSpacingVARIABLE_BEFORE; 2=visCtrlSpacingVARIABLE_AFTER; 4=visCtrlSpacingFIXED_BEFORE; 8=visCtrlSpacingFIXED_AFTER; 16=visCtrlSpacingNEW_ROW; 32=visCtrlSpacingTB_NOTFIXED; 64=visCtrlSpacingPALET-TERIGHT; 80=visCtrlSpacingNEW_ROW_PALETTERIGHT;
	Style	RW	returns {12} = Style; Property type: Integer; VisUIButtonStyle; Values: 0=visButtonAutomatic; 1=visButtonIcon; 2=visButtonCaption; 3=visButtonIconandCaption;
	Width	RW	returns {I2} = Width ; Property type: Integer; Pixels
lcon			
Prop	FaceID	RW	returns {I2} = FaceID ; Property type: Integer; VisUIIconIDs; Values: 0=visIconIXNEW; 1=visIconIXOPEN; 2=visIconIXOPENSTENCIL; 3=visIconIXSAVE; 4=visIconIXPRINT; 5=visIconIXPRINTPREVIEW; 6=visIconIXCUT; 7=visIconIXCOPY; 8=visIconIXPASTE; 9=visIconIXCLEAR; and 236 more.
Meth	IconFileName		IconFileName IconFileName {BStr [In]}
AddO	nFunctionality	, , , , , , , , , , , , , , , , , , ,	
Prop	AddOnArgs	RW	returns {BStr} = AddOnArgs ; Property type: String
	AddOnName	RW	returns {BStr} = AddOnName ; Property type: String
Help		*	
Prop	HelpContextID	RWH	returns {I2} = HelpContextID ; Property type: Integer; ID
	HelpFile	RWH	returns {BStr} = HelpFile ; Property type: String
	MiniHelp	RWH	returns {BStr} = MiniHelp ; Property type: String
	I .		

			[Branch: UI&View]	Menultems
Collec	ction of items on a M	lenu		
P/M	Name	RW H	Syntax/Type	
Conta	ninee Mgt			
Prop	_NewEnum	R	returns {Unknown} = _NewEnum ; Property type: Unknown	
	Count	R	returns {I4} = Count ; Property type: Integer; Count	
	Item	R	returns {IVMenuItem} = Item(lIndex {I4 [In]}) ; Property type: IVMenuItem	
Meth	Add		returns {IVMenuItem} = Add	
	AddAt		returns {IVMenuItem} = AddAt(lIndex {I4 [In]})	
Conta	nined By	·		
Prop	Parent	R	returns {IVMenu} = Parent ; Property type: IVMenu	
	ParentItem	R	returns {IVMenuItem} = ParentItem ; Property type: IVMenuItem	

			[Branch: UI&View] MenuSet
Mana	ges a single Menus	object, holding	menus applicable to a particular Visio context
P/M	Name	RW H	Syntax/Type
ld/Ord	der/Label/Type	, in the second	
Prop	Builtln	R	returns {Bool} = BuiltIn ; Property type: Boolean
	Caption	RW	returns {BStr} = Caption ; Property type: String
	Rowlndex	RW	returns {12} = RowIndex ; Property type: Integer; Index
	SetID	R	returns {I4} = SetID ; Property type: Integer; VisUIObjSets; Values: 1=visUIObjSetNoDocument; 2=visUIObjSetDrawing; 3=visUIObjSetStencil; 4=visUIObjSetShapeSheet; 5=visUIObjSetIcon; 6=visUIObjSetInPlace; 7=visUIObjSetPrintPreview; 8=visUIObjSetText; 9=visUIObjSetCntx_DrawObjSel; 10=visUIObjSetCntx_DrawOleObjSel; and 63 more.
Objec	t Life/Enable/Visit	ole/State	
Prop	Enabled	RW	returns {Bool} = Enabled ; Property type: Boolean
	Visible	RW	returns {Bool} = Visible ; Property type: Boolean
Meth	Delete		Delete
Core	Attributes		
Prop	Default	RH	returns {BStr} = Default ; Property type: String
	Protection	RW	returns {I2} = Protection; Property type: Integer; VisUIBarProtection; Values: 0=visBarNoProtection; 1=visBarNoCustomize; 2=visBarNoResize; 4=visBarNoMove; 16=visBarNoChange-Dock; 32=visBarNoVerticalDock; 64=visBarNoHorizontalDock;
Conta	inee Mgt	<u> </u>	
Prop	Menus	R	returns {IVMenus} = Menus ; Property type: IVMenus
Conta	nined By		
Prop	Parent	R	returns {IVMenuSets} = Parent ; Property type: IVMenuSets
Appe	arance		
Prop	Height	RW	returns {12} = Height ; Property type: Integer; Pixels
	Left	RW	returns {I2} = Left ; Property type: Integer; Pixels
	Position	RW	returns {I2} = Position ; Property type: Integer; VisUIBarPosition; Values: 0=visBarLeft; 1=visBarTop; 2=visBarRight; 3=visBarBottom; 4=visBarFloating; 5=visBarPopup; 6=visBarMenu;
	Тор	RW	returns {12} = Top ; Property type: Integer; Pixels
	Width	RW	returns {12} = Width ; Property type: Integer; Pixels

			[Branch: UI&View]	MenuSets		
Set of	set of menus, cover	ring all Visio co	ntexts.			
P/M	Name	RW H	Syntax/Type			
Conta	inee Mgt					
Prop	_NewEnum	R	returns {Unknown} = _NewEnum ; Property type: Unknown			
	Count	R	returns {I4} = Count ; Property type: Integer; Count			
	Item	R	returns {IVMenuSet} = Item(lIndex {I4 [In]}) ; Property type: IVMenuSet			
	ItemAtID	R	returns {IVMenuSet} = ItemAtID(IID {I4 [In]}) ; Property type: IVMenuSet			
Meth	Add		returns {IVMenuSet} = Add			
	AddAtID		returns {IVMenuSet} = AddAtID(lID {I4 [In]})			
Conta	Contained By					
Prop	Parent	R	returns {IVUIObject} = Parent ; Property type: IVUIObject			

		[Branch: UI&View] StatusBar				
Manages a single StatusBarItems object applicable to a particular Visio context.						
Name	RW H	Syntax/Type				
der/Label/Type						
Builtln	R	returns {Bool} = BuiltIn ; Property type: Boolean				
Caption	RW	returns {BStr} = Caption ; Property type: String				
SetID	R	returns {14} = SetID ; Property type: Integer; VisUIObjSets; Values: 1=visUIObjSetNoDocument; 2=visUIObjSetDrawing; 3=visUIObjSetStencil; 4=visUIObjSetShapeSheet; 5=visUIObjSetIcon; 6=visUIObjSetInPlace; 7=visUIObjSetPrintPreview; 8=visUIObjSetText; 9=visUIObjSetCntx_DrawObjSel; 10=visUIObjSetCntx_DrawOleObjSel; and 63 more.				
t Life/Enable/Visible/St	ate					
Delete		Delete				
Attributes						
Default	RH	returns {BStr} = Default ; Property type: String				
Protection	RW	returns {I2} = Protection; Property type: Integer; VisUIBarProtection; Values: 0=visBarNoProtection; 1=visBarNoCustomize; 2=visBarNoResize; 4=visBarNoMove; 16=visBarNoChangeDock; 32=visBarNoVerticalDock; 64=visBarNoHorizontalDock;				
Containee Mgt						
StatusBarltems	R	returns {IVStatusBarItems} = StatusBarItems ; Property type: IVStatusBarItems				
nined By	•					
Parent	R	returns {IVStatusBars} = Parent ; Property type: IVStatusBars				
	Name der/Label/Type BuiltIn Caption SetID Et Life/Enable/Visible/Sta Delete Attributes Default Protection sinee Mgt StatusBarltems sined By	Name RW H der/Label/Type Builtln R Caption RW SetID R et Life/Enable/Visible/State Delete Attributes Default RH Protection RW sinee Mgt StatusBarltems R ained By				

			[Branch: UI&View] StatusBarltem
A sing	gle status bar item, dis	plays one ite	em of status.
P/M	Name	RW H	Syntax/Type
Id/Ord	der/Label/Type		
Prop	Builtln	R	returns {Bool} = BuiltIn ; Property type: Boolean
	Caption	RW	returns {BStr} = Caption ; Property type: String
	CntrlID	RWH	returns {I2} = CntrlID ; Property type: Integer; VisUICtrlIDs; Values: 1=visCtrlIDOPEN; 2=visCtrlIDOPENSTEN; 3=visCtrlIDSAVE; 4=visCtrlIDPRINT; 5=visCtrlIDPREVIEW; 6=visCtrlIDCUT; 7=visCtrlIDCOPY; 8=visCtrlIDPASTE; 9=visCtrlIDCLEAR; 10=visCtrlIDUNDO; and 184 more.
	CntrlType	RW	returns {12} = CntrlType ; Property type: Integer; VisUICtrlTypes; Values: 0=visCtrlTypeEND; 1=visCtrlTypeSTATE; 2=visCtrlTypeBUTTON; 3=visCtrlTypeSTATE_BUTTON; 4=visCtrlTypeHIERBUTTON; 5=visCtrlTypeSTATE_HIERBUTTON; 8=visCtrlTypeDROPBUTTON; 9=visCtrlTypeSTATE_DROPBUTTON; 16=visCtrlTypePALETTEBUTTON; 16=visCtrlTypeSPLITBUTTON_MRU_COLOR; and 24 more.
	Index	R	returns {I4} = Index ; Property type: Integer; Index
	IsHierarchical	R	returns {12} = IsHierarchical ; Property type: Integer; Bool
	IsSeparator	RH	returns {12} = IsSeparator ; Property type: Integer; Bool
Objec	t Life/Enable/Visible	/State	
Prop	Enabled	RW	returns {Bool} = Enabled ; Property type: Boolean
	State	RW	returns {12} = State ; Property type: Integer; VisUIButtonState; Values: -1=visButtonDown; 0=visButtonUp; 2=visButtonMixed;
	Visible	RW	returns {Bool} = Visible ; Property type: Boolean
Meth	Delete		Delete
Core	Attributes		
Prop	ActionText	RW	returns {BStr} = ActionText ; Property type: String
	Default	RH	returns {BStr} = Default ; Property type: String
	Priority	RWH	returns {12} = Priority ; Property type: Integer; -
	TypeSpecific1	RW	returns {I2} = TypeSpecific1 ; Property type: Integer; varies
	TypeSpecific2	RW	returns {12} = TypeSpecific2 ; Property type: Integer; varies
Conta	inee Mgt		
Prop	StatusBarItems	R	returns {IVStatusBarItems} = StatusBarItems ; Property type: IVStatusBarItems
Conta	nined By		
Prop	Parent	R	returns {IVStatusBarItems} = Parent ; Property type: IVStatusBarItems
Appe	arance		
Prop	PaletteWidth	RW	returns {I2} = PaletteWidth ; Property type: Integer; Pixels
	Spacing	RWH	returns {I2} = Spacing ; Property type: Integer; VisUISpacingTypes; Values: 0=visCtrlSpacing NONE; 1=visCtrlSpacingVARIABLE_BEFORE; 2=visCtrlSpacingVARIABLE_AFTER; 4=visCtrlSpacingFIXED_BEFORE; 8=visCtrlSpacingFIXED_AFTER; 16=visCtrlSpacingNEW_ROW; 32=visCtrlSpacingTB_NOTFIXED; 64=visCtrlSpacingPALET-TERIGHT; 80=visCtrlSpacingNEW_ROW_PALETTERIGHT;
	Style	RW	returns {12} = Style ; Property type: Integer; VisUIButtonStyle; Values: 0=visButtonAutomatic; 1=visButtonIcon; 2=visButtonCaption; 3=visButtonIconandCaption;
	Width	RW	returns {12} = Width ; Property type: Integer; Pixels

			[Branch: UI&View] StatusBarltem (Continued)			
A sing	A single status bar item, displays one item of status.					
P/M	Name	RW H	Syntax/Type			
Icon						
Prop	FaceID	RW	returns {12} = FaceID ; Property type: Integer; VisUIIconIDs; Values: 0=visIconIXNEW; 1=visIconIXOPEN; 2=visIconIXOPENSTENCIL; 3=visIconIXSAVE; 4=visIconIXPRINT; 5=visIconIXPRINTPREVIEW; 6=visIconIXCUT; 7=visIconIXCOPY; 8=visIconIXPASTE; 9=visIconIXCLEAR; and 236 more.			
Meth	IconFileName		IconFileName [ConFileName [BStr [In]]]			
Help		·				
Prop	HelpContextID	RWH	returns {12} = HelpContextID ; Property type: Integer; ID			
	HelpFile	RWH	returns {BStr} = HelpFile ; Property type: String			
	MiniHelp	RWH	returns {BStr} = MiniHelp ; Property type: String			
Irrele	vant?	·				
Prop	AddOnArgs	RW	returns {BStr} = AddOnArgs ; Property type: String			
	AddOnName	RW	returns {BStr} = AddOnName ; Property type: String			
	CmdNum	RW	returns {12} = CmdNum ; Property type: Integer; VisUICmds; Values: 0=visCmdHierarchical; 0=visCmdFirst; 1001=visCmdFileNew; 1002=visCmdFileOpen; 1003=visCmdFileClose; 1004=visCmdFileSave; 1005=visCmdFileSaveAs; 1006=visCmdFileSaveWorkspace; 1007=visCmdFileImport; 1009=visCmdFileSummaryInfoDlg; and 508 more.			

			[Branch: UI&View] StatusBarltems			
A set	of StatusBarItems					
P/M	Name	RW H	Syntax/Type			
Conta	inee Mgt					
Prop	_NewEnum	R	returns {Unknown} = _NewEnum ; Property type: Unknown			
	Count	R	returns {I4} = Count ; Property type: Integer; Count			
	Item	R	returns {IVStatusBarItem} = Item(lIndex {I4 [In]}) ; Property type: IVStatusBarItem			
Meth	Add		returns {IVStatusBarItem} = Add			
	AddAt		returns {IVStatusBarItem} = AddAt(lIndex {I4 [In]})			
Conta	Contained By					
Prop	Parent	R	returns {IVStatusBar} = Parent ; Property type: IVStatusBar			
	Parentitem	R	returns {IVStatusBarItem} = ParentItem ; Property type: IVStatusBarItem			

			[Branch: UI&View] StatusBars
Collec	ction of StatusBar of	bjects covering	all Visio contexts
P/M	Name	RW H	Syntax/Type
Conta	ainee Mgt		
Prop	_NewEnum	R	returns {Unknown} = _NewEnum ; Property type: Unknown
	Count	R	returns {I4} = Count ; Property type: Integer; Count
	Item	R	returns {IVStatusBar} = Item(lIndex {I4 [In]}) ; Property type: IVStatusBar
	ItemAtID	R	returns {IVStatusBar} = ItemAtID(IID {I4 [In]}) ; Property type: IVStatusBar
Meth	Add		returns {IVStatusBar} = Add
	AddAtID		returns {IVStatusBar} = AddAtID(IID {I4 [In]})
Conta	ained By	·	
Prop	Parent	R	returns {IVUIObject} = Parent ; Property type: IVUIObject

		[Branch: UI&View] Toolbar			
A single toolbar, managing a single ToolbarItems object					
Name	RW H	Syntax/Type			
der/Label/Type	_				
Builtln	R	returns {Bool} = BuiltIn ; Property type: Boolean			
Caption	RW	returns {BStr} = Caption ; Property type: String			
Index	R	returns {I4} = Index ; Property type: Integer; Index			
Rowlndex	RW	returns {I2} = RowIndex ; Property type: Integer; Index			
t Life/Enable/Visible/St	ate				
Enabled	RW	returns {Bool} = Enabled ; Property type: Boolean			
Visible	RW	returns {Bool} = Visible ; Property type: Boolean			
Delete		Delete			
Attributes					
Default	RH	returns {BStr} = Default ; Property type: String			
Protection	RW	returns {I2} = Protection; Property type: Integer; VisUIBarProtection; Values: 0=visBarNoProtection; 1=visBarNoCustomize; 2=visBarNoResize; 4=visBarNoMove; 16=visBarNoChange-Dock; 32=visBarNoVerticalDock; 64=visBarNoHorizontalDock;			
ainee Mgt	*				
Toolbaritems	R	returns {IVToolbarItems} = ToolbarItems ; Property type: IVToolbarItems			
ained By					
Parent	R	returns {IVToolbars} = Parent ; Property type: IVToolbars			
arance	<u>'</u>				
Height	RW	returns {I2} = Height ; Property type: Integer; Pixels			
Left	RW	returns {I2} = Left ; Property type: Integer; Pixels			
Position	RW	returns {I2} = Position ; Property type: Integer; VisUIBarPosition; Values: 0=visBarLeft; 1=visBarTop; 2=visBarRight; 3=visBarBottom; 4=visBarFloating; 5=visBarPopup; 6=visBarMenu;			
Тор	RW	returns {I2} = Top ; Property type: Integer; Pixels			
	Name der/Label/Type BuiltIn Caption Index RowIndex et Life/Enable/Visible/St Enabled Visible Delete Attributes Default Protection ainee Mgt Toolbarltems ained By Parent arance Height Left	Name RW H der/Label/Type BuiltIn R Caption RW Index R RowIndex RW et Life/Enable/Visible/State Enabled RW Visible RW Delete Attributes Default RH Protection RW ainee Mgt Toolbarltems R ained By Parent R arance Height RW Left RW			

			[Branch: UI&View] ToolbarItem				
A sin	A single toolbar button or other control.						
P/M	Name	RW H	Syntax/Type				
ld/Or	der/Label/Type						
Prop	Builtln	R	returns {Bool} = BuiltIn ; Property type: Boolean				
	Caption	RW	returns {BStr} = Caption ; Property type: String				
	CntrlID	RWH	returns {I2} = CntrlID ; Property type: Integer; VisUICtrlIDs; Values: 1=visCtrlIDOPEN; 2=visCtrlIDOPENSTEN; 3=visCtrlIDSAVE; 4=visCtrlIDPRINT; 5=visCtrlIDPREVIEW; 6=visCtrlIDCUT; 7=visCtrlIDCOPY; 8=visCtrlIDPASTE; 9=visCtrlIDCLEAR; 10=visCtrlIDUNDO; and 184 more.				
	CntrlType	RW	returns {12} = CntrlType ; Property type: Integer; VisUICtrlTypes; Values: 0=visCtrlTypeEND; 1=visCtrlTypeSTATE; 2=visCtrlTypeBUTTON; 3=visCtrlTypeSTATE_BUTTON; 4=visCtrlTypeHIERBUTTON; 5=visCtrlTypeSTATE_HIERBUTTON; 8=visCtrlTypeDROPBUTTON; 9=visCtrlTypeSTATE_DROPBUTTON; 16=visCtrlTypePALETTEBUTTON; 16=visCtrlTypeSPLITBUTTON_MRU_COLOR; and 24 more.				
	Index	R	returns {I4} = Index ; Property type: Integer; Index				
	IsHierarchical	R	returns {I2} = IsHierarchical ; Property type: Integer; Bool				
	IsSeparator	RH	returns {I2} = IsSeparator ; Property type: Integer; Bool				
Obje	ct Life/Enable/Visible	e/State					
Prop	Enabled	RW	returns {Bool} = Enabled ; Property type: Boolean				
	State	RW	returns {I2} = State ; Property type: Integer; VisUIButtonState; Values: -1=visButtonDown; 0=visButtonUp; 2=visButtonMixed;				
	Visible	RW	returns {Bool} = Visible ; Property type: Boolean				
Meth	Delete		Delete				

			[Branch: UI&View] ToolbarItem (Continued)
A sing	gle toolbar button or o	ther control.	
P/M	Name	RW H	Syntax/Type
Core	Attributes		
Prop	ActionText	RW	returns {BStr} = ActionText ; Property type: String
	BeginGroup	RW	returns {Bool} = BeginGroup ; Property type: Boolean
	CmdNum	RW	returns {I2} = CmdNum ; Property type: Integer; VisUICmds; Values: 0=visCmdHierarchical; 0=visCmdFirst; 1001=visCmdFileNew; 1002=visCmdFileOpen; 1003=visCmdFileClose; 1004=visCmdFileSave; 1005=visCmdFileSaveAs; 1006=visCmdFileSaveWorkspace; 1007=visCmdFileImport; 1009=visCmdFileSummaryInfoDlg; and 508 more.
	Default	RH	returns {BStr} = Default ; Property type: String
	Priority	RWH	returns {I2} = Priority ; Property type: Integer; -
	TypeSpecific1	RW	returns {I2} = TypeSpecific1 ; Property type: Integer; varies
	TypeSpecific2	RW	returns {I2} = TypeSpecific2 ; Property type: Integer; varies
Conta	ainee Mgt		
Prop	Toolbaritems	R	returns {IVToolbarItems} = ToolbarItems ; Property type: IVToolbarItems
Conta	ained By	,	
Prop	Parent	R	returns {IVToolbarItems} = Parent ; Property type: IVToolbarItems
Appe	arance	,	
Prop	PaletteWidth	RW	returns {I2} = PaletteWidth ; Property type: Integer; Pixels
	Spacing	RWH	returns {12} = Spacing ; Property type: Integer; VisUISpacingTypes; Values: 0=visCtrlSpacingNONE; 1=visCtrlSpacingVARIABLE_BEFORE; 2=visCtrlSpacingVARIABLE_AFTER; 4=visCtrlSpacingFIXED_BEFORE; 8=visCtrlSpacingFIXED_AFTER; 16=visCtrlSpacingNEW_ROW; 32=visCtrlSpacingTB_NOTFIXED; 64=visCtrlSpacingPALETTERIGHT; 80=visCtrlSpacingNEW_ROW_PALETTERIGHT;
	Style	RW	returns {I2} = Style ; Property type: Integer; VisUIButtonStyle; Values: 0=visButtonAutomatic; 1=visButtonIcon; 2=visButtonCaption; 3=visButtonIconandCaption;
	Width	RW	returns {I2} = Width ; Property type: Integer; Pixels
Icon			
Prop	FaceID	RW	returns {12} = FaceID ; Property type: Integer; VisUIIconIDs; Values: 0=visIconIXNEW; 1=visIconIXOPEN; 2=visIconIXOPENSTENCIL; 3=visIconIXSAVE; 4=visIconIXPRINT; 5=visIconIXPRINTPREVIEW; 6=visIconIXCUT; 7=visIconIXCOPY; 8=visIconIXPASTE; 9=visIconIXCLEAR; and 236 more.
Meth	IconFileName		IconFileName IconFileName {BStr [In]}
AddO	nFunctionality		
Prop	AddOnArgs	RW	returns {BStr} = AddOnArgs ; Property type: String
	AddOnName	RW	returns {BStr} = AddOnName ; Property type: String
Help			
Prop	HelpContextID	RWH	returns {I2} = HelpContextID ; Property type: Integer; ID
	HelpFile	RWH	returns {BStr} = HelpFile ; Property type: String
	MiniHelp	RWH	returns {BStr} = MiniHelp ; Property type: String

			[Branch: UI&View] ToolbarItems
A coll	ection of ToolbarIten	n objects	
P/M	Name	RW H	Syntax/Type
Conta	ninee Mgt		
Prop	_NewEnum	R	returns {Unknown} = _NewEnum ; Property type: Unknown
	Count	R	returns {I4} = Count ; Property type: Integer; Count
	Item	R	returns {IVToolbarItem} = Item(lIndex {I4 [In]}) ; Property type: IVToolbarItem
Meth	Add		returns {IVToolbarItem} = Add
	AddAt		returns {IVToolbarItem} = AddAt(lIndex {I4 [In]})
Conta	nined By		
Prop	Parent	R	returns {IVToolbar} = Parent ; Property type: IVToolbar
	ParentItem	R	returns {IVToolbarItem} = ParentItem ; Property type: IVToolbarItem

			[Branch: UI&View]	Toolbars		
Collec	ction of Toolbar object	ts				
P/M	Name	RW H	Syntax/Type			
Conta	ninee Mgt	"				
Prop	_NewEnum	R	returns {Unknown} = _NewEnum ; Property type: Unknown			
	Count	R	returns {I4} = Count ; Property type: Integer; Count			
	Item	R	returns {IVToolbar} = Item(lIndex {I4 [In]}) ; Property type: IVToolbar			
Meth	Add		returns {IVToolbar} = Add			
	AddAt		returns {IVToolbar} = AddAt(lIndex {I4 [In]})			
Conta	Contained By					
Prop	Parent	R	returns {IVToolbarSet} = Parent ; Property type: IVToolbarSet			

			[Branch: UI&View] ToolbarSet		
Mana	ges a single Toolbars	object applica	able to a particular Visio context		
P/M	Name	RW H	Syntax/Type		
Id/Ord	ler/Label/Type				
Prop	Caption	RW	returns {BStr} = Caption ; Property type: String		
	SetID	R	returns {14} = SetID ; Property type: Integer; VisUIObjSets; Values: 1=visUIObjSetNoDocument; 2=visUIObjSetDrawing; 3=visUIObjSetStencil; 4=visUIObjSetShapeSheet; 5=visUIObjSetIcon; 6=visUIObjSetInPlace; 7=visUIObjSetPrintPreview; 8=visUIObjSetText; 9=visUIObjSetCntx_DrawObjSel; 10=visUIObjSetCntx_DrawOleObjSel; and 63 more.		
Objec	t Life/Enable/Visible	e/State			
Meth	Delete		Delete		
Core	Attributes	·			
Prop	Default	RH	returns {BStr} = Default ; Property type: String		
Conta	Containee Mgt				
Prop	Toolbars	R	returns {IVToolbars} = Toolbars ; Property type: IVToolbars		
Conta	Contained By				
Prop	Parent	R	returns {IVToolbarSets} = Parent ; Property type: IVToolbarSets		

			[Branch: UI&View] ToolbarSets
Collec	ction of ToolbarSet o	bjects covering	all Visio contexts
P/M	Name	RW H	Syntax/Type
Conta	inee Mgt		
Prop	_NewEnum	R	returns {Unknown} = _NewEnum ; Property type: Unknown
	Count	R	returns {I4} = Count ; Property type: Integer; Count
	Item	R	returns {IVToolbarSet} = Item(lIndex {I4 [In]}) ; Property type: IVToolbarSet
	ItemAtID	R	returns {IVToolbarSet} = ItemAtID(lID {I4 [In]}) ; Property type: IVToolbarSet
Meth Add returns {IVToolbarSet} = Add		returns {IVToolbarSet} = Add	
	AddAtID		returns {IVToolbarSet} = AddAtID(lID {I4 [In]})
Conta	ined By	<u>.</u>	
Prop	Parent	R	returns {IVUIObject} = Parent ; Property type: IVUIObject

			[Branch: UI&View] UIObject
Holde	r for ToolbarSets, MenuSe	ets, Status	BBars and AccelTables
P/M	Name	RW H	Syntax/Type
Id/Ord	ler/Label/Type		
Prop	Name	RW	returns {BStr} = Name ; Property type: String
Behav	viorVariants		
Prop	DisplayKeysInTooltips	RW	returns {Bool} = DisplayKeysInTooltips ; Property type: Boolean
	DisplayTooltips	RW	returns {Bool} = DisplayTooltips ; Property type: Boolean
	MenuAnimationStyle	RW	returns {I2} = MenuAnimationStyle ; Property type: Integer; VisUIMenuAnimation; Values: 0=visMenuAnimationNone; 1=visMenuAnimationRandom; 2=visMenuAnimationUnfold; 3=visMenuAnimationSlide;
Objec	t Life/Enable/Visible/Sta	te	
Prop	Clone	R	returns {IVUIObject} = Clone ; Property type: IVUIObject
Meth	Delete	Н	Delete
Core	Attributes		
Prop	Default	RH	returns {BStr} = Default ; Property type: String
Meth	UpdateUI		UpdateUI
Conta	inee Mgt		
Prop	AccelTables	R	returns {IVAccelTables} = AccelTables ; Property type: IVAccelTables
	MenuSets	R	returns {IVMenuSets} = MenuSets ; Property type: IVMenuSets
	StatusBars	RH	returns {IVStatusBars} = StatusBars ; Property type: IVStatusBars
	ToolbarSets	R	returns {IVToolbarSets} = ToolbarSets ; Property type: IVToolbarSets
Appea	arance		
Prop	LargeButtons	RW	returns {Bool} = LargeButtons ; Property type: Boolean
File/D	ir		
Meth	LoadFromFile		LoadFromFile FileName {BStr [In]}
	SaveToFile		SaveToFile FileName {BStr [In]}
Obsol	ete		
Prop	Flavor	RWH	returns {12} = Flavor ; Property type: Integer; obsolete

			[Branch: UI&View] Window
Interf	ace to a window		
P/M	Name	RW H	Syntax/Type
ld/Or	der/Label/Type		
Prop	Caption	RW	returns {BStr} = Caption ; Property type: String
	ID	R	returns {I4} = ID ; Property type: Integer; ID
	Index	R	returns {I2} = Index ; Property type: Integer; Index
	ObjectType	R	returns {12} = ObjectType ; Property type: Integer; =visObjTypeWindow
	SubType	R	returns {I2} = SubType ; Property type: Integer; VisWinTypes_SubType; Values: 64=visMaster-Win; 96=visMasterGroupWin; 128=visPageWin; 160=visPageGroupWin;
	Туре	R	returns {12} = Type ; Property type: Integer; VisWinTypes_Type; Values: 0=visWinOther; 1=visDrawing; 2=visStencil; 3=visSheet; 4=visIcon; 5=visApplication; 6=visAnchorBarBuiltIn; 7=visDockedStencilBuiltIn; 8=visDrawingAddon; 9=visStencilAddon; and 2 more.
	WindowHandle	RH	returns {12} = WindowHandle ; Property type: Integer; Handle
	WindowHandle32	R	returns {14} = WindowHandle32 ; Property type: Integer; Handle

			[Branch: UI&View] Window (Continued)
Interfa	ce to a window		
P/M	Name	RW H	Syntax/Type
Objec	t Life/Enable/Visible/Sta	ite	
Prop	InPlace	R	returns {Bool} = InPlace ; Property type: Boolean
	IsEditingOLE	R	returns {Bool} = IsEditingOLE ; Property type: Boolean
	IsEditingText	R	returns {Bool} = IsEditingText ; Property type: Boolean
	MergeCaption	RW	returns {BStr} = MergeCaption ; Property type: String
	MergeClass	RW	returns {BStr} = MergeClass ; Property type: String
	MergeID	RW	returns {BStr} = MergeID ; Property type: String
	MergePosition	RW	returns {I4} = MergePosition ; Property type: Integer; -
	ReviewerMarkupVisi- ble	RW	returns {Bool} = ReviewerMarkupVisible(ReviewerID {I4 []}) ; Property type: Boolean
	ShowPageTabs	RW	returns {Bool} = ShowPageTabs ; Property type: Boolean
	Stat	R	returns {I2} = Stat ; Property type: Integer; VisStatCodes; Values: 0=visStatNormal; 1=vis-StatAppHasShutdown; 2=visStatDeleted; 4=visStatTouched; 8=visStatClosed; 16=visStatSuspended;
	Visible	RW	returns {Bool} = Visible ; Property type: Boolean
	WindowState	RW	returns {14} = WindowState ; Property type: Integer; VisWindowStates; Values: 0=visWSNone; 1=visWSDockedLeft; 2=visWSDockedTop; 4=visWSDockedRight; 8=visWSDockedBottom; 16=visWSFloating; 32=visWSAnchorLeft; 64=visWSAnchorTop; 128=visWSAnchorRight; 256=visWSAnchorBottom; and 7 more.
Meth	Activate		Activate
	Close		Close
	Delete	Н	Delete
Core	Attributes	'	
Prop	AllowEditing	RW	returns {Bool} = AllowEditing ; Property type: Boolean
	BackgroundColor	RW	returns {OLE_COLOR} = BackgroundColor ; Property type: OLE_COLOR
	BackgroundColorGra- dient	RW	returns {OLE_COLOR} = BackgroundColorGradient ; Property type: OLE_COLOR
	PageTabWidth	RW	returns {R8} = PageTabWidth ; Property type: Real
	ScrollLock	RW	returns {Bool} = ScrollLock ; Property type: Boolean
	ShowConnectPoints	RW	returns {12} = ShowConnectPoints ; Property type: Integer; Bool
	ShowGrid	RW	returns {I2} = ShowGrid ; Property type: Integer; Bool
	ShowGuides	RW	returns {I2} = ShowGuides ; Property type: Integer; Bool
	ShowPageBreaks	RW	returns {I2} = ShowPageBreaks ; Property type: Integer; Bool
	ShowPageOutline	RW	returns {Bool} = ShowPageOutline ; Property type: Boolean
	ShowRulers	RW	returns {I2} = ShowRulers ; Property type: Integer; Bool
	ShowScrollBars	RW	returns {12} = ShowScrollBars ; Property type: Integer; Bool
	ViewFit	RW	returns {I4} = ViewFit; Property type: Integer; VisWindowFit; Values: 0=visFitNone; 1=vis-FitPage; 2=visFitWidth;
	Zoom	RW	returns {R8} = Zoom ; Property type: Real
	ZoomBehavior	RW	returns {VisZoomBehavior} = ZoomBehavior; Property type: VisZoomBehavior
	ZoomLock	RW	returns {Bool} = ZoomLock ; Property type: Boolean
Meth	GetViewRect		GetViewRect pdLeft {R8 [Out]}, pdTop {R8 [Out]}, pdWidth {R8 [Out]}, pdHeight {R8 [Out]}
	GetWindowRect		GetWindowRect pnLeft {I4 [Out]}, pnTop {I4 [Out]}, pnWidth {I4 [Out]}, pnHeight {I4 [Out]}
	Scroll		Scroll nxFlags {14 [In]}, nyFlags {14 [In]}
	ScrollViewTo		ScrollViewTo x {R8 [In]}, y {R8 [In]}
	SetViewRect	1	SetViewRect dLeft {R8 [In]}, dTop {R8 [In]}, dWidth {R8 [In]}, dHeight {R8 [In]}
	SetWindowRect		SetWindowRect nLeft [14 [In]], nTop [14 [In]], nWidth [14 [In]], nHeight [14 [In]]
Core	Associations		and the fact that the fact tha
Prop	Master	R	returns {Variant} = Master ; Property type: Variant
	MasterShortcut	R	returns {IVMasterShortcut} = MasterShortcut; Property type: IVMasterShortcut
Meth	DockedStencils	1	DockedStencils NameArray {SafeArray BStr [Out]}
			Dou [Out.]]

Interface to a window				[Branch: UI&View] Window (Continued)
	Interfa	ace to a window		<u> </u>
Document	P/M	Name	RW H	Syntax/Type
Page FW	Core	Associations: Diagram	Data	
PageAsObj RH	Prop	Document	R	returns {IVDocument} = Document ; Property type: IVDocument
PageFromName		Page	RW	
SelectedCell		PageAsObj	RH	returns {IVPage} = PageAsObj ; Property type: IVPage
		PageFromName	WH	PageFromName = {BStr} ; Property type: None
SelectdText		SelectedCell	R	returns {IVCell} = SelectedCell ; Property type: IVCell
Selection		SelectedMasters	R	returns {SafeArray Dispatch} = SelectedMasters ; Property type: Dispatch
Shape		SelectedText	RW	returns {IVCharacters} = SelectedText ; Property type: IVCharacters
Methodology		Selection	RW	returns {IVSelection} = Selection ; Property type: IVSelection
Combine		Shape	R	returns {IVShape} = Shape ; Property type: IVShape
DeselectAll	Meth	AddToGroup	Н	AddToGroup
Duplicate		Combine	Н	Combine
Fragment		DeselectAll		DeselectAll
Group		Duplicate	Н	Duplicate
Intersect		Fragment	Н	Fragment
		Group	Н	Group
RemoveFromGroup H RemoveFromGroup		Intersect	Н	Intersect
Select Select SheetObject {IVShape [In]}, SelectAction {12 [In]} SelectAll SelectAll Subtract H Subtract Trim		Join	Н	Join
SelectAll SelectAll Subtract H Subtract		RemoveFromGroup	Н	RemoveFromGroup
Subtract		Select		Select SheetObject {IVShape [In]}, SelectAction {I2 [In]}
Trim		SelectAll		SelectAll
Union H Union Core Associations: Windows Meth NewWindow returns {IVWindow} = NewWindow Contained By Property type: IVApplication Property type: IVApplication Parent R returns {IVWindows} = Parent ; Property type: IVWindows ParentWindow R returns {IVWindows} = ParentWindow ; Property type: IVWindows Icon Icon Clipboard Copy H Copy Cut H Cut Paste L Event Set ons/Commands EventList R returns {IVEventList} = EventList ; Property type: IVEventList		Subtract	Н	Subtract
Core Associations: Windows Meth NewWindow returns {IVWindow} = NewWindow Contained By Proper Bapplication R returns {IVApplication} = Application Parent Property type: IVApplication Parent R returns {IVWindows} = Parent Property type: IVWindows ParentWindow R returns {IVWindow} = ParentWindow Property type: IVWindows ParentWindows R returns {IVWindows} = Windows Property type: IVWindows Property type: I		Trim	Н	Trim
Meth NewWindow returns {IVWindow} = NewWindow Contained By Property Bapplication R returns {IVApplication} = Application ; Property type: IVApplication Parent R returns {IVWindows} = Parent ; Property type: IVWindows ParentWindow R returns {IVWindow} = ParentWindow ; Property type: IVWindows Windows Property type: IVWindows Icon H returns {IPictureDisp} = Icon Clipboard Meth Copy H Copy Cut H Cut Paste H Paste Events/Actions/Commands Events/Actions/Commands R returns {IVEventList} = EventList ; Property type: IVEventList		Union	Н	Union
Propage Application R returns {IVApplication} = Application ; Property type: IVApplication Parent R returns {IVWindows} = Parent ; Property type: IVWindows ParentWindow R returns {IVWindows} = ParentWindow ; Property type: IVWindows ParentWindow ParentWindow Property type: IVWindows Property type: IVWindows	Core	Associations: Window	s	
Property Application R returns {IVApplication} = Application ; Property type: IVApplication Parent R returns {IVWindows} = Parent ; Property type: IVWindows ParentWindow R returns {IVWindow} = ParentWindow ; Property type: IVWindows Windows R returns {IVWindows} = Windows ; Property type: IVWindows Icon Clipboard Cut H Copy Cut H Cut Paste H Paste Events/Actions/Commands Prop EventList R returns {IVEventList} = EventList ; Property type: IVEventList	Meth	NewWindow		returns {IVWindow} = NewWindow
Parent R returns {IVWindows} = Parent ; Property type: IVWindows ParentWindow ParentWindow Property type: IVWindows Property type: IVWindows	Conta	ined By		
ParentWindow	Prop	Application	R	returns {IVApplication} = Application ; Property type: IVApplication
Windows R returns {IVWindows} = Windows ; Property type: IVWindows Icon H returns {IPictureDisp} = Icon Clipboard Meth Paste H Copy Cut H Cut Paste H Paste Events/Actions/Commands Prop EventList R returns {IVEventList} = EventList ; Property type: IVEventList		Parent	R	returns {IVWindows} = Parent ; Property type: IVWindows
Icon H returns {IPictureDisp} = Icon Clipboard Meth Copy H Copy Cut H Cut Paste H Paste Events/Actions/Commands Prop EventList R returns {IVEventList} = EventList Property type: IVEventList		ParentWindow	R	returns {IVWindow} = ParentWindow; Property type: IVWindow
Icon H returns {IPictureDisp} = Icon Clipboard Meth Copy H Copy Cut H Cut Paste H Paste Events/Actions/Commands Prop EventList R returns {IVEventList} = EventList ; Property type: IVEventList		Windows	R	returns {IVWindows} = Windows ; Property type: IVWindows
Clipboard Meth Copy H Copy Cut H Cut Paste H Paste Events/Actions/Commands Prop EventList R returns {IVEventList} = EventList ; Property type: IVEventList	lcon			
Meth Copy Copy H Copy Cut H Cut Paste H Paste Events/Actions/Commands Frequency Frequency From EventList R returns {IVEventList} = EventList ; Property type: IVEventList		Icon	Н	returns {IPictureDisp} = Icon
Cut H Cut Paste H Paste Events/Actions/Commands Frop EventList R returns {IVEventList} = EventList ; Property type: IVEventList	Clipbe	oard		
Paste H Paste Events/Actions/Commands Prop EventList R returns {IVEventList} = EventList ; Property type: IVEventList	Meth			Сору
Events/Actions/Commands Prop EventList R returns {IVEventList} = EventList ; Property type: IVEventList		Cut	Н	Cut
Prop EventList R returns {IVEventList} = EventList ; Property type: IVEventList			Н	Paste
	Event	s/Actions/Commands		
PersistsEvents R returns {I2} = PersistsEvents ; Property type: Integer; Bool	Prop	EventList	R	returns {IVEventList} = EventList ; Property type: IVEventList
		PersistsEvents	R	returns {I2} = PersistsEvents ; Property type: Integer; Bool

	[Branch: UI&View]	EWindow
Event DispInterface. See Events Chapter for details.		

			[Branch: UI&View] Windows		
Collec	Collection of WIndow objects				
P/M	Name	RW H	Syntax/Type		
Id/Ord	der/Label/Type				
Prop	ObjectType	R	returns {12} = ObjectType ; Property type: Integer; =visObjTypeWindows		
Conta	ninee Mgt				
Prop	_NewEnum	R	returns {Unknown} = _NewEnum ; Property type: Unknown		
	Count	R	returns {I2} = Count ; Property type: Integer; Count		
	Item	R	returns {IVWindow} = Item(Index {I2 [In]}) ; Property type: IVWindow		
	ItemEx	R	returns {IVWindow} = ItemEx(CaptionOrIndex {Variant [In]}) ; Property type: IVWindow		
	ItemFromID	R	returns {IVWindow} = ItemFromID(nID {I4 [In]}) ; Property type: IVWindow		
Meth	Add		returns {IVWindow} = Add(bstrCaption {Variant [In Optional]}, nFlags {Variant [In Optional]}, nType {Variant [In Optional]}, nLeft {Variant [In Optional]}, nTop {Variant [In Optional]}, nWidth {Variant [In Optional]}, nHeight {Variant [In Optional]}, bstrMergeID {Variant [In Optional]}, bstrMergeClass {Variant [In Optional]}, nMergePosition {Variant [In Optional]})		
	Add_WithoutMergeAr gs	Н	$\label{eq:continuous_series} $$ returns {IVWindow} = Add_WithoutMergeArgs(bstrCaption {Variant [In Optional]}, nFlags {Variant [In Optional]}, nType {Variant [In Optional]}, nLeft {Variant [In Optional]}, nTop {Variant [In Optional]}, nWidth {Variant [In Optional]}, nHeight {Variant [In Optional]})$		
	Arrange		Arrange nArrangeFlags {Variant [In Optional]}		
Conta	nined By				
Prop	Application	R	returns {IVApplication} = Application ; Property type: IVApplication		
Event	Events/Actions/Commands				
Prop	EventList	R	returns {IVEventList} = EventList ; Property type: IVEventList		
	PersistsEvents	R	returns {12} = PersistsEvents ; Property type: Integer; Bool		
Unkno	own/Undocumented				
Meth	VoidArrange	Н	VoidArrange		

	[Branch: UI&View]	EWindows
Event DispInterface. See Events Chapter for details.		

			[Branch: Util] Addon	
Keeps	s track of a Visio add-on a	pplication	or VSL	
P/M	Name	RW H	Syntax/Type	
ld/Ord	der/Label/Type			
Prop	Index	R	returns {I2} = Index ; Property type: Integer; Index	
	Name	R	returns {BStr} = Name ; Property type: String	
	NameU	R	returns {BStr} = NameU ; Property type: String	
	ObjectType	R	returns {I2} = ObjectType ; Property type: Integer; =visObjTypeAddon	
Objec	t Life/Enable/Visible/Sta	te		
Prop	Enabled	R	returns {12} = Enabled ; Property type: Integer; Bool	
Conta	Contained By			
Prop	Application	R	returns {IVApplication} = Application ; Property type: IVApplication	
AddO	AddOnFunctionality			
Meth	Run		Run ArgString {BStr [In]}	

			[Branch: Util] Addons
Collec	tion of Addons		
P/M	Name	RW H	Syntax/Type
Id/Ord	ler/Label/Type		
Prop	ObjectType	R	returns {I2} = ObjectType ; Property type: Integer; =visObjTypeAddons
Conta	inee Mgt	•	
Prop	_NewEnum	R	returns {Unknown} = _NewEnum ; Property type: Unknown
	Count	R	returns {I2} = Count ; Property type: Integer; Count
	Item	R	returns {IVAddon} = Item(NameOrIndex {Variant [In]}) ; Property type: IVAddon
	ItemU	R	returns {IVAddon} = ItemU(NameOrIndex {Variant [In]}) ; Property type: IVAddon
Meth	Add		returns {IVAddon} = Add(FileName {BStr [In]})
	GetNames		GetNames NameArray {SafeArray BStr [Out]}
	GetNamesU		GetNamesU NameArray {SafeArray BStr [Out]}
Conta	ined By	•	
Prop	Application	R	returns {IVApplication} = Application ; Property type: IVApplication

			[Branch: Util] ApplicationSettings
Applic	ation-level settings		
P/M	Name	RW H	Syntax/Type
Id/Ord	der/Label/Type		
Prop	ObjectType	R	returns {VisObjectTypes} = ObjectType ; Property type: VisObjectTypes
Conta	nined By		
Prop	Application	R	returns {IVApplication} = Application; Property type: IVApplication
Appli	cation Behavior		
Prop	DefaultSaveFormat	RW	returns {VisDefaultSaveFormats} = DefaultSaveFormat ; Property type: VisDefaultSaveFormats
	DeveloperMode	RW	returns {Bool} = DeveloperMode ; Property type: Boolean
	KanaFindAndReplace	RW	returns {VisRegionalUIOptions} = KanaFindAndReplace ; Property type: VisRegionalUIOptions
	RecentFilesListSize	RW	returns {I4} = RecentFilesListSize ; Property type: Integer; -
	ShowFileOpenWarn-ings	RW	returns {Bool} = ShowFileOpenWarnings ; Property type: Boolean
	ShowFileSaveWarn-ings	RW	returns {Bool} = ShowFileSaveWarnings ; Property type: Boolean
	ShowStartupDialog	RW	returns {Bool} = ShowStartupDialog ; Property type: Boolean
	UndoLevels	RW	returns {I4} = UndoLevels ; Property type: Integer; Count
Envir	onment		
Prop	UserInitials	RW	returns {BStr} = UserInitials ; Property type: String
	UserName	RW	returns {BStr} = UserName ; Property type: String

			[Branch: Util] ApplicationSettings (Continued)
Applio	cation-level settings		
P/M	Name	RW H	Syntax/Type
Wind	ow Appearance		
Prop	AsianTextUI	RW	returns {VisRegionalUIOptions} = AsianTextUI ; Property type: VisRegionalUIOptions; Values: 0=VisRegionalUIOptionsHide; 1=VisRegionalUIOptionsShow; 65535=VisRegionalUIOptionsUseSystemSettings;
	ComplexTextUI	RW	returns {VisRegionalUIOptions} = ComplexTextUI ; Property type: VisRegionalUIOptions
	DrawingAids	RW	returns {Bool} = DrawingAids ; Property type: Boolean
	DrawingBackground- Color	RW	returns {OLE_COLOR} = DrawingBackgroundColor ; Property type: OLE_COLOR
	DrawingBackground- ColorGradient	RW	returns {OLE_COLOR} = DrawingBackgroundColorGradient ; Property type: OLE_COLOR
	DrawingPageColor	RW	returns {OLE_COLOR} = DrawingPageColor ; Property type: OLE_COLOR
	FullScreenBack- groundColor	RW	returns {OLE_COLOR} = FullScreenBackgroundColor ; Property type: OLE_COLOR
	HigherQualityShape- Display	RW	returns {Bool} = HigherQualityShapeDisplay ; Property type: Boolean
	PrintPreviewBack- groundColor	RW	returns {OLE_COLOR} = PrintPreviewBackgroundColor ; Property type: OLE_COLOR
	ShowChooseDrawing- TypePane	RW	returns {Bool} = ShowChooseDrawingTypePane ; Property type: Boolean
	ShowSmartTags	RW	returns {Bool} = ShowSmartTags ; Property type: Boolean
	SmoothDrawing	RW	returns {Bool} = SmoothDrawing ; Property type: Boolean
	StencilBackground- Color	RW	returns {OLE_COLOR} = StencilBackgroundColor ; Property type: OLE_COLOR
	StencilBackground- ColorGradient	RW	returns {OLE_COLOR} = StencilBackgroundColorGradient ; Property type: OLE_COLOR
	StencilCharactersPer- Line	RW	returns {I4} = StencilCharactersPerLine ; Property type: Integer; Count
	StencilLinesPerMas- ter	RW	returns {I4} = StencilLinesPerMaster ; Property type: Integer; Count
	StencilTextColor	RW	returns {OLE_COLOR} = StencilTextColor ; Property type: OLE_COLOR
	TextDisplayQuality	RW	returns {VisTextDisplayQualityTypes} = TextDisplayQuality ; Property type: VisTextDisplayQualityTypes

			[Branch: Util] ApplicationSettings (Continued)
Applio	cation-level settings		
P/M	Name	RW H	Syntax/Type
Wind	ow Behavior	•	
Prop	CenterSelection- OnZoom	RW	returns {Bool} = CenterSelectionOnZoom ; Property type: Boolean
	ConnectorSplittingEnabled	RW	returns {Bool} = ConnectorSplittingEnabled ; Property type: Boolean
	FreeformDrawingPrecision	RW	returns {I4} = FreeformDrawingPrecision ; Property type: Integer; ?
	FreeformDraw-ingSmoothing	RW	returns {I4} = FreeformDrawingSmoothing ; Property type: Integer; ?
	SnapStrengthExtensionsX	RW	returns {I4} = SnapStrengthExtensionsX ; Property type: Integer; -
	SnapStrengthExtensionsY	RW	returns {I4} = SnapStrengthExtensionsY ; Property type: Integer; -
	SnapStrengthGeometryX	RW	returns {I4} = SnapStrengthGeometryX ; Property type: Integer; -
	SnapStrengthGeometryY	RW	returns {I4} = SnapStrengthGeometryY ; Property type: Integer; -
	SnapStrengthGridX	RW	returns {I4} = SnapStrengthGridX ; Property type: Integer; -
	SnapStrengthGridY	RW	returns {I4} = SnapStrengthGridY ; Property type: Integer; -
	SnapStrengthGuidesX	RW	returns {I4} = SnapStrengthGuidesX ; Property type: Integer; -
	SnapStrengthGuidesY	RW	returns {I4} = SnapStrengthGuidesY ; Property type: Integer; -
	SnapStrengthPointsX	RW	returns {I4} = SnapStrengthPointsX ; Property type: Integer; -
	SnapStrengthPointsY	RW	returns {I4} = SnapStrengthPointsY; Property type: Integer; -
	SnapStrengthRulerX	RW	returns {I4} = SnapStrengthRulerX ; Property type: Integer; -
	SnapStrengthRulerY	RW	returns {I4} = SnapStrengthRulerY ; Property type: Integer; -
	ZoomOnRoll	RW	returns {Bool} = ZoomOnRoll ; Property type: Boolean

			[Branch: Util] Event
A sing	gle event notification	subscription u	sed in the EventList.mechanism.
P/M	Name	RW H	Syntax/Type
ld/Ord	der/Label/Type		
Prop	ID	R	returns {I4} = ID ; Property type: Integer; ID
	Index	R	returns {I2} = Index ; Property type: Integer; Index
	ObjectType	R	returns {I2} = ObjectType ; Property type: Integer; =visObjTypeEvent
Objec	t Life/Enable/Visibl	e/State	
Prop	Enabled	RW	returns {I2} = Enabled ; Property type: Integer; Bool
Meth	Delete		Delete
Core Attributes			
Prop	Action	RW	returns {I2} = Action ; Property type: Integer; VisEventCodes_Action; Values: 1=visAct-CodeRunAddon; 2=visActCodeAdvise;
	Event	RW	returns {I2} = Event ; Property type: Integer; VisEventCodes; Values: -1=visEvtIDInval; -1=visScopeIDInval; 0=visEvtCodeInval; 0=visEvtIdMostRecent; 1=visEvtAppActivate; 1=visEvtCodeCreate; 1=visEvtCodeDocCreate; 1=visEvtWindow; 2=visEvtCodeDocOpen; 2=visEvtAppDeactivate; and 78 more.
	EventList	R	returns {IVEventList} = EventList ; Property type: IVEventList
	Persistable	R	returns {I2} = Persistable ; Property type: Integer; Bool
	Persistent	RW	returns {I2} = Persistent ; Property type: Integer; Bool
	Target	RW	returns {BStr} = Target ; Property type: String
	TargetArgs	RW	returns {BStr} = TargetArgs ; Property type: String

			[Branch: Util]	Event (Continued)
A sing	le event notification subs	cription us	ed in the EventList.mechanism.	
P/M	Name	RW H	Syntax/Type	
Meth	Trigger		Trigger ContextString {BStr [In]}	
Conta	ined By			
Prop	Application	R	returns {IVApplication} = Application ; Property type: IVApplication	
Event Filters				
Meth	GetFilterCommands		returns {SafeArray I4} = GetFilterCommands	
	GetFilterObjects		returns {SafeArray I4} = GetFilterObjects	
	GetFilterSRC		returns {SafeArray I2} = GetFilterSRC	
	SetFilterCommands		SetFilterCommands Commands {SafeArray I4 [In]}	
	SetFilterObjects		SetFilterObjects Objects {SafeArray I4 [In]}	
	SetFilterSRC		SetFilterSRC SRCStream {SafeArray I2 [In]}	

			[Branch: Util] EventList	
List of	f event subscriptions for	this object,	including Add/AddAvise and WithEvent subscriptions	
P/M	Name	RW H	Syntax/Type	
Id/Ord	der/Label/Type			
Prop	ObjectType	R	returns {12} = ObjectType ; Property type: Integer; =visObjTypeEventList	
Conta	ninee Mgt			
Prop	_NewEnum	R	returns {Unknown} = _NewEnum ; Property type: Unknown	
	Count	R	returns {12} = Count ; Property type: Integer; Count	
	Item	R	$returns \{IVEvent\} = Item(Index \{I2 [In]\})$; Property type: IVEvent	
	ItemFromID	R	returns {IVEvent} = ItemFromID(ObjectID {I4 [In]}) ; Property type: IVEvent	
Meth	Add		$\label{eq:continuity} returns \{ IVEvent \} = Add(EventCode \{ I2 [In] \}, Action \{ I2 [In] \}, Target \{ BStr [In] \}, TargetArgs \{ BStr [In] \})$	
	AddAdvise		<pre>returns {IVEvent} = AddAdvise(EventCode {I2 [In]}, SinkIUnkOrIDisp {Variant [In]}, IIDSink {BStr [In]}, TargetArgs {BStr [In]})</pre>	
Conta	Contained By			
Prop	Application	R	returns {IVApplication} = Application ; Property type: IVApplication	

			[Branch: Util] Extender
Define	es the Shape-like properti	es and me	ethods that Visio adds to an Active X control embedded in a Visio document
P/M	Name	RW H	Syntax/Type
ld/Ord	der/Label/Type		
Prop	ClassID	R	returns {BStr} = ClassID ; Property type: String
	Name	RW	returns {BStr} = Name ; Property type: String
	NameID	R	returns {BStr} = NameID ; Property type: String
	ProgID	R	returns {BStr} = ProgID ; Property type: String
	UniqueID	R	returns {BStr} = UniqueID(fUniqueID {I2 [In]}) ; Property type: String
Meth	Index	Н	Index
Object Life/Enable/Visible/State			
Meth	Delete	Н	Delete

			[Branch: Util] Extender (Continued
Define	es the Shape-like propert	ies and m	ethods that Visio adds to an Active X control embedded in a Visio document
P/M	Name	RW H	Syntax/Type
Core	Associations		
Prop	Connects	R	returns {IVConnects} = Connects ; Property type: IVConnects
	FromConnects	R	returns {IVConnects} = FromConnects ; Property type: IVConnects
	Layer	R	returns {IVLayer} = Layer(Index {I2 [In]}) ; Property type: IVLayer
	LayerCount	R	returns {I2} = LayerCount ; Property type: Integer; Count
	Shape	R	returns {IVShape} = Shape ; Property type: IVShape
	ShapeID	R	returns {I4} = ShapeID ; Property type: Integer; ID
	ShapelD16	RH	returns {I2} = ShapeID16 ; Property type: Integer; ID
	ShapeIndex	R	returns {I4} = ShapeIndex ; Property type: Integer; Index
	ShapeIndex16	RH	returns {I2} = ShapeIndex16 ; Property type: Integer; Index
	ShapeObject	R	returns {Dispatch} = ShapeObject ; Property type: Dispatch
	ShapeParent	R	returns {Dispatch} = ShapeParent ; Property type: Dispatch
Meth	BringForward		BringForward
	BringToFront		BringToFront
	SendBackward		SendBackward
	SendToBack		SendToBack
	ShapeCopy		ShapeCopy
	ShapeCut		ShapeCut
	ShapeDelete		ShapeDelete
	ShapeDuplicate		returns {IVShape} = ShapeDuplicate
	VoidGroup	Н	VoidGroup
	VoidShapeDuplicate	Н	VoidShapeDuplicate
Core	Associations: Windows		(Mashipes aphrene
Meth			returns {IVWindow} = OpenSheetWindow
Conta	inee Mgt		
Meth	_		ConvertToGroup
	Group		returns {IVShape} = Group
Conta	ined By		············· (c. ampe)
Prop	Application	R	returns {IVApplication} = Application ; Property type: IVApplication
· iop	ContainingMaster	R	returns {IVMaster} = ContainingMaster ; Property type: IVMaster
	ContainingPage	R	returns {IVPage} = ContainingPage ; Property type: IVPage
	ContainingShape	R	returns {IVShape} = ContainingShape ; Property type: IVShape
	Document	R	returns {IVOocument} = Document ; Property type: IVOocument
	Master	R	returns {IVMaster} = Master ; Property type: IVMaster
	Parent	R	returns {Unknown} = Parent ; Property type: Unknown
Shane	eSheet	n	returns {Olikilowii} = Falcili , Flopetty type. Olikilowii
Prop	CellExists	R	returns {12} = CellExists(localeSpecificCellName {BStr [In]}, fExistsLocally {12 [In]}) ; Property
гюр	Cellexists	n	type: Integer; Bool
	Cells	R	returns {IVCell} = Cells(localeSpecificCellName {BStr [In]}) ; Property type: IVCell
	CellsSRC	R	returns {IVCell} = CellsSRC(Section {I2 [In]}, Row {I2 [In]}, Column {I2 [In]}) ; Property type
	Consorto		IVCell
	CellsSRCExists	R	returns {I2} = CellsSRCExists(Section {I2 [In]}, Row {I2 [In]}, Column {I2 [In]}, fExistsLocally {II. [In]}); Property type: Integer; Bool
	RowCount	R	returns {I2} = RowCount(Section {I2 [In]}) ; Property type: Integer; Count
	RowExists	R	returns {I2} = RowExists(Section {I2 [In]}, Row {I2 [In]}, fExistsLocally {I2 [In]}) ; Property type: Integer; Bool
	RowsCellCount	R	returns {12} = RowsCellCount(Section {12 [In]}, Row {12 [In]}) ; Property type: Integer; Count
	RowType	RW	returns {12} = RowType(Section {12 [In]}, Row {12 [In]}) ; Property type: Integer; VisRowTags
	SectionExists	R	returns {12} = SectionExists(Section {12 [In]}, New {12 [Im]}) ; Property type: Integer; returns {12} = SectionExists(Section {12 [In]}, fExistsLocally {12 [In]}) ; Property type: Integer;
		1	Bool

			[Branch: Util] Extender (Continued)
Define	es the Shape-like proper	ties and m	ethods that Visio adds to an Active X control embedded in a Visio document
P/M	Name	RW H	Syntax/Type
Meth	AddNamedRow		returns {I2} = AddNamedRow(Section {I2 [In]}, RowName {BStr [In]}, RowTag {I2 [In]})
	AddRow		returns {I2} = AddRow(Section {I2 [In]}, Row {I2 [In]}, RowTag {I2 [In]})
	AddRows		returns {I2} = AddRows(Section {I2 [In]}, Row {I2 [In]}, RowTag {I2 [In]}, RowCount {I2 [In]})
	AddSection		returns {I2} = AddSection(Section {I2 [In]})
	DeleteRow		DeleteRow Section {I2 [In]}, Row {I2 [In]}
	DeleteSection		DeleteSection Section {I2 [In]}
	GetFormulas		GetFormulas SRCStream {SafeArray I2 [In]}, formulaArray {SafeArray Variant [Out]}
	GetResults		GetResults SRCStream {SafeArray I2 [In]}, Flags {I2 [In]}, UnitsNamesOrCodes {SafeArray Variant [In]}, resultArray {SafeArray Variant [Out]}
	SetFormulas		returns {12} = SetFormulas(SRCStream {SafeArray 12 [In]}, formulaArray {SafeArray Variant [In]}, Flags {12 [In]})
	SetResults		returns {I2} = SetResults(SRCStream {SafeArray I2 [In]}, UnitsNamesOrCodes {SafeArray Variant [In]}, resultArray {SafeArray Variant [In]}, Flags {I2 [In]})
Style/	Format	<u> </u>	
Prop	FillStyle	RW	returns {BStr} = FillStyle ; Property type: String
	FillStyleKeepFmt	W	FillStyleKeepFmt = {BStr} ; Property type: None
	LineStyle	RW	returns {BStr} = LineStyle ; Property type: String
	LineStyleKeepFmt	W	LineStyleKeepFmt = {BStr} ; Property type: None
	Style	RW	returns {BStr} = Style ; Property type: String
	StyleKeepFmt	W	StyleKeepFmt = {BStr} ; Property type: None
Descr	riptive/User Attribs		
Prop	Data1	RW	returns {BStr} = Data1 ; Property type: String
	Data2	RW	returns {BStr} = Data2 ; Property type: String
	Data3	RW	returns {BStr} = Data3 ; Property type: String
Forei	gn		
Meth	Export		Export FileName {BStr [In]}
Geom	netry		
Meth	BoundingBox		$BoundingBox \textit{Flags} \ \{12 \ [In]\}, \textit{lpr8Left} \ \{R8 \ [Out]\}, \textit{lpr8Bottom} \ \{R8 \ [Out]\}, \textit{lpr8Right} \ \{R8 \ [Out]\}, \textit{lpr8Top} \ \{R8 \ [Out]\}$
	HitTest		returns {I2} = HitTest(xPos {R8 [In]}, yPos {R8 [In]}, Tolerance {R8 [In]})
	SetCenter		SetCenter xPos {R8 [In]}, yPos {R8 [In]}
Нуреі	rlink		
Prop	Hyperlink	R	returns {IVHyperlink} = Hyperlink ; Property type: IVHyperlink
Event	s/Actions/Commands	· · ·	
Prop	EventList	R	returns {IVEventList} = EventList ; Property type: IVEventList
	PersistsEvents	R	returns {I2} = PersistsEvents ; Property type: Integer; Bool
Help			
Prop	Help	RW	returns {BStr} = Help ; Property type: String
OLEA	activeX		
Prop	Object	R	returns {Unknown} = Object ; Property type: Unknown
	ObjectIsInherited	R	returns {I2} = ObjectIsInherited ; Property type: Integer; Bool

			[Branch: Util] IVAmbients
Allows	s Active-X control's interna	al code to	access control's Visio-side Shape properties and methods.
P/M	Name	RW H	Syntax/Type
Id/Ord	der/Label/Type		
Prop	DisplayName	RH	returns {BStr} = DisplayName ; Property type: String
	LocaleID	RH	returns {I4} = LocaleID ; Property type: Integer; -
Beha	viorVariants		
Prop	AutoClip	RH	returns {Bool} = AutoClip ; Property type: Boolean
	MessageReflect	RH	returns {Bool} = MessageReflect ; Property type: Boolean
	ShowGrabHandles	RH	returns {Bool} = ShowGrabHandles ; Property type: Boolean
	ShowHatching	RH	returns {Bool} = ShowHatching ; Property type: Boolean
	SupportsMnemonics	RH	returns {Bool} = SupportsMnemonics ; Property type: Boolean
Objec	t Life/Enable/Visible/Sta	ate	
Prop	UIDead	RH	returns {Bool} = UIDead ; Property type: Boolean
	UserMode	RH	returns {Bool} = UserMode ; Property type: Boolean
Shap	eSheet		
Prop	Shape	R	returns {IVShape} = Shape ; Property type: IVShape
Style	/Format		
Prop	BackColor	RH	returns {I4} = BackColor ; Property type: Integer; -
	Font	RH	returns {Dispatch} = Font ; Property type: Dispatch
	ForeColor	RH	returns {I4} = ForeColor ; Property type: Integer; -
	ScaleUnits	RH	returns {BStr} = ScaleUnits ; Property type: String
	TextAlign	RH	returns {12} = TextAlign ; Property type: Integer; ???
Appe	arance		
Prop	Appearance	RH	returns {I4} = Appearance ; Property type: Integer; -
	DisplayAsDefault	RH	returns {Bool} = DisplayAsDefault ; Property type: Boolean

				[Branch: Util]	IVBUndoManager
Interfa	Interface to the Visio Undo mechanism. See Application Undo methods.				
P/M	Name	RW H	Syntax/Type		
Conta	Containee Mgt				
Meth	Add		Add pUnit {IVBUndoUnit [In]}		

			[Branch: Util]	IVBUndoUnit
An Ite	em in the Visio Undo lis	st		
P/M	Name	RW H	Syntax/Type	
ld/Ord	der/Label/Type			
Prop	UnitSize	R	returns {I4} = UnitSize ; Property type: Integer; -	
	UnitTypeCLSID	R	returns {BStr} = UnitTypeCLSID ; Property type: String	
	UnitTypeLong	R	returns {I4} = UnitTypeLong ; Property type: Integer; ???	
Core	Attributes	<u> </u>		
Meth	Do		Do pMgr {IVBUndoManager [In]}	
	OnNextAdd		OnNextAdd	
Desci	riptive/User Attribs	·		
Prop	Description	R	returns {BStr} = Description ; Property type: String	

			[Branch: Util]	IVClientSite		
IOleC	IOleClientSite interface provided by Visio to OLE embedded objects (eg Active X controls).					
P/M	Name	RW H	Syntax/Type			
Conta	Contained By					
	Shape		returns {HResult} = Shape(ppShape {Ptr IVShape []})			

			[Branch: Util]	IVisEventProc
Interfa	Interface definition for event-response object that solution can supply to EventList.AddAdvise			
P/M	Name	RW H	Syntax/Type	
Core	Core Attributes			
Meth	VisEventProc		returns {Variant} = VisEventProc(nEventCode {I2 [In]}, pSourceObj {D	

			[Branch: Util] IVisLibOcxSupport			
Supp	upports Visio Control					
P/M	Name	RW H	Syntax/Type			
ld/Or	der/Label/Type					
	HostID		$returns \{HResult\} = HostID(pbstr \{BStr []\})$			
Beha	viorVariants					
	NegotiateMenus		returns {HResult} = NegotiateMenus(pbVal {Bool []})			
	NegotiateToolbars		returns {HResult} = NegotiateToolbars(pbVal {Bool []})			
	PageSizingBehavior		returns {HResult} = PageSizingBehavior(peVal {VisPageSizingBehaviors []})			
Cont	ainee Mgt					
	Document		returns {HResult} = Document(ppDoc {Ptr IVDocument []})			
	Window		returns {HResult} = Window(ppWin {Ptr IVWindow []})			
Desc	riptive/User Attribs					
	About		returns {HResult} = About			
Doc-	Window Relationship	1				
	Src		$returns \{HResult\} = Src(pbstr \{BStr []\})$			

			[Branch: Util]	KeyboardEvent
Info f	rom keyboard event			
P/M	Name	RW H	Syntax/Type	
ld/Or	der/Label/Type			
	ObjectType		returns {HResult} = ObjectType(peType {VisObjectTypes []})	
Core	Attributes			
	KeyAscii		returns {HResult} = KeyAscii(pnKeyAscii {I4 []})	
	KeyButtonState		returns {HResult} = KeyButtonState(pnKeyButtonState {I4 []})	
	KeyCode		returns {HResult} = KeyCode(pnKeyCode {I4 []})	
	ToString		returns {HResult} = ToString(pbstrString {BStr []})	
	Window		returns {HResult} = Window(ppWindow {Ptr IVWindow []})	
Cont	ained By		'	
	Application		returns {HResult} = Application(lpdispRet {Ptr IVApplication []})	

			[Branch: Util]	MouseEvent
Info fr	om mouse event			
P/M	Name	RW H	Syntax/Type	
ld/Ord	der/Label/Type			
	ObjectType		returns {HResult} = ObjectType(peType {VisObjectTypes []})	
Core	Attributes			
	Button		returns {HResult} = Button(pnButton {I4 []})	
	KeyButtonState		returns {HResult} = KeyButtonState(pnKeyButtonState {I4 []})	
	ToString		returns {HResult} = ToString(pbstrString {BStr []})	
	Window		returns {HResult} = Window(ppWindow {Ptr IVWindow []})	
	x		returns {HResult} = $x(pdX \{R8 []\})$	
	у		returns {HResult} = $y(pdY \{R8 []\})$	
Conta	ained By		'	
	Application		returns {HResult} = Application(lpdispRet {Ptr IVApplication []})	

			[Branch: Util]	MSGWrap
Inform	national object passe	d by EApplicat	ion.OnKeystrokeMessageForAddon (V2002)	
P/M	Name	RW H	Syntax/Type	
Id/Ord	der/Label/Type			
Prop	hwnd	RW	returns {I4} = hwnd ; Property type: Integer; Handle	
	ObjectType	R	returns {12} = ObjectType ; Property type: Integer; =visObjTypeMSGWrap	
Core	Attributes			
Prop	IParam	RW	returns {I4} = lParam ; Property type: Integer; -	
	message	RW	returns {I4} = message ; Property type: Integer; -	
	posttime	RW	returns {I4} = posttime ; Property type: Integer; -	
	ptx	RW	returns {I4} = ptx ; Property type: Integer; Pixels	
	pty	RW	returns {I4} = pty ; Property type: Integer; Pixels	
	wParam	RW	returns {I4} = wParam ; Property type: Integer; -	
Conta	nined By	•		
Prop	Application	R	returns {IVApplication} = Application; Property type: IVApplication	

			[Branch: Util] Selection
A coll	lection of Shapes, use	ed in Window	and elsewhere. Usually used to apply some function en masse.
P/M	Name	RW H	Syntax/Type
ld/Or	der/Label/Type		
Prop	ObjectType	R	returns {12} = ObjectType ; Property type: Integer; =visObjTypeSelection
Beha	viorVariants	<u> </u>	
Prop	IterationMode	RW	returns {I4} = IterationMode ; Property type: Integer; VisSelectMode; Values: 256=visSelModeSkipSuper; 512=visSelModeOnlySuper; 1024=visSelModeSkipSub; 2048=visSelModeOnlySub;
Objec	ct Life/Enable/Visible	e/State	
Prop	Stat	R	returns {12} = Stat ; Property type: Integer; VisStatCodes; Values: 0=visStatNormal; 1=vis-StatAppHasShutdown; 2=visStatDeleted; 4=visStatTouched; 8=visStatClosed; 16=visStatSuspended;
Meth	Delete		Delete

			[Branch: Util] Selection (Continued							
A colle	ection of Shapes, used in	Window	and elsewhere. Usually used to apply some function en masse.							
P/M	Name	RW H	Syntax/Type							
Meth	ConnectShapes		ConnectShapes							
	DeselectAll		DeselectAll							
	Distribute		Distribute Distribute {VisDistributeTypes [In]}, GlueToGuide {Bool []}							
	Move		Move dx {R8 [In]}, dy {R8 [In]}, UnitsNameOrCode {Variant [In Optional]}							
	Offset		Offset Distance {R8 [In]}							
	Rotate		Rotate Angle {R8 [In]}, AngleUnitsNameOrCode {Variant [In Optional]}, BlastGuards {Bool []}, RotationType {VisRotationTypes []}, PinX {R8 []}, PinY {R8 []}, PinUnitsNameOrCode {Variant [In Optional]}							
	Rotate90		Rotate90							
	Select		Select SheetObject {IVShape [In]}, SelectAction {I2 [In]}							
	SelectAll	SelectAll								
	UpdateAlignmentBox		UpdateAlignmentBox							
Conta	ined By									
Prop	Application	R	returns {IVApplication} = Application ; Property type: IVApplication							
	ContainingMaster	R	returns {IVMaster} = ContainingMaster ; Property type: IVMaster							
	ContainingMasterID	R	returns {I4} = ContainingMasterID ; Property type: Integer; ID							
	ContainingPage	R	returns {IVPage} = ContainingPage ; Property type: IVPage							
	ContainingPageID	R	returns {I4} = ContainingPageID ; Property type: Integer; ID							
	ContainingShape	R	returns {IVShape} = ContainingShape ; Property type: IVShape							
	Document	R	returns {IVDocument} = Document ; Property type: IVDocument							
Style/	Format	•								
Prop	FillStyle	RW	returns {BStr} = FillStyle ; Property type: String							
	FillStyleKeepFmt	W	FillStyleKeepFmt = {BStr} ; Property type: None							
	LineStyle	RW	returns {BStr} = LineStyle ; Property type: String							
	LineStyleKeepFmt	W	LineStyleKeepFmt = {BStr} ; Property type: None							
	Style	RW	returns {BStr} = Style ; Property type: String							
	StyleKeepFmt	W	StyleKeepFmt = {BStr} ; Property type: None							
	TextStyle	RW	returns {BStr} = TextStyle ; Property type: String							
	TextStyleKeepFmt	W	TextStyleKeepFmt = {BStr} ; Property type: None							
Appea	arance									
Meth	Align		Align AlignHorizontal {VisHorizontalAlignTypes [In]}, AlignVertical {VisVerticalAlignTypes [In]}, GlueToGuide {Bool []}							
Forei										
Prop	Picture	R	returns {IPictureDisp} = Picture ; Property type: IPictureDisp							
Meth	Export		Export FileName {BStr [In]}							
Clipbe										
Meth	Сору		Copy Flags {Variant [In Optional]}							
	Cut		Cut Flags {Variant [In Optional]}							
	old_Copy	Н	old_Copy							
	old_Cut	Н	old_Cut							
Event	s/Actions/Commands									
Prop	EventList	R	returns {IVEventList} = EventList ; Property type: IVEventList							
	PersistsEvents	R	returns {I2} = PersistsEvents ; Property type: Integer; Bool							

Chapter 39

Events Table

In This Chapter...

Events Table/Selection Guide

ince event-response plays a significantly part in defining what your solution does, it's crucially important to be able to quickly grasp the spectrum of events which Visio does and does not offer, and which objects to use to tap into those events.

On the following pages you will find a table which presents this information in the most concise and easy-to-navigate form. The table is basically organized by Event Subject and Event Name (what kind of object the event happened to, and what kind of event it was) versus Event Reporter (what objects report this event.)

At the intersections of Subject/Event Name and Reporter you will find a "Y" if the event is available to work with all of the event mechanisms discussed in Chapter 20: *Events and Other Notifications*. An "A" marks events which are available, but only through the EventList Add/AddAdvise mechanism.

Please also note the abbreviation schemes that have been used to make the listing more readable and compact. These are shown in the headers for the columns where they apply.

Also note that some of the EventCode constants are single constants, while others are the sum of two values (such as visEvtAdd + visEvtShape). However, the sum-of-two-values is not completely general: not every reasonable-looking combination results in an event that Visio actually provides.

Table 39-1: Visio 2003 Events by Subject and Reporter. Note indents for hierarchy.

Subject	Event Name	Event																					
(Event hap- pened to)	QC- = QueryCancel	Code Hex	_Xxx = visEvtCodeXxx Xxx = visEvtXxx QC- = QueryCancel	Application	Documents	Document	Masters	Master	Pages	Page	Shape	Characters	Styles	Style	Section	Row	Cell	Windows	Window				
Application	AfterModal	H1040	App +AfterModal	Αp	۵													>					
Application			* *																				
	AppActivated	H1001	App +AppActivate	Υ																			
	AppDeactivated	H1002	App +AppDeactivate	Υ																			
	AppObjActivated	H1004	App +ObjActivate	Y																			
	AppObjDeactivated	H1008	App +ObjDeactivate	-																			
	BeforeModal	H1020	App +BeforeModal	Υ																			
	BeforeQuit	H1010	App +BeforeQuit	Υ																			
	DesignModeEntered	H0006	_DocDesign	Υ	Υ	Υ																	
	QC-Quit	H00CC	_QC-Quit	Υ																			
	QuitCanceled	H00CD	_CancelQuit	Υ	.,																		
	RunModeEntered	H0005	_DocRunning	Υ	Υ	Υ																	
A 5 + Mark	VisioIsIdle	H1400	App +Idle	Υ																			
App Evt Mgt	MarkerEvent	H1100	App +Marker	Υ																			
	MustFlushScopeBeginning	H00C8	_BefForcedFlush	Υ																			
	MustFlushScopeEnded	H00C9	_AfterForcedFlush	Υ																			
	NoEventsPending	H1200	App +NonePending	Υ														•					
	OnKeystrokeMessageFo- rAddon	H02C4	_WinOnAddonKeyMSG	2														2	2				
App Sus-	AfterResume	H00D1	_AfterResume	1																			
App Sus- pend	BeforeSuspend	H00D0	_BeforeSuspend	1																			
	QC-Suspend	H00CE	_QC-Suspend	1																			
	SuspendCanceled	H00CF	_CancelSuspend	1																			
App Undo	EnterScope	H00CA	_EnterScope	Υ																			
	ExitScope	H00CB	_ExitScope	Υ																			
Document	BeforeDocumentClose	H4002	Del +Doc	Υ	Υ	Υ																	
	BeforeDocumentSave	H0007	_BefDocSave	Υ	Υ	Υ																	
	BeforeDocumentSaveAs	H0008	_BefDocSaveAs	Υ	Υ	Υ																	
	DocumentAdded	H8002	Add +Doc	Α	Α	Α																	
	DocumentChanged	H2002	Mod +Doc	Υ	Υ	Υ																	
	DocumentCloseCanceled	H000A	_CancelDocClose	Υ	Υ	Υ																	
	DocumentCreated	H0001	_Create	Υ	Υ	Υ																	
	DocumentOpened	H0002	_Open	Υ	Υ	Υ																	
	DocumentSaved	H0003	_DocSave	Υ	Υ	Υ																	
	DocumentSavedAs	H0004	_DocSaveAs	Υ	Υ	Υ																	
	QC-DocumentClose	H0009	_QC-DocClose	Υ	Υ	Υ																	
Page	BeforePageDelete	H4010	Del +Page	Υ	Υ	Υ			Υ	Υ													
	BeforeWindowPageTurn	H02BF	_BefWinPageTurn	Υ														Υ	Υ				
	PageAdded	H8010	Add +Page	Υ	Υ	Υ			Υ														
	PageChanged	H2010	Mod +Page	Υ	Υ	Υ			Υ	Υ													
	PageDeleteCanceled	H01F5	_CancelPageDel	Υ	Υ	Υ			Υ	Υ													
	QC-PageDelete	H01F4	_QC-PageDel	Υ	Υ	Υ			Υ	Υ													

Table 39-1: Visio 2003 Events by Subject and Reporter. Note indents for hierarchy. (Continued)

Subject	Event Name	Event	Constants	Event Reported by															
(Event hap- pened to)	QC- = QueryCancel	Code Hex	_Xxx = visEvtCodeXxx Xxx = visEvtXxx QC- = QueryCancel	Application	Documents	Document	Masters	Master	Pages	Page	Shape	Characters	Styles	Style	Section	Row	Cell	Windows	Window
Master	BeforeMasterDelete	H4008	Del +Master	Υ	Υ	Υ	Υ	Υ											
	MasterAdded	H8008	Add +Master	Υ	Υ	Υ	Υ												
	MasterChanged	H2008	Mod +Master	Υ	Υ	Υ	Υ	Υ											
	MasterDeleteCanceled	H0191	_CancelMasterDel	Υ	Υ	Υ	Υ	Υ											
	QC-MasterDelete	H0190	_QC-MasterDel	Υ	Υ	Υ	Υ	Υ											
Shape	BeforeShapeDelete	H4040	Del +Shape	Υ	Υ	Α	Υ	Υ	Υ	Υ	Υ								
	BeforeShapeTextEdit	H0323	_ShapeBeforeTextEdit	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ								
	ShapeAdded	H8040	Add +Shape	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ								
	ShapeChanged	H2040	Mod +Shape	Υ	Υ	Α	Υ	Υ	Υ	Υ	Υ								
	ShapeExitedTextEdit	H0324	_ShapeExitTextEdit	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ								
	ShapeParentChanged	H0322	_ShapeParentChange	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ								
	ShapesDeleted	H0321	_ShapeDelete			Α													
	TextChanged	H2080	Mod +Text	Υ	Υ	Α	Υ	Υ	Υ	Υ	Υ	Υ							
Cell	CellChanged	H2800	Mod +Cell	Υ	Υ	Α	Υ	Υ	Υ	Υ	Υ				Υ	Υ	Υ		
	FormulaChanged	H3000	Mod +Formula	Υ	Υ	Α	Υ	Υ	Υ	Υ	Υ				Υ	Υ	Υ		
Group	ConvertToGroupCanceled	H038C	_CancelConvertToGroup	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ								
	QC-ConvertToGroup	H038B	_QC-ConvertToGroup	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ								
	QC-Ungroup	H0389	_QC-Ungroup	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ								
	UngroupCanceled	H038A	_CancelUngroup	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ								
Connec-	ConnectionsAdded	H8100	Add +Connect	Υ	Υ	Α	Υ	Υ	Υ	Υ									
tions	ConnectionsDeleted	H4100	Del +Connect	Υ	Υ	Α	Υ	Υ	Υ	Υ									
Style	BeforeStyleDelete	H4004	Del +Style	Υ	Υ	Υ							Υ	Υ					
	QC-StyleDelete	H012C	_QC-StyleDel	Υ	Υ	Υ							Υ	Υ					
	StyleAdded	H8004	Add +Style	Υ	Υ	Υ							Υ						
	StyleChanged	H2004	Mod +Style	Υ	Υ	Υ							Υ	Υ					
	StyleDeleteCanceled	H012D	_CancelStyleDel	Υ	Υ	Υ							Υ	Υ					
Window	BeforeWindowClosed	H4001	Del +Window	Υ														Υ	Υ
	QC-WindowClose	H02C2	_QC-WinClose	Υ														Υ	Υ
	ViewChanged	H02C1	_ViewChanged	Υ								ĺ						Υ	Υ
	WindowActivated	H1080	App +WinActivate	Υ														Υ	Υ
	WindowChanged	H2001	Mod +Window	Υ														Υ	Υ
	WindowCloseCanceled	H02C3	_CancelWinClose	Υ								ĺ						Υ	Υ
	WindowOpened	H8001	Add +Window	Υ														Υ	
	WindowTurnedToPage	H02C0	_WinPageTurn	Υ								Ĭ						Υ	Υ

Table 39-1: Visio 2003 Events by Subject and Reporter. Note indents for hierarchy. (Continued)

Subject	Event Name	Event	Constants	Event Reported by															
(Event hap- pened to)	QC- = QueryCancel	Code Hex	_Xxx = visEvtCodeXxx Xxx = visEvtXxx QC- = QueryCancel	Application	Documents	Document	Masters	Master	Pages	Page	Shape	Characters	Styles	Style	Section	Row	Cell	Windows	Window
UserInput	KeyDown	H02C8	_KeyDown	3														3	3
	KeyPress	H02C9	_KeyPress	3														3	3
	KeyUp	H02CA	_KeyUp	3														3	3
	MouseDown	H02C5	_MouseDown	3														3	3
	MouseMove	H02C6	_MouseMove	3														3	3
	MouseUp	H02C7	_MouseUp	3														3	3
Selection	BeforeSelectionDelete	H0385	_BefSelDel	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ								
	BeforeWindowSelDelete	H02BE	_BefWinSelDel	Υ														Υ	Υ
	QC-SelectionDelete	H0387	_QC-SelDel	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ								
	SelectionAdded	H0386	_SelAdded	Υ	Υ	Α	Υ	Υ	Υ	Υ	Υ								
	SelectionChanged	H02BD	_WinSelChange	Υ														Υ	Υ
	SelectionDeleteCanceled	H0388	_CancelSelDel	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ								

Key: Y = Yes; A = Only via Add/AddAdvise, 1 = Added V2000 SR1; 2 = Added V2002; 3 = Added V2003 Source: Data extracted from Type Library, except Add/AddAdvise added by hand from Help. GW_Events_V2003.mdb