

[MS-PWEDPS]: PowerPoint Web Editor Data Protocol Specification

Intellectual Property Rights Notice for Open Specifications Documentation

- **Technical Documentation.** Microsoft publishes Open Specifications documentation for protocols, file formats, languages, standards as well as overviews of the interaction among each of these technologies.
- **Copyrights.** This documentation is covered by Microsoft copyrights. Regardless of any other terms that are contained in the terms of use for the Microsoft website that hosts this documentation, you may make copies of it in order to develop implementations of the technologies described in the Open Specifications and may distribute portions of it in your implementations using these technologies or your documentation as necessary to properly document the implementation. You may also distribute in your implementation, with or without modification, any schema, IDL's, or code samples that are included in the documentation. This permission also applies to any documents that are referenced in the Open Specifications.
- **No Trade Secrets.** Microsoft does not claim any trade secret rights in this documentation.
- **Patents.** Microsoft has patents that may cover your implementations of the technologies described in the Open Specifications. Neither this notice nor Microsoft's delivery of the documentation grants any licenses under those or any other Microsoft patents. However, a given Open Specification may be covered by Microsoft [Open Specification Promise](#) or the [Community Promise](#). If you would prefer a written license, or if the technologies described in the Open Specifications are not covered by the Open Specifications Promise or Community Promise, as applicable, patent licenses are available by contacting iplg@microsoft.com.
- **Trademarks.** The names of companies and products contained in this documentation may be covered by trademarks or similar intellectual property rights. This notice does not grant any licenses under those rights.
- **Fictitious Names.** The example companies, organizations, products, domain names, e-mail addresses, logos, people, places, and events depicted in this documentation are fictitious. No association with any real company, organization, product, domain name, email address, logo, person, place, or event is intended or should be inferred.

Reservation of Rights. All other rights are reserved, and this notice does not grant any rights other than specifically described above, whether by implication, estoppel, or otherwise.

Tools. The Open Specifications do not require the use of Microsoft programming tools or programming environments in order for you to develop an implementation. If you have access to Microsoft programming tools and environments you are free to take advantage of them. Certain Open Specifications are intended for use in conjunction with publicly available standard specifications and network programming art, and assumes that the reader either is familiar with the aforementioned material or has immediate access to it.

Preliminary Documentation. This Open Specification provides documentation for past and current releases and/or for the pre-release (beta) version of this technology. This Open Specification is final

documentation for past or current releases as specifically noted in the document, as applicable; it is preliminary documentation for the pre-release (beta) versions. Microsoft will release final documentation in connection with the commercial release of the updated or new version of this technology. As the documentation may change between this preliminary version and the final version of this technology, there are risks in relying on preliminary documentation. To the extent that you incur additional development obligations or any other costs as a result of relying on this preliminary documentation, you do so at your own risk.

Revision Summary

Date	Revision History	Revision Class	Comments
07/13/2009	0.1	Major	Initial Availability
08/28/2009	0.2	Editorial	Revised and edited the technical content
11/06/2009	0.3	Editorial	Revised and edited the technical content
02/19/2010	1.0	Major	Updated and revised the technical content
03/31/2010	1.01	Editorial	Revised and edited the technical content
04/30/2010	1.02	Editorial	Revised and edited the technical content
06/07/2010	1.03	Editorial	Revised and edited the technical content
06/29/2010	1.04	Editorial	Changed language and formatting in the technical content.
07/23/2010	1.05	Minor	Clarified the meaning of the technical content.
09/27/2010	1.05	No change	No changes to the meaning, language, or formatting of the technical content.
11/15/2010	1.06	Minor	Clarified the meaning of the technical content.
12/17/2010	1.06	No change	No changes to the meaning, language, or formatting of the technical content.
03/18/2011	1.06	No change	No changes to the meaning, language, or formatting of the technical content.
06/10/2011	2.0	Major	Significantly changed the technical content.
01/20/2012	3.0	Major	Significantly changed the technical content.
04/11/2012	3.0	No change	No changes to the meaning, language, or formatting of the technical content.

Table of Contents

1 Introduction	18
1.1 Glossary	18
1.2 References	19
1.2.1 Normative References	19
1.2.2 Informative References	20
1.3 Protocol Overview (Synopsis)	20
1.4 Relationship to Other Protocols	20
1.5 Prerequisites/Preconditions	20
1.6 Applicability Statement	21
1.7 Versioning and Capability Negotiation	21
1.8 Vendor-Extensible Fields	21
1.9 Standards Assignments	21
2 Messages	22
2.1 Transport	22
2.2 Common Message Syntax	22
2.2.1 Namespaces	22
2.2.2 Messages	23
2.2.3 Elements	23
2.2.4 Complex Types	23
2.2.4.1 ArrayOfContentMasterFe	25
2.2.4.2 ArrayOfEditShape	25
2.2.4.3 ArrayOfEditSlide	25
2.2.4.4 ArrayOfEditSlideChanges	26
2.2.4.5 ArrayOfEditSlideInfoFe	26
2.2.4.6 ArrayOfMainMasterFe	26
2.2.4.7 ArrayOfunsignedInt	26
2.2.4.8 ArrayOfViewElement	27
2.2.4.9 ClippingInfo	27
2.2.4.10 ContentMasterFe	27
2.2.4.11 EditCommandResponse	28
2.2.4.12 EditPresentationChanges	28
2.2.4.13 EditPresentationInfo	29
2.2.4.14 EditShape	30
2.2.4.15 EditSlide	32
2.2.4.16 EditSlideChanges	33
2.2.4.17 EditSlideInfoFe	34
2.2.4.18 FontSizeMapping	35
2.2.4.19 Html	35
2.2.4.20 MainMasterFe	36
2.2.4.21 Notes	36
2.2.4.22 Point	37
2.2.4.23 PptViewingService.PrintResult	37
2.2.4.24 Rectangle	37
2.2.4.25 ServiceError	38
2.2.4.26 ServiceResult	38
2.2.4.27 SlideIdList	39
2.2.4.28 SmartArtInfo	39
2.2.4.29 Theme	39
2.2.4.30 ThemeColor	40

2.2.4.31	ViewElement	41
2.2.4.32	ArrayOfComment	41
2.2.4.33	ArrayOfEditAnimInfo	41
2.2.4.34	ArrayOfEditorInfo	42
2.2.4.35	ArrayOfStyleGalleryItem	42
2.2.4.36	BoundingRegion	42
2.2.4.37	CoauthState	43
2.2.4.38	CoauthUpdate	43
2.2.4.39	Comment	44
2.2.4.40	EditAnimInfo	44
2.2.4.41	EditorInfo	45
2.2.4.42	EditTransitionInfo	46
2.2.4.43	PresetSchemeColorMapping	46
2.2.4.44	StyleGalleryItem	47
2.2.5	Simple Types	47
2.2.5.1	char	48
2.2.5.2	ClientActions	48
2.2.5.3	duration	48
2.2.5.4	guid	49
2.2.5.5	ServiceErrorType	49
2.2.5.6	ErrorCode	50
2.2.6	Attributes	53
2.2.7	Groups	53
2.2.8	Attribute Groups	53
3	Protocol Details	54
3.1	Server Details	54
3.1.1	Abstract Data Model	55
3.1.2	Timers	55
3.1.3	Initialization	55
3.1.4	Message Processing Events and Sequencing Rules	55
3.1.4.1	ApplyTheme	58
3.1.4.1.1	Messages	58
3.1.4.1.1.1	IPptEdit_ApplyTheme_InputMessage	59
3.1.4.1.1.2	IPptEdit_ApplyTheme_OutputMessage	59
3.1.4.1.2	Elements	59
3.1.4.1.2.1	ApplyTheme	59
3.1.4.1.2.2	ApplyThemeResponse	60
3.1.4.1.3	Complex Types	60
3.1.4.1.4	Simple Types	60
3.1.4.1.5	Attributes	60
3.1.4.1.6	Groups	60
3.1.4.1.7	Attribute Groups	60
3.1.4.2	ChangePictureStyle	60
3.1.4.2.1	Messages	61
3.1.4.2.1.1	IPptEdit_ChangePictureStyle_InputMessage	61
3.1.4.2.1.2	IPptEdit_ChangePictureStyle_OutputMessage	61
3.1.4.2.2	Elements	61
3.1.4.2.2.1	ChangePictureStyle	61
3.1.4.2.2.2	ChangePictureStyleResponse	62
3.1.4.2.3	Complex Types	62
3.1.4.2.4	Simple Types	62
3.1.4.2.5	Attributes	62

3.1.4.2.6	Groups.....	62
3.1.4.2.7	Attribute Groups	62
3.1.4.3	ChangeSmartArtColor	63
3.1.4.3.1	Messages	63
3.1.4.3.1.1	IPptEdit_ChangeSmartArtColor_InputMessage	63
3.1.4.3.1.2	IPptEdit_ChangeSmartArtColor_OutputMessage	63
3.1.4.3.2	Elements.....	64
3.1.4.3.2.1	ChangeSmartArtColor	64
3.1.4.3.2.2	ChangeSmartArtColorResponse	64
3.1.4.3.3	Complex Types	65
3.1.4.3.4	Simple Types.....	65
3.1.4.3.5	Attributes.....	65
3.1.4.3.6	Groups.....	65
3.1.4.3.7	Attribute Groups	65
3.1.4.4	ChangeSmartArtLayout	65
3.1.4.4.1	Messages	65
3.1.4.4.1.1	IPptEdit_ChangeSmartArtLayout_InputMessage	66
3.1.4.4.1.2	IPptEdit_ChangeSmartArtLayout_OutputMessage	66
3.1.4.4.2	Elements.....	66
3.1.4.4.2.1	ChangeSmartArtLayout	66
3.1.4.4.2.2	ChangeSmartArtLayoutResponse	67
3.1.4.4.3	Complex Types	67
3.1.4.4.4	Simple Types.....	67
3.1.4.4.5	Attributes.....	67
3.1.4.4.6	Groups.....	67
3.1.4.4.7	Attribute Groups	67
3.1.4.5	ChangeSmartArtStyle.....	67
3.1.4.5.1	Messages	68
3.1.4.5.1.1	IPptEdit_ChangeSmartArtStyle_InputMessage	68
3.1.4.5.1.2	IPptEdit_ChangeSmartArtStyle_OutputMessage	68
3.1.4.5.2	Elements.....	68
3.1.4.5.2.1	ChangeSmartArtStyle.....	69
3.1.4.5.2.2	ChangeSmartArtStyleResponse	69
3.1.4.5.3	Complex Types	69
3.1.4.5.4	Simple Types.....	69
3.1.4.5.5	Attributes.....	70
3.1.4.5.6	Groups.....	70
3.1.4.5.7	Attribute Groups	70
3.1.4.6	ClearPlaceholder.....	70
3.1.4.6.1	Messages	70
3.1.4.6.1.1	IPptEdit_ClearPlaceholder_InputMessage.....	70
3.1.4.6.1.2	IPptEdit_ClearPlaceholder_OutputMessage.....	71
3.1.4.6.2	Elements.....	71
3.1.4.6.2.1	ClearPlaceholder.....	71
3.1.4.6.2.2	ClearPlaceholderResponse	71
3.1.4.6.3	Complex Types	72
3.1.4.6.4	Simple Types.....	72
3.1.4.6.5	Attributes.....	72
3.1.4.6.6	Groups.....	72
3.1.4.6.7	Attribute Groups	72
3.1.4.7	DeleteSlide	72
3.1.4.7.1	Messages	72
3.1.4.7.1.1	IPptEdit_DeleteSlide_InputMessage	73

3.1.4.7.1.2	IPptEdit_DeleteSlide_OutputMessage	73
3.1.4.7.2	Elements.....	73
3.1.4.7.2.1	DeleteSlide	73
3.1.4.7.2.2	DeleteSlideResponse.....	73
3.1.4.7.3	Complex Types	74
3.1.4.7.4	Simple Types.....	74
3.1.4.7.5	Attributes.....	74
3.1.4.7.6	Groups.....	74
3.1.4.7.7	Attribute Groups	74
3.1.4.8	DuplicateSlide	74
3.1.4.8.1	Messages	74
3.1.4.8.1.1	IPptEdit_DuplicateSlide_InputMessage	75
3.1.4.8.1.2	IPptEdit_DuplicateSlide_OutputMessage.....	75
3.1.4.8.2	Elements.....	75
3.1.4.8.2.1	DuplicateSlide	75
3.1.4.8.2.2	DuplicateSlideResponse.....	76
3.1.4.8.3	Complex Types	76
3.1.4.8.4	Simple Types.....	76
3.1.4.8.5	Attributes.....	76
3.1.4.8.6	Groups.....	76
3.1.4.8.7	Attribute Groups	76
3.1.4.9	GetEditPresInfo	76
3.1.4.9.1	Messages	77
3.1.4.9.1.1	IPptEdit_GetEditPresInfo_InputMessage	77
3.1.4.9.1.2	IPptEdit_GetEditPresInfo_OutputMessage.....	77
3.1.4.9.2	Elements.....	77
3.1.4.9.2.1	GetEditPresInfo	77
3.1.4.9.2.2	GetEditPresInfoResponse.....	78
3.1.4.9.3	Complex Types	78
3.1.4.9.4	Simple Types.....	78
3.1.4.9.5	Attributes.....	78
3.1.4.9.6	Groups.....	79
3.1.4.9.7	Attribute Groups	79
3.1.4.10	GetEditSlide	79
3.1.4.10.1	Messages	79
3.1.4.10.1.1	IPptEdit_GetEditSlide_InputMessage	79
3.1.4.10.1.2	IPptEdit_GetEditSlide_OutputMessage.....	79
3.1.4.10.2	Elements.....	80
3.1.4.10.2.1	GetEditSlide	80
3.1.4.10.2.2	GetEditSlideResponse.....	80
3.1.4.10.3	Complex Types	80
3.1.4.10.4	Simple Types.....	81
3.1.4.10.5	Attributes.....	81
3.1.4.10.6	Groups.....	81
3.1.4.10.7	Attribute Groups.....	81
3.1.4.11	GetPresentationId	81
3.1.4.11.1	Messages	81
3.1.4.11.1.1	IPptEdit_GetPresentationId_InputMessage	81
3.1.4.11.1.2	IPptEdit_GetPresentationId_OutputMessage.....	82
3.1.4.11.2	Elements	82
3.1.4.11.2.1	GetPresentationId	82
3.1.4.11.2.2	GetPresentationIdResponse.....	82
3.1.4.11.3	Complex Types	83

3.1.4.11.4	Simple Types	83
3.1.4.11.5	Attributes	83
3.1.4.11.6	Groups.....	83
3.1.4.11.7	Attribute Groups.....	83
3.1.4.12	InsertClipart.....	83
3.1.4.12.1	Messages	83
3.1.4.12.1.1	IPptEdit_InsertClipart_InputMessage.....	84
3.1.4.12.1.2	IPptEdit_InsertClipart_OutputMessage	84
3.1.4.12.2	Elements.....	84
3.1.4.12.2.1	InsertClipart.....	84
3.1.4.12.2.2	InsertClipartResponse	85
3.1.4.12.3	Complex Types	85
3.1.4.12.4	Simple Types	85
3.1.4.12.5	Attributes	85
3.1.4.12.6	Groups.....	85
3.1.4.12.7	Attribute Groups.....	85
3.1.4.13	InsertSlide	85
3.1.4.13.1	Messages	86
3.1.4.13.1.1	IPptEdit_InsertSlide_InputMessage	86
3.1.4.13.1.2	IPptEdit_InsertSlide_OutputMessage.....	86
3.1.4.13.2	Elements.....	86
3.1.4.13.2.1	InsertSlide.....	86
3.1.4.13.2.2	InsertSlideResponse.....	87
3.1.4.13.3	Complex Types	87
3.1.4.13.4	Simple Types	87
3.1.4.13.5	Attributes	87
3.1.4.13.6	Groups.....	87
3.1.4.13.7	Attribute Groups.....	88
3.1.4.14	InsertSmartArt	88
3.1.4.14.1	Messages	88
3.1.4.14.1.1	IPptEdit_InsertSmartArt_InputMessage.....	88
3.1.4.14.1.2	IPptEdit_InsertSmartArt_OutputMessage.....	88
3.1.4.14.2	Elements.....	89
3.1.4.14.2.1	InsertSmartArt	89
3.1.4.14.2.2	InsertSmartArtResponse.....	89
3.1.4.14.3	Complex Types	90
3.1.4.14.4	Simple Types.....	90
3.1.4.14.5	Attributes.....	90
3.1.4.14.6	Groups.....	90
3.1.4.14.7	Attribute Groups.....	90
3.1.4.15	MoveSlide	90
3.1.4.15.1	Messages	90
3.1.4.15.1.1	IPptEdit_MoveSlide_InputMessage.....	91
3.1.4.15.1.2	IPptEdit_MoveSlide_OutputMessage.....	91
3.1.4.15.2	Elements.....	91
3.1.4.15.2.1	MoveSlide.....	91
3.1.4.15.2.2	MoveSlideResponse.....	92
3.1.4.15.3	Complex Types	92
3.1.4.15.4	Simple Types	92
3.1.4.15.5	Attributes.....	92
3.1.4.15.6	Groups.....	92
3.1.4.15.7	Attribute Groups.....	92
3.1.4.16	Print.....	92

3.1.4.16.1	Messages	93
3.1.4.16.1.1	IPptEdit_Print_InputMessage.....	93
3.1.4.16.1.2	IPptEdit_Print_OutputMessage	93
3.1.4.16.2	Elements	93
3.1.4.16.2.1	Print.....	93
3.1.4.16.2.2	PrintResponse	94
3.1.4.16.3	Complex Types	94
3.1.4.16.4	Simple Types	94
3.1.4.16.5	Attributes	94
3.1.4.16.6	Groups.....	94
3.1.4.16.7	Attribute Groups.....	94
3.1.4.17	Redo	94
3.1.4.17.1	Messages	95
3.1.4.17.1.1	IPptEdit_Redo_InputMessage	95
3.1.4.17.1.2	IPptEdit_Redo_OutputMessage	95
3.1.4.17.2	Elements	95
3.1.4.17.2.1	Redo	95
3.1.4.17.2.2	RedoResponse.....	96
3.1.4.17.3	Complex Types	96
3.1.4.17.4	Simple Types	96
3.1.4.17.5	Attributes	96
3.1.4.17.6	Groups.....	96
3.1.4.17.7	Attribute Groups.....	96
3.1.4.18	ReplaceNotes	96
3.1.4.18.1	Messages	97
3.1.4.18.1.1	IPptEdit_ReplaceNotes_InputMessage	97
3.1.4.18.1.2	IPptEdit_ReplaceNotes_OutputMessage	97
3.1.4.18.2	Elements	97
3.1.4.18.2.1	ReplaceNotes	97
3.1.4.18.2.2	ReplaceNotesResponse.....	98
3.1.4.18.3	Complex Types	98
3.1.4.18.4	Simple Types	98
3.1.4.18.5	Attributes	98
3.1.4.18.6	Groups.....	98
3.1.4.18.7	Attribute Groups.....	98
3.1.4.19	ReplaceText	98
3.1.4.19.1	Messages	99
3.1.4.19.1.1	IPptEdit_ReplaceText_InputMessage	99
3.1.4.19.1.2	IPptEdit_ReplaceText_OutputMessage	99
3.1.4.19.2	Elements.....	99
3.1.4.19.2.1	ReplaceText	99
3.1.4.19.2.2	ReplaceTextResponse.....	100
3.1.4.19.3	Complex Types	100
3.1.4.19.4	Simple Types	100
3.1.4.19.5	Attributes	100
3.1.4.19.6	Groups.....	100
3.1.4.19.7	Attribute Groups.....	101
3.1.4.20	ResetSmartArt.....	101
3.1.4.20.1	Messages	101
3.1.4.20.1.1	IPptEdit_ResetSmartArt_InputMessage.....	101
3.1.4.20.1.2	IPptEdit_ResetSmartArt_OutputMessage	101
3.1.4.20.2	Elements.....	102
3.1.4.20.2.1	ResetSmartArt.....	102

3.1.4.20.2.2	ResetSmartArtResponse	102
3.1.4.20.3	Complex Types	102
3.1.4.20.4	Simple Types	103
3.1.4.20.5	Attributes	103
3.1.4.20.6	Groups.....	103
3.1.4.20.7	Attribute Groups.....	103
3.1.4.21	ReverseSmartArt	103
3.1.4.21.1	Messages	103
3.1.4.21.1.1	IPptEdit_ReverseSmartArt_InputMessage	103
3.1.4.21.1.2	IPptEdit_ReverseSmartArt_OutputMessage	104
3.1.4.21.2	Elements	104
3.1.4.21.2.1	ReverseSmartArt	104
3.1.4.21.2.2	ReverseSmartArtResponse.....	104
3.1.4.21.3	Complex Types	105
3.1.4.21.4	Simple Types	105
3.1.4.21.5	Attributes	105
3.1.4.21.6	Groups.....	105
3.1.4.21.7	Attribute Groups.....	105
3.1.4.22	SaveAndClose	105
3.1.4.22.1	Messages	105
3.1.4.22.1.1	IPptEdit_SaveAndClose_InputMessage	106
3.1.4.22.1.2	IPptEdit_SaveAndClose_OutputMessage	106
3.1.4.22.2	Elements	106
3.1.4.22.2.1	SaveAndClose	106
3.1.4.22.2.2	SaveAndCloseResponse.....	107
3.1.4.22.3	Complex Types	107
3.1.4.22.4	Simple Types	107
3.1.4.22.5	Attributes	107
3.1.4.22.6	Groups.....	107
3.1.4.22.7	Attribute Groups.....	107
3.1.4.23	ShowHideSlide.....	107
3.1.4.23.1	Messages	108
3.1.4.23.1.1	IPptEdit_ShowHideSlide_InputMessage	108
3.1.4.23.1.2	IPptEdit_ShowHideSlide_OutputMessage	108
3.1.4.23.2	Elements.....	108
3.1.4.23.2.1	ShowHideSlide	108
3.1.4.23.2.2	ShowHideSlideResponse	109
3.1.4.23.3	Complex Types	109
3.1.4.23.4	Simple Types	109
3.1.4.23.5	Attributes.....	109
3.1.4.23.6	Groups.....	109
3.1.4.23.7	Attribute Groups.....	109
3.1.4.24	Undo.....	110
3.1.4.24.1	Messages	110
3.1.4.24.1.1	IPptEdit_Undo_InputMessage.....	110
3.1.4.24.1.2	IPptEdit_Undo_OutputMessage.....	110
3.1.4.24.2	Elements.....	110
3.1.4.24.2.1	Undo.....	111
3.1.4.24.2.2	UndoResponse.....	111
3.1.4.24.3	Complex Types	111
3.1.4.24.4	Simple Types	111
3.1.4.24.5	Attributes.....	111
3.1.4.24.6	Groups.....	111

3.1.4.24.7	Attribute Groups.....	112
3.1.4.25	UpdateCanary	112
3.1.4.25.1	Messages	112
3.1.4.25.1.1	IPptEdit_UpdateCanary_InputMessage	112
3.1.4.25.1.2	IPptEdit_UpdateCanary_OutputMessage	112
3.1.4.25.2	Elements	112
3.1.4.25.2.1	UpdateCanary	113
3.1.4.25.2.2	UpdateCanaryResponse	113
3.1.4.25.3	Complex Types	113
3.1.4.25.4	Simple Types	113
3.1.4.25.5	Attributes	113
3.1.4.25.6	Groups.....	113
3.1.4.25.7	Attribute Groups.....	113
3.1.4.26	ApplyShapeFill	114
3.1.4.26.1	Messages	114
3.1.4.26.1.1	IPptEdit_ApplyShapeFill_InputMessage.....	114
3.1.4.26.1.2	IPptEdit_ApplyShapeFill_OutputMessage.....	114
3.1.4.26.2	Elements	114
3.1.4.26.2.1	ApplyShapeFill.....	115
3.1.4.26.2.2	ApplyShapeFillResponse	115
3.1.4.26.3	Complex Types	116
3.1.4.26.4	Simple Types	116
3.1.4.26.5	Attributes	116
3.1.4.26.6	Groups.....	116
3.1.4.26.7	Attribute Groups.....	116
3.1.4.27	ApplyShapeOutlineColor	116
3.1.4.27.1	Messages	116
3.1.4.27.1.1	IPptEdit_ApplyShapeOutlineColor_InputMessage	117
3.1.4.27.1.2	IPptEdit_ApplyShapeOutlineColor_OutputMessage	117
3.1.4.27.2	Elements	117
3.1.4.27.2.1	ApplyShapeOutlineColor	117
3.1.4.27.2.2	ApplyShapeOutlineColorResponse	118
3.1.4.27.3	Complex Types	118
3.1.4.27.4	Simple Types	118
3.1.4.27.5	Attributes	118
3.1.4.27.6	Groups.....	118
3.1.4.27.7	Attribute Groups.....	119
3.1.4.28	ApplyShapeOutlineDashStyle.....	119
3.1.4.28.1	Messages	119
3.1.4.28.1.1	IPptEdit_ApplyShapeOutlineDashStyle_InputMessage.....	119
3.1.4.28.1.2	IPptEdit_ApplyShapeOutlineDashStyle_OutputMessage	120
3.1.4.28.2	Elements	120
3.1.4.28.2.1	ApplyShapeOutlineDashStyle.....	120
3.1.4.28.2.2	ApplyShapeOutlineDashStyleResponse	121
3.1.4.28.3	Complex Types	121
3.1.4.28.4	Simple Types	121
3.1.4.28.5	Attributes	121
3.1.4.28.6	Groups.....	121
3.1.4.28.7	Attribute Groups.....	121
3.1.4.29	ApplyShapeOutlineEndStyle	121
3.1.4.29.1	Messages	122
3.1.4.29.1.1	IPptEdit_ApplyShapeOutlineEndStyle_InputMessage	122
3.1.4.29.1.2	IPptEdit_ApplyShapeOutlineEndStyle_OutputMessage	122

3.1.4.29.2	Elements	122
3.1.4.29.2.1	ApplyShapeOutlineEndStyle	123
3.1.4.29.2.2	ApplyShapeOutlineEndStyleResponse	124
3.1.4.29.3	Complex Types	124
3.1.4.29.4	Simple Types	124
3.1.4.29.5	Attributes	124
3.1.4.29.6	Groups.....	124
3.1.4.29.7	Attribute Groups.....	124
3.1.4.30	ApplyShapeOutlineWidth.....	124
3.1.4.30.1	Messages	125
3.1.4.30.1.1	IPptEdit_ApplyShapeOutlineWidth_InputMessage.....	125
3.1.4.30.1.2	IPptEdit_ApplyShapeOutlineWidth_OutputMessage	125
3.1.4.30.2	Elements.....	125
3.1.4.30.2.1	ApplyShapeOutlineWidth.....	125
3.1.4.30.2.2	ApplyShapeOutlineWidthResponse	126
3.1.4.30.3	Complex Types	126
3.1.4.30.4	Simple Types	126
3.1.4.30.5	Attributes	126
3.1.4.30.6	Groups.....	126
3.1.4.30.7	Attribute Groups.....	127
3.1.4.31	ApplyShapeStyle.....	127
3.1.4.31.1	Messages	127
3.1.4.31.1.1	IPptEdit_ApplyShapeStyle_InputMessage.....	127
3.1.4.31.1.2	IPptEdit_ApplyShapeStyle_OutputMessage	127
3.1.4.31.2	Elements.....	128
3.1.4.31.2.1	ApplyShapeStyle.....	128
3.1.4.31.2.2	ApplyShapeStyleResponse	128
3.1.4.31.3	Complex Types	129
3.1.4.31.4	Simple Types	129
3.1.4.31.5	Attributes	129
3.1.4.31.6	Groups.....	129
3.1.4.31.7	Attribute Groups.....	129
3.1.4.32	ArrangeShape	129
3.1.4.32.1	Messages	129
3.1.4.32.1.1	IPptEdit_ArrangeShape_InputMessage	130
3.1.4.32.1.2	IPptEdit_ArrangeShape_OutputMessage	130
3.1.4.32.2	Elements.....	130
3.1.4.32.2.1	ArrangeShape	130
3.1.4.32.2.2	ArrangeShapeResponse	131
3.1.4.32.3	Complex Types	131
3.1.4.32.4	Simple Types	131
3.1.4.32.5	Attributes	131
3.1.4.32.6	Groups.....	131
3.1.4.32.7	Attribute Groups.....	131
3.1.4.33	DuplicateShape	131
3.1.4.33.1	Messages	132
3.1.4.33.1.1	IPptEdit_DuplicateShape_InputMessage	132
3.1.4.33.1.2	IPptEdit_DuplicateShape_OutputMessage	132
3.1.4.33.2	Elements.....	132
3.1.4.33.2.1	DuplicateShape	133
3.1.4.33.2.2	DuplicateShapeResponse	133
3.1.4.33.3	Complex Types	133
3.1.4.33.4	Simple Types	133

3.1.4.33.5	Attributes	134
3.1.4.33.6	Groups.....	134
3.1.4.33.7	Attribute Groups.....	134
3.1.4.34	FlipShape.....	134
3.1.4.34.1	Messages	134
3.1.4.34.1.1	IPptEdit_FlipShape_InputMessage	134
3.1.4.34.1.2	IPptEdit_FlipShape_OutputMessage	135
3.1.4.34.2	Elements.....	135
3.1.4.34.2.1	FlipShape	135
3.1.4.34.2.2	FlipShapeResponse	135
3.1.4.34.3	Complex Types	136
3.1.4.34.4	Simple Types	136
3.1.4.34.5	Attributes	136
3.1.4.34.6	Groups.....	136
3.1.4.34.7	Attribute Groups.....	136
3.1.4.35	GetCoauthUpdates	136
3.1.4.35.1	Messages	136
3.1.4.35.1.1	IPptEdit_GetCoauthUpdates_InputMessage	137
3.1.4.35.1.2	IPptEdit_GetCoauthUpdates_OutputMessage	137
3.1.4.35.2	Elements.....	137
3.1.4.35.2.1	GetCoauthUpdates.....	137
3.1.4.35.2.2	GetCoauthUpdatesResponse.....	138
3.1.4.35.3	Complex Types	138
3.1.4.35.4	Simple Types	138
3.1.4.35.5	Attributes	138
3.1.4.35.6	Groups.....	138
3.1.4.35.7	Attribute Groups.....	138
3.1.4.36	GetEditPresInfoGetEditSlideById	138
3.1.4.36.1	Messages	139
3.1.4.36.1.1	IPptEdit_GetEditPresInfoGetEditSlideById_InputMessage	139
3.1.4.36.1.2	IPptEdit_GetEditPresInfoGetEditSlideById_OutputMessage	139
3.1.4.36.2	Elements.....	139
3.1.4.36.2.1	GetEditPresInfoGetEditSlideById	139
3.1.4.36.2.2	GetEditPresInfoGetEditSlideByIdResponse	140
3.1.4.36.3	Complex Types	140
3.1.4.36.4	Simple Types	140
3.1.4.36.5	Attributes	141
3.1.4.36.6	Groups.....	141
3.1.4.36.7	Attribute Groups.....	141
3.1.4.37	InsertShape	141
3.1.4.37.1	Messages	141
3.1.4.37.1.1	IPptEdit_InsertShape_InputMessage	141
3.1.4.37.1.2	IPptEdit_InsertShape_OutputMessage	142
3.1.4.37.2	Elements.....	142
3.1.4.37.2.1	InsertShape	142
3.1.4.37.2.2	InsertShapeResponse.....	142
3.1.4.37.3	Complex Types	143
3.1.4.37.4	Simple Types	143
3.1.4.37.5	Attributes	143
3.1.4.37.6	Groups.....	143
3.1.4.37.7	Attribute Groups.....	143
3.1.4.38	MoveShape	143
3.1.4.38.1	Messages	143

3.1.4.38.1.1	IPptEdit_MoveShape_InputMessage	144
3.1.4.38.1.2	IPptEdit_MoveShape_OutputMessage	144
3.1.4.38.2	Elements	144
3.1.4.38.2.1	MoveShape	144
3.1.4.38.2.2	MoveShapeResponse	145
3.1.4.38.3	Complex Types	145
3.1.4.38.4	Simple Types	145
3.1.4.38.5	Attributes	145
3.1.4.38.6	Groups	145
3.1.4.38.7	Attribute Groups	145
3.1.4.39	RemoveShapeFill	145
3.1.4.39.1	Messages	146
3.1.4.39.1.1	IPptEdit_RemoveShapeFill_InputMessage	146
3.1.4.39.1.2	IPptEdit_RemoveShapeFill_OutputMessage	146
3.1.4.39.2	Elements	146
3.1.4.39.2.1	RemoveShapeFill	147
3.1.4.39.2.2	RemoveShapeFillResponse	147
3.1.4.39.3	Complex Types	147
3.1.4.39.4	Simple Types	147
3.1.4.39.5	Attributes	147
3.1.4.39.6	Groups	147
3.1.4.39.7	Attribute Groups	148
3.1.4.40	RemoveShapeOutline	148
3.1.4.40.1	Messages	148
3.1.4.40.1.1	IPptEdit_RemoveShapeOutline_InputMessage	148
3.1.4.40.1.2	IPptEdit_RemoveShapeOutline_OutputMessage	148
3.1.4.40.2	Elements	149
3.1.4.40.2.1	RemoveShapeOutline	149
3.1.4.40.2.2	RemoveShapeOutlineResponse	149
3.1.4.40.3	Complex Types	149
3.1.4.40.4	Simple Types	150
3.1.4.40.5	Attributes	150
3.1.4.40.6	Groups	150
3.1.4.40.7	Attribute Groups	150
3.1.4.41	ReorderAnimation	150
3.1.4.41.1	Messages	150
3.1.4.41.1.1	IPptEdit_ReorderAnimation_InputMessage	150
3.1.4.41.1.2	IPptEdit_ReorderAnimation_OutputMessage	151
3.1.4.41.2	Elements	151
3.1.4.41.2.1	ReorderAnimation	151
3.1.4.41.2.2	ReorderAnimationResponse	151
3.1.4.41.3	Complex Types	152
3.1.4.41.4	Simple Types	152
3.1.4.41.5	Attributes	152
3.1.4.41.6	Groups	152
3.1.4.41.7	Attribute Groups	152
3.1.4.42	ResizeShape	152
3.1.4.42.1	Messages	152
3.1.4.42.1.1	IPptEdit_ResizeShape_InputMessage	153
3.1.4.42.1.2	IPptEdit_ResizeShape_OutputMessage	153
3.1.4.42.2	Elements	153
3.1.4.42.2.1	ResizeShape	153
3.1.4.42.2.2	ResizeShapeResponse	154

3.1.4.42.3	Complex Types	154
3.1.4.42.4	Simple Types	154
3.1.4.42.5	Attributes	154
3.1.4.42.6	Groups	155
3.1.4.42.7	Attribute Groups	155
3.1.4.43	RotateShape	155
3.1.4.43.1	Messages	155
3.1.4.43.1.1	IPptEdit_RotateShape_InputMessage	155
3.1.4.43.1.2	IPptEdit_RotateShape_OutputMessage	155
3.1.4.43.2	Elements	156
3.1.4.43.2.1	RotateShape	156
3.1.4.43.2.2	RotateShapeResponse	156
3.1.4.43.3	Complex Types	157
3.1.4.43.4	Simple Types	157
3.1.4.43.5	Attributes	157
3.1.4.43.6	Groups	157
3.1.4.43.7	Attribute Groups	157
3.1.4.44	SetAnimation	157
3.1.4.44.1	Messages	157
3.1.4.44.1.1	IPptEdit_SetAnimation_InputMessage	158
3.1.4.44.1.2	IPptEdit_SetAnimation_OutputMessage	158
3.1.4.44.2	Elements	158
3.1.4.44.2.1	SetAnimation	158
3.1.4.44.2.2	SetAnimationResponse	159
3.1.4.44.3	Complex Types	160
3.1.4.44.4	Simple Types	160
3.1.4.44.5	Attributes	160
3.1.4.44.6	Groups	160
3.1.4.44.7	Attribute Groups	160
3.1.4.45	SetTransition	160
3.1.4.45.1	Messages	160
3.1.4.45.1.1	IPptEdit_SetTransition_InputMessage	161
3.1.4.45.1.2	IPptEdit_SetTransition_OutputMessage	161
3.1.4.45.2	Elements	161
3.1.4.45.2.1	SetTransition	161
3.1.4.45.2.2	SetTransitionResponse	162
3.1.4.45.3	Complex Types	162
3.1.4.45.4	Simple Types	163
3.1.4.45.5	Attributes	163
3.1.4.45.6	Groups	163
3.1.4.45.7	Attribute Groups	163
3.1.4.46	SetWordArt	163
3.1.4.46.1	Messages	163
3.1.4.46.1.1	IPptEdit_SetWordArt_InputMessage	163
3.1.4.46.1.2	IPptEdit_SetWordArt_OutputMessage	164
3.1.4.46.2	Elements	164
3.1.4.46.2.1	SetWordArt	164
3.1.4.46.2.2	SetWordArtResponse	164
3.1.4.46.3	Complex Types	165
3.1.4.46.4	Simple Types	165
3.1.4.46.5	Attributes	165
3.1.4.46.6	Groups	165
3.1.4.46.7	Attribute Groups	165

3.1.4.47	ShapeFormatPainting	165
3.1.4.47.1	Messages	165
3.1.4.47.1.1	IPptEdit_ShapeFormatPainting_InputMessage	166
3.1.4.47.1.2	IPptEdit_ShapeFormatPainting_OutputMessage	166
3.1.4.47.2	Elements	166
3.1.4.47.2.1	ShapeFormatPainting	166
3.1.4.47.2.2	ShapeFormatPaintingResponse	167
3.1.4.47.3	Complex Types	167
3.1.4.47.4	Simple Types	167
3.1.4.47.5	Attributes	167
3.1.4.47.6	Groups	167
3.1.4.47.7	Attribute Groups	167
3.1.4.48	UngroupShape	167
3.1.4.48.1	Messages	168
3.1.4.48.1.1	IPptEdit_UngroupShape_InputMessage	168
3.1.4.48.1.2	IPptEdit_UngroupShape_OutputMessage	168
3.1.4.48.2	Elements	168
3.1.4.48.2.1	UngroupShape	169
3.1.4.48.2.2	UngroupShapeResponse	169
3.1.4.48.3	Complex Types	169
3.1.4.48.4	Simple Types	169
3.1.4.48.5	Attributes	169
3.1.4.48.6	Groups	170
3.1.4.48.7	Attribute Groups	170
3.1.4.49	AddComment	170
3.1.4.49.1	Messages	170
3.1.4.49.1.1	IPptEdit_AddComment_InputMessage	170
3.1.4.49.1.2	IPptEdit_AddComment_OutputMessage	170
3.1.4.49.2	Elements	171
3.1.4.49.2.1	AddComment	171
3.1.4.49.2.2	AddCommentResponse	171
3.1.4.49.3	Complex Types	172
3.1.4.49.4	Simple Types	172
3.1.4.49.5	Attributes	172
3.1.4.49.6	Groups	172
3.1.4.49.7	Attribute Groups	172
3.1.4.50	DeleteComment	172
3.1.4.50.1	Messages	172
3.1.4.50.1.1	IPptEdit_DeleteComment_InputMessage	173
3.1.4.50.1.2	IPptEdit_DeleteComment_OutputMessage	173
3.1.4.50.2	Elements	173
3.1.4.50.2.1	DeleteComment	173
3.1.4.50.2.2	DeleteCommentResponse	174
3.1.4.50.3	Complex Types	174
3.1.4.50.4	Simple Types	174
3.1.4.50.5	Attributes	174
3.1.4.50.6	Groups	174
3.1.4.50.7	Attribute Groups	174
3.1.4.51	EditComment	174
3.1.4.51.1	Messages	175
3.1.4.51.1.1	IPptEdit_EditComment_InputMessage	175
3.1.4.51.1.2	IPptEdit_EditComment_OutputMessage	175
3.1.4.51.2	Elements	175

3.1.4.51.2.1	EditComment	175
3.1.4.51.2.2	EditCommentResponse	176
3.1.4.51.3	Complex Types	176
3.1.4.51.4	Simple Types	176
3.1.4.51.5	Attributes	176
3.1.4.51.6	Groups	177
3.1.4.51.7	Attribute Groups	177
3.1.4.52	MoveComment	177
3.1.4.52.1	Messages	177
3.1.4.52.1.1	IPptEdit_MoveComment_InputMessage	177
3.1.4.52.1.2	IPptEdit_MoveComment_OutputMessage	177
3.1.4.52.2	Elements	178
3.1.4.52.2.1	MoveComment	178
3.1.4.52.2.2	MoveCommentResponse	178
3.1.4.52.3	Complex Types	179
3.1.4.52.4	Simple Types	179
3.1.4.52.5	Attributes	179
3.1.4.52.6	Groups	179
3.1.4.52.7	Attribute Groups	179
3.1.4.53	SetTransitionApplyAll	179
3.1.4.53.1	Messages	179
3.1.4.53.1.1	IPptEdit_SetTransitionApplyAll_InputMessage	180
3.1.4.53.1.2	IPptEdit_SetTransitionApplyAll_OutputMessage	180
3.1.4.53.2	Elements	180
3.1.4.53.2.1	SetTransitionApplyAll	180
3.1.4.53.2.2	SetTransitionApplyAllResponse	181
3.1.4.53.3	Complex Types	181
3.1.4.53.4	Simple Types	181
3.1.4.53.5	Attributes	181
3.1.4.53.6	Groups	181
3.1.4.53.7	Attribute Groups	181
3.1.4.54	ResetPicture	181
3.1.4.54.1	Messages	182
3.1.4.54.1.1	IPptEdit_ResetPicture_InputMessage	182
3.1.4.54.1.2	IPptEdit_ResetPicture_OutputMessage	182
3.1.4.54.2	Elements	182
3.1.4.54.2.1	ResetPicture	182
3.1.4.54.2.2	ResetPictureResponse	183
3.1.4.54.3	Complex Types	183
3.1.4.54.4	Simple Types	183
3.1.4.54.5	Attributes	183
3.1.4.54.6	Groups	183
3.1.4.54.7	Attribute Groups	183
3.1.5	Timer Events	183
3.1.6	Other Local Events	184
4	Protocol Examples	185
4.1	Sample Protocol Interaction	185
5	Security	196
5.1	Security Considerations for Implementers	196
5.2	Index of Security Parameters	196

6 Appendix A: Full WSDL	197
6.1	
http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEditorServerInternalService/ WSDL	197
6.2	http://tempuri.org/ WSDL.....
	211
7 Appendix B: Full XML Schema	213
7.1	
http://schemas.datacontract.org/2004/07/Microsoft.Office.Server.Powerpoint.Interface.Shared Schema	213
7.2	
http://schemas.datacontract.org/2004/07/Microsoft.Office.Server.Powerpoint.PipelineInterface Schema.....	214
7.3	http://schemas.datacontract.org/2004/07/p Schema
	215
7.4	http://schemas.microsoft.com/2003/10/Serialization/Arrays Schema
	223
7.5	http://schemas.microsoft.com/2003/10/Serialization/ Schema
	223
7.6	
http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEditorServerInternalService/ Schema	224
8 Appendix C: Product Behavior	242
9 Change Tracking.....	247
10 Index	248

1 Introduction

This document specifies the PowerPoint Web Editor Data Protocol, which enables a protocol client to obtain information about and modify slide collection content on a protocol server.

Sections 1.8, 2, and 3 of this specification are normative and can contain the terms MAY, SHOULD, MUST, MUST NOT, and SHOULD NOT as defined in RFC 2119. Sections 1.5 and 1.9 are also normative but cannot contain those terms. All other sections and examples in this specification are informative.

1.1 Glossary

The following terms are defined in [\[MS-GLOS\]](#):

Hypertext Transfer Protocol (HTTP)
Hypertext Transfer Protocol over Secure Sockets Layer (HTTPS)
language code identifier (LCID)

The following terms are defined in [\[MS-OFCGLOS\]](#):

absolute URL
build identifier
canary
comment
cookie
cross-site request forgery
cross-site scripting
Hypertext Markup Language (HTML)
main master slide
placeholder
presentation
presentation slide
right-to-left
shape
Simple Object Access Protocol (SOAP)
slide
slide layout
SmartArt
SOAP action
SOAP body
SOAP fault
SOAP message
theme
title master slide
Uniform Resource Locator (URL)
Web Services Description Language (WSDL)
Web site
WSDL message
WSDL operation
XML namespace
XML namespace prefix
XML schema

The following terms are specific to this document:

MAY, SHOULD, MUST, SHOULD NOT, MUST NOT: These terms (in all caps) are used as described in [\[RFC2119\]](#). All statements of optional behavior use either MAY, SHOULD, or SHOULD NOT.

1.2 References

References to Microsoft Open Specifications documentation do not include a publishing year because links are to the latest version of the documents, which are updated frequently. References to other documents include a publishing year when one is available.

1.2.1 Normative References

We conduct frequent surveys of the normative references to assure their continued availability. If you have any issue with finding a normative reference, please contact dochelp@microsoft.com. We will assist you in finding the relevant information. Please check the archive site, <http://msdn2.microsoft.com/en-us/library/E4BD6494-06AD-4aed-9823-445E921C9624>, as an additional source.

[ISO/IEC-29500-1] International Organization for Standardization, "Information Technology - Document description and processing languages - Office Open XML File Formats - Part 1: Fundamentals and Markup Language Reference", ISO/IEC PRF 29500-1:2008, http://www.iso.org/iso/iso_catalogue/catalogue_tc/catalogue_detail.htm?csnumber=51463

[MS-LCID] Microsoft Corporation, "[Windows Language Code Identifier \(LCID\) Reference](#)".

[RFC2119] Bradner, S., "Key words for use in RFCs to Indicate Requirement Levels", BCP 14, RFC 2119, March 1997, <http://www.rfc-editor.org/rfc/rfc2119.txt>

[RFC2616] Fielding, R., Gettys, J., Mogul, J., et al., "Hypertext Transfer Protocol -- HTTP/1.1", RFC 2616, June 1999, <http://www.ietf.org/rfc/rfc2616.txt>

[RFC4627] Crockford, D., "The application/json Media Type for Javascript Object Notation (JSON)", RFC 4627, July 2006, <http://www.ietf.org/rfc/rfc4627.txt>

[SOAP1.1] Box, D., Ehnebuske, D., Kakivaya, G., et al., "Simple Object Access Protocol (SOAP) 1.1", May 2000, <http://www.w3.org/TR/2000/NOTE-SOAP-20000508/>

[SOAP1.2/1] Gudgin, M., Hadley, M., Mendelsohn, N., Moreau, J., and Nielsen, H.F., "SOAP Version 1.2 Part 1: Messaging Framework", W3C Recommendation, June 2003, <http://www.w3.org/TR/2003/REC-soap12-part1-20030624>

[WSDL] Christensen, E., Curbera, F., Meredith, G., and Weerawarana, S., "Web Services Description Language (WSDL) 1.1", W3C Note, March 2001, <http://www.w3.org/TR/2001/NOTE-wsdl-20010315>

[XMLNS] Bray, T., Hollander, D., Layman, A., et al., Eds., "Namespaces in XML 1.0 (Third Edition)", W3C Recommendation, December 2009, <http://www.w3.org/TR/2009/REC-xml-names-20091208/>

[XMLSCHEMA1] Thompson, H.S., Ed., Beech, D., Ed., Maloney, M., Ed., and Mendelsohn, N., Ed., "XML Schema Part 1: Structures", W3C Recommendation, May 2001, <http://www.w3.org/TR/2001/REC-xmlschema-1-20010502/>

[XMLSCHEMA2] Biron, P.V., Ed. and Malhotra, A., Ed., "XML Schema Part 2: Datatypes", W3C Recommendation, May 2001, <http://www.w3.org/TR/2001/REC-xmlschema-2-20010502/>

1.2.2 Informative References

[HTML] World Wide Web Consortium, "HTML 4.01 Specification", December 1999, <http://www.w3.org/TR/html4/>

[MS-GLOS] Microsoft Corporation, "[Windows Protocols Master Glossary](#)".

[MS-OFCGLOS] Microsoft Corporation, "[Microsoft Office Master Glossary](#)".

[RFC2818] Rescorla, E., "HTTP Over TLS", RFC 2818, May 2000, <http://www.ietf.org/rfc/rfc2818.txt>

[RFC2822] Resnick, P., Ed., "Internet Message Format", STD 11, RFC 2822, April 2001, <http://www.ietf.org/rfc/rfc2822.txt>

[SOAP1.2/2] Gudgin, M., Hadley, M., Mendelsohn, N., Moreau, J., and Nielsen, H.F., "SOAP Version 1.2 Part 2: Adjuncts", W3C Recommendation, June 2003, <http://www.w3.org/TR/2003/REC-soap12-part2-20030624>

1.3 Protocol Overview (Synopsis)

This protocol enables a protocol client to send a request to modify **presentation** content to the protocol server and then receive from the protocol server information about the result of the modification.

To facilitate this, the protocol allows the protocol client to send a request to the protocol server and then receive from the protocol server information about the existence of **presentation slides**, **main master slides**, and **slide layouts**. The protocol client can also send a request to the protocol server and then receive from the protocol server images of slide content.

1.4 Relationship to Other Protocols

This protocol uses the **SOAP** message protocol for formatting request and response messages, as described in [\[SOAP1.1\]](#), [\[SOAP1.2/1\]](#) and [\[SOAP1.2/2\]](#). It transmits those messages by using **HTTP**, as described in [\[RFC2616\]](#), or **Hypertext Transfer Protocol over Secure Sockets Layer (HTTPS)**, as described in [\[RFC2818\]](#).

The following diagram shows the underlying messaging and transport stack used by the protocol:

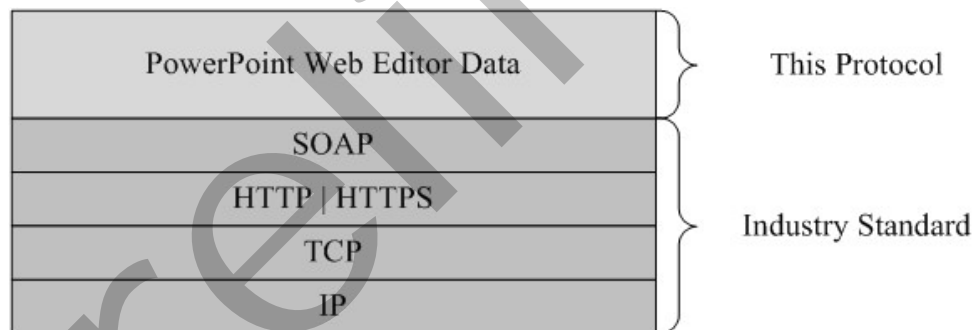


Figure 1: This protocol in relation to other protocols

1.5 Prerequisites/Preconditions

This protocol operates against a set of **Web sites (1)** that is identified by a set of **URLs** that are known by protocol clients.

The protocol server endpoint to which the client sends requests to modify presentation content SHOULD [<1>](#) be formed by appending "/p/ppt/edit.svc" to the URL of the Web site (1), for example <http://www.contoso.com/p/ppt/edit.svc>.

The protocol server endpoint to which the client sends requests to modify image content SHOULD [<2>](#) be formed by appending "/p/pptInsertPicture.ashx" to the URL of the Web site (1), for example <http://www.contoso.com/p/pptInsertPicture.ashx>.

This protocol assumes that authentication has been performed by the underlying protocols.

1.6 Applicability Statement

This protocol is designed to retrieve information about and to modify presentations that are stored on the protocol server.

1.7 Versioning and Capability Negotiation

This document covers versioning issues in the following areas:

- **Supported Transports:** This protocol uses multiple transports with SOAP as described in section [2.1](#).

1.8 Vendor-Extensible Fields

None.

1.9 Standards Assignments

None.

2 Messages

In the following sections, the schema definition might differ from the processing rules imposed by the protocol. The **WSDL** in this specification matches the WSDL that shipped with the product and provides a base description of the schema. The text that introduces the WSDL might specify differences that reflect actual Microsoft product behavior. For example, the schema definition might allow for an element to be **empty**, **null**, or **not present** but the behavior of the protocol as specified restricts the same elements to being **non-empty**, **present**, and **not null**.

2.1 Transport

Protocol servers **MUST** support SOAP over HTTP. Protocol servers **SHOULD** additionally support SOAP over HTTPS for securing communication with clients. Protocol servers **SHOULD** support JSON [\[RFC4627\]](#) over HTTP and HTTPS. [<3>](#)

Protocol messages **MUST** be formatted as specified either in [\[SOAP1.1\]](#) section 4 or in [\[SOAP1.2/1\]](#) section 5. Protocol server faults **MUST** be returned either using HTTP Status Codes, as specified in [\[RFC2616\]](#) section 10 or using **SOAP faults**, as specified in either [\[SOAP1.1\]](#) section 4.4 or in [\[SOAP1.2/1\]](#) section 5.4.

2.2 Common Message Syntax

This section contains common definitions used by this protocol. The syntax of the definitions uses XML Schema as defined in [\[XMLSCHEMA1\]](#) and [\[XMLSCHEMA2\]](#), and WSDL as defined in [\[WSDL\]](#).

2.2.1 Namespaces

This specification defines and references various **XML namespaces** using the mechanisms specified in [\[XMLNS\]](#). Although this specification associates a specific **XML namespace prefix** for each XML namespace that is used, the choice of any particular XML namespace prefix is implementation-specific and not significant for interoperability.

Pref ix	Namespace URI	Reference
q1	http://schemas.microsoft.com/2003/10/Serialization/Arrays	
tns	http://schemas.datacontract.org/2004/07/Microsoft.Office.Server.Powerpoint.Interface.Shared	
tns1	http://schemas.datacontract.org/2004/07/Microsoft.Office.Server.Powerpoint.Pipe.Interface	
tns2	http://schemas.datacontract.org/2004/07/p	
tns3	http://schemas.microsoft.com/2003/10/Serialization/	
tns4	http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEditServerInternalService/	
tns5	http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEditServerInternalService/Imports	
wsaw	http://www.w3.org/2006/05/addressing/wsdl	
wsdl	http://schemas.xmlsoap.org/wsdl/	[WSDL]

Prefix	Namespace URI	Reference
xs	http://www.w3.org/2001/XMLSchema	[XMLSCHEMA1] [XMLSCHEMA2]

2.2.2 Messages

None.

2.2.3 Elements

This specification does not define any common XML Schema element definitions.

2.2.4 Complex Types

The following table summarizes the set of common **XML schema** complex type definitions defined by this specification. XML schema complex type definitions that are specific to a particular operation are described with the operation.

Complex Type	Description
ArrayOfComment	A complex type that SHOULD <4> specify a list of Comment elements, as specified in section 2.2.4.39 .
ArrayOfContentMasterFe	A complex type that specifies a list of ContentMasterFe elements.
ArrayOfEditAnimInfo	A complex type that SHOULD <5> specify a list of EditAnimInfo elements, as specified in section 2.2.4.40 .
ArrayOfEditorInfo	A complex type that SHOULD <6> specify a list of EditorInfo elements, as specified in section 2.2.4.41 .
ArrayOfEditShape	A complex type that specifies a list of EditShape elements.
ArrayOfEditSlide	A complex type that specifies a list of EditSlide elements.
ArrayOfEditSlideChanges	A complex type that specifies a list of EditSlideChanges elements.
ArrayOfEditSlideInfoFe	A complex type that specifies a list of EditSlideInfoFe elements.
ArrayOfMainMasterFe	A complex type that specifies a list of MainMasterFe elements.
ArrayOfStyleGalleryItem	A complex type that SHOULD <7> specify a list of StyleGalleryItem elements, as specified in section 2.2.4.44 .
ArrayOfunsignedInt	A complex type that specifies a list of xs:unsignedInt elements ([XMLSCHEMA2] section 3.3.22).
ArrayOfViewElement	A complex type that specifies a list of ViewElement elements.
BoundingRegion	A complex type that SHOULD <8> specify the rotated bounds of a shape .
ClippingInfo	A complex type that SHOULD <9> specify a region within an image.
CoauthState	A complex type that SHOULD <10> specify the co-authoring state of the

Complex Type	Description
	presentation.
CoauthUpdate	A complex type that SHOULD <11> specify the co-authoring state of the presentation.
Comment	A complex type that SHOULD <12> specify a single comment and its replies
ContentMasterFe	A complex type that specifies a slide layout.
EditAnimInfo	A complex type that SHOULD <13> specify a shape animation.
EditCommandResponse	A complex type that specifies the response of a modification to a presentation.
EditorInfo	A complex type that SHOULD <14> specify an editor of the presentation.
EditPresentationChanges	A complex type that specifies the content of the presentation that is modified as a result of a request to the protocol server.
EditPresentationInfo	A complex type that specifies information about the content of a specified presentation.
EditShape	A complex type that specifies a shape.
EditSlide	A complex type that specifies a presentation slide.
EditSlideChanges	A complex type that specifies the content of the presentation slide that is modified as a result of a request to the protocol server.
EditSlideInfoFe	A complex type that specifies information about a presentation slide.
EditTransitionInfo	A complex type that SHOULD <15> specify a slide transition.
FontSizeMapping	Reserved. MUST be ignored.
Html	A complex type that specifies HTML content.
MainMasterFe	A complex type that specifies a main master slide.
Notes	A complex type that specifies the notes of a presentation slide.
Point	A complex type that specifies a two dimensional point.
PptViewingService.PrintResult	A complex type that SHOULD <16> specify the result of a print operation.
PresetSchemeColorMapping	A complex type that SHOULD <17> specify a set of colors in the theme
Rectangle	A complex type that specifies a rectangle.
ServiceError	A complex type that specifies error information returned by the protocol server to a protocol client.
ServiceResult	A complex type that specifies the result of a protocol method. The protocol server returns this type to the protocol client containing either a successful Result element or an Error element.
SlideIdList	A complex type that specifies a list of identifiers for presentation slides.
SmartArtInfo	A complex type that specifies information about a SmartArt diagram.

Complex Type	Description
StyleGalleryItem	A complex type that SHOULD 18 specify a shape style.
Theme	A complex type that specifies information about a theme.
ThemeColor	A complex type that specifies a color using the red, green, blue RGB color model. Red, green, and blue are each expressed as an unsigned byte from 0 for no intensity to 255 for full intensity.
ViewElement	A complex type that specifies a visual representation of presentation slide content.

2.2.4.1 ArrayOfContentMasterFe

Namespace: <http://schemas.datacontract.org/2004/07/p>

A complex type that specifies a list of [ContentMasterFe](#) elements.

```
<xs:complexType name="ArrayOfContentMasterFe" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="unbounded" name="ContentMasterFe" nillable="true"
      type="tns2:ContentMasterFe"/>
  </xs:sequence>
</xs:complexType>
```

ContentMasterFe: Each element MUST specify a ContentMasterFe type instance.

2.2.4.2 ArrayOfEditShape

Namespace: <http://schemas.datacontract.org/2004/07/p>

A complex type that specifies a list of [EditShape](#) elements.

```
<xs:complexType name="ArrayOfEditShape" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="unbounded" name="EditShape" nillable="true"
      type="tns2:EditShape"/>
  </xs:sequence>
</xs:complexType>
```

EditShape: Each element MUST specify an EditShape type instance.

2.2.4.3 ArrayOfEditSlide

Namespace: <http://schemas.datacontract.org/2004/07/p>

A complex type that specifies a list of [EditSlide](#) elements.

```
<xs:complexType name="ArrayOfEditSlide" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="unbounded" name="EditSlide" nillable="true"
      type="tns2:EditSlide"/>
  </xs:sequence>
</xs:complexType>
```

```
</xs:complexType>
```

EditSlide: Each element MUST specify an EditSlide type instance.

2.2.4.4 ArrayOfEditSlideChanges

Namespace: <http://schemas.datacontract.org/2004/07/p>

A complex type that specifies a list of [EditSlideChanges](#) elements.

```
<xs:complexType name="ArrayOfEditSlideChanges" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="unbounded" name="EditSlideChanges" nillable="true"
      type="tns2:EditSlideChanges"/>
  </xs:sequence>
</xs:complexType>
```

EditSlideChanges: Each element MUST specify an EditSlideChanges type instance.

2.2.4.5 ArrayOfEditSlideInfoFe

Namespace: <http://schemas.datacontract.org/2004/07/p>

A complex type that specifies a list of [EditSlideInfoFe](#) elements.

```
<xs:complexType name="ArrayOfEditSlideInfoFe" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="unbounded" name="EditSlideInfoFe" nillable="true"
      type="tns2:EditSlideInfoFe"/>
  </xs:sequence>
</xs:complexType>
```

EditSlideInfoFe: Each element MUST specify an EditSlideInfoFe type instance.

2.2.4.6 ArrayOfMainMasterFe

Namespace: <http://schemas.datacontract.org/2004/07/p>

A complex type that specifies a list of [MainMasterFe](#) elements.

```
<xs:complexType name="ArrayOfMainMasterFe" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="unbounded" name="MainMasterFe" nillable="true"
      type="tns2:MainMasterFe"/>
  </xs:sequence>
</xs:complexType>
```

MainMasterFe: Each element MUST specify a MainMasterFe type instance.

2.2.4.7 ArrayOfunsignedInt

Namespace: <http://schemas.microsoft.com/2003/10/Serialization/Arrays>

A complex type that specifies a list of **xs:unsignedInt** elements ([\[XMLSCHEMA2\]](#) section 3.3.22).

```
<xs:complexType name="ArrayOfunsignedInt" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="unbounded" name="unsignedInt"
type="xs:unsignedInt"/>
  </xs:sequence>
</xs:complexType>
```

unsignedInt: Each element MUST specify an **xs:unsignedInt** ([\[XMLSCHEMA2\]](#) section 3.3.22).

2.2.4.8 ArrayOfViewElement

Namespace: <http://schemas.datacontract.org/2004/07/p>

A complex type that specifies a list of [ViewElement](#) elements.

```
<xs:complexType name="ArrayOfViewElement" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="unbounded" name="ViewElement" nillable="true"
type="tns2:ViewElement"/>
  </xs:sequence>
</xs:complexType>
```

ViewElement: Each element MUST specify a ViewElement type instance.

2.2.4.9 ClippingInfo

Namespace: <http://schemas.datacontract.org/2004/07/p>

A complex type that SHOULD [<19>](#) specify a region within an image.

```
<xs:complexType name="ClippingInfo" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:sequence>
    <xs:element minOccurs="0" name="Bounds" nillable="true" type="tns2:Rectangle"/>
    <xs:element minOccurs="0" name="TotalHeight" type="xs:int"/>
    <xs:element minOccurs="0" name="TotalWidth" type="xs:int"/>
  </xs:sequence>
</xs:complexType>
```

Bounds: A **Rectangle** (section [2.2.4.24](#)) that specifies the bounds of the region. This element MUST be present.

TotalHeight: An **xs:int** ([\[XMLSCHEMA2\]](#) section 3.3.17) that specifies the total height of the image.

TotalWidth: An **xs:int** ([\[XMLSCHEMA2\]](#) section 3.3.17) that specifies the total width of the image.

2.2.4.10 ContentMasterFe

Namespace: <http://schemas.datacontract.org/2004/07/p>

A complex type that specifies a slide layout.

```

<xs:complexType name="ContentMasterFe" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:sequence>
    <xs:element minOccurs="0" name="Id" type="xs:unsignedInt"/>
    <xs:element minOccurs="0" name="Name" nillable="true" type="xs:string"/>
    <xs:element minOccurs="0" name="SlideLayoutType" nillable="true" type="xs:string"/>
  </xs:sequence>
</xs:complexType>

```

Id: An **xs:unsignedInt** ([\[XMLSCHEMA2\]](#) section 3.3.22) that specifies the identifier for the slide layout. This element **MUST** be present.

Name: An **xs:string** ([\[XMLSCHEMA2\]](#) section 3.2.1) that specifies the name of the slide layout.

SlideLayoutType: An **xs:string** ([\[XMLSCHEMA2\]](#) section 3.2.1) that specifies the layout type as specified by **ST_SlideLayoutType** [\[ISO/IEC-29500-1\]](#) section 19.7.15. This element **MUST** be present.

2.2.4.11 EditCommandResponse

Namespace: <http://schemas.datacontract.org/2004/07/p>

A complex type that specifies the response of a modification to a presentation.

```

<xs:complexType name="EditCommandResponse" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:sequence>
    <xs:element minOccurs="0" name="PresChanges" nillable="true"
type="tns2:EditPresentationChanges"/>
  </xs:sequence>
</xs:complexType>

```

PresChanges: An [EditPresentationChanges](#) that specifies the content of the presentation that is modified.

2.2.4.12 EditPresentationChanges

Namespace: <http://schemas.datacontract.org/2004/07/p>

A complex type that specifies the content of the presentation that is modified as a result of a request to the protocol server.

```

<xs:complexType name="EditPresentationChanges" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:sequence>
    <xs:element minOccurs="0" name="AddedSlideInfos" nillable="true"
type="tns2:ArrayOfEditSlideInfoFe"/>
    <xs:element minOccurs="0" name="AddedSlides" nillable="true"
type="tns2:ArrayOfEditSlide"/>
    <xs:element minOccurs="0" name="InvalidateAllThumbs" type="xs:boolean"/>
    <xs:element minOccurs="0" name="MainMasterIds" nillable="true" type="tns2:SlideIdList"/>
    <xs:element minOccurs="0" name="ModifiedSlides" nillable="true"
type="tns2:ArrayOfEditSlideChanges"/>
    <xs:element minOccurs="0" name="Redo" type="xs:boolean"/>
    <xs:element minOccurs="0" name="SlideOrder" nillable="true" type="tns2:SlideIdList"/>
    <xs:element minOccurs="0" name="UndidApplyTheme" type="xs:boolean"/>
    <xs:element minOccurs="0" name="Undo" type="xs:boolean"/>
  </xs:sequence>

```

</xs:complexType>

AddedSlideInfos: An **ArrayOfEditSlideInfoFe** element (section [2.2.4.5](#)) that specifies information about presentation slides added to the presentation. This element MUST be present.

AddedSlides: An **ArrayOfEditSlide** element (section [2.2.4.3](#)) that specifies presentation slides added to the presentation. This element MUST be present.

InvalidateAllThumbs: An **xs:boolean** ([\[XMLSCHEMA2\]](#) section 3.2.2) that SHOULD [<20>](#) specify whether all thumbnails are invalid. This element MUST be present.

MainMasterIds: A **SlideIdList** element (section [2.2.4.27](#)) that specifies main master slides that are referenced by presentation slides.

ModifiedSlides: An **ArrayOfEditSlideChanges** element (section [2.2.4.4](#)) that specifies slide content that is modified. MUST be present.

Redo: An **xs:boolean** ([\[XMLSCHEMA2\]](#) section 3.2.2) that specifies whether **Redo** (section [3.1.4.17](#)) is possible. This element MUST be present.

SlideOrder: A **SlideIdList** that specifies the order of the presentation slides.

UndidApplyTheme: An **xs:boolean** ([\[XMLSCHEMA2\]](#) section 3.2.2) that SHOULD [<21>](#) specify whether an applied theme was removed. This element MUST be present.

Undo: An **xs:boolean** ([\[XMLSCHEMA2\]](#) section 3.2.2) that specifies whether **Undo** (section [3.1.4.24](#)) is possible. This element MUST be present.

2.2.4.13 EditPresentationInfo

Namespace: <http://schemas.datacontract.org/2004/07/p>

A complex type that specifies information about the content of a specified presentation.

```
<xs:complexType name="EditPresentationInfo" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:sequence>
    <xs:element minOccurs="0" name="CompatProblems" type="xs:boolean"/>
    <xs:element minOccurs="0" name="EditSlideInfos" nillable="true"
type="tns2:ArrayOfEditSlideInfoFe"/>
    <xs:element minOccurs="0" name="FCreateNew" type="xs:boolean"/>
    <xs:element minOccurs="0" name="FirstSlideIndex" type="xs:unsignedInt"/>
    <xs:element minOccurs="0" name="MainMasters" nillable="true"
type="tns2:ArrayOfMainMasterFe"/>
    <xs:element minOccurs="0" name="Redo" type="xs:boolean"/>
    <xs:element minOccurs="0" name="Rtl" type="xs:boolean"/>
    <xs:element minOccurs="0" name="Size" nillable="true" type="tns2:Point"/>
    <xs:element minOccurs="0" name="Slide" nillable="true" type="tns2:EditSlide"/>
    <xs:element minOccurs="0" name="SlideOrder" nillable="true" type="tns2:SlideIdList"/>
    <xs:element minOccurs="0" name="Undo" type="xs:boolean"/>
  </xs:sequence>
</xs:complexType>
```

CompatProblems: An **xs:boolean** ([\[XMLSCHEMA2\]](#) section 3.2.2) that SHOULD [<22>](#) specify whether compatibility issues can occur if the presentation is edited. This element MUST be present.

EditSlideInfos: An [ArrayOfEditSlideInfoFe](#) that specifies information about presentation slides. This element MUST be present.

FCreateNew: An **xs:boolean** ([\[XMLSCHEMA2\]](#) section 3.2.2) that specifies whether the presentation is new.

FirstSlideIndex: An **xs:unsignedInt** ([\[XMLSCHEMA2\]](#) section 3.3.22) that specifies the index of the first presentation slide. This element MUST be present.

MainMasters: An [ArrayOfMainMasterFe](#) elements that specify information about main master slides. This element MUST be present.

Redo: An **xs:boolean** ([\[XMLSCHEMA2\]](#) section 3.2.2) that specifies whether [Redo](#) is possible. This element MUST be present.

Rtl: An **xs:boolean** ([\[XMLSCHEMA2\]](#) section 3.2.2) that specifies whether the presentation content is **right-to-left**. This element MUST be present.

Size: A [Point](#) that specifies the dimensions of the presentation slides. This element MUST be present.

Slide: Reserved. MUST be ignored.

SlideOrder: A [SlideIdList](#) that specifies the order of the presentation slides. This element MUST be present.

Undo: An **xs:boolean** ([\[XMLSCHEMA2\]](#) section 3.2.2) that specifies whether [Undo](#) is possible. This element MUST be present.

2.2.4.14 EditShape

Namespace: <http://schemas.datacontract.org/2004/07/p>

A complex type that specifies a shape.

```
<xs:complexType name="EditShape" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:sequence>
    <xs:element minOccurs="0" name="Alt" nillable="true" type="xs:string"/>
    <xs:element minOccurs="0" name="EditBounds" nillable="true" type="tns2:Rectangle"/>
    <xs:element minOccurs="0" name="EditHtml" nillable="true" type="xs:string"/>
    <xs:element minOccurs="0" name="FFlippedHorizontally" type="xs:boolean"/>
    <xs:element minOccurs="0" name="FFlippedVertically" type="xs:boolean"/>
    <xs:element minOccurs="0" name="FontSizeMapping" nillable="true"
type="tns2:FontSizeMapping"/>
    <xs:element minOccurs="0" name="IsActiveX" type="xs:boolean"/>
    <xs:element minOccurs="0" name="IsChart" type="xs:boolean"/>
    <xs:element minOccurs="0" name="IsConnected" type="xs:boolean"/>
    <xs:element minOccurs="0" name="IsGroup" type="xs:boolean"/>
    <xs:element minOccurs="0" name="IsLine" type="xs:boolean"/>
    <xs:element minOccurs="0" name="IsPicture" type="xs:boolean"/>
    <xs:element minOccurs="0" name="IsPlaceholder" type="xs:boolean"/>
    <xs:element minOccurs="0" name="IsPrompt" type="xs:boolean"/>
    <xs:element minOccurs="0" name="IsSmartArt" type="xs:boolean"/>
    <xs:element minOccurs="0" name="IsStraightLine" type="xs:boolean"/>
    <xs:element minOccurs="0" name="IsTable" type="xs:boolean"/>
    <xs:element minOccurs="0" name="IsTextbox" type="xs:boolean"/>
    <xs:element minOccurs="0" name="PlaceholderType" type="xs:unsignedInt"/>
  
```

```

    <xs:element minOccurs="0" name="RotatedBoundingRegion" nillable="true"
type="tns2:BoundingRegion"/>
    <xs:element minOccurs="0" name="Rotation" type="xs:int"/>
    <xs:element minOccurs="0" name="ShapeId" type="xs:unsignedInt"/>
    <xs:element minOccurs="0" name="ShapeViewElemId" type="xs:unsignedInt"/>
    <xs:element minOccurs="0" name="SmartArtInfo" nillable="true" type="tns2:SmartArtInfo"/>
    <xs:element minOccurs="0" name="TextViewElemId" type="xs:unsignedInt"/>
    <xs:element minOccurs="0" name="X" type="xs:double"/>
    <xs:element minOccurs="0" name="Y" type="xs:double"/>
  </xs:sequence>
</xs:complexType>

```

Alt: Reserved. MUST be ignored.

EditBounds: A [Rectangle](#) that specifies the bounds of the shape. This element MUST be present.

EditHtml: An **xs:string** ([\[XMLSCHEMA2\]](#) section 3.2.1) that specifies the text content of the shape as HTML. This element MUST be present.

FFlippedHorizontally: An **xs:boolean** ([\[XMLSCHEMA2\]](#) section 3.2.2) that specifies whether the shape is currently flipped horizontally. This element MUST be present.

FFlippedVertically: An **xs:boolean** ([\[XMLSCHEMA2\]](#) section 3.2.2) that specifies whether the shape is currently flipped vertically. This element MUST be present.

FontSizeMapping: Reserved. MUST be ignored.

IsActiveX: An **xs:boolean** ([\[XMLSCHEMA2\]](#) section 3.2.2) that specifies whether the shape is an ActiveX shape. This element MUST be present.

IsChart: An **xs:boolean** ([\[XMLSCHEMA2\]](#) section 3.2.2) that specifies whether the shape is a chart. This element MUST be present.

IsConnected: An **xs:boolean** ([\[XMLSCHEMA2\]](#) section 3.2.2) that specifies whether the shape is a connector that is attached to one or more shapes. This element MUST be present.

IsGroup: An **xs:boolean** ([\[XMLSCHEMA2\]](#) section 3.2.2) that specifies whether the shape is a group of shapes. This element MUST be present.

IsLine: An **xs:boolean** ([\[XMLSCHEMA2\]](#) section 3.2.2) that specifies whether the shape is a line. This element MUST be present.

IsPicture: An **xs:boolean** ([\[XMLSCHEMA2\]](#) section 3.2.2) that specifies whether the shape is a picture. This element MUST be present.

IsPlaceholder: An **xs:boolean** ([\[XMLSCHEMA2\]](#) section 3.2.2) that specifies whether the shape is a **placeholder**. This element MUST be present.

IsPrompt: An **xs:boolean** ([\[XMLSCHEMA2\]](#) section 3.2.2) that specifies whether the shape contains text. This element MUST be present.

IsSmartArt: An **xs:boolean** ([\[XMLSCHEMA2\]](#) section 3.2.2) that specifies whether the shape is a SmartArt diagram. This element MUST be present.

IsStraightLine: An **xs:boolean** ([\[XMLSCHEMA2\]](#) section 3.2.2) that specifies whether the shape is a straight line. This element MUST be present.

IsTable: An **xs:boolean** ([XMLSCHEMA2] section 3.2.2) that specifies whether the shape is a table. This element MUST be present.

IsTextbox: An **xs:boolean** ([XMLSCHEMA2] section 3.2.2) that specifies whether the shape is a textbox. This element MUST be present.

PlaceholderType: An **xs:unsignedInt** ([XMLSCHEMA2] section 3.3.22) that specifies the type of placeholder. This element MUST be present.

RotatedBoundingRegion: A [BoundingRegion](#) element that specifies the orientation of the shape. This element MUST be present.

Rotation: An **xs:int** ([XMLSCHEMA2] section 3.3.17) that specifies the rotation of the shape around its center in degrees.

ShapeId: An **xs:unsignedInt** ([XMLSCHEMA2] section 3.3.22) that specifies the identifier of the shape. This element MUST be present.

ShapeViewElemId: An **xs:unsignedInt** ([XMLSCHEMA2] section 3.3.22) that specifies the identifier of the [ViewElement](#) for the shape. This element MUST be present.

SmartArtInfo: A [SmartArtInfo](#) element that specifies information about the SmartArt diagram. MUST be present if and only if **IsSmartArt** is true.

TextViewElemId: An **xs:unsignedInt** ([XMLSCHEMA2] section 3.3.22) that specifies the identifier of the ViewElement for the text content of the shape.

X: An **xs:double** ([XMLSCHEMA2] section 3.3.5) that specifies the x coordinate of the shape.

Y: An **xs:double** ([XMLSCHEMA2] section 3.3.5) that specifies the y coordinate of the shape.

2.2.4.15 EditSlide

Namespace: <http://schemas.datacontract.org/2004/07/p>

A complex type that specifies a presentation slide.

```
<xs:complexType name="EditSlide" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:sequence>
    <xs:element minOccurs="0" name="Comments" nillable="true" type="tns2:ArrayOfComment"/>
    <xs:element minOccurs="0" name="ContentMasterId" type="xs:unsignedInt"/>
    <xs:element minOccurs="0" name="Created" type="xs:dateTime"/>
    <xs:element minOccurs="0" name="EditAnims" nillable="true"
type="tns2:ArrayOfEditAnimInfo"/>
    <xs:element minOccurs="0" name="EditShapes" nillable="true"
type="tns2:ArrayOfEditShape"/>
    <xs:element minOccurs="0" name="EditTransition" nillable="true"
type="tns2:EditTransitionInfo"/>
    <xs:element minOccurs="0" name="Hidden" type="xs:boolean"/>
    <xs:element minOccurs="0" name="IsTitleContentMaster" type="xs:boolean"/>
    <xs:element minOccurs="0" name="MainMasterId" type="xs:unsignedInt"/>
    <xs:element minOccurs="0" name="Notes" nillable="true" type="tns2:Notes"/>
    <xs:element minOccurs="0" name="SlideId" type="xs:unsignedInt"/>
    <xs:element minOccurs="0" name="Theme" nillable="true" type="tns2:Theme"/>
    <xs:element minOccurs="0" name="ThumbnailViewElement" nillable="true"
type="tns2:ViewElement"/>
    <xs:element minOccurs="0" name="ViewElems" nillable="true"
type="tns2:ArrayOfViewElement"/>
  
```



```
</xs:sequence>
</xs:complexType>
```

Comments: An [ArrayOfComment](#) (section [2.2.4.32](#)) that specifies comments for the presentation slide.

ContentMasterId: An **xs:unsignedInt** ([\[XMLSCHEMA2\]](#) section 3.3.22) that specifies the identifier of the [ContentMasterFe](#) for the presentation slide. This element MUST be present.

Created: Reserved. MUST be ignored.

EditAnims: An [ArrayOfEditAnimInfo](#) element that specifies the list of animations on the slide.

EditShapes: An [ArrayOfEditShape](#) element that specifies the shapes of the presentation slide. This element MUST be present.

EditTransition: An [EditTransitionInfo](#) element that specifies the slide transition.

Hidden: An **xs:boolean** ([\[XMLSCHEMA2\]](#) section 3.2.2) that specifies whether the presentation slide is hidden. This element MUST be present.

IsTitleContentMaster: An **xs:boolean** ([\[XMLSCHEMA2\]](#) section 3.2.2) that specifies whether the slide layout specified by **ContentMasterId** is a **title master slide**. This element MUST be present.

MainMasterId: An **xs:unsignedInt** ([\[XMLSCHEMA2\]](#) section 3.3.22) that specifies the identifier of the main master slide for this presentation slide. This element MUST be present.

Notes: A [Notes](#) element that specifies the presentation notes for the presentation slide. This element MUST be present.

SlideId: An **xs:unsignedInt** ([\[XMLSCHEMA2\]](#) section 3.3.22) that specifies the identifier of the presentation slide. This element MUST be present.

Theme: A [Theme](#) element that specifies the theme for the presentation slide. This element MUST be present.

ThumbnailViewElement: A [ViewElement](#) element that specifies the thumbnail of the presentation slide. This element MUST be present.

ViewElems: An [ArrayOfViewElement](#) element that specifies the ViewElement elements for slide content of the presentation slide. This element MUST be present.

2.2.4.16 EditSlideChanges

Namespace: <http://schemas.datacontract.org/2004/07/p>

A complex type that specifies the content of the presentation slide that is modified as a result of a request to the protocol server.

```
<xs:complexType name="EditSlideChanges" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:sequence>
    <xs:element minOccurs="0" name="Comments" nillable="true" type="tns2:ArrayOfComment"/>
    <xs:element xmlns:q1="http://schemas.microsoft.com/2003/10/Serialization/Arrays"
      minOccurs="0" name="DelElems" nillable="true" type="q1:ArrayOfunsignedInt"/>
    <xs:element minOccurs="0" name="EditAnims" nillable="true"
      type="tns2:ArrayOfEditAnimInfo"/>
  </xs:sequence>
</xs:complexType>
```

```

    <xs:element minOccurs="0" name="EditTransition" nillable="true"
type="tns2:EditTransitionInfo"/>
    <xs:element minOccurs="0" name="Elems" nillable="true" type="tns2:ArrayOfViewElement"/>
    <xs:element minOccurs="0" name="Hidden" type="xs:boolean"/>
    <xs:element minOccurs="0" name="Id" type="xs:unsignedInt"/>
    <xs:element minOccurs="0" name="ModifiedShapes" nillable="true"
type="tns2:ArrayOfEditShape"/>
    <xs:element minOccurs="0" name="Notes" nillable="true" type="tns2:Notes"/>
    <xs:element minOccurs="0" name="Refresh" type="xs:boolean"/>
    <xs:element minOccurs="0" name="Thumb" nillable="true" type="tns2:ViewElement"/>
    <xs:element minOccurs="0" name="Title" nillable="true" type="xs:string"/>
  </xs:sequence>
</xs:complexType>

```

Comments: An [ArrayOfComment](#) (section [2.2.4.32](#)) that specifies comments for the presentation slide.

DelElems: Reserved. MUST be ignored.

EditAnims: An [ArrayOfEditAnimInfo](#) element that specifies the list of animations on the slide.

EditTransition: An [EditTransitionInfo](#) element that specifies the slide transition.

Elems: An [ArrayOfViewElement](#) element that specifies the [ViewElement](#) elements for slide content on the presentation slide.

Hidden: An **xs:boolean** ([\[XMLSCHEMA2\]](#) section 3.2.2) that specifies whether the presentation slide is hidden.

Id: An **xs:unsignedInt** ([\[XMLSCHEMA2\]](#) section 3.3.22) that specifies the identifier of the presentation slide. This element MUST be present.

ModifiedShapes: An [ArrayOfEditShape](#) element that specifies the shapes modified.

Notes: A [Notes](#) element that specifies the presentation notes for the presentation slide.

Refresh: An **xs:boolean** ([\[XMLSCHEMA2\]](#) section 3.2.2) that specifies whether the presentation slide has outdated [ViewElement](#) elements.

Thumb: A [ViewElement](#) element that specifies the thumbnail of the presentation slide.

Title: An **xs:string** ([\[XMLSCHEMA2\]](#) section 3.2.1) that specifies the title of the presentation slide.

2.2.4.17 EditSlideInfoFe

Namespace: <http://schemas.datacontract.org/2004/07/p>

A complex type that specifies information about a presentation slide.

```

<xs:complexType name="EditSlideInfoFe" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:sequence>
    <xs:element minOccurs="0" name="Hidden" type="xs:boolean"/>
    <xs:element minOccurs="0" name="Id" type="xs:unsignedInt"/>
    <xs:element minOccurs="0" name="Thumb" nillable="true" type="tns2:ViewElement"/>
    <xs:element minOccurs="0" name="Title" nillable="true" type="xs:string"/>
  </xs:sequence>

```

```
</xs:complexType>
```

Hidden: An **xs:boolean** ([\[XMLSCHEMA2\]](#) section 3.2.2) that specifies whether the presentation slide is hidden.

Id: An **xs:unsignedInt** ([\[XMLSCHEMA2\]](#) section 3.3.22) that specifies an identifier for the presentation slide.

Thumb: A [ViewElement](#) that specifies the thumbnail of the presentation slide.

Title: An **xs:string** ([\[XMLSCHEMA2\]](#) section 3.2.1) that specifies the title of the presentation slide.

2.2.4.18 FontSizeMapping

Namespace: <http://schemas.datacontract.org/2004/07/p>

Reserved. MUST be ignored.

```
<xs:complexType name="FontSizeMapping" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:sequence>
    <xs:element minOccurs="0" name="Size1" type="xs:unsignedInt"/>
    <xs:element minOccurs="0" name="Size2" type="xs:unsignedInt"/>
    <xs:element minOccurs="0" name="Size3" type="xs:unsignedInt"/>
    <xs:element minOccurs="0" name="Size4" type="xs:unsignedInt"/>
    <xs:element minOccurs="0" name="Size5" type="xs:unsignedInt"/>
    <xs:element minOccurs="0" name="Size6" type="xs:unsignedInt"/>
    <xs:element minOccurs="0" name="Size7" type="xs:unsignedInt"/>
  </xs:sequence>
</xs:complexType>
```

Size1: Reserved. MUST be ignored.

Size2: Reserved. MUST be ignored.

Size3: Reserved. MUST be ignored.

Size4: Reserved. MUST be ignored.

Size5: Reserved. MUST be ignored.

Size6: Reserved. MUST be ignored.

Size7: Reserved. MUST be ignored.

2.2.4.19 Html

Namespace: <http://schemas.datacontract.org/2004/07/p>

A complex type that specifies HTML content.

```
<xs:complexType name="Html" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:sequence>
    <xs:element minOccurs="0" name="Text" nillable="true" type="xs:string"/>
  </xs:sequence>
</xs:complexType>
```

Text: An **xs:string** ([\[XMLSCHEMA2\]](#) section 3.2.1) that specifies the HTML content.

2.2.4.20 MainMasterFe

Namespace: <http://schemas.datacontract.org/2004/07/p>

A complex type that specifies a main master slide.

```
<xs:complexType name="MainMasterFe" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:sequence>
    <xs:element minOccurs="0" name="ContentMasters" nillable="true"
      type="tns2:ArrayOfContentMasterFe"/>
    <xs:element minOccurs="0" name="Id" type="xs:unsignedInt"/>
    <xs:element minOccurs="0" name="InContent" type="xs:boolean"/>
    <xs:element minOccurs="0" name="LineStyle" nillable="true"
      type="tns2:ArrayOfStyleGalleryItem"/>
    <xs:element minOccurs="0" name="Name" nillable="true" type="xs:string"/>
    <xs:element minOccurs="0" name="ShapeStyles" nillable="true"
      type="tns2:ArrayOfStyleGalleryItem"/>
  </xs:sequence>
</xs:complexType>
```

ContentMasters: An [ArrayOfContentMasterFe](#) element that specifies slide layouts.

Id: An **xs:unsignedInt** ([\[XMLSCHEMA2\]](#) section 3.3.22) that specifies the identifier of the main master slide.

InContent: Reserved. MUST be ignored.

LineStyle: An [ArrayOfStyleGalleryItem](#) element that specifies line styles.

Name: An **xs:string** ([\[XMLSCHEMA2\]](#) section 3.2.1) that specifies the name of the main master slide.

ShapeStyles: An [ArrayOfStyleGalleryItem](#) element that specifies shape styles.

2.2.4.21 Notes

Namespace: <http://schemas.datacontract.org/2004/07/p>

A complex type that specifies the notes of a presentation slide.

```
<xs:complexType name="Notes" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:sequence>
    <xs:element minOccurs="0" name="Html" nillable="true" type="tns2:Html"/>
    <xs:element minOccurs="0" name="IsPrompt" type="xs:boolean"/>
  </xs:sequence>
</xs:complexType>
```

Html: An [Html](#) element that specifies the content of the notes.

IsPrompt: An **xs:boolean** ([\[XMLSCHEMA2\]](#) section 3.2.2) that specifies whether the notes is empty.

2.2.4.22 Point

Namespace: http://schemas.datacontract.org/2004/07/p

A complex type that specifies a two dimensional point.

```
<xs:complexType name="Point" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:sequence>
    <xs:element minOccurs="0" name="X" type="xs:int"/>
    <xs:element minOccurs="0" name="Y" type="xs:int"/>
  </xs:sequence>
</xs:complexType>
```

X: An **xs:int** ([\[XMLSCHEMA2\]](#) section 3.3.17) that specifies the x coordinate. This element **MUST** be present.

Y: An **xs:int** ([\[XMLSCHEMA2\]](#) section 3.3.17) that specifies the y coordinate. This element **MUST** be present.

2.2.4.23 PptViewingService.PrintResult

Namespace: http://schemas.datacontract.org/2004/07/p

A complex type that **SHOULD** [<23>](#) specify the result of a print operation.

```
<xs:complexType name="PptViewingService.PrintResult"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:sequence>
    <xs:element minOccurs="0" name="PrintUrl" nillable="true" type="xs:string"/>
  </xs:sequence>
</xs:complexType>
```

PrintUrl: An **xs:string** ([\[XMLSCHEMA2\]](#) section 3.2.1) element that specifies the URL for getting a printable version of the presentation.

2.2.4.24 Rectangle

Namespace: http://schemas.datacontract.org/2004/07/p

A complex type that specifies a rectangle.

```
<xs:complexType name="Rectangle" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:sequence>
    <xs:element minOccurs="0" name="Bottom" type="xs:int"/>
    <xs:element minOccurs="0" name="Left" type="xs:int"/>
    <xs:element minOccurs="0" name="Right" type="xs:int"/>
    <xs:element minOccurs="0" name="Top" type="xs:int"/>
  </xs:sequence>
</xs:complexType>
```

Bottom: An **xs:int** ([\[XMLSCHEMA2\]](#) section 3.3.17) that specifies the location of the bottom of the rectangle. This element **MUST** be present.

Left: An **xs:int** ([\[XMLSCHEMA2\]](#) section 3.3.17) that specifies the location of the left side of the rectangle. This element **MUST** be present.

Right: An **xs:int** ([\[XMLSCHEMA2\]](#) section 3.3.17) that specifies the location of the right side of the rectangle. This element **MUST** be present.

Top: An **xs:int** ([\[XMLSCHEMA2\]](#) section 3.3.17) that specifies the location of the top of the rectangle. This element **MUST** be present.

2.2.4.25 ServiceError

Namespace: <http://schemas.datacontract.org/2004/07/p>

A complex type that specifies error information returned by the protocol server to a protocol client.

```
<xs:complexType name="ServiceError" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:sequence>
    <xs:element
      xmlns:tns="http://schemas.datacontract.org/2004/07/Microsoft.Office.Server.Powerpoint.Interface.Shared" minOccurs="0" name="Code" type="tns:ErrorCode"/>
    <xs:element minOccurs="0" name="Message" nillable="true" type="xs:string"/>
    <xs:element
      xmlns:tns1="http://schemas.datacontract.org/2004/07/Microsoft.Office.Server.Powerpoint.Pipe.Interface" minOccurs="0" name="RecommendedActions" type="tns1:ClientActions"/>
    <xs:element minOccurs="0" name="Title" nillable="true" type="xs:string"/>
    <xs:element minOccurs="0" name="Type" type="tns2:ServiceErrorType"/>
  </xs:sequence>
</xs:complexType>
```

Code: Reserved. **MUST** be ignored.

Message: An **xs:string** ([\[XMLSCHEMA2\]](#) section 3.2.1) that specifies the error message description. **MUST** be present. The string length **MUST** be greater than zero if the **Type** element has a value of [ApplicationError](#).

RecommendedActions: Reserved. **MUST** be ignored.

Title: An **xs:string** ([\[XMLSCHEMA2\]](#) section 3.2.1) that specifies the error title. This element **MUST** be present. The string length **MUST** be greater than zero if the **Type** element has a value of [ApplicationError](#).

Type: A [ServiceErrorType](#) element that specifies the error type. This element **MUST** be present.

2.2.4.26 ServiceResult

Namespace: <http://schemas.datacontract.org/2004/07/p>

A complex type that specifies the result of a protocol method. The protocol server returns this type to the protocol client containing either a successful **Result** element or an **Error** element.

```
<xs:complexType name="ServiceResult" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:sequence>
    <xs:element minOccurs="0" name="Error" nillable="true" type="tns2:ServiceError"/>
    <xs:element minOccurs="0" name="Result" nillable="true" type="xs:anyType"/>
  </xs:sequence>
</xs:complexType>
```

Error: An optional [ServiceError](#) element that specifies an error result of a protocol message response. This element **MUST** be present if the **Result** element is not present. Otherwise, this element **MUST NOT** be present.

Result: An optional **xs:anyType** ([\[XMLSCHEMA1\]](#) section 3.4.7) that specifies a successful result of a protocol message response. This element **MUST** be present if the **Error** element is not present. Otherwise, this element **MUST NOT** be present.

2.2.4.27 SlideIdList

Namespace: <http://schemas.datacontract.org/2004/07/p>

A complex type that specifies a list of identifiers for presentation slides.

```
<xs:complexType name="SlideIdList" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:sequence>
    <xs:element xmlns:q1="http://schemas.microsoft.com/2003/10/Serialization/Arrays"
      minOccurs="0" name="SlideIds" nillable="true" type="q1:ArrayOfunsignedInt"/>
  </xs:sequence>
</xs:complexType>
```

SlideIds: An [ArrayOfunsignedInt](#) element that specifies the list of identifiers.

2.2.4.28 SmartArtInfo

Namespace: <http://schemas.datacontract.org/2004/07/p>

A complex type that specifies information about a SmartArt diagram.

```
<xs:complexType name="SmartArtInfo" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:sequence>
    <xs:element minOccurs="0" name="fReverseChecked" type="xs:boolean"/>
    <xs:element minOccurs="0" name="fReverseEnabled" type="xs:boolean"/>
  </xs:sequence>
</xs:complexType>
```

fReverseChecked: An **xs:boolean** ([\[XMLSCHEMA2\]](#) section 3.2.2) that specifies whether the SmartArt diagram is reversed.

fReverseEnabled: An **xs:boolean** ([\[XMLSCHEMA2\]](#) section 3.2.2) that specifies whether the SmartArt diagram can be reversed.

2.2.4.29 Theme

Namespace: <http://schemas.datacontract.org/2004/07/p>

A complex type that specifies information about a theme.

```
<xs:complexType name="Theme" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:sequence>
    <xs:element minOccurs="0" name="Accent1" nillable="true" type="tns2:ThemeColor"/>
    <xs:element minOccurs="0" name="Accent2" nillable="true" type="tns2:ThemeColor"/>
    <xs:element minOccurs="0" name="Accent3" nillable="true" type="tns2:ThemeColor"/>
    <xs:element minOccurs="0" name="Accent4" nillable="true" type="tns2:ThemeColor"/>
    <xs:element minOccurs="0" name="Accent5" nillable="true" type="tns2:ThemeColor"/>
  </xs:sequence>
</xs:complexType>
```

```

<xs:element minOccurs="0" name="Accent6" nillable="true" type="tns2:ThemeColor"/>
<xs:element minOccurs="0" name="Dark1" nillable="true" type="tns2:ThemeColor"/>
<xs:element minOccurs="0" name="Dark2" nillable="true" type="tns2:ThemeColor"/>
<xs:element minOccurs="0" name="Light1" nillable="true" type="tns2:ThemeColor"/>
<xs:element minOccurs="0" name="Light2" nillable="true" type="tns2:ThemeColor"/>
<xs:element minOccurs="0" name="PresetSchemeColorMapping" nillable="true"
type="tns2:PresetSchemeColorMapping"/>
</xs:sequence>
</xs:complexType>

```

Accent1: A [ThemeColor](#) element that defines the first accent color in the theme.

Accent2: A ThemeColor element that defines the second accent color in the theme.

Accent3: A ThemeColor element that defines the third accent color in the theme.

Accent4: A ThemeColor element that defines the fourth accent color in the theme.

Accent5: A ThemeColor element that defines the fifth accent color in the theme.

Accent6: A ThemeColor element that defines the sixth accent color in the theme.

Dark1: A ThemeColor element that defines a dark color in the theme.

Dark2: A ThemeColor element that defines a second dark color in the theme.

Light1: A ThemeColor element that defines a light color in the theme.

Light2: A ThemeColor element that defines a second light color in the theme.

PresetSchemeColorMapping: A [PresetSchemeColorMapping](#) element that defines a set of colors in the theme.

2.2.4.30 ThemeColor

Namespace: http://schemas.datacontract.org/2004/07/p

A complex type that specifies a color using the red, green, blue RGB color model. Red, green, and blue are each expressed as an unsigned byte from 0 for no intensity to 255 for full intensity.

```

<xs:complexType name="ThemeColor" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:sequence>
    <xs:element minOccurs="0" name="b" type="xs:unsignedByte"/>
    <xs:element minOccurs="0" name="g" type="xs:unsignedByte"/>
    <xs:element minOccurs="0" name="r" type="xs:unsignedByte"/>
  </xs:sequence>
</xs:complexType>

```

b: An **xs:unsignedByte** ([\[XMLSHEMA2\]](#) section 3.3.24) that specifies the blue component of the color. This element **MUST** be present.

g: An **xs:unsignedByte** ([\[XMLSHEMA2\]](#) section 3.3.24) that specifies the green component of the color. This element **MUST** be present.

r: An **xs:unsignedByte** ([\[XMLSHEMA2\]](#) section 3.3.24) that specifies the red component of the color. This element **MUST** be present.

2.2.4.31 ViewElement

Namespace: <http://schemas.datacontract.org/2004/07/p>

A complex type that specifies a visual representation of presentation slide content.

```
<xs:complexType name="ViewElement" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:sequence>
    <xs:element minOccurs="0" name="Alt" nillable="true" type="xs:string"/>
    <xs:element minOccurs="0" name="Clip" nillable="true" type="tns2:ClippingInfo"/>
    <xs:element minOccurs="0" name="Html" nillable="true" type="xs:string"/>
    <xs:element minOccurs="0" name="Id" type="xs:unsignedInt"/>
    <xs:element minOccurs="0" name="ImgId" nillable="true" type="xs:string"/>
    <xs:element minOccurs="0" name="Position" nillable="true" type="tns2:Point"/>
    <xs:element minOccurs="0" name="Z" type="xs:unsignedInt"/>
  </xs:sequence>
</xs:complexType>
```

Alt: Reserved. MUST be ignored.

Clip: A [ClippingInfo](#) that specifies the region within the image. This element MUST be present.

Html: An **xs:string** ([\[XMLSCHEMA2\]](#) section 3.2.1) that specifies text content. MUST be present if and only if **ImgId** is not present.

Id: An **xs:unsignedInt** ([\[XMLSCHEMA2\]](#) section 3.3.22) that specifies the identifier. This element MUST be present.

ImgId: An **xs:string** ([\[XMLSCHEMA2\]](#) section 3.2.1) that specifies the URL of the image. [<24>](#)

Position: A [Point](#) element that specifies the position.

Z: An **xs:unsignedInt** ([\[XMLSCHEMA2\]](#) section 3.3.22) that specifies the z-order.

2.2.4.32 ArrayOfComment

Namespace: <http://schemas.datacontract.org/2004/07/p>

A complex type that SHOULD [<25>](#) specify a list of [Comment](#) elements, as specified in section [2.2.4.39](#).

```
<xs:complexType name="ArrayOfComment" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="unbounded" name="Comment" nillable="true"
      type="tns2:Comment"/>
  </xs:sequence>
</xs:complexType>
```

Comment: Each element MUST specify a Comment (section [2.2.4.39](#).)

2.2.4.33 ArrayOfEditAnimInfo

Namespace: <http://schemas.datacontract.org/2004/07/p>

A complex type that SHOULD [<26>](#) specify a list of [EditAnimInfo](#) elements, as specified in section [2.2.4.40](#).

```

<xs:complexType name="ArrayOfEditAnimInfo" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="unbounded" name="EditAnimInfo" nillable="true"
type="tns2:EditAnimInfo"/>
  </xs:sequence>
</xs:complexType>

```

EditAnimInfo: Each element MUST specify a [EditAnimInfo](#) (section [2.2.4.40](#).)

2.2.4.34 ArrayOfEditorInfo

Namespace: <http://schemas.datacontract.org/2004/07/p>

A complex type that SHOULD [<27>](#) specify a list of [EditorInfo](#) elements, as specified in section [2.2.4.41](#).

```

<xs:complexType name="ArrayOfEditorInfo" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="unbounded" name="EditorInfo" nillable="true"
type="tns2:EditorInfo"/>
  </xs:sequence>
</xs:complexType>

```

EditorInfo: Each element MUST specify an [EditorInfo](#) (section [2.2.4.41](#)) type instance.

2.2.4.35 ArrayOfStyleGalleryItem

Namespace: <http://schemas.datacontract.org/2004/07/p>

A complex type that SHOULD [<28>](#) specify a list of [StyleGalleryItem](#) elements, as specified in section [2.2.4.44](#).

```

<xs:complexType name="ArrayOfStyleGalleryItem" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="unbounded" name="StyleGalleryItem" nillable="true"
type="tns2:StyleGalleryItem"/>
  </xs:sequence>
</xs:complexType>

```

StyleGalleryItem: Each element MUST specify a [StyleGalleryItem](#) (section [2.2.4.44](#)) type instance

2.2.4.36 BoundingRegion

Namespace: <http://schemas.datacontract.org/2004/07/p>

A complex type that SHOULD [<29>](#) specify the rotated bounds of a shape.

```

<xs:complexType name="BoundingRegion" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:sequence>
    <xs:element minOccurs="0" name="BottomLeft" nillable="true" type="tns2:Point"/>
    <xs:element minOccurs="0" name="BottomRight" nillable="true" type="tns2:Point"/>
    <xs:element minOccurs="0" name="TopLeft" nillable="true" type="tns2:Point"/>
    <xs:element minOccurs="0" name="TopRight" nillable="true" type="tns2:Point"/>
  </xs:sequence>
</xs:complexType>

```

```
</xs:sequence>
</xs:complexType>
```

BottomLeft: A [Point](#) element (section [2.2.4.22](#)) that specifies the bottom left point of the shape. This element MUST be present.

BottomRight: A [Point](#) element (section [2.2.4.22](#)) that specifies the bottom right point of the shape. This element MUST be present.

TopLeft: A [Point](#) element (section [2.2.4.22](#)) that specifies the top left point of the shape. This element MUST be present.

TopRight: A [Point](#) element (section [2.2.4.22](#)) that specifies the top right point of the shape. This element MUST be present.

2.2.4.37 CoauthState

Namespace: <http://schemas.datacontract.org/2004/07/p>

A complex type that SHOULD [<30>](#) specify the co-authoring state of the presentation.

```
<xs:complexType name="CoauthState" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:sequence>
    <xs:element minOccurs="0" name="cs" type="xs:int"/>
    <xs:element minOccurs="0" name="et" nillable="true" type="tns2:ArrayOfEditorInfo"/>
    <xs:element minOccurs="0" name="lsave" type="xs:dateTime"/>
    <xs:element minOccurs="0" name="lsmce" type="xs:dateTime"/>
    <xs:element minOccurs="0" name="lsum" type="xs:dateTime"/>
    <xs:element minOccurs="0" name="meid" nillable="true" type="xs:string"/>
  </xs:sequence>
</xs:complexType>
```

cs: Reserved. Must be ignored.

et: An [ArrayOfEditorInfo](#) (section [2.2.4.34](#)) element that specifies the list of editors that are currently co-authoring the presentation.

lsave: Reserved. Must be ignored.

lsmce: Reserved. Must be ignored.

lsum: Reserved. Must be ignored.

meid: Reserved. Must be ignored.

2.2.4.38 CoauthUpdate

Namespace: <http://schemas.datacontract.org/2004/07/p>

A complex type that SHOULD [<31>](#) specify the co-authoring state of the presentation.

```
<xs:complexType name="CoauthUpdate" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:sequence>
    <xs:element minOccurs="0" name="State" nillable="true" type="tns2:CoauthState"/>
    <xs:element minOccurs="0" name="Token" nillable="true" type="xs:string"/>
  </xs:sequence>
</xs:complexType>
```

```
</xs:sequence>
</xs:complexType>
```

State: A **CoauthState** (section [2.2.4.37](#)) element that specifies the co-authoring state of the presentation.

Token: Reserved. Must be ignored.

2.2.4.39 Comment

Namespace: <http://schemas.datacontract.org/2004/07/p>

A complex type that SHOULD [<32>](#) specify a single comment and its replies

```
<xs:complexType name="Comment" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:sequence>
    <xs:element minOccurs="0" name="Children" nillable="true" type="tns:ArrayOfComment"/>
    <xs:element minOccurs="0" name="authorId" type="xs:unsignedInt"/>
    <xs:element minOccurs="0" name="authorName" nillable="true" type="xs:string"/>
    <xs:element minOccurs="0" name="dt" type="xs:dateTime"/>
    <xs:element minOccurs="0" name="idx" type="xs:unsignedInt"/>
    <xs:element minOccurs="0" name="pos" nillable="true" type="tns:Point"/>
    <xs:element minOccurs="0" name="text" nillable="true" type="xs:string"/>
  </xs:sequence>
</xs:complexType>
```

Children: An [ArrayOfComment](#) (section [2.2.4.32](#)) that contains the replies to this comment.

authorId: An **xs:unsignedInt** ([\[XMLSCHEMA2\]](#) section 3.3.22) that specifies the identifier of the author of the comment. This element MUST be present.

authorName: An **xs:string** ([\[XMLSCHEMA2\]](#) section 3.2.1) that specifies the name of the author of the comment.

dt: An **xs:dateTime** ([\[XMLSCHEMA2\]](#) section 3.2.7) that specifies the time in UTC in which the comment was created.

idx: An **xs:unsignedInt** ([\[XMLSCHEMA2\]](#) section 3.3.22) that specifies the identifier of the comment within its author's comments. This element MUST be present.

pos: A [Point](#) (section [2.2.4.22](#)) that specifies the position of the comment on the slide.

text: An **xs:string** ([\[XMLSCHEMA2\]](#) section 3.2.1) that specifies the contents of the comment.

2.2.4.40 EditAnimInfo

Namespace: <http://schemas.datacontract.org/2004/07/p>

A complex type that SHOULD [<33>](#) specify a shape animation.

```
<xs:complexType name="EditAnimInfo" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:sequence>
    <xs:element xmlns:q1="http://schemas.microsoft.com/2003/10/Serialization/Arrays"
      minOccurs="0" name="BuildIds" nillable="true" type="q1:ArrayOfunsignedInt"/>
    <xs:element minOccurs="0" name="Direction" type="xs:unsignedInt"/>
  </xs:sequence>
</xs:complexType>
```

```

<xs:element minOccurs="0" name="EffectId" type="xs:unsignedInt"/>
<xs:element minOccurs="0" name="HasExisting" type="xs:boolean"/>
<xs:element minOccurs="0" name="HasTrigger" type="xs:boolean"/>
<xs:element minOccurs="0" name="SequenceId" type="xs:unsignedInt"/>
<xs:element minOccurs="0" name="ShapeId" type="xs:unsignedInt"/>
</xs:sequence>
</xs:complexType>

```

BuildIds: An [ArrayOfunsignedInt](#) element that specifies the list of **build identifiers**. This element MUST be present.

Direction: An **xs:unsignedInt** ([\[XMLSCHEMA2\]](#) section 3.3.22) that specifies the direction of animation. This element MAY be present.

EffectId: An **xs:unsignedInt** ([\[XMLSCHEMA2\]](#) section 3.3.22) that specifies the type of animation. This element MUST be present.

HasExisting: Reserved. MUST be ignored.

HasTrigger: An **xs:boolean** ([\[XMLSCHEMA2\]](#) section 3.2.2) that specifies whether the shape has one or more animations using a triggered sequence. This element MUST be present.

SequenceId: An **xs:unsignedInt** ([\[XMLSCHEMA2\]](#) section 3.3.22) that specifies the type of animation. This element MUST be present.

ShapeId: An **xs:unsignedInt** ([\[XMLSCHEMA2\]](#) section 3.3.22) that specifies the identifier of the shape. This element MUST be present.

2.2.4.41 EditorInfo

Namespace: <http://schemas.datacontract.org/2004/07/p>

A complex type that SHOULD [<34>](#) specify an editor of the presentation.

```

<xs:complexType name="EditorInfo" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:sequence>
    <xs:element minOccurs="0" name="EmailAddress" nillable="true" type="xs:string"/>
    <xs:element minOccurs="0" name="ID" nillable="true" type="xs:string"/>
    <xs:element minOccurs="0" name="Name" nillable="true" type="xs:string"/>
    <xs:element minOccurs="0" name="SIPAddress" nillable="true" type="xs:string"/>
    <xs:element minOccurs="0" name="TimeOut" nillable="true" type="xs:string"/>
    <xs:element minOccurs="0" name="UserName" nillable="true" type="xs:string"/>
  </xs:sequence>
</xs:complexType>

```

EmailAddress: Reserved. MUST be ignored.

ID: An **xs:string** ([\[XMLSCHEMA2\]](#) section 3.2.1) that specifies the identifier of the editor.

Name: Reserved. MUST be ignored.

SIPAddress: Reserved. MUST be ignored.

TimeOut: Reserved. MUST be ignored.

UserName: Reserved. MUST be ignored.

2.2.4.42 EditTransitionInfo

Namespace: <http://schemas.datacontract.org/2004/07/p>

A complex type that SHOULD [<35>](#) specify a slide transition.

```
<xs:complexType name="EditTransitionInfo" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:sequence>
    <xs:element minOccurs="0" name="Direction" type="xs:unsignedInt"/>
    <xs:element minOccurs="0" name="Duration" type="xs:unsignedInt"/>
    <xs:element minOccurs="0" name="IsManualAdvance" type="xs:boolean"/>
    <xs:element minOccurs="0" name="TransitionType" type="xs:unsignedInt"/>
  </xs:sequence>
</xs:complexType>
```

Direction: An **xs:unsignedInt** ([\[XMLSCHEMA2\]](#) section 3.3.22) that specifies the direction of the transition.

Duration: An **xs:unsignedInt** ([\[XMLSCHEMA2\]](#) section 3.3.22) that specifies the duration of the transition in milliseconds.

IsManualAdvance: Reserved. MUST be ignored.

TransitionType: An **xs:unsignedInt** ([\[XMLSCHEMA2\]](#) section 3.3.22) that specifies the type of the transition.

2.2.4.43 PresetSchemeColorMapping

Namespace: <http://schemas.datacontract.org/2004/07/p>

A complex type that SHOULD [<36>](#) specify a set of colors in the theme

```
<xs:complexType name="PresetSchemeColorMapping" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:sequence>
    <xs:element minOccurs="0" name="Accent1" nillable="true" type="tns2:ThemeColor"/>
    <xs:element minOccurs="0" name="Accent2" nillable="true" type="tns2:ThemeColor"/>
    <xs:element minOccurs="0" name="Accent3" nillable="true" type="tns2:ThemeColor"/>
    <xs:element minOccurs="0" name="Accent4" nillable="true" type="tns2:ThemeColor"/>
    <xs:element minOccurs="0" name="Accent5" nillable="true" type="tns2:ThemeColor"/>
    <xs:element minOccurs="0" name="Accent6" nillable="true" type="tns2:ThemeColor"/>
    <xs:element minOccurs="0" name="Background1" nillable="true" type="tns2:ThemeColor"/>
    <xs:element minOccurs="0" name="Background2" nillable="true" type="tns2:ThemeColor"/>
    <xs:element minOccurs="0" name="Text1" nillable="true" type="tns2:ThemeColor"/>
    <xs:element minOccurs="0" name="Text2" nillable="true" type="tns2:ThemeColor"/>
  </xs:sequence>
</xs:complexType>
```

Accent1: A [ThemeColor](#) element that defines the first accent color in the theme.

Accent2: A ThemeColor element that defines the second accent color in the theme.

Accent3: A ThemeColor element that defines the third accent color in the theme.

Accent4: A ThemeColor element that defines the fourth accent color in the theme.

Accent5: A ThemeColor element that defines the fifth accent color in the theme.

Accent6: A ThemeColor element that defines the sixth accent color in the theme.

Background1: A ThemeColor element that defines the first background color in the theme.

Background2: A ThemeColor element that defines the second background color in the theme.

Text1: A ThemeColor element that defines the first text color in the theme.

Text2: A ThemeColor element that defines the second text color in the theme.

2.2.4.44 StyleGalleryItem

Namespace: <http://schemas.datacontract.org/2004/07/p>

A complex type that SHOULD [<37>](#) specify a shape style.

```
<xs:complexType name="StyleGalleryItem" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:sequence>
    <xs:element minOccurs="0" name="Icon" nillable="true" type="tns2:ViewElement"/>
    <xs:element minOccurs="0" name="StyleId" type="xs:unsignedInt"/>
  </xs:sequence>
</xs:complexType>
```

Icon: A [ViewElement](#) element (section [2.2.4.31](#)) that specifies the style of the shape. This element MUST be present.

StyleId: An **xs:unsignedInt** ([\[XMLSCHEMA2\]](#) section 3.3.22) that specifies the type of the shape style. This element MUST be present.

2.2.5 Simple Types

The following table summarizes the set of common XML schema simple type definitions defined by this specification. XML schema simple type definitions that are specific to a particular operation are described with the operation.

Simple type	Description
char	Reserved. MUST be ignored. The client and the server MUST NOT use this as the type of an element, and the client and the server MUST ignore it, if receiving an element of this type.
ClientActions	Reserved. MUST be ignored.
duration	Reserved. MUST be ignored. The client and the server MUST NOT use this as the type of an element, and the client and the server MUST ignore it, if receiving an element of this type.
ErrorCode	Reserved. MUST be ignored.
guid	Reserved. MUST be ignored. The client and the server MUST NOT use this as the type of an element, and the client and the server MUST ignore it, if receiving an element of this type.
ServiceErrorType	A simple type that specifies an enumeration of a set of protocol errors returned by the protocol server to the protocol client.

2.2.5.1 char

Namespace: http://schemas.microsoft.com/2003/10/Serialization/

Reserved. MUST be ignored. The client and the server MUST NOT use this as the type of an element, and the client and the server MUST ignore it, if receiving an element of this type.

```
<xs:simpleType name="char" xmlns:xs="http://www.w3.org/2001/XMLSchema">  
  <xs:restriction base="xs:int"/>  
</xs:simpleType>
```

2.2.5.2 ClientActions

Namespace:

http://schemas.datacontract.org/2004/07/Microsoft.Office.Server.Powerpoint.Pipe.Interface

Reserved. MUST be ignored.

```
<xs:simpleType name="ClientActions" xmlns:xs="http://www.w3.org/2001/XMLSchema">  
  <xs:list>  
    <xs:simpleType>  
      <xs:restriction base="xs:string">  
        <xs:enumeration value="None"/>  
        <xs:enumeration value="Dismiss"/>  
        <xs:enumeration value="Close"/>  
        <xs:enumeration value="OpenInClient"/>  
        <xs:enumeration value="Refresh"/>  
      </xs:restriction>  
    </xs:simpleType>  
  </xs:list>  
</xs:simpleType>
```

The following table specifies the allowable values for **ClientActions**.

Value	Meaning
None	Reserved. MUST be ignored.
Dismiss	Reserved. MUST be ignored.
Close	Reserved. MUST be ignored.
OpenInClient	Reserved. MUST be ignored.
Refresh	Reserved. MUST be ignored.

2.2.5.3 duration

Namespace: http://schemas.microsoft.com/2003/10/Serialization/

Reserved. MUST be ignored. The client and the server MUST NOT use this as the type of an element, and the client and the server MUST ignore it, if receiving an element of this type.

```
<xs:simpleType name="duration" xmlns:xs="http://www.w3.org/2001/XMLSchema">  
  <xs:restriction base="xs:duration">
```



```

    <xs:pattern value="\-?P(\d*D)?(T(\d*H)?(\d*M)?(\d*(\.\d*)?S)?)?" />
    <xs:minInclusive value="-P10675199DT2H48M5.4775808S" />
    <xs:maxInclusive value="P10675199DT2H48M5.4775807S" />
  </xs:restriction>
</xs:simpleType>

```

2.2.5.4 guid

Namespace: <http://schemas.microsoft.com/2003/10/Serialization/>

Reserved. MUST be ignored. The client and the server MUST NOT use this as the type of an element, and the client and the server MUST ignore it, if receiving an element of this type.

```

<xs:simpleType name="guid" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:restriction base="xs:string">
    <xs:pattern value="\[da-fA-F]{8}-\[da-fA-F]{4}-\[da-fA-F]{4}-\[da-fA-F]{4}-\[da-fA-F]{12}" />
  </xs:restriction>
</xs:simpleType>

```

2.2.5.5 ServiceErrorType

Namespace: <http://schemas.datacontract.org/2004/07/p>

A simple type that specifies an enumeration of a set of protocol errors returned by the protocol server to the protocol client.

```

<xs:simpleType name="ServiceErrorType" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:restriction base="xs:string">
    <xs:enumeration value="UnknownError" />
    <xs:enumeration value="ApplicationError" />
    <xs:enumeration value="Timeout" />
    <xs:enumeration value="ServiceBusy" />
    <xs:enumeration value="SessionFull" />
  </xs:restriction>
</xs:simpleType>

```

The following table specifies the allowable values for **ServiceErrorType**.

Value	Meaning
UnknownError	The protocol server encountered an unknown error.
ApplicationError	The protocol server encountered an application error.
Timeout	The protocol server timed out.
ServiceBusy	Reserved. MUST be ignored.
SessionFull	Reserved. MUST be ignored.

2.2.5.6 ErrorCode

Namespace:

<http://schemas.datacontract.org/2004/07/Microsoft.Office.Server.Powerpoint.Interface.Shared>

Reserved. MUST be ignored.

```
<xs:simpleType name="ErrorCode" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:restriction base="xs:string">
    <xs:enumeration value="ErrorRESERVEDSuccess"/>
    <xs:enumeration value="ErrorRESERVEDUnknown"/>
    <xs:enumeration value="ErrorCantOpenDocumentFileType"/>
    <xs:enumeration value="ErrorCantOpenDocumentIRM"/>
    <xs:enumeration value="ErrorCantOpenDocumentPassword"/>
    <xs:enumeration value="ErrorCantOpenDocument"/>
    <xs:enumeration value="ErrorCantInstallFonts"/>
    <xs:enumeration value="ErrorCantConvertModifyPassword"/>
    <xs:enumeration value="ErrorCantComposeSlideParse"/>
    <xs:enumeration value="ErrorCantComposeSlideUnexpected"/>
    <xs:enumeration value="ErrorWacConversionFailure"/>
    <xs:enumeration value="ErrorResourceNotGenerated"/>
    <xs:enumeration value="ErrorGenericSlideCorruption"/>
    <xs:enumeration value="ErrorFileNotFound"/>
    <xs:enumeration value="ErrorGeneralUnknown"/>
    <xs:enumeration value="ErrorFailedToOpenDocument"/>
    <xs:enumeration value="ErrorFailedToRetrieveResource"/>
    <xs:enumeration value="ErrorFailedToRenderDocument"/>
    <xs:enumeration value="ErrorFailedToRenderSlide"/>
    <xs:enumeration value="ErrorFailedToSaveDocument"/>
    <xs:enumeration value="ErrorCantSaveDocument"/>
    <xs:enumeration value="ErrorInvalidCommand"/>
    <xs:enumeration value="ErrorDocVersionMismatch"/>
    <xs:enumeration value="ErrorCannotAcquirePptEditLock"/>
    <xs:enumeration value="ErrorRequiresCheckout"/>
    <xs:enumeration value="ErrorLockedForOfflineCheckout"/>
    <xs:enumeration value="ErrorLockedByAnotherUser"/>
    <xs:enumeration value="ErrorAccessDenied"/>
    <xs:enumeration value="ErrorNoLicense"/>
    <xs:enumeration value="ErrorRequestTooBig"/>
    <xs:enumeration value="ErrorTextTooBig"/>
    <xs:enumeration value="ErrorTryAgain"/>
    <xs:enumeration value="ErrorUnexpected"/>
    <xs:enumeration value="ErrorCantOpenDocumentMacro"/>
    <xs:enumeration value="ErrorCantOpenDocumentFinal"/>
    <xs:enumeration value="ErrorCantOpenDocumentSigned"/>
    <xs:enumeration value="ErrorCantOpenEmbeddedFonts"/>
    <xs:enumeration value="ErrorNoAvailableEditAppServer"/>
    <xs:enumeration value="ErrorServiceUnavailable"/>
    <xs:enumeration value="ErrorPptEditExistingExclusiveLock"/>
    <xs:enumeration value="ErrorPptEditCheckedOutByAnother"/>
    <xs:enumeration value="ErrorCantOpenDocumentGatekeeperFailure"/>
    <xs:enumeration value="ErrorEditWorkerTimeout"/>
    <xs:enumeration value="ErrorEditSlideCorruption"/>
    <xs:enumeration value="ErrorServiceBusy"/>
    <xs:enumeration value="ErrorClipartCannotConnect"/>
    <xs:enumeration value="ErrorClipartCannotDownload"/>
    <xs:enumeration value="ErrorMediaNotEnabled"/>
    <xs:enumeration value="ErrorUnsupportedMediaFormat"/>
    <xs:enumeration value="ErrorLinkedMediaNotEnabled"/>
  </xs:restriction>
</xs:simpleType>
```

```

<xs:enumeration value="ErrorUnsupportedLinkTarget"/>
<xs:enumeration value="ErrorEmbeddedMediaNotEnabled"/>
<xs:enumeration value="ErrorEmbeddedMediaExceedsMaxSize"/>
<xs:enumeration value="ErrorTranscodingNotEnabled"/>
<xs:enumeration value="ErrorMediaUnavailable"/>
<xs:enumeration value="ErrorCannotOpenODPDocumentPassword"/>
<xs:enumeration value="ErrorLocalChangeLost"/>
<xs:enumeration value="ErrorNumberOfCoauthorsReachedMax"/>
<xs:enumeration value="ErrorRESERVEDLastError"/>
</xs:restriction>
</xs:simpleType>

```

The following table specifies the allowable values for **ErrorCode**.

Value	Meaning
ErrorRESERVEDSuccess	Reserved. MUST be ignored.
ErrorRESERVEDUnknown	Reserved. MUST be ignored.
ErrorCantOpenDocumentFileType	Reserved. MUST be ignored.
ErrorCantOpenDocumentIRM	Reserved. MUST be ignored.
ErrorCantOpenDocumentPassword	Reserved. MUST be ignored.
ErrorCantOpenDocument	Reserved. MUST be ignored.
ErrorCantInstallFonts	Reserved. MUST be ignored.
ErrorCantConvertModifyPassword	Reserved. MUST be ignored.
ErrorCantComposeSlideParse	Reserved. MUST be ignored.
ErrorCantComposeSlideUnexpected	Reserved. MUST be ignored.
ErrorWacConversionFailure	Reserved. MUST be ignored.
ErrorResourceNotGenerated	Reserved. MUST be ignored.
ErrorGenericSlideCorruption	Reserved. MUST be ignored.
ErrorFileNotFound	Reserved. MUST be ignored.
ErrorGeneralUnknown	Reserved. MUST be ignored.
ErrorFailedToOpenDocument	Reserved. MUST be ignored.
ErrorFailedToRetrieveResource	Reserved. MUST be ignored.
ErrorFailedToRenderDocument	Reserved. MUST be ignored.
ErrorFailedToRenderSlide	Reserved. MUST be ignored.
ErrorFailedToSaveDocument	Reserved. MUST be ignored.
ErrorCantSaveDocument	Reserved. MUST be ignored.
ErrorInvalidCommand	Reserved. MUST be ignored.

Value	Meaning
ErrorDocVersionMismatch	Reserved. MUST be ignored.
ErrorCannotAcquirePptEditLock	Reserved. MUST be ignored.
ErrorRequiresCheckout	Reserved. MUST be ignored.
ErrorLockedForOfflineCheckout	Reserved. MUST be ignored.
ErrorLockedByAnotherUser	Reserved. MUST be ignored.
ErrorAccessDenied	Reserved. MUST be ignored.
ErrorNoLicense	Reserved. MUST be ignored.
ErrorRequestTooBig	Reserved. MUST be ignored.
ErrorTextTooBig	Reserved. MUST be ignored.
ErrorTryAgain	Reserved. MUST be ignored.
ErrorUnexpected	Reserved. MUST be ignored.
ErrorCantOpenDocumentMacro	Reserved. MUST be ignored.
ErrorCantOpenDocumentFinal	Reserved. MUST be ignored.
ErrorCantOpenDocumentSigned	Reserved. MUST be ignored.
ErrorCantOpenEmbeddedFonts	Reserved. MUST be ignored.
ErrorNoAvailableEditAppServer	Reserved. MUST be ignored.
ErrorServiceUnavailable	Reserved. MUST be ignored.
ErrorPptEditExistingExclusiveLock	Reserved. MUST be ignored.
ErrorPptEditCheckedOutByAnother	Reserved. MUST be ignored.
ErrorCantOpenDocumentGatekeeperFailure	Reserved. MUST be ignored.
ErrorEditWorkerTimeout	Reserved. MUST be ignored.
ErrorEditSlideCorruption	Reserved. MUST be ignored.
ErrorServiceBusy	Reserved. MUST be ignored.
ErrorClipartCannotConnect	Reserved. MUST be ignored.
ErrorClipartCannotDownload	Reserved. MUST be ignored.
ErrorMediaNotEnabled	Reserved. MUST be ignored.
ErrorUnsupportedMediaFormat	Reserved. MUST be ignored.
ErrorLinkedMediaNotEnabled	Reserved. MUST be ignored.
ErrorUnsupportedLinkTarget	Reserved. MUST be ignored.
ErrorEmbeddedMediaNotEnabled	Reserved. MUST be ignored.

Value	Meaning
ErrorEmbeddedMediaExceedsMaxSize	Reserved. MUST be ignored.
ErrorTranscodingNotEnabled	Reserved. MUST be ignored.
ErrorMediaUnavailable	Reserved. MUST be ignored.
ErrorCannotOpenODPDocumentPassword	Reserved. MUST be ignored.
ErrorLocalChangeLost	Reserved. MUST be ignored.
ErrorNumberOfCoauthorsReachedMax	Reserved. MUST be ignored.
ErrorRESERVEDLastError	Reserved. MUST be ignored.

2.2.6 Attributes

This specification does not define any common XML Schema attribute definitions.

2.2.7 Groups

This specification does not define any common XML Schema group definitions.

2.2.8 Attribute Groups

This specification does not define any common XML Schema attribute group definitions.

3 Protocol Details

In the following sections, the schema definition might differ from the processing rules imposed by the protocol. The WSDL in this specification matches the WSDL that shipped with the product and provides a base description of the schema. The text that introduces the WSDL might specify differences that reflect actual Microsoft product behavior. For example, the schema definition might allow for an element to be **empty**, **null**, or **not present** but the behavior of the protocol as specified restricts the same elements to being **non-empty**, **present**, and **not null**.

The client side of this protocol is simply a pass-through. That is, no additional timers or other state is required on the client side of this protocol. Calls made by the higher-layer protocol or application are passed directly to the transport, and the results returned by the transport are passed directly back to the higher-layer protocol or application.

3.1 Server Details

The following diagram describes the communication between the protocol client and the protocol server.

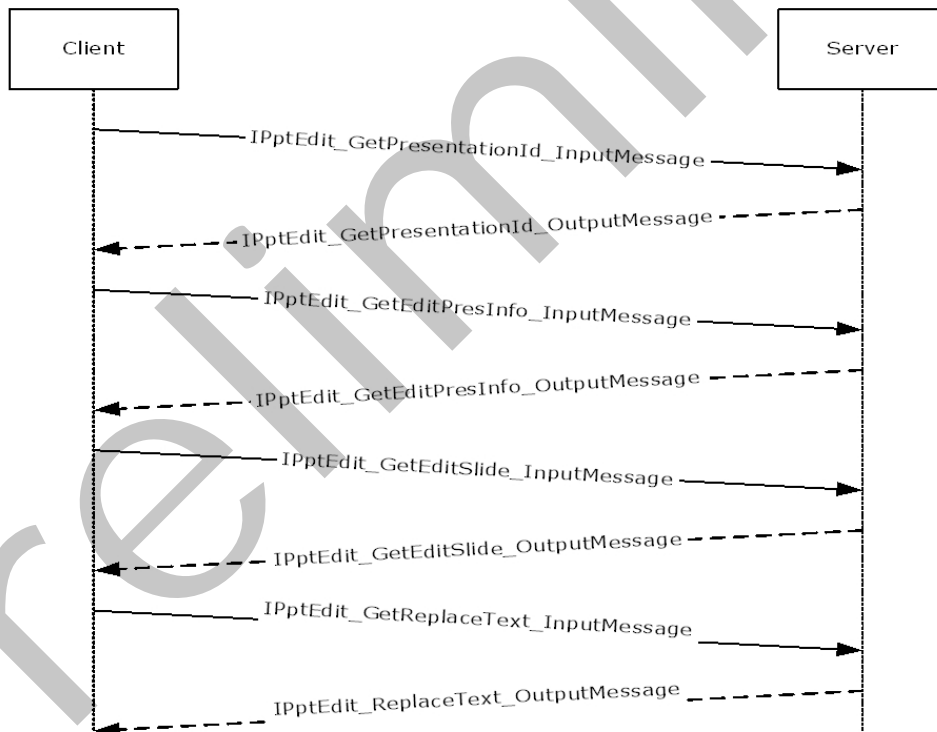


Figure 2: Sample communication between protocol client and protocol server

The protocol client sends the **IPptEdit_GetPresentationId_InputMessage SOAP message** as specified in section [3.1.4.11](#) to obtain a valid identifier for a presentation within an **IPptEdit_GetPresentationId_OutputMessage**.

The protocol client sends an **IPptEdit_GetEditPresInfo_InputMessage** message and the protocol server responds with an **IPptEdit_GetEditPresInfo_OutputMessage** containing information about the requested presentation.

The protocol client sends one or more **IPptEdit_GetEditSlide_InputMessage** messages and the protocol server responds with an **IPptEdit_GetSlide_OutputMessage** containing information about the requested presentation slide.

The protocol client sends one or more **IPptEdit_ReplaceText_InputMessage** messages and the protocol server responds with an **IPptEdit_ReplaceText_OutputMessage** containing information about the result of the operation.

3.1.1 Abstract Data Model

This section describes a conceptual model of possible data organization that an implementation maintains to participate in this protocol. The described organization is provided to facilitate the explanation of how the protocol behaves. This document does not mandate that implementations adhere to this model as long as their external behavior is consistent with that described in this document.

3.1.2 Timers

None.

3.1.3 Initialization

The protocol server MUST expose its Web methods at the following URL, which builds upon a base URL. The URL SHOULD [<38>](#) conform to the following structure: *base URL/p/ppt/edit.svc*. This is the minimal required structure. Case-sensitivity is specific to the protocol server implementation.

3.1.4 Message Processing Events and Sequencing Rules

The message processing events and sequencing rules are listed in this section. [<39>](#)

The following table summarizes the list of operations as defined by this specification:

Operation	Description
AddComment	The AddComment operation SHOULD <40> be used to insert a comment into a presentation.
ApplyShapeFill	The ApplyShapeFill operation SHOULD <41> be used to modify the color of a shape in a presentation.
ApplyShapeOutlineColor	The ApplyShapeOutlineColor operation SHOULD <42> be used to modify the color of the outline of a shape in a presentation.
ApplyShapeOutlineDashStyle	The ApplyShapeOutlineDashStyle operation SHOULD <43> be used to modify the dash type of the outline of a shape.

Operation	Description
ApplyShapeOutlineEndStyle	The ApplyShapeOutlineEndStyle operation SHOULD<44> be used to modify the end style of a line in a presentation.
ApplyShapeOutlineWidth	The ApplyShapeOutlineWidth operation SHOULD<45> be used to modify the width of the outline of a shape.
ApplyShapeStyle	The ApplyShapeStyle operation SHOULD<46> be used to apply a style to a shape in a presentation.
ApplyTheme	The ApplyTheme operation SHOULD<47> be used to change the theme applied to a presentation.
ArrangeShape	The ArrangeShape operation SHOULD<48> be used to rearrange a shape in a presentation.
ChangePictureStyle	The ChangePictureStyle operation is used to change the style applied to a picture.
ChangeSmartArtColor	The ChangeSmartArtColor operation is used to change the color transform applied to a SmartArt diagram.
ChangeSmartArtLayout	The ChangeSmartArtLayout operation is used to change the layout applied to a SmartArt diagram.
ChangeSmartArtStyle	The ChangeSmartArtStyle operation is used to change the style applied to a SmartArt diagram.
ClearPlaceholder	The ClearPlaceholder is used to delete a shape in a presentation.
DeleteComment	The DeleteComment operation SHOULD<49> be used to delete a comment from a presentation.
DeleteSlide	The DeleteSlide operation is used to delete a presentation slide from a presentation.
DuplicateShape	The DuplicateShape operation SHOULD<50> be used to duplicate a shape in a presentation.
DuplicateSlide	The DuplicateSlide operation is used to duplicate a presentation slide.
EditComment	The EditComment operation SHOULD<51> be used to change the contents of a comment in a presentation
FlipShape	The FlipShape operation SHOULD<52> be used to flip a shape vertically or horizontally in a presentation.
GetCoauthUpdates	The GetCoauthUpdates operation SHOULD<53> be used to retrieve co-authoring state for a presentation.
GetEditPresInfo	The GetEditPresInfo operation is used to retrieve information about a presentation.
GetEditPresInfoGetEditSlideById	The GetEditPresInfoGetEditSlideById operation SHOULD<54> be used to retrieve information about a presentation.
GetEditSlide	The GetEditSlide operation is used to retrieve information about a presentation slide.
GetPresentationId	The GetPresentationId operation is used to retrieve an identifier for a

Operation	Description
	presentation.
InsertClipart	The InsertClipart operation SHOULD <55> be used to insert a picture into a presentation.
InsertShape	The InsertShape operation SHOULD <56> be used to insert a shape in a presentation.
InsertSlide	The InsertSlide operation is used to insert a presentation slide into a presentation.
InsertSmartArt	The InsertSmartArt operation is used to insert a SmartArt diagram into a presentation
MoveComment	The MoveComment operation SHOULD <57> be used to change the position of a comment in a presentation.
MoveShape	The MoveShape operation SHOULD <58> be used to move a shape in a presentation.
MoveSlide	The MoveSlide operation is used to move a presentation slide in a presentation.
Print	A Print operation SHOULD <59> be used to print a presentation.
Redo	The Redo operation is used to redo the last operation in a presentation that is undone.
RemoveShapeFill	The RemoveShapeFill operation SHOULD <60> be used to remove the color of a shape in a presentation.
RemoveShapeOutline	The RemoveShapeOutline operation SHOULD <61> be used to remove the outline of a shape in a presentation.
ReorderAnimation	The ReorderAnimation operation SHOULD <62> be used to reorder the animation of a shape in a presentation.
ReplaceNotes	The ReplaceNotes operation is used to replace presentation notes in a presentation.
ReplaceText	The ReplaceText operation is used to replace text in a shape in a presentation.
ResetPicture	The ResetPicture operation SHOULD <63> be used to remove all customizations on a picture in a presentation.
ResetSmartArt	The ResetSmartArt operation is used to remove all customizations on a SmartArt diagram in a presentation.
ResizeShape	The ResizeShape operation SHOULD <64> be used to resize a shape in a presentation.
ReverseSmartArt	The ReverseSmartArt operation is used to reverse the direction of a SmartArt diagram in a presentation.
RotateShape	The RotateShape operation SHOULD <65> be used to rotate a shape in a presentation.
SaveAndClose	The SaveAndClose operation is used to save the contents of a

Operation	Description
	presentation and unlock it.
SetAnimation	The SetAnimation operation SHOULD <66> be used to apply an animation to a shape in a presentation.
SetTransition	The SetTransition operation SHOULD <67> be used to apply a transition to a slide in a presentation.
SetTransitionApplyAll	The SetTransitionApplyAll operation SHOULD <68> be used to copy a transition from one slide and apply it to all other slides in a presentation.
SetWordArt	Reserved. MUST not be called.
ShapeFormatPainting	The ShapeFormatPainting operation SHOULD <69> be used to copy formatting from one shape and apply it to another shape in the presentation.
ShowHideSlide	The ShowHideSlide operation is used to show or hide a presentation slide.
Undo	The Undo operation is used to undo the last operation in a presentation that is not undone.
UngroupShape	The UngroupShape operation SHOULD <70> be used to ungroup a shape in a presentation.
UpdateCanary	Reserved. MUST be ignored.

3.1.4.1 ApplyTheme

The **ApplyTheme** operation SHOULD [<71>](#) be used to change the theme applied to a presentation.

```
<wsdl:operation name="ApplyTheme" xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
    wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
    ServerInternalService/IPptEdit/ApplyTheme" message="tns4:IPptEdit_ApplyTheme_InputMessage"
    xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
    wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
    ServerInternalService/IPptEdit/ApplyThemeResponse"
    message="tns4:IPptEdit_ApplyTheme_OutputMessage"
    xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```

The protocol client sends an **IPptEdit_ApplyTheme_InputMessage** request message, and the protocol server responds with an **IPptEdit_ApplyTheme_OutputMessage** response message.

3.1.4.1.1 Messages

The following table summarizes the set of **WSDL message** definitions that are specific to this operation.

Message	Description
IPptEdit_ApplyTheme_InputMessage	The request WSDL message for the ApplyTheme WSDL

Message	Description
	operation.
IPptEdit_ApplyTheme_OutputMessage	The response WSDL message for the ApplyTheme WSDL operation.

3.1.4.1.1.1 IPptEdit_ApplyTheme_InputMessage

The request WSDL message for the **ApplyTheme** WSDL operation.

The **SOAP action** value is:

```
http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEditServerInternalService/IPptEdit/ApplyTheme
```

The **SOAP body** contains the **ApplyTheme** element.

3.1.4.1.1.2 IPptEdit_ApplyTheme_OutputMessage

The response WSDL message for the **ApplyTheme** WSDL operation.

The SOAP body contains the **ApplyThemeResponse** element.

3.1.4.1.2 Elements

The following table summarizes the XML schema element definitions that are specific to this operation.

Element	Description
ApplyTheme	The input data for the ApplyTheme WSDL operation.
ApplyThemeResponse	The result data for the ApplyTheme WSDL operation.

3.1.4.1.2.1 ApplyTheme

The input data for the **ApplyTheme** WSDL operation.

```
<xs:element name="ApplyTheme" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="presentationId" nillable="true" type="xs:string"/>
      <xs:element minOccurs="0" name="slideId" type="xs:unsignedInt"/>
      <xs:element minOccurs="0" name="themeName" nillable="true" type="xs:string"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

presentationId: An **xs:string** ([\[XMLSCHEMA2\]](#) section 3.2.1) that specifies the identifier of the presentation, as specified in section [3.1.4.11](#).

slideId: An **ST_SlideId** ([\[ISO/IEC-29500-1\]](#) section 19.7.13) that specifies the identifier of the presentation slide.

themeName: An **xs:string** ([\[XMLSCHEMA2\]](#) section 3.2.1) that specifies the name of the theme to apply.

3.1.4.1.2.2 ApplyThemeResponse

The result data for the **ApplyTheme** WSDL operation.

```
<xs:element name="ApplyThemeResponse" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:tns2="http://schemas.datacontract.org/2004/07/p" minOccurs="0"
name="ApplyThemeResult" nillable="true" type="tns2:ServiceResult"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

ApplyThemeResult: A **ServiceResult** (section [2.2.4.26](#)) that specifies the result of the operation. The **Result** child element MUST be an **EditCommandResponse** (section [2.2.4.11](#)).

3.1.4.1.3 Complex Types

None.

3.1.4.1.4 Simple Types

None.

3.1.4.1.5 Attributes

None.

3.1.4.1.6 Groups

None.

3.1.4.1.7 Attribute Groups

None.

3.1.4.2 ChangePictureStyle

The **ChangePictureStyle** operation is used to change the style applied to a picture.

```
<wsdl:operation name="ChangePictureStyle" xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/ChangePictureStyle"
message="tns4:IPptEdit_ChangePictureStyle_InputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/ChangePictureStyleResponse"
message="tns4:IPptEdit_ChangePictureStyle_OutputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```

The protocol client sends an **IPptEdit_ChangePictureStyle_InputMessage** request message, and the protocol server responds with an **IPptEdit_ChangePictureStyle_OutputMessage** response message.

3.1.4.2.1 Messages

The following table summarizes the set of WSDL message definitions that are specific to this operation.

Message	Description
IPptEdit_ChangePictureStyle_InputMessage	The request WSDL message for the ChangePictureStyle WSDL operation.
IPptEdit_ChangePictureStyle_OutputMessage	The response WSDL message for the ChangePictureStyle WSDL operation.

3.1.4.2.1.1 IPptEdit_ChangePictureStyle_InputMessage

The request WSDL message for the **ChangePictureStyle** WSDL operation.

The SOAP action value is:

```
http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEditServerInternalService/IPptEdit/ChangePictureStyle
```

The SOAP body contains the **ChangePictureStyle** element.

3.1.4.2.1.2 IPptEdit_ChangePictureStyle_OutputMessage

The response WSDL message for the **ChangePictureStyle** WSDL operation.

The SOAP body contains the **ChangePictureStyleResponse** element.

3.1.4.2.2 Elements

The following table summarizes the XML schema element definitions that are specific to this operation.

Element	Description
ChangePictureStyle	The input data for the ChangePictureStyle WSDL operation.
ChangePictureStyleResponse	The result data for the ChangePictureStyle WSDL operation.

3.1.4.2.2.1 ChangePictureStyle

The input data for the **ChangePictureStyle** WSDL operation.

```
<xs:element name="ChangePictureStyle" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="presentationId" nillable="true" type="xs:string"/>
      <xs:element minOccurs="0" name="slideId" type="xs:unsignedInt"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

```

    <xs:element minOccurs="0" name="shapeId" type="xs:unsignedInt"/>
    <xs:element minOccurs="0" name="pictureStyleId" type="xs:unsignedInt"/>
  </xs:sequence>
</xs:complexType>
</xs:element>

```

presentationId: An **xs:string** ([\[XMLSCHEMA2\]](#) section 3.2.1) that specifies the identifier of the presentation, as specified in section [3.1.4.11](#).

slideId: An **ST_SlideId** ([\[ISO/IEC-29500-1\]](#) section 19.7.13) that specifies the identifier of the presentation slide.

shapeId: An **ST_DrawingElementId** ([\[ISO/IEC-29500-1\]](#) section 20.1.10.21) that specifies the identifier of the picture.

pictureStyleId: An **xs:unsignedInt** ([\[XMLSCHEMA2\]](#) section 3.3.22) that specifies which style the picture is changed to. The value **MUST** be in the range from 15505 through 15532.

3.1.4.2.2.2 ChangePictureStyleResponse

The result data for the **ChangePictureStyle** WSDL operation.

```

<xs:element name="ChangePictureStyleResponse" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:tns2="http://schemas.datacontract.org/2004/07/p" minOccurs="0"
        name="ChangePictureStyleResult" nillable="true" type="tns2:ServiceResult"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>

```

ChangePictureStyleResult: A [ServiceResult](#) that specifies the result of the operation. The **Result** child element **MUST** be an [EditCommandResponse](#).

3.1.4.2.3 Complex Types

None.

3.1.4.2.4 Simple Types

None.

3.1.4.2.5 Attributes

None.

3.1.4.2.6 Groups

None.

3.1.4.2.7 Attribute Groups

None.

3.1.4.3 ChangeSmartArtColor

The **ChangeSmartArtColor** operation is used to change the color transform applied to a SmartArt diagram.

```
<wsdl:operation name="ChangeSmartArtColor" xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
    wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEditServerInternalService/IPptEdit/ChangeSmartArtColor"
    message="tns4:IPptEdit_ChangeSmartArtColor_InputMessage"
    xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
    wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEditServerInternalService/IPptEdit/ChangeSmartArtColorResponse"
    message="tns4:IPptEdit_ChangeSmartArtColor_OutputMessage"
    xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```

The protocol client sends an **IPptEdit_ChangeSmartArtColor_InputMessage** request message, and the protocol server responds with an **IPptEdit_ChangeSmartArtColor_OutputMessage** response message.

3.1.4.3.1 Messages

The following table summarizes the set of WSDL message definitions that are specific to this operation.

Message	Description
IPptEdit_ChangeSmartArtColor_InputMessage	The request WSDL message for the ChangeSmartArtColor WSDL operation.
IPptEdit_ChangeSmartArtColor_OutputMessage	The response WSDL message for the ChangeSmartArtColor WSDL operation.

3.1.4.3.1.1 IPptEdit_ChangeSmartArtColor_InputMessage

The request WSDL message for the **ChangeSmartArtColor** WSDL operation.

The SOAP action value is:

```
http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEditServerInternalService/IPptEdit/ChangeSmartArtColor
```

The SOAP body contains the **ChangeSmartArtColor** element.

3.1.4.3.1.2 IPptEdit_ChangeSmartArtColor_OutputMessage

The response WSDL message for the **ChangeSmartArtColor** WSDL operation.

The SOAP body contains the **ChangeSmartArtColorResponse** element.

3.1.4.3.2 Elements

The following table summarizes the XML schema element definitions that are specific to this operation.

Element	Description
ChangeSmartArtColor	The input data for the ChangeSmartArtColor WSDL operation.
ChangeSmartArtColorResponse	The result data for the ChangeSmartArtColor WSDL operation.

3.1.4.3.2.1 ChangeSmartArtColor

The input data for the **ChangeSmartArtColor** WSDL operation.

```
<xs:element name="ChangeSmartArtColor" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="presentationId" nillable="true" type="xs:string"/>
      <xs:element minOccurs="0" name="slideId" type="xs:unsignedInt"/>
      <xs:element minOccurs="0" name="shapeId" type="xs:unsignedInt"/>
      <xs:element minOccurs="0" name="colorTransUri" nillable="true" type="xs:string"/>
      <xs:element minOccurs="0" name="category" nillable="true" type="xs:string"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

presentationId: An **xs:string** ([\[XMLSCHEMA2\]](#) section 3.2.1) that specifies the identifier of the presentation where the color transform of the SmartArt diagram is changed, as specified in section [3.1.4.11](#).

slideId: An **ST_SlideId** ([\[ISO/IEC-29500-1\]](#) section 19.7.13) that specifies the identifier of the presentation slide where the color transform of the SmartArt diagram is changed.

shapeId: An **ST_DrawingElementId** ([\[ISO/IEC-29500-1\]](#) section 20.1.10.21) that specifies the identifier of the SmartArt diagram the color of which is changed.

colorTransUri: An **xs:string** ([\[XMLSCHEMA2\]](#) section 3.2.1) that specifies the identifier of the color transform which is applied to the SmartArt diagram.

category: An **xs:string** ([\[XMLSCHEMA2\]](#) section 3.2.1) that specifies the category to which the color transform belongs.

3.1.4.3.2.2 ChangeSmartArtColorResponse

The result data for the **ChangeSmartArtColor** WSDL operation.

```
<xs:element name="ChangeSmartArtColorResponse" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:tns2="http://schemas.datacontract.org/2004/07/p" minOccurs="0"
        name="ChangeSmartArtColorResult" nillable="true" type="tns2:ServiceResult"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```


ChangeSmartArtColorResult: A [ServiceResult](#) that specifies the result of the operation. The **Result** child element MUST be an [EditCommandResponse](#).

3.1.4.3.3 Complex Types

None.

3.1.4.3.4 Simple Types

None.

3.1.4.3.5 Attributes

None.

3.1.4.3.6 Groups

None.

3.1.4.3.7 Attribute Groups

None.

3.1.4.4 ChangeSmartArtLayout

The **ChangeSmartArtLayout** operation is used to change the layout applied to a SmartArt diagram.

```
<wsdl:operation name="ChangeSmartArtLayout" xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
    wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
    ServerInternalService/IPptEdit/ChangeSmartArtLayout"
    message="tns4:IPptEdit_ChangeSmartArtLayout_InputMessage"
    xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
    wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
    ServerInternalService/IPptEdit/ChangeSmartArtLayoutResponse"
    message="tns4:IPptEdit_ChangeSmartArtLayout_OutputMessage"
    xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```

The protocol client sends an **IPptEdit_ChangeSmartArtLayout_InputMessage** request message, and the protocol server responds with an **IPptEdit_ChangeSmartArtLayout_OutputMessage** response message.

3.1.4.4.1 Messages

The following table summarizes the set of WSDL message definitions that are specific to this operation.

Message	Description
IPptEdit_ChangeSmartArtLayout_InputMessage	The request WSDL message for the ChangeSmartArtLayout WSDL operation.

Message	Description
IPptEdit_ChangeSmartArtLayout_OutputMessage	The response WSDL message for the ChangeSmartArtLayout WSDL operation.

3.1.4.4.1.1 IPptEdit_ChangeSmartArtLayout_InputMessage

The request WSDL message for the **ChangeSmartArtLayout** WSDL operation.

The SOAP action value is:

```
http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEditServerInternalService/IPptEdit/ChangeSmartArtLayout
```

The SOAP body contains the **ChangeSmartArtLayout** element.

3.1.4.4.1.2 IPptEdit_ChangeSmartArtLayout_OutputMessage

The response WSDL message for the **ChangeSmartArtLayout** WSDL operation.

The SOAP body contains the **ChangeSmartArtLayoutResponse** element.

3.1.4.4.2 Elements

The following table summarizes the XML schema element definitions that are specific to this operation.

Element	Description
ChangeSmartArtLayout	The input data for the ChangeSmartArtLayout WSDL operation.
ChangeSmartArtLayoutResponse	The result data for the ChangeSmartArtLayout WSDL operation.

3.1.4.4.2.1 ChangeSmartArtLayout

The input data for the **ChangeSmartArtLayout** WSDL operation.

```
<xs:element name="ChangeSmartArtLayout" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="presentationId" nillable="true" type="xs:string"/>
      <xs:element minOccurs="0" name="slideId" type="xs:unsignedInt"/>
      <xs:element minOccurs="0" name="shapeId" type="xs:unsignedInt"/>
      <xs:element minOccurs="0" name="layoutUri" nillable="true" type="xs:string"/>
      <xs:element minOccurs="0" name="category" nillable="true" type="xs:string"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

presentationId: An **xs:string** ([\[XMLSCHEMA2\]](#) section 3.2.1) that specifies the identifier of the presentation where the layout of the SmartArt diagram is changed, as specified in section [3.1.4.11](#).

slideId: An **ST_SlideId** ([\[ISO/IEC-29500-1\]](#) section 19.7.13) that specifies the identifier of the presentation slide where the layout of the SmartArt diagram is changed.

shapeId: An **ST_DrawingElementId** ([\[ISO/IEC-29500-1\]](#) section 20.1.10.21) that specifies the identifier of the SmartArt diagram the layout of which is changed.

layoutUri: An **xs:string** ([\[XMLSCHEMA2\]](#) section 3.2.1) that specifies the identifier of the layout which is applied to the SmartArt diagram.

category: An **xs:string** ([\[XMLSCHEMA2\]](#) section 3.2.1) that specifies the category to which the layout belongs.

3.1.4.4.2 ChangeSmartArtLayoutResponse

The result data for the **ChangeSmartArtLayout** WSDL operation.

```
<xs:element name="ChangeSmartArtLayoutResponse" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:tns2="http://schemas.datacontract.org/2004/07/p" minOccurs="0"
name="ChangeSmartArtLayoutResult" nillable="true" type="tns2:ServiceResult"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

ChangeSmartArtLayoutResult: A [ServiceResult](#) that specifies the result of the operation. The **Result** child element MUST be an [EditCommandResponse](#).

3.1.4.4.3 Complex Types

None.

3.1.4.4.4 Simple Types

None.

3.1.4.4.5 Attributes

None.

3.1.4.4.6 Groups

None.

3.1.4.4.7 Attribute Groups

None.

3.1.4.5 ChangeSmartArtStyle

The **ChangeSmartArtStyle** operation is used to change the style applied to a SmartArt diagram.

```
<wsdl:operation name="ChangeSmartArtStyle" xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/ChangeSmartArtStyle"
message="tns4:IPptEdit_ChangeSmartArtStyle_InputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
```

```

<wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/ChangeSmartArtStyleResponse"
message="tns4:IPptEdit_ChangeSmartArtStyle_OutputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>

```

The protocol client sends an **IPptEdit_ChangeSmartArtStyle_InputMessage** request message, and the protocol server responds with an **IPptEdit_ChangeSmartArtStyle_OutputMessage** response message.

3.1.4.5.1 Messages

The following table summarizes the set of WSDL message definitions that are specific to this operation.

Message	Description
IPptEdit_ChangeSmartArtStyle_InputMessage	The request WSDL message for the ChangeSmartArtStyle WSDL operation.
IPptEdit_ChangeSmartArtStyle_OutputMessage	The response WSDL message for the ChangeSmartArtStyle WSDL operation.

3.1.4.5.1.1 IPptEdit_ChangeSmartArtStyle_InputMessage

The request WSDL message for the **ChangeSmartArtStyle** WSDL operation.

The SOAP action value is:

```

http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEditServerInternalService/IPptEdit/ChangeSmartArtStyle

```

The SOAP body contains the **ChangeSmartArtStyle** element.

3.1.4.5.1.2 IPptEdit_ChangeSmartArtStyle_OutputMessage

The response WSDL message for the **ChangeSmartArtStyle** WSDL operation.

The SOAP body contains the **ChangeSmartArtStyleResponse** element.

3.1.4.5.2 Elements

The following table summarizes the XML schema element definitions that are specific to this operation.

Element	Description
ChangeSmartArtStyle	The input data for the ChangeSmartArtStyle WSDL operation.
ChangeSmartArtStyleResponse	The result data for the ChangeSmartArtStyle WSDL operation.

3.1.4.5.2.1 ChangeSmartArtStyle

The input data for the **ChangeSmartArtStyle** WSDL operation.

```
<xs:element name="ChangeSmartArtStyle" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="presentationId" nillable="true" type="xs:string"/>
      <xs:element minOccurs="0" name="slideId" type="xs:unsignedInt"/>
      <xs:element minOccurs="0" name="shapeId" type="xs:unsignedInt"/>
      <xs:element minOccurs="0" name="styleUri" nillable="true" type="xs:string"/>
      <xs:element minOccurs="0" name="category" nillable="true" type="xs:string"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

presentationId: An **xs:string** ([\[XMLSCHEMA2\]](#) section 3.2.1) that specifies the identifier of the presentation where the style of the SmartArt diagram is changed, as specified in section [3.1.4.11](#).

slideId: An **ST_SlideId** ([\[ISO/IEC-29500-1\]](#) section 19.7.13) that specifies the identifier of the presentation slide where the style of the SmartArt diagram is changed.

shapeId: An **ST_DrawingElementId** ([\[ISO/IEC-29500-1\]](#) section 20.1.10.21) that specifies the identifier of the SmartArt diagram the style of which is changed.

styleUri: An **xs:string** ([\[XMLSCHEMA2\]](#) section 3.2.1) that specifies the identifier of the style which is applied to the SmartArt diagram.

category: An **xs:string** ([\[XMLSCHEMA2\]](#) section 3.2.1) that specifies the category to which the style belongs.

3.1.4.5.2.2 ChangeSmartArtStyleResponse

The result data for the **ChangeSmartArtStyle** WSDL operation.

```
<xs:element name="ChangeSmartArtStyleResponse" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:tns2="http://schemas.datacontract.org/2004/07/p" minOccurs="0"
        name="ChangeSmartArtStyleResult" nillable="true" type="tns2:ServiceResult"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

ChangeSmartArtStyleResult: A [ServiceResult](#) that specifies the result of the operation. The **Result** child element MUST be an [EditCommandResponse](#).

3.1.4.5.3 Complex Types

None.

3.1.4.5.4 Simple Types

None.

3.1.4.5.5 Attributes

None.

3.1.4.5.6 Groups

None.

3.1.4.5.7 Attribute Groups

None.

3.1.4.6 ClearPlaceholder

The **ClearPlaceholder** is used to delete a shape in a presentation.

```
<wsdl:operation name="ClearPlaceholder" xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
    wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
    ServerInternalService/IPptEdit/ClearPlaceholder"
    message="tns4:IPptEdit_ClearPlaceholder_InputMessage"
    xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
    wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
    ServerInternalService/IPptEdit/ClearPlaceholderResponse"
    message="tns4:IPptEdit_ClearPlaceholder_OutputMessage"
    xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```

The protocol client sends an **IPptEdit_ClearPlaceholder_InputMessage** request message, and the protocol server responds with an **IPptEdit_ClearPlaceholder_OutputMessage** response message.

3.1.4.6.1 Messages

The following table summarizes the set of WSDL message definitions that are specific to this operation.

Message	Description
IPptEdit_ClearPlaceholder_InputMessage	The request WSDL message for the ClearPlaceholder WSDL operation.
IPptEdit_ClearPlaceholder_OutputMessage	The response WSDL message for the ClearPlaceholder WSDL operation.

3.1.4.6.1.1 IPptEdit_ClearPlaceholder_InputMessage

The request WSDL message for the **ClearPlaceholder** WSDL operation.

The SOAP action value is:

```
http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEditServerInternalService/IPptEdit/ClearPlaceholder
```

The SOAP body contains the **ClearPlaceholder** element.

3.1.4.6.1.2 IPptEdit_ClearPlaceholder_OutputMessage

The response WSDL message for the **ClearPlaceholder** WSDL operation.

The SOAP body contains the **ClearPlaceholderResponse** element.

3.1.4.6.2 Elements

The following table summarizes the XML schema element definitions that are specific to this operation.

Element	Description
ClearPlaceholder	The input data for the ClearPlaceholder WSDL operation.
ClearPlaceholderResponse	The result data for the ClearPlaceholder WSDL operation.

3.1.4.6.2.1 ClearPlaceholder

The input data for the **ClearPlaceholder** WSDL operation.

```
<xs:element name="ClearPlaceholder" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="presentationId" nillable="true" type="xs:string"/>
      <xs:element minOccurs="0" name="slideId" type="xs:unsignedInt"/>
      <xs:element minOccurs="0" name="shapeId" type="xs:unsignedInt"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

presentationId: An **xs:string** ([\[XMLSCHEMA2\]](#) section 3.2.1) that specifies the identifier of the presentation containing the shape that is deleted, as specified in section [3.1.4.11](#).

slideId: An **ST_SlideId** ([\[ISO/IEC-29500-1\]](#) section 19.7.13) that specifies the identifier of the presentation slide containing the shape that is deleted.

shapeId: An **ST_DrawingElementId** ([\[ISO/IEC-29500-1\]](#) section 20.1.10.21) that specifies the identifier of the shape that is deleted.

3.1.4.6.2.2 ClearPlaceholderResponse

The result data for the **ClearPlaceholder** WSDL operation.

```
<xs:element name="ClearPlaceholderResponse" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:tns2="http://schemas.datacontract.org/2004/07/p" minOccurs="0"
name="ClearPlaceholderResult" nillable="true" type="tns2:ServiceResult"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

ClearPlaceholderResult: A [ServiceResult](#) that specifies the result of the operation. The **Result** child element MUST be an [EditCommandResponse](#).

3.1.4.6.3 Complex Types

None.

3.1.4.6.4 Simple Types

None.

3.1.4.6.5 Attributes

None.

3.1.4.6.6 Groups

None.

3.1.4.6.7 Attribute Groups

None.

3.1.4.7 DeleteSlide

The **DeleteSlide** operation is used to delete a presentation slide from a presentation.

```
<wsdl:operation name="DeleteSlide" xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
    wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
    ServerInternalService/IPptEdit/DeleteSlide" message="tns4:IPptEdit_DeleteSlide_InputMessage"
    xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
    wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
    ServerInternalService/IPptEdit/DeleteSlideResponse"
    message="tns4:IPptEdit_DeleteSlide_OutputMessage"
    xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```

The protocol client sends an **IPptEdit_DeleteSlide_InputMessage** request message, and the protocol server responds with an **IPptEdit_DeleteSlide_OutputMessage** response message.

3.1.4.7.1 Messages

The following table summarizes the set of WSDL message definitions that are specific to this operation.

Message	Description
IPptEdit_DeleteSlide_InputMessage	The request WSDL message for the DeleteSlide WSDL operation.
IPptEdit_DeleteSlide_OutputMessage	The response WSDL message for the DeleteSlide WSDL operation.

3.1.4.7.1.1 IPptEdit_DeleteSlide_InputMessage

The request WSDL message for the **DeleteSlide** WSDL operation.

The SOAP action value is:

```
http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEditServerInternalService/IPptEdit/DeleteSlide
```

The SOAP body contains the **DeleteSlide** element.

3.1.4.7.1.2 IPptEdit_DeleteSlide_OutputMessage

The response WSDL message for the **DeleteSlide** WSDL operation.

The SOAP body contains the **DeleteSlideResponse** element.

3.1.4.7.2 Elements

The following table summarizes the XML schema element definitions that are specific to this operation.

Element	Description
DeleteSlide	The input data for the DeleteSlide WSDL operation.
DeleteSlideResponse	The result data for the DeleteSlide WSDL operation.

3.1.4.7.2.1 DeleteSlide

The input data for the **DeleteSlide** WSDL operation.

```
<xs:element name="DeleteSlide" xmlns:xs="http://www.w3.org/2001/XMLSchema">  
  <xs:complexType>  
    <xs:sequence>  
      <xs:element minOccurs="0" name="presentationId" nillable="true" type="xs:string"/>  
      <xs:element minOccurs="0" name="slideId" type="xs:unsignedInt"/>  
    </xs:sequence>  
  </xs:complexType>  
</xs:element>
```

presentationId: An **xs:string** ([\[XMLSCHEMA2\]](#) section 3.2.1) that specifies the identifier of the presentation, as specified in section [3.1.4.11](#).

slideId: An **ST_SlideId** ([\[ISO/IEC-29500-1\]](#) section 19.7.13) that specifies the identifier of the presentation slide to delete.

3.1.4.7.2.2 DeleteSlideResponse

The result data for the **DeleteSlide** WSDL operation.

```
<xs:element name="DeleteSlideResponse" xmlns:xs="http://www.w3.org/2001/XMLSchema">  
  <xs:complexType>  
    <xs:sequence>
```

```

    <xs:element xmlns:tns2="http://schemas.datacontract.org/2004/07/p" minOccurs="0"
name="DeleteSlideResult" nillable="true" type="tns2:ServiceResult"/>
  </xs:sequence>
</xs:complexType>
</xs:element>

```

DeleteSlideResult: A [ServiceResult](#) that specifies the result of the operation. The **Result** child element MUST be an [EditCommandResponse](#).

3.1.4.7.3 Complex Types

None.

3.1.4.7.4 Simple Types

None.

3.1.4.7.5 Attributes

None.

3.1.4.7.6 Groups

None.

3.1.4.7.7 Attribute Groups

None.

3.1.4.8 DuplicateSlide

The **DuplicateSlide** operation is used to duplicate a presentation slide.

```

<wsdl:operation name="DuplicateSlide" xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/DuplicateSlide"
message="tns4:IPptEdit_DuplicateSlide_InputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/DuplicateSlideResponse"
message="tns4:IPptEdit_DuplicateSlide_OutputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>

```

The protocol client sends an **IPptEdit_DuplicateSlide_InputMessage** request message, and the protocol server responds with an **IPptEdit_DuplicateSlide_OutputMessage** response message.

3.1.4.8.1 Messages

The following table summarizes the set of WSDL message definitions that are specific to this operation.

Message	Description
IPptEdit_DuplicateSlide_InputMessage	The request WSDL message for the DuplicateSlide WSDL operation.
IPptEdit_DuplicateSlide_OutputMessage	The response WSDL message for the DuplicateSlide WSDL operation.

3.1.4.8.1.1 IPptEdit_DuplicateSlide_InputMessage

The request WSDL message for the **DuplicateSlide** WSDL operation.

The SOAP action value is:

```
http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEditServerInternalService/IPptEdit/DuplicateSlide
```

The SOAP body contains the **DuplicateSlide** element.

3.1.4.8.1.2 IPptEdit_DuplicateSlide_OutputMessage

The response WSDL message for the **DuplicateSlide** WSDL operation.

The SOAP body contains the **DuplicateSlideResponse** element.

3.1.4.8.2 Elements

The following table summarizes the XML schema element definitions that are specific to this operation.

Element	Description
DuplicateSlide	The input data for the DuplicateSlide WSDL operation.
DuplicateSlideResponse	The result data for the DuplicateSlide WSDL operation.

3.1.4.8.2.1 DuplicateSlide

The input data for the **DuplicateSlide** WSDL operation.

```
<xs:element name="DuplicateSlide" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="presentationId" nillable="true" type="xs:string"/>
      <xs:element minOccurs="0" name="srcId" type="xs:unsignedInt"/>
      <xs:element minOccurs="0" name="dstId" type="xs:unsignedInt"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

presentationId: An **xs:string** ([\[XMLSCHEMA2\]](#) section 3.2.1) that specifies the identifier of the presentation, as specified in section [3.1.4.11](#).

srcId: An **ST_SlideId** ([\[ISO/IEC-29500-1\]](#) section 19.7.13) that specifies the identifier of the presentation slide to duplicate.

dstId: A **ST_SlideId** ([\[ISO/IEC-29500-1\]](#) section 19.7.13) that specifies the identifier of the presentation slide that precedes the location of the duplicated slide.

3.1.4.8.2.2 DuplicateSlideResponse

The result data for the **DuplicateSlide** WSDL operation.

```
<xs:element name="DuplicateSlideResponse" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:tns2="http://schemas.datacontract.org/2004/07/p" minOccurs="0"
name="DuplicateSlideResult" nillable="true" type="tns2:ServiceResult"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

DuplicateSlideResult: A [ServiceResult](#) that specifies the result of the operation. The **Result** child element MUST be an [EditCommandResponse](#).

3.1.4.8.3 Complex Types

None.

3.1.4.8.4 Simple Types

None.

3.1.4.8.5 Attributes

None.

3.1.4.8.6 Groups

None.

3.1.4.8.7 Attribute Groups

None.

3.1.4.9 GetEditPresInfo

The **GetEditPresInfo** operation is used to retrieve information about a presentation.

```
<wsdl:operation name="GetEditPresInfo" xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/GetEditPresInfo"
message="tns4:IPptEdit_GetEditPresInfo_InputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/GetEditPresInfoResponse"
```

```

message="tns4:IPptEdit_GetEditPresInfo_OutputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>

```

The protocol client sends an **IPptEdit_GetEditPresInfo_InputMessage** request message, and the protocol server responds with an **IPptEdit_GetEditPresInfo_OutputMessage** response message.

3.1.4.9.1 Messages

The following table summarizes the set of WSDL message definitions that are specific to this operation.

Message	Description
IPptEdit_GetEditPresInfo_InputMessage	The request WSDL message for the GetEditPresInfo WSDL operation.
IPptEdit_GetEditPresInfo_OutputMessage	The response WSDL message for the GetEditPresInfo WSDL operation.

3.1.4.9.1.1 IPptEdit_GetEditPresInfo_InputMessage

The request WSDL message for the **GetEditPresInfo** WSDL operation.

The SOAP action value is:

```

http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEditServerInternalService/IPptEdit/GetEditPresInfo

```

The SOAP body contains the **GetEditPresInfo** element.

3.1.4.9.1.2 IPptEdit_GetEditPresInfo_OutputMessage

The response WSDL message for the **GetEditPresInfo** WSDL operation.

The SOAP body contains the **GetEditPresInfoResponse** element.

3.1.4.9.2 Elements

The following table summarizes the XML schema element definitions that are specific to this operation.

Element	Description
GetEditPresInfo	The input data for the GetEditPresInfo WSDL operation.
GetEditPresInfoResponse	The result data for the GetEditPresInfo WSDL operation.

3.1.4.9.2.1 GetEditPresInfo

The input data for the **GetEditPresInfo** WSDL operation.

```

<xs:element name="GetEditPresInfo" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>

```

```

<xs:sequence>
  <xs:element minOccurs="0" name="presentationId" nillable="true" type="xs:string"/>
  <xs:element minOccurs="0" name="firstSlideIndex" type="xs:unsignedInt"/>
  <xs:element minOccurs="0" name="numSlides" type="xs:unsignedInt"/>
  <xs:element minOccurs="0" name="includedEditSlideIndex" type="xs:int"/>
  <xs:element minOccurs="0" name="clientWidth" type="xs:unsignedInt"/>
  <xs:element minOccurs="0" name="clientHeight" type="xs:unsignedInt"/>
</xs:sequence>
</xs:complexType>
</xs:element>

```

presentationId: An **xs:string** ([XMLSCHEMA2] section 3.2.1) that specifies the identifier of the presentation, as specified in section 3.1.4.11.

firstSlideIndex: An **xs:unsignedInt** ([XMLSCHEMA2] section 3.3.22) that specifies the index of the first presentation slide for which to retrieve information.

numSlides: An **xs:unsignedInt** ([XMLSCHEMA2] section 3.3.22) that specifies the count of presentation slides for which to retrieve information.

includedEditSlideIndex: Reserved. MUST be ignored.

clientWidth: An **xs:unsignedInt** ([XMLSCHEMA2] section 3.3.22) that specifies the width of the client area.

clientHeight: An **xs:unsignedInt** ([XMLSCHEMA2] section 3.3.22) that specifies the height of the client area.

3.1.4.9.2.2 GetEditPresInfoResponse

The result data for the **GetEditPresInfo** WSDL operation.

```

<xs:element name="GetEditPresInfoResponse" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:tns2="http://schemas.datacontract.org/2004/07/p" minOccurs="0"
        name="GetEditPresInfoResult" nillable="true" type="tns2:ServiceResult"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>

```

GetEditPresInfoResult: A [ServiceResult](#) that specifies the result of the operation. The **Result** child element MUST be an [EditPresentationInfo](#).

3.1.4.9.3 Complex Types

None.

3.1.4.9.4 Simple Types

None.

3.1.4.9.5 Attributes

None.

3.1.4.9.6 Groups

None.

3.1.4.9.7 Attribute Groups

None.

3.1.4.10 GetEditSlide

The **GetEditSlide** operation is used to retrieve information about a presentation slide.

```
<wsdl:operation name="GetEditSlide" xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
    wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
    ServerInternalService/IPptEdit/GetEditSlide"
    message="tns4:IPptEdit_GetEditSlide_InputMessage"
    xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
    wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
    ServerInternalService/IPptEdit/GetEditSlideResponse"
    message="tns4:IPptEdit_GetEditSlide_OutputMessage"
    xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```

The protocol client sends an **IPptEdit_GetEditSlide_InputMessage** request message, and the protocol server responds with an **IPptEdit_GetEditSlide_OutputMessage** response message.

3.1.4.10.1 Messages

The following table summarizes the set of WSDL message definitions that are specific to this operation.

Message	Description
IPptEdit_GetEditSlide_InputMessage	The request WSDL message for the GetEditSlide WSDL operation.
IPptEdit_GetEditSlide_OutputMessage	The response WSDL message for the GetEditSlide WSDL operation.

3.1.4.10.1.1 IPptEdit_GetEditSlide_InputMessage

The request WSDL message for the **GetEditSlide** WSDL operation.

The SOAP action value is:

```
http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEditServerInternalService/IPptEdit/GetEditSlide
```

The SOAP body contains the **GetEditSlide** element.

3.1.4.10.1.2 IPptEdit_GetEditSlide_OutputMessage

The response WSDL message for the **GetEditSlide** WSDL operation.

The SOAP body contains the **GetEditSlideResponse** element.

3.1.4.10.2 Elements

The following table summarizes the XML schema element definitions that are specific to this operation.

Element	Description
GetEditSlide	The input data for the GetEditSlide WSDL operation.
GetEditSlideResponse	The result data for the GetEditSlide WSDL operation.

3.1.4.10.2.1 GetEditSlide

The input data for the **GetEditSlide** WSDL operation.

```
<xs:element name="GetEditSlide" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="presentationId" nillable="true" type="xs:string"/>
      <xs:element minOccurs="0" name="slideId" type="xs:int"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

presentationId: An **xs:string** ([\[XMLSCHEMA2\]](#) section 3.2.1) that specifies the identifier of the presentation, as specified in section [3.1.4.11](#).

slideId: An **ST_SlideId** ([\[ISO/IEC-29500-1\]](#) section 19.7.13) that specifies the identifier of the presentation slide.

3.1.4.10.2.2 GetEditSlideResponse

The result data for the **GetEditSlide** WSDL operation.

```
<xs:element name="GetEditSlideResponse" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:tns2="http://schemas.datacontract.org/2004/07/p" minOccurs="0"
name="GetEditSlideResult" nillable="true" type="tns2:ServiceResult"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

GetEditSlideResult: A [ServiceResult](#) that specifies the result of the operation. The **Result** child element MUST be an [EditSlide](#).

3.1.4.10.3 Complex Types

None.

3.1.4.10.4 Simple Types

None.

3.1.4.10.5 Attributes

None.

3.1.4.10.6 Groups

None.

3.1.4.10.7 Attribute Groups

None.

3.1.4.11 GetPresentationId

The **GetPresentationId** operation is used to retrieve an identifier for a presentation.

```
<wsdl:operation name="GetPresentationId" xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
    wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
    ServerInternalService/IPptEdit/GetPresentationId"
    message="tns4:IPptEdit_GetPresentationId_InputMessage"
    xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
    wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
    ServerInternalService/IPptEdit/GetPresentationIdResponse"
    message="tns4:IPptEdit_GetPresentationId_OutputMessage"
    xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```

The protocol client sends an **IPptEdit_GetPresentationId_InputMessage** request message, and the protocol server responds with an **IPptEdit_GetPresentationId_OutputMessage** response message.

3.1.4.11.1 Messages

The following table summarizes the set of WSDL message definitions that are specific to this operation.

Message	Description
IPptEdit_GetPresentationId_InputMessage	The request WSDL message for the GetPresentationId WSDL operation.
IPptEdit_GetPresentationId_OutputMessage	The response WSDL message for the GetPresentationId WSDL operation.

3.1.4.11.1.1 IPptEdit_GetPresentationId_InputMessage

The request WSDL message for the **GetPresentationId** WSDL operation.

The SOAP action value is:

The SOAP body contains the **GetPresentationId** element.

3.1.4.11.1.2 IPptEdit_GetPresentationId_OutputMessage

The response WSDL message for the **GetPresentationId** WSDL operation.

The SOAP body contains the **GetPresentationIdResponse** element.

3.1.4.11.2 Elements

The following table summarizes the XML schema element definitions that are specific to this operation.

Element	Description
GetPresentationId	The input data for the GetPresentationId WSDL operation.
GetPresentationIdResponse	The result data for the GetPresentationId WSDL operation.

3.1.4.11.2.1 GetPresentationId

The input data for the **GetPresentationId** WSDL operation.

```
<xs:element name="GetPresentationId" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="rawDocId" nillable="true" type="xs:string"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

rawDocId: An **xs:string** ([\[XMLSCHEMA2\]](#) section 3.2.1) that specifies the **absolute URL** to the presentation.

3.1.4.11.2.2 GetPresentationIdResponse

The result data for the **GetPresentationId** WSDL operation.

```
<xs:element name="GetPresentationIdResponse" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="GetPresentationIdResult" nillable="true"
type="xs:string"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

GetPresentationIdResult: An **xs:string** ([\[XMLSCHEMA2\]](#) section 3.2.1) that specifies the identifier of the presentation.

3.1.4.11.3 Complex Types

None.

3.1.4.11.4 Simple Types

None.

3.1.4.11.5 Attributes

None.

3.1.4.11.6 Groups

None.

3.1.4.11.7 Attribute Groups

None.

3.1.4.12 InsertClipart

The **InsertClipart** operation SHOULD [<72>](#) be used to insert a picture into a presentation.

```
<wsdl:operation name="InsertClipart" xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
    wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
    ServerInternalService/IPptEdit/InsertClipart"
    message="tns4:IPptEdit_InsertClipart_InputMessage"
    xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
    wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
    ServerInternalService/IPptEdit/InsertClipartResponse"
    message="tns4:IPptEdit_InsertClipart_OutputMessage"
    xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```

The protocol client sends an **IPptEdit_InsertClipart_InputMessage** request message, and the protocol server responds with an **IPptEdit_InsertClipart_OutputMessage** response message.

3.1.4.12.1 Messages

The following table summarizes the set of WSDL message definitions that are specific to this operation.

Message	Description
IPptEdit_InsertClipart_InputMessage	The request WSDL message for the InsertClipart WSDL operation.
IPptEdit_InsertClipart_OutputMessage	The response WSDL message for the InsertClipart WSDL operation.

3.1.4.12.1.1 IPptEdit_InsertClipart_InputMessage

The request WSDL message for the **InsertClipart** WSDL operation.

The SOAP action value is:

```
http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEditServerInternalService/IPptEdit/InsertClipart
```

The SOAP body contains the **InsertClipart** element.

3.1.4.12.1.2 IPptEdit_InsertClipart_OutputMessage

The response WSDL message for the **InsertClipart** WSDL operation.

The SOAP body contains the **InsertClipartResponse** element.

3.1.4.12.2 Elements

The following table summarizes the XML schema element definitions that are specific to this operation.

Element	Description
InsertClipart	The input data for the InsertClipart WSDL operation.
InsertClipartResponse	The result data for the InsertClipart WSDL operation.

3.1.4.12.2.1 InsertClipart

The input data for the **InsertClipart** WSDL operation.

```
<xs:element name="InsertClipart" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="presentationId" nillable="true" type="xs:string"/>
      <xs:element minOccurs="0" name="slideId" type="xs:unsignedInt"/>
      <xs:element minOccurs="0" name="shapeId" type="xs:unsignedInt"/>
      <xs:element minOccurs="0" name="assetId" nillable="true" type="xs:string"/>
      <xs:element minOccurs="0" name="Lcid" nillable="true" type="xs:string"/>
      <xs:element minOccurs="0" name="alt" nillable="true" type="xs:string"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

presentationId: An **xs:string** ([\[XMLSCHEMA2\]](#) section 3.2.1) that specifies the identifier of the presentation into which the picture is inserted, as specified in section [3.1.4.11](#).

slideId: An **ST_SlideId** ([\[ISO/IEC-29500-1\]](#) section 19.7.13) that specifies the identifier of the presentation slide into which the picture is inserted.

shapeId: An **ST_DrawingElementId** ([\[ISO/IEC-29500-1\]](#) section 20.1.10.21) that specifies the identifier of the placeholder shape into which the picture is inserted.

assetId: An **xs:string** ([\[XMLSCHEMA2\]](#) section 3.2.1) that specifies the unique identifier of the picture.

Lcid: An **xs:string** ([\[XMLSCHEMA2\]](#) section 3.2.1) that specifies the **language code identifier (LCID)**, as specified in [\[MS-LCID\]](#), of the picture.

alt: An **xs:string** ([\[XMLSCHEMA2\]](#) section 3.2.1) that specifies the alternate text for the picture.

3.1.4.12.2 InsertClipartResponse

The result data for the **InsertClipart** WSDL operation.

```
<xs:element name="InsertClipartResponse" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:tns2="http://schemas.datacontract.org/2004/07/p" minOccurs="0"
name="InsertClipartResult" nillable="true" type="tns2:ServiceResult"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

InsertClipartResult: A **ServiceResult** (section [2.2.4.26](#)) that specifies the result of the operation. The **Result** child element MUST be an **EditCommandResponse** (section [2.2.4.11](#)).

3.1.4.12.3 Complex Types

None.

3.1.4.12.4 Simple Types

None.

3.1.4.12.5 Attributes

None.

3.1.4.12.6 Groups

None.

3.1.4.12.7 Attribute Groups

None.

3.1.4.13 InsertSlide

The **InsertSlide** operation is used to insert a presentation slide into a presentation.

```
<wsdl:operation name="InsertSlide" xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/InsertSlide" message="tns4:IPptEdit_InsertSlide_InputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
```

```

ServerInternalService/IPptEdit/InsertSlideResponse"
message="tns4:IPptEdit_InsertSlide_OutputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>

```

The protocol client sends an **IPptEdit_InsertSlide_InputMessage** request message, and the protocol server responds with an **IPptEdit_InsertSlide_OutputMessage** response message.

3.1.4.13.1 Messages

The following table summarizes the set of WSDL message definitions that are specific to this operation.

Message	Description
IPptEdit_InsertSlide_InputMessage	The request WSDL message for the InsertSlide WSDL operation.
IPptEdit_InsertSlide_OutputMessage	The response WSDL message for the InsertSlide WSDL operation.

3.1.4.13.1.1 IPptEdit_InsertSlide_InputMessage

The request WSDL message for the **InsertSlide** WSDL operation.

The SOAP action value is:

```

http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEditServerInternalService/IPptEdit/InsertSlide

```

The SOAP body contains the **InsertSlide** element.

3.1.4.13.1.2 IPptEdit_InsertSlide_OutputMessage

The response WSDL message for the **InsertSlide** WSDL operation.

The SOAP body contains the **InsertSlideResponse** element.

3.1.4.13.2 Elements

The following table summarizes the XML schema element definitions that are specific to this operation.

Element	Description
InsertSlide	The input data for the InsertSlide WSDL operation.
InsertSlideResponse	The result data for the InsertSlide WSDL operation.

3.1.4.13.2.1 InsertSlide

The input data for the **InsertSlide** WSDL operation.

```

<xs:element name="InsertSlide" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>

```

```

    <xs:element minOccurs="0" name="presentationId" nillable="true" type="xs:string"/>
    <xs:element minOccurs="0" name="dstId" type="xs:unsignedInt"/>
    <xs:element minOccurs="0" name="mainMasterId" type="xs:unsignedInt"/>
    <xs:element minOccurs="0" name="contentMasterId" type="xs:unsignedInt"/>
  </xs:sequence>
</xs:complexType>
</xs:element>

```

presentationId: An **xs:string** ([\[XMLSCHEMA2\]](#) section 3.2.1) that specifies the identifier of the presentation, as specified in section [3.1.4.11](#).

dstId: A **ST_SlideId** ([\[ISO/IEC-29500-1\]](#) section 19.7.13) that specifies the identifier of the presentation slide that precedes the location of the inserted slide. A value of zero indicates that no presentation slide precedes the location. In this case, the location of the inserted presentation slide will be the first slide of the presentation.

mainMasterId: An **ST_SlideMasterId** ([\[ISO/IEC-29500-1\]](#) section 19.7.16) that specifies the identifier for the main master slide of the inserted presentation slide.

contentMasterId: An **ST_SlideLayoutId** ([\[ISO/IEC-29500-1\]](#) section 19.7.14) that specifies the identifier for the slide layout of the inserted presentation slide.

3.1.4.13.2 InsertSlideResponse

The result data for the **InsertSlide** WSDL operation.

```

<xs:element name="InsertSlideResponse" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:tns2="http://schemas.datacontract.org/2004/07/p" minOccurs="0"
        name="InsertSlideResult" nillable="true" type="tns2:ServiceResult"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>

```

InsertSlideResult: A [ServiceResult](#) that specifies the result of the operation. The **Result** child element MUST be an [EditCommandResponse](#).

3.1.4.13.3 Complex Types

None.

3.1.4.13.4 Simple Types

None.

3.1.4.13.5 Attributes

None.

3.1.4.13.6 Groups

None.

3.1.4.13.7 Attribute Groups

None.

3.1.4.14 InsertSmartArt

The **InsertSmartArt** operation is used to insert a SmartArt diagram into a presentation

```
<wsdl:operation name="InsertSmartArt" xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
    wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
    ServerInternalService/IPptEdit/InsertSmartArt"
    message="tns4:IPptEdit_InsertSmartArt_InputMessage"
    xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
    wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
    ServerInternalService/IPptEdit/InsertSmartArtResponse"
    message="tns4:IPptEdit_InsertSmartArt_OutputMessage"
    xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```

The protocol client sends an **IPptEdit_InsertSmartArt_InputMessage** request message, and the protocol server responds with an **IPptEdit_InsertSmartArt_OutputMessage** response message.

3.1.4.14.1 Messages

The following table summarizes the set of WSDL message definitions that are specific to this operation.

Message	Description
IPptEdit_InsertSmartArt_InputMessage	The request WSDL message for the InsertSmartArt WSDL operation.
IPptEdit_InsertSmartArt_OutputMessage	The response WSDL message for the InsertSmartArt WSDL operation.

3.1.4.14.1.1 IPptEdit_InsertSmartArt_InputMessage

The request WSDL message for the **InsertSmartArt** WSDL operation.

The SOAP action value is:

```
http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEditServerInternalService/IPptEdit/InsertSmartArt
```

The SOAP body contains the **InsertSmartArt** element.

3.1.4.14.1.2 IPptEdit_InsertSmartArt_OutputMessage

The response WSDL message for the **InsertSmartArt** WSDL operation.

The SOAP body contains the **InsertSmartArtResponse** element.

3.1.4.14.2 Elements

The following table summarizes the XML schema element definitions that are specific to this operation.

Element	Description
InsertSmartArt	The input data for the InsertSmartArt WSDL operation.
InsertSmartArtResponse	The result data for the InsertSmartArt WSDL operation.

3.1.4.14.2.1 InsertSmartArt

The input data for the **InsertSmartArt** WSDL operation.

```
<xs:element name="InsertSmartArt" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="presentationId" nillable="true" type="xs:string"/>
      <xs:element minOccurs="0" name="slideId" type="xs:unsignedInt"/>
      <xs:element minOccurs="0" name="shapeId" type="xs:unsignedInt"/>
      <xs:element minOccurs="0" name="layoutUri" nillable="true" type="xs:string"/>
      <xs:element minOccurs="0" name="category" nillable="true" type="xs:string"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

presentationId: An **xs:string** ([\[XMLSCHEMA2\]](#) section 3.2.1) that specifies the identifier of the presentation into which the SmartArt diagram is inserted, as specified in section [3.1.4.11](#).

slideId: An **ST_SlideId** ([\[ISO/IEC-29500-1\]](#) section 19.7.13) that specifies the identifier of the presentation slide into which the SmartArt diagram is inserted.

shapeId: An **ST_DrawingElementId** ([\[ISO/IEC-29500-1\]](#) section 20.1.10.21) that specifies the identifier of the placeholder shape into which the SmartArt diagram is inserted.

layoutUri: An **xs:string** ([\[XMLSCHEMA2\]](#) section 3.2.1) that specifies the identifier of the layout with which the SmartArt diagram is inserted.

category: An **xs:string** ([\[XMLSCHEMA2\]](#) section 3.2.1) that specifies the category to which the layout belongs.

3.1.4.14.2.2 InsertSmartArtResponse

The result data for the **InsertSmartArt** WSDL operation.

```
<xs:element name="InsertSmartArtResponse" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:tns2="http://schemas.datacontract.org/2004/07/p" minOccurs="0"
name="InsertSmartArtResult" nillable="true" type="tns2:ServiceResult"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

InsertSmartArtResult: A [ServiceResult](#) that specifies the result of the operation. The **Result** child element MUST be an [EditCommandResponse](#).

3.1.4.14.3 Complex Types

None.

3.1.4.14.4 Simple Types

None.

3.1.4.14.5 Attributes

None.

3.1.4.14.6 Groups

None.

3.1.4.14.7 Attribute Groups

None.

3.1.4.15 MoveSlide

The **MoveSlide** operation is used to move a presentation slide in a presentation.

```
<wsdl:operation name="MoveSlide" xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
    wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
    ServerInternalService/IPptEdit/MoveSlide" message="tns4:IPptEdit_MoveSlide_InputMessage"
    xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
    wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
    ServerInternalService/IPptEdit/MoveSlideResponse"
    message="tns4:IPptEdit_MoveSlide_OutputMessage"
    xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```

The protocol client sends an **IPptEdit_MoveSlide_InputMessage** request message, and the protocol server responds with an **IPptEdit_MoveSlide_OutputMessage** response message.

3.1.4.15.1 Messages

The following table summarizes the set of WSDL message definitions that are specific to this operation.

Message	Description
IPptEdit_MoveSlide_InputMessage	The request WSDL message for the MoveSlide WSDL operation.
IPptEdit_MoveSlide_OutputMessage	The response WSDL message for the MoveSlide WSDL operation.

3.1.4.15.1.1 IPptEdit_MoveSlide_InputMessage

The request WSDL message for the **MoveSlide** WSDL operation.

The SOAP action value is:

```
http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEditServerInternalService/IPptEdit/MoveSlide
```

The SOAP body contains the **MoveSlide** element.

3.1.4.15.1.2 IPptEdit_MoveSlide_OutputMessage

The response WSDL message for the **MoveSlide** WSDL operation.

The SOAP body contains the **MoveSlideResponse** element.

3.1.4.15.2 Elements

The following table summarizes the XML schema element definitions that are specific to this operation.

Element	Description
MoveSlide	The input data for the MoveSlide WSDL operation.
MoveSlideResponse	The result data for the MoveSlide WSDL operation.

3.1.4.15.2.1 MoveSlide

The input data for the **MoveSlide** WSDL operation.

```
<xs:element name="MoveSlide" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="presentationId" nillable="true" type="xs:string"/>
      <xs:element minOccurs="0" name="srcId" type="xs:unsignedInt"/>
      <xs:element minOccurs="0" name="dstId" type="xs:unsignedInt"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

presentationId: An **xs:string** ([\[XMLSCHEMA2\]](#) section 3.2.1) that specifies the identifier of the presentation containing the slide that is moved, as specified in section [3.1.4.11](#).

srcId: An **ST_SlideId** ([\[ISO/IEC-29500-1\]](#) section 19.7.13) that specifies the identifier of the presentation slide that is moved.

dstId: A value of zero or an **ST_SlideId** ([\[ISO/IEC-29500-1\]](#) section 19.7.13) that specifies the identifier of the presentation slide that precedes the new location of the moved slide. A value of zero indicates that no presentation slide precedes the new location. In this case, the new location of the moved presentation slide is the first slide of the presentation.

3.1.4.15.2 MoveSlideResponse

The result data for the **MoveSlide** WSDL operation.

```
<xs:element name="MoveSlideResponse" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:tns2="http://schemas.datacontract.org/2004/07/p" minOccurs="0"
        name="MoveSlideResult" nillable="true" type="tns2:ServiceResult"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

MoveSlideResult: A [ServiceResult](#) that specifies the result of the operation. The **Result** child element MUST be an [EditCommandResponse](#).

3.1.4.15.3 Complex Types

None.

3.1.4.15.4 Simple Types

None.

3.1.4.15.5 Attributes

None.

3.1.4.15.6 Groups

None.

3.1.4.15.7 Attribute Groups

None.

3.1.4.16 Print

A **Print** operation SHOULD [<73>](#) be used to print a presentation.

```
<wsdl:operation name="Print" xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
    wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
    ServerInternalService/IPptEdit/Print" message="tns4:IPptEdit_Print_InputMessage"
    xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
    wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
    ServerInternalService/IPptEdit/PrintResponse" message="tns4:IPptEdit_Print_OutputMessage"
    xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```

The protocol client sends an **IPptEdit_Print_InputMessage** request message, and the protocol server responds with an **IPptEdit_Print_OutputMessage** response message.

3.1.4.16.1 Messages

The following table summarizes the set of WSDL message definitions that are specific to this operation.

Message	Description
IPptEdit_Print_InputMessage	The request WSDL message for the Print WSDL operation.
IPptEdit_Print_OutputMessage	The response WSDL message for the Print WSDL operation.

3.1.4.16.1.1 IPptEdit_Print_InputMessage

The request WSDL message for the **Print** WSDL operation.

The SOAP action value is:

```
http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEditServerInternalService/IPptEdit/Print
```

The SOAP body contains the **Print** element.

3.1.4.16.1.2 IPptEdit_Print_OutputMessage

The response WSDL message for the **Print** WSDL operation.

The SOAP body contains the **PrintResponse** element.

3.1.4.16.2 Elements

The following table summarizes the XML schema element definitions that are specific to this operation.

Element	Description
Print	The input data for the Print WSDL operation.
PrintResponse	The result data for the Print WSDL operation.

3.1.4.16.2.1 Print

The input data for the **Print** WSDL operation.

```
<xs:element name="Print" xmlns:xs="http://www.w3.org/2001/XMLSchema">  
  <xs:complexType>  
    <xs:sequence>  
      <xs:element minOccurs="0" name="presentationId" nillable="true" type="xs:string"/>  
    </xs:sequence>  
  </xs:complexType>  
</xs:element>
```

presentationId: An **xs:string** ([XMLSCHEMA2](#) section 3.2.1) that specifies the identifier of the presentation to print, as specified in section [3.1.4.11](#).

3.1.4.16.2 PrintResponse

The result data for the **Print** WSDL operation.

```
<xs:element name="PrintResponse" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:tns2="http://schemas.datacontract.org/2004/07/p" minOccurs="0"
        name="PrintResult" nillable="true" type="tns2:ServiceResult"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

PrintResult: A **PptViewingService.PrintResult** (section [2.2.4.23](#)) that specifies the result of the operation.

3.1.4.16.3 Complex Types

None.

3.1.4.16.4 Simple Types

None.

3.1.4.16.5 Attributes

None.

3.1.4.16.6 Groups

None.

3.1.4.16.7 Attribute Groups

None.

3.1.4.17 Redo

The **Redo** operation is used to redo the last operation in a presentation that is undone.

```
<wsdl:operation name="Redo" xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
    wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
    ServerInternalService/IPptEdit/Redo" message="tns4:IPptEdit_Reddo_InputMessage"
    xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
    wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
    ServerInternalService/IPptEdit/ReddoResponse" message="tns4:IPptEdit_Reddo_OutputMessage"
    xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```

The protocol client sends an **IPptEdit_Reddo_InputMessage** request message, and the protocol server responds with an **IPptEdit_Reddo_OutputMessage** response message.

3.1.4.17.1 Messages

The following table summarizes the set of WSDL message definitions that are specific to this operation.

Message	Description
IPptEdit_Redo_InputMessage	The request WSDL message for the Redo WSDL operation.
IPptEdit_Redo_OutputMessage	The response WSDL message for the Redo WSDL operation.

3.1.4.17.1.1 IPptEdit_Redo_InputMessage

The request WSDL message for the **Redo** WSDL operation.

The SOAP action value is:

```
http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEditServerInternalService/IPptEdit/Redo
```

The SOAP body contains the **Redo** element.

3.1.4.17.1.2 IPptEdit_Redo_OutputMessage

The response WSDL message for the **Redo** WSDL operation.

The SOAP body contains the **RedoResponse** element.

3.1.4.17.2 Elements

The following table summarizes the XML schema element definitions that are specific to this operation.

Element	Description
Redo	The input data for the Redo WSDL operation.
RedoResponse	The result data for the Redo WSDL operation.

3.1.4.17.2.1 Redo

The input data for the **Redo** WSDL operation.

```
<xs:element name="Redo" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="presentationId" nillable="true" type="xs:string"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

presentationId: An **xs:string** ([\[XMLSCHEMA2\]](#) section 3.2.1) that specifies the identifier of the presentation, as specified in section [3.1.4.11](#).

3.1.4.17.2 RedoResponse

The result data for the **Redo** WSDL operation.

```
<xs:element name="RedoResponse" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:tns2="http://schemas.datacontract.org/2004/07/p" minOccurs="0"
        name="RedoResult" nillable="true" type="tns2:ServiceResult"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

RedoResult: A [ServiceResult](#) that specifies the result of the operation. The **Result** child element MUST be an [EditCommandResponse](#).

3.1.4.17.3 Complex Types

None.

3.1.4.17.4 Simple Types

None.

3.1.4.17.5 Attributes

None.

3.1.4.17.6 Groups

None.

3.1.4.17.7 Attribute Groups

None.

3.1.4.18 ReplaceNotes

The **ReplaceNotes** operation is used to replace presentation notes in a presentation.

```
<wsdl:operation name="ReplaceNotes" xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input>
    wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
    ServerInternalService/IPptEdit/ReplaceNotes"
    message="tns4:IPptEdit_ReplaceNotes_InputMessage"
    xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output>
    wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
    ServerInternalService/IPptEdit/ReplaceNotesResponse"
    message="tns4:IPptEdit_ReplaceNotes_OutputMessage"
    xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```

The protocol client sends an **IPptEdit_ReplaceNotes_InputMessage** request message, and the protocol server responds with an **IPptEdit_ReplaceNotes_OutputMessage** response message.

3.1.4.18.1 Messages

The following table summarizes the set of WSDL message definitions that are specific to this operation.

Message	Description
IPptEdit_ReplaceNotes_InputMessage	The request WSDL message for the ReplaceNotes WSDL operation.
IPptEdit_ReplaceNotes_OutputMessage	The response WSDL message for the ReplaceNotes WSDL operation.

3.1.4.18.1.1 IPptEdit_ReplaceNotes_InputMessage

The request WSDL message for the **ReplaceNotes** WSDL operation.

The SOAP action value is:

```
http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEditServerInternalService/IPptEdit/ReplaceNotes
```

The SOAP body contains the **ReplaceNotes** element.

3.1.4.18.1.2 IPptEdit_ReplaceNotes_OutputMessage

The response WSDL message for the **ReplaceNotes** WSDL operation.

The SOAP body contains the **ReplaceNotesResponse** element.

3.1.4.18.2 Elements

The following table summarizes the XML schema element definitions that are specific to this operation.

Element	Description
ReplaceNotes	The input data for the ReplaceNotes WSDL operation.
ReplaceNotesResponse	The result data for the ReplaceNotes WSDL operation.

3.1.4.18.2.1 ReplaceNotes

The input data for the **ReplaceNotes** WSDL operation.

```
<xs:element name="ReplaceNotes" xmlns:xs="http://www.w3.org/2001/XMLSchema">  
  <xs:complexType>  
    <xs:sequence>  
      <xs:element minOccurs="0" name="presentationId" nillable="true" type="xs:string"/>  
      <xs:element minOccurs="0" name="slideId" type="xs:unsignedInt"/>  
      <xs:element minOccurs="0" name="newNotes" nillable="true" type="xs:string"/>  
    </xs:sequence>  
  </xs:complexType>  
</xs:element>
```

presentationId: An **xs:string** ([\[XMLSCHEMA2\]](#) section 3.2.1) that specifies the identifier of the presentation containing the text that is replaced, as specified in section [3.1.4.11](#).

slideId: An **ST_SlideId** ([\[ISO/IEC-29500-1\]](#) section 19.7.13) that specifies the identifier of the presentation slide containing the text that is replaced.

newNotes: An **xs:string** ([\[XMLSCHEMA2\]](#) section 3.2.1) that specifies the replacement notes.

3.1.4.18.2.2 ReplaceNotesResponse

The result data for the **ReplaceNotes** WSDL operation.

```
<xs:element name="ReplaceNotesResponse" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:tns2="http://schemas.datacontract.org/2004/07/p" minOccurs="0"
name="ReplaceNotesResult" nillable="true" type="tns2:ServiceResult"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

ReplaceNotesResult: A [ServiceResult](#) that specifies the result of the operation. The **Result** child element MUST be an [EditCommandResponse](#).

3.1.4.18.3 Complex Types

None.

3.1.4.18.4 Simple Types

None.

3.1.4.18.5 Attributes

None.

3.1.4.18.6 Groups

None.

3.1.4.18.7 Attribute Groups

None.

3.1.4.19 ReplaceText

The **ReplaceText** operation is used to replace text in a shape in a presentation.

```
<wsdl:operation name="ReplaceText" xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/ReplaceText" message="tns4:IPptEdit_ReplaceText_InputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
```

```

ServerInternalService/IPptEdit/ReplaceTextResponse"
message="tns4:IPptEdit_ReplaceText_OutputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>

```

The protocol client sends an **IPptEdit_ReplaceText_InputMessage** request message, and the protocol server responds with an **IPptEdit_ReplaceText_OutputMessage** response message.

3.1.4.19.1 Messages

The following table summarizes the set of WSDL message definitions that are specific to this operation.

Message	Description
IPptEdit_ReplaceText_InputMessage	The request WSDL message for the ReplaceText WSDL operation.
IPptEdit_ReplaceText_OutputMessage	The response WSDL message for the ReplaceText WSDL operation.

3.1.4.19.1.1 IPptEdit_ReplaceText_InputMessage

The request WSDL message for the **ReplaceText** WSDL operation.

The SOAP action value is:

```

http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEditServerInternalService/IPptEdit/ReplaceText

```

The SOAP body contains the **ReplaceText** element.

3.1.4.19.1.2 IPptEdit_ReplaceText_OutputMessage

The response WSDL message for the **ReplaceText** WSDL operation.

The SOAP body contains the **ReplaceTextResponse** element.

3.1.4.19.2 Elements

The following table summarizes the XML schema element definitions that are specific to this operation.

Element	Description
ReplaceText	The input data for the ReplaceText WSDL operation.
ReplaceTextResponse	The result data for the ReplaceText WSDL operation.

3.1.4.19.2.1 ReplaceText

The input data for the **ReplaceText** WSDL operation.

```

<xs:element name="ReplaceText" xmlns:xs="http://www.w3.org/2001/XMLSchema">

```

```

<xs:complexType>
  <xs:sequence>
    <xs:element minOccurs="0" name="presentationId" nillable="true" type="xs:string"/>
    <xs:element minOccurs="0" name="slideId" type="xs:unsignedInt"/>
    <xs:element minOccurs="0" name="shapeId" type="xs:unsignedInt"/>
    <xs:element minOccurs="0" name="newText" nillable="true" type="xs:string"/>
  </xs:sequence>
</xs:complexType>
</xs:element>

```

presentationId: An **xs:string** ([\[XMLSCHEMA2\]](#) section 3.2.1) that specifies the identifier of the presentation containing the text that is replaced, as specified in section [3.1.4.11](#).

slideId: An **ST_SlideId** ([\[ISO/IEC-29500-1\]](#) section 19.7.13) that specifies the identifier of the presentation slide containing the text that is replaced.

shapeId: An **ST_DrawingElementId** ([\[ISO/IEC-29500-1\]](#) section 20.1.10.21) that specifies the identifier of the shape containing the text that is replaced.

newText: An **xs:string** ([\[XMLSCHEMA2\]](#) section 3.2.1) that specifies the replacement text.

3.1.4.19.2.2 ReplaceTextResponse

The result data for the **ReplaceText** WSDL operation.

```

<xs:element name="ReplaceTextResponse" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:tns2="http://schemas.datacontract.org/2004/07/p" minOccurs="0"
name="ReplaceTextResult" nillable="true" type="tns2:ServiceResult"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>

```

ReplaceTextResult: A [ServiceResult](#) that specifies the result of the operation. The **Result** child element MUST be an [EditCommandResponse](#).

3.1.4.19.3 Complex Types

None.

3.1.4.19.4 Simple Types

None.

3.1.4.19.5 Attributes

None.

3.1.4.19.6 Groups

None.

3.1.4.19.7 Attribute Groups

None.

3.1.4.20 ResetSmartArt

The **ResetSmartArt** operation is used to remove all customizations on a SmartArt diagram in a presentation.

```
<wsdl:operation name="ResetSmartArt" xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
    wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
    ServerInternalService/IPptEdit/ResetSmartArt"
    message="tns4:IPptEdit_ResetSmartArt_InputMessage"
    xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
    wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
    ServerInternalService/IPptEdit/ResetSmartArtResponse"
    message="tns4:IPptEdit_ResetSmartArt_OutputMessage"
    xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```

The protocol client sends an **IPptEdit_ResetSmartArt_InputMessage** request message, and the protocol server responds with an **IPptEdit_ResetSmartArt_OutputMessage** response message.

3.1.4.20.1 Messages

The following table summarizes the set of WSDL message definitions that are specific to this operation.

Message	Description
IPptEdit_ResetSmartArt_InputMessage	The request WSDL message for the ResetSmartArt WSDL operation.
IPptEdit_ResetSmartArt_OutputMessage	The response WSDL message for the ResetSmartArt WSDL operation.

3.1.4.20.1.1 IPptEdit_ResetSmartArt_InputMessage

The request WSDL message for the **ResetSmartArt** WSDL operation.

The SOAP action value is:

```
http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEditServerInternalService/IPptEdit/ResetSmartArt
```

The SOAP body contains the **ResetSmartArt** element.

3.1.4.20.1.2 IPptEdit_ResetSmartArt_OutputMessage

The response WSDL message for the **ResetSmartArt** WSDL operation.

The SOAP body contains the **ResetSmartArtResponse** element.

3.1.4.20.2 Elements

The following table summarizes the XML schema element definitions that are specific to this operation.

Element	Description
ResetSmartArt	The input data for the ResetSmartArt WSDL operation.
ResetSmartArtResponse	The result data for the ResetSmartArt WSDL operation.

3.1.4.20.2.1 ResetSmartArt

The input data for the **ResetSmartArt** WSDL operation.

```
<xs:element name="ResetSmartArt" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="presentationId" nillable="true" type="xs:string"/>
      <xs:element minOccurs="0" name="slideId" type="xs:unsignedInt"/>
      <xs:element minOccurs="0" name="shapeId" type="xs:unsignedInt"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

presentationId: An **xs:string** ([\[XMLSCHEMA2\]](#) section 3.2.1) that specifies the identifier of the presentation containing the SmartArt diagram that is reset, as specified in section [3.1.4.11](#).

slideId: A **ST_SlideId** ([\[ISO/IEC-29500-1\]](#) section 19.7.13) that specifies the identifier of the presentation slide containing the SmartArt diagram that is reset.

shapeId: An **ST_DrawingElementId** ([\[ISO/IEC-29500-1\]](#) section 20.1.10.21) that specifies the identifier of the SmartArt diagram that is reset.

3.1.4.20.2.2 ResetSmartArtResponse

The result data for the **ResetSmartArt** WSDL operation.

```
<xs:element name="ResetSmartArtResponse" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:tns2="http://schemas.datacontract.org/2004/07/p" minOccurs="0"
name="ResetSmartArtResult" nillable="true" type="tns2:ServiceResult"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

ResetSmartArtResult: A [ServiceResult](#) that specifies the result of the operation. The **Result** child element MUST be an [EditCommandResponse](#).

3.1.4.20.3 Complex Types

None.

3.1.4.20.4 Simple Types

None.

3.1.4.20.5 Attributes

None.

3.1.4.20.6 Groups

None.

3.1.4.20.7 Attribute Groups

None.

3.1.4.21 ReverseSmartArt

The **ReverseSmartArt** operation is used to reverse the direction of a SmartArt diagram in a presentation.

```
<wsdl:operation name="ReverseSmartArt" xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
    wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
    ServerInternalService/IPptEdit/ReverseSmartArt"
    message="tns4:IPptEdit_ReverseSmartArt_InputMessage"
    xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
    wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
    ServerInternalService/IPptEdit/ReverseSmartArtResponse"
    message="tns4:IPptEdit_ReverseSmartArt_OutputMessage"
    xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```

The protocol client sends an **IPptEdit_ReverseSmartArt_InputMessage** request message, and the protocol server responds with an **IPptEdit_ReverseSmartArt_OutputMessage** response message.

3.1.4.21.1 Messages

The following table summarizes the set of WSDL message definitions that are specific to this operation.

Message	Description
IPptEdit_ReverseSmartArt_InputMessage	The request WSDL message for the ReverseSmartArt WSDL operation.
IPptEdit_ReverseSmartArt_OutputMessage	The response WSDL message for the ReverseSmartArt WSDL operation.

3.1.4.21.1.1 IPptEdit_ReverseSmartArt_InputMessage

The request WSDL message for the **ReverseSmartArt** WSDL operation.

The SOAP action value is:

The SOAP body contains the **ReverseSmartArt** element.

3.1.4.21.1.2 IPptEdit_ReverseSmartArt_OutputMessage

The response WSDL message for the **ReverseSmartArt** WSDL operation.

The SOAP body contains the **ReverseSmartArtResponse** element.

3.1.4.21.2 Elements

The following table summarizes the XML schema element definitions that are specific to this operation.

Element	Description
ReverseSmartArt	The input data for the ReverseSmartArt WSDL operation.
ReverseSmartArtResponse	The result data for the ReverseSmartArt WSDL operation.

3.1.4.21.2.1 ReverseSmartArt

The input data for the **ReverseSmartArt** WSDL operation.

```
<xs:element name="ReverseSmartArt" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="presentationId" nillable="true" type="xs:string"/>
      <xs:element minOccurs="0" name="slideId" type="xs:unsignedInt"/>
      <xs:element minOccurs="0" name="shapeId" type="xs:unsignedInt"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

presentationId: An **xs:string** ([\[XMLSCHEMA2\]](#) section 3.2.1) that specifies the identifier of the presentation containing the SmartArt diagram that is reversed, as specified in section [3.1.4.11](#).

slideId: An **ST_SlideId** ([\[ISO/IEC-29500-1\]](#) section 19.7.13) that specifies the identifier of the presentation slide containing the SmartArt diagram that is reversed.

shapeId: An **ST_DrawingElementId** ([\[ISO/IEC-29500-1\]](#) section 20.1.10.21) that specifies the identifier of the SmartArt diagram that is reversed.

3.1.4.21.2.2 ReverseSmartArtResponse

The result data for the **ReverseSmartArt** WSDL operation.

```
<xs:element name="ReverseSmartArtResponse" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:tns2="http://schemas.datacontract.org/2004/07/p" minOccurs="0"
        name="ReverseSmartArtResult" nillable="true" type="tns2:ServiceResult"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```



```
</xs:sequence>
</xs:complexType>
</xs:element>
```

ReverseSmartArtResult: A [ServiceResult](#) that specifies the result of the operation. The **Result** child element MUST be an [EditCommandResponse](#).

3.1.4.21.3 Complex Types

None.

3.1.4.21.4 Simple Types

None.

3.1.4.21.5 Attributes

None.

3.1.4.21.6 Groups

None.

3.1.4.21.7 Attribute Groups

None.

3.1.4.22 SaveAndClose

The **SaveAndClose** operation is used to save the contents of a presentation and unlock it.

```
<wsdl:operation name="SaveAndClose" xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
    wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
    ServerInternalService/IPptEdit/SaveAndClose"
    message="tns4:IPptEdit_SaveAndClose_InputMessage"
    xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
    wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
    ServerInternalService/IPptEdit/SaveAndCloseResponse"
    message="tns4:IPptEdit_SaveAndClose_OutputMessage"
    xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```

The protocol client sends an **IPptEdit_SaveAndClose_InputMessage** request message, and the protocol server responds with an **IPptEdit_SaveAndClose_OutputMessage** response message.

3.1.4.22.1 Messages

The following table summarizes the set of WSDL message definitions that are specific to this operation.

Message	Description
IPptEdit_SaveAndClose_InputMessage	The request WSDL message for the SaveAndClose WSDL operation.
IPptEdit_SaveAndClose_OutputMessage	The response WSDL message for the SaveAndClose WSDL operation.

3.1.4.22.1.1 IPptEdit_SaveAndClose_InputMessage

The request WSDL message for the **SaveAndClose** WSDL operation.

The SOAP action value is:

```
http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEditServerInternalService/IPptEdit/SaveAndClose
```

The SOAP body contains the **SaveAndClose** element.

3.1.4.22.1.2 IPptEdit_SaveAndClose_OutputMessage

The response WSDL message for the **SaveAndClose** WSDL operation.

The SOAP body contains the **SaveAndCloseResponse** element.

3.1.4.22.2 Elements

The following table summarizes the XML schema element definitions that are specific to this operation.

Element	Description
SaveAndClose	The input data for the SaveAndClose WSDL operation.
SaveAndCloseResponse	The result data for the SaveAndClose WSDL operation.

3.1.4.22.2.1 SaveAndClose

The input data for the **SaveAndClose** WSDL operation.

```
<xs:element name="SaveAndClose" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="presentationId" nillable="true" type="xs:string"/>
      <xs:element minOccurs="0" name="fReleaseLock" type="xs:boolean"/>
      <xs:element minOccurs="0" name="fWaitForSave" type="xs:boolean"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

presentationId: An **xs:string** ([\[XMLSCHEMA2\]](#) section 3.2.1) that specifies the identifier of the presentation, as specified in section [3.1.4.11](#).

fReleaseLock: An **xs:boolean** ([\[XMLSCHEMA2\]](#) section 3.2.2) that specifies whether the presentation will become unlocked.

fWaitForSave: An **xs:boolean** ([\[XMLSCHEMA2\]](#) section 3.2.2) that specifies whether the protocol server makes a blocking call until the save is finished.

3.1.4.22.2 SaveAndCloseResponse

The result data for the **SaveAndClose** WSDL operation.

```
<xs:element name="SaveAndCloseResponse" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:tns2="http://schemas.datacontract.org/2004/07/p" minOccurs="0"
name="SaveAndCloseResult" nillable="true" type="tns2:ServiceResult"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

SaveAndCloseResult: A [ServiceResult](#) that specifies the result of the operation. The **Result** child element MUST be an [EditCommandResponse](#).

3.1.4.22.3 Complex Types

None.

3.1.4.22.4 Simple Types

None.

3.1.4.22.5 Attributes

None.

3.1.4.22.6 Groups

None.

3.1.4.22.7 Attribute Groups

None.

3.1.4.23 ShowHideSlide

The **ShowHideSlide** operation is used to show or hide a presentation slide.

```
<wsdl:operation name="ShowHideSlide" xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/ShowHideSlide"
message="tns4:IPptEdit_ShowHideSlide_InputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/ShowHideSlideResponse"
```

```

message="tns4:IPptEdit_ShowHideSlide_OutputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>

```

The protocol client sends an **IPptEdit_ShowHideSlide_InputMessage** request message, and the protocol server responds with an **IPptEdit_ShowHideSlide_OutputMessage** response message.

3.1.4.23.1 Messages

The following table summarizes the set of WSDL message definitions that are specific to this operation.

Message	Description
IPptEdit_ShowHideSlide_InputMessage	The request WSDL message for the ShowHideSlide WSDL operation.
IPptEdit_ShowHideSlide_OutputMessage	The response WSDL message for the ShowHideSlide WSDL operation.

3.1.4.23.1.1 IPptEdit_ShowHideSlide_InputMessage

The request WSDL message for the **ShowHideSlide** WSDL operation.

The SOAP action value is:

```

http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEditServerInternalService/IPptEdit/ShowHideSlide

```

The SOAP body contains the **ShowHideSlide** element.

3.1.4.23.1.2 IPptEdit_ShowHideSlide_OutputMessage

The response WSDL message for the **ShowHideSlide** WSDL operation.

The SOAP body contains the **ShowHideSlideResponse** element.

3.1.4.23.2 Elements

The following table summarizes the XML schema element definitions that are specific to this operation.

Element	Description
ShowHideSlide	The input data for the ShowHideSlide WSDL operation.
ShowHideSlideResponse	The result data for the ShowHideSlide WSDL operation.

3.1.4.23.2.1 ShowHideSlide

The input data for the **ShowHideSlide** WSDL operation.

```

<xs:element name="ShowHideSlide" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>

```

```

<xs:sequence>
  <xs:element minOccurs="0" name="presentationId" nillable="true" type="xs:string"/>
  <xs:element minOccurs="0" name="slideId" type="xs:unsignedInt"/>
  <xs:element minOccurs="0" name="fHidden" type="xs:boolean"/>
</xs:sequence>
</xs:complexType>
</xs:element>

```

presentationId: An **xs:string** ([\[XMLSCHEMA2\]](#) section 3.2.1) that specifies the identifier of the presentation containing the target presentation slide, as specified in section [3.1.4.11](#).

slideId: An **ST_SlideId** ([\[ISO/IEC-29500-1\]](#) section 19.7.13) that specifies the identifier of the target presentation.

fHidden: An **xs:boolean** ([\[XMLSCHEMA2\]](#) section 3.2.2) that specifies if the operation is to show or hide the presentation slide. If the value is true, the protocol server MUST make the presentation slide hidden. Otherwise, the protocol server MUST make the presentation slide shown. MUST be present.

3.1.4.23.2 ShowHideSlideResponse

The result data for the **ShowHideSlide** WSDL operation.

```

<xs:element name="ShowHideSlideResponse" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:tns2="http://schemas.datacontract.org/2004/07/p" minOccurs="0"
name="ShowHideSlideResult" nillable="true" type="tns2:ServiceResult"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>

```

ShowHideSlideResult: A [ServiceResult](#) that specifies the result of the operation. The **Result** child element MUST be an [EditCommandResponse](#).

3.1.4.23.3 Complex Types

None.

3.1.4.23.4 Simple Types

None.

3.1.4.23.5 Attributes

None.

3.1.4.23.6 Groups

None.

3.1.4.23.7 Attribute Groups

None.

3.1.4.24 Undo

The **Undo** operation is used to undo the last operation in a presentation that is not undone.

```
<wsdl:operation name="Undo" xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
    wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
    ServerInternalService/IPptEdit/Undo" message="tns4:IPptEdit_Undo_InputMessage"
    xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
    wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
    ServerInternalService/IPptEdit/UndoResponse" message="tns4:IPptEdit_Undo_OutputMessage"
    xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```

The protocol client sends an **IPptEdit_Undo_InputMessage** request message, and the protocol server responds with an **IPptEdit_Undo_OutputMessage** response message.

3.1.4.24.1 Messages

The following table summarizes the set of WSDL message definitions that are specific to this operation.

Message	Description
IPptEdit_Undo_InputMessage	The request WSDL message for the Undo WSDL operation.
IPptEdit_Undo_OutputMessage	The response WSDL message for the Undo WSDL operation.

3.1.4.24.1.1 IPptEdit_Undo_InputMessage

The request WSDL message for the **Undo** WSDL operation.

The SOAP action value is:

```
http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEditServerInternalService/IPptEdit/Undo
```

The SOAP body contains the **Undo** element.

3.1.4.24.1.2 IPptEdit_Undo_OutputMessage

The response WSDL message for the **Undo** WSDL operation.

The SOAP body contains the **UndoResponse** element.

3.1.4.24.2 Elements

The following table summarizes the XML schema element definitions that are specific to this operation.

Element	Description
Undo	The input data for the Undo WSDL operation.

Element	Description
UndoResponse	The result data for the Undo WSDL operation.

3.1.4.24.2.1 Undo

The input data for the **Undo** WSDL operation.

```
<xs:element name="Undo" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="presentationId" nillable="true" type="xs:string"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

presentationId: An **xs:string** ([\[XMLSCHEMA2\]](#) section 3.2.1) that specifies the identifier of the presentation, as specified in section [3.1.4.11](#).

3.1.4.24.2.2 UndoResponse

The result data for the **Undo** WSDL operation.

```
<xs:element name="UndoResponse" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:tns2="http://schemas.datacontract.org/2004/07/p" minOccurs="0"
name="UndoResult" nillable="true" type="tns2:ServiceResult"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

UndoResult: A [ServiceResult](#) that specifies the result of the operation. The **Result** child element MUST be an [EditCommandResponse](#).

3.1.4.24.3 Complex Types

None.

3.1.4.24.4 Simple Types

None.

3.1.4.24.5 Attributes

None.

3.1.4.24.6 Groups

None.

3.1.4.24.7 Attribute Groups

None.

3.1.4.25 UpdateCanary

Reserved. MUST be ignored.

```
<wsdl:operation name="UpdateCanary" xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
    wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
    ServerInternalService/IPptEdit/UpdateCanary"
    message="tns4:IPptEdit_UpdateCanary_InputMessage"
    xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
    wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
    ServerInternalService/IPptEdit/UpdateCanaryResponse"
    message="tns4:IPptEdit_UpdateCanary_OutputMessage"
    xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```

3.1.4.25.1 Messages

The following table summarizes the set of WSDL message definitions that are specific to this operation.

Message	Description
IPptEdit_UpdateCanary_InputMessage	The request WSDL message for the UpdateCanary WSDL operation.
IPptEdit_UpdateCanary_OutputMessage	The response WSDL message for the UpdateCanary WSDL operation.

3.1.4.25.1.1 IPptEdit_UpdateCanary_InputMessage

The request WSDL message for the **UpdateCanary** WSDL operation.

The SOAP action value is:

```
http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEditServerInternalService/IPptEdit/UpdateCanary
```

The SOAP body contains the **UpdateCanary** element.

3.1.4.25.1.2 IPptEdit_UpdateCanary_OutputMessage

The response WSDL message for the **UpdateCanary** WSDL operation.

The SOAP body contains the **UpdateCanaryResponse** element.

3.1.4.25.2 Elements

The following table summarizes the XML schema element definitions that are specific to this operation.

Element	Description
UpdateCanary	The input data for the UpdateCanary WSDL operation.
UpdateCanaryResponse	The result data for the UpdateCanary WSDL operation.

3.1.4.25.2.1 UpdateCanary

The input data for the **UpdateCanary** WSDL operation.

```
<xs:element name="UpdateCanary" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="presentationId" nillable="true" type="xs:string"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

presentationId: Reserved. MUST be ignored.

3.1.4.25.2.2 UpdateCanaryResponse

The result data for the **UpdateCanary** WSDL operation.

```
<xs:element name="UpdateCanaryResponse" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:tns2="http://schemas.datacontract.org/2004/07/p" minOccurs="0"
name="UpdateCanaryResult" nillable="true" type="tns2:ServiceResult"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

UpdateCanaryResult: Reserved. MUST be ignored.

3.1.4.25.3 Complex Types

None.

3.1.4.25.4 Simple Types

None.

3.1.4.25.5 Attributes

None.

3.1.4.25.6 Groups

None.

3.1.4.25.7 Attribute Groups

None.

3.1.4.26 ApplyShapeFill

The **ApplyShapeFill** operation SHOULD [<74>](#) be used to modify the color of a shape in a presentation.

```
<wsdl:operation name="ApplyShapeFill" xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
    wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
    ServerInternalService/IPptEdit/ApplyShapeFill"
    message="tns4:IPptEdit_ApplyShapeFill_InputMessage"
    xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
    wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
    ServerInternalService/IPptEdit/ApplyShapeFillResponse"
    message="tns4:IPptEdit_ApplyShapeFill_OutputMessage"
    xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```

The protocol client sends an **IPptEdit_ApplyShapeFill_InputMessage** request message, and the protocol server responds with an **IPptEdit_ApplyShapeFill_OutputMessage** response message.

3.1.4.26.1 Messages

The following table summarizes the set of WSDL message definitions that are specific to this operation.

Message	Description
IPptEdit_ApplyShapeFill_InputMessage	The request WSDL message for the ApplyShapeFill WSDL operation.
IPptEdit_ApplyShapeFill_OutputMessage	The response WSDL message for the ApplyShapeFill WSDL operation.

3.1.4.26.1.1 IPptEdit_ApplyShapeFill_InputMessage

The request WSDL message for the **ApplyShapeFill** WSDL operation.

The SOAP action value is:

```
http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEditServerInternalService/IPptEdit/ApplyShapeFill
```

The SOAP body contains the **ApplyShapeFill** element.

3.1.4.26.1.2 IPptEdit_ApplyShapeFill_OutputMessage

The response WSDL message for the **ApplyShapeFill** WSDL operation.

The SOAP body contains the **ApplyShapeFillResponse** element.

3.1.4.26.2 Elements

The following table summarizes the XML schema element definitions that are specific to this operation.

Element	Description
ApplyShapeFill	The input data for the ApplyShapeFill WSDL operation.
ApplyShapeFillResponse	The result data for the ApplyShapeFill WSDL operation.

3.1.4.26.2.1 ApplyShapeFill

The input data for the **ApplyShapeFill** WSDL operation.

```
<xs:element name="ApplyShapeFill" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="presentationId" nillable="true" type="xs:string"/>
      <xs:element minOccurs="0" name="slideId" type="xs:unsignedInt"/>
      <xs:element minOccurs="0" name="shapeId" type="xs:unsignedInt"/>
      <xs:element minOccurs="0" name="RGBColor" nillable="true" type="xs:string"/>
      <xs:element minOccurs="0" name="themeColor" type="xs:int"/>
      <xs:element minOccurs="0" name="colorLuminance" type="xs:unsignedInt"/>
      <xs:element minOccurs="0" name="fTintColor" type="xs:boolean"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

presentationId: An **xs:string** ([\[XMLSCHEMA2\]](#) section 3.2.1) that specifies the identifier of the presentation containing the shape that is being modified, as specified in section [3.1.4.11](#).

slideId: An **ST_SlideId** ([\[ISO/IEC-29500-1\]](#) section 19.7.13) that specifies the identifier of the presentation slide containing the shape that is being modified.

shapeId: An **ST_DrawingElementId** ([\[ISO/IEC-29500-1\]](#) section 20.1.10.21) that specifies the identifier of the shape that is being modified.

RGBColor: An **xs:string** ([\[XMLSCHEMA2\]](#) section 3.2.1) that specifies the red, green, and blue components of the color. This element MAY be present.

themeColor: An **xs:int** ([\[XMLSCHEMA2\]](#) section 3.3.17) that specifies a preset theme color. This element is ignored if the RGBColor element is present.

colorLuminance: An **xs:unsignedInt** ([\[XMLSCHEMA2\]](#) section 3.3.22) that specifies the luminance of the color.

fTintColor: An **xs:boolean** ([\[XMLSCHEMA2\]](#) section 3.2.2) that specifies if the color is a tint.

3.1.4.26.2.2 ApplyShapeFillResponse

The result data for the **ApplyShapeFill** WSDL operation.

```
<xs:element name="ApplyShapeFillResponse" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:tns2="http://schemas.datacontract.org/2004/07/p" minOccurs="0"
        name="ApplyShapeFillResult" nillable="true" type="tns2:ServiceResult"/>
    </xs:sequence>
  </xs:complexType>
```

</xs:element>

ApplyShapeFillResult: A [ServiceResult](#) that specifies the result of the operation. The **Result** child element MUST be an [EditCommandResponse](#).

3.1.4.26.3 Complex Types

None.

3.1.4.26.4 Simple Types

None.

3.1.4.26.5 Attributes

None.

3.1.4.26.6 Groups

None.

3.1.4.26.7 Attribute Groups

None.

3.1.4.27 ApplyShapeOutlineColor

The **ApplyShapeOutlineColor** operation SHOULD [<75>](#) be used to modify the color of the outline of a shape in a presentation.

```
<wsdl:operation name="ApplyShapeOutlineColor" xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
    wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
    ServerInternalService/IPptEdit/ApplyShapeOutlineColor"
    message="tns4:IPptEdit_ApplyShapeOutlineColor_InputMessage"
    xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
    wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
    ServerInternalService/IPptEdit/ApplyShapeOutlineColorResponse"
    message="tns4:IPptEdit_ApplyShapeOutlineColor_OutputMessage"
    xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```

The protocol client sends an **IPptEdit_ApplyShapeOutlineColor_InputMessage** request message, and the protocol server responds with an **IPptEdit_ApplyShapeOutlineColor_OutputMessage** response message.

3.1.4.27.1 Messages

The following table summarizes the set of WSDL message definitions that are specific to this operation.

Message	Description
IPptEdit_ApplyShapeOutlineColor_InputMessage	The request WSDL message for the ApplyShapeOutlineColor WSDL operation.
IPptEdit_ApplyShapeOutlineColor_OutputMessage	The response WSDL message for the ApplyShapeOutlineColor WSDL operation.

3.1.4.27.1.1 IPptEdit_ApplyShapeOutlineColor_InputMessage

The request WSDL message for the **ApplyShapeOutlineColor** WSDL operation.

The SOAP action value is:

```
http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEditServerInternalService/IPptEdit/ApplyShapeOutlineColor
```

The SOAP body contains the **ApplyShapeOutlineColor** element.

3.1.4.27.1.2 IPptEdit_ApplyShapeOutlineColor_OutputMessage

The response WSDL message for the **ApplyShapeOutlineColor** WSDL operation.

The SOAP body contains the **ApplyShapeOutlineColorResponse** element.

3.1.4.27.2 Elements

The following table summarizes the XML schema element definitions that are specific to this operation.

Element	Description
ApplyShapeOutlineColor	The input data for the ApplyShapeOutlineColor WSDL operation.
ApplyShapeOutlineColorResponse	The result data for the ApplyShapeOutlineColor WSDL operation.

3.1.4.27.2.1 ApplyShapeOutlineColor

The input data for the **ApplyShapeOutlineColor** WSDL operation.

```
<xs:element name="ApplyShapeOutlineColor" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="presentationId" nillable="true" type="xs:string"/>
      <xs:element minOccurs="0" name="slideId" type="xs:unsignedInt"/>
      <xs:element minOccurs="0" name="shapeId" type="xs:unsignedInt"/>
      <xs:element minOccurs="0" name="RGBColor" nillable="true" type="xs:string"/>
      <xs:element minOccurs="0" name="themeColor" type="xs:int"/>
      <xs:element minOccurs="0" name="colorLuminance" type="xs:unsignedInt"/>
      <xs:element minOccurs="0" name="fTintColor" type="xs:boolean"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

presentationId: An **xs:string** ([\[XMLSCHEMA2\]](#) section 3.2.1) that specifies the identifier of the presentation containing the shape that is being modified, as specified in section [3.1.4.11](#).

slideId: An **ST_SlideId** ([\[ISO/IEC-29500-1\]](#) section 19.7.13) that specifies the identifier of the presentation slide containing the shape that is being modified.

shapeId: An **ST_DrawingElementId** ([\[ISO/IEC-29500-1\]](#) section 20.1.10.21) that specifies the identifier of the shape that is being modified.

RGBColor: An **xs:string** ([\[XMLSCHEMA2\]](#) section 3.2.1) that specifies the red, green, and blue components of the color. This element MAY be present.

themeColor: An **xs:int** ([\[XMLSCHEMA2\]](#) section 3.3.17) that specifies a preset theme color. This element is ignored if the RGBColor element is present.

colorLuminance: An **xs:unsignedInt** ([\[XMLSCHEMA2\]](#) section 3.3.22) that specifies the luminance of the color.

fTintColor: An **xs:boolean** ([\[XMLSCHEMA2\]](#) section 3.2.2) that specifies if the color is a tint.

3.1.4.27.2.2 ApplyShapeOutlineColorResponse

The result data for the **ApplyShapeOutlineColor** WSDL operation.

```
<xs:element name="ApplyShapeOutlineColorResponse"
  xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:tns2="http://schemas.datacontract.org/2004/07/p" minOccurs="0"
        name="ApplyShapeOutlineColorResult" nillable="true" type="tns2:ServiceResult"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

ApplyShapeOutlineColorResult: A [ServiceResult](#) that specifies the result of the operation. The **Result** child element MUST be an [EditCommandResponse](#).

3.1.4.27.3 Complex Types

None.

3.1.4.27.4 Simple Types

None.

3.1.4.27.5 Attributes

None.

3.1.4.27.6 Groups

None.

3.1.4.27.7 Attribute Groups

None.

3.1.4.28 ApplyShapeOutlineDashStyle

The **ApplyShapeOutlineDashStyle** operation SHOULD<76> be used to modify the dash type of the outline of a shape.

```
<wsdl:operation name="ApplyShapeOutlineDashStyle"
  xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
    wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
    ServerInternalService/IPptEdit/ApplyShapeOutlineDashStyle"
    message="tns4:IPptEdit_ApplyShapeOutlineDashStyle_InputMessage"
    xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
    <wsdl:output
      wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
      ServerInternalService/IPptEdit/ApplyShapeOutlineDashStyleResponse"
      message="tns4:IPptEdit_ApplyShapeOutlineDashStyle_OutputMessage"
      xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  </wsdl:operation>
```

The protocol client sends an **IPptEdit_ApplyShapeOutlineDashStyle_InputMessage** request message, and the protocol server responds with an **IPptEdit_ApplyShapeOutlineDashStyle_OutputMessage** response message.

3.1.4.28.1 Messages

The following table summarizes the set of WSDL message definitions that are specific to this operation.

Message	Description
IPptEdit_ApplyShapeOutlineDashStyle_InputMessage	The request WSDL message for the ApplyShapeOutlineDashStyle WSDL operation.
IPptEdit_ApplyShapeOutlineDashStyle_OutputMessage	The response WSDL message for the ApplyShapeOutlineDashStyle WSDL operation.

3.1.4.28.1.1 IPptEdit_ApplyShapeOutlineDashStyle_InputMessage

The request WSDL message for the **ApplyShapeOutlineDashStyle** WSDL operation.

The SOAP action value is:

```
http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEditServerInternalService/IPptEdit/ApplyShapeOutlineDashStyle
```

The SOAP body contains the **ApplyShapeOutlineDashStyle** element.

3.1.4.28.1.2 IPptEdit_ApplyShapeOutlineDashStyle_OutputMessage

The response WSDL message for the **ApplyShapeOutlineDashStyle** WSDL operation.

The SOAP body contains the **ApplyShapeOutlineDashStyleResponse** element.

3.1.4.28.2 Elements

The following table summarizes the XML schema element definitions that are specific to this operation.

Element	Description
ApplyShapeOutlineDashStyle	The input data for the ApplyShapeOutlineDashStyle WSDL operation.
ApplyShapeOutlineDashStyleResponse	The result data for the ApplyShapeOutlineDashStyle WSDL operation.

3.1.4.28.2.1 ApplyShapeOutlineDashStyle

The input data for the **ApplyShapeOutlineDashStyle** WSDL operation.

```
<xs:element name="ApplyShapeOutlineDashStyle" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="presentationId" nillable="true" type="xs:string"/>
      <xs:element minOccurs="0" name="slideId" type="xs:unsignedInt"/>
      <xs:element minOccurs="0" name="shapeId" type="xs:unsignedInt"/>
      <xs:element minOccurs="0" name="dashType" type="xs:unsignedInt"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

presentationId: An **xs:string** ([[XMLSCHEMA2](#)] section 3.2.1) that specifies the identifier of the presentation containing the shape that is being modified, as specified in section [3.1.4.11](#).

slideId: An **ST_SlideId** ([[ISO/IEC-29500-1](#)] section 19.7.13) that specifies the identifier of the presentation slide containing the shape that is being modified.

shapeId: An **ST_DrawingElementId** ([[ISO/IEC-29500-1](#)] section 20.1.10.21) that specifies the identifier of the shape that is being modified.

dashType: An **xs:unsignedInt** ([[XMLSCHEMA2](#)] section 3.3.22) that specifies the dash type.

Value	Meaning
0x00	Solid.
0x01	Round dot.
0x02	Square dot.
0x03	Dash.
0x04	Dash dot.

Value	Meaning
0x05	Long dash.
0x06	Long dash dot.
0x07	Long dash dot dot.

3.1.4.28.2 ApplyShapeOutlineDashStyleResponse

The result data for the **ApplyShapeOutlineDashStyle** WSDL operation.

```
<xs:element name="ApplyShapeOutlineDashStyleResponse"
  xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:tns2="http://schemas.datacontract.org/2004/07/p" minOccurs="0"
        name="ApplyShapeOutlineDashStyleResult" nillable="true" type="tns2:ServiceResult"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

ApplyShapeOutlineDashStyleResult: A [ServiceResult](#) that specifies the result of the operation. The **Result** child element MUST be an [EditCommandResponse](#).

3.1.4.28.3 Complex Types

None.

3.1.4.28.4 Simple Types

None.

3.1.4.28.5 Attributes

None.

3.1.4.28.6 Groups

None.

3.1.4.28.7 Attribute Groups

None.

3.1.4.29 ApplyShapeOutlineEndStyle

The **ApplyShapeOutlineEndStyle** operation SHOULD [<??>](#) be used to modify the end style of a line in a presentation.

```
<wsdl:operation name="ApplyShapeOutlineEndStyle"
  xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
    wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
    ServerInternalService/IPptEdit/ApplyShapeOutlineEndStyle"
```

```

message="tns4:IPptEdit_ApplyShapeOutlineEndStyle_InputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsd1"/>
  <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/ApplyShapeOutlineEndStyleResponse"
message="tns4:IPptEdit_ApplyShapeOutlineEndStyle_OutputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsd1"/>
</wsdl:operation>

```

The protocol client sends an **IPptEdit_ApplyShapeOutlineEndStyle_InputMessage** request message, and the protocol server responds with an **IPptEdit_ApplyShapeOutlineEndStyle_OutputMessage** response message.

3.1.4.29.1 Messages

The following table summarizes the set of WSDL message definitions that are specific to this operation.

Message	Description
IPptEdit_ApplyShapeOutlineEndStyle_InputMessage	The request WSDL message for the ApplyShapeOutlineEndStyle WSDL operation.
IPptEdit_ApplyShapeOutlineEndStyle_OutputMessage	The response WSDL message for the ApplyShapeOutlineEndStyle WSDL operation.

3.1.4.29.1.1 IPptEdit_ApplyShapeOutlineEndStyle_InputMessage

The request WSDL message for the **ApplyShapeOutlineEndStyle** WSDL operation.

The SOAP action value is:

```

http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEditServerInternalService/IPptEdit/ApplyShapeOutlineEndStyle

```

The SOAP body contains the **ApplyShapeOutlineEndStyle** element.

3.1.4.29.1.2 IPptEdit_ApplyShapeOutlineEndStyle_OutputMessage

The response WSDL message for the **ApplyShapeOutlineEndStyle** WSDL operation.

The SOAP body contains the **ApplyShapeOutlineEndStyleResponse** element.

3.1.4.29.2 Elements

The following table summarizes the XML schema element definitions that are specific to this operation.

Element	Description
ApplyShapeOutlineEndStyle	The input data for the ApplyShapeOutlineEndStyle WSDL operation.
ApplyShapeOutlineEndStyleResponse	The result data for the ApplyShapeOutlineEndStyle WSDL operation.

3.1.4.29.2.1 ApplyShapeOutlineEndStyle

The input data for the **ApplyShapeOutlineEndStyle** WSDL operation.

```
<xs:element name="ApplyShapeOutlineEndStyle" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="presentationId" nillable="true" type="xs:string"/>
      <xs:element minOccurs="0" name="slideId" type="xs:unsignedInt"/>
      <xs:element minOccurs="0" name="shapeId" type="xs:unsignedInt"/>
      <xs:element minOccurs="0" name="headEndType" type="xs:unsignedInt"/>
      <xs:element minOccurs="0" name="tailEndType" type="xs:unsignedInt"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

presentationId: An **xs:string** ([\[XMLSCHEMA2\]](#) section 3.2.1) that specifies the identifier of the presentation containing the line that is being modified, as specified in section [3.1.4.11](#).

slideId: An **ST_SlideId** ([\[ISO/IEC-29500-1\]](#) section 19.7.13) that specifies the identifier of the presentation slide containing the line that is being modified.

shapeId: An **ST_DrawingElementId** ([\[ISO/IEC-29500-1\]](#) section 20.1.10.21) that specifies the identifier of the line that is being modified.

headEndType: An **xs:unsignedInt** ([\[XMLSCHEMA2\]](#) section 3.3.22) that specifies the end style for the head of the line.

Value	Meaning
0x00	None.
0x01	Triangle.
0x02	Arrow.
0x03	Stealth.
0x04	Diamond.
0x05	Oval.

tailEndType: An **xs:unsignedInt** ([\[XMLSCHEMA2\]](#) section 3.3.22) that specifies the end style for the tail of the line.

Value	Meaning
0x00	None.
0x01	Triangle.
0x02	Arrow.
0x03	Stealth.
0x04	Diamond.

Value	Meaning
0x05	Oval.

3.1.4.29.2 ApplyShapeOutlineEndStyleResponse

The result data for the **ApplyShapeOutlineEndStyle** WSDL operation.

```
<xs:element name="ApplyShapeOutlineEndStyleResponse"
  xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:tns2="http://schemas.datacontract.org/2004/07/p" minOccurs="0"
        name="ApplyShapeOutlineEndStyleResult" nillable="true" type="tns2:ServiceResult"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

ApplyShapeOutlineEndStyleResult: A [ServiceResult](#) that specifies the result of the operation. The **Result** child element MUST be an [EditCommandResponse](#).

3.1.4.29.3 Complex Types

None.

3.1.4.29.4 Simple Types

None.

3.1.4.29.5 Attributes

None.

3.1.4.29.6 Groups

None.

3.1.4.29.7 Attribute Groups

None.

3.1.4.30 ApplyShapeOutlineWidth

The **ApplyShapeOutlineWidth** operation SHOULD [<78>](#) be used to modify the width of the outline of a shape.

```
<wsdl:operation name="ApplyShapeOutlineWidth" xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
    wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
    ServerInternalService/IPptEdit/ApplyShapeOutlineWidth"
    message="tns4:IPptEdit_ApplyShapeOutlineWidth_InputMessage"
    xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
    wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
    ServerInternalService/IPptEdit/ApplyShapeOutlineWidthResponse"/>
</wsdl:operation>
```

```

message="tns4:IPptEdit_ApplyShapeOutlineWidth_OutputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>

```

The protocol client sends an **IPptEdit_ApplyShapeOutlineWidth_InputMessage** request message, and the protocol server responds with an **IPptEdit_ApplyShapeOutlineWidth_OutputMessage** response message.

3.1.4.30.1 Messages

The following table summarizes the set of WSDL message definitions that are specific to this operation.

Message	Description
IPptEdit_ApplyShapeOutlineWidth_InputMessage	The request WSDL message for the ApplyShapeOutlineWidth WSDL operation.
IPptEdit_ApplyShapeOutlineWidth_OutputMessage	The response WSDL message for the ApplyShapeOutlineWidth WSDL operation.

3.1.4.30.1.1 IPptEdit_ApplyShapeOutlineWidth_InputMessage

The request WSDL message for the **ApplyShapeOutlineWidth** WSDL operation.

The SOAP action value is:

```

http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEditServerInternalService/IPptEdit/ApplyShapeOutlineWidth

```

The SOAP body contains the **ApplyShapeOutlineWidth** element.

3.1.4.30.1.2 IPptEdit_ApplyShapeOutlineWidth_OutputMessage

The response WSDL message for the **ApplyShapeOutlineWidth** WSDL operation.

The SOAP body contains the **ApplyShapeOutlineWidthResponse** element.

3.1.4.30.2 Elements

The following table summarizes the XML schema element definitions that are specific to this operation.

Element	Description
ApplyShapeOutlineWidth	The input data for the ApplyShapeOutlineWidth WSDL operation.
ApplyShapeOutlineWidthResponse	The result data for the ApplyShapeOutlineWidth WSDL operation.

3.1.4.30.2.1 ApplyShapeOutlineWidth

The input data for the **ApplyShapeOutlineWidth** WSDL operation.

```

<xs:element name="ApplyShapeOutlineWidth" xmlns:xs="http://www.w3.org/2001/XMLSchema">

```

```

<xs:complexType>
  <xs:sequence>
    <xs:element minOccurs="0" name="presentationId" nillable="true" type="xs:string"/>
    <xs:element minOccurs="0" name="slideId" type="xs:unsignedInt"/>
    <xs:element minOccurs="0" name="shapeId" type="xs:unsignedInt"/>
    <xs:element minOccurs="0" name="width" type="xs:double"/>
  </xs:sequence>
</xs:complexType>
</xs:element>

```

presentationId: An **xs:string** ([\[XMLSCHEMA2\]](#) section 3.2.1) that specifies the identifier of the presentation containing the shape that is being modified, as specified in section [3.1.4.11](#).

slideId: An **ST_SlideId** ([\[ISO/IEC-29500-1\]](#) section 19.7.13) that specifies the identifier of the presentation slide containing the shape that is being modified.

shapeId: An **ST_DrawingElementId** ([\[ISO/IEC-29500-1\]](#) section 20.1.10.21) that specifies the identifier of the shape that is being modified.

width: An **xs:double** ([\[XMLSCHEMA2\]](#) section 3.3.5) that specifies the width of the outline in points. The value **MUST** be greater than zero and less than or equal to 1584.

3.1.4.30.2 ApplyShapeOutlineWidthResponse

The result data for the **ApplyShapeOutlineWidth** WSDL operation.

```

<xs:element name="ApplyShapeOutlineWidthResponse"
  xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:tns2="http://schemas.datacontract.org/2004/07/p" minOccurs="0"
        name="ApplyShapeOutlineWidthResult" nillable="true" type="tns2:ServiceResult"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>

```

ApplyShapeOutlineWidthResult: A [ServiceResult](#) that specifies the result of the operation. The **Result** child element **MUST** be an [EditCommandResponse](#).

3.1.4.30.3 Complex Types

None.

3.1.4.30.4 Simple Types

None.

3.1.4.30.5 Attributes

None.

3.1.4.30.6 Groups

None.

3.1.4.30.7 Attribute Groups

None.

3.1.4.31 ApplyShapeStyle

The **ApplyShapeStyle** operation SHOULD [<79>](#) be used to apply a style to a shape in a presentation.

```
<wsdl:operation name="ApplyShapeStyle" xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
    wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
    ServerInternalService/IPptEdit/ApplyShapeStyle"
    message="tns4:IPptEdit_ApplyShapeStyle_InputMessage"
    xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
    wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
    ServerInternalService/IPptEdit/ApplyShapeStyleResponse"
    message="tns4:IPptEdit_ApplyShapeStyle_OutputMessage"
    xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```

The protocol client sends an **IPptEdit_ApplyShapeStyle_InputMessage** request message, and the protocol server responds with an **IPptEdit_ApplyShapeStyle_OutputMessage** response message.

3.1.4.31.1 Messages

The following table summarizes the set of WSDL message definitions that are specific to this operation.

Message	Description
IPptEdit_ApplyShapeStyle_InputMessage	The request WSDL message for the ApplyShapeStyle WSDL operation.
IPptEdit_ApplyShapeStyle_OutputMessage	The response WSDL message for the ApplyShapeStyle WSDL operation.

3.1.4.31.1.1 IPptEdit_ApplyShapeStyle_InputMessage

The request WSDL message for the **ApplyShapeStyle** WSDL operation.

The SOAP action value is:

```
http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEditServerInternalService/IPptEdit/ApplyShapeStyle
```

The SOAP body contains the **ApplyShapeStyle** element.

3.1.4.31.1.2 IPptEdit_ApplyShapeStyle_OutputMessage

The response WSDL message for the **ApplyShapeStyle** WSDL operation.

The SOAP body contains the **ApplyShapeStyleResponse** element.

3.1.4.31.2 Elements

The following table summarizes the XML schema element definitions that are specific to this operation.

Element	Description
ApplyShapeStyle	The input data for the ApplyShapeStyle WSDL operation.
ApplyShapeStyleResponse	The result data for the ApplyShapeStyle WSDL operation.

3.1.4.31.2.1 ApplyShapeStyle

The input data for the **ApplyShapeStyle** WSDL operation.

```
<xs:element name="ApplyShapeStyle" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="presentationId" nillable="true" type="xs:string"/>
      <xs:element minOccurs="0" name="slideId" type="xs:unsignedInt"/>
      <xs:element minOccurs="0" name="shapeId" type="xs:unsignedInt"/>
      <xs:element minOccurs="0" name="styleId" type="xs:unsignedInt"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

presentationId: An **xs:string** ([\[XMLSCHEMA2\]](#) section 3.2.1) that specifies the identifier of the presentation containing the shape that is being modified, as specified in section [3.1.4.11](#).

slideId: An **ST_SlideId** ([\[ISO/IEC-29500-1\]](#) section 19.7.13) that specifies the identifier of the presentation slide containing the shape that is being modified.

shapeId: An **ST_DrawingElementId** ([\[ISO/IEC-29500-1\]](#) section 20.1.10.21) that specifies the identifier of the shape that is being modified.

styleId: An **xs:unsignedInt** ([\[XMLSCHEMA2\]](#) section 3.3.22) that specifies the style. The value **MUST** be greater than or equal to zero and less than 42.

3.1.4.31.2.2 ApplyShapeStyleResponse

The result data for the **ApplyShapeStyle** WSDL operation.

```
<xs:element name="ApplyShapeStyleResponse" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:tns2="http://schemas.datacontract.org/2004/07/p" minOccurs="0"
        name="ApplyShapeStyleResult" nillable="true" type="tns2:ServiceResult"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

ApplyShapeStyleResult: A [ServiceResult](#) element that specifies the result of the operation. The **Result** child element **MUST** be an [EditCommandResponse](#) element.

3.1.4.31.3 Complex Types

None.

3.1.4.31.4 Simple Types

None.

3.1.4.31.5 Attributes

None.

3.1.4.31.6 Groups

None.

3.1.4.31.7 Attribute Groups

None.

3.1.4.32 ArrangeShape

The **ArrangeShape** operation SHOULD [<80>](#) be used to rearrange a shape in a presentation.

```
<wsdl:operation name="ArrangeShape" xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
    wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
    ServerInternalService/IPptEdit/ArrangeShape"
    message="tns4:IPptEdit_ArrangeShape_InputMessage"
    xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
    wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
    ServerInternalService/IPptEdit/ArrangeShapeResponse"
    message="tns4:IPptEdit_ArrangeShape_OutputMessage"
    xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```

The protocol client sends an **IPptEdit_ArrangeShape_InputMessage** request message, and the protocol server responds with an **IPptEdit_ArrangeShape_OutputMessage** response message.

3.1.4.32.1 Messages

The following table summarizes the set of WSDL message definitions that are specific to this operation.

Message	Description
IPptEdit_ArrangeShape_InputMessage	The request WSDL message for the ArrangeShape WSDL operation.
IPptEdit_ArrangeShape_OutputMessage	The response WSDL message for the ArrangeShape WSDL operation.

3.1.4.32.1.1 IPptEdit_ArrangeShape_InputMessage

The request WSDL message for the **ArrangeShape** WSDL operation.

The SOAP action value is:

```
http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEditServerInternalService/IPptEdit/ArrangeShape
```

The SOAP body contains the **ArrangeShape** element.

3.1.4.32.1.2 IPptEdit_ArrangeShape_OutputMessage

The response WSDL message for the **ArrangeShape** WSDL operation.

The SOAP body contains the **ArrangeShapeResponse** element.

3.1.4.32.2 Elements

The following table summarizes the XML schema element definitions that are specific to this operation.

Element	Description
ArrangeShape	The input data for the ArrangeShape WSDL operation.
ArrangeShapeResponse	The result data for the ArrangeShape WSDL operation.

3.1.4.32.2.1 ArrangeShape

The input data for the **ArrangeShape** WSDL operation.

```
<xs:element name="ArrangeShape" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="presentationId" nillable="true" type="xs:string"/>
      <xs:element minOccurs="0" name="slideId" type="xs:unsignedInt"/>
      <xs:element minOccurs="0" name="shapeId" type="xs:unsignedInt"/>
      <xs:element minOccurs="0" name="orderMode" type="xs:unsignedInt"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

presentationId: An **xs:string** ([\[XMLSCHEMA2\]](#) section 3.2.1) that specifies the identifier of the presentation containing the shape that is being modified, as specified in section [3.1.4.11](#).

slideId: An **ST_SlideId** ([\[ISO/IEC-29500-1\]](#) section 19.7.13) that specifies the identifier of the presentation slide containing the shape that is being modified.

shapeId: An **ST_DrawingElementId** ([\[ISO/IEC-29500-1\]](#) section 20.1.10.21) that specifies the identifier of the shape that is being modified.

orderMode: An **xs:unsignedInt** ([\[XMLSCHEMA2\]](#) section 3.3.22) that specifies how to rearrange the shape.

Value	Description
0x0	Bring the shape to the front, in front of all other shapes
0x1	Bring the shape towards the front by one position
0x2	Send the shape to the back, behind all other shapes
0x3	Send the shape toward the back by one position

3.1.4.32.2 ArrangeShapeResponse

The result data for the **ArrangeShape** WSDL operation.

```
<xs:element name="ArrangeShapeResponse" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:tns2="http://schemas.datacontract.org/2004/07/p" minOccurs="0"
name="ArrangeShapeResult" nillable="true" type="tns2:ServiceResult"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

ArrangeShapeResult: A [ServiceResult](#) that specifies the result of the operation. The **Result** child element MUST be an [EditCommandResponse](#).

3.1.4.32.3 Complex Types

None.

3.1.4.32.4 Simple Types

None.

3.1.4.32.5 Attributes

None.

3.1.4.32.6 Groups

None.

3.1.4.32.7 Attribute Groups

None.

3.1.4.33 DuplicateShape

The **DuplicateShape** operation SHOULD [81](#) be used to duplicate a shape in a presentation.

```
<wsdl:operation name="DuplicateShape" xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/DuplicateShape"
```

```

message="tns4:IPptEdit_DuplicateShape_InputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/DuplicateShapeResponse"
message="tns4:IPptEdit_DuplicateShape_OutputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>

```

The protocol client sends an **IPptEdit_DuplicateShape_InputMessage** request message, and the protocol server responds with an **IPptEdit_DuplicateShape_OutputMessage** response message.

3.1.4.33.1 Messages

The following table summarizes the set of WSDL message definitions that are specific to this operation.

Message	Description
IPptEdit_DuplicateShape_InputMessage	The request WSDL message for the DuplicateShape WSDL operation.
IPptEdit_DuplicateShape_OutputMessage	The response WSDL message for the DuplicateShape WSDL operation.

3.1.4.33.1.1 IPptEdit_DuplicateShape_InputMessage

The request WSDL message for the **DuplicateShape** WSDL operation.

The SOAP action value is:

```

http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEditServerInternalService/IPptEdit/DuplicateShape

```

The SOAP body contains the **DuplicateShape** element.

3.1.4.33.1.2 IPptEdit_DuplicateShape_OutputMessage

The response WSDL message for the **DuplicateShape** WSDL operation.

The SOAP body contains the **DuplicateShapeResponse** element.

3.1.4.33.2 Elements

The following table summarizes the XML schema element definitions that are specific to this operation.

Element	Description
DuplicateShape	The input data for the DuplicateShape WSDL operation.
DuplicateShapeResponse	The result data for the DuplicateShape WSDL operation.

3.1.4.33.2.1 DuplicateShape

The input data for the **DuplicateShape** WSDL operation.

```
<xs:element name="DuplicateShape" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="presentationId" nillable="true" type="xs:string"/>
      <xs:element minOccurs="0" name="slideId" type="xs:unsignedInt"/>
      <xs:element minOccurs="0" name="shapeId" type="xs:unsignedInt"/>
      <xs:element minOccurs="0" name="cloneShapePosX" type="xs:int"/>
      <xs:element minOccurs="0" name="cloneShapePosY" type="xs:int"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

presentationId: An **xs:string** ([\[XMLSCHEMA2\]](#) section 3.2.1) that specifies the identifier of the presentation containing the shape that is duplicated, as specified in section [3.1.4.11](#).

slideId: An **ST_SlideId** ([\[ISO/IEC-29500-1\]](#) section 19.7.13) that specifies the identifier of the presentation slide containing the shape that is duplicated.

shapeId: An **ST_DrawingElementId** ([\[ISO/IEC-29500-1\]](#) section 20.1.10.21) that specifies the identifier of the shape that is duplicated.

cloneShapePosX: An **xs:int** ([\[XMLSCHEMA2\]](#) section 3.3.17) that specifies the x coordinate of the shape that is inserted.

cloneShapePosY: An **xs:int** ([\[XMLSCHEMA2\]](#) section 3.3.17) that specifies the y coordinate of the shape that is inserted.

3.1.4.33.2.2 DuplicateShapeResponse

The result data for the **DuplicateShape** WSDL operation.

```
<xs:element name="DuplicateShapeResponse" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:tns2="http://schemas.datacontract.org/2004/07/p" minOccurs="0"
        name="DuplicateShapeResult" nillable="true" type="tns2:ServiceResult"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

DuplicateShapeResult: A [ServiceResult](#) element that specifies the result of the operation. The **Result** child element MUST be an [EditCommandResponse](#).

3.1.4.33.3 Complex Types

None.

3.1.4.33.4 Simple Types

None.

3.1.4.33.5 Attributes

None.

3.1.4.33.6 Groups

None.

3.1.4.33.7 Attribute Groups

None.

3.1.4.34 FlipShape

The **FlipShape** operation SHOULD [<82>](#) be used to flip a shape vertically or horizontally in a presentation.

```
<wsdl:operation name="FlipShape" xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
    wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
    ServerInternalService/IPptEdit/FlipShape" message="tns4:IPptEdit_FlipShape_InputMessage"
    xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
    wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
    ServerInternalService/IPptEdit/FlipShapeResponse"
    message="tns4:IPptEdit_FlipShape_OutputMessage"
    xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```

The protocol client sends an **IPptEdit_FlipShape_InputMessage** request message, and the protocol server responds with an **IPptEdit_FlipShape_OutputMessage** response message.

3.1.4.34.1 Messages

The following table summarizes the set of WSDL message definitions that are specific to this operation.

Message	Description
IPptEdit_FlipShape_InputMessage	The request WSDL message for the FlipShape WSDL operation.
IPptEdit_FlipShape_OutputMessage	The response WSDL message for the FlipShape WSDL operation.

3.1.4.34.1.1 IPptEdit_FlipShape_InputMessage

The request WSDL message for the **FlipShape** WSDL operation.

The SOAP action value is:

```
http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEditServerInternalService/IPptEdit/FlipShape
```

The SOAP body contains the **FlipShape** element.

3.1.4.34.1.2 IPptEdit_FlipShape_OutputMessage

The response WSDL message for the **FlipShape** WSDL operation.

The SOAP body contains the **FlipShapeResponse** element.

3.1.4.34.2 Elements

The following table summarizes the XML schema element definitions that are specific to this operation.

Element	Description
FlipShape	The input data for the FlipShape WSDL operation.
FlipShapeResponse	The result data for the FlipShape WSDL operation.

3.1.4.34.2.1 FlipShape

The input data for the **FlipShape** WSDL operation.

```
<xs:element name="FlipShape" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="presentationId" nillable="true" type="xs:string"/>
      <xs:element minOccurs="0" name="slideId" type="xs:unsignedInt"/>
      <xs:element minOccurs="0" name="shapeId" type="xs:unsignedInt"/>
      <xs:element minOccurs="0" name="fHorizontal" type="xs:boolean"/>
      <xs:element minOccurs="0" name="fVertical" type="xs:boolean"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

presentationId: An **xs:string** ([\[XMLSCHEMA2\]](#) section 3.2.1) that specifies the identifier of the presentation containing the shape that is being modified, as specified in section [3.1.4.11](#).

slideId: An **ST_SlideId** ([\[ISO/IEC-29500-1\]](#) section 19.7.13) that specifies the identifier of the presentation slide containing the shape that is being modified.

shapeId: An **ST_DrawingElementId** ([\[ISO/IEC-29500-1\]](#) section 20.1.10.21) that specifies the identifier of the shape that is being modified.

fHorizontal: An **xs:boolean** ([\[XMLSCHEMA2\]](#) section 3.2.2) that specifies whether the shape will be flipped horizontally.

fVertical: An **xs:boolean** ([\[XMLSCHEMA2\]](#) section 3.2.2) that specifies whether the shape will be flipped vertically.

3.1.4.34.2.2 FlipShapeResponse

The result data for the **FlipShape** WSDL operation.

```
<xs:element name="FlipShapeResponse" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
```

```

    <xs:element xmlns:tns2="http://schemas.datacontract.org/2004/07/p" minOccurs="0"
name="FlipShapeResult" nillable="true" type="tns2:ServiceResult"/>
  </xs:sequence>
</xs:complexType>
</xs:element>

```

FlipShapeResult: A [ServiceResult](#) element that specifies the result of the operation. The **Result** child element MUST be an [EditCommandResponse](#).

3.1.4.34.3 Complex Types

None.

3.1.4.34.4 Simple Types

None.

3.1.4.34.5 Attributes

None.

3.1.4.34.6 Groups

None.

3.1.4.34.7 Attribute Groups

None.

3.1.4.35 GetCoauthUpdates

The **GetCoauthUpdates** operation SHOULD [<83>](#) be used to retrieve co-authoring state for a presentation.

```

<wsdl:operation name="GetCoauthUpdates" xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/GetCoauthUpdates"
message="tns4:IPptEdit_GetCoauthUpdates_InputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/GetCoauthUpdatesResponse"
message="tns4:IPptEdit_GetCoauthUpdates_OutputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>

```

The protocol client sends an **IPptEdit_GetCoauthUpdates_InputMessage** request message, and the protocol server responds with an **IPptEdit_GetCoauthUpdates_OutputMessage** response message.

3.1.4.35.1 Messages

The following table summarizes the set of WSDL message definitions that are specific to this operation.

Message	Description
IPptEdit_GetCoauthUpdates_InputMessage	The request WSDL message for the GetCoauthUpdates WSDL operation.
IPptEdit_GetCoauthUpdates_OutputMessage	The response WSDL message for the GetCoauthUpdates WSDL operation.

3.1.4.35.1.1 IPptEdit_GetCoauthUpdates_InputMessage

The request WSDL message for the **GetCoauthUpdates** WSDL operation.

The SOAP action value is:

```
http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEditServerInternalService/IPptEdit/GetCoauthUpdates
```

The SOAP body contains the **GetCoauthUpdates** element.

3.1.4.35.1.2 IPptEdit_GetCoauthUpdates_OutputMessage

The response WSDL message for the **GetCoauthUpdates** WSDL operation.

The SOAP body contains the **GetCoauthUpdatesResponse** element.

3.1.4.35.2 Elements

The following table summarizes the XML schema element definitions that are specific to this operation.

Element	Description
GetCoauthUpdates	The input data for the GetCoauthUpdates WSDL operation.
GetCoauthUpdatesResponse	The result data for the GetCoauthUpdates WSDL operation.

3.1.4.35.2.1 GetCoauthUpdates

The input data for the **GetCoauthUpdates** WSDL operation.

```
<xs:element name="GetCoauthUpdates" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="presentationId" nillable="true" type="xs:string"/>
      <xs:element minOccurs="0" name="lastToken" nillable="true" type="xs:string"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

presentationId: An **xs:string** ([XMLSCHEMA2](#) section 3.2.1) that specifies the identifier of the presentation, as specified in section [3.1.4.11](#).

lastToken: Reserved. MUST be ignored.

3.1.4.35.2.2 GetCoauthUpdatesResponse

The result data for the **GetCoauthUpdates** WSDL operation.

```
<xs:element name="GetCoauthUpdatesResponse" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:tns2="http://schemas.datacontract.org/2004/07/p" minOccurs="0"
name="GetCoauthUpdatesResult" nillable="true" type="tns2:ServiceResult"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

GetCoauthUpdatesResult: A [ServiceResult](#) that specifies the result of the operation. The **Result** child element MUST be a [CoauthUpdate](#).

3.1.4.35.3 Complex Types

None.

3.1.4.35.4 Simple Types

None.

3.1.4.35.5 Attributes

None.

3.1.4.35.6 Groups

None.

3.1.4.35.7 Attribute Groups

None.

3.1.4.36 GetEditPresInfoGetEditSlideById

The **GetEditPresInfoGetEditSlideById** operation SHOULD [<84>](#) be used to retrieve information about a presentation.

```
<wsdl:operation name="GetEditPresInfoGetEditSlideById"
xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/GetEditPresInfoGetEditSlideById"
message="tns4:IPptEdit_GetEditPresInfoGetEditSlideById_InputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/GetEditPresInfoGetEditSlideByIdResponse"
message="tns4:IPptEdit_GetEditPresInfoGetEditSlideById_OutputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```

The protocol client sends an **IPptEdit_GetEditPresInfoGetEditSlideById_InputMessage** request message, and the protocol server responds with an **IPptEdit_GetEditPresInfoGetEditSlideById_OutputMessage** response message.

3.1.4.36.1 Messages

The following table summarizes the set of WSDL message definitions that are specific to this operation.

Message	Description
IPptEdit_GetEditPresInfoGetEditSlideById_InputMessage	The request WSDL message for the GetEditPresInfoGetEditSlideById WSDL operation.
IPptEdit_GetEditPresInfoGetEditSlideById_OutputMessage	The response WSDL message for the GetEditPresInfoGetEditSlideById WSDL operation.

3.1.4.36.1.1 IPptEdit_GetEditPresInfoGetEditSlideById_InputMessage

The request WSDL message for the **GetEditPresInfoGetEditSlideById** WSDL operation.

The SOAP action value is:

```
http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEditServerInternalService/IPptEdit/GetEditPresInfoGetEditSlideById
```

The SOAP body contains the **GetEditPresInfoGetEditSlideById** element.

3.1.4.36.1.2 IPptEdit_GetEditPresInfoGetEditSlideById_OutputMessage

The response WSDL message for the **GetEditPresInfoGetEditSlideById** WSDL operation.

The SOAP body contains the **GetEditPresInfoGetEditSlideByIdResponse** element.

3.1.4.36.2 Elements

The following table summarizes the XML schema element definitions that are specific to this operation.

Element	Description
GetEditPresInfoGetEditSlideById	The input data for the GetEditPresInfoGetEditSlideById WSDL operation.
GetEditPresInfoGetEditSlideByIdResponse	The result data for the GetEditPresInfoGetEditSlideById WSDL operation.

3.1.4.36.2.1 GetEditPresInfoGetEditSlideById

The input data for the **GetEditPresInfoGetEditSlideById** WSDL operation.

```

<xs:element name="GetEditPresInfoGetEditSlideById"
  xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="presentationId" nillable="true" type="xs:string"/>
      <xs:element minOccurs="0" name="firstSlideIndex" type="xs:unsignedInt"/>
      <xs:element minOccurs="0" name="numSlides" type="xs:unsignedInt"/>
      <xs:element minOccurs="0" name="includedEditSlideId" type="xs:unsignedInt"/>
      <xs:element minOccurs="0" name="clientWidth" type="xs:unsignedInt"/>
      <xs:element minOccurs="0" name="clientHeight" type="xs:unsignedInt"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>

```

presentationId: An **xs:string** ([\[XMLSCHEMA2\]](#) section 3.2.1) that specifies the identifier of the presentation, as specified in section [3.1.4.11](#).

firstSlideIndex: An **xs:unsignedInt** ([\[XMLSCHEMA2\]](#) section 3.3.22) that specifies the index of the first presentation slide for which to retrieve information.

numSlides: An **xs:unsignedInt** ([\[XMLSCHEMA2\]](#) section 3.3.22) that specifies the count of presentation slides for which to retrieve information.

includedEditSlideId: Reserved. MUST be ignored.

clientWidth: An **xs:unsignedInt** ([\[XMLSCHEMA2\]](#) section 3.3.22) that specifies the width of the client area.

clientHeight: An **xs:unsignedInt** ([\[XMLSCHEMA2\]](#) section 3.3.22) that specifies the height of the client area.

3.1.4.36.2 GetEditPresInfoGetEditSlideByIdResponse

The result data for the **GetEditPresInfoGetEditSlideById** WSDL operation.

```

<xs:element name="GetEditPresInfoGetEditSlideByIdResponse"
  xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:tns2="http://schemas.datacontract.org/2004/07/p" minOccurs="0"
        name="GetEditPresInfoGetEditSlideByIdResult" nillable="true" type="tns2:ServiceResult"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>

```

GetEditPresInfoGetEditSlideByIdResult: A [ServiceResult](#) that specifies the result of the operation. The **Result** child element MUST be an [EditPresentationInfo](#).

3.1.4.36.3 Complex Types

None.

3.1.4.36.4 Simple Types

None.

3.1.4.36.5 Attributes

None.

3.1.4.36.6 Groups

None.

3.1.4.36.7 Attribute Groups

None.

3.1.4.37 InsertShape

The **InsertShape** operation SHOULD [<85>](#) be used to insert a shape in a presentation.

```
<wsdl:operation name="InsertShape" xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
    wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
    ServerInternalService/IPptEdit/InsertShape" message="tns4:IPptEdit_InsertShape_InputMessage"
    xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
    wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
    ServerInternalService/IPptEdit/InsertShapeResponse"
    message="tns4:IPptEdit_InsertShape_OutputMessage"
    xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```

The protocol client sends an **IPptEdit_InsertShape_InputMessage** request message, and the protocol server responds with an **IPptEdit_InsertShape_OutputMessage** response message.

3.1.4.37.1 Messages

The following table summarizes the set of WSDL message definitions that are specific to this operation.

Message	Description
IPptEdit_InsertShape_InputMessage	The request WSDL message for the InsertShape WSDL operation.
IPptEdit_InsertShape_OutputMessage	The response WSDL message for the InsertShape WSDL operation.

3.1.4.37.1.1 IPptEdit_InsertShape_InputMessage

The request WSDL message for the **InsertShape** WSDL operation.

The SOAP action value is:

```
http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEditServerInternalService/IPptEdit/InsertShape
```

The SOAP body contains the **InsertShape** element.

3.1.4.37.1.2 IPptEdit_InsertShape_OutputMessage

The response WSDL message for the **InsertShape** WSDL operation.

The SOAP body contains the **InsertShapeResponse** element.

3.1.4.37.2 Elements

The following table summarizes the XML schema element definitions that are specific to this operation.

Element	Description
InsertShape	The input data for the InsertShape WSDL operation.
InsertShapeResponse	The result data for the InsertShape WSDL operation.

3.1.4.37.2.1 InsertShape

The input data for the **InsertShape** WSDL operation.

```
<xs:element name="InsertShape" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="presentationId" nillable="true" type="xs:string"/>
      <xs:element minOccurs="0" name="slideId" type="xs:unsignedInt"/>
      <xs:element minOccurs="0" name="shapeType" type="xs:int"/>
      <xs:element minOccurs="0" name="shapeCtrPosX" type="xs:int"/>
      <xs:element minOccurs="0" name="shapeCtrPosY" type="xs:int"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

presentationId: An **xs:string** ([\[XMLSCHEMA2\]](#) section 3.2.1) that specifies the identifier of the presentation, as specified in section [3.1.4.11](#).

slideId: An **ST_SlideId** ([\[ISO/IEC-29500-1\]](#) section 19.7.13) that specifies the identifier of the presentation slide.

shapeType: An **xs:int** ([\[XMLSCHEMA2\]](#) section 3.3.17) that specifies the type of the shape that is inserted.

shapeCtrPosX: An **xs:int** ([\[XMLSCHEMA2\]](#) section 3.3.17) that specifies the x coordinate of the shape that is inserted.

shapeCtrPosY: An **xs:int** ([\[XMLSCHEMA2\]](#) section 3.3.17) that specifies the y coordinate of the shape that is inserted.

3.1.4.37.2.2 InsertShapeResponse

The result data for the **InsertShape** WSDL operation.

```
<xs:element name="InsertShapeResponse" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
```

```

    <xs:element xmlns:tns2="http://schemas.datacontract.org/2004/07/p" minOccurs="0"
name="InsertShapeResult" nillable="true" type="tns2:ServiceResult"/>
  </xs:sequence>
</xs:complexType>
</xs:element>

```

InsertShapeResult: A [ServiceResult](#) element that specifies the result of the operation. The **Result** child element MUST be an [EditCommandResponse](#).

3.1.4.37.3 Complex Types

None.

3.1.4.37.4 Simple Types

None.

3.1.4.37.5 Attributes

None.

3.1.4.37.6 Groups

None.

3.1.4.37.7 Attribute Groups

None.

3.1.4.38 MoveShape

The **MoveShape** operation SHOULD [<86>](#) be used to move a shape in a presentation.

```

<wsdl:operation name="MoveShape" xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/MoveShape" message="tns4:IPptEdit_MoveShape_InputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/MoveShapeResponse"
message="tns4:IPptEdit_MoveShape_OutputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>

```

The protocol client sends an **IPptEdit_MoveShape_InputMessage** request message, and the protocol server responds with an **IPptEdit_MoveShape_OutputMessage** response message.

3.1.4.38.1 Messages

The following table summarizes the set of WSDL message definitions that are specific to this operation.

Message	Description
IPptEdit_MoveShape_InputMessage	The request WSDL message for the MoveShape WSDL operation.
IPptEdit_MoveShape_OutputMessage	The response WSDL message for the MoveShape WSDL operation.

3.1.4.38.1.1 IPptEdit_MoveShape_InputMessage

The request WSDL message for the **MoveShape** WSDL operation.

The SOAP action value is:

```
http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEditServerInternalService/IPptEdit/MoveShape
```

The SOAP body contains the **MoveShape** element.

3.1.4.38.1.2 IPptEdit_MoveShape_OutputMessage

The response WSDL message for the **MoveShape** WSDL operation.

The SOAP body contains the **MoveShapeResponse** element.

3.1.4.38.2 Elements

The following table summarizes the XML schema element definitions that are specific to this operation.

Element	Description
MoveShape	The input data for the MoveShape WSDL operation.
MoveShapeResponse	The result data for the MoveShape WSDL operation.

3.1.4.38.2.1 MoveShape

The input data for the **MoveShape** WSDL operation.

```
<xs:element name="MoveShape" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="presentationId" nillable="true" type="xs:string"/>
      <xs:element minOccurs="0" name="slideId" type="xs:unsignedInt"/>
      <xs:element minOccurs="0" name="shapeId" type="xs:unsignedInt"/>
      <xs:element minOccurs="0" name="x" type="xs:double"/>
      <xs:element minOccurs="0" name="y" type="xs:double"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

presentationId: An **xs:string** ([\[XMLSCHEMA2\]](#) section 3.2.1) that specifies the identifier of the presentation containing the shape that is being modified, as specified in section [3.1.4.11](#).

slideId: An **ST_SlideId** ([\[ISO/IEC-29500-1\]](#) section 19.7.13) that specifies the identifier of the presentation slide containing the shape that is being modified.

shapeId: An **ST_DrawingElementId** ([\[ISO/IEC-29500-1\]](#) section 20.1.10.21) that specifies the identifier of the shape that is being modified.

x: An **xs:double** ([\[XMLSCHEMA2\]](#) section 3.3.5) that specifies the new x coordinate of the shape.

y: An **xs:double** ([\[XMLSCHEMA2\]](#) section 3.3.5) that specifies the new y coordinate of the shape.

3.1.4.38.2 MoveShapeResponse

The result data for the **MoveShape** WSDL operation.

```
<xs:element name="MoveShapeResponse" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:tns2="http://schemas.datacontract.org/2004/07/p" minOccurs="0"
name="MoveShapeResult" nillable="true" type="tns2:ServiceResult"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

MoveShapeResult: A [ServiceResult](#) element that specifies the result of the operation. The **Result** child element MUST be an [EditCommandResponse](#).

3.1.4.38.3 Complex Types

None.

3.1.4.38.4 Simple Types

None.

3.1.4.38.5 Attributes

None.

3.1.4.38.6 Groups

None.

3.1.4.38.7 Attribute Groups

None.

3.1.4.39 RemoveShapeFill

The **RemoveShapeFill** operation SHOULD [<87>](#) be used to remove the color of a shape in a presentation.

```
<wsdl:operation name="RemoveShapeFill" xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/RemoveShapeFill"
```

```

message="tns4:IPptEdit_RemoveShapeFill_InputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/RemoveShapeFillResponse"
message="tns4:IPptEdit_RemoveShapeFill_OutputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>

```

The protocol client sends an **IPptEdit_RemoveShapeFill_InputMessage** request message, and the protocol server responds with an **IPptEdit_RemoveShapeFill_OutputMessage** response message.

3.1.4.39.1 Messages

The following table summarizes the set of WSDL message definitions that are specific to this operation.

Message	Description
IPptEdit_RemoveShapeFill_InputMessage	The request WSDL message for the RemoveShapeFill WSDL operation.
IPptEdit_RemoveShapeFill_OutputMessage	The response WSDL message for the RemoveShapeFill WSDL operation.

3.1.4.39.1.1 IPptEdit_RemoveShapeFill_InputMessage

The request WSDL message for the **RemoveShapeFill** WSDL operation.

The SOAP action value is:

```

http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEditServerInternalService/IPptEdit/RemoveShapeFill

```

The SOAP body contains the **RemoveShapeFill** element.

3.1.4.39.1.2 IPptEdit_RemoveShapeFill_OutputMessage

The response WSDL message for the **RemoveShapeFill** WSDL operation.

The SOAP body contains the **RemoveShapeFillResponse** element.

3.1.4.39.2 Elements

The following table summarizes the XML schema element definitions that are specific to this operation.

Element	Description
RemoveShapeFill	The input data for the RemoveShapeFill WSDL operation.
RemoveShapeFillResponse	The result data for the RemoveShapeFill WSDL operation.

3.1.4.39.2.1 RemoveShapeFill

The input data for the **RemoveShapeFill** WSDL operation.

```
<xs:element name="RemoveShapeFill" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="presentationId" nillable="true" type="xs:string"/>
      <xs:element minOccurs="0" name="slideId" type="xs:unsignedInt"/>
      <xs:element minOccurs="0" name="shapeId" type="xs:unsignedInt"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

presentationId: An **xs:string** ([XMLSCHEMA2](#) section 3.2.1) that specifies the identifier of the presentation containing the shape that is being modified, as specified in section [3.1.4.11](#).

slideId: An **ST_SlideId** ([ISO/IEC-29500-1](#) section 19.7.13) that specifies the identifier of the presentation slide containing the shape that is being modified.

shapeId: An **ST_DrawingElementId** ([ISO/IEC-29500-1](#) section 20.1.10.21) that specifies the identifier of the shape that is being modified.

3.1.4.39.2.2 RemoveShapeFillResponse

The result data for the **RemoveShapeFill** WSDL operation.

```
<xs:element name="RemoveShapeFillResponse" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:tns2="http://schemas.datacontract.org/2004/07/p" minOccurs="0"
name="RemoveShapeFillResult" nillable="true" type="tns2:ServiceResult"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

RemoveShapeFillResult: A [ServiceResult](#) element that specifies the result of the operation. The **Result** child element MUST be an [EditCommandResponse](#).

3.1.4.39.3 Complex Types

None.

3.1.4.39.4 Simple Types

None.

3.1.4.39.5 Attributes

None.

3.1.4.39.6 Groups

None.

3.1.4.39.7 Attribute Groups

None.

3.1.4.40 RemoveShapeOutline

The **RemoveShapeOutline** operation SHOULD [<88>](#) be used to remove the outline of a shape in a presentation.

```
<wsdl:operation name="RemoveShapeOutline" xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
    wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
    ServerInternalService/IPptEdit/RemoveShapeOutline"
    message="tns4:IPptEdit_RemoveShapeOutline_InputMessage"
    xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
    wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
    ServerInternalService/IPptEdit/RemoveShapeOutlineResponse"
    message="tns4:IPptEdit_RemoveShapeOutline_OutputMessage"
    xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```

The protocol client sends an **IPptEdit_RemoveShapeOutline_InputMessage** request message, and the protocol server responds with an **IPptEdit_RemoveShapeOutline_OutputMessage** response message.

3.1.4.40.1 Messages

The following table summarizes the set of WSDL message definitions that are specific to this operation.

Message	Description
IPptEdit_RemoveShapeOutline_InputMessage	The request WSDL message for the RemoveShapeOutline WSDL operation.
IPptEdit_RemoveShapeOutline_OutputMessage	The response WSDL message for the RemoveShapeOutline WSDL operation.

3.1.4.40.1.1 IPptEdit_RemoveShapeOutline_InputMessage

The request WSDL message for the **RemoveShapeOutline** WSDL operation.

The SOAP action value is:

```
http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEditServerInternalService/IPptEdit/RemoveShapeOutline
```

The SOAP body contains the **RemoveShapeOutline** element.

3.1.4.40.1.2 IPptEdit_RemoveShapeOutline_OutputMessage

The response WSDL message for the **RemoveShapeOutline** WSDL operation.

The SOAP body contains the **RemoveShapeOutlineResponse** element.

3.1.4.40.2 Elements

The following table summarizes the XML schema element definitions that are specific to this operation.

Element	Description
RemoveShapeOutline	The input data for the RemoveShapeOutline WSDL operation.
RemoveShapeOutlineResponse	The result data for the RemoveShapeOutline WSDL operation.

3.1.4.40.2.1 RemoveShapeOutline

The input data for the **RemoveShapeOutline** WSDL operation.

```
<xs:element name="RemoveShapeOutline" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="presentationId" nillable="true" type="xs:string"/>
      <xs:element minOccurs="0" name="slideId" type="xs:unsignedInt"/>
      <xs:element minOccurs="0" name="shapeId" type="xs:unsignedInt"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

presentationId: An **xs:string** ([\[XMLSCHEMA2\]](#) section 3.2.1) that specifies the identifier of the presentation containing the shape that is being modified, as specified in section [3.1.4.11](#).

slideId: An **ST_SlideId** ([\[ISO/IEC-29500-1\]](#) section 19.7.13) that specifies the identifier of the presentation slide containing the shape that is being modified.

shapeId: An **ST_DrawingElementId** ([\[ISO/IEC-29500-1\]](#) section 20.1.10.21) that specifies the identifier of the shape that is being modified.

3.1.4.40.2.2 RemoveShapeOutlineResponse

The result data for the **RemoveShapeOutline** WSDL operation.

```
<xs:element name="RemoveShapeOutlineResponse" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:tns2="http://schemas.datacontract.org/2004/07/p" minOccurs="0"
        name="RemoveShapeOutlineResult" nillable="true" type="tns2:ServiceResult"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

RemoveShapeOutlineResult: A [ServiceResult](#) element that specifies the result of the operation. The **Result** child element MUST be an [EditCommandResponse](#).

3.1.4.40.3 Complex Types

None.

3.1.4.40.4 Simple Types

None.

3.1.4.40.5 Attributes

None.

3.1.4.40.6 Groups

None.

3.1.4.40.7 Attribute Groups

None.

3.1.4.41 ReorderAnimation

The **ReorderAnimation** operation SHOULD<89> be used to reorder the animation of a shape in a presentation.

```
<wsdl:operation name="ReorderAnimation" xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
    wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
    ServerInternalService/IPptEdit/ReorderAnimation"
    message="tns4:IPptEdit_ReorderAnimation_InputMessage"
    xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
    wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
    ServerInternalService/IPptEdit/ReorderAnimationResponse"
    message="tns4:IPptEdit_ReorderAnimation_OutputMessage"
    xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```

The protocol client sends an **IPptEdit_ReorderAnimation_InputMessage** request message, and the protocol server responds with an **IPptEdit_ReorderAnimation_OutputMessage** response message.

3.1.4.41.1 Messages

The following table summarizes the set of WSDL message definitions that are specific to this operation.

Message	Description
IPptEdit_ReorderAnimation_InputMessage	The request WSDL message for the ReorderAnimation WSDL operation.
IPptEdit_ReorderAnimation_OutputMessage	The response WSDL message for the ReorderAnimation WSDL operation.

3.1.4.41.1.1 IPptEdit_ReorderAnimation_InputMessage

The request WSDL message for the **ReorderAnimation** WSDL operation.

The SOAP action value is:

The SOAP body contains the **ReorderAnimation** element.

3.1.4.41.1.2 IPptEdit_ReorderAnimation_OutputMessage

The response WSDL message for the **ReorderAnimation** WSDL operation.

The SOAP body contains the **ReorderAnimationResponse** element.

3.1.4.41.2 Elements

The following table summarizes the XML schema element definitions that are specific to this operation.

Element	Description
ReorderAnimation	The input data for the ReorderAnimation WSDL operation.
ReorderAnimationResponse	The result data for the ReorderAnimation WSDL operation.

3.1.4.41.2.1 ReorderAnimation

The input data for the **ReorderAnimation** WSDL operation.

```
<xs:element name="ReorderAnimation" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="presentationId" nillable="true" type="xs:string"/>
      <xs:element minOccurs="0" name="slideId" type="xs:unsignedInt"/>
      <xs:element minOccurs="0" name="shapeId" type="xs:unsignedInt"/>
      <xs:element minOccurs="0" name="fLater" type="xs:boolean"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

presentationId: An **xs:string** ([\[XMLSCHEMA2\]](#) section 3.2.1) that specifies the identifier of the presentation containing the shape, as specified in section [3.1.4.11](#).

slideId: An **ST_SlideId** ([\[ISO/IEC-29500-1\]](#) section 19.7.13) that specifies the identifier of the presentation slide containing the shape.

shapeId: An **ST_DrawingElementId** ([\[ISO/IEC-29500-1\]](#) section 20.1.10.21) that specifies the identifier of the shape. The shape **MUST** have exactly one effect and that effect **MUST** exist on the main timeline.

fLater: An **xs:boolean** ([\[XMLSCHEMA2\]](#) section 3.2.2) that specifies whether to move the effect earlier or later in the timeline. If this value is true, the effect **MUST NOT** have the largest build identifier. If this value is false, the effect **MUST NOT** have the smallest build identifier.

3.1.4.41.2.2 ReorderAnimationResponse

The result data for the **ReorderAnimation** WSDL operation.

```

<xs:element name="ReorderAnimationResponse" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:tns2="http://schemas.datacontract.org/2004/07/p" minOccurs="0"
name="ReorderAnimationResult" nillable="true" type="tns2:ServiceResult"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>

```

ReorderAnimationResult: A [ServiceResult](#) that specifies the result of the operation. The **Result** child element MUST be an [EditCommandResponse](#).

3.1.4.41.3 Complex Types

None.

3.1.4.41.4 Simple Types

None.

3.1.4.41.5 Attributes

None.

3.1.4.41.6 Groups

None.

3.1.4.41.7 Attribute Groups

None.

3.1.4.42 ResizeShape

The **ResizeShape** operation SHOULD [<90>](#) be used to resize a shape in a presentation.

```

<wsdl:operation name="ResizeShape" xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/ResizeShape" message="tns4:IPptEdit_ResizeShape_InputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/ResizeShapeResponse"
message="tns4:IPptEdit_ResizeShape_OutputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>

```

The protocol client sends an **IPptEdit_ResizeShape_InputMessage** request message, and the protocol server responds with an **IPptEdit_ResizeShape_OutputMessage** response message.

3.1.4.42.1 Messages

The following table summarizes the set of WSDL message definitions that are specific to this operation.

Message	Description
IPptEdit_ResizeShape_InputMessage	The request WSDL message for the ResizeShape WSDL operation.
IPptEdit_ResizeShape_OutputMessage	The response WSDL message for the ResizeShape WSDL operation.

3.1.4.42.1.1 IPptEdit_ResizeShape_InputMessage

The request WSDL message for the **ResizeShape** WSDL operation.

The SOAP action value is:

```
http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEditServerInternalService/IPptEdit/ResizeShape
```

The SOAP body contains the **ResizeShape** element.

3.1.4.42.1.2 IPptEdit_ResizeShape_OutputMessage

The response WSDL message for the **ResizeShape** WSDL operation.

The SOAP body contains the **ResizeShapeResponse** element.

3.1.4.42.2 Elements

The following table summarizes the XML schema element definitions that are specific to this operation.

Element	Description
ResizeShape	The input data for the ResizeShape WSDL operation.
ResizeShapeResponse	The result data for the ResizeShape WSDL operation.

3.1.4.42.2.1 ResizeShape

The input data for the **ResizeShape** WSDL operation.

```
<xs:element name="ResizeShape" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="presentationId" nillable="true" type="xs:string"/>
      <xs:element minOccurs="0" name="slideId" type="xs:unsignedInt"/>
      <xs:element minOccurs="0" name="shapeId" type="xs:unsignedInt"/>
      <xs:element minOccurs="0" name="deltaNorth" type="xs:double"/>
      <xs:element minOccurs="0" name="deltaSouth" type="xs:double"/>
      <xs:element minOccurs="0" name="deltaWest" type="xs:double"/>
      <xs:element minOccurs="0" name="deltaEast" type="xs:double"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

presentationId: An **xs:string** ([\[XMLSCHEMA2\]](#) section 3.2.1) that specifies the identifier of the presentation containing the shape that is being modified, as specified in section [3.1.4.11](#).

slideId: An **ST_SlideId** ([\[ISO/IEC-29500-1\]](#) section 19.7.13) that specifies the identifier of the presentation slide containing the shape that is being modified.

shapeId: An **ST_DrawingElementId** ([\[ISO/IEC-29500-1\]](#) section 20.1.10.21) that specifies the identifier of the shape that is being modified.

deltaNorth: An **xs:double** ([\[XMLSCHEMA2\]](#) section 3.3.5) that specifies how the shape is resized. If the shape is a line, then the start of the y coordinate of the line is offset by this value. Else the north edge of the shape is offset by this value.

deltaSouth: An **xs:double** ([\[XMLSCHEMA2\]](#) section 3.3.5) that specifies how the shape is resized. If the shape is a line, then the start of the x coordinate of the line is offset by this value. Else the south edge of the shape is offset by this value.

deltaWest: An **xs:double** ([\[XMLSCHEMA2\]](#) section 3.3.5) that specifies how the shape is resized. If the shape is a line, then the end of the y coordinate of the line is offset by this value. Else the west edge of the shape is offset by this value.

deltaEast: An **xs:double** ([\[XMLSCHEMA2\]](#) section 3.3.5) that specifies how the shape is resized. If the shape is a line, then the end of the x coordinate of the line is offset by this value. Else the east edge of the shape is offset by this value.

3.1.4.42.2.2 ResizeShapeResponse

The result data for the **ResizeShape** WSDL operation.

```
<xs:element name="ResizeShapeResponse" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:tns2="http://schemas.datacontract.org/2004/07/p" minOccurs="0"
name="ResizeShapeResult" nillable="true" type="tns2:ServiceResult"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

ResizeShapeResult: A [ServiceResult](#) that specifies the result of the operation. The **Result** child element MUST be an [EditCommandResponse](#).

3.1.4.42.3 Complex Types

None.

3.1.4.42.4 Simple Types

None.

3.1.4.42.5 Attributes

None.

3.1.4.42.6 Groups

None.

3.1.4.42.7 Attribute Groups

None.

3.1.4.43 RotateShape

The **RotateShape** operation SHOULD [<91>](#) be used to rotate a shape in a presentation.

```
<wsdl:operation name="RotateShape" xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
    wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
    ServerInternalService/IPptEdit/RotateShape" message="tns4:IPptEdit_RotateShape_InputMessage"
    xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
    wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
    ServerInternalService/IPptEdit/RotateShapeResponse"
    message="tns4:IPptEdit_RotateShape_OutputMessage"
    xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```

The protocol client sends an **IPptEdit_RotateShape_InputMessage** request message, and the protocol server responds with an **IPptEdit_RotateShape_OutputMessage** response message.

3.1.4.43.1 Messages

The following table summarizes the set of WSDL message definitions that are specific to this operation.

Message	Description
IPptEdit_RotateShape_InputMessage	The request WSDL message for the RotateShape WSDL operation.
IPptEdit_RotateShape_OutputMessage	The response WSDL message for the RotateShape WSDL operation.

3.1.4.43.1.1 IPptEdit_RotateShape_InputMessage

The request WSDL message for the **RotateShape** WSDL operation.

The SOAP action value is:

```
http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEditServerInternalService/IPptEdit/RotateShape
```

The SOAP body contains the **RotateShape** element.

3.1.4.43.1.2 IPptEdit_RotateShape_OutputMessage

The response WSDL message for the **RotateShape** WSDL operation.

The SOAP body contains the **RotateShapeResponse** element.

3.1.4.43.2 Elements

The following table summarizes the XML schema element definitions that are specific to this operation.

Element	Description
RotateShape	The input data for the RotateShape WSDL operation.
RotateShapeResponse	The result data for the RotateShape WSDL operation.

3.1.4.43.2.1 RotateShape

The input data for the **RotateShape** WSDL operation.

```
<xs:element name="RotateShape" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="presentationId" nillable="true" type="xs:string"/>
      <xs:element minOccurs="0" name="slideId" type="xs:unsignedInt"/>
      <xs:element minOccurs="0" name="shapeId" type="xs:unsignedInt"/>
      <xs:element minOccurs="0" name="degrees" type="xs:int"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

presentationId: An **xs:string** ([\[XMLSCHEMA2\]](#) section 3.2.1) that specifies the identifier of the presentation containing the shape that is being modified, as specified in section [3.1.4.11](#).

slideId: An **ST_SlideId** ([\[ISO/IEC-29500-1\]](#) section 19.7.13) that specifies the identifier of the presentation slide containing the shape that is being modified.

shapeId: An **ST_DrawingElementId** ([\[ISO/IEC-29500-1\]](#) section 20.1.10.21) that specifies the identifier of the shape that is being modified. The shape **MUST NOT** be a chart, SmartArt, table, or ActiveX shape.

degrees: An **xs:int** ([\[XMLSCHEMA2\]](#) section 3.3.17) that specifies the number of degrees the shape is rotated from its default orientation.

3.1.4.43.2.2 RotateShapeResponse

The result data for the **RotateShape** WSDL operation.

```
<xs:element name="RotateShapeResponse" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:tns2="http://schemas.datacontract.org/2004/07/p" minOccurs="0"
        name="RotateShapeResult" nillable="true" type="tns2:ServiceResult"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

RotateShapeResult: A [ServiceResult](#) that specifies the result of the operation. The **Result** child element MUST be an [EditCommandResponse](#).

3.1.4.43.3 Complex Types

None.

3.1.4.43.4 Simple Types

None.

3.1.4.43.5 Attributes

None.

3.1.4.43.6 Groups

None.

3.1.4.43.7 Attribute Groups

None.

3.1.4.44 SetAnimation

The **SetAnimation** operation SHOULD [<92>](#) be used to apply an animation to a shape in a presentation.

```
<wsdl:operation name="SetAnimation" xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
    wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
    ServerInternalService/IPptEdit/SetAnimation"
    message="tns4:IPptEdit_SetAnimation_InputMessage"
    xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
    wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
    ServerInternalService/IPptEdit/SetAnimationResponse"
    message="tns4:IPptEdit_SetAnimation_OutputMessage"
    xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```

The protocol client sends an **IPptEdit_SetAnimation_InputMessage** request message, and the protocol server responds with an **IPptEdit_SetAnimation_OutputMessage** response message.

3.1.4.44.1 Messages

The following table summarizes the set of WSDL message definitions that are specific to this operation.

Message	Description
IPptEdit_SetAnimation_InputMessage	The request WSDL message for the SetAnimation WSDL operation.
IPptEdit_SetAnimation_OutputMessage	The response WSDL message for the SetAnimation WSDL

Message	Description
	operation.

3.1.4.44.1.1 IPptEdit_SetAnimation_InputMessage

The request WSDL message for the **SetAnimation** WSDL operation.

The SOAP action value is:

```
http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEditServerInternalService/IPptEdit/SetAnimation
```

The SOAP body contains the **SetAnimation** element.

3.1.4.44.1.2 IPptEdit_SetAnimation_OutputMessage

The response WSDL message for the **SetAnimation** WSDL operation.

The SOAP body contains the **SetAnimationResponse** element.

3.1.4.44.2 Elements

The following table summarizes the XML schema element definitions that are specific to this operation.

Element	Description
SetAnimation	The input data for the SetAnimation WSDL operation.
SetAnimationResponse	The result data for the SetAnimation WSDL operation.

3.1.4.44.2.1 SetAnimation

The input data for the **SetAnimation** WSDL operation.

```
<xs:element name="SetAnimation" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="presentationId" nillable="true" type="xs:string"/>
      <xs:element minOccurs="0" name="slideId" type="xs:unsignedInt"/>
      <xs:element minOccurs="0" name="shapeId" type="xs:unsignedInt"/>
      <xs:element minOccurs="0" name="fxId" type="xs:unsignedInt"/>
      <xs:element minOccurs="0" name="direction" type="xs:unsignedInt"/>
      <xs:element minOccurs="0" name="sequenceId" type="xs:unsignedInt"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

presentationId: An **xs:string** ([\[XMLSCHEMA2\]](#) section 3.2.1) that specifies the identifier of the presentation containing the shape, as specified in section [3.1.4.11](#).

slideId: An **ST_SlideId** ([\[ISO/IEC-29500-1\]](#) section 19.7.13) that specifies the identifier of the presentation slide containing the shape.

shapeId: An **ST_DrawingElementId** ([\[ISO/IEC-29500-1\]](#) section 20.1.10.21) that specifies the identifier of the shape.

fxId: An **xs:unsignedInt** ([\[XMLSCHEMA2\]](#) section 3.3.22) that specifies the animation. The value MUST be a value from the following table.

Value	Meaning
0x0	None
0x1	Appear
0x2	Fly In
0x3	Fade

direction: An **xs:unsignedInt** ([\[XMLSCHEMA2\]](#) section 3.3.22) that specifies the direction of the animation. The value MUST be zero if **fxId** is not 2. The value MUST be a value from the following table if **fxId** is 2.

Value	Meaning
0x0	None
0x1	Up
0x2	Right
0x3	Down
0x4	Left

sequenceId: An **xs:unsignedInt** ([\[XMLSCHEMA2\]](#) section 3.3.22) that specifies the sequence type of the animation. The value MUST be a value from the following table.

Value	Meaning
0x0	Default
0x1	As One Object
0x2	By Paragraph
0x3	One by One

3.1.4.44.2.2 SetAnimationResponse

The result data for the **SetAnimation** WSDL operation.

```
<xs:element name="SetAnimationResponse" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:tns2="http://schemas.datacontract.org/2004/07/p" minOccurs="0"
        name="SetAnimationResult" nillable="true" type="tns2:ServiceResult"/>
    </xs:sequence>
  </xs:complexType>
```

</xs:element>

SetAnimationResult: A [ServiceResult](#) that specifies the result of the operation. The **Result** child element MUST be an [EditCommandResponse](#).

3.1.4.44.3 Complex Types

None.

3.1.4.44.4 Simple Types

None.

3.1.4.44.5 Attributes

None.

3.1.4.44.6 Groups

None.

3.1.4.44.7 Attribute Groups

None.

3.1.4.45 SetTransition

The **SetTransition** operation SHOULD [<93>](#) be used to apply a transition to a slide in a presentation.

```
<wsdl:operation name="SetTransition" xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
    wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
    ServerInternalService/IPptEdit/SetTransition"
    message="tns4:IPptEdit_SetTransition_InputMessage"
    xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
    wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
    ServerInternalService/IPptEdit/SetTransitionResponse"
    message="tns4:IPptEdit_SetTransition_OutputMessage"
    xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```

The protocol client sends an **IPptEdit_SetTransition_InputMessage** request message, and the protocol server responds with an **IPptEdit_SetTransition_OutputMessage** response message.

3.1.4.45.1 Messages

The following table summarizes the set of WSDL message definitions that are specific to this operation.

Message	Description
IPptEdit_SetTransition_InputMessage	The request WSDL message for the SetTransition WSDL

Message	Description
	operation.
IPptEdit_SetTransition_OutputMessage	The response WSDL message for the SetTransition WSDL operation.

3.1.4.45.1.1 IPptEdit_SetTransition_InputMessage

The request WSDL message for the **SetTransition** WSDL operation.

The SOAP action value is:

```
http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEditServerInternalService/IPptEdit/SetTransition
```

The SOAP body contains the **SetTransition** element.

3.1.4.45.1.2 IPptEdit_SetTransition_OutputMessage

The response WSDL message for the **SetTransition** WSDL operation.

The SOAP body contains the **SetTransitionResponse** element.

3.1.4.45.2 Elements

The following table summarizes the XML schema element definitions that are specific to this operation.

Element	Description
SetTransition	The input data for the SetTransition WSDL operation.
SetTransitionResponse	The result data for the SetTransition WSDL operation.

3.1.4.45.2.1 SetTransition

The input data for the **SetTransition** WSDL operation.

```
<xs:element name="SetTransition" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="presentationId" nillable="true" type="xs:string"/>
      <xs:element minOccurs="0" name="slideId" type="xs:unsignedInt"/>
      <xs:element minOccurs="0" name="type" type="xs:unsignedInt"/>
      <xs:element minOccurs="0" name="direction" type="xs:unsignedInt"/>
      <xs:element minOccurs="0" name="duration" type="xs:unsignedInt"/>
      <xs:element minOccurs="0" name="isManualAdvance" type="xs:boolean"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

presentationId: An **xs:string** ([XMLSCHEMA2](#) section 3.2.1) that specifies the identifier of the presentation containing the slide, as specified in section [3.1.4.11](#).

slideId: An **ST_SlideId** ([\[ISO/IEC-29500-1\]](#) section 19.7.13) that specifies the identifier of the presentation slide.

type: An **xs:unsignedInt** ([\[XMLSCHEMA2\]](#) section 3.3.22) that specifies the type of transition. The value MUST be a value from the following table.

Value	Meaning
0x0	None
0x6	Fade through black
0x17	Fade smoothly
0x14	Push

direction: An **xs:unsignedInt** ([\[XMLSCHEMA2\]](#) section 3.3.22) that specifies the direction of transition. If **type** is not 0x14, the value MUST be zero. If **type** is 0x14, the value MUST be a value from the following table.

Value	Meaning
0x0	From right
0x1	From bottom
0x2	From left
0x3	From top

duration: An **xs:unsignedInt** ([\[XMLSCHEMA2\]](#) section 3.3.22) that specifies the duration of the transition in milliseconds.

isManualAdvance: Reserved. MUST be ignored.

3.1.4.45.2.2 SetTransitionResponse

The result data for the **SetTransition** WSDL operation.

```
<xs:element name="SetTransitionResponse" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:tns2="http://schemas.datacontract.org/2004/07/p" minOccurs="0"
        name="SetTransitionResult" nillable="true" type="tns2:ServiceResult"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

SetTransitionResult: A [ServiceResult](#) that specifies the result of the operation. The **Result** child element MUST be an [EditCommandResponse](#).

3.1.4.45.3 Complex Types

None.

3.1.4.45.4 Simple Types

None.

3.1.4.45.5 Attributes

None.

3.1.4.45.6 Groups

None.

3.1.4.45.7 Attribute Groups

None.

3.1.4.46 SetWordArt

Reserved. MUST not be called.

```
<wsdl:operation name="SetWordArt" xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
    wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
    ServerInternalService/IPptEdit/SetWordArt" message="tns4:IPptEdit_SetWordArt_InputMessage"
    xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
    wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
    ServerInternalService/IPptEdit/SetWordArtResponse"
    message="tns4:IPptEdit_SetWordArt_OutputMessage"
    xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```

Reserved. MUST not be called.

3.1.4.46.1 Messages

The following table summarizes the set of WSDL message definitions that are specific to this operation.

Message	Description
IPptEdit_SetWordArt_InputMessage	The request WSDL message for the SetWordArt WSDL operation.
IPptEdit_SetWordArt_OutputMessage	The response WSDL message for the SetWordArt WSDL operation.

3.1.4.46.1.1 IPptEdit_SetWordArt_InputMessage

The request WSDL message for the **SetWordArt** WSDL operation.

The SOAP action value is:

```
http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEditServerInternalService/IPptEdit/SetWordArt
```

The SOAP body contains the **SetWordArt** element.

3.1.4.46.1.2 IPptEdit_SetWordArt_OutputMessage

The response WSDL message for the **SetWordArt** WSDL operation.

The SOAP body contains the **SetWordArtResponse** element.

3.1.4.46.2 Elements

The following table summarizes the XML schema element definitions that are specific to this operation.

Element	Description
SetWordArt	The input data for the SetWordArt WSDL operation.
SetWordArtResponse	The result data for the SetWordArt WSDL operation.

3.1.4.46.2.1 SetWordArt

The input data for the **SetWordArt** WSDL operation.

```
<xs:element name="SetWordArt" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="presentationId" nillable="true" type="xs:string"/>
      <xs:element minOccurs="0" name="slideId" type="xs:unsignedInt"/>
      <xs:element minOccurs="0" name="shapeId" type="xs:unsignedInt"/>
      <xs:element minOccurs="0" name="styleId" type="xs:int"/>
      <xs:element minOccurs="0" name="isClear" type="xs:boolean"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

presentationId: Reserved. MUST be ignored.

slideId: Reserved. MUST be ignored.

shapeId: Reserved. MUST be ignored.

styleId: Reserved. MUST be ignored.

isClear: Reserved. MUST be ignored.

3.1.4.46.2.2 SetWordArtResponse

The result data for the **SetWordArt** WSDL operation.

```
<xs:element name="SetWordArtResponse" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:tns2="http://schemas.datacontract.org/2004/07/p" minOccurs="0"
        name="SetWordArtResult" nillable="true" type="tns2:ServiceResult"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

```
</xs:complexType>
</xs:element>
```

SetWordArtResult: Reserved. MUST be ignored.

3.1.4.46.3 Complex Types

None.

3.1.4.46.4 Simple Types

None.

3.1.4.46.5 Attributes

None.

3.1.4.46.6 Groups

None.

3.1.4.46.7 Attribute Groups

None.

3.1.4.47 ShapeFormatPainting

The **ShapeFormatPainting** operation SHOULD [<94>](#) be used to copy formatting from one shape and apply it to another shape in the presentation.

```
<wsdl:operation name="ShapeFormatPainting" xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
    wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
    ServerInternalService/IPptEdit/ShapeFormatPainting"
    message="tns4:IPptEdit_ShapeFormatPainting_InputMessage"
    xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
    wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
    ServerInternalService/IPptEdit/ShapeFormatPaintingResponse"
    message="tns4:IPptEdit_ShapeFormatPainting_OutputMessage"
    xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```

The protocol client sends an **IPptEdit_ShapeFormatPainting_InputMessage** request message, and the protocol server responds with an **IPptEdit_ShapeFormatPainting_OutputMessage** response message.

3.1.4.47.1 Messages

The following table summarizes the set of WSDL message definitions that are specific to this operation.

Message	Description
IPptEdit_ShapeFormatPainting_InputMessage	The request WSDL message for the ShapeFormatPainting WSDL operation.
IPptEdit_ShapeFormatPainting_OutputMessage	The response WSDL message for the ShapeFormatPainting WSDL operation.

3.1.4.47.1.1 IPptEdit_ShapeFormatPainting_InputMessage

The request WSDL message for the **ShapeFormatPainting** WSDL operation.

The SOAP action value is:

```
http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEditServerInternalService/IPptEdit/ShapeFormatPainting
```

The SOAP body contains the **ShapeFormatPainting** element.

3.1.4.47.1.2 IPptEdit_ShapeFormatPainting_OutputMessage

The response WSDL message for the **ShapeFormatPainting** WSDL operation.

The SOAP body contains the **ShapeFormatPaintingResponse** element.

3.1.4.47.2 Elements

The following table summarizes the XML schema element definitions that are specific to this operation.

Element	Description
ShapeFormatPainting	The input data for the ShapeFormatPainting WSDL operation.
ShapeFormatPaintingResponse	The result data for the ShapeFormatPainting WSDL operation.

3.1.4.47.2.1 ShapeFormatPainting

The input data for the **ShapeFormatPainting** WSDL operation.

```
<xs:element name="ShapeFormatPainting" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="presentationId" nillable="true" type="xs:string"/>
      <xs:element minOccurs="0" name="sourceSlideId" type="xs:unsignedInt"/>
      <xs:element minOccurs="0" name="sourceShapeId" type="xs:unsignedInt"/>
      <xs:element minOccurs="0" name="destinationSlideId" type="xs:unsignedInt"/>
      <xs:element minOccurs="0" name="destinationShapeId" type="xs:unsignedInt"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

presentationId: An **xs:string** ([XMLSCHEMA2](#) section 3.2.1) that specifies the identifier of the presentation, as specified in section [3.1.4.11](#).

sourceSlideId: An **ST_SlideId** ([\[ISO/IEC-29500-1\]](#) section 19.7.13) that specifies the identifier of the presentation slide containing the shape that the formatting is copied from.

sourceShapeId: An **ST_DrawingElementId** ([\[ISO/IEC-29500-1\]](#) section 20.1.10.21) that specifies the identifier of the shape that the formatting is copied from. The shape MUST NOT be a group, SmartArt, table, chart, or ActiveX shape.

destinationSlideId: An **ST_SlideId** ([\[ISO/IEC-29500-1\]](#) section 19.7.13) that specifies the identifier of the presentation slide containing the shape that the formatting is applied to.

destinationShapeId: An **ST_DrawingElementId** ([\[ISO/IEC-29500-1\]](#) section 20.1.10.21) that specifies the identifier of the shape that the formatting is applied to. The shape MUST NOT be a SmartArt, table, chart, or ActiveX shape.

3.1.4.47.2 ShapeFormatPaintingResponse

The result data for the **ShapeFormatPainting** WSDL operation.

```
<xs:element name="ShapeFormatPaintingResponse" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:tns2="http://schemas.datacontract.org/2004/07/p" minOccurs="0"
        name="ShapeFormatPaintingResult" nillable="true" type="tns2:ServiceResult"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

ShapeFormatPaintingResult: A [ServiceResult](#) that specifies the result of the operation. The **Result** child element MUST be an [EditCommandResponse](#).

3.1.4.47.3 Complex Types

None.

3.1.4.47.4 Simple Types

None.

3.1.4.47.5 Attributes

None.

3.1.4.47.6 Groups

None.

3.1.4.47.7 Attribute Groups

None.

3.1.4.48 UngroupShape

The **UngroupShape** operation SHOULD [<95>](#) be used to ungroup a shape in a presentation.

```

<wsdl:operation name="UngroupShape" xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
    wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
    ServerInternalService/IPptEdit/UngroupShape"
    message="tns4:IPptEdit_UngroupShape_InputMessage"
    xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
    wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
    ServerInternalService/IPptEdit/UngroupShapeResponse"
    message="tns4:IPptEdit_UngroupShape_OutputMessage"
    xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>

```

The protocol client sends an **IPptEdit_UngroupShape_InputMessage** request message, and the protocol server responds with an **IPptEdit_UngroupShape_OutputMessage** response message.

3.1.4.48.1 Messages

The following table summarizes the set of WSDL message definitions that are specific to this operation.

Message	Description
IPptEdit_UngroupShape_InputMessage	The request WSDL message for the UngroupShape WSDL operation.
IPptEdit_UngroupShape_OutputMessage	The response WSDL message for the UngroupShape WSDL operation.

3.1.4.48.1.1 IPptEdit_UngroupShape_InputMessage

The request WSDL message for the **UngroupShape** WSDL operation.

The SOAP action value is:

```

http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEditServerInternalService/IPptEdit/UngroupShape

```

The SOAP body contains the **UngroupShape** element.

3.1.4.48.1.2 IPptEdit_UngroupShape_OutputMessage

The response WSDL message for the **UngroupShape** WSDL operation.

The SOAP body contains the **UngroupShapeResponse** element.

3.1.4.48.2 Elements

The following table summarizes the XML schema element definitions that are specific to this operation.

Element	Description
UngroupShape	The input data for the UngroupShape WSDL operation.

Element	Description
UngroupShapeResponse	The result data for the UngroupShape WSDL operation.

3.1.4.48.2.1 UngroupShape

The input data for the **UngroupShape** WSDL operation.

```
<xs:element name="UngroupShape" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="presentationId" nillable="true" type="xs:string"/>
      <xs:element minOccurs="0" name="slideId" type="xs:unsignedInt"/>
      <xs:element minOccurs="0" name="shapeId" type="xs:unsignedInt"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

presentationId: An **xs:string** ([XMLSCHEMA2](#) section 3.2.1) that specifies the identifier of the presentation containing the shape that is being modified, as specified in section [3.1.4.11](#).

slideId: An **ST_SlideId** ([ISO/IEC-29500-1](#) section 19.7.13) that specifies the identifier of the presentation slide containing the shape that is being modified.

shapeId: An **ST_DrawingElementId** ([ISO/IEC-29500-1](#) section 20.1.10.21) that specifies the identifier of the shape that is being modified.

3.1.4.48.2.2 UngroupShapeResponse

The result data for the **UngroupShape** WSDL operation.

```
<xs:element name="UngroupShapeResponse" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:tns2="http://schemas.datacontract.org/2004/07/p" minOccurs="0"
name="UngroupShapeResult" nillable="true" type="tns2:ServiceResult"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

UngroupShapeResult: A [ServiceResult](#) that specifies the result of the operation. The **Result** child element MUST be an [EditCommandResponse](#).

3.1.4.48.3 Complex Types

None.

3.1.4.48.4 Simple Types

None.

3.1.4.48.5 Attributes

None.

3.1.4.48.6 Groups

None.

3.1.4.48.7 Attribute Groups

None.

3.1.4.49 AddComment

The **AddComment** operation SHOULD [<96>](#) be used to insert a comment into a presentation.

```
<wsdl:operation name="AddComment" xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
    wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
    ServerInternalService/IPptEdit/AddComment" message="tns4:IPptEdit_AddComment_InputMessage"
    xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
    wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
    ServerInternalService/IPptEdit/AddCommentResponse"
    message="tns4:IPptEdit_AddComment_OutputMessage"
    xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```

The protocol client sends an **IPptEdit_AddComment_InputMessage** request message, and the protocol server responds with an **IPptEdit_AddComment_OutputMessage** response message

3.1.4.49.1 Messages

The following table summarizes the set of WSDL message definitions that are specific to this operation.

Message	Description
IPptEdit_AddComment_InputMessage	The request WSDL message for the AddComment WSDL operation.
IPptEdit_AddComment_OutputMessage	The response WSDL message for the AddComment WSDL operation.

3.1.4.49.1.1 IPptEdit_AddComment_InputMessage

The request WSDL message for the **AddComment** WSDL operation.

The SOAP action value is:

```
http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEditServerInternalService/IPptEdit/AddComment
```

The SOAP body contains the **AddComment** element.

3.1.4.49.1.2 IPptEdit_AddComment_OutputMessage

The response WSDL message for the **AddComment** WSDL operation.

The SOAP body contains the **AddCommentResponse** element.

3.1.4.49.2 Elements

The following table summarizes the XML schema element definitions that are specific to this operation.

Element	Description
AddComment	The input data for the AddComment WSDL operation.
AddCommentResponse	The result data for the AddComment WSDL operation.

3.1.4.49.2.1 AddComment

The input data for the **AddComment** WSDL operation.

```
<xs:element name="AddComment" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="presentationId" nillable="true" type="xs:string"/>
      <xs:element minOccurs="0" name="slideId" type="xs:unsignedInt"/>
      <xs:element minOccurs="0" name="text" nillable="true" type="xs:string"/>
      <xs:element minOccurs="0" name="timeZoneBias" type="xs:int"/>
      <xs:element minOccurs="0" name="parentAuthor" type="xs:int"/>
      <xs:element minOccurs="0" name="parentIndex" type="xs:int"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

presentationId: An **xs:string** ([\[XMLSCHEMA2\]](#) section 3.2.1) that specifies the identifier of the presentation, as specified in section [3.1.4.11](#).

slideId: An **ST_SlideId** ([\[ISO/IEC-29500-1\]](#) section 19.7.13) that specifies the identifier of the presentation slide containing the comment that is being modified.

text: An **xs:string** ([\[XMLSCHEMA2\]](#) section 3.2.1) that specifies the contents of the comment.

timeZoneBias: An **xs:int** ([\[XMLSCHEMA2\]](#) section 3.3.17) that specifies the difference between the local time of the user and UTC, in minutes.

parentAuthor: An **xs:int** ([\[XMLSCHEMA2\]](#) section 3.3.17) that specifies the identifier of the author of another comment. If this comment is not a reply, the value MUST be -1.

parentIndex: An **xs:int** ([\[XMLSCHEMA2\]](#) section 3.3.17) that specifies the identifier of another comment. If this comment is not a reply, the value MUST be -1.

3.1.4.49.2.2 AddCommentResponse

The result data for the **AddComment** WSDL operation.

```
<xs:element name="AddCommentResponse" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
```

```

        <xs:element xmlns:tns2="http://schemas.datacontract.org/2004/07/p" minOccurs="0"
name="AddCommentResult" nillable="true" type="tns2:ServiceResult"/>
    </xs:sequence>
</xs:complexType>
</xs:element>

```

AddCommentResult: A [ServiceResult](#) that specifies the result of the operation. The **Result** child element MUST be an [EditCommandResponse](#).

3.1.4.49.3 Complex Types

None.

3.1.4.49.4 Simple Types

None.

3.1.4.49.5 Attributes

None.

3.1.4.49.6 Groups

None.

3.1.4.49.7 Attribute Groups

None.

3.1.4.50 DeleteComment

The **DeleteComment** operation SHOULD [<97>](#) be used to delete a comment from a presentation.

```

<wsdl:operation name="DeleteComment" xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/DeleteComment"
message="tns4:IPptEdit_DeleteComment_InputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/DeleteCommentResponse"
message="tns4:IPptEdit_DeleteComment_OutputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>

```

The protocol client sends an **IPptEdit_DeleteComment_InputMessage** request message, and the protocol server responds with an **IPptEdit_DeleteComment_OutputMessage** response message

3.1.4.50.1 Messages

The following table summarizes the set of WSDL message definitions that are specific to this operation.

Message	Description
IPptEdit_DeleteComment_InputMessage	The request WSDL message for the DeleteComment WSDL operation.
IPptEdit_DeleteComment_OutputMessage	The response WSDL message for the DeleteComment WSDL operation.

3.1.4.50.1.1 IPptEdit_DeleteComment_InputMessage

The request WSDL message for the **DeleteComment** WSDL operation.

The SOAP action value is:

```
http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEditServerInternalService/IPptEdit/DeleteComment
```

The SOAP body contains the **DeleteComment** element.

3.1.4.50.1.2 IPptEdit_DeleteComment_OutputMessage

The response WSDL message for the **DeleteComment** WSDL operation.

The SOAP body contains the **DeleteCommentResponse** element.

3.1.4.50.2 Elements

The following table summarizes the XML schema element definitions that are specific to this operation.

Element	Description
DeleteComment	The input data for the DeleteComment WSDL operation.
DeleteCommentResponse	The result data for the DeleteComment WSDL operation.

3.1.4.50.2.1 DeleteComment

The input data for the **DeleteComment** WSDL operation.

```
<xs:element name="DeleteComment" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="presentationId" nillable="true" type="xs:string"/>
      <xs:element minOccurs="0" name="slideId" type="xs:unsignedInt"/>
      <xs:element minOccurs="0" name="authorId" type="xs:unsignedInt"/>
      <xs:element minOccurs="0" name="index" type="xs:unsignedInt"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

presentationId: An **xs:string** ([XMLSCHEMA2](#) section 3.2.1) that specifies the identifier of the presentation, as specified in section [3.1.4.11](#).

slideId: An **ST_SlideId** ([\[ISO/IEC-29500-1\]](#) section 19.7.13) that specifies the identifier of the presentation slide containing the comment that is being deleted.

authorId: An **xs:unsignedInt** ([\[XMLSCHEMA2\]](#) section 3.3.22) that specifies the identifier of the author of the comment.

index: An **xs:unsignedInt** ([\[XMLSCHEMA2\]](#) section 3.3.22) that specifies the identifier of the comment within its author's comments.

3.1.4.50.2.2 DeleteCommentResponse

The result data for the **DeleteComment** WSDL operation.

```
<xs:element name="DeleteCommentResponse" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:tns2="http://schemas.datacontract.org/2004/07/p" minOccurs="0"
name="DeleteCommentResult" nillable="true" type="tns2:ServiceResult"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

DeleteCommentResult: A [ServiceResult](#) that specifies the result of the operation. The **Result** child element MUST be an [EditCommandResponse](#).

3.1.4.50.3 Complex Types

None.

3.1.4.50.4 Simple Types

None.

3.1.4.50.5 Attributes

None.

3.1.4.50.6 Groups

None.

3.1.4.50.7 Attribute Groups

None.

3.1.4.51 EditComment

The **EditComment** operation SHOULD [<98>](#) be used to change the contents of a comment in a presentation

```
<wsdl:operation name="EditComment" xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/EditComment" message="tns4:IPptEdit_EditComment_InputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
```

```

<wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/EditCommentResponse"
message="tns4:IPptEdit_EditComment_OutputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>

```

The protocol client sends an **IPptEdit_EditComment_InputMessage** request message, and the protocol server responds with an **IPptEdit_EditComment_OutputMessage** response message.

3.1.4.51.1 Messages

The following table summarizes the set of WSDL message definitions that are specific to this operation.

Message	Description
IPptEdit_EditComment_InputMessage	The request WSDL message for the EditComment WSDL operation.
IPptEdit_EditComment_OutputMessage	The response WSDL message for the EditComment WSDL operation.

3.1.4.51.1.1 IPptEdit_EditComment_InputMessage

The request WSDL message for the **EditComment** WSDL operation.

The SOAP action value is:

```

http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEditServerInternalService/IPptEdit/EditComment

```

The SOAP body contains the **EditComment** element.

3.1.4.51.1.2 IPptEdit_EditComment_OutputMessage

The response WSDL message for the **EditComment** WSDL operation.

The SOAP body contains the **EditCommentResponse** element.

3.1.4.51.2 Elements

The following table summarizes the XML schema element definitions that are specific to this operation.

Element	Description
EditComment	The input data for the EditComment WSDL operation.
EditCommentResponse	The result data for the EditComment WSDL operation.

3.1.4.51.2.1 EditComment

The input data for the **EditComment** WSDL operation.

```

<xs:element name="EditComment" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="presentationId" nillable="true" type="xs:string"/>
      <xs:element minOccurs="0" name="slideId" type="xs:unsignedInt"/>
      <xs:element minOccurs="0" name="text" nillable="true" type="xs:string"/>
      <xs:element minOccurs="0" name="authorId" type="xs:unsignedInt"/>
      <xs:element minOccurs="0" name="index" type="xs:unsignedInt"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>

```

presentationId: An **xs:string** ([\[XMLSCHEMA2\]](#) section 3.2.1) that specifies the identifier of the presentation, as specified in section [3.1.4.11](#).

slideId: An **ST_SlideId** ([\[ISO/IEC-29500-1\]](#) section 19.7.13) that specifies the identifier of the presentation slide containing the comment that is being modified.

text: An **xs:string** ([\[XMLSCHEMA2\]](#) section 3.2.1) that specifies the new contents of the comment.

authorId: An **xs:unsignedInt** ([\[XMLSCHEMA2\]](#) section 3.3.22) that specifies the identifier of the author of the comment.

index: An **xs:unsignedInt** ([\[XMLSCHEMA2\]](#) section 3.3.22) that specifies the identifier of the comment within its author's comments.

3.1.4.51.2.2 EditCommentResponse

The result data for the **EditComment** WSDL operation.

```

<xs:element name="EditCommentResponse" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:tns2="http://schemas.datacontract.org/2004/07/p" minOccurs="0"
name="EditCommentResult" nillable="true" type="tns2:ServiceResult"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>

```

EditCommentResult: A [ServiceResult](#) that specifies the result of the operation. The **Result** child element MUST be an [EditCommandResponse](#).

3.1.4.51.3 Complex Types

None.

3.1.4.51.4 Simple Types

None.

3.1.4.51.5 Attributes

None.

3.1.4.51.6 Groups

None.

3.1.4.51.7 Attribute Groups

None.

3.1.4.52 MoveComment

The **MoveComment** operation SHOULD [<99>](#) be used to change the position of a comment in a presentation.

```
<wsdl:operation name="MoveComment" xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
    wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
    ServerInternalService/IPptEdit/MoveComment" message="tns4:IPptEdit_MoveComment_InputMessage"
    xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
    wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
    ServerInternalService/IPptEdit/MoveCommentResponse"
    message="tns4:IPptEdit_MoveComment_OutputMessage"
    xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```

The protocol client sends an **IPptEdit_MoveComment_InputMessage** request message, and the protocol server responds with an **IPptEdit_MoveComment_OutputMessage** response message.

3.1.4.52.1 Messages

The following table summarizes the set of WSDL message definitions that are specific to this operation.

Message	Description
IPptEdit_MoveComment_InputMessage	The request WSDL message for the MoveComment WSDL operation.
IPptEdit_MoveComment_OutputMessage	The response WSDL message for the MoveComment WSDL operation.

3.1.4.52.1.1 IPptEdit_MoveComment_InputMessage

The request WSDL message for the **MoveComment** WSDL operation.

The SOAP action value is:

```
http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEditServerInternalService/IPptEdit/MoveComment
```

The SOAP body contains the **MoveComment** element.

3.1.4.52.1.2 IPptEdit_MoveComment_OutputMessage

The response WSDL message for the **MoveComment** WSDL operation.

The SOAP body contains the **MoveCommentResponse** element.

3.1.4.52.2 Elements

The following table summarizes the XML schema element definitions that are specific to this operation.

Element	Description
MoveComment	The input data for the MoveComment WSDL operation.
MoveCommentResponse	The result data for the MoveComment WSDL operation.

3.1.4.52.2.1 MoveComment

The input data for the **MoveComment** WSDL operation.

```
<xs:element name="MoveComment" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="presentationId" nillable="true" type="xs:string"/>
      <xs:element minOccurs="0" name="slideId" type="xs:unsignedInt"/>
      <xs:element minOccurs="0" name="authorId" type="xs:unsignedInt"/>
      <xs:element minOccurs="0" name="index" type="xs:unsignedInt"/>
      <xs:element minOccurs="0" name="x" type="xs:double"/>
      <xs:element minOccurs="0" name="y" type="xs:double"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

presentationId: An **xs:string** ([\[XMLSCHEMA2\]](#) section 3.2.1) that specifies the identifier of the presentation, as specified in section [3.1.4.11](#).

slideId: An **ST_SlideId** ([\[ISO/IEC-29500-1\]](#) section 19.7.13) that specifies the identifier of the presentation slide containing the comment that is being modified.

authorId: An **xs:unsignedInt** ([\[XMLSCHEMA2\]](#) section 3.3.22) that specifies the identifier of the author of the comment.

index: An **xs:unsignedInt** ([\[XMLSCHEMA2\]](#) section 3.3.22) that specifies the identifier of the comment within its author's comments.

x: An **xs:double** ([\[XMLSCHEMA2\]](#) section 3.3.5) that specifies the new x coordinate of the comment.

y: An **xs:double** ([\[XMLSCHEMA2\]](#) section 3.3.5) that specifies the new y coordinate of the comment.

3.1.4.52.2.2 MoveCommentResponse

The result data for the **MoveComment** WSDL operation.

```
<xs:element name="MoveCommentResponse" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
```

```

    <xs:element xmlns:tns2="http://schemas.datacontract.org/2004/07/p" minOccurs="0"
name="MoveCommentResult" nillable="true" type="tns2:ServiceResult"/>
  </xs:sequence>
</xs:complexType>
</xs:element>

```

MoveCommentResult: A [ServiceResult](#) that specifies the result of the operation. The **Result** child element MUST be an [EditCommandResponse](#).

3.1.4.52.3 Complex Types

None.

3.1.4.52.4 Simple Types

None.

3.1.4.52.5 Attributes

None.

3.1.4.52.6 Groups

None.

3.1.4.52.7 Attribute Groups

None.

3.1.4.53 SetTransitionApplyAll

The **SetTransitionApplyAll** operation SHOULD [<100>](#) be used to copy a transition from one slide and apply it to all other slides in a presentation.

```

<wsdl:operation name="SetTransitionApplyAll" xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/SetTransitionApplyAll"
message="tns4:IPptEdit_SetTransitionApplyAll_InputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/SetTransitionApplyAllResponse"
message="tns4:IPptEdit_SetTransitionApplyAll_OutputMessage"
xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>

```

The protocol client sends an **IPptEdit_SetTransitionApplyAll_InputMessage** request message, and the protocol server responds with an **IPptEdit_SetTransitionApplyAll_OutputMessage** response message.

3.1.4.53.1 Messages

The following table summarizes the set of WSDL message definitions that are specific to this operation.

Message	Description
IPptEdit_SetTransitionApplyAll_InputMessage	The request WSDL message for the SetTransitionApplyAll WSDL operation.
IPptEdit_SetTransitionApplyAll_OutputMessage	The response WSDL message for the SetTransitionApplyAll WSDL operation.

3.1.4.53.1.1 IPptEdit_SetTransitionApplyAll_InputMessage

The request WSDL message for the **SetTransitionApplyAll** WSDL operation.

The SOAP action value is:

```
http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEditServerInternalService/IPptEdit/SetTransitionApplyAll
```

The SOAP body contains the **SetTransitionApplyAll** element.

3.1.4.53.1.2 IPptEdit_SetTransitionApplyAll_OutputMessage

The response WSDL message for the **SetTransitionApplyAll** WSDL operation.

The SOAP body contains the **SetTransitionApplyAllResponse** element.

3.1.4.53.2 Elements

The following table summarizes the XML schema element definitions that are specific to this operation.

Element	Description
SetTransitionApplyAll	The input data for the SetTransitionApplyAll WSDL operation.
SetTransitionApplyAllResponse	The result data for the SetTransitionApplyAll WSDL operation.

3.1.4.53.2.1 SetTransitionApplyAll

The input data for the **SetTransitionApplyAll** WSDL operation.

```
<xs:element name="SetTransitionApplyAll" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="presentationId" nillable="true" type="xs:string"/>
      <xs:element minOccurs="0" name="slideId" type="xs:unsignedInt"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

presentationId: An **xs:string** ([\[XMLSCHEMA2\]](#) section 3.2.1) that specifies the identifier of the presentation, as specified in section [3.1.4.11](#).

slideId: An **ST_SlideId** ([\[ISO/IEC-29500-1\]](#) section 19.7.13) that specifies the identifier of the presentation slide containing the transition to be copied.

3.1.4.53.2 SetTransitionApplyAllResponse

The result data for the **SetTransitionApplyAll** WSDL operation.

```
<xs:element name="SetTransitionApplyAllResponse" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:tns2="http://schemas.datacontract.org/2004/07/p" minOccurs="0"
        name="SetTransitionApplyAllResult" nillable="true" type="tns2:ServiceResult"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

SetTransitionApplyAllResult: A [ServiceResult](#) that specifies the result of the operation. The **Result** child element MUST be an [EditCommandResponse](#).

3.1.4.53.3 Complex Types

None.

3.1.4.53.4 Simple Types

None.

3.1.4.53.5 Attributes

None.

3.1.4.53.6 Groups

None.

3.1.4.53.7 Attribute Groups

None.

3.1.4.54 ResetPicture

The **ResetPicture** operation SHOULD [<101>](#) be used to remove all customizations on a picture in a presentation.

```
<wsdl:operation name="ResetPicture" xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:input
    wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
    ServerInternalService/IPptEdit/ResetPicture"
    message="tns4:IPptEdit_ResetPicture_InputMessage"
    xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
  <wsdl:output
    wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
    ServerInternalService/IPptEdit/ResetPictureResponse"
    message="tns4:IPptEdit_ResetPicture_OutputMessage"
    xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"/>
</wsdl:operation>
```

The protocol client sends an **IPptEdit_ResetPicture_InputMessage** request message, and the protocol server responds with an **IPptEdit_ResetPicture_OutputMessage** response message.

3.1.4.54.1 Messages

The following table summarizes the set of WSDL message definitions that are specific to this operation.

Message	Description
IPptEdit_ResetPicture_InputMessage	The request WSDL message for the ResetPicture WSDL operation.
IPptEdit_ResetPicture_OutputMessage	The response WSDL message for the ResetPicture WSDL operation.

3.1.4.54.1.1 IPptEdit_ResetPicture_InputMessage

The request WSDL message for the **ResetPicture** WSDL operation.

The SOAP action value is:

```
http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEditServerInternalService/IPptEdit/ResetPicture
```

The SOAP body contains the **ResetPicture** element.

3.1.4.54.1.2 IPptEdit_ResetPicture_OutputMessage

The response WSDL message for the **ResetPicture** WSDL operation.

The SOAP body contains the **ResetPictureResponse** element.

3.1.4.54.2 Elements

The following table summarizes the XML schema element definitions that are specific to this operation.

Element	Description
ResetPicture	The input data for the ResetPicture WSDL operation.
ResetPictureResponse	The result data for the ResetPicture WSDL operation.

3.1.4.54.2.1 ResetPicture

The input data for the **ResetPicture** WSDL operation.

```
<xs:element name="ResetPicture" xmlns:xs="http://www.w3.org/2001/XMLSchema">  
  <xs:complexType>  
    <xs:sequence>  
      <xs:element minOccurs="0" name="presentationId" nillable="true" type="xs:string"/>  
      <xs:element minOccurs="0" name="slideId" type="xs:unsignedInt"/>  
      <xs:element minOccurs="0" name="shapeId" type="xs:unsignedInt"/>  
    </xs:sequence>  
  </xs:complexType>  
</xs:element>
```

```
</xs:sequence>
</xs:complexType>
</xs:element>
```

presentationId: An **xs:string** ([\[XMLSCHEMA2\]](#) section 3.2.1) that specifies the identifier of the presentation, as specified in section [3.1.4.11](#).

slideId: A **ST_SlideId** ([\[ISO/IEC-29500-1\]](#) section 19.7.13) that specifies the identifier of the presentation slide containing the picture that is being modified.

shapeId: An **ST_DrawingElementId** ([\[ISO/IEC-29500-1\]](#) section 20.1.10.21) that specifies the identifier of the picture that is being modified.

3.1.4.54.2.2 ResetPictureResponse

The result data for the **ResetPicture** WSDL operation.

```
<xs:element name="ResetPictureResponse" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:tns2="http://schemas.datacontract.org/2004/07/p" minOccurs="0"
name="ResetPictureResult" nillable="true" type="tns2:ServiceResult"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
```

ResetPictureResult: A [ServiceResult](#) that specifies the result of the operation. The **Result** child element MUST be an [EditCommandResponse](#).

3.1.4.54.3 Complex Types

None.

3.1.4.54.4 Simple Types

None.

3.1.4.54.5 Attributes

None.

3.1.4.54.6 Groups

None.

3.1.4.54.7 Attribute Groups

None.

3.1.5 Timer Events

None.

3.1.6 Other Local Events

None.

Preliminary

4 Protocol Examples

The following example contains a sample interaction between the protocol client and the protocol server.

4.1 Sample Protocol Interaction

In this example, the protocol client sends a request to the protocol server for the identifier of a presentation. The following **IPptEdit_GetPresentationId_InputMessage** message is sent to the protocol server:

```
<s:Envelope xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
  <s:Body>
    <GetPresentationId
      xmlns="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEditServer
      InternalService/">
      <rawDocId>http://protocolserver/Shared
      Documents/MSPWEDPSEexample.pptx</rawDocId></GetPresentationId>
    </s:Body>
  </s:Envelope>
```

The protocol server responds with the appropriate identifier for the presentation. The following **IPptEdit_GetPresentationId_OutputMessage** message is sent to the protocol client:

```
<s:Envelope xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
  <s:Body><GetPresentationIdResponse
      xmlns="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEditServer
      InternalService/">
    <GetPresentationIdResult>d=F39bc64b0ef8e43c493bc0191f7fb5371m371f1619a41e40dd8a9a007e0723241f
    m568ced57b5cc4aeda74fff96066a8267m</GetPresentationIdResult></GetPresentationIdResponse>
  </s:Body>
</s:Envelope>
```

The response sent to the protocol client also contains the **canary** which is sent back as a **cookie** with the following name: "X-Key". This canary is sent with any subsequent operations to the protocol server that can modify the presentation.

Next, the protocol client sends a request to the protocol server for information about the presentation. The following **IPptEdit_GetEditPresInfo_InputMessage** message is sent to the protocol server:

```
<s:Envelope xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
  <s:Body><GetEditPresInfo
      xmlns="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEditServer
      InternalService/">
    <presentationId>d=F39bc64b0ef8e43c493bc0191f7fb5371m371f1619a41e40dd8a9a007e0723241fm568ced57
    b5cc4aeda74fff96066a8267m</presentationId>
    <firstSlideIndex>0</firstSlideIndex>
    <numSlides>10</numSlides>
    <includedEditSlideIndex>1</includedEditSlideIndex>
  </GetEditPresInfo>
  </s:Body>
</s:Envelope>
```

The protocol server responds with the appropriate information about the presentation. The following **IPptEdit_GetEditPresInfo_OutputMessage** message is sent to the protocol client:

```
<s:Envelope xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
  <s:Body>
    <GetEditPresInfoResponse
      xmlns="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEditServer
      InternalService/">
      <GetEditPresInfoResult xmlns:a="http://schemas.datacontract.org/2004/07/p"
        xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
        <a:Error i:nil="true"/>
        <a:Result i:type="a:EditPresentationInfo">
          <a:EditSlideInfos>
            <a:EditSlideInfoFe>
              <a:Hidden>>false</a:Hidden>
              <a:Id>256</a:Id>
              <a:Thumb>
                <a:Alt i:nil="true"/>
                <a:Clip>
                  <a:Bottom>96</a:Bottom>
                  <a:Left>0</a:Left>
                  <a:Right>128</a:Right>
                  <a:Top>0</a:Top>
                </a:Clip>
                <a:Html i:nil="true"/>
                <a:Id>1</a:Id>
              </a:Thumb>
              <a:Title>Fancy Title</a:Title>
            </a:EditSlideInfoFe>
          </a:EditSlideInfos>
          <a:FirstSlideIndex>0</a:FirstSlideIndex>
          <a:HasComments>>false</a:HasComments>
          <a:MainMasters>
            <a:MainMasterFe>
              <a:ContentMasters>
                <a:ContentMasterFe>
                  <a:Id>2147483649</a:Id>
                  <a:Name>Title Slide</a:Name>
                  <a:SlideLayoutType>title</a:SlideLayoutType>
                </a:ContentMasterFe>
                <a:ContentMasterFe>
                  <a:Id>2147483650</a:Id>
                  <a:Name>Title and Content</a:Name>
                  <a:SlideLayoutType>obj</a:SlideLayoutType>
                </a:ContentMasterFe>
                <a:ContentMasterFe>
                  <a:Id>2147483651</a:Id>
                  <a:Name>Section Header</a:Name>
                  <a:SlideLayoutType>secHead</a:SlideLayoutType>
                </a:ContentMasterFe>
              </a:ContentMasters>
            </a:MainMasterFe>
          </a:MainMasters>
        </a:Result>
      </a:GetEditPresInfoResult>
    </a:GetEditPresInfoResponse>
  </s:Body>
</s:Envelope>
```

```

        <a:Id>2147483652</a:Id>
        <a:Name>Two Content</a:Name>
        <a:SlideLayoutType>twoObj</a:SlideLayoutType>
    </a:ContentMasterFe>
    <a:ContentMasterFe>
        <a:Id>2147483653</a:Id>
        <a:Name>Comparison</a:Name>
        <a:SlideLayoutType>twoTxTwoObj</a:SlideLayoutType>
    </a:ContentMasterFe>
    <a:ContentMasterFe>
        <a:Id>2147483654</a:Id>
        <a:Name>Title Only</a:Name>
        <a:SlideLayoutType>titleOnly</a:SlideLayoutType>
    </a:ContentMasterFe>
    <a:ContentMasterFe>
        <a:Id>2147483655</a:Id>
        <a:Name>Blank</a:Name>
        <a:SlideLayoutType>blank</a:SlideLayoutType>
    </a:ContentMasterFe>
    <a:ContentMasterFe>
        <a:Id>2147483656</a:Id>
        <a:Name>Content with Caption</a:Name>
        <a:SlideLayoutType>objTx</a:SlideLayoutType>
    </a:ContentMasterFe>
    <a:ContentMasterFe>
        <a:Id>2147483657</a:Id>
        <a:Name>Picture with Caption</a:Name>
        <a:SlideLayoutType>picTx</a:SlideLayoutType>
    </a:ContentMasterFe>
</a:ContentMasters>
<a:Id>2147483648</a:Id>
<a:InContent>>true</a:InContent>
<a:Name>Office Theme</a:Name>
</a>MainMasterFe>
</a>MainMasters>
<a:Redo>>false</a:Redo>
<a:Rtl>>false</a:Rtl>
<a:Size>
    <a:X>620</a:X>
    <a:Y>465</a:Y>
</a:Size>
<a:Slide i:nil="true"/>
<a:SlideOrder>
    <a:SlideIds
xmlns:b="http://schemas.microsoft.com/2003/10/Serialization/Arrays">
        <b:unsignedInt>256</b:unsignedInt>
    </a:SlideIds>
</a:SlideOrder>
<a:Undo>>false</a:Undo>
</a:Result>
</GetEditPresInfoResult></GetEditPresInfoResponse>
</s:Body>
</s:Envelope>

```

Next, the protocol client sends a request to the protocol server for information about a presentation slide. The identifier of the first slide is 256 that is specified by the first element of the **SlideOrder** element of the [EditPresentationInfo](#) element (section 2.2.4.13). The following **IPptEdit_GetEditSlide_InputMessage** message is sent to the protocol server:

```

<s:Envelope xmlns:s="http://schemas.xmlsoap.org/soap/envelope/"><s:Body><GetEditSlide
xmlns="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEditServer
InternalService/"><presentationId>d=F39bc64b0ef8e43c493bc0191f7fb5371m371f1619a41e40dd8a9a007
e0723241fm568ced57b5cc4aeda74fff96066a8267m</presentationId><slideId>256</slideId></GetEditSl
ide></s:Body></s:Envelope>

```

The protocol server responds with the appropriate information about the presentation slide. The following **IPptEdit_GetEditSlide_OutputMessage** message is sent to the protocol client:

```

<s:Envelope xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
  <s:Body>
    <GetEditSlideResponse
xmlns="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEditServer
InternalService/">
      <GetEditSlideResult xmlns:a="http://schemas.datacontract.org/2004/07/p"
xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
        <a:Error i:nil="true"/>
        <a:Result i:type="a:EditSlide">
          <a:ContentMasterId>2147483649</a:ContentMasterId>
          <a:EditShapes>
            <a:EditShape>
              <a:Alt i:nil="true"/>
              <a:EditBounds>
                <a:Bottom>140</a:Bottom>
                <a:Left>46</a:Left>
                <a:Right>573</a:Right>
                <a:Top>41</a:Top>
              </a:EditBounds>
              <a:EditHtml>&lt;div class=defaultPHStyles style='font-size:32.0px;font-
family:Calibri;color:#7293C9;text-align:center'&gt; &lt;/div&gt;&lt;p class=nonListPara
style='direction:ltr' lang=en-US style='language:en-US' align=center&gt;&lt;font size=6
face=Calibri color="#7293C9"&gt;&lt;span style='font-variant:normal;text-
transform:uppercase'&gt;&lt;b&gt;Fancy
Title&lt;/b&gt;&lt;/span&gt;&lt;/font&gt;&lt;/p&gt;</a:EditHtml>
              <a:FontSizeMapping>
                <a:Size1>12</a:Size1>
                <a:Size2>15</a:Size2>
                <a:Size3>19</a:Size3>
                <a:Size4>21</a:Size4>
                <a:Size5>28</a:Size5>
                <a:Size6>44</a:Size6>
                <a:Size7>56</a:Size7>
              </a:FontSizeMapping>
              <a:IsPicture>>false</a:IsPicture>
              <a:IsPlaceholder>>true</a:IsPlaceholder>
              <a:IsPrompt>>false</a:IsPrompt>
              <a:IsSmartArt>>false</a:IsSmartArt>
              <a:PlaceholderType>2</a:PlaceholderType>
              <a:ShapeId>2</a:ShapeId>
              <a:ShapeViewElemId>2</a:ShapeViewElemId>
              <a:SmartArtInfo i:nil="true"/>
              <a:TextViewElemId>3</a:TextViewElemId>
            </a:EditShape>
            <a:EditShape>
              <a:Alt i:nil="true"/>
              <a:EditBounds>
                <a:Bottom>340</a:Bottom>
                <a:Left>25</a:Left>
                <a:Right>459</a:Right>

```

```

    <a:Top>222</a:Top>
  </a:EditBounds>
  <a:EditHtml>&lt;div class=defaultPHStyles style='font-size:24.0px;font-
family:Calibri;color:#1F497D;text-align:center'&gt; &lt;/div&gt;&lt;p class=nonListPara
style='direction:ltr' lang=en-US style='language:en-US' align=center&gt;&lt;font size=5
face=Calibri color="#1F497D'&gt;Boring subtitle&lt;/font&gt;&lt;/p&gt;</a:EditHtml>
  <a:FontSizeMapping>
    <a:Size1>12</a:Size1>
    <a:Size2>20</a:Size2>
    <a:Size3>24</a:Size3>
    <a:Size4>28</a:Size4>
    <a:Size5>32</a:Size5>
    <a:Size6>37</a:Size6>
    <a:Size7>56</a:Size7>
  </a:FontSizeMapping>
  <a:IsPicture>>false</a:IsPicture>
  <a:IsPlaceholder>>true</a:IsPlaceholder>
  <a:IsPrompt>>false</a:IsPrompt>
  <a:IsSmartArt>>false</a:IsSmartArt>
  <a:PlaceholderType>3</a:PlaceholderType>
  <a:ShapeId>3</a:ShapeId>
  <a:ShapeViewElemId>0</a:ShapeViewElemId>
  <a:SmartArtInfo i:nil="true"/>
  <a:TextViewElemId>4</a:TextViewElemId>
</a:EditShape>
</a:EditShapes>
<a:Hidden>>false</a:Hidden>
<a:IsTitleContentMaster>>true</a:IsTitleContentMaster>
<a:MainMasterId>2147483648</a:MainMasterId>
<a:Notes>
  <a:Html>
    <a:Text>&lt;p class=nonListPara style='direction:ltr' lang=en-US
style='language:en-US' align=left&gt;&lt;font face=Calibri&gt;&lt;img width=1 height=10
style='visibility:hidden'&gt;&lt;/font&gt;&lt;/p&gt;</a:Text>
  </a:Html>
  <a:IsPrompt>>true</a:IsPrompt>
</a:Notes>
<a:SlideId>256</a:SlideId>
<a:Theme>
  <a:Accent1>
    <a:b>189</a:b>
    <a:g>129</a:g>
    <a:r>79</a:r>
  </a:Accent1>
  <a:Accent2>
    <a:b>77</a:b>
    <a:g>80</a:g>
    <a:r>192</a:r>
  </a:Accent2>
  <a:Accent3>
    <a:b>89</a:b>
    <a:g>187</a:g>
    <a:r>155</a:r>
  </a:Accent3>
  <a:Accent4>
    <a:b>162</a:b>
    <a:g>100</a:g>
    <a:r>128</a:r>
  </a:Accent4>

```

```

<a:Accent5>
  <a:b>198</a:b>
  <a:g>172</a:g>
  <a:r>75</a:r>
</a:Accent5>
<a:Accent6>
  <a:b>70</a:b>
  <a:g>150</a:g>
  <a:r>247</a:r>
</a:Accent6>
<a:Dark1>
  <a:b>0</a:b>
  <a:g>0</a:g>
  <a:r>0</a:r>
</a:Dark1>
<a:Dark2>
  <a:b>125</a:b>
  <a:g>73</a:g>
  <a:r>31</a:r>
</a:Dark2>
<a:Light1>
  <a:b>255</a:b>
  <a:g>255</a:g>
  <a:r>255</a:r>
</a:Light1>
<a:Light2>
  <a:b>225</a:b>
  <a:g>236</a:g>
  <a:r>238</a:r>
</a:Light2>
</a:Theme>
<a:ThumbnailViewElement>
  <a:Alt i:nil="true"/>
  <a:Clip>
    <a:Bottom>96</a:Bottom>
    <a:Left>0</a:Left>
    <a:Right>128</a:Right>
    <a:Top>0</a:Top>
  </a:Clip>
  <a:Html i:nil="true"/>
  <a:Id>1</a:Id>

<a:ImgId>./editImageHandler.ashx?Pid=d%3DF39bc64b0ef8e43c493bc0191f7fb5371m371f1619a41e40dd8a
9a007e0723241fm568ced57b5cc4aeda74fff96066a8267m&amp;Rid=14tvmylk%2Ed4e%2Epng</a:ImgId>
  <a:Position>
    <a:X>0</a:X>
    <a:Y>0</a:Y>
  </a:Position>
  <a:Z>0</a:Z>
</a:ThumbnailViewElement>
<a:ViewElems>
  <a:ViewElement>
    <a:Alt/>
    <a:Clip>
      <a:Bottom>205</a:Bottom>
      <a:Left>0</a:Left>
      <a:Right>407</a:Right>
      <a:Top>0</a:Top>
    </a:Clip>

```

```
<a:Html i:nil="true"/>
<a:Id>2</a:Id>

<a:ImgId>./editImageHandler.ashx?Pid=d%3DF39bc64b0ef8e43c493bc0191f7fb5371m371f1619a41e40dd8a
9a007e0723241fm568ced57b5cc4aeda74fff96066a8267m&amp;Rid=yvkqezlr%2Esms%2Epng</a:ImgId>
  <a:Position>
    <a:X>149</a:X>
    <a:Y>8</a:Y>
  </a:Position>
  <a:Z>1</a:Z>
</a:ViewElement>
<a:ViewElement>
  <a:Alt i:nil="true"/>
  <a:Clip>
    <a:Bottom>74</a:Bottom>
    <a:Left>407</a:Left>
    <a:Right>547</a:Right>
    <a:Top>0</a:Top>
  </a:Clip>
  <a:Html i:nil="true"/>
  <a:Id>3</a:Id>

<a:ImgId>./editImageHandler.ashx?Pid=d%3DF39bc64b0ef8e43c493bc0191f7fb5371m371f1619a41e40dd8a
9a007e0723241fm568ced57b5cc4aeda74fff96066a8267m&amp;Rid=yvkqezlr%2Esms%2Epng</a:ImgId>
  <a:Position>
    <a:X>245</a:X>
    <a:Y>66</a:Y>
  </a:Position>
  <a:Z>2</a:Z>
</a:ViewElement>
<a:ViewElement>
  <a:Alt i:nil="true"/>
  <a:Clip>
    <a:Bottom>24</a:Bottom>
    <a:Left>547</a:Left>
    <a:Right>708</a:Right>
    <a:Top>0</a:Top>
  </a:Clip>
  <a:Html i:nil="true"/>
  <a:Id>4</a:Id>

<a:ImgId>./editImageHandler.ashx?Pid=d%3DF39bc64b0ef8e43c493bc0191f7fb5371m371f1619a41e40dd8a
9a007e0723241fm568ced57b5cc4aeda74fff96066a8267m&amp;Rid=yvkqezlr%2Esms%2Epng</a:ImgId>
  <a:Position>
    <a:X>163</a:X>
    <a:Y>232</a:Y>
  </a:Position>
  <a:Z>5</a:Z>
</a:ViewElement>
<a:ViewElement>
  <a:Alt i:nil="true"/>
  <a:Clip i:nil="true"/>
  <a:Html>&lt;div
style="position:absolute;top:0px;left:0px;width:620px;height:465px;background-
color:#FFFFFF"/&gt;</a:Html>
  <a:Id>0</a:Id>
  <a:ImgId i:nil="true"/>
  <a:Position>
    <a:X>0</a:X>
    <a:Y>0</a:Y>
```

```

        </a:Position>
        <a:Z>0</a:Z>
    </a:ViewElement>
</a:ViewElems>
</a:Result>
</GetEditSlideResult>
</GetEditSlideResponse>
</s:Body>
</s:Envelope>

```

Next, the protocol client sends a request to the protocol server to modify the text of a shape on the presentation slide that was referenced in the previous step. The identifier of the shape, 2, is specified by the **SlideId** element of the first element in the **EditShapes** element of the [EditSlide](#) element (section [2.2.4.15](#)). The following **IPptEdit_ReplaceText_InputMessage** message is sent to the protocol server:

```

<s:Envelope xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
  <s:Body>
    <ReplaceText
      xmlns="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEditServer
      InternalService/">
      <presentationId>d=F39bc64b0ef8e43c493bc0191f7fb5371m371f1619a41e40dd8a9a007e0723241fm568ced57
      b5cc4aeda74fff96066a8267m</presentationId>
      <slideId>256</slideId>
      <shapeId>2</shapeId>
      <newText>&lt;p class=nonListPara style='direction:ltr' lang=en-US style='language:en-
      US' align=center&gt;&lt;font size=6 face=Calibri color="#7293C9"&gt;&lt;span style='font-
      variant:normal;text-transform:uppercase' &gt;&lt;b&gt;Fancy Title with
      3d.&lt;/b&gt;&lt;/span&gt;&lt;/font&gt;&lt;/p&gt;</newText>
    </ReplaceText>
  </s:Body>
</s:Envelope>

```

The protocol server responds with the result of the operation. The following **IPptEdit_ReplaceText_OutputMessage** message is sent to the protocol client:

```

<s:Envelope xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
  <s:Body>
    <ReplaceTextResponse
      xmlns="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEditServer
      InternalService/">
      <ReplaceTextResult xmlns:a="http://schemas.datacontract.org/2004/07/p"
      xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
        <a:Error i:nil="true"/>
        <a:Result i:type="a:EditCommandResponse">
          <a:PresChanges>
            <a:AddedSlideInfos/>
            <a:AddedSlides/>
            <a:MainMasterIds i:nil="true"/>
            <a:ModifiedSlides>
              <a:EditSlideChanges>
                <a:DelElems
                  xmlns:b="http://schemas.microsoft.com/2003/10/Serialization/Arrays"/>
                <a:Elems>
                  <a:ViewElement>
                    <a:Alt/>

```



```

<a:Clip>
  <a:Bottom>205</a:Bottom>
  <a:Left>0</a:Left>
  <a:Right>407</a:Right>
  <a:Top>0</a:Top>
</a:Clip>
<a:Html i:nil="true"/>
<a:Id>2</a:Id>

<a:ImgId>./editImageHandler.ashx?Pid=d%3DF39bc64b0ef8e43c493bc0191f7fb5371m371f1619a41e40dd8a
9a007e0723241fm568ced57b5cc4aeda74fff96066a8267m&amp;Rid=iv0q3epq%2Edro%2Epng</a:ImgId>
  <a:Position>
    <a:X>149</a:X>
    <a:Y>8</a:Y>
  </a:Position>
  <a:Z>1</a:Z>
</a:ViewElement>
<a:ViewElement>
  <a:Alt i:nil="true"/>
  <a:Clip>
    <a:Bottom>102</a:Bottom>
    <a:Left>407</a:Left>
    <a:Right>659</a:Right>
    <a:Top>0</a:Top>
  </a:Clip>
  <a:Html i:nil="true"/>
  <a:Id>3</a:Id>

<a:ImgId>./editImageHandler.ashx?Pid=d%3DF39bc64b0ef8e43c493bc0191f7fb5371m371f1619a41e40dd8a
9a007e0723241fm568ced57b5cc4aeda74fff96066a8267m&amp;Rid=iv0q3epq%2Edro%2Epng</a:ImgId>
  <a:Position>
    <a:X>199</a:X>
    <a:Y>55</a:Y>
  </a:Position>
  <a:Z>2</a:Z>
</a:ViewElement>
</a:Elms>
<a:Hidden>>false</a:Hidden>
<a:Id>256</a:Id>
<a:ModifiedShapes>
  <a>EditShape>
    <a:Alt i:nil="true"/>
    <a>EditBounds>
      <a:Bottom>140</a:Bottom>
      <a:Left>46</a:Left>
      <a:Right>573</a:Right>
      <a:Top>41</a:Top>
    </a>EditBounds>
    <a>EditHtml>&lt;div class=defaultPHStyles style='font-size:32.0px;font-
family:Calibri;color:#7293C9;text-align:center'&gt; &lt;/div&gt;&lt;p class=nonListPara
style='direction:ltr' lang=en-US style='language=en-US' align=center&gt;&lt;font size=6
face=Calibri color="#7293C9'&gt;&lt;span style='font-variant:normal;text-
transform:uppercase'&gt;&lt;b&gt;Fancy Title with
3d.&lt;/b&gt;&lt;/span&gt;&lt;/font&gt;&lt;/p&gt;</a>EditHtml>
  <a:FontSizeMapping>
    <a:Size1>12</a:Size1>
    <a:Size2>15</a:Size2>
    <a:Size3>19</a:Size3>
    <a:Size4>21</a:Size4>
    <a:Size5>28</a:Size5>

```

```

        <a:Size6>44</a:Size6>
        <a:Size7>56</a:Size7>
    </a:FontSizeMapping>
    <a:IsPicture>>false</a:IsPicture>
    <a:IsPlaceholder>>true</a:IsPlaceholder>
    <a:IsPrompt>>false</a:IsPrompt>
    <a:IsSmartArt>>false</a:IsSmartArt>
    <a:PlaceholderType>2</a:PlaceholderType>
    <a:ShapeId>2</a:ShapeId>
    <a:ShapeViewElemId>2</a:ShapeViewElemId>
    <a:SmartArtInfo i:nil="true"/>
    <a:TextViewElemId>3</a:TextViewElemId>
</a>EditShape>
</a:ModifiedShapes>
<a:Notes i:nil="true"/>
<a:Refresh>>false</a:Refresh>
<a:Thumb>
    <a:Alt i:nil="true"/>
    <a:Clip>
        <a:Bottom>96</a:Bottom>
        <a:Left>659</a:Left>
        <a:Right>787</a:Right>
        <a:Top>0</a:Top>
    </a:Clip>
    <a:Html i:nil="true"/>
    <a:Id>5</a:Id>
<a:ImgId>./editImageHandler.ashx?Pid=d%3DF39bc64b0ef8e43c493bc0191f7fb5371m371f1619a41e40dd8a
9a007e0723241fm568ced57b5cc4aeda74fff96066a8267m&amp;Rid=iv0q3epq%2Edro%2Epng</a:ImgId>
    <a:Position>
        <a:X>0</a:X>
        <a:Y>0</a:Y>
    </a:Position>
    <a:Z>0</a:Z>
</a:Thumb>
    <a:Title>Fancy Title with 3d.</a:Title>
</a>EditSlideChanges>
</a:ModifiedSlides>
<a:Redo>>false</a:Redo>
<a:SlideOrder i:nil="true"/>
<a:Undo>>true</a:Undo>
</a:PresChanges>
</a:Result>
</ReplaceTextResult>
</ReplaceTextResponse>
</s:Body>
</s:Envelope>

```

Finally, the protocol client sends a request to the protocol server to save the changes made to the presentation and end the session. The following **IPptEdit_SaveAndClose_InputMessage** message is sent to the protocol server:

```

<s:Envelope xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
  <s:Body>
    <SaveAndClose
      xmlns="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEditServer
      InternalService/">

```

```
<presentationId>d=F39bc64b0ef8e43c493bc0191f7fb5371m371f1619a41e40dd8a9a007e0723241fmc8e360c
9a82447c9a2ce13a5987d49cm</presentationId>
  <fReleaseLock>true</fReleaseLock>
  <fWaitForSave>true</fWaitForSave>
</SaveAndClose>
</s:Body>
</s:Envelope>
```

The protocol server responds with the result of the operation. The following **IPptEdit_SaveAndClose_OutputMessage** message is sent to the protocol client:

```
<s:Envelope xmlns:s="http://schemas.xmlsoap.org/soap/envelope/">
  <s:Body>
    <SaveAndCloseResponse
xmlns="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEditServer
InternalService/">
      <SaveAndCloseResult xmlns:a="http://schemas.datacontract.org/2004/07/p"
xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
        <a:Error i:nil="true"/>
        <a:Result i:type="a:EditCommandResponse">
          <a:PresChanges i:nil="true"/>
        </a:Result>
      </SaveAndCloseResult>
    </SaveAndCloseResponse>
  </s:Body>
</s:Envelope>
```

5 Security

5.1 Security Considerations for Implementers

The **Html** child element of [ViewElement](#), the **Html** child element of [Notes](#), and the **EditHtml** child element of [EditShape](#) contain [\[HTML\]](#) fragments. HTML fragments are susceptible to **cross-site scripting** attacks. Implementers are advised to sanitize these HTML fragments when generating or processing these elements.

Some operations which specify a change to a presentation such as [DeleteSlide](#) are susceptible to **cross-site request forgery** attacks. Implementers are advised to use a canary [<102>](#) to mitigate operations from this type of attack.

There are no additional security considerations that are specific to this protocol. General security considerations pertaining to [\[RFC2822\]](#) apply.

5.2 Index of Security Parameters

None.

6 Appendix A: Full WSDL

WSDL name	Prefix	Section
http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEditServerInternalService/	tns4	6.1
http://tempuri.org/	Unassigned	6.2

For ease of implementation, the full WSDLs are provided in the following sections.

6.1

<http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEditServerInternalService/> WSDL

```
<?xml version="1.0"?>
<wsdl:definitions xmlns:wsaw="http://www.w3.org/2006/05/addressing/wsdl"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xmlns:tns4="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEditServerInternalService/" name="PptService"
targetNamespace="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEditServerInternalService/" xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">
  <wsdl:import namespace="http://tempuri.org/"
location="http://www.example.com/p/ppt/edit.svc?wsdl=wsdl0"/>
  <wsdl:types>
    <xs:schema
xmlns:tns5="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEditServerInternalService/Imports"
targetNamespace="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEditServerInternalService/Imports">
      <xs:import schemaLocation="http://www.example.com/p/ppt/edit.svc?xsd=xsd3"
namespace="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEditServerInternalService/" />
      <xs:import schemaLocation="http://www.example.com/p/ppt/edit.svc?xsd=xsd0"
namespace="http://schemas.microsoft.com/2003/10/Serialization/" />
      <xs:import schemaLocation="http://www.example.com/p/ppt/edit.svc?xsd=xsd1"
namespace="http://schemas.datacontract.org/2004/07/p"/>
      <xs:import schemaLocation="http://www.example.com/p/ppt/edit.svc?xsd=xsd2"
namespace="http://schemas.microsoft.com/2003/10/Serialization/Arrays"/>
      <xs:import schemaLocation="http://www.example.com/p/ppt/edit.svc?xsd=xsd4"
namespace="http://schemas.datacontract.org/2004/07/Microsoft.Office.Server.Powerpoint.Interface.Shared"/>
      <xs:import schemaLocation="http://www.example.com/p/ppt/edit.svc?xsd=xsd5"
namespace="http://schemas.datacontract.org/2004/07/Microsoft.Office.Server.Powerpoint.Pipe.Interface"/>
    </xs:schema>
  </wsdl:types>
  <wsdl:message name="IPptEdit_ResetSmartArt_InputMessage">
    <wsdl:part name="parameters" element="tns4:ResetSmartArt"/>
  </wsdl:message>
  <wsdl:message name="IPptEdit_ResetSmartArt_OutputMessage">
    <wsdl:part name="parameters" element="tns4:ResetSmartArtResponse"/>
  </wsdl:message>
  <wsdl:message name="IPptEdit_ReverseSmartArt_InputMessage">
    <wsdl:part name="parameters" element="tns4:ReverseSmartArt"/>
  </wsdl:message>
  <wsdl:message name="IPptEdit_ReverseSmartArt_OutputMessage">
    <wsdl:part name="parameters" element="tns4:ReverseSmartArtResponse"/>
  </wsdl:message>

```

```

<wsdl:message name="IPptEdit_ApplyTheme_InputMessage">
  <wsdl:part name="parameters" element="tns4:ApplyTheme"/>
</wsdl:message>
<wsdl:message name="IPptEdit_ApplyTheme_OutputMessage">
  <wsdl:part name="parameters" element="tns4:ApplyThemeResponse"/>
</wsdl:message>
<wsdl:message name="IPptEdit_SetWordArt_InputMessage">
  <wsdl:part name="parameters" element="tns4:SetWordArt"/>
</wsdl:message>
<wsdl:message name="IPptEdit_SetWordArt_OutputMessage">
  <wsdl:part name="parameters" element="tns4:SetWordArtResponse"/>
</wsdl:message>
<wsdl:message name="IPptEdit_InsertClipart_InputMessage">
  <wsdl:part name="parameters" element="tns4:InsertClipart"/>
</wsdl:message>
<wsdl:message name="IPptEdit_InsertClipart_OutputMessage">
  <wsdl:part name="parameters" element="tns4:InsertClipartResponse"/>
</wsdl:message>
<wsdl:message name="IPptEdit_ShapeFormatPainting_InputMessage">
  <wsdl:part name="parameters" element="tns4:ShapeFormatPainting"/>
</wsdl:message>
<wsdl:message name="IPptEdit_ShapeFormatPainting_OutputMessage">
  <wsdl:part name="parameters" element="tns4:ShapeFormatPaintingResponse"/>
</wsdl:message>
<wsdl:message name="IPptEdit_AddComment_InputMessage">
  <wsdl:part name="parameters" element="tns4:AddComment"/>
</wsdl:message>
<wsdl:message name="IPptEdit_AddComment_OutputMessage">
  <wsdl:part name="parameters" element="tns4:AddCommentResponse"/>
</wsdl:message>
<wsdl:message name="IPptEdit_DeleteComment_InputMessage">
  <wsdl:part name="parameters" element="tns4>DeleteComment"/>
</wsdl:message>
<wsdl:message name="IPptEdit_DeleteComment_OutputMessage">
  <wsdl:part name="parameters" element="tns4>DeleteCommentResponse"/>
</wsdl:message>
<wsdl:message name="IPptEdit_EditComment_InputMessage">
  <wsdl:part name="parameters" element="tns4>EditComment"/>
</wsdl:message>
<wsdl:message name="IPptEdit_EditComment_OutputMessage">
  <wsdl:part name="parameters" element="tns4>EditCommentResponse"/>
</wsdl:message>
<wsdl:message name="IPptEdit_MoveComment_InputMessage">
  <wsdl:part name="parameters" element="tns4:MoveComment"/>
</wsdl:message>
<wsdl:message name="IPptEdit_MoveComment_OutputMessage">
  <wsdl:part name="parameters" element="tns4:MoveCommentResponse"/>
</wsdl:message>
<wsdl:message name="IPptEdit_ResizeShape_InputMessage">
  <wsdl:part name="parameters" element="tns4:ResizeShape"/>
</wsdl:message>
<wsdl:message name="IPptEdit_ResizeShape_OutputMessage">
  <wsdl:part name="parameters" element="tns4:ResizeShapeResponse"/>
</wsdl:message>
<wsdl:message name="IPptEdit_RotateShape_InputMessage">
  <wsdl:part name="parameters" element="tns4:RotateShape"/>
</wsdl:message>
<wsdl:message name="IPptEdit_RotateShape_OutputMessage">
  <wsdl:part name="parameters" element="tns4:RotateShapeResponse"/>

```

```

</wsdl:message>
<wsdl:message name="IPptEdit_FlipShape_InputMessage">
  <wsdl:part name="parameters" element="tns4:FlipShape"/>
</wsdl:message>
<wsdl:message name="IPptEdit_FlipShape_OutputMessage">
  <wsdl:part name="parameters" element="tns4:FlipShapeResponse"/>
</wsdl:message>
<wsdl:message name="IPptEdit_InsertShape_InputMessage">
  <wsdl:part name="parameters" element="tns4:InsertShape"/>
</wsdl:message>
<wsdl:message name="IPptEdit_InsertShape_OutputMessage">
  <wsdl:part name="parameters" element="tns4:InsertShapeResponse"/>
</wsdl:message>
<wsdl:message name="IPptEdit_DuplicateShape_InputMessage">
  <wsdl:part name="parameters" element="tns4:DuplicateShape"/>
</wsdl:message>
<wsdl:message name="IPptEdit_DuplicateShape_OutputMessage">
  <wsdl:part name="parameters" element="tns4:DuplicateShapeResponse"/>
</wsdl:message>
<wsdl:message name="IPptEdit_ArrangeShape_InputMessage">
  <wsdl:part name="parameters" element="tns4:ArrangeShape"/>
</wsdl:message>
<wsdl:message name="IPptEdit_ArrangeShape_OutputMessage">
  <wsdl:part name="parameters" element="tns4:ArrangeShapeResponse"/>
</wsdl:message>
<wsdl:message name="IPptEdit_UngroupShape_InputMessage">
  <wsdl:part name="parameters" element="tns4:UngroupShape"/>
</wsdl:message>
<wsdl:message name="IPptEdit_UngroupShape_OutputMessage">
  <wsdl:part name="parameters" element="tns4:UngroupShapeResponse"/>
</wsdl:message>
<wsdl:message name="IPptEdit_ApplyShapeStyle_InputMessage">
  <wsdl:part name="parameters" element="tns4:ApplyShapeStyle"/>
</wsdl:message>
<wsdl:message name="IPptEdit_ApplyShapeStyle_OutputMessage">
  <wsdl:part name="parameters" element="tns4:ApplyShapeStyleResponse"/>
</wsdl:message>
<wsdl:message name="IPptEdit_ApplyShapeFill_InputMessage">
  <wsdl:part name="parameters" element="tns4:ApplyShapeFill"/>
</wsdl:message>
<wsdl:message name="IPptEdit_ApplyShapeFill_OutputMessage">
  <wsdl:part name="parameters" element="tns4:ApplyShapeFillResponse"/>
</wsdl:message>
<wsdl:message name="IPptEdit_RemoveShapeFill_InputMessage">
  <wsdl:part name="parameters" element="tns4:RemoveShapeFill"/>
</wsdl:message>
<wsdl:message name="IPptEdit_RemoveShapeFill_OutputMessage">
  <wsdl:part name="parameters" element="tns4:RemoveShapeFillResponse"/>
</wsdl:message>
<wsdl:message name="IPptEdit_ApplyShapeOutlineColor_InputMessage">
  <wsdl:part name="parameters" element="tns4:ApplyShapeOutlineColor"/>
</wsdl:message>
<wsdl:message name="IPptEdit_ApplyShapeOutlineColor_OutputMessage">
  <wsdl:part name="parameters" element="tns4:ApplyShapeOutlineColorResponse"/>
</wsdl:message>
<wsdl:message name="IPptEdit_ApplyShapeOutlineWidth_InputMessage">
  <wsdl:part name="parameters" element="tns4:ApplyShapeOutlineWidth"/>
</wsdl:message>
<wsdl:message name="IPptEdit_ApplyShapeOutlineWidth_OutputMessage">

```

```

    <wsdl:part name="parameters" element="tns4:ApplyShapeOutlineWidthResponse"/>
</wsdl:message>
<wsdl:message name="IPptEdit_ApplyShapeOutlineDashStyle_InputMessage">
  <wsdl:part name="parameters" element="tns4:ApplyShapeOutlineDashStyle"/>
</wsdl:message>
<wsdl:message name="IPptEdit_ApplyShapeOutlineDashStyle_OutputMessage">
  <wsdl:part name="parameters" element="tns4:ApplyShapeOutlineDashStyleResponse"/>
</wsdl:message>
<wsdl:message name="IPptEdit_ApplyShapeOutlineEndStyle_InputMessage">
  <wsdl:part name="parameters" element="tns4:ApplyShapeOutlineEndStyle"/>
</wsdl:message>
<wsdl:message name="IPptEdit_ApplyShapeOutlineEndStyle_OutputMessage">
  <wsdl:part name="parameters" element="tns4:ApplyShapeOutlineEndStyleResponse"/>
</wsdl:message>
<wsdl:message name="IPptEdit_RemoveShapeOutline_InputMessage">
  <wsdl:part name="parameters" element="tns4:RemoveShapeOutline"/>
</wsdl:message>
<wsdl:message name="IPptEdit_RemoveShapeOutline_OutputMessage">
  <wsdl:part name="parameters" element="tns4:RemoveShapeOutlineResponse"/>
</wsdl:message>
<wsdl:message name="IPptEdit_SaveAndClose_InputMessage">
  <wsdl:part name="parameters" element="tns4:SaveAndClose"/>
</wsdl:message>
<wsdl:message name="IPptEdit_SaveAndClose_OutputMessage">
  <wsdl:part name="parameters" element="tns4:SaveAndCloseResponse"/>
</wsdl:message>
<wsdl:message name="IPptEdit_UpdateCanary_InputMessage">
  <wsdl:part name="parameters" element="tns4:UpdateCanary"/>
</wsdl:message>
<wsdl:message name="IPptEdit_UpdateCanary_OutputMessage">
  <wsdl:part name="parameters" element="tns4:UpdateCanaryResponse"/>
</wsdl:message>
<wsdl:message name="IPptEdit_Print_InputMessage">
  <wsdl:part name="parameters" element="tns4:Print"/>
</wsdl:message>
<wsdl:message name="IPptEdit_Print_OutputMessage">
  <wsdl:part name="parameters" element="tns4:PrintResponse"/>
</wsdl:message>
<wsdl:message name="IPptEdit_ChangeSmartArtLayout_InputMessage">
  <wsdl:part name="parameters" element="tns4:ChangeSmartArtLayout"/>
</wsdl:message>
<wsdl:message name="IPptEdit_ChangeSmartArtLayout_OutputMessage">
  <wsdl:part name="parameters" element="tns4:ChangeSmartArtLayoutResponse"/>
</wsdl:message>
<wsdl:message name="IPptEdit_ChangeSmartArtColor_InputMessage">
  <wsdl:part name="parameters" element="tns4:ChangeSmartArtColor"/>
</wsdl:message>
<wsdl:message name="IPptEdit_ChangeSmartArtColor_OutputMessage">
  <wsdl:part name="parameters" element="tns4:ChangeSmartArtColorResponse"/>
</wsdl:message>
<wsdl:message name="IPptEdit_ChangeSmartArtStyle_InputMessage">
  <wsdl:part name="parameters" element="tns4:ChangeSmartArtStyle"/>
</wsdl:message>
<wsdl:message name="IPptEdit_ChangeSmartArtStyle_OutputMessage">
  <wsdl:part name="parameters" element="tns4:ChangeSmartArtStyleResponse"/>
</wsdl:message>
<wsdl:message name="IPptEdit_InsertSmartArt_InputMessage">
  <wsdl:part name="parameters" element="tns4:InsertSmartArt"/>
</wsdl:message>

```



```

<wsdl:message name="IPptEdit_InsertSmartArt_OutputMessage">
  <wsdl:part name="parameters" element="tns4:InsertSmartArtResponse"/>
</wsdl:message>
<wsdl:message name="IPptEdit_GetPresentationId_InputMessage">
  <wsdl:part name="parameters" element="tns4:GetPresentationId"/>
</wsdl:message>
<wsdl:message name="IPptEdit_GetPresentationId_OutputMessage">
  <wsdl:part name="parameters" element="tns4:GetPresentationIdResponse"/>
</wsdl:message>
<wsdl:message name="IPptEdit_GetCoauthUpdates_InputMessage">
  <wsdl:part name="parameters" element="tns4:GetCoauthUpdates"/>
</wsdl:message>
<wsdl:message name="IPptEdit_GetCoauthUpdates_OutputMessage">
  <wsdl:part name="parameters" element="tns4:GetCoauthUpdatesResponse"/>
</wsdl:message>
<wsdl:message name="IPptEdit_GetEditPresInfo_InputMessage">
  <wsdl:part name="parameters" element="tns4:GetEditPresInfo"/>
</wsdl:message>
<wsdl:message name="IPptEdit_GetEditPresInfo_OutputMessage">
  <wsdl:part name="parameters" element="tns4:GetEditPresInfoResponse"/>
</wsdl:message>
<wsdl:message name="IPptEdit_GetEditPresInfoGetEditSlideById_InputMessage">
  <wsdl:part name="parameters" element="tns4:GetEditPresInfoGetEditSlideById"/>
</wsdl:message>
<wsdl:message name="IPptEdit_GetEditPresInfoGetEditSlideById_OutputMessage">
  <wsdl:part name="parameters" element="tns4:GetEditPresInfoGetEditSlideByIdResponse"/>
</wsdl:message>
<wsdl:message name="IPptEdit_GetEditSlide_InputMessage">
  <wsdl:part name="parameters" element="tns4:GetEditSlide"/>
</wsdl:message>
<wsdl:message name="IPptEdit_GetEditSlide_OutputMessage">
  <wsdl:part name="parameters" element="tns4:GetEditSlideResponse"/>
</wsdl:message>
<wsdl:message name="IPptEdit_MoveSlide_InputMessage">
  <wsdl:part name="parameters" element="tns4:MoveSlide"/>
</wsdl:message>
<wsdl:message name="IPptEdit_MoveSlide_OutputMessage">
  <wsdl:part name="parameters" element="tns4:MoveSlideResponse"/>
</wsdl:message>
<wsdl:message name="IPptEdit_InsertSlide_InputMessage">
  <wsdl:part name="parameters" element="tns4:InsertSlide"/>
</wsdl:message>
<wsdl:message name="IPptEdit_InsertSlide_OutputMessage">
  <wsdl:part name="parameters" element="tns4:InsertSlideResponse"/>
</wsdl:message>
<wsdl:message name="IPptEdit_ReplaceText_InputMessage">
  <wsdl:part name="parameters" element="tns4:ReplaceText"/>
</wsdl:message>
<wsdl:message name="IPptEdit_ReplaceText_OutputMessage">
  <wsdl:part name="parameters" element="tns4:ReplaceTextResponse"/>
</wsdl:message>
<wsdl:message name="IPptEdit_SetAnimation_InputMessage">
  <wsdl:part name="parameters" element="tns4:SetAnimation"/>
</wsdl:message>
<wsdl:message name="IPptEdit_SetAnimation_OutputMessage">
  <wsdl:part name="parameters" element="tns4:SetAnimationResponse"/>
</wsdl:message>
<wsdl:message name="IPptEdit_SetTransition_InputMessage">
  <wsdl:part name="parameters" element="tns4:SetTransition"/>

```

```

</wsdl:message>
<wsdl:message name="IPptEdit_SetTransition_OutputMessage">
  <wsdl:part name="parameters" element="tns4:SetTransitionResponse"/>
</wsdl:message>
<wsdl:message name="IPptEdit_SetTransitionApplyAll_InputMessage">
  <wsdl:part name="parameters" element="tns4:SetTransitionApplyAll"/>
</wsdl:message>
<wsdl:message name="IPptEdit_SetTransitionApplyAll_OutputMessage">
  <wsdl:part name="parameters" element="tns4:SetTransitionApplyAllResponse"/>
</wsdl:message>
<wsdl:message name="IPptEdit_ReorderAnimation_InputMessage">
  <wsdl:part name="parameters" element="tns4:ReorderAnimation"/>
</wsdl:message>
<wsdl:message name="IPptEdit_ReorderAnimation_OutputMessage">
  <wsdl:part name="parameters" element="tns4:ReorderAnimationResponse"/>
</wsdl:message>
<wsdl:message name="IPptEdit_ClearPlaceholder_InputMessage">
  <wsdl:part name="parameters" element="tns4:ClearPlaceholder"/>
</wsdl:message>
<wsdl:message name="IPptEdit_ClearPlaceholder_OutputMessage">
  <wsdl:part name="parameters" element="tns4:ClearPlaceholderResponse"/>
</wsdl:message>
<wsdl:message name="IPptEdit_DeleteSlide_InputMessage">
  <wsdl:part name="parameters" element="tns4>DeleteSlide"/>
</wsdl:message>
<wsdl:message name="IPptEdit_DeleteSlide_OutputMessage">
  <wsdl:part name="parameters" element="tns4>DeleteSlideResponse"/>
</wsdl:message>
<wsdl:message name="IPptEdit_DuplicateSlide_InputMessage">
  <wsdl:part name="parameters" element="tns4:DuplicateSlide"/>
</wsdl:message>
<wsdl:message name="IPptEdit_DuplicateSlide_OutputMessage">
  <wsdl:part name="parameters" element="tns4:DuplicateSlideResponse"/>
</wsdl:message>
<wsdl:message name="IPptEdit_ShowHideSlide_InputMessage">
  <wsdl:part name="parameters" element="tns4>ShowHideSlide"/>
</wsdl:message>
<wsdl:message name="IPptEdit_ShowHideSlide_OutputMessage">
  <wsdl:part name="parameters" element="tns4>ShowHideSlideResponse"/>
</wsdl:message>
<wsdl:message name="IPptEdit_ReplaceNotes_InputMessage">
  <wsdl:part name="parameters" element="tns4:ReplaceNotes"/>
</wsdl:message>
<wsdl:message name="IPptEdit_ReplaceNotes_OutputMessage">
  <wsdl:part name="parameters" element="tns4:ReplaceNotesResponse"/>
</wsdl:message>
<wsdl:message name="IPptEdit_Undo_InputMessage">
  <wsdl:part name="parameters" element="tns4:Undo"/>
</wsdl:message>
<wsdl:message name="IPptEdit_Undo_OutputMessage">
  <wsdl:part name="parameters" element="tns4:UndoResponse"/>
</wsdl:message>
<wsdl:message name="IPptEdit_Redo_InputMessage">
  <wsdl:part name="parameters" element="tns4:Redo"/>
</wsdl:message>
<wsdl:message name="IPptEdit_Redo_OutputMessage">
  <wsdl:part name="parameters" element="tns4:RedoResponse"/>
</wsdl:message>
<wsdl:message name="IPptEdit_ChangePictureStyle_InputMessage">

```

```

    <wsdl:part name="parameters" element="tns4:ChangePictureStyle"/>
  </wsdl:message>
  <wsdl:message name="IPptEdit_ChangePictureStyle_OutputMessage">
    <wsdl:part name="parameters" element="tns4:ChangePictureStyleResponse"/>
  </wsdl:message>
  <wsdl:message name="IPptEdit_ResetPicture_InputMessage">
    <wsdl:part name="parameters" element="tns4:ResetPicture"/>
  </wsdl:message>
  <wsdl:message name="IPptEdit_ResetPicture_OutputMessage">
    <wsdl:part name="parameters" element="tns4:ResetPictureResponse"/>
  </wsdl:message>
  <wsdl:message name="IPptEdit_MoveShape_InputMessage">
    <wsdl:part name="parameters" element="tns4:MoveShape"/>
  </wsdl:message>
  <wsdl:message name="IPptEdit_MoveShape_OutputMessage">
    <wsdl:part name="parameters" element="tns4:MoveShapeResponse"/>
  </wsdl:message>
  <wsdl:portType name="IPptEdit">
    <wsdl:operation name="ResetSmartArt">
      <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/ResetSmartArt"
message="tns4:IPptEdit_ResetSmartArt_InputMessage"/>
      <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/ResetSmartArtResponse"
message="tns4:IPptEdit_ResetSmartArt_OutputMessage"/>
      </wsdl:operation>
      <wsdl:operation name="ReverseSmartArt">
        <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/ReverseSmartArt"
message="tns4:IPptEdit_ReverseSmartArt_InputMessage"/>
        <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/ReverseSmartArtResponse"
message="tns4:IPptEdit_ReverseSmartArt_OutputMessage"/>
        </wsdl:operation>
      <wsdl:operation name="ApplyTheme">
        <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/ApplyTheme" message="tns4:IPptEdit_ApplyTheme_InputMessage"/>
        <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/ApplyThemeResponse"
message="tns4:IPptEdit_ApplyTheme_OutputMessage"/>
        </wsdl:operation>
      <wsdl:operation name="SetWordArt">
        <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/SetWordArt" message="tns4:IPptEdit_SetWordArt_InputMessage"/>
        <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/SetWordArtResponse"
message="tns4:IPptEdit_SetWordArt_OutputMessage"/>
        </wsdl:operation>
      <wsdl:operation name="InsertClipart">
        <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/InsertClipart"
message="tns4:IPptEdit_InsertClipart_InputMessage"/>

```

```

    <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/InsertClipartResponse"
message="tns4:IPptEdit_InsertClipart_OutputMessage"/>
    </wsdl:operation>
    <wsdl:operation name="ShapeFormatPainting">
    <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/ShapeFormatPainting"
message="tns4:IPptEdit_ShapeFormatPainting_InputMessage"/>
    <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/ShapeFormatPaintingResponse"
message="tns4:IPptEdit_ShapeFormatPainting_OutputMessage"/>
    </wsdl:operation>
    <wsdl:operation name="AddComment">
    <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/AddComment" message="tns4:IPptEdit_AddComment_InputMessage"/>
    <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/AddCommentResponse"
message="tns4:IPptEdit_AddComment_OutputMessage"/>
    </wsdl:operation>
    <wsdl:operation name="DeleteComment">
    <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/DeleteComment"
message="tns4:IPptEdit_DeleteComment_InputMessage"/>
    <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/DeleteCommentResponse"
message="tns4:IPptEdit_DeleteComment_OutputMessage"/>
    </wsdl:operation>
    <wsdl:operation name="EditComment">
    <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/EditComment"
message="tns4:IPptEdit_EditComment_InputMessage"/>
    <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/EditCommentResponse"
message="tns4:IPptEdit_EditComment_OutputMessage"/>
    </wsdl:operation>
    <wsdl:operation name="MoveComment">
    <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/MoveComment"
message="tns4:IPptEdit_MoveComment_InputMessage"/>
    <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/MoveCommentResponse"
message="tns4:IPptEdit_MoveComment_OutputMessage"/>
    </wsdl:operation>
    <wsdl:operation name="ResizeShape">
    <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/ResizeShape"
message="tns4:IPptEdit_ResizeShape_InputMessage"/>
    <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/ResizeShapeResponse"
message="tns4:IPptEdit_ResizeShape_OutputMessage"/>

```

```

    </wsdl:operation>
    <wsdl:operation name="RotateShape">
      <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/RotateShape"
message="tns4:IPptEdit_RotateShape_InputMessage"/>
      <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/RotateShapeResponse"
message="tns4:IPptEdit_RotateShape_OutputMessage"/>
    </wsdl:operation>
    <wsdl:operation name="FlipShape">
      <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/FlipShape" message="tns4:IPptEdit_FlipShape_InputMessage"/>
      <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/FlipShapeResponse"
message="tns4:IPptEdit_FlipShape_OutputMessage"/>
    </wsdl:operation>
    <wsdl:operation name="InsertShape">
      <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/InsertShape"
message="tns4:IPptEdit_InsertShape_InputMessage"/>
      <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/InsertShapeResponse"
message="tns4:IPptEdit_InsertShape_OutputMessage"/>
    </wsdl:operation>
    <wsdl:operation name="DuplicateShape">
      <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/DuplicateShape"
message="tns4:IPptEdit_DuplicateShape_InputMessage"/>
      <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/DuplicateShapeResponse"
message="tns4:IPptEdit_DuplicateShape_OutputMessage"/>
    </wsdl:operation>
    <wsdl:operation name="ArrangeShape">
      <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/ArrangeShape"
message="tns4:IPptEdit_ArrangeShape_InputMessage"/>
      <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/ArrangeShapeResponse"
message="tns4:IPptEdit_ArrangeShape_OutputMessage"/>
    </wsdl:operation>
    <wsdl:operation name="UngroupShape">
      <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/UngroupShape"
message="tns4:IPptEdit_UngroupShape_InputMessage"/>
      <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/UngroupShapeResponse"
message="tns4:IPptEdit_UngroupShape_OutputMessage"/>
    </wsdl:operation>
    <wsdl:operation name="ApplyShapeStyle">

```

```

    <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/ApplyShapeStyle"
message="tns4:IPptEdit_ApplyShapeStyle_InputMessage"/>
    <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/ApplyShapeStyleResponse"
message="tns4:IPptEdit_ApplyShapeStyle_OutputMessage"/>
    </wsdl:operation>
    <wsdl:operation name="ApplyShapeFill">
    <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/ApplyShapeFill"
message="tns4:IPptEdit_ApplyShapeFill_InputMessage"/>
    <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/ApplyShapeFillResponse"
message="tns4:IPptEdit_ApplyShapeFill_OutputMessage"/>
    </wsdl:operation>
    <wsdl:operation name="RemoveShapeFill">
    <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/RemoveShapeFill"
message="tns4:IPptEdit_RemoveShapeFill_InputMessage"/>
    <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/RemoveShapeFillResponse"
message="tns4:IPptEdit_RemoveShapeFill_OutputMessage"/>
    </wsdl:operation>
    <wsdl:operation name="ApplyShapeOutlineColor">
    <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/ApplyShapeOutlineColor"
message="tns4:IPptEdit_ApplyShapeOutlineColor_InputMessage"/>
    <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/ApplyShapeOutlineColorResponse"
message="tns4:IPptEdit_ApplyShapeOutlineColor_OutputMessage"/>
    </wsdl:operation>
    <wsdl:operation name="ApplyShapeOutlineWidth">
    <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/ApplyShapeOutlineWidth"
message="tns4:IPptEdit_ApplyShapeOutlineWidth_InputMessage"/>
    <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/ApplyShapeOutlineWidthResponse"
message="tns4:IPptEdit_ApplyShapeOutlineWidth_OutputMessage"/>
    </wsdl:operation>
    <wsdl:operation name="ApplyShapeOutlineDashStyle">
    <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/ApplyShapeOutlineDashStyle"
message="tns4:IPptEdit_ApplyShapeOutlineDashStyle_InputMessage"/>
    <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/ApplyShapeOutlineDashStyleResponse"
message="tns4:IPptEdit_ApplyShapeOutlineDashStyle_OutputMessage"/>
    </wsdl:operation>
    <wsdl:operation name="ApplyShapeOutlineEndStyle">
    <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit

```

```

ServerInternalService/IPptEdit/ApplyShapeOutlineEndStyle"
message="tns4:IPptEdit_ApplyShapeOutlineEndStyle_InputMessage"/>
  <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/ApplyShapeOutlineEndStyleResponse"
message="tns4:IPptEdit_ApplyShapeOutlineEndStyle_OutputMessage"/>
  </wsdl:operation>
  <wsdl:operation name="RemoveShapeOutline">
    <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/RemoveShapeOutline"
message="tns4:IPptEdit_RemoveShapeOutline_InputMessage"/>
    <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/RemoveShapeOutlineResponse"
message="tns4:IPptEdit_RemoveShapeOutline_OutputMessage"/>
    </wsdl:operation>
    <wsdl:operation name="SaveAndClose">
      <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/SaveAndClose"
message="tns4:IPptEdit_SaveAndClose_InputMessage"/>
      <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/SaveAndCloseResponse"
message="tns4:IPptEdit_SaveAndClose_OutputMessage"/>
      </wsdl:operation>
      <wsdl:operation name="UpdateCanary">
        <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/UpdateCanary"
message="tns4:IPptEdit_UpdateCanary_InputMessage"/>
        <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/UpdateCanaryResponse"
message="tns4:IPptEdit_UpdateCanary_OutputMessage"/>
        </wsdl:operation>
        <wsdl:operation name="Print">
          <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/Print" message="tns4:IPptEdit_Print_InputMessage"/>
          <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/PrintResponse" message="tns4:IPptEdit_Print_OutputMessage"/>
          </wsdl:operation>
          <wsdl:operation name="ChangeSmartArtLayout">
            <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/ChangeSmartArtLayout"
message="tns4:IPptEdit_ChangeSmartArtLayout_InputMessage"/>
            <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/ChangeSmartArtLayoutResponse"
message="tns4:IPptEdit_ChangeSmartArtLayout_OutputMessage"/>
            </wsdl:operation>
            <wsdl:operation name="ChangeSmartArtColor">
              <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/ChangeSmartArtColor"
message="tns4:IPptEdit_ChangeSmartArtColor_InputMessage"/>
              <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit

```

```

ServerInternalService/IPptEdit/ChangeSmartArtColorResponse"
message="tns4:IPptEdit_ChangeSmartArtColor_OutputMessage"/>
  </wsdl:operation>
  <wsdl:operation name="ChangeSmartArtStyle">
    <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/ChangeSmartArtStyle"
message="tns4:IPptEdit_ChangeSmartArtStyle_InputMessage"/>
    <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/ChangeSmartArtStyleResponse"
message="tns4:IPptEdit_ChangeSmartArtStyle_OutputMessage"/>
    </wsdl:operation>
  <wsdl:operation name="InsertSmartArt">
    <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/InsertSmartArt"
message="tns4:IPptEdit_InsertSmartArt_InputMessage"/>
    <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/InsertSmartArtResponse"
message="tns4:IPptEdit_InsertSmartArt_OutputMessage"/>
    </wsdl:operation>
  <wsdl:operation name="GetPresentationId">
    <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/GetPresentationId"
message="tns4:IPptEdit_GetPresentationId_InputMessage"/>
    <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/GetPresentationIdResponse"
message="tns4:IPptEdit_GetPresentationId_OutputMessage"/>
    </wsdl:operation>
  <wsdl:operation name="GetCoauthUpdates">
    <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/GetCoauthUpdates"
message="tns4:IPptEdit_GetCoauthUpdates_InputMessage"/>
    <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/GetCoauthUpdatesResponse"
message="tns4:IPptEdit_GetCoauthUpdates_OutputMessage"/>
    </wsdl:operation>
  <wsdl:operation name="GetEditPresInfo">
    <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/GetEditPresInfo"
message="tns4:IPptEdit_GetEditPresInfo_InputMessage"/>
    <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/GetEditPresInfoResponse"
message="tns4:IPptEdit_GetEditPresInfo_OutputMessage"/>
    </wsdl:operation>
  <wsdl:operation name="GetEditPresInfoGetEditSlideById">
    <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/GetEditPresInfoGetEditSlideById"
message="tns4:IPptEdit_GetEditPresInfoGetEditSlideById_InputMessage"/>
    <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/GetEditPresInfoGetEditSlideByIdResponse"
message="tns4:IPptEdit_GetEditPresInfoGetEditSlideById_OutputMessage"/>
    </wsdl:operation>

```



```

    <wsdl:operation name="GetEditSlide">
      <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/GetEditSlide"
message="tns4:IPptEdit_GetEditSlide_InputMessage"/>
      <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/GetEditSlideResponse"
message="tns4:IPptEdit_GetEditSlide_OutputMessage"/>
    </wsdl:operation>
    <wsdl:operation name="MoveSlide">
      <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/MoveSlide" message="tns4:IPptEdit_MoveSlide_InputMessage"/>
      <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/MoveSlideResponse"
message="tns4:IPptEdit_MoveSlide_OutputMessage"/>
    </wsdl:operation>
    <wsdl:operation name="InsertSlide">
      <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/InsertSlide"
message="tns4:IPptEdit_InsertSlide_InputMessage"/>
      <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/InsertSlideResponse"
message="tns4:IPptEdit_InsertSlide_OutputMessage"/>
    </wsdl:operation>
    <wsdl:operation name="ReplaceText">
      <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/ReplaceText"
message="tns4:IPptEdit_ReplaceText_InputMessage"/>
      <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/ReplaceTextResponse"
message="tns4:IPptEdit_ReplaceText_OutputMessage"/>
    </wsdl:operation>
    <wsdl:operation name="SetAnimation">
      <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/SetAnimation"
message="tns4:IPptEdit_SetAnimation_InputMessage"/>
      <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/SetAnimationResponse"
message="tns4:IPptEdit_SetAnimation_OutputMessage"/>
    </wsdl:operation>
    <wsdl:operation name="SetTransition">
      <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/SetTransition"
message="tns4:IPptEdit_SetTransition_InputMessage"/>
      <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/SetTransitionResponse"
message="tns4:IPptEdit_SetTransition_OutputMessage"/>
    </wsdl:operation>
    <wsdl:operation name="SetTransitionApplyAll">
      <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit

```

```

ServerInternalService/IPptEdit/SetTransitionApplyAll"
message="tns4:IPptEdit_SetTransitionApplyAll_InputMessage"/>
  <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/SetTransitionApplyAllResponse"
message="tns4:IPptEdit_SetTransitionApplyAll_OutputMessage"/>
  </wsdl:operation>
  <wsdl:operation name="ReorderAnimation">
    <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/ReorderAnimation"
message="tns4:IPptEdit_ReorderAnimation_InputMessage"/>
    <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/ReorderAnimationResponse"
message="tns4:IPptEdit_ReorderAnimation_OutputMessage"/>
    </wsdl:operation>
    <wsdl:operation name="ClearPlaceholder">
      <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/ClearPlaceholder"
message="tns4:IPptEdit_ClearPlaceholder_InputMessage"/>
      <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/ClearPlaceholderResponse"
message="tns4:IPptEdit_ClearPlaceholder_OutputMessage"/>
      </wsdl:operation>
      <wsdl:operation name="DeleteSlide">
        <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/DeleteSlide"
message="tns4:IPptEdit_DeleteSlide_InputMessage"/>
        <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/DeleteSlideResponse"
message="tns4:IPptEdit_DeleteSlide_OutputMessage"/>
        </wsdl:operation>
        <wsdl:operation name="DuplicateSlide">
          <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/DuplicateSlide"
message="tns4:IPptEdit_DuplicateSlide_InputMessage"/>
          <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/DuplicateSlideResponse"
message="tns4:IPptEdit_DuplicateSlide_OutputMessage"/>
          </wsdl:operation>
          <wsdl:operation name="ShowHideSlide">
            <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/ShowHideSlide"
message="tns4:IPptEdit_ShowHideSlide_InputMessage"/>
            <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/ShowHideSlideResponse"
message="tns4:IPptEdit_ShowHideSlide_OutputMessage"/>
            </wsdl:operation>
            <wsdl:operation name="ReplaceNotes">
              <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/ReplaceNotes"
message="tns4:IPptEdit_ReplaceNotes_InputMessage"/>

```

```

        <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/ReplaceNotesResponse"
message="tns4:IPptEdit_ReplaceNotes_OutputMessage"/>
        </wsdl:operation>
        <wsdl:operation name="Undo">
        <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/Undo" message="tns4:IPptEdit_Undo_InputMessage"/>
        <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/UndoResponse" message="tns4:IPptEdit_Undo_OutputMessage"/>
        </wsdl:operation>
        <wsdl:operation name="Redo">
        <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/Redo" message="tns4:IPptEdit_Redo_InputMessage"/>
        <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/RedoResponse" message="tns4:IPptEdit_Redo_OutputMessage"/>
        </wsdl:operation>
        <wsdl:operation name="ChangePictureStyle">
        <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/ChangePictureStyle"
message="tns4:IPptEdit_ChangePictureStyle_InputMessage"/>
        <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/ChangePictureStyleResponse"
message="tns4:IPptEdit_ChangePictureStyle_OutputMessage"/>
        </wsdl:operation>
        <wsdl:operation name="ResetPicture">
        <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/ResetPicture"
message="tns4:IPptEdit_ResetPicture_InputMessage"/>
        <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/ResetPictureResponse"
message="tns4:IPptEdit_ResetPicture_OutputMessage"/>
        </wsdl:operation>
        <wsdl:operation name="MoveShape">
        <wsdl:input
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/MoveShape" message="tns4:IPptEdit_MoveShape_InputMessage"/>
        <wsdl:output
wsaw:Action="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEdit
ServerInternalService/IPptEdit/MoveShapeResponse"
message="tns4:IPptEdit_MoveShape_OutputMessage"/>
        </wsdl:operation>
    </wsdl:portType>
</wsdl:definitions>

```

6.2 http://tempuri.org/ WSDL

```

<?xml version="1.0"?>
<wsdl:definitions targetNamespace="http://tempuri.org/"
xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/">

```

```
<wsdl:import
namespace="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEditSe
rverInternalService/" location="http://www.example.com/p/ppt/edit.svc?wsdl"/>
  <wsdl:types/>
</wsdl:definitions>
```

Preliminary

7 Appendix B: Full XML Schema

For ease of implementation, the following sections provide the full XML schema for this protocol.

Schema name	Prefix	Section
http://schemas.datacontract.org/2004/07/Microsoft.Office.Server.Powerpoint.Interface.Shared	tns	7.1
http://schemas.datacontract.org/2004/07/Microsoft.Office.Server.Powerpoint.Pipe.Interface	tns1	7.2
http://schemas.datacontract.org/2004/07/p	tns2	7.3
http://schemas.microsoft.com/2003/10/Serialization/Arrays	q1	7.4
http://schemas.microsoft.com/2003/10/Serialization/	tns3	7.5
http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEditServerInternalService/	tns4	7.6

7.1

<http://schemas.datacontract.org/2004/07/Microsoft.Office.Server.Powerpoint.Interface.Shared> Schema

```
<?xml version="1.0"?>
<xs:schema
  xmlns:tns="http://schemas.datacontract.org/2004/07/Microsoft.Office.Server.Powerpoint.Interface.Shared" elementFormDefault="qualified"
  targetNamespace="http://schemas.datacontract.org/2004/07/Microsoft.Office.Server.Powerpoint.Interface.Shared" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:simpleType name="ErrorCode">
    <xs:restriction base="xs:string">
      <xs:enumeration value="ErrorRESERVEDSuccess"/>
      <xs:enumeration value="ErrorRESERVEDUnknown"/>
      <xs:enumeration value="ErrorCantOpenDocumentFileType"/>
      <xs:enumeration value="ErrorCantOpenDocumentIRM"/>
      <xs:enumeration value="ErrorCantOpenDocumentPassword"/>
      <xs:enumeration value="ErrorCantOpenDocument"/>
      <xs:enumeration value="ErrorCantInstallFonts"/>
      <xs:enumeration value="ErrorCantConvertModifyPassword"/>
      <xs:enumeration value="ErrorCantComposeSlideParse"/>
      <xs:enumeration value="ErrorCantComposeSlideUnexpected"/>
      <xs:enumeration value="ErrorWacConversionFailure"/>
      <xs:enumeration value="ErrorResourceNotGenerated"/>
      <xs:enumeration value="ErrorGenericSlideCorruption"/>
      <xs:enumeration value="ErrorFileNotFound"/>
      <xs:enumeration value="ErrorGeneralUnknown"/>
      <xs:enumeration value="ErrorFailedToOpenDocument"/>
      <xs:enumeration value="ErrorFailedToRetrieveResource"/>
      <xs:enumeration value="ErrorFailedToRenderDocument"/>
      <xs:enumeration value="ErrorFailedToRenderSlide"/>
      <xs:enumeration value="ErrorFailedToSaveDocument"/>
      <xs:enumeration value="ErrorCantSaveDocument"/>
      <xs:enumeration value="ErrorInvalidCommand"/>
      <xs:enumeration value="ErrorDocVersionMismatch"/>
    </xs:restriction>
  </xs:simpleType>
</xs:schema>
```

```

<xs:enumeration value="ErrorCannotAcquirePptEditLock"/>
<xs:enumeration value="ErrorRequiresCheckout"/>
<xs:enumeration value="ErrorLockedForOfflineCheckout"/>
<xs:enumeration value="ErrorLockedByAnotherUser"/>
<xs:enumeration value="ErrorAccessDenied"/>
<xs:enumeration value="ErrorNoLicense"/>
<xs:enumeration value="ErrorRequestTooBig"/>
<xs:enumeration value="ErrorTextTooBig"/>
<xs:enumeration value="ErrorTryAgain"/>
<xs:enumeration value="ErrorUnexpected"/>
<xs:enumeration value="ErrorCantOpenDocumentMacro"/>
<xs:enumeration value="ErrorCantOpenDocumentFinal"/>
<xs:enumeration value="ErrorCantOpenDocumentSigned"/>
<xs:enumeration value="ErrorCantOpenEmbeddedFonts"/>
<xs:enumeration value="ErrorNoAvailableEditAppServer"/>
<xs:enumeration value="ErrorServiceUnavailable"/>
<xs:enumeration value="ErrorPptEditExistingExclusiveLock"/>
<xs:enumeration value="ErrorPptEditCheckedOutByAnother"/>
<xs:enumeration value="ErrorCantOpenDocumentGatekeeperFailure"/>
<xs:enumeration value="ErrorEditWorkerTimeout"/>
<xs:enumeration value="ErrorEditSlideCorruption"/>
<xs:enumeration value="ErrorServiceBusy"/>
<xs:enumeration value="ErrorClipartCannotConnect"/>
<xs:enumeration value="ErrorClipartCannotDownload"/>
<xs:enumeration value="ErrorMediaNotEnabled"/>
<xs:enumeration value="ErrorUnsupportedMediaFormat"/>
<xs:enumeration value="ErrorLinkedMediaNotEnabled"/>
<xs:enumeration value="ErrorUnsupportedLinkTarget"/>
<xs:enumeration value="ErrorEmbeddedMediaNotEnabled"/>
<xs:enumeration value="ErrorEmbeddedMediaExceedsMaxSize"/>
<xs:enumeration value="ErrorTranscodingNotEnabled"/>
<xs:enumeration value="ErrorMediaUnavailable"/>
<xs:enumeration value="ErrorCannotOpenODPDocumentPassword"/>
<xs:enumeration value="ErrorLocalChangeLost"/>
<xs:enumeration value="ErrorNumberOfCoauthorsReachedMax"/>
<xs:enumeration value="ErrorRESERVEDLastError"/>
</xs:restriction>
</xs:simpleType>
<xs:element name="ErrorCode" nillable="true" type="tns:ErrorCode"/>
</xs:schema>

```

7.2

<http://schemas.datacontract.org/2004/07/Microsoft.Office.Server.Powerpoint.Pipe.Interface.Schema>

```

<?xml version="1.0"?>
<xs:schema
  xmlns:tns1="http://schemas.datacontract.org/2004/07/Microsoft.Office.Server.Powerpoint.Pipe.I
nterface" elementFormDefault="qualified"
  targetNamespace="http://schemas.datacontract.org/2004/07/Microsoft.Office.Server.Powerpoint.P
ipe.Interface" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:import schemaLocation="http://www.example.com/p/ppt/edit.svc?xsd=xsd0"
    namespace="http://schemas.microsoft.com/2003/10/Serialization/">
  <xs:simpleType name="ClientActions">
    <xs:list>
      <xs:simpleType>
        <xs:restriction base="xs:string">

```

```

        <xs:enumeration value="None"/>
        <xs:enumeration value="Dismiss"/>
        <xs:enumeration value="Close"/>
        <xs:enumeration value="OpenInClient"/>
        <xs:enumeration value="Refresh"/>
    </xs:restriction>
</xs:simpleType>
</xs:list>
</xs:simpleType>
<xs:element name="ClientActions" nillable="true" type="tns1:ClientActions"/>
</xs:schema>

```

7.3 http://schemas.datacontract.org/2004/07/p Schema

```

<?xml version="1.0"?>
<xs:schema xmlns:tns2="http://schemas.datacontract.org/2004/07/p"
elementFormDefault="qualified" targetNamespace="http://schemas.datacontract.org/2004/07/p"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
    <xs:import schemaLocation="http://www.example.com/p/ppt/edit.svc?xsd=xsd2"
namespace="http://schemas.microsoft.com/2003/10/Serialization/Arrays"/>
    <xs:import schemaLocation="http://www.example.com/p/ppt/edit.svc?xsd=xsd4"
namespace="http://schemas.datacontract.org/2004/07/Microsoft.Office.Server.Powerpoint.Interface.Shared"/>
    <xs:import schemaLocation="http://www.example.com/p/ppt/edit.svc?xsd=xsd5"
namespace="http://schemas.datacontract.org/2004/07/Microsoft.Office.Server.Powerpoint.Pipe.Interface"/>
    <xs:complexType name="EditCommandResponse">
        <xs:sequence>
            <xs:element minOccurs="0" name="PresChanges" nillable="true"
type="tns2:EditPresentationChanges"/>
        </xs:sequence>
    </xs:complexType>
    <xs:element name="EditCommandResponse" nillable="true" type="tns2:EditCommandResponse"/>
    <xs:complexType name="EditPresentationChanges">
        <xs:sequence>
            <xs:element minOccurs="0" name="AddedSlideInfos" nillable="true"
type="tns2:ArrayOfEditSlideInfoFe"/>
            <xs:element minOccurs="0" name="AddedSlides" nillable="true"
type="tns2:ArrayOfEditSlide"/>
            <xs:element minOccurs="0" name="InvalidateAllThumbs" type="xs:boolean"/>
            <xs:element minOccurs="0" name="MainMasterIds" nillable="true"
type="tns2:SlideIdList"/>
            <xs:element minOccurs="0" name="ModifiedSlides" nillable="true"
type="tns2:ArrayOfEditSlideChanges"/>
            <xs:element minOccurs="0" name="Redo" type="xs:boolean"/>
            <xs:element minOccurs="0" name="SlideOrder" nillable="true" type="tns2:SlideIdList"/>
            <xs:element minOccurs="0" name="UndidApplyTheme" type="xs:boolean"/>
            <xs:element minOccurs="0" name="Undo" type="xs:boolean"/>
        </xs:sequence>
    </xs:complexType>
    <xs:element name="EditPresentationChanges" nillable="true"
type="tns2:EditPresentationChanges"/>
    <xs:complexType name="ArrayOfEditSlideInfoFe">
        <xs:sequence>
            <xs:element minOccurs="0" maxOccurs="unbounded" name="EditSlideInfoFe" nillable="true"
type="tns2:EditSlideInfoFe"/>
        </xs:sequence>
    </xs:complexType>

```

```

<xs:element name="ArrayOfEditSlideInfoFe" nillable="true"
type="tns2:ArrayOfEditSlideInfoFe"/>
<xs:complexType name="EditSlideInfoFe">
  <xs:sequence>
    <xs:element minOccurs="0" name="Hidden" type="xs:boolean"/>
    <xs:element minOccurs="0" name="Id" type="xs:unsignedInt"/>
    <xs:element minOccurs="0" name="Thumb" nillable="true" type="tns2:ViewElement"/>
    <xs:element minOccurs="0" name="Title" nillable="true" type="xs:string"/>
  </xs:sequence>
</xs:complexType>
<xs:element name="EditSlideInfoFe" nillable="true" type="tns2:EditSlideInfoFe"/>
<xs:complexType name="ViewElement">
  <xs:sequence>
    <xs:element minOccurs="0" name="Alt" nillable="true" type="xs:string"/>
    <xs:element minOccurs="0" name="Clip" nillable="true" type="tns2:ClippingInfo"/>
    <xs:element minOccurs="0" name="Html" nillable="true" type="xs:string"/>
    <xs:element minOccurs="0" name="Id" type="xs:unsignedInt"/>
    <xs:element minOccurs="0" name="ImgId" nillable="true" type="xs:string"/>
    <xs:element minOccurs="0" name="Position" nillable="true" type="tns2:Point"/>
    <xs:element minOccurs="0" name="Z" type="xs:unsignedInt"/>
  </xs:sequence>
</xs:complexType>
<xs:element name="ViewElement" nillable="true" type="tns2:ViewElement"/>
<xs:complexType name="ClippingInfo">
  <xs:sequence>
    <xs:element minOccurs="0" name="Bounds" nillable="true" type="tns2:Rectangle"/>
    <xs:element minOccurs="0" name="TotalHeight" type="xs:int"/>
    <xs:element minOccurs="0" name="TotalWidth" type="xs:int"/>
  </xs:sequence>
</xs:complexType>
<xs:element name="ClippingInfo" nillable="true" type="tns2:ClippingInfo"/>
<xs:complexType name="Rectangle">
  <xs:sequence>
    <xs:element minOccurs="0" name="Bottom" type="xs:int"/>
    <xs:element minOccurs="0" name="Left" type="xs:int"/>
    <xs:element minOccurs="0" name="Right" type="xs:int"/>
    <xs:element minOccurs="0" name="Top" type="xs:int"/>
  </xs:sequence>
</xs:complexType>
<xs:element name="Rectangle" nillable="true" type="tns2:Rectangle"/>
<xs:complexType name="Point">
  <xs:sequence>
    <xs:element minOccurs="0" name="X" type="xs:int"/>
    <xs:element minOccurs="0" name="Y" type="xs:int"/>
  </xs:sequence>
</xs:complexType>
<xs:element name="Point" nillable="true" type="tns2:Point"/>
<xs:complexType name="ArrayOfEditSlide">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="unbounded" name="EditSlide" nillable="true"
type="tns2:EditSlide"/>
  </xs:sequence>
</xs:complexType>
<xs:element name="ArrayOfEditSlide" nillable="true" type="tns2:ArrayOfEditSlide"/>
<xs:complexType name="EditSlide">
  <xs:sequence>
    <xs:element minOccurs="0" name="Comments" nillable="true" type="tns2:ArrayOfComment"/>
    <xs:element minOccurs="0" name="ContentMasterId" type="xs:unsignedInt"/>
    <xs:element minOccurs="0" name="Created" type="xs:dateTime"/>
  </xs:sequence>
</xs:complexType>

```



```

    <xs:element minOccurs="0" name="EditAnims" nillable="true"
type="tns2:ArrayOfEditAnimInfo"/>
    <xs:element minOccurs="0" name="EditShapes" nillable="true"
type="tns2:ArrayOfEditShape"/>
    <xs:element minOccurs="0" name="EditTransition" nillable="true"
type="tns2:EditTransitionInfo"/>
    <xs:element minOccurs="0" name="Hidden" type="xs:boolean"/>
    <xs:element minOccurs="0" name="IsTitleContentMaster" type="xs:boolean"/>
    <xs:element minOccurs="0" name="MainMasterId" type="xs:unsignedInt"/>
    <xs:element minOccurs="0" name="Notes" nillable="true" type="tns2:Notes"/>
    <xs:element minOccurs="0" name="SlideId" type="xs:unsignedInt"/>
    <xs:element minOccurs="0" name="Theme" nillable="true" type="tns2:Theme"/>
    <xs:element minOccurs="0" name="ThumbnailViewElement" nillable="true"
type="tns2:ViewElement"/>
    <xs:element minOccurs="0" name="ViewElems" nillable="true"
type="tns2:ArrayOfViewElement"/>
  </xs:sequence>
</xs:complexType>
<xs:element name="EditSlide" nillable="true" type="tns2:EditSlide"/>
<xs:complexType name="ArrayOfComment">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="unbounded" name="Comment" nillable="true"
type="tns2:Comment"/>
  </xs:sequence>
</xs:complexType>
<xs:element name="ArrayOfComment" nillable="true" type="tns2:ArrayOfComment"/>
<xs:complexType name="Comment">
  <xs:sequence>
    <xs:element minOccurs="0" name="Children" nillable="true" type="tns2:ArrayOfComment"/>
    <xs:element minOccurs="0" name="authorId" type="xs:unsignedInt"/>
    <xs:element minOccurs="0" name="authorName" nillable="true" type="xs:string"/>
    <xs:element minOccurs="0" name="dt" type="xs:dateTime"/>
    <xs:element minOccurs="0" name="idx" type="xs:unsignedInt"/>
    <xs:element minOccurs="0" name="pos" nillable="true" type="tns2:Point"/>
    <xs:element minOccurs="0" name="text" nillable="true" type="xs:string"/>
  </xs:sequence>
</xs:complexType>
<xs:element name="Comment" nillable="true" type="tns2:Comment"/>
<xs:complexType name="ArrayOfEditAnimInfo">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="unbounded" name="EditAnimInfo" nillable="true"
type="tns2:EditAnimInfo"/>
  </xs:sequence>
</xs:complexType>
<xs:element name="ArrayOfEditAnimInfo" nillable="true" type="tns2:ArrayOfEditAnimInfo"/>
<xs:complexType name="EditAnimInfo">
  <xs:sequence>
    <xs:element xmlns:q1="http://schemas.microsoft.com/2003/10/Serialization/Arrays"
minOccurs="0" name="BuildIds" nillable="true" type="q1:ArrayOfunsignedInt"/>
    <xs:element minOccurs="0" name="Direction" type="xs:unsignedInt"/>
    <xs:element minOccurs="0" name="EffectId" type="xs:unsignedInt"/>
    <xs:element minOccurs="0" name="HasExisting" type="xs:boolean"/>
    <xs:element minOccurs="0" name="HasTrigger" type="xs:boolean"/>
    <xs:element minOccurs="0" name="SequenceId" type="xs:unsignedInt"/>
    <xs:element minOccurs="0" name="ShapeId" type="xs:unsignedInt"/>
  </xs:sequence>
</xs:complexType>
<xs:element name="EditAnimInfo" nillable="true" type="tns2:EditAnimInfo"/>
<xs:complexType name="ArrayOfEditShape">
  <xs:sequence>

```

```

    <xs:element minOccurs="0" maxOccurs="unbounded" name="EditShape" nillable="true"
type="tns2:EditShape"/>
  </xs:sequence>
</xs:complexType>
<xs:element name="ArrayOfEditShape" nillable="true" type="tns2:ArrayOfEditShape"/>
<xs:complexType name="EditShape">
  <xs:sequence>
    <xs:element minOccurs="0" name="Alt" nillable="true" type="xs:string"/>
    <xs:element minOccurs="0" name="EditBounds" nillable="true" type="tns2:Rectangle"/>
    <xs:element minOccurs="0" name="EditHtml" nillable="true" type="xs:string"/>
    <xs:element minOccurs="0" name="FFlippedHorizontally" type="xs:boolean"/>
    <xs:element minOccurs="0" name="FFlippedVertically" type="xs:boolean"/>
    <xs:element minOccurs="0" name="FontSizeMapping" nillable="true"
type="tns2:FontSizeMapping"/>
    <xs:element minOccurs="0" name="IsActiveX" type="xs:boolean"/>
    <xs:element minOccurs="0" name="IsChart" type="xs:boolean"/>
    <xs:element minOccurs="0" name="IsConnected" type="xs:boolean"/>
    <xs:element minOccurs="0" name="IsGroup" type="xs:boolean"/>
    <xs:element minOccurs="0" name="IsLine" type="xs:boolean"/>
    <xs:element minOccurs="0" name="IsPicture" type="xs:boolean"/>
    <xs:element minOccurs="0" name="IsPlaceholder" type="xs:boolean"/>
    <xs:element minOccurs="0" name="IsPrompt" type="xs:boolean"/>
    <xs:element minOccurs="0" name="IsSmartArt" type="xs:boolean"/>
    <xs:element minOccurs="0" name="IsStraightLine" type="xs:boolean"/>
    <xs:element minOccurs="0" name="IsTable" type="xs:boolean"/>
    <xs:element minOccurs="0" name="IsTextbox" type="xs:boolean"/>
    <xs:element minOccurs="0" name="PlaceholderType" type="xs:unsignedInt"/>
    <xs:element minOccurs="0" name="RotatedBoundingRegion" nillable="true"
type="tns2:BoundingRegion"/>
    <xs:element minOccurs="0" name="Rotation" type="xs:int"/>
    <xs:element minOccurs="0" name="ShapeId" type="xs:unsignedInt"/>
    <xs:element minOccurs="0" name="ShapeViewElemId" type="xs:unsignedInt"/>
    <xs:element minOccurs="0" name="SmartArtInfo" nillable="true"
type="tns2:SmartArtInfo"/>
    <xs:element minOccurs="0" name="TextViewElemId" type="xs:unsignedInt"/>
    <xs:element minOccurs="0" name="X" type="xs:double"/>
    <xs:element minOccurs="0" name="Y" type="xs:double"/>
  </xs:sequence>
</xs:complexType>
<xs:element name="EditShape" nillable="true" type="tns2:EditShape"/>
<xs:complexType name="FontSizeMapping">
  <xs:sequence>
    <xs:element minOccurs="0" name="Size1" type="xs:unsignedInt"/>
    <xs:element minOccurs="0" name="Size2" type="xs:unsignedInt"/>
    <xs:element minOccurs="0" name="Size3" type="xs:unsignedInt"/>
    <xs:element minOccurs="0" name="Size4" type="xs:unsignedInt"/>
    <xs:element minOccurs="0" name="Size5" type="xs:unsignedInt"/>
    <xs:element minOccurs="0" name="Size6" type="xs:unsignedInt"/>
    <xs:element minOccurs="0" name="Size7" type="xs:unsignedInt"/>
  </xs:sequence>
</xs:complexType>
<xs:element name="FontSizeMapping" nillable="true" type="tns2:FontSizeMapping"/>
<xs:complexType name="BoundingRegion">
  <xs:sequence>
    <xs:element minOccurs="0" name="BottomLeft" nillable="true" type="tns2:Point"/>
    <xs:element minOccurs="0" name="BottomRight" nillable="true" type="tns2:Point"/>
    <xs:element minOccurs="0" name="TopLeft" nillable="true" type="tns2:Point"/>
    <xs:element minOccurs="0" name="TopRight" nillable="true" type="tns2:Point"/>
  </xs:sequence>

```

```

</xs:complexType>
<xs:element name="BoundingRegion" nillable="true" type="tns2:BoundingRegion"/>
<xs:complexType name="SmartArtInfo">
  <xs:sequence>
    <xs:element minOccurs="0" name="fReverseChecked" type="xs:boolean"/>
    <xs:element minOccurs="0" name="fReverseEnabled" type="xs:boolean"/>
  </xs:sequence>
</xs:complexType>
<xs:element name="SmartArtInfo" nillable="true" type="tns2:SmartArtInfo"/>
<xs:complexType name="EditTransitionInfo">
  <xs:sequence>
    <xs:element minOccurs="0" name="Direction" type="xs:unsignedInt"/>
    <xs:element minOccurs="0" name="Duration" type="xs:unsignedInt"/>
    <xs:element minOccurs="0" name="IsManualAdvance" type="xs:boolean"/>
    <xs:element minOccurs="0" name="TransitionType" type="xs:unsignedInt"/>
  </xs:sequence>
</xs:complexType>
<xs:element name="EditTransitionInfo" nillable="true" type="tns2:EditTransitionInfo"/>
<xs:complexType name="Notes">
  <xs:sequence>
    <xs:element minOccurs="0" name="Html" nillable="true" type="tns2:Html"/>
    <xs:element minOccurs="0" name="IsPrompt" type="xs:boolean"/>
  </xs:sequence>
</xs:complexType>
<xs:element name="Notes" nillable="true" type="tns2:Notes"/>
<xs:complexType name="Html">
  <xs:sequence>
    <xs:element minOccurs="0" name="Text" nillable="true" type="xs:string"/>
  </xs:sequence>
</xs:complexType>
<xs:element name="Html" nillable="true" type="tns2:Html"/>
<xs:complexType name="Theme">
  <xs:sequence>
    <xs:element minOccurs="0" name="Accent1" nillable="true" type="tns2:ThemeColor"/>
    <xs:element minOccurs="0" name="Accent2" nillable="true" type="tns2:ThemeColor"/>
    <xs:element minOccurs="0" name="Accent3" nillable="true" type="tns2:ThemeColor"/>
    <xs:element minOccurs="0" name="Accent4" nillable="true" type="tns2:ThemeColor"/>
    <xs:element minOccurs="0" name="Accent5" nillable="true" type="tns2:ThemeColor"/>
    <xs:element minOccurs="0" name="Accent6" nillable="true" type="tns2:ThemeColor"/>
    <xs:element minOccurs="0" name="Dark1" nillable="true" type="tns2:ThemeColor"/>
    <xs:element minOccurs="0" name="Dark2" nillable="true" type="tns2:ThemeColor"/>
    <xs:element minOccurs="0" name="Light1" nillable="true" type="tns2:ThemeColor"/>
    <xs:element minOccurs="0" name="Light2" nillable="true" type="tns2:ThemeColor"/>
    <xs:element minOccurs="0" name="PresetSchemeColorMapping" nillable="true"
type="tns2:PresetSchemeColorMapping"/>
  </xs:sequence>
</xs:complexType>
<xs:element name="Theme" nillable="true" type="tns2:Theme"/>
<xs:complexType name="ThemeColor">
  <xs:sequence>
    <xs:element minOccurs="0" name="b" type="xs:unsignedByte"/>
    <xs:element minOccurs="0" name="g" type="xs:unsignedByte"/>
    <xs:element minOccurs="0" name="r" type="xs:unsignedByte"/>
  </xs:sequence>
</xs:complexType>
<xs:element name="ThemeColor" nillable="true" type="tns2:ThemeColor"/>
<xs:complexType name="PresetSchemeColorMapping">
  <xs:sequence>
    <xs:element minOccurs="0" name="Accent1" nillable="true" type="tns2:ThemeColor"/>

```

```

    <xs:element minOccurs="0" name="Accent2" nillable="true" type="tns2:ThemeColor"/>
    <xs:element minOccurs="0" name="Accent3" nillable="true" type="tns2:ThemeColor"/>
    <xs:element minOccurs="0" name="Accent4" nillable="true" type="tns2:ThemeColor"/>
    <xs:element minOccurs="0" name="Accent5" nillable="true" type="tns2:ThemeColor"/>
    <xs:element minOccurs="0" name="Accent6" nillable="true" type="tns2:ThemeColor"/>
    <xs:element minOccurs="0" name="Background1" nillable="true" type="tns2:ThemeColor"/>
    <xs:element minOccurs="0" name="Background2" nillable="true" type="tns2:ThemeColor"/>
    <xs:element minOccurs="0" name="Text1" nillable="true" type="tns2:ThemeColor"/>
    <xs:element minOccurs="0" name="Text2" nillable="true" type="tns2:ThemeColor"/>
  </xs:sequence>
</xs:complexType>
<xs:element name="PresetSchemeColorMapping" nillable="true"
type="tns2:PresetSchemeColorMapping"/>
<xs:complexType name="ArrayOfViewElement">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="unbounded" name="ViewElement" nillable="true"
type="tns2:ViewElement"/>
  </xs:sequence>
</xs:complexType>
<xs:element name="ArrayOfViewElement" nillable="true" type="tns2:ArrayOfViewElement"/>
<xs:complexType name="SlideIdList">
  <xs:sequence>
    <xs:element xmlns:q1="http://schemas.microsoft.com/2003/10/Serialization/Arrays"
minOccurs="0" name="SlideIds" nillable="true" type="q1:ArrayOfunsignedInt"/>
  </xs:sequence>
</xs:complexType>
<xs:element name="SlideIdList" nillable="true" type="tns2:SlideIdList"/>
<xs:complexType name="ArrayOfEditSlideChanges">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="unbounded" name="EditSlideChanges" nillable="true"
type="tns2:EditSlideChanges"/>
  </xs:sequence>
</xs:complexType>
<xs:element name="ArrayOfEditSlideChanges" nillable="true"
type="tns2:ArrayOfEditSlideChanges"/>
<xs:complexType name="EditSlideChanges">
  <xs:sequence>
    <xs:element minOccurs="0" name="Comments" nillable="true" type="tns2:ArrayOfComment"/>
    <xs:element xmlns:q1="http://schemas.microsoft.com/2003/10/Serialization/Arrays"
minOccurs="0" name="DelElems" nillable="true" type="q1:ArrayOfunsignedInt"/>
    <xs:element minOccurs="0" name="EditAnims" nillable="true"
type="tns2:ArrayOfEditAnimInfo"/>
    <xs:element minOccurs="0" name="EditTransition" nillable="true"
type="tns2:EditTransitionInfo"/>
    <xs:element minOccurs="0" name="Elems" nillable="true" type="tns2:ArrayOfViewElement"/>
    <xs:element minOccurs="0" name="Hidden" type="xs:boolean"/>
    <xs:element minOccurs="0" name="Id" type="xs:unsignedInt"/>
    <xs:element minOccurs="0" name="ModifiedShapes" nillable="true"
type="tns2:ArrayOfEditShape"/>
    <xs:element minOccurs="0" name="Notes" nillable="true" type="tns2:Notes"/>
    <xs:element minOccurs="0" name="Refresh" type="xs:boolean"/>
    <xs:element minOccurs="0" name="Thumb" nillable="true" type="tns2:ViewElement"/>
    <xs:element minOccurs="0" name="Title" nillable="true" type="xs:string"/>
  </xs:sequence>
</xs:complexType>
<xs:element name="EditSlideChanges" nillable="true" type="tns2:EditSlideChanges"/>
<xs:complexType name="ServiceResult">
  <xs:sequence>
    <xs:element minOccurs="0" name="Error" nillable="true" type="tns2:ServiceError"/>
    <xs:element minOccurs="0" name="Result" nillable="true" type="xs:anyType"/>
  </xs:sequence>
</xs:complexType>

```

```

    </xs:sequence>
  </xs:complexType>
  <xs:element name="ServiceResult" nillable="true" type="tns2:ServiceResult"/>
  <xs:complexType name="ServiceError">
    <xs:sequence>
      <xs:element
xmlns:tns="http://schemas.datacontract.org/2004/07/Microsoft.Office.Server.Powerpoint.Interface.Shared" minOccurs="0" name="Code" type="tns:ErrorCode"/>
      <xs:element minOccurs="0" name="Message" nillable="true" type="xs:string"/>
      <xs:element
xmlns:tns1="http://schemas.datacontract.org/2004/07/Microsoft.Office.Server.Powerpoint.Pipe.Interface" minOccurs="0" name="RecommendedActions" type="tns1:ClientActions"/>
      <xs:element minOccurs="0" name="Title" nillable="true" type="xs:string"/>
      <xs:element minOccurs="0" name="Type" type="tns2:ServiceErrorType"/>
    </xs:sequence>
  </xs:complexType>
  <xs:element name="ServiceError" nillable="true" type="tns2:ServiceError"/>
  <xs:simpleType name="ServiceErrorType">
    <xs:restriction base="xs:string">
      <xs:enumeration value="UnknownError"/>
      <xs:enumeration value="ApplicationError"/>
      <xs:enumeration value="Timeout"/>
      <xs:enumeration value="ServiceBusy"/>
      <xs:enumeration value="SessionFull"/>
    </xs:restriction>
  </xs:simpleType>
  <xs:element name="ServiceErrorType" nillable="true" type="tns2:ServiceErrorType"/>
  <xs:complexType name="PptViewingService.PrintResult">
    <xs:sequence>
      <xs:element minOccurs="0" name="PrintUrl" nillable="true" type="xs:string"/>
    </xs:sequence>
  </xs:complexType>
  <xs:element name="PptViewingService.PrintResult" nillable="true"
type="tns2:PptViewingService.PrintResult"/>
  <xs:complexType name="CoauthUpdate">
    <xs:sequence>
      <xs:element minOccurs="0" name="State" nillable="true" type="tns2:CoauthState"/>
      <xs:element minOccurs="0" name="Token" nillable="true" type="xs:string"/>
    </xs:sequence>
  </xs:complexType>
  <xs:element name="CoauthUpdate" nillable="true" type="tns2:CoauthUpdate"/>
  <xs:complexType name="CoauthState">
    <xs:sequence>
      <xs:element minOccurs="0" name="cs" type="xs:int"/>
      <xs:element minOccurs="0" name="et" nillable="true" type="tns2:ArrayOfEditorInfo"/>
      <xs:element minOccurs="0" name="lsave" type="xs:dateTime"/>
      <xs:element minOccurs="0" name="lsmce" type="xs:dateTime"/>
      <xs:element minOccurs="0" name="lsum" type="xs:dateTime"/>
      <xs:element minOccurs="0" name="meid" nillable="true" type="xs:string"/>
    </xs:sequence>
  </xs:complexType>
  <xs:element name="CoauthState" nillable="true" type="tns2:CoauthState"/>
  <xs:complexType name="ArrayOfEditorInfo">
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="unbounded" name="EditorInfo" nillable="true"
type="tns2:EditorInfo"/>
    </xs:sequence>
  </xs:complexType>
  <xs:element name="ArrayOfEditorInfo" nillable="true" type="tns2:ArrayOfEditorInfo"/>

```

```

<xs:complexType name="EditorInfo">
  <xs:sequence>
    <xs:element minOccurs="0" name="EmailAddress" nillable="true" type="xs:string"/>
    <xs:element minOccurs="0" name="ID" nillable="true" type="xs:string"/>
    <xs:element minOccurs="0" name="Name" nillable="true" type="xs:string"/>
    <xs:element minOccurs="0" name="SIPAddress" nillable="true" type="xs:string"/>
    <xs:element minOccurs="0" name="TimeOut" nillable="true" type="xs:string"/>
    <xs:element minOccurs="0" name="UserName" nillable="true" type="xs:string"/>
  </xs:sequence>
</xs:complexType>
<xs:element name="EditorInfo" nillable="true" type="tns2:EditorInfo"/>
<xs:complexType name="EditPresentationInfo">
  <xs:sequence>
    <xs:element minOccurs="0" name="CompatProblems" type="xs:boolean"/>
    <xs:element minOccurs="0" name="EditSlideInfos" nillable="true"
type="tns2:ArrayOfEditSlideInfoFe"/>
    <xs:element minOccurs="0" name="FCreateNew" type="xs:boolean"/>
    <xs:element minOccurs="0" name="FirstSlideIndex" type="xs:unsignedInt"/>
    <xs:element minOccurs="0" name="MainMasters" nillable="true"
type="tns2:ArrayOfMainMasterFe"/>
    <xs:element minOccurs="0" name="Redo" type="xs:boolean"/>
    <xs:element minOccurs="0" name="Rtl" type="xs:boolean"/>
    <xs:element minOccurs="0" name="Size" nillable="true" type="tns2:Point"/>
    <xs:element minOccurs="0" name="Slide" nillable="true" type="tns2:EditSlide"/>
    <xs:element minOccurs="0" name="SlideOrder" nillable="true" type="tns2:SlideIdList"/>
    <xs:element minOccurs="0" name="Undo" type="xs:boolean"/>
  </xs:sequence>
</xs:complexType>
<xs:element name="EditPresentationInfo" nillable="true" type="tns2:EditPresentationInfo"/>
<xs:complexType name="ArrayOfMainMasterFe">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="unbounded" name="MainMasterFe" nillable="true"
type="tns2:MainMasterFe"/>
  </xs:sequence>
</xs:complexType>
<xs:element name="ArrayOfMainMasterFe" nillable="true" type="tns2:ArrayOfMainMasterFe"/>
<xs:complexType name="MainMasterFe">
  <xs:sequence>
    <xs:element minOccurs="0" name="ContentMasters" nillable="true"
type="tns2:ArrayOfContentMasterFe"/>
    <xs:element minOccurs="0" name="Id" type="xs:unsignedInt"/>
    <xs:element minOccurs="0" name="InContent" type="xs:boolean"/>
    <xs:element minOccurs="0" name="LineStyle" nillable="true"
type="tns2:ArrayOfStyleGalleryItem"/>
    <xs:element minOccurs="0" name="Name" nillable="true" type="xs:string"/>
    <xs:element minOccurs="0" name="ShapeStyles" nillable="true"
type="tns2:ArrayOfStyleGalleryItem"/>
  </xs:sequence>
</xs:complexType>
<xs:element name="MainMasterFe" nillable="true" type="tns2:MainMasterFe"/>
<xs:complexType name="ArrayOfContentMasterFe">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="unbounded" name="ContentMasterFe" nillable="true"
type="tns2:ContentMasterFe"/>
  </xs:sequence>
</xs:complexType>
<xs:element name="ArrayOfContentMasterFe" nillable="true"
type="tns2:ArrayOfContentMasterFe"/>
  <xs:complexType name="ContentMasterFe">
    <xs:sequence>

```

```

    <xs:element minOccurs="0" name="Id" type="xs:unsignedInt"/>
    <xs:element minOccurs="0" name="Name" nillable="true" type="xs:string"/>
    <xs:element minOccurs="0" name="SlideLayoutType" nillable="true" type="xs:string"/>
  </xs:sequence>
</xs:complexType>
<xs:element name="ContentMasterFe" nillable="true" type="tns2:ContentMasterFe"/>
<xs:complexType name="ArrayOfStyleGalleryItem">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="unbounded" name="StyleGalleryItem" nillable="true"
type="tns2:StyleGalleryItem"/>
  </xs:sequence>
</xs:complexType>
<xs:element name="ArrayOfStyleGalleryItem" nillable="true"
type="tns2:ArrayOfStyleGalleryItem"/>
<xs:complexType name="StyleGalleryItem">
  <xs:sequence>
    <xs:element minOccurs="0" name="Icon" nillable="true" type="tns2:ViewElement"/>
    <xs:element minOccurs="0" name="StyleId" type="xs:unsignedInt"/>
  </xs:sequence>
</xs:complexType>
<xs:element name="StyleGalleryItem" nillable="true" type="tns2:StyleGalleryItem"/>
</xs:schema>

```

7.4 <http://schemas.microsoft.com/2003/10/Serialization/Arrays> Schema

```

<?xml version="1.0"?>
<xs:schema xmlns:q1="http://schemas.microsoft.com/2003/10/Serialization/Arrays"
elementFormDefault="qualified"
targetNamespace="http://schemas.microsoft.com/2003/10/Serialization/Arrays"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:complexType name="ArrayOfunsignedInt">
    <xs:sequence>
      <xs:element minOccurs="0" maxOccurs="unbounded" name="unsignedInt"
type="xs:unsignedInt"/>
    </xs:sequence>
  </xs:complexType>
  <xs:element name="ArrayOfunsignedInt" nillable="true" type="q1:ArrayOfunsignedInt"/>
</xs:schema>

```

7.5 <http://schemas.microsoft.com/2003/10/Serialization/> Schema

```

<?xml version="1.0"?>
<xs:schema xmlns:tns3="http://schemas.microsoft.com/2003/10/Serialization/"
attributeFormDefault="qualified" elementFormDefault="qualified"
targetNamespace="http://schemas.microsoft.com/2003/10/Serialization/"
xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:element name="anyType" nillable="true" type="xs:anyType"/>
  <xs:element name="anyURI" nillable="true" type="xs:anyURI"/>
  <xs:element name="base64Binary" nillable="true" type="xs:base64Binary"/>
  <xs:element name="boolean" nillable="true" type="xs:boolean"/>
  <xs:element name="byte" nillable="true" type="xs:byte"/>
  <xs:element name="dateTime" nillable="true" type="xs:dateTime"/>
  <xs:element name="decimal" nillable="true" type="xs:decimal"/>
  <xs:element name="double" nillable="true" type="xs:double"/>
  <xs:element name="float" nillable="true" type="xs:float"/>
  <xs:element name="int" nillable="true" type="xs:int"/>
  <xs:element name="long" nillable="true" type="xs:long"/>

```

```

<xs:element name="QName" nillable="true" type="xs:QName"/>
<xs:element name="short" nillable="true" type="xs:short"/>
<xs:element name="string" nillable="true" type="xs:string"/>
<xs:element name="unsignedByte" nillable="true" type="xs:unsignedByte"/>
<xs:element name="unsignedInt" nillable="true" type="xs:unsignedInt"/>
<xs:element name="unsignedLong" nillable="true" type="xs:unsignedLong"/>
<xs:element name="unsignedShort" nillable="true" type="xs:unsignedShort"/>
<xs:element name="char" nillable="true" type="tns3:char"/>
<xs:simpleType name="char">
  <xs:restriction base="xs:int"/>
</xs:simpleType>
<xs:element name="duration" nillable="true" type="tns3:duration"/>
<xs:simpleType name="duration">
  <xs:restriction base="xs:duration">
    <xs:pattern value="\-?P(\d*D)?(T(\d*H)?(\d*M)?(\d*(\.\d*)?S)?)?"/>
    <xs:minInclusive value="-P10675199DT2H48M5.4775808S"/>
    <xs:maxInclusive value="P10675199DT2H48M5.4775807S"/>
  </xs:restriction>
</xs:simpleType>
<xs:element name="guid" nillable="true" type="tns3:guid"/>
<xs:simpleType name="guid">
  <xs:restriction base="xs:string">
    <xs:pattern value="[\da-fA-F]{8}-[\da-fA-F]{4}-[\da-fA-F]{4}-[\da-fA-F]{4}-[\da-fA-F]{12}"/>
  </xs:restriction>
</xs:simpleType>
<xs:attribute name="FactoryType" type="xs:QName"/>
<xs:attribute name="Id" type="xs:ID"/>
<xs:attribute name="Ref" type="xs:IDREF"/>
</xs:schema>

```

7.6

<http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPointEditServerInternalService/> Schema

```

<?xml version="1.0"?>
<xs:schema elementFormDefault="qualified"
targetNamespace="http://schemas.microsoft.com/office/PowerPoint/Server/WebServices/PowerPoint
EditServerInternalService/" xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:import schemaLocation="http://www.example.com/p/ppt/edit.svc?xsd=xsd1"
namespace="http://schemas.datacontract.org/2004/07/p"/>
  <xs:element name="ResetSmartArt">
    <xs:complexType>
      <xs:sequence>
        <xs:element minOccurs="0" name="presentationId" nillable="true" type="xs:string"/>
        <xs:element minOccurs="0" name="slideId" type="xs:unsignedInt"/>
        <xs:element minOccurs="0" name="shapeId" type="xs:unsignedInt"/>
      </xs:sequence>
    </xs:complexType>
  </xs:element>
  <xs:element name="ResetSmartArtResponse">
    <xs:complexType>
      <xs:sequence>
        <xs:element xmlns:tns2="http://schemas.datacontract.org/2004/07/p" minOccurs="0"
name="ResetSmartArtResult" nillable="true" type="tns2:ServiceResult"/>
      </xs:sequence>
    </xs:complexType>
  </xs:element>

```



```

</xs:element>
<xs:element name="ReverseSmartArt">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="presentationId" nillable="true" type="xs:string"/>
      <xs:element minOccurs="0" name="slideId" type="xs:unsignedInt"/>
      <xs:element minOccurs="0" name="shapeId" type="xs:unsignedInt"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
<xs:element name="ReverseSmartArtResponse">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:tns2="http://schemas.datacontract.org/2004/07/p" minOccurs="0"
name="ReverseSmartArtResult" nillable="true" type="tns2:ServiceResult"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
<xs:element name="ApplyTheme">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="presentationId" nillable="true" type="xs:string"/>
      <xs:element minOccurs="0" name="slideId" type="xs:unsignedInt"/>
      <xs:element minOccurs="0" name="themeName" nillable="true" type="xs:string"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
<xs:element name="ApplyThemeResponse">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:tns2="http://schemas.datacontract.org/2004/07/p" minOccurs="0"
name="ApplyThemeResult" nillable="true" type="tns2:ServiceResult"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
<xs:element name="SetWordArt">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="presentationId" nillable="true" type="xs:string"/>
      <xs:element minOccurs="0" name="slideId" type="xs:unsignedInt"/>
      <xs:element minOccurs="0" name="shapeId" type="xs:unsignedInt"/>
      <xs:element minOccurs="0" name="styleId" type="xs:int"/>
      <xs:element minOccurs="0" name="isClear" type="xs:boolean"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
<xs:element name="SetWordArtResponse">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:tns2="http://schemas.datacontract.org/2004/07/p" minOccurs="0"
name="SetWordArtResult" nillable="true" type="tns2:ServiceResult"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
<xs:element name="InsertClipart">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="presentationId" nillable="true" type="xs:string"/>
      <xs:element minOccurs="0" name="slideId" type="xs:unsignedInt"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>

```

```

    <xs:element minOccurs="0" name="shapeId" type="xs:unsignedInt"/>
    <xs:element minOccurs="0" name="assetId" nillable="true" type="xs:string"/>
    <xs:element minOccurs="0" name="Lcid" nillable="true" type="xs:string"/>
    <xs:element minOccurs="0" name="alt" nillable="true" type="xs:string"/>
  </xs:sequence>
</xs:complexType>
</xs:element>
<xs:element name="InsertClipartResponse">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:tns2="http://schemas.datacontract.org/2004/07/p" minOccurs="0"
name="InsertClipartResult" nillable="true" type="tns2:ServiceResult"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
<xs:element name="ShapeFormatPainting">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="presentationId" nillable="true" type="xs:string"/>
      <xs:element minOccurs="0" name="sourceSlideId" type="xs:unsignedInt"/>
      <xs:element minOccurs="0" name="sourceShapeId" type="xs:unsignedInt"/>
      <xs:element minOccurs="0" name="destinationSlideId" type="xs:unsignedInt"/>
      <xs:element minOccurs="0" name="destinationShapeId" type="xs:unsignedInt"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
<xs:element name="ShapeFormatPaintingResponse">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:tns2="http://schemas.datacontract.org/2004/07/p" minOccurs="0"
name="ShapeFormatPaintingResult" nillable="true" type="tns2:ServiceResult"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
<xs:element name="AddComment">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="presentationId" nillable="true" type="xs:string"/>
      <xs:element minOccurs="0" name="slideId" type="xs:unsignedInt"/>
      <xs:element minOccurs="0" name="text" nillable="true" type="xs:string"/>
      <xs:element minOccurs="0" name="timeZoneBias" type="xs:int"/>
      <xs:element minOccurs="0" name="parentAuthor" type="xs:int"/>
      <xs:element minOccurs="0" name="parentIndex" type="xs:int"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
<xs:element name="AddCommentResponse">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:tns2="http://schemas.datacontract.org/2004/07/p" minOccurs="0"
name="AddCommentResult" nillable="true" type="tns2:ServiceResult"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
<xs:element name="DeleteComment">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="presentationId" nillable="true" type="xs:string"/>
      <xs:element minOccurs="0" name="slideId" type="xs:unsignedInt"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>

```

```

        <xs:element minOccurs="0" name="authorId" type="xs:unsignedInt"/>
        <xs:element minOccurs="0" name="index" type="xs:unsignedInt"/>
    </xs:sequence>
</xs:complexType>
</xs:element>
<xs:element name="DeleteCommentResponse">
    <xs:complexType>
        <xs:sequence>
            <xs:element xmlns:tns2="http://schemas.datacontract.org/2004/07/p" minOccurs="0"
name="DeleteCommentResult" nillable="true" type="tns2:ServiceResult"/>
        </xs:sequence>
    </xs:complexType>
</xs:element>
<xs:element name="EditComment">
    <xs:complexType>
        <xs:sequence>
            <xs:element minOccurs="0" name="presentationId" nillable="true" type="xs:string"/>
            <xs:element minOccurs="0" name="slideId" type="xs:unsignedInt"/>
            <xs:element minOccurs="0" name="text" nillable="true" type="xs:string"/>
            <xs:element minOccurs="0" name="authorId" type="xs:unsignedInt"/>
            <xs:element minOccurs="0" name="index" type="xs:unsignedInt"/>
        </xs:sequence>
    </xs:complexType>
</xs:element>
<xs:element name="EditCommentResponse">
    <xs:complexType>
        <xs:sequence>
            <xs:element xmlns:tns2="http://schemas.datacontract.org/2004/07/p" minOccurs="0"
name="EditCommentResult" nillable="true" type="tns2:ServiceResult"/>
        </xs:sequence>
    </xs:complexType>
</xs:element>
<xs:element name="MoveComment">
    <xs:complexType>
        <xs:sequence>
            <xs:element minOccurs="0" name="presentationId" nillable="true" type="xs:string"/>
            <xs:element minOccurs="0" name="slideId" type="xs:unsignedInt"/>
            <xs:element minOccurs="0" name="authorId" type="xs:unsignedInt"/>
            <xs:element minOccurs="0" name="index" type="xs:unsignedInt"/>
            <xs:element minOccurs="0" name="x" type="xs:double"/>
            <xs:element minOccurs="0" name="y" type="xs:double"/>
        </xs:sequence>
    </xs:complexType>
</xs:element>
<xs:element name="MoveCommentResponse">
    <xs:complexType>
        <xs:sequence>
            <xs:element xmlns:tns2="http://schemas.datacontract.org/2004/07/p" minOccurs="0"
name="MoveCommentResult" nillable="true" type="tns2:ServiceResult"/>
        </xs:sequence>
    </xs:complexType>
</xs:element>
<xs:element name="ResizeShape">
    <xs:complexType>
        <xs:sequence>
            <xs:element minOccurs="0" name="presentationId" nillable="true" type="xs:string"/>
            <xs:element minOccurs="0" name="slideId" type="xs:unsignedInt"/>
            <xs:element minOccurs="0" name="shapeId" type="xs:unsignedInt"/>
            <xs:element minOccurs="0" name="deltaNorth" type="xs:double"/>
        </xs:sequence>
    </xs:complexType>
</xs:element>

```

```

        <xs:element minOccurs="0" name="deltaSouth" type="xs:double"/>
        <xs:element minOccurs="0" name="deltaWest" type="xs:double"/>
        <xs:element minOccurs="0" name="deltaEast" type="xs:double"/>
    </xs:sequence>
</xs:complexType>
</xs:element>
<xs:element name="ResizeShapeResponse">
    <xs:complexType>
        <xs:sequence>
            <xs:element xmlns:tns2="http://schemas.datacontract.org/2004/07/p" minOccurs="0"
name="ResizeShapeResult" nillable="true" type="tns2:ServiceResult"/>
        </xs:sequence>
    </xs:complexType>
</xs:element>
<xs:element name="RotateShape">
    <xs:complexType>
        <xs:sequence>
            <xs:element minOccurs="0" name="presentationId" nillable="true" type="xs:string"/>
            <xs:element minOccurs="0" name="slideId" type="xs:unsignedInt"/>
            <xs:element minOccurs="0" name="shapeId" type="xs:unsignedInt"/>
            <xs:element minOccurs="0" name="degrees" type="xs:int"/>
        </xs:sequence>
    </xs:complexType>
</xs:element>
<xs:element name="RotateShapeResponse">
    <xs:complexType>
        <xs:sequence>
            <xs:element xmlns:tns2="http://schemas.datacontract.org/2004/07/p" minOccurs="0"
name="RotateShapeResult" nillable="true" type="tns2:ServiceResult"/>
        </xs:sequence>
    </xs:complexType>
</xs:element>
<xs:element name="FlipShape">
    <xs:complexType>
        <xs:sequence>
            <xs:element minOccurs="0" name="presentationId" nillable="true" type="xs:string"/>
            <xs:element minOccurs="0" name="slideId" type="xs:unsignedInt"/>
            <xs:element minOccurs="0" name="shapeId" type="xs:unsignedInt"/>
            <xs:element minOccurs="0" name="fHorizontal" type="xs:boolean"/>
            <xs:element minOccurs="0" name="fVertical" type="xs:boolean"/>
        </xs:sequence>
    </xs:complexType>
</xs:element>
<xs:element name="FlipShapeResponse">
    <xs:complexType>
        <xs:sequence>
            <xs:element xmlns:tns2="http://schemas.datacontract.org/2004/07/p" minOccurs="0"
name="FlipShapeResult" nillable="true" type="tns2:ServiceResult"/>
        </xs:sequence>
    </xs:complexType>
</xs:element>
<xs:element name="InsertShape">
    <xs:complexType>
        <xs:sequence>
            <xs:element minOccurs="0" name="presentationId" nillable="true" type="xs:string"/>
            <xs:element minOccurs="0" name="slideId" type="xs:unsignedInt"/>
            <xs:element minOccurs="0" name="shapeType" type="xs:int"/>
            <xs:element minOccurs="0" name="shapeCtrPosX" type="xs:int"/>
            <xs:element minOccurs="0" name="shapeCtrPosY" type="xs:int"/>
        </xs:sequence>
    </xs:complexType>
</xs:element>

```

```

        </xs:sequence>
    </xs:complexType>
</xs:element>
<xs:element name="InsertShapeResponse">
    <xs:complexType>
        <xs:sequence>
            <xs:element xmlns:tns2="http://schemas.datacontract.org/2004/07/p" minOccurs="0"
name="InsertShapeResult" nillable="true" type="tns2:ServiceResult"/>
        </xs:sequence>
    </xs:complexType>
</xs:element>
<xs:element name="DuplicateShape">
    <xs:complexType>
        <xs:sequence>
            <xs:element minOccurs="0" name="presentationId" nillable="true" type="xs:string"/>
            <xs:element minOccurs="0" name="slideId" type="xs:unsignedInt"/>
            <xs:element minOccurs="0" name="shapeId" type="xs:unsignedInt"/>
            <xs:element minOccurs="0" name="cloneShapePosX" type="xs:int"/>
            <xs:element minOccurs="0" name="cloneShapePosY" type="xs:int"/>
        </xs:sequence>
    </xs:complexType>
</xs:element>
<xs:element name="DuplicateShapeResponse">
    <xs:complexType>
        <xs:sequence>
            <xs:element xmlns:tns2="http://schemas.datacontract.org/2004/07/p" minOccurs="0"
name="DuplicateShapeResult" nillable="true" type="tns2:ServiceResult"/>
        </xs:sequence>
    </xs:complexType>
</xs:element>
<xs:element name="ArrangeShape">
    <xs:complexType>
        <xs:sequence>
            <xs:element minOccurs="0" name="presentationId" nillable="true" type="xs:string"/>
            <xs:element minOccurs="0" name="slideId" type="xs:unsignedInt"/>
            <xs:element minOccurs="0" name="shapeId" type="xs:unsignedInt"/>
            <xs:element minOccurs="0" name="orderMode" type="xs:unsignedInt"/>
        </xs:sequence>
    </xs:complexType>
</xs:element>
<xs:element name="ArrangeShapeResponse">
    <xs:complexType>
        <xs:sequence>
            <xs:element xmlns:tns2="http://schemas.datacontract.org/2004/07/p" minOccurs="0"
name="ArrangeShapeResult" nillable="true" type="tns2:ServiceResult"/>
        </xs:sequence>
    </xs:complexType>
</xs:element>
<xs:element name="UngroupShape">
    <xs:complexType>
        <xs:sequence>
            <xs:element minOccurs="0" name="presentationId" nillable="true" type="xs:string"/>
            <xs:element minOccurs="0" name="slideId" type="xs:unsignedInt"/>
            <xs:element minOccurs="0" name="shapeId" type="xs:unsignedInt"/>
        </xs:sequence>
    </xs:complexType>
</xs:element>
<xs:element name="UngroupShapeResponse">
    <xs:complexType>

```

```

    <xs:sequence>
      <xs:element xmlns:tns2="http://schemas.datacontract.org/2004/07/p" minOccurs="0"
name="UngroupShapeResult" nillable="true" type="tns2:ServiceResult"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
<xs:element name="ApplyShapeStyle">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="presentationId" nillable="true" type="xs:string"/>
      <xs:element minOccurs="0" name="slideId" type="xs:unsignedInt"/>
      <xs:element minOccurs="0" name="shapeId" type="xs:unsignedInt"/>
      <xs:element minOccurs="0" name="styleId" type="xs:unsignedInt"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
<xs:element name="ApplyShapeStyleResponse">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:tns2="http://schemas.datacontract.org/2004/07/p" minOccurs="0"
name="ApplyShapeStyleResult" nillable="true" type="tns2:ServiceResult"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
<xs:element name="ApplyShapeFill">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="presentationId" nillable="true" type="xs:string"/>
      <xs:element minOccurs="0" name="slideId" type="xs:unsignedInt"/>
      <xs:element minOccurs="0" name="shapeId" type="xs:unsignedInt"/>
      <xs:element minOccurs="0" name="RGBColor" nillable="true" type="xs:string"/>
      <xs:element minOccurs="0" name="themeColor" type="xs:int"/>
      <xs:element minOccurs="0" name="colorLuminance" type="xs:unsignedInt"/>
      <xs:element minOccurs="0" name="fTintColor" type="xs:boolean"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
<xs:element name="ApplyShapeFillResponse">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:tns2="http://schemas.datacontract.org/2004/07/p" minOccurs="0"
name="ApplyShapeFillResult" nillable="true" type="tns2:ServiceResult"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
<xs:element name="RemoveShapeFill">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="presentationId" nillable="true" type="xs:string"/>
      <xs:element minOccurs="0" name="slideId" type="xs:unsignedInt"/>
      <xs:element minOccurs="0" name="shapeId" type="xs:unsignedInt"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
<xs:element name="RemoveShapeFillResponse">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:tns2="http://schemas.datacontract.org/2004/07/p" minOccurs="0"
name="RemoveShapeFillResult" nillable="true" type="tns2:ServiceResult"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>

```

```

    </xs:sequence>
  </xs:complexType>
</xs:element>
<xs:element name="ApplyShapeOutlineColor">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="presentationId" nillable="true" type="xs:string"/>
      <xs:element minOccurs="0" name="slideId" type="xs:unsignedInt"/>
      <xs:element minOccurs="0" name="shapeId" type="xs:unsignedInt"/>
      <xs:element minOccurs="0" name="RGBColor" nillable="true" type="xs:string"/>
      <xs:element minOccurs="0" name="themeColor" type="xs:int"/>
      <xs:element minOccurs="0" name="colorLuminance" type="xs:unsignedInt"/>
      <xs:element minOccurs="0" name="fTintColor" type="xs:boolean"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
<xs:element name="ApplyShapeOutlineColorResponse">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:tns2="http://schemas.datacontract.org/2004/07/p" minOccurs="0"
name="ApplyShapeOutlineColorResult" nillable="true" type="tns2:ServiceResult"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
<xs:element name="ApplyShapeOutlineWidth">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="presentationId" nillable="true" type="xs:string"/>
      <xs:element minOccurs="0" name="slideId" type="xs:unsignedInt"/>
      <xs:element minOccurs="0" name="shapeId" type="xs:unsignedInt"/>
      <xs:element minOccurs="0" name="width" type="xs:double"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
<xs:element name="ApplyShapeOutlineWidthResponse">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:tns2="http://schemas.datacontract.org/2004/07/p" minOccurs="0"
name="ApplyShapeOutlineWidthResult" nillable="true" type="tns2:ServiceResult"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
<xs:element name="ApplyShapeOutlineDashStyle">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="presentationId" nillable="true" type="xs:string"/>
      <xs:element minOccurs="0" name="slideId" type="xs:unsignedInt"/>
      <xs:element minOccurs="0" name="shapeId" type="xs:unsignedInt"/>
      <xs:element minOccurs="0" name="dashType" type="xs:unsignedInt"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
<xs:element name="ApplyShapeOutlineDashStyleResponse">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:tns2="http://schemas.datacontract.org/2004/07/p" minOccurs="0"
name="ApplyShapeOutlineDashStyleResult" nillable="true" type="tns2:ServiceResult"/>
    </xs:sequence>
  </xs:complexType>

```

```

</xs:element>
<xs:element name="ApplyShapeOutlineEndStyle">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="presentationId" nillable="true" type="xs:string"/>
      <xs:element minOccurs="0" name="slideId" type="xs:unsignedInt"/>
      <xs:element minOccurs="0" name="shapeId" type="xs:unsignedInt"/>
      <xs:element minOccurs="0" name="headEndType" type="xs:unsignedInt"/>
      <xs:element minOccurs="0" name="tailEndType" type="xs:unsignedInt"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
<xs:element name="ApplyShapeOutlineEndStyleResponse">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:tns2="http://schemas.datacontract.org/2004/07/p" minOccurs="0"
name="ApplyShapeOutlineEndStyleResult" nillable="true" type="tns2:ServiceResult"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
<xs:element name="RemoveShapeOutline">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="presentationId" nillable="true" type="xs:string"/>
      <xs:element minOccurs="0" name="slideId" type="xs:unsignedInt"/>
      <xs:element minOccurs="0" name="shapeId" type="xs:unsignedInt"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
<xs:element name="RemoveShapeOutlineResponse">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:tns2="http://schemas.datacontract.org/2004/07/p" minOccurs="0"
name="RemoveShapeOutlineResult" nillable="true" type="tns2:ServiceResult"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
<xs:element name="SaveAndClose">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="presentationId" nillable="true" type="xs:string"/>
      <xs:element minOccurs="0" name="fReleaseLock" type="xs:boolean"/>
      <xs:element minOccurs="0" name="fWaitForSave" type="xs:boolean"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
<xs:element name="SaveAndCloseResponse">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:tns2="http://schemas.datacontract.org/2004/07/p" minOccurs="0"
name="SaveAndCloseResult" nillable="true" type="tns2:ServiceResult"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
<xs:element name="UpdateCanary">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="presentationId" nillable="true" type="xs:string"/>
    </xs:sequence>
  </xs:complexType>

```



```

    </xs:complexType>
  </xs:element>
  <xs:element name="UpdateCanaryResponse">
    <xs:complexType>
      <xs:sequence>
        <xs:element xmlns:tns2="http://schemas.datacontract.org/2004/07/p" minOccurs="0"
name="UpdateCanaryResult" nillable="true" type="tns2:ServiceResult"/>
      </xs:sequence>
    </xs:complexType>
  </xs:element>
  <xs:element name="Print">
    <xs:complexType>
      <xs:sequence>
        <xs:element minOccurs="0" name="presentationId" nillable="true" type="xs:string"/>
      </xs:sequence>
    </xs:complexType>
  </xs:element>
  <xs:element name="PrintResponse">
    <xs:complexType>
      <xs:sequence>
        <xs:element xmlns:tns2="http://schemas.datacontract.org/2004/07/p" minOccurs="0"
name="PrintResult" nillable="true" type="tns2:ServiceResult"/>
      </xs:sequence>
    </xs:complexType>
  </xs:element>
  <xs:element name="ChangeSmartArtLayout">
    <xs:complexType>
      <xs:sequence>
        <xs:element minOccurs="0" name="presentationId" nillable="true" type="xs:string"/>
        <xs:element minOccurs="0" name="slideId" type="xs:unsignedInt"/>
        <xs:element minOccurs="0" name="shapeId" type="xs:unsignedInt"/>
        <xs:element minOccurs="0" name="layoutUri" nillable="true" type="xs:string"/>
        <xs:element minOccurs="0" name="category" nillable="true" type="xs:string"/>
      </xs:sequence>
    </xs:complexType>
  </xs:element>
  <xs:element name="ChangeSmartArtLayoutResponse">
    <xs:complexType>
      <xs:sequence>
        <xs:element xmlns:tns2="http://schemas.datacontract.org/2004/07/p" minOccurs="0"
name="ChangeSmartArtLayoutResult" nillable="true" type="tns2:ServiceResult"/>
      </xs:sequence>
    </xs:complexType>
  </xs:element>
  <xs:element name="ChangeSmartArtColor">
    <xs:complexType>
      <xs:sequence>
        <xs:element minOccurs="0" name="presentationId" nillable="true" type="xs:string"/>
        <xs:element minOccurs="0" name="slideId" type="xs:unsignedInt"/>
        <xs:element minOccurs="0" name="shapeId" type="xs:unsignedInt"/>
        <xs:element minOccurs="0" name="colorTransUri" nillable="true" type="xs:string"/>
        <xs:element minOccurs="0" name="category" nillable="true" type="xs:string"/>
      </xs:sequence>
    </xs:complexType>
  </xs:element>
  <xs:element name="ChangeSmartArtColorResponse">
    <xs:complexType>
      <xs:sequence>

```

```

        <xs:element xmlns:tns2="http://schemas.datacontract.org/2004/07/p" minOccurs="0"
name="ChangeSmartArtColorResult" nillable="true" type="tns2:ServiceResult"/>
    </xs:sequence>
</xs:complexType>
</xs:element>
<xs:element name="ChangeSmartArtStyle">
    <xs:complexType>
        <xs:sequence>
            <xs:element minOccurs="0" name="presentationId" nillable="true" type="xs:string"/>
            <xs:element minOccurs="0" name="slideId" type="xs:unsignedInt"/>
            <xs:element minOccurs="0" name="shapeId" type="xs:unsignedInt"/>
            <xs:element minOccurs="0" name="styleUri" nillable="true" type="xs:string"/>
            <xs:element minOccurs="0" name="category" nillable="true" type="xs:string"/>
        </xs:sequence>
    </xs:complexType>
</xs:element>
<xs:element name="ChangeSmartArtStyleResponse">
    <xs:complexType>
        <xs:sequence>
            <xs:element xmlns:tns2="http://schemas.datacontract.org/2004/07/p" minOccurs="0"
name="ChangeSmartArtStyleResult" nillable="true" type="tns2:ServiceResult"/>
        </xs:sequence>
    </xs:complexType>
</xs:element>
<xs:element name="InsertSmartArt">
    <xs:complexType>
        <xs:sequence>
            <xs:element minOccurs="0" name="presentationId" nillable="true" type="xs:string"/>
            <xs:element minOccurs="0" name="slideId" type="xs:unsignedInt"/>
            <xs:element minOccurs="0" name="shapeId" type="xs:unsignedInt"/>
            <xs:element minOccurs="0" name="layoutUri" nillable="true" type="xs:string"/>
            <xs:element minOccurs="0" name="category" nillable="true" type="xs:string"/>
        </xs:sequence>
    </xs:complexType>
</xs:element>
<xs:element name="InsertSmartArtResponse">
    <xs:complexType>
        <xs:sequence>
            <xs:element xmlns:tns2="http://schemas.datacontract.org/2004/07/p" minOccurs="0"
name="InsertSmartArtResult" nillable="true" type="tns2:ServiceResult"/>
        </xs:sequence>
    </xs:complexType>
</xs:element>
<xs:element name="GetPresentationId">
    <xs:complexType>
        <xs:sequence>
            <xs:element minOccurs="0" name="rawDocId" nillable="true" type="xs:string"/>
        </xs:sequence>
    </xs:complexType>
</xs:element>
<xs:element name="GetPresentationIdResponse">
    <xs:complexType>
        <xs:sequence>
            <xs:element minOccurs="0" name="GetPresentationIdResult" nillable="true"
type="xs:string"/>
        </xs:sequence>
    </xs:complexType>
</xs:element>
<xs:element name="GetCoauthUpdates">

```

```

<xs:complexType>
  <xs:sequence>
    <xs:element minOccurs="0" name="presentationId" nillable="true" type="xs:string"/>
    <xs:element minOccurs="0" name="lastToken" nillable="true" type="xs:string"/>
  </xs:sequence>
</xs:complexType>
</xs:element>
<xs:element name="GetCoauthUpdatesResponse">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:tns2="http://schemas.datacontract.org/2004/07/p" minOccurs="0"
name="GetCoauthUpdatesResult" nillable="true" type="tns2:ServiceResult"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
<xs:element name="GetEditPresInfo">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="presentationId" nillable="true" type="xs:string"/>
      <xs:element minOccurs="0" name="firstSlideIndex" type="xs:unsignedInt"/>
      <xs:element minOccurs="0" name="numSlides" type="xs:unsignedInt"/>
      <xs:element minOccurs="0" name="includedEditSlideIndex" type="xs:int"/>
      <xs:element minOccurs="0" name="clientWidth" type="xs:unsignedInt"/>
      <xs:element minOccurs="0" name="clientHeight" type="xs:unsignedInt"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
<xs:element name="GetEditPresInfoResponse">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:tns2="http://schemas.datacontract.org/2004/07/p" minOccurs="0"
name="GetEditPresInfoResult" nillable="true" type="tns2:ServiceResult"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
<xs:element name="GetEditPresInfoGetEditSlideById">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="presentationId" nillable="true" type="xs:string"/>
      <xs:element minOccurs="0" name="firstSlideIndex" type="xs:unsignedInt"/>
      <xs:element minOccurs="0" name="numSlides" type="xs:unsignedInt"/>
      <xs:element minOccurs="0" name="includedEditSlideId" type="xs:unsignedInt"/>
      <xs:element minOccurs="0" name="clientWidth" type="xs:unsignedInt"/>
      <xs:element minOccurs="0" name="clientHeight" type="xs:unsignedInt"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
<xs:element name="GetEditPresInfoGetEditSlideByIdResponse">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:tns2="http://schemas.datacontract.org/2004/07/p" minOccurs="0"
name="GetEditPresInfoGetEditSlideByIdResult" nillable="true" type="tns2:ServiceResult"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
<xs:element name="GetEditSlide">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="presentationId" nillable="true" type="xs:string"/>

```

```

        <xs:element minOccurs="0" name="slideId" type="xs:int"/>
    </xs:sequence>
</xs:complexType>
</xs:element>
<xs:element name="GetEditSlideResponse">
    <xs:complexType>
        <xs:sequence>
            <xs:element xmlns:tns2="http://schemas.datacontract.org/2004/07/p" minOccurs="0"
name="GetEditSlideResult" nillable="true" type="tns2:ServiceResult"/>
        </xs:sequence>
    </xs:complexType>
</xs:element>
<xs:element name="MoveSlide">
    <xs:complexType>
        <xs:sequence>
            <xs:element minOccurs="0" name="presentationId" nillable="true" type="xs:string"/>
            <xs:element minOccurs="0" name="srcId" type="xs:unsignedInt"/>
            <xs:element minOccurs="0" name="dstId" type="xs:unsignedInt"/>
        </xs:sequence>
    </xs:complexType>
</xs:element>
<xs:element name="MoveSlideResponse">
    <xs:complexType>
        <xs:sequence>
            <xs:element xmlns:tns2="http://schemas.datacontract.org/2004/07/p" minOccurs="0"
name="MoveSlideResult" nillable="true" type="tns2:ServiceResult"/>
        </xs:sequence>
    </xs:complexType>
</xs:element>
<xs:element name="InsertSlide">
    <xs:complexType>
        <xs:sequence>
            <xs:element minOccurs="0" name="presentationId" nillable="true" type="xs:string"/>
            <xs:element minOccurs="0" name="dstId" type="xs:unsignedInt"/>
            <xs:element minOccurs="0" name="mainMasterId" type="xs:unsignedInt"/>
            <xs:element minOccurs="0" name="contentMasterId" type="xs:unsignedInt"/>
        </xs:sequence>
    </xs:complexType>
</xs:element>
<xs:element name="InsertSlideResponse">
    <xs:complexType>
        <xs:sequence>
            <xs:element xmlns:tns2="http://schemas.datacontract.org/2004/07/p" minOccurs="0"
name="InsertSlideResult" nillable="true" type="tns2:ServiceResult"/>
        </xs:sequence>
    </xs:complexType>
</xs:element>
<xs:element name="ReplaceText">
    <xs:complexType>
        <xs:sequence>
            <xs:element minOccurs="0" name="presentationId" nillable="true" type="xs:string"/>
            <xs:element minOccurs="0" name="slideId" type="xs:unsignedInt"/>
            <xs:element minOccurs="0" name="shapeId" type="xs:unsignedInt"/>
            <xs:element minOccurs="0" name="newText" nillable="true" type="xs:string"/>
        </xs:sequence>
    </xs:complexType>
</xs:element>
<xs:element name="ReplaceTextResponse">
    <xs:complexType>

```

```

    <xs:sequence>
      <xs:element xmlns:tns2="http://schemas.datacontract.org/2004/07/p" minOccurs="0"
name="ReplaceTextResult" nillable="true" type="tns2:ServiceResult"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
<xs:element name="SetAnimation">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="presentationId" nillable="true" type="xs:string"/>
      <xs:element minOccurs="0" name="slideId" type="xs:unsignedInt"/>
      <xs:element minOccurs="0" name="shapeId" type="xs:unsignedInt"/>
      <xs:element minOccurs="0" name="fxId" type="xs:unsignedInt"/>
      <xs:element minOccurs="0" name="direction" type="xs:unsignedInt"/>
      <xs:element minOccurs="0" name="sequenceId" type="xs:unsignedInt"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
<xs:element name="SetAnimationResponse">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:tns2="http://schemas.datacontract.org/2004/07/p" minOccurs="0"
name="SetAnimationResult" nillable="true" type="tns2:ServiceResult"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
<xs:element name="SetTransition">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="presentationId" nillable="true" type="xs:string"/>
      <xs:element minOccurs="0" name="slideId" type="xs:unsignedInt"/>
      <xs:element minOccurs="0" name="type" type="xs:unsignedInt"/>
      <xs:element minOccurs="0" name="direction" type="xs:unsignedInt"/>
      <xs:element minOccurs="0" name="duration" type="xs:unsignedInt"/>
      <xs:element minOccurs="0" name="isManualAdvance" type="xs:boolean"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
<xs:element name="SetTransitionResponse">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:tns2="http://schemas.datacontract.org/2004/07/p" minOccurs="0"
name="SetTransitionResult" nillable="true" type="tns2:ServiceResult"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
<xs:element name="SetTransitionApplyAll">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="presentationId" nillable="true" type="xs:string"/>
      <xs:element minOccurs="0" name="slideId" type="xs:unsignedInt"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
<xs:element name="SetTransitionApplyAllResponse">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:tns2="http://schemas.datacontract.org/2004/07/p" minOccurs="0"
name="SetTransitionApplyAllResult" nillable="true" type="tns2:ServiceResult"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>

```

```

    </xs:sequence>
  </xs:complexType>
</xs:element>
<xs:element name="ReorderAnimation">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="presentationId" nillable="true" type="xs:string"/>
      <xs:element minOccurs="0" name="slideId" type="xs:unsignedInt"/>
      <xs:element minOccurs="0" name="shapeId" type="xs:unsignedInt"/>
      <xs:element minOccurs="0" name="fLater" type="xs:boolean"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
<xs:element name="ReorderAnimationResponse">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:tns2="http://schemas.datacontract.org/2004/07/p" minOccurs="0"
name="ReorderAnimationResult" nillable="true" type="tns2:ServiceResult"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
<xs:element name="ClearPlaceholder">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="presentationId" nillable="true" type="xs:string"/>
      <xs:element minOccurs="0" name="slideId" type="xs:unsignedInt"/>
      <xs:element minOccurs="0" name="shapeId" type="xs:unsignedInt"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
<xs:element name="ClearPlaceholderResponse">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:tns2="http://schemas.datacontract.org/2004/07/p" minOccurs="0"
name="ClearPlaceholderResult" nillable="true" type="tns2:ServiceResult"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
<xs:element name="DeleteSlide">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="presentationId" nillable="true" type="xs:string"/>
      <xs:element minOccurs="0" name="slideId" type="xs:unsignedInt"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
<xs:element name="DeleteSlideResponse">
  <xs:complexType>
    <xs:sequence>
      <xs:element xmlns:tns2="http://schemas.datacontract.org/2004/07/p" minOccurs="0"
name="DeleteSlideResult" nillable="true" type="tns2:ServiceResult"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
<xs:element name="DuplicateSlide">
  <xs:complexType>
    <xs:sequence>
      <xs:element minOccurs="0" name="presentationId" nillable="true" type="xs:string"/>
      <xs:element minOccurs="0" name="srcId" type="xs:unsignedInt"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>

```

```

        <xs:element minOccurs="0" name="dstId" type="xs:unsignedInt"/>
    </xs:sequence>
</xs:complexType>
</xs:element>
<xs:element name="DuplicateSlideResponse">
    <xs:complexType>
        <xs:sequence>
            <xs:element xmlns:tns2="http://schemas.datacontract.org/2004/07/p" minOccurs="0"
name="DuplicateSlideResult" nillable="true" type="tns2:ServiceResult"/>
        </xs:sequence>
    </xs:complexType>
</xs:element>
<xs:element name="ShowHideSlide">
    <xs:complexType>
        <xs:sequence>
            <xs:element minOccurs="0" name="presentationId" nillable="true" type="xs:string"/>
            <xs:element minOccurs="0" name="slideId" type="xs:unsignedInt"/>
            <xs:element minOccurs="0" name="fHidden" type="xs:boolean"/>
        </xs:sequence>
    </xs:complexType>
</xs:element>
<xs:element name="ShowHideSlideResponse">
    <xs:complexType>
        <xs:sequence>
            <xs:element xmlns:tns2="http://schemas.datacontract.org/2004/07/p" minOccurs="0"
name="ShowHideSlideResult" nillable="true" type="tns2:ServiceResult"/>
        </xs:sequence>
    </xs:complexType>
</xs:element>
<xs:element name="ReplaceNotes">
    <xs:complexType>
        <xs:sequence>
            <xs:element minOccurs="0" name="presentationId" nillable="true" type="xs:string"/>
            <xs:element minOccurs="0" name="slideId" type="xs:unsignedInt"/>
            <xs:element minOccurs="0" name="newNotes" nillable="true" type="xs:string"/>
        </xs:sequence>
    </xs:complexType>
</xs:element>
<xs:element name="ReplaceNotesResponse">
    <xs:complexType>
        <xs:sequence>
            <xs:element xmlns:tns2="http://schemas.datacontract.org/2004/07/p" minOccurs="0"
name="ReplaceNotesResult" nillable="true" type="tns2:ServiceResult"/>
        </xs:sequence>
    </xs:complexType>
</xs:element>
<xs:element name="Undo">
    <xs:complexType>
        <xs:sequence>
            <xs:element minOccurs="0" name="presentationId" nillable="true" type="xs:string"/>
        </xs:sequence>
    </xs:complexType>
</xs:element>
<xs:element name="UndoResponse">
    <xs:complexType>
        <xs:sequence>
            <xs:element xmlns:tns2="http://schemas.datacontract.org/2004/07/p" minOccurs="0"
name="UndoResult" nillable="true" type="tns2:ServiceResult"/>
        </xs:sequence>
    </xs:complexType>
</xs:element>

```

```

    </xs:complexType>
  </xs:element>
  <xs:element name="Redo">
    <xs:complexType>
      <xs:sequence>
        <xs:element minOccurs="0" name="presentationId" nillable="true" type="xs:string"/>
      </xs:sequence>
    </xs:complexType>
  </xs:element>
  <xs:element name="RedoResponse">
    <xs:complexType>
      <xs:sequence>
        <xs:element xmlns:tns2="http://schemas.datacontract.org/2004/07/p" minOccurs="0"
name="RedoResult" nillable="true" type="tns2:ServiceResult"/>
      </xs:sequence>
    </xs:complexType>
  </xs:element>
  <xs:element name="ChangePictureStyle">
    <xs:complexType>
      <xs:sequence>
        <xs:element minOccurs="0" name="presentationId" nillable="true" type="xs:string"/>
        <xs:element minOccurs="0" name="slideId" type="xs:unsignedInt"/>
        <xs:element minOccurs="0" name="shapeId" type="xs:unsignedInt"/>
        <xs:element minOccurs="0" name="pictureStyleId" type="xs:unsignedInt"/>
      </xs:sequence>
    </xs:complexType>
  </xs:element>
  <xs:element name="ChangePictureStyleResponse">
    <xs:complexType>
      <xs:sequence>
        <xs:element xmlns:tns2="http://schemas.datacontract.org/2004/07/p" minOccurs="0"
name="ChangePictureStyleResult" nillable="true" type="tns2:ServiceResult"/>
      </xs:sequence>
    </xs:complexType>
  </xs:element>
  <xs:element name="ResetPicture">
    <xs:complexType>
      <xs:sequence>
        <xs:element minOccurs="0" name="presentationId" nillable="true" type="xs:string"/>
        <xs:element minOccurs="0" name="slideId" type="xs:unsignedInt"/>
        <xs:element minOccurs="0" name="shapeId" type="xs:unsignedInt"/>
      </xs:sequence>
    </xs:complexType>
  </xs:element>
  <xs:element name="ResetPictureResponse">
    <xs:complexType>
      <xs:sequence>
        <xs:element xmlns:tns2="http://schemas.datacontract.org/2004/07/p" minOccurs="0"
name="ResetPictureResult" nillable="true" type="tns2:ServiceResult"/>
      </xs:sequence>
    </xs:complexType>
  </xs:element>
  <xs:element name="MoveShape">
    <xs:complexType>
      <xs:sequence>
        <xs:element minOccurs="0" name="presentationId" nillable="true" type="xs:string"/>
        <xs:element minOccurs="0" name="slideId" type="xs:unsignedInt"/>
        <xs:element minOccurs="0" name="shapeId" type="xs:unsignedInt"/>
        <xs:element minOccurs="0" name="x" type="xs:double"/>
      </xs:sequence>
    </xs:complexType>
  </xs:element>

```



```
        <xs:element minOccurs="0" name="y" type="xs:double"/>
      </xs:sequence>
    </xs:complexType>
  </xs:element>
  <xs:element name="MoveShapeResponse">
    <xs:complexType>
      <xs:sequence>
        <xs:element xmlns:tns2="http://schemas.datacontract.org/2004/07/p" minOccurs="0"
name="MoveShapeResult" nillable="true" type="tns2:ServiceResult"/>
      </xs:sequence>
    </xs:complexType>
  </xs:element>
</xs:schema>
```

8 Appendix C: Product Behavior

The information in this specification is applicable to the following Microsoft products or supplemental software. References to product versions include released service packs:

- Microsoft® PowerPoint® 2010
- Microsoft® PowerPoint® Web App
- Microsoft® PowerPoint® 15 Technical Preview

Exceptions, if any, are noted below. If a service pack or Quick Fix Engineering (QFE) number appears with the product version, behavior changed in that service pack or QFE. The new behavior also applies to subsequent service packs of the product unless otherwise specified. If a product edition appears with the product version, behavior is different in that product edition.

Unless otherwise specified, any statement of optional behavior in this specification that is prescribed using the terms SHOULD or SHOULD NOT implies product behavior in accordance with the SHOULD or SHOULD NOT prescription. Unless otherwise specified, the term MAY implies that the product does not follow the prescription.

[<1> Section 1.5:](#) The protocol server endpoint to which the client sends requests to modify presentation content is formed by appending `"/_vti_bin/ppt/edit.svc"` to the URL of the Web site (1) in Office 2010.

[<2> Section 1.5:](#) The protocol server endpoint to which the client sends requests to modify image content is formed by appending `"/_layouts/pptInsertPicture.ashx"` to the URL of the Web site (1) in Office 2010.

[<3> Section 2.1:](#) PowerPoint Web App servers support JSON [\[RFC4627\]](#) over HTTP and HTTPS.

[<4> Section 2.2.4:](#) Support for this complex type was added in Office 15 Technical Preview.

[<5> Section 2.2.4:](#) Support for this complex type was added in Office 15 Technical Preview.

[<6> Section 2.2.4:](#) Support for this complex type was added in Office 15 Technical Preview.

[<7> Section 2.2.4:](#) Support for this complex type was added in Office 15 Technical Preview.

[<8> Section 2.2.4:](#) Support for this complex type was added in Office 15 Technical Preview.

[<9> Section 2.2.4:](#) Support for this type was added in Office 2010 Service Pack 1.

[<10> Section 2.2.4:](#) Support for this complex type was added in Office 15 Technical Preview.

[<11> Section 2.2.4:](#) Support for this complex type was added in Office 15 Technical Preview.

[<12> Section 2.2.4:](#) Support for this complex type was added in Office 15 Technical Preview.

[<13> Section 2.2.4:](#) Support for this complex type was added in Office 15 Technical Preview.

[<14> Section 2.2.4:](#) Support for this complex type was added in Office 15 Technical Preview.

[<15> Section 2.2.4:](#) Support for this complex type was added in Office 15 Technical Preview.

[<16> Section 2.2.4:](#) Support for this type was added in Office 2010 Service Pack 1.

<17> [Section 2.2.4:](#) Support for this complex type was added in Office 15 Technical Preview.

<18> [Section 2.2.4:](#) Support for this complex type was added in Office 15 Technical Preview.

<19> [Section 2.2.4.9:](#) Support for this type was added in Office 2010 Service Pack 1.

<20> [Section 2.2.4.12:](#) Support for this element was added in Office 2010 Service Pack 1.

<21> [Section 2.2.4.12:](#) Support for this element was added in Office 2010 Service Pack 1.

<22> [Section 2.2.4.13:](#) Support for this element was added in Office 2010 Service Pack 1.

<23> [Section 2.2.4.23:](#) Support for this type was added in Office 2010 Service Pack 1.

<24> [Section 2.2.4.31:](#) PowerPoint Web App defines this type as an **xs:string** ([\[XMLSCHEMA2\]](#) section 3.2.1) that specifies the identifier of the image.

To retrieve an image, the protocol client sends a request to the protocol server at the endpoint formed by appending `"/_layouts/editImageHandler.ashx"` to the URL of the Web site, for example `http://www.contoso.com/Repository/_layouts/editImageHandler.ashx`.

The parameters to the endpoint are specified by the following table:

Parameter name	Definition
Rid	MUST be <code>ImgId</code> as specified by ViewElement .
Pid	MUST be a valid identifier for a presentation as specified in GetPresentationId .

<25> [Section 2.2.4.32:](#) Support for this complex type was added in Office 15 Technical Preview.

<26> [Section 2.2.4.33:](#) Support for this complex type was added in Office 15 Technical Preview.

<27> [Section 2.2.4.34:](#) Support for this complex type was added in Office 15 Technical Preview.

<28> [Section 2.2.4.35:](#) Support for this complex type was added in Office 15 Technical Preview.

<29> [Section 2.2.4.36:](#) Support for this complex type was added in Office 15 Technical Preview.

<30> [Section 2.2.4.37:](#) Support for this complex type was added in Office 15 Technical Preview.

<31> [Section 2.2.4.38:](#) Support for this complex type was added in Office 15 Technical Preview.

<32> [Section 2.2.4.39:](#) Support for this complex type was added in Office 15 Technical Preview.

<33> [Section 2.2.4.40:](#) Support for this complex type was added in Office 15 Technical Preview.

<34> [Section 2.2.4.41:](#) Support for this complex type was added in Office 15 Technical Preview.

<35> [Section 2.2.4.42:](#) Support for this complex type was added in Office 15 Technical Preview.

<36> [Section 2.2.4.43:](#) Support for this complex type was added in Office 15 Technical Preview.

<37> [Section 2.2.4.44:](#) Support for this complex type was added in Office 15 Technical Preview.

<38> [Section 3.1.3:](#) The URL conforms to the following structure in Office 2010: *base URL/_vti_bin/ppt/edit.svc*

<39> [Section 3.1.4:](#) The insert picture operation is used to insert a picture into a presentation.

In Office 2010, the protocol server endpoint to insert picture content is formed by appending "/_layouts/pptInsertPicture.ashx" to the URL of the Web site, for example http://www.contoso.com/_layouts/pptInsertPicture.ashx.

In Office 15 Technical Preview, the protocol server endpoint to insert picture content is formed by appending "/p/pptInsertPicture.ashx" to the base URL, for example <http://www.contoso.com/p/pptInsertPicture.ashx>.

The parameters to the endpoint are specified by the following table:

Parameter name	Definition
PresentationId	MUST be a valid identifier of a presentation as specified by section 3.1.4.11 .
SlideId	MUST be a valid ST_SlideId ([ISO/IEC-29500-1] section 19.7.13) that specifies the identifier of the presentation slide.
ShapeId	MUST be a valid ST_DrawingElementId ([ISO/IEC-29500-1] section 20.1.10.21) that specifies the identifier of the shape.

<40> [Section 3.1.4](#): Support for this operation was added in Office 15 Technical Preview.

<41> [Section 3.1.4](#): Support for this operation was added in Office 15 Technical Preview.

<42> [Section 3.1.4](#): Support for this operation was added in Office 15 Technical Preview.

<43> [Section 3.1.4](#): Support for this operation was added in Office 15 Technical Preview.

<44> [Section 3.1.4](#): Support for this operation was added in Office 15 Technical Preview.

<45> [Section 3.1.4](#): Support for this operation was added in Office 15 Technical Preview.

<46> [Section 3.1.4](#): Support for this operation was added in Office 15 Technical Preview.

<47> [Section 3.1.4](#): Support for this operation was added in Office 2010 Service Pack 1.

<48> [Section 3.1.4](#): Support for this operation was added in Office 15 Technical Preview.

<49> [Section 3.1.4](#): Support for this operation was added in Office 15 Technical Preview.

<50> [Section 3.1.4](#): Support for this operation was added in Office 15 Technical Preview.

<51> [Section 3.1.4](#): Support for this operation was added in Office 15 Technical Preview.

<52> [Section 3.1.4](#): Support for this operation was added in Office 15 Technical Preview.

<53> [Section 3.1.4](#): Support for this operation was added in Office 15 Technical Preview.

<54> [Section 3.1.4](#): Support for this operation was added in Office 15 Technical Preview.

<55> [Section 3.1.4](#): Support for this operation was added in Office 2010 Service Pack 1.

<56> [Section 3.1.4](#): Support for this operation was added in Office 15 Technical Preview.

<57> [Section 3.1.4](#): Support for this operation was added in Office 15 Technical Preview.

<58> [Section 3.1.4](#): Support for this operation was added in Office 15 Technical Preview.

[<59> Section 3.1.4:](#) Support for this operation was added in Office 2010 Service Pack 1.

[<60> Section 3.1.4:](#) Support for this operation was added in Office 15 Technical Preview.

[<61> Section 3.1.4:](#) Support for this operation was added in Office 15 Technical Preview.

[<62> Section 3.1.4:](#) Support for this operation was added in Office 15 Technical Preview.

[<63> Section 3.1.4:](#) Support for this operation was added in Office 15 Technical Preview.

[<64> Section 3.1.4:](#) Support for this operation was added in Office 15 Technical Preview.

[<65> Section 3.1.4:](#) Support for this operation was added in Office 15 Technical Preview.

[<66> Section 3.1.4:](#) Support for this operation was added in Office 15 Technical Preview.

[<67> Section 3.1.4:](#) Support for this operation was added in Office 15 Technical Preview.

[<68> Section 3.1.4:](#) Support for this operation was added in Office 15 Technical Preview.

[<69> Section 3.1.4:](#) Support for this operation was added in Office 15 Technical Preview.

[<70> Section 3.1.4:](#) Support for this operation was added in Office 15 Technical Preview.

[<71> Section 3.1.4.1:](#) Support for this operation was added in Office 2010 Service Pack 1.

[<72> Section 3.1.4.12:](#) Support for this operation was added in Office 2010 Service Pack 1.

[<73> Section 3.1.4.16:](#) Support for this operation was added in Office 2010 Service Pack 1.

[<74> Section 3.1.4.26:](#) Support for this operation was added in Office 15 Technical Preview.

[<75> Section 3.1.4.27:](#) Support for this operation was added in Office 15 Technical Preview.

[<76> Section 3.1.4.28:](#) Support for this operation was added in Office 15 Technical Preview.

[<77> Section 3.1.4.29:](#) Support for this operation was added in Office 15 Technical Preview.

[<78> Section 3.1.4.30:](#) Support for this operation was added in Office 15 Technical Preview.

[<79> Section 3.1.4.31:](#) Support for this operation was added in Office 15 Technical Preview.

[<80> Section 3.1.4.32:](#) Support for this operation was added in Office 15 Technical Preview.

[<81> Section 3.1.4.33:](#) Support for this operation was added in Office 15 Technical Preview.

[<82> Section 3.1.4.34:](#) Support for this operation was added in Office 15 Technical Preview.

[<83> Section 3.1.4.35:](#) Support for this operation was added in Office 15 Technical Preview.

[<84> Section 3.1.4.36:](#) Support for this operation was added in Office 15 Technical Preview.

[<85> Section 3.1.4.37:](#) Support for this operation was added in Office 15 Technical Preview.

[<86> Section 3.1.4.38:](#) Support for this operation was added in Office 15 Technical Preview.

[<87> Section 3.1.4.39:](#) Support for this operation was added in Office 15 Technical Preview.

[<88> Section 3.1.4.40:](#) Support for this operation was added in Office 15 Technical Preview.

<89> [Section 3.1.4.41](#): Support for this operation was added in Office 15 Technical Preview.

<90> [Section 3.1.4.42](#): Support for this operation was added in Office 15 Technical Preview.

<91> [Section 3.1.4.43](#): Support for this operation was added in Office 15 Technical Preview.

<92> [Section 3.1.4.44](#): Support for this operation was added in Office 15 Technical Preview.

<93> [Section 3.1.4.45](#): Support for this operation was added in Office 15 Technical Preview.

<94> [Section 3.1.4.47](#): Support for this operation was added in Office 15 Technical Preview.

<95> [Section 3.1.4.48](#): Support for this operation was added in Office 15 Technical Preview.

<96> [Section 3.1.4.49](#): Support for this operation was added in Office 15 Technical Preview.

<97> [Section 3.1.4.50](#): Support for this operation was added in Office 15 Technical Preview.

<98> [Section 3.1.4.51](#): Support for this operation was added in Office 15 Technical Preview.

<99> [Section 3.1.4.52](#): Support for this operation was added in Office 15 Technical Preview.

<100> [Section 3.1.4.53](#): Support for this operation was added in Office 15 Technical Preview.

<101> [Section 3.1.4.54](#): Support for this operation was added in Office 15 Technical Preview.

<102> [Section 5.1](#): PowerPoint Web App Technical Preview uses the canary mitigation as follows. On a request to [GetPresentationId](#), a HTTP cookie with a name of X-Key is included in the response. The value of this cookie is then required to be included by subsequent operation calls that may result in a change to a presentation. For any subsequent operation, an additional cookie with the name X-NewKey may also be included which allows the protocol server to inform the protocol client of the new canary value, for example when the canary has expired.

9 Change Tracking

No table of changes is available. The document is either new or has had no changes since its last release.

Preliminary

10 Index

A

Abstract data model
 [server](#) 55
[Applicability](#) 21
[ArrayOfComment complex type](#) 41
[ArrayOfContentMasterFe complex type](#) 25
[ArrayOfEditAnimInfo complex type](#) 41
[ArrayOfEditorInfo complex type](#) 42
[ArrayOfEditShape complex type](#) 25
[ArrayOfEditSlide complex type](#) 25
[ArrayOfEditSlideChanges complex type](#) 26
[ArrayOfEditSlideInfoFe complex type](#) 26
[ArrayOfMainMasterFe complex type](#) 26
[ArrayOfStyleGalleryItem complex type](#) 42
[ArrayOfunsignedInt complex type](#) 26
[ArrayOfViewElement complex type](#) 27
[Attribute groups](#) 53
[Attributes](#) 53

B

[BoundingRegion complex type](#) 42

C

[Capability negotiation](#) 21
[Change tracking](#) 247
[char simple type](#) 48
Client
 [overview](#) 54
[ClientActions simple type](#) 48
[ClippingInfo complex type](#) 27
[CoauthState complex type](#) 43
[CoauthUpdate complex type](#) 43
[Comment complex type](#) 44
[Complex types](#) 23
 [ArrayOfComment](#) 41
 [ArrayOfContentMasterFe](#) 25
 [ArrayOfEditAnimInfo](#) 41
 [ArrayOfEditorInfo](#) 42
 [ArrayOfEditShape](#) 25
 [ArrayOfEditSlide](#) 25
 [ArrayOfEditSlideChanges](#) 26
 [ArrayOfEditSlideInfoFe](#) 26
 [ArrayOfMainMasterFe](#) 26
 [ArrayOfStyleGalleryItem](#) 42
 [ArrayOfunsignedInt](#) 26
 [ArrayOfViewElement](#) 27
[BoundingRegion](#) 42
[ClippingInfo](#) 27
[CoauthState](#) 43
[CoauthUpdate](#) 43
[Comment](#) 44
[ContentMasterFe](#) 27
[EditAnimInfo](#) 44
[EditCommandResponse](#) 28
[EditorInfo](#) 45
[EditPresentationChanges](#) 28

[EditPresentationInfo](#) 29
[EditShape](#) 30
[EditSlide](#) 32
[EditSlideChanges](#) 33
[EditSlideInfoFe](#) 34
[EditTransitionInfo](#) 46
[FontSizeMapping](#) 35
[Html](#) 35
[MainMasterFe](#) 36
[Notes](#) 36
[Point](#) 37
[PptViewingService.PrintResult](#) 37
[PresetSchemeColorMapping](#) 46
[Rectangle](#) 37
[ServiceError](#) 38
[ServiceResult](#) 38
[SlideIdList](#) 39
[SmartArtInfo](#) 39
[StyleGalleryItem](#) 47
[Theme](#) 39
[ThemeColor](#) 40
[ViewElement](#) 41
[ContentMasterFe complex type](#) 27

D

Data model - abstract
 [server](#) 55
[duration simple type](#) 48

E

[EditAnimInfo complex type](#) 44
[EditCommandResponse complex type](#) 28
[EditorInfo complex type](#) 45
[EditPresentationChanges complex type](#) 28
[EditPresentationInfo complex type](#) 29
[EditShape complex type](#) 30
[EditSlide complex type](#) 32
[EditSlideChanges complex type](#) 33
[EditSlideInfoFe complex type](#) 34
[EditTransitionInfo complex type](#) 46
[ErrorCode simple type](#) 50
Events
 [local - server](#) 184
 [timer - server](#) 183
Examples
 [overview](#) 185
 [sample protocol interaction](#) 185

F

[Fields - vendor-extensible](#) 21
[FontSizeMapping complex type](#) 35
[Full WSDL](#) 197

G

[Glossary](#) 18

[Groups](#) 53
[guid simple type](#) 49

H

[Html complex type](#) 35

I

[Implementer - security considerations](#) 196

[Index of security parameters](#) 196

[Informative references](#) 20

Initialization

[server](#) 55

[Introduction](#) 18

L

Local events

[server](#) 184

M

[MainMasterFe complex type](#) 36

Message processing

[server](#) 55

[Messages](#) 22

[ArrayOfComment complex type](#) 41

[ArrayOfContentMasterFe complex type](#) 25

[ArrayOfEditAnimInfo complex type](#) 41

[ArrayOfEditorInfo complex type](#) 42

[ArrayOfEditShape complex type](#) 25

[ArrayOfEditSlide complex type](#) 25

[ArrayOfEditSlideChanges complex type](#) 26

[ArrayOfEditSlideInfoFe complex type](#) 26

[ArrayOfMainMasterFe complex type](#) 26

[ArrayOfStyleGalleryItem complex type](#) 42

[ArrayOfunsignedInt complex type](#) 26

[ArrayOfViewElement complex type](#) 27

[attribute groups](#) 53

[attributes](#) 53

[BoundingRegion complex type](#) 42

[char simple type](#) 48

[ClientActions simple type](#) 48

[ClippingInfo complex type](#) 27

[CoauthState complex type](#) 43

[CoauthUpdate complex type](#) 43

[Comment complex type](#) 44

[complex types](#) 23

[ContentMasterFe complex type](#) 27

[duration simple type](#) 48

[EditAnimInfo complex type](#) 44

[EditCommandResponse complex type](#) 28

[EditorInfo complex type](#) 45

[EditPresentationChanges complex type](#) 28

[EditPresentationInfo complex type](#) 29

[EditShape complex type](#) 30

[EditSlide complex type](#) 32

[EditSlideChanges complex type](#) 33

[EditSlideInfoFe complex type](#) 34

[EditTransitionInfo complex type](#) 46

[elements](#) 23

[enumerated](#) 23

[ErrorCode simple type](#) 50

[FontSizeMapping complex type](#) 35

[groups](#) 53

[guid simple type](#) 49

[Html complex type](#) 35

[MainMasterFe complex type](#) 36

[namespaces](#) 22

[Notes complex type](#) 36

[Point complex type](#) 37

[PptViewingService.PrintResult complex type](#) 37

[PresetSchemeColorMapping complex type](#) 46

[Rectangle complex type](#) 37

[ServiceError complex type](#) 38

[ServiceErrorType simple type](#) 49

[ServiceResult complex type](#) 38

[simple types](#) 47

[SlideIdList complex type](#) 39

[SmartArtInfo complex type](#) 39

[StyleGalleryItem complex type](#) 47

[syntax](#) 22

[Theme complex type](#) 39

[ThemeColor complex type](#) 40

[transport](#) 22

[ViewElement complex type](#) 41

N

[Namespaces](#) 22

[Normative references](#) 19

[Notes complex type](#) 36

O

Operations

[AddComment](#) 170

[ApplyShapeFill](#) 114

[ApplyShapeOutlineColor](#) 116

[ApplyShapeOutlineDashStyle](#) 119

[ApplyShapeOutlineEndStyle](#) 121

[ApplyShapeOutlineWidth](#) 124

[ApplyShapeStyle](#) 127

[ApplyTheme](#) 58

[ArrangeShape](#) 129

[ChangePictureStyle](#) 60

[ChangeSmartArtColor](#) 63

[ChangeSmartArtLayout](#) 65

[ChangeSmartArtStyle](#) 67

[ClearPlaceholder](#) 70

[DeleteComment](#) 172

[DeleteSlide](#) 72

[DuplicateShape](#) 131

[DuplicateSlide](#) 74

[EditComment](#) 174

[FlipShape](#) 134

[GetCoauthUpdates](#) 136

[GetEditPresInfo](#) 76

[GetEditPresInfoGetEditSlideById](#) 138

[GetEditSlide](#) 79

[GetPresentationId](#) 81

[InsertClipart](#) 83

[InsertShape](#) 141

[InsertSlide](#) 85
[InsertSmartArt](#) 88
[MoveComment](#) 177
[MoveShape](#) 143
[MoveSlide](#) 90
[Print](#) 92
[Redo](#) 94
[RemoveShapeFill](#) 145
[RemoveShapeOutline](#) 148
[ReorderAnimation](#) 150
[ReplaceNotes](#) 96
[ReplaceText](#) 98
[ResetPicture](#) 181
[ResetSmartArt](#) 101
[ResizeShape](#) 152
[ReverseSmartArt](#) 103
[RotateShape](#) 155
[SaveAndClose](#) 105
[SetAnimation](#) 157
[SetTransition](#) 160
[SetTransitionApplyAll](#) 179
[SetWordArt](#) 163
[ShapeFormatPainting](#) 165
[ShowHideSlide](#) 107
[Undo](#) 110
[UngroupShape](#) 167
[UpdateCanary](#) 112
[Overview \(synopsis\)](#) 20

P

[Parameters - security index](#) 196
[Point complex type](#) 37
[PptViewingService.PrintResult complex type](#) 37
[Preconditions](#) 20
[Prerequisites](#) 20
[PresetSchemeColorMapping complex type](#) 46
[Product behavior](#) 242

R

[Rectangle complex type](#) 37
[References](#) 19
 [informative](#) 20
 [normative](#) 19
[Relationship to other protocols](#) 20

S

[Sample protocol interaction example](#) 185
 Security
 [implementer considerations](#) 196
 [parameter index](#) 196
 Sequencing rules
 [server](#) 55
 Server
 [abstract data model](#) 55
 [AddComment operation](#) 170
 [ApplyShapeFill operation](#) 114
 [ApplyShapeOutlineColor operation](#) 116
 [ApplyShapeOutlineDashStyle operation](#) 119
 [ApplyShapeOutlineEndStyle operation](#) 121
 [ApplyShapeOutlineWidth operation](#) 124
 [ApplyShapeStyle operation](#) 127
 [ApplyTheme operation](#) 58
 [ArrangeShape operation](#) 129
 [ChangePictureStyle operation](#) 60
 [ChangeSmartArtColor operation](#) 63
 [ChangeSmartArtLayout operation](#) 65
 [ChangeSmartArtStyle operation](#) 67
 [ClearPlaceholder operation](#) 70
 [DeleteComment operation](#) 172
 [DeleteSlide operation](#) 72
 [details](#) 54
 [DuplicateShape operation](#) 131
 [DuplicateSlide operation](#) 74
 [EditComment operation](#) 174
 [FlipShape operation](#) 134
 [GetCoauthUpdates operation](#) 136
 [GetEditPresInfo operation](#) 76
 [GetEditPresInfoGetEditSlideById operation](#) 138
 [GetEditSlide operation](#) 79
 [GetPresentationId operation](#) 81
 [initialization](#) 55
 [InsertClipart operation](#) 83
 [InsertShape operation](#) 141
 [InsertSlide operation](#) 85
 [InsertSmartArt operation](#) 88
 [local events](#) 184
 [message processing](#) 55
 [MoveComment operation](#) 177
 [MoveShape operation](#) 143
 [MoveSlide operation](#) 90
 [overview](#) 54
 [Print operation](#) 92
 [Redo operation](#) 94
 [RemoveShapeFill operation](#) 145
 [RemoveShapeOutline operation](#) 148
 [ReorderAnimation operation](#) 150
 [ReplaceNotes operation](#) 96
 [ReplaceText operation](#) 98
 [ResetPicture operation](#) 181
 [ResetSmartArt operation](#) 101
 [ResizeShape operation](#) 152
 [ReverseSmartArt operation](#) 103
 [RotateShape operation](#) 155
 [SaveAndClose operation](#) 105
 [sequencing rules](#) 55
 [SetAnimation operation](#) 157
 [SetTransition operation](#) 160
 [SetTransitionApplyAll operation](#) 179
 [SetWordArt operation](#) 163
 [ShapeFormatPainting operation](#) 165
 [ShowHideSlide operation](#) 107
 [timer events](#) 183
 [timers](#) 55
 [Undo operation](#) 110
 [UngroupShape operation](#) 167
 [UpdateCanary operation](#) 112
 [ServiceError complex type](#) 38
 [ServiceErrorType simple type](#) 49
 [ServiceResult complex type](#) 38
 [Simple types](#) 47

[char](#) 48
[ClientActions](#) 48
[duration](#) 48
[ErrorCode](#) 50
[guid](#) 49
[ServiceErrorType](#) 49
[SlideIdList complex type](#) 39
[SmartArtInfo complex type](#) 39
[Standards assignments](#) 21
[StyleGalleryItem complex type](#) 47
Syntax
[messages - overview](#) 22

T

[Theme complex type](#) 39
[ThemeColor complex type](#) 40
Timer events
[server](#) 183
Timers
[server](#) 55
[Tracking changes](#) 247
[Transport](#) 22
Types
[complex](#) 23
[simple](#) 47

V

[Vendor-extensible fields](#) 21
[Versioning](#) 21
[ViewElement complex type](#) 41

W

[WSDL](#) 197