



OpenSceneGraph Version 2.9.6

# **osgPresentation::**

## **Reference Manual**



# Contents

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<b>1</b>	<b>Main Page</b>	<b>1</b>
<b>2</b>	<b>Directory Documentation</b>	<b>3</b>
2.1	include/ Directory Reference . . . . .	3
2.2	src/osgPresentation/ Directory Reference . . . . .	4
2.3	include/osgPresentation/ Directory Reference . . . . .	5
2.4	src/ Directory Reference . . . . .	6
<b>3</b>	<b>Namespace Documentation</b>	<b>7</b>
3.1	osgPresentation Namespace Reference . . . . .	7
3.1.1	Detailed Description . . . . .	7
3.1.2	Enumeration Type Documentation . . . . .	7
3.1.2.1	Operation . . . . .	7
<b>4</b>	<b>Class Documentation</b>	<b>9</b>
4.1	ActiveOperators Class Reference . . . . .	9
4.1.1	Member Typedef Documentation . . . . .	10
4.1.1.1	OperatorList . . . . .	10
4.1.2	Constructor & Destructor Documentation . . . . .	10
4.1.2.1	ActiveOperators . . . . .	10
4.1.2.2	~ActiveOperators . . . . .	10
4.1.3	Member Function Documentation . . . . .	10
4.1.3.1	collect . . . . .	10
4.1.3.2	getPause . . . . .	10
4.1.3.3	process . . . . .	10
4.1.3.4	processIncomming . . . . .	10
4.1.3.5	processMaintained . . . . .	10
4.1.3.6	processOutgoing . . . . .	10
4.1.3.7	reset . . . . .	10
4.1.3.8	setPause . . . . .	10
4.1.4	Member Data Documentation . . . . .	10
4.1.4.1	_current . . . . .	10
4.1.4.2	_incomming . . . . .	10
4.1.4.3	_maintained . . . . .	10
4.1.4.4	_outgoing . . . . .	10
4.1.4.5	_pause . . . . .	10
4.1.4.6	_previous . . . . .	10
4.2	AnimationMaterial Class Reference . . . . .	11

4.2.1	Detailed Description . . . . .	12
4.2.2	Member Typedef Documentation . . . . .	12
4.2.2.1	TimeControlPointMap . . . . .	12
4.2.3	Member Enumeration Documentation . . . . .	12
4.2.3.1	LoopMode . . . . .	12
4.2.4	Constructor & Destructor Documentation . . . . .	12
4.2.4.1	AnimationMaterial . . . . .	12
4.2.4.2	AnimationMaterial . . . . .	12
4.2.4.3	~AnimationMaterial . . . . .	12
4.2.5	Member Function Documentation . . . . .	12
4.2.5.1	getFirstTime . . . . .	12
4.2.5.2	getLastTime . . . . .	12
4.2.5.3	getLoopMode . . . . .	12
4.2.5.4	getMaterial . . . . .	12
4.2.5.5	getPeriod . . . . .	12
4.2.5.6	getTimeControlPointMap . . . . .	12
4.2.5.7	getTimeControlPointMap . . . . .	12
4.2.5.8	insert . . . . .	12
4.2.5.9	interpolate . . . . .	12
4.2.5.10	META_Object . . . . .	12
4.2.5.11	read . . . . .	12
4.2.5.12	requiresBlending . . . . .	12
4.2.5.13	setLoopMode . . . . .	12
4.2.5.14	write . . . . .	12
4.2.6	Member Data Documentation . . . . .	12
4.2.6.1	_loopMode . . . . .	12
4.2.6.2	_timeControlPointMap . . . . .	12
4.3	AnimationMaterialCallback Class Reference . . . . .	14
4.3.1	Constructor & Destructor Documentation . . . . .	14
4.3.1.1	AnimationMaterialCallback . . . . .	14
4.3.1.2	AnimationMaterialCallback . . . . .	14
4.3.1.3	AnimationMaterialCallback . . . . .	14
4.3.1.4	~AnimationMaterialCallback . . . . .	14
4.3.2	Member Function Documentation . . . . .	14
4.3.2.1	getAnimationMaterial . . . . .	14
4.3.2.2	getAnimationMaterial . . . . .	14
4.3.2.3	getAnimationTime . . . . .	14
4.3.2.4	getTimeMultiplier . . . . .	15
4.3.2.5	getTimeOffset . . . . .	15
4.3.2.6	META_Object . . . . .	15
4.3.2.7	operator() . . . . .	15

4.3.2.8	reset . . . . .	15
4.3.2.9	setAnimationMaterial . . . . .	15
4.3.2.10	setPause . . . . .	15
4.3.2.11	setTimeMultiplier . . . . .	15
4.3.2.12	setTimeOffset . . . . .	15
4.3.2.13	update . . . . .	15
4.3.3	Member Data Documentation . . . . .	15
4.3.3.1	_animationMaterial . . . . .	15
4.3.3.2	_firstTime . . . . .	15
4.3.3.3	_latestTime . . . . .	15
4.3.3.4	_pause . . . . .	15
4.3.3.5	_pauseTime . . . . .	15
4.3.3.6	_timeMultiplier . . . . .	15
4.3.3.7	_timeOffset . . . . .	15
4.3.3.8	_useInverseMatrix . . . . .	15
4.4	CallbackOperator Struct Reference . . . . .	16
4.4.1	Constructor & Destructor Documentation . . . . .	16
4.4.1.1	CallbackOperator . . . . .	16
4.4.2	Member Function Documentation . . . . .	16
4.4.2.1	enter . . . . .	16
4.4.2.2	leave . . . . .	16
4.4.2.3	maintain . . . . .	16
4.4.2.4	ptr . . . . .	17
4.4.2.5	reset . . . . .	17
4.4.2.6	setPause . . . . .	17
4.4.3	Member Data Documentation . . . . .	17
4.4.3.1	_callback . . . . .	17
4.4.3.2	_node . . . . .	17
4.5	CompileSlideCallback Class Reference . . . . .	18
4.5.1	Constructor & Destructor Documentation . . . . .	18
4.5.1.1	CompileSlideCallback . . . . .	18
4.5.1.2	~CompileSlideCallback . . . . .	18
4.5.2	Member Function Documentation . . . . .	18
4.5.2.1	needCompile . . . . .	18
4.5.2.2	operator() . . . . .	18
4.5.3	Member Data Documentation . . . . .	18
4.5.3.1	_frameNumber . . . . .	18
4.5.3.2	_needCompile . . . . .	18
4.5.3.3	_sceneToCompile . . . . .	18
4.6	dereference_less Struct Reference . . . . .	19
4.6.1	Member Function Documentation . . . . .	19

4.6.1.1	operator() . . . . .	19
4.7	DraggerVolumeTileCallback Class Reference . . . . .	20
4.7.1	Constructor & Destructor Documentation . . . . .	20
4.7.1.1	DraggerVolumeTileCallback . . . . .	20
4.7.2	Member Function Documentation . . . . .	20
4.7.2.1	receive . . . . .	20
4.7.3	Member Data Documentation . . . . .	20
4.7.3.1	_localToWorld . . . . .	20
4.7.3.2	_locator . . . . .	20
4.7.3.3	_startMotionMatrix . . . . .	20
4.7.3.4	_volume . . . . .	20
4.7.3.5	_worldToLocal . . . . .	20
4.8	FilePathData Struct Reference . . . . .	21
4.8.1	Constructor & Destructor Documentation . . . . .	21
4.8.1.1	FilePathData . . . . .	21
4.8.2	Member Data Documentation . . . . .	21
4.8.2.1	filePathList . . . . .	21
4.9	FindFilePathDataVisitor Class Reference . . . . .	22
4.9.1	Constructor & Destructor Documentation . . . . .	22
4.9.1.1	FindFilePathDataVisitor . . . . .	22
4.9.2	Member Function Documentation . . . . .	22
4.9.2.1	apply . . . . .	22
4.10	FindHomePositionVisitor Class Reference . . . . .	23
4.10.1	Constructor & Destructor Documentation . . . . .	23
4.10.1.1	FindHomePositionVisitor . . . . .	23
4.10.2	Member Function Documentation . . . . .	23
4.10.2.1	apply . . . . .	23
4.10.3	Member Data Documentation . . . . .	23
4.10.3.1	_homePosition . . . . .	23
4.11	FindImageStreamsVisitor Class Reference . . . . .	24
4.11.1	Constructor & Destructor Documentation . . . . .	24
4.11.1.1	FindImageStreamsVisitor . . . . .	24
4.11.2	Member Function Documentation . . . . .	24
4.11.2.1	apply . . . . .	24
4.11.2.2	apply . . . . .	24
4.11.2.3	process . . . . .	24
4.12	FindNamedSwitchVisitor Class Reference . . . . .	25
4.12.1	Constructor & Destructor Documentation . . . . .	25
4.12.1.1	FindNamedSwitchVisitor . . . . .	25
4.12.2	Member Function Documentation . . . . .	25
4.12.2.1	apply . . . . .	25

4.12.3	Member Data Documentation	25
4.12.3.1	_name	25
4.12.3.2	_switch	25
4.13	FindOperatorsVisitor Class Reference	26
4.13.1	Constructor & Destructor Documentation	26
4.13.1.1	FindOperatorsVisitor	26
4.13.2	Member Function Documentation	26
4.13.2.1	apply	26
4.13.2.2	apply	26
4.13.2.3	process	26
4.13.3	Member Data Documentation	26
4.13.3.1	_operatorList	26
4.14	FontData Struct Reference	27
4.14.1	Constructor & Destructor Documentation	27
4.14.1.1	FontData	27
4.14.2	Member Data Documentation	27
4.14.2.1	alignment	27
4.14.2.2	axisAlignment	27
4.14.2.3	characterSize	27
4.14.2.4	color	27
4.14.2.5	font	27
4.14.2.6	layout	27
4.14.2.7	maximumHeight	27
4.14.2.8	maximumWidth	27
4.15	HomePosition Struct Reference	28
4.15.1	Constructor & Destructor Documentation	28
4.15.1.1	HomePosition	28
4.15.1.2	HomePosition	28
4.15.2	Member Data Documentation	28
4.15.2.1	center	28
4.15.2.2	eye	28
4.15.2.3	up	28
4.16	ImageData Struct Reference	29
4.16.1	Constructor & Destructor Documentation	29
4.16.1.1	ImageData	29
4.16.2	Member Data Documentation	29
4.16.2.1	backgroundColor	29
4.16.2.2	height	29
4.16.2.3	loopingMode	29
4.16.2.4	page	29
4.16.2.5	region	29

- 4.16.2.6 region\_in\_pixel\_coords . . . . . 29
- 4.16.2.7 texcoord\_rotate . . . . . 29
- 4.16.2.8 width . . . . . 29
- 4.17 ImageStreamOperator Struct Reference . . . . . 30
  - 4.17.1 Constructor & Destructor Documentation . . . . . 30
    - 4.17.1.1 ImageStreamOperator . . . . . 30
  - 4.17.2 Member Function Documentation . . . . . 30
    - 4.17.2.1 enter . . . . . 30
    - 4.17.2.2 leave . . . . . 30
    - 4.17.2.3 maintain . . . . . 30
    - 4.17.2.4 ptr . . . . . 31
    - 4.17.2.5 reset . . . . . 31
    - 4.17.2.6 setPause . . . . . 31
  - 4.17.3 Member Data Documentation . . . . . 31
    - 4.17.3.1 \_imageStream . . . . . 31
- 4.18 KeyPosition Struct Reference . . . . . 32
  - 4.18.1 Constructor & Destructor Documentation . . . . . 32
    - 4.18.1.1 KeyPosition . . . . . 32
  - 4.18.2 Member Function Documentation . . . . . 32
    - 4.18.2.1 set . . . . . 32
  - 4.18.3 Member Data Documentation . . . . . 32
    - 4.18.3.1 \_key . . . . . 32
    - 4.18.3.2 \_x . . . . . 32
    - 4.18.3.3 \_y . . . . . 32
- 4.19 LayerAttributes Struct Reference . . . . . 33
  - 4.19.1 Member Typedef Documentation . . . . . 34
    - 4.19.1.1 Keys . . . . . 34
    - 4.19.1.2 LayerCallbacks . . . . . 34
    - 4.19.1.3 RunStrings . . . . . 34
  - 4.19.2 Constructor & Destructor Documentation . . . . . 34
    - 4.19.2.1 LayerAttributes . . . . . 34
    - 4.19.2.2 LayerAttributes . . . . . 34
  - 4.19.3 Member Function Documentation . . . . . 34
    - 4.19.3.1 addEnterCallback . . . . . 34
    - 4.19.3.2 addKey . . . . . 34
    - 4.19.3.3 addLeaveCallback . . . . . 34
    - 4.19.3.4 addRunString . . . . . 34
    - 4.19.3.5 callEnterCallbacks . . . . . 34
    - 4.19.3.6 callLeaveCallbacks . . . . . 34
    - 4.19.3.7 getDuration . . . . . 34
    - 4.19.3.8 getKeys . . . . . 34

4.19.3.9	getLayerNum . . . . .	34
4.19.3.10	getRelativeJump . . . . .	34
4.19.3.11	getRunStrings . . . . .	34
4.19.3.12	getSlideNum . . . . .	34
4.19.3.13	requiresJump . . . . .	34
4.19.3.14	setDuration . . . . .	34
4.19.3.15	setJump . . . . .	34
4.19.3.16	setKeys . . . . .	34
4.19.3.17	setRunStrings . . . . .	34
4.19.4	Member Data Documentation . . . . .	34
4.19.4.1	_duration . . . . .	34
4.19.4.2	_enterLayerCallbacks . . . . .	34
4.19.4.3	_keys . . . . .	34
4.19.4.4	_layerNum . . . . .	34
4.19.4.5	_leaveLayerCallbacks . . . . .	34
4.19.4.6	_relativeJump . . . . .	34
4.19.4.7	_runStrings . . . . .	34
4.19.4.8	_slideNum . . . . .	34
4.20	LayerAttributesOperator Struct Reference . . . . .	36
4.20.1	Constructor & Destructor Documentation . . . . .	36
4.20.1.1	LayerAttributesOperator . . . . .	36
4.20.2	Member Function Documentation . . . . .	36
4.20.2.1	enter . . . . .	36
4.20.2.2	leave . . . . .	36
4.20.2.3	maintain . . . . .	36
4.20.2.4	ptr . . . . .	37
4.20.2.5	reset . . . . .	37
4.20.2.6	setPause . . . . .	37
4.20.3	Member Data Documentation . . . . .	37
4.20.3.1	_layerAttribute . . . . .	37
4.20.3.2	_node . . . . .	37
4.21	LayerCallback Struct Reference . . . . .	38
4.21.1	Member Function Documentation . . . . .	38
4.21.1.1	operator() . . . . .	38
4.22	ModelData Struct Reference . . . . .	39
4.22.1	Constructor & Destructor Documentation . . . . .	39
4.22.1.1	ModelData . . . . .	39
4.22.2	Member Data Documentation . . . . .	39
4.22.2.1	effect . . . . .	39
4.23	ObjectOperator Struct Reference . . . . .	40
4.23.1	Constructor & Destructor Documentation . . . . .	40

4.23.1.1	~ObjectOperator . . . . .	40
4.23.2	Member Function Documentation . . . . .	40
4.23.2.1	enter . . . . .	40
4.23.2.2	leave . . . . .	40
4.23.2.3	maintain . . . . .	40
4.23.2.4	operator< . . . . .	40
4.23.2.5	ptr . . . . .	40
4.23.2.6	reset . . . . .	40
4.23.2.7	setPause . . . . .	40
4.24	PickEventHandler Class Reference . . . . .	41
4.24.1	Constructor & Destructor Documentation . . . . .	42
4.24.1.1	PickEventHandler . . . . .	42
4.24.1.2	PickEventHandler . . . . .	42
4.24.1.3	PickEventHandler . . . . .	42
4.24.2	Member Function Documentation . . . . .	42
4.24.2.1	accept . . . . .	42
4.24.2.2	doOperation . . . . .	42
4.24.2.3	getCommand . . . . .	42
4.24.2.4	getKeyPosition . . . . .	42
4.24.2.5	getLayerNum . . . . .	42
4.24.2.6	getOperation . . . . .	42
4.24.2.7	getRelativeJump . . . . .	42
4.24.2.8	getSlideNum . . . . .	42
4.24.2.9	getUsage . . . . .	42
4.24.2.10	handle . . . . .	42
4.24.2.11	requiresJump . . . . .	42
4.24.2.12	setAbsoluteJump . . . . .	42
4.24.2.13	setCommand . . . . .	42
4.24.2.14	setKeyPosition . . . . .	42
4.24.2.15	setOperation . . . . .	42
4.24.2.16	setRelativeJump . . . . .	42
4.24.3	Member Data Documentation . . . . .	42
4.24.3.1	_command . . . . .	42
4.24.3.2	_keyPos . . . . .	42
4.24.3.3	_layerNum . . . . .	42
4.24.3.4	_operation . . . . .	42
4.24.3.5	_relativeJump . . . . .	42
4.24.3.6	_slideNum . . . . .	42
4.25	PositionData Struct Reference . . . . .	43
4.25.1	Constructor & Destructor Documentation . . . . .	44
4.25.1.1	PositionData . . . . .	44

4.25.2	Member Function Documentation	44
4.25.2.1	requiresAnimation	44
4.25.2.2	requiresMaterialAnimation	44
4.25.2.3	requiresPosition	44
4.25.2.4	requiresRotate	44
4.25.2.5	requiresScale	44
4.25.3	Member Data Documentation	44
4.25.3.1	absolute_path	44
4.25.3.2	animation_material_filename	44
4.25.3.3	animation_material_loop_mode	44
4.25.3.4	animation_material_time_multiplier	44
4.25.3.5	animation_material_time_offset	44
4.25.3.6	animation_name	44
4.25.3.7	fade	44
4.25.3.8	frame	44
4.25.3.9	inverse_path	44
4.25.3.10	path	44
4.25.3.11	path_loop_mode	44
4.25.3.12	path_time_multiplier	44
4.25.3.13	path_time_offset	44
4.25.3.14	position	44
4.25.3.15	rotate	44
4.25.3.16	rotation	44
4.25.3.17	scale	44
4.26	SetPageCallback Class Reference	45
4.26.1	Constructor & Destructor Documentation	45
4.26.1.1	SetPageCallback	45
4.26.2	Member Function Documentation	45
4.26.2.1	operator()	45
4.26.3	Member Data Documentation	45
4.26.3.1	_pageNum	45
4.26.3.2	_pdfImage	45
4.27	SetToTransparentBin Class Reference	46
4.27.1	Constructor & Destructor Documentation	46
4.27.1.1	SetToTransparentBin	46
4.27.2	Member Function Documentation	46
4.27.2.1	apply	46
4.27.2.2	apply	46
4.28	SlideEventHandler Class Reference	47
4.28.1	Member Enumeration Documentation	49
4.28.1.1	ObjectMask	49

4.28.1.2	WhichPosition . . . . .	49
4.28.2	Constructor & Destructor Documentation . . . . .	50
4.28.2.1	SlideEventHandler . . . . .	50
4.28.2.2	~SlideEventHandler . . . . .	50
4.28.2.3	SlideEventHandler . . . . .	50
4.28.3	Member Function Documentation . . . . .	50
4.28.3.1	accept . . . . .	50
4.28.3.2	compileSlide . . . . .	50
4.28.3.3	dispatchEvent . . . . .	50
4.28.3.4	getActiveLayer . . . . .	50
4.28.3.5	getActiveSlide . . . . .	50
4.28.3.6	getAutoSteppingActive . . . . .	50
4.28.3.7	getCurrentTimeDelayBetweenSlides . . . . .	50
4.28.3.8	getDuration . . . . .	50
4.28.3.9	getLoopPresentation . . . . .	50
4.28.3.10	getNumSlides . . . . .	50
4.28.3.11	getReleaseAndCompileOnEachNewSlide . . . . .	50
4.28.3.12	getTimeDelayBetweenSlides . . . . .	50
4.28.3.13	getTimeDelayOnNewSlideWithMovies . . . . .	50
4.28.3.14	getUsage . . . . .	50
4.28.3.15	getViewer . . . . .	50
4.28.3.16	handle . . . . .	50
4.28.3.17	home . . . . .	50
4.28.3.18	home . . . . .	50
4.28.3.19	instance . . . . .	50
4.28.3.20	META_Object . . . . .	50
4.28.3.21	nextLayer . . . . .	50
4.28.3.22	nextLayerOrSlide . . . . .	50
4.28.3.23	nextSlide . . . . .	50
4.28.3.24	operator() . . . . .	50
4.28.3.25	previousLayer . . . . .	51
4.28.3.26	previousLayerOrSlide . . . . .	51
4.28.3.27	previousSlide . . . . .	51
4.28.3.28	releaseSlide . . . . .	51
4.28.3.29	selectLayer . . . . .	51
4.28.3.30	selectSlide . . . . .	51
4.28.3.31	set . . . . .	51
4.28.3.32	setAutoSteppingActive . . . . .	51
4.28.3.33	setLoopPresentation . . . . .	51
4.28.3.34	setReleaseAndCompileOnEachNewSlide . . . . .	51
4.28.3.35	setTimeDelayBetweenSlides . . . . .	51

4.28.3.36	setTimeDelayOnNewSlideWithMovies	51
4.28.3.37	updateAlpha	51
4.28.3.38	updateLight	51
4.28.3.39	updateOperators	51
4.28.4	Member Data Documentation	51
4.28.4.1	_activeLayer	51
4.28.4.2	_activeOperators	51
4.28.4.3	_activePresentation	51
4.28.4.4	_activeSlide	51
4.28.4.5	_autoSteppingActive	51
4.28.4.6	_compileSlideCallback	51
4.28.4.7	_cursorOn	51
4.28.4.8	_firstSlideOrLayerChange	51
4.28.4.9	_firstTraversal	51
4.28.4.10	_hold	51
4.28.4.11	_loopPresentation	51
4.28.4.12	_minimumTimeBetweenKeyPresses	51
4.28.4.13	_pause	51
4.28.4.14	_presentationSwitch	51
4.28.4.15	_previousTime	51
4.28.4.16	_previousX	51
4.28.4.17	_previousY	51
4.28.4.18	_releaseAndCompileOnEachNewSlide	51
4.28.4.19	_showSwitch	51
4.28.4.20	_slideSwitch	51
4.28.4.21	_tickAtFirstSlideOrLayerChange	51
4.28.4.22	_tickAtLastSlideOrLayerChange	51
4.28.4.23	_timeDelayOnNewSlideWithMovies	51
4.28.4.24	_timeLastKeyPresses	51
4.28.4.25	_timePerSlide	51
4.28.4.26	_updateLightActive	51
4.28.4.27	_updateOpacityActive	51
4.28.4.28	_viewer	51
4.29	SlideShowConstructor Class Reference	53
4.29.1	Member Enumeration Documentation	56
4.29.1.1	CoordinateFrame	56
4.29.2	Constructor & Destructor Documentation	57
4.29.2.1	SlideShowConstructor	57
4.29.3	Member Function Documentation	57
4.29.3.1	addBrowser	57
4.29.3.2	addBullet	57

4.29.3.3	addImage . . . . .	57
4.29.3.4	addInteractiveImage . . . . .	57
4.29.3.5	addKey . . . . .	57
4.29.3.6	addLayer . . . . .	57
4.29.3.7	addLayerKey . . . . .	57
4.29.3.8	addLayerRunString . . . . .	57
4.29.3.9	addModel . . . . .	57
4.29.3.10	addModel . . . . .	57
4.29.3.11	addParagraph . . . . .	57
4.29.3.12	addPDF . . . . .	57
4.29.3.13	addPresentationKey . . . . .	57
4.29.3.14	addPresentationRunString . . . . .	57
4.29.3.15	addRunString . . . . .	57
4.29.3.16	addSlide . . . . .	57
4.29.3.17	addSlideKey . . . . .	57
4.29.3.18	addSlideRunString . . . . .	57
4.29.3.19	addStereolImagePair . . . . .	57
4.29.3.20	addVNC . . . . .	57
4.29.3.21	addVolume . . . . .	57
4.29.3.22	attachMaterialAnimation . . . . .	57
4.29.3.23	attachTexMat . . . . .	57
4.29.3.24	computePositionInModelCoords . . . . .	57
4.29.3.25	convertModelToSlide . . . . .	57
4.29.3.26	convertSlideToModel . . . . .	57
4.29.3.27	createPresentation . . . . .	57
4.29.3.28	createTexturedQuadGeometry . . . . .	57
4.29.3.29	createTransformStateSet . . . . .	57
4.29.3.30	findFileAndRecordPath . . . . .	57
4.29.3.31	findImageStreamsAndAddCallbacks . . . . .	57
4.29.3.32	getAnimationPathCallback . . . . .	57
4.29.3.33	getAutoSteppingActive . . . . .	57
4.29.3.34	getBackgroundColor . . . . .	57
4.29.3.35	getCurrentLayer . . . . .	57
4.29.3.36	getCurrentSlide . . . . .	57
4.29.3.37	getImagePositionData . . . . .	57
4.29.3.38	getImagePositionDataDefault . . . . .	57
4.29.3.39	getLoopPresentation . . . . .	57
4.29.3.40	getModelPositionData . . . . .	57
4.29.3.41	getModelPositionDataDefault . . . . .	57
4.29.3.42	getOrCreateLayerAttributes . . . . .	57
4.29.3.43	getPresentation . . . . .	57

4.29.3.44	getPresentationSwitch . . . . .	57
4.29.3.45	getTextColor . . . . .	57
4.29.3.46	getTextFontData . . . . .	57
4.29.3.47	getTextFontDataDefault . . . . .	57
4.29.3.48	getTextPositionData . . . . .	57
4.29.3.49	getTextPositionDataDefault . . . . .	57
4.29.3.50	getTitleFontData . . . . .	57
4.29.3.51	getTitleFontDataDefault . . . . .	57
4.29.3.52	getTitlePositionData . . . . .	57
4.29.3.53	getTitlePositionDataDefault . . . . .	57
4.29.3.54	layerClickEventOperation . . . . .	57
4.29.3.55	layerClickToDoOperation . . . . .	57
4.29.3.56	layerClickToDoOperation . . . . .	57
4.29.3.57	recordOptionsFilePath . . . . .	57
4.29.3.58	selectLayer . . . . .	57
4.29.3.59	selectSlide . . . . .	57
4.29.3.60	setAutoSteppingActive . . . . .	57
4.29.3.61	setBackgroundColor . . . . .	57
4.29.3.62	setDuration . . . . .	57
4.29.3.63	setJump . . . . .	57
4.29.3.64	setLayerDuration . . . . .	57
4.29.3.65	setLayerJump . . . . .	57
4.29.3.66	setLoopPresentation . . . . .	57
4.29.3.67	setPresentationAspectRatio . . . . .	57
4.29.3.68	setPresentationAspectRatio . . . . .	57
4.29.3.69	setPresentationDuration . . . . .	57
4.29.3.70	setPresentationName . . . . .	57
4.29.3.71	setSlideBackground . . . . .	57
4.29.3.72	setSlideDuration . . . . .	57
4.29.3.73	setSlideJump . . . . .	57
4.29.3.74	setSlideTitle . . . . .	57
4.29.3.75	setTextColor . . . . .	57
4.29.3.76	takePresentation . . . . .	57
4.29.3.77	translateTextCursor . . . . .	57
4.29.3.78	updatePositionFromInModelCoords . . . . .	57
4.29.4	Member Data Documentation . . . . .	57
4.29.4.1	_autoSteppingActive . . . . .	57
4.29.4.2	_backgroundColor . . . . .	57
4.29.4.3	_currentLayer . . . . .	57
4.29.4.4	_eyeOrigin . . . . .	57
4.29.4.5	_filePathData . . . . .	57

4.29.4.6	_imagePositionData	57
4.29.4.7	_imagePositionDataDefault	57
4.29.4.8	_loopPresentation	57
4.29.4.9	_modelPositionData	57
4.29.4.10	_modelPositionDataDefault	57
4.29.4.11	_options	57
4.29.4.12	_presentationDuration	57
4.29.4.13	_presentationName	57
4.29.4.14	_presentationSwitch	57
4.29.4.15	_previousLayer	57
4.29.4.16	_root	57
4.29.4.17	_slide	57
4.29.4.18	_slideBackgroundImageFileName	57
4.29.4.19	_slideClearNode	57
4.29.4.20	_slideDistance	57
4.29.4.21	_slideHeight	57
4.29.4.22	_slideOrigin	57
4.29.4.23	_slideTitle	57
4.29.4.24	_slideWidth	57
4.29.4.25	_textFontData	57
4.29.4.26	_textFontDataDefault	57
4.29.4.27	_textPositionData	57
4.29.4.28	_textPositionDataDefault	57
4.29.4.29	_titleFontData	57
4.29.4.30	_titleFontDataDefault	57
4.29.4.31	_titlePositionData	57
4.29.4.32	_titlePositionDataDefault	57
4.30	UpdateAlphaVisitor Class Reference	59
4.30.1	Constructor & Destructor Documentation	59
4.30.1.1	UpdateAlphaVisitor	59
4.30.2	Member Function Documentation	59
4.30.2.1	apply	59
4.30.2.2	apply	59
4.30.3	Member Data Documentation	59
4.30.3.1	_currentX	59
4.30.3.2	_currentY	59
4.30.3.3	_modAlphaFunc	59
4.30.3.4	_modMaterial	59
4.31	UpdateLightVisitor Class Reference	60
4.31.1	Constructor & Destructor Documentation	60
4.31.1.1	UpdateLightVisitor	60

4.31.2	Member Function Documentation	60
4.31.2.1	apply	60
4.31.2.2	apply	60
4.31.2.3	apply	60
4.31.2.4	apply	60
4.31.3	Member Data Documentation	60
4.31.3.1	_currentX	60
4.31.3.2	_currentY	60
4.31.3.3	_viewMatrix	60
4.32	VolumeData Struct Reference	61
4.32.1	Member Enumeration Documentation	61
4.32.1.1	ShadingModel	61
4.32.2	Constructor & Destructor Documentation	61
4.32.2.1	VolumeData	61
4.32.3	Member Data Documentation	61
4.32.3.1	alphaValue	61
4.32.3.2	cutoffValue	61
4.32.3.3	region	61
4.32.3.4	region_in_pixel_coords	61
4.32.3.5	sampleDensityValue	61
4.32.3.6	shadingModel	61
4.32.3.7	transferFunction	61
4.32.3.8	useTabbedDragger	61
4.32.3.9	useTrackballDragger	61
<b>5</b>	<b>File Documentation</b>	<b>63</b>
5.1	AnimationMaterial File Reference	63
5.1.1	Define Documentation	64
5.1.1.1	OSG_ANIMATIONMATERIAL	64
5.2	AnimationMaterial.cpp File Reference	65
5.2.1	Function Documentation	65
5.2.1.1	interp	65
5.3	CompileSlideCallback File Reference	66
5.3.1	Define Documentation	66
5.3.1.1	OSG_COMPILESLIDECALLBACK	66
5.4	CompileSlideCallback.cpp File Reference	67
5.5	Export File Reference	68
5.5.1	Define Documentation	68
5.5.1.1	OSGPRESSENTATION_EXPORT	68
5.5.1.2	OSGPRESSENTATION_EXPORT_	68
5.6	mainpage.h File Reference	69

---

5.6.1	Detailed Description . . . . .	69
5.7	PickEventHandler File Reference . . . . .	70
5.7.1	Define Documentation . . . . .	70
5.7.1.1	PICKEVENTHANDLER . . . . .	70
5.8	PickEventHandler.cpp File Reference . . . . .	71
5.9	SlideEventHandler File Reference . . . . .	72
5.9.1	Define Documentation . . . . .	73
5.9.1.1	SLIDEEVENTHANDLER . . . . .	73
5.10	SlideEventHandler.cpp File Reference . . . . .	74
5.10.1	Variable Documentation . . . . .	74
5.10.1.1	s_seh . . . . .	74
5.11	SlideShowConstructor File Reference . . . . .	75
5.12	SlideShowConstructor.cpp File Reference . . . . .	76

## Main Page

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The OpenSceneGraph exists as a number of modules, each sitting in its own library, enclosed within its own namespace. At the very core lies the osg library. This contains the OpenSceneGraph's central classes and, at the bare minimum, it is all users need to write an OpenSceneGraph program in C++.

Around and alongside this sit other supporting libraries, such as osgUtil (containing visitors for app traversals, cull traversals, scene graph optimizers and so on), osgDB (for handling plug-ins, shared library loading, database reading and writing and the like), osgText, osgParticle, etc.

Extensive online documentation is available from the OSG Support section to help in using Open Scene Graph.

The project's original reference guides generated by Doxygen from the source code may be downloaded as a single file from the OSG Reference Guides section.

To download source code, binaries, dependencies and sample datasets visit the OSG Download page.

For more about dependencies see the OSG Dependencies page.

The documentation you are looking at can be downloaded from [www.3draum.ch](http://www.3draum.ch).

Enjoy!



# Directory Documentation

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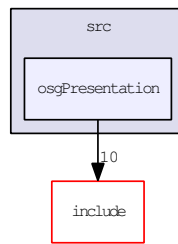
## 2.1 include/ Directory Reference



### Directories

- directory **osgPresentation**

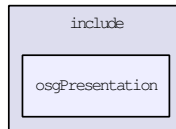
## 2.2 src/osgPresentation/ Directory Reference



### Files

- file **AnimationMaterial.cpp**
- file **CompileSlideCallback.cpp**
- file **PickEventHandler.cpp**
- file **SlideEventHandler.cpp**
- file **SlideShowConstructor.cpp**

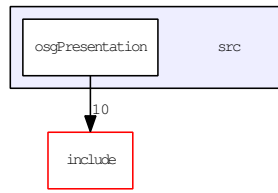
## 2.3 include/osgPresentation/ Directory Reference



### Files

- file **AnimationMaterial**
- file **CompileSlideCallback**
- file **Export**
- file **mainpage.h**
- file **PickEventHandler**
- file **SlideEventHandler**
- file **SlideShowConstructor**

## 2.4 src/ Directory Reference



### Directories

- directory `osgPresentation`

## Namespace Documentation

---

### 3.1 osgPresentation Namespace Reference

The **osgPresentation** (p. 7) library is a NodeKit that extends the core scene graph to support 3D scene graph based presentations.

#### Classes

- class **ActiveOperators**
- class **AnimationMaterial**  
*AnimationMaterial* (p. 11) for specify the time varying transformation pathway to use when update camera and model objects.
- class **AnimationMaterialCallback**
- class **CompileSlideCallback**
- struct **dereference\_less**
- struct **FilePathData**
- struct **HomePosition**
- struct **KeyPosition**
- struct **LayerAttributes**
- struct **LayerCallback**
- struct **ObjectOperator**
- class **PickEventHandler**
- class **SlideEventHandler**
- class **SlideShowConstructor**

#### Enumerations

- enum **Operation** { **RUN**, **LOAD**, **EVENT**, **JUMP** }  
*Operations related to click to run/load/key events.*

#### 3.1.1 Detailed Description

The **osgPresentation** (p. 7) library is a NodeKit that extends the core scene graph to support 3D scene graph based presentations.

#### 3.1.2 Enumeration Type Documentation

##### 3.1.2.1 enum Operation

Operations related to click to run/load/key events.

##### Enumerator:

**RUN**  
**LOAD**  
**EVENT**  
**JUMP**

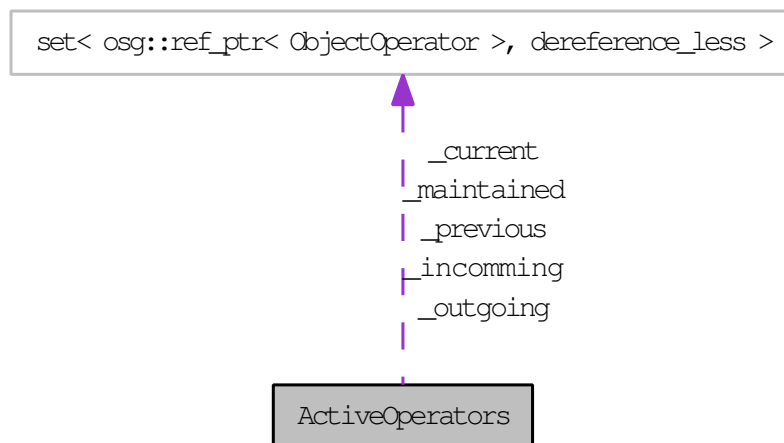


# Class Documentation

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## 4.1 ActiveOperators Class Reference

Collaboration diagram for ActiveOperators:



### Public Types

- typedef std::set< osg::ref\_ptr< **ObjectOperator** >, **dereference\_less** > **OperatorList**

### Public Member Functions

- **ActiveOperators** ()
- **~ActiveOperators** ()
- void **collect** (osg::Node \*incommingNode, osg::NodeVisitor::TraversalMode tm=osg::NodeVisitor::TRAVERSE\_ACTIVE\_CHILDREN)
- bool **getPause** () const
- void **process** ()
- void **reset** ()
- void **setPause** (bool pause)

### Protected Member Functions

- void **processIncomming** ()
- void **processMaintained** ()
- void **processOutgoing** ()

### Protected Attributes

- **OperatorList** **\_current**
- **OperatorList** **\_incomming**

- OperatorList \_maintained
- OperatorList \_outgoing
- bool \_pause
- OperatorList \_previous

#### 4.1.1 Member Typedef Documentation

4.1.1.1 typedef std::set< osg::ref\_ptr<ObjectOperator>, dereference\_less > OperatorList

#### 4.1.2 Constructor & Destructor Documentation

4.1.2.1 ActiveOperators ()

4.1.2.2 ~ActiveOperators ()

#### 4.1.3 Member Function Documentation

4.1.3.1 void collect (osg::Node \* *incommingNode*, osg::NodeVisitor::TraversalMode *tm* = osg::NodeVisitor::TRAVERSE\_ACTIVE\_CHILDREN)

4.1.3.2 bool getPause () const [inline]

4.1.3.3 void process ()

4.1.3.4 void processIncomming () [protected]

4.1.3.5 void processMaintained () [protected]

4.1.3.6 void processOutgoing () [protected]

4.1.3.7 void reset ()

4.1.3.8 void setPause (bool *pause*)

#### 4.1.4 Member Data Documentation

4.1.4.1 OperatorList \_current [protected]

4.1.4.2 OperatorList \_incomming [protected]

4.1.4.3 OperatorList \_maintained [protected]

4.1.4.4 OperatorList \_outgoing [protected]

4.1.4.5 bool \_pause [protected]

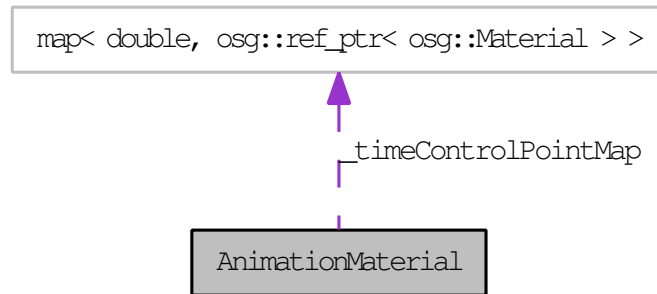
4.1.4.6 OperatorList \_previous [protected]

The documentation for this class was generated from the following files:

- SlideEventHandler
- SlideEventHandler.cpp

## 4.2 AnimationMaterial Class Reference

**AnimationMaterial** (p. 11) for specify the time varying transformation pathway to use when update camera and model objects. Collaboration diagram for AnimationMaterial:



### Public Types

- enum **LoopMode** { **SWING**, **LOOP**, **NO\_LOOPING** }
- typedef std::map< double, osg::ref\_ptr< osg::Material > > **TimeControlPointMap**

### Public Member Functions

- **AnimationMaterial** (const **AnimationMaterial** &ap, const osg::CopyOp &copyop=osg::CopyOp::SHALLOW\_COPY)
- **AnimationMaterial** ()
- double **getFirstTime** () const
- double **getLastTime** () const
- **LoopMode** **getLoopMode** () const
- bool **getMaterial** (double time, osg::Material &material) const  
*get the transformation matrix for a point in time.*
- double **getPeriod** () const
- const **TimeControlPointMap** & **getTimeControlPointMap** () const
- **TimeControlPointMap** & **getTimeControlPointMap** ()
- void **insert** (double time, osg::Material \*material)
- **META\_Object** (osg, **AnimationMaterial**)
- void **read** (std::istream &in)  
*read the anumation path from a flat ascii file stream.*
- bool **requiresBlending** () const
- void **setLoopMode** (**LoopMode** lm)
- void **write** (std::ostream &out) const  
*write the anumation path to a flat ascii file stream.*

### Protected Member Functions

- virtual ~**AnimationMaterial** ()
- void **interpolate** (osg::Material &material, float r, const osg::Material &lhs, const osg::Material &rhs) const

### Protected Attributes

- **LoopMode** **\_loopMode**
- **TimeControlPointMap** **\_timeControlPointMap**

## 4.2.1 Detailed Description

**AnimationMaterial** (p. 11) for specify the time varying transformation pathway to use when update camera and model objects. Subclassed from `Transform::ComputeTransformCallback` allows **AnimationMaterial** (p. 11) to be attached directly to `Transform` nodes to move subgraphs around the scene.

## 4.2.2 Member Typedef Documentation

4.2.2.1 `typedef std::map<double, osg::ref_ptr<osg::Material> > TimeControlPointMap`

## 4.2.3 Member Enumeration Documentation

4.2.3.1 `enum LoopMode`

Enumerator:

*SWING*

*LOOP*

*NO\_LOOPING*

## 4.2.4 Constructor & Destructor Documentation

4.2.4.1 `AnimationMaterial () [inline]`

4.2.4.2 `AnimationMaterial (const AnimationMaterial & ap, const osg::CopyOp & copyop = osg::CopyOp::SHALLOW_COPY) [inline]`

4.2.4.3 `virtual ~AnimationMaterial () [inline, protected, virtual]`

## 4.2.5 Member Function Documentation

4.2.5.1 `double getFirstTime () const [inline]`

4.2.5.2 `double getLastTime () const [inline]`

4.2.5.3 `LoopMode getLoopMode () const [inline]`

4.2.5.4 `bool getMaterial (double time, osg::Material & material) const`

get the transformation matrix for a point in time.

4.2.5.5 `double getPeriod () const [inline]`

4.2.5.6 `const TimeControlPointMap& getTimeControlPointMap () const [inline]`

4.2.5.7 `TimeControlPointMap& getTimeControlPointMap () [inline]`

4.2.5.8 `void insert (double time, osg::Material * material)`

4.2.5.9 `void interpolate (osg::Material & material, float r, const osg::Material & lhs, const osg::Material & rhs) const [protected]`

4.2.5.10 `META_Object (osg, AnimationMaterial)`

4.2.5.11 `void read (std::istream & in)`

read the anumation path from a flat ascii file stream.

4.2.5.12 `bool requiresBlending () const`

4.2.5.13 `void setLoopMode (LoopMode lm) [inline]`

4.2.5.14 `void write (std::ostream & out) const`

write the anumation path to a flat ascii file stream.

## 4.2.6 Member Data Documentation

4.2.6.1 `LoopMode _loopMode [protected]`

4.2.6.2 `TimeControlPointMap _timeControlPointMap [protected]`

The documentation for this class was generated from the following files:

- AnimationMaterial
- AnimationMaterial.cpp

## 4.3 AnimationMaterialCallback Class Reference

### Public Member Functions

- **AnimationMaterialCallback** (**AnimationMaterial** \*ap, double timeOffset=0.0f, double timeMultiplier=1.0f)
- **AnimationMaterialCallback** (const **AnimationMaterialCallback** &apc, const osg::CopyOp &copyop)
- **AnimationMaterialCallback** ()
- const **AnimationMaterial** \* **getAnimationMaterial** () const
- **AnimationMaterial** \* **getAnimationMaterial** ()
- double **getAnimationTime** () const

*get the animation time that is used to specify the position along the **AnimationMaterial** (p. 11).*

- double **getTimeMultiplier** () const
- double **getTimeOffset** () const
- **META\_Object** (osg, **AnimationMaterialCallback**)
- virtual void **operator()** (osg::Node \*node, osg::NodeVisitor \*nv)

*implements the callback*

- void **reset** ()
- void **setAnimationMaterial** (**AnimationMaterial** \*path)
- void **setPause** (bool pause)
- void **setTimeMultiplier** (double multiplier)
- void **setTimeOffset** (double offset)
- void **update** (osg::Node &node)

### Public Attributes

- osg::ref\_ptr< **AnimationMaterial** > **\_animationMaterial**
- double **\_firstTime**
- double **\_latestTime**
- bool **\_pause**
- double **\_pauseTime**
- double **\_timeMultiplier**
- double **\_timeOffset**
- bool **\_useInverseMatrix**

### Protected Member Functions

- ~**AnimationMaterialCallback** ()

#### 4.3.1 Constructor & Destructor Documentation

4.3.1.1 **AnimationMaterialCallback** () [inline]

4.3.1.2 **AnimationMaterialCallback** (const **AnimationMaterialCallback** & apc, const osg::CopyOp & copyop) [inline]

4.3.1.3 **AnimationMaterialCallback** (**AnimationMaterial** \* ap, double *timeOffset* = 0.0f, double *timeMultiplier* = 1.0f) [inline]

4.3.1.4 ~**AnimationMaterialCallback** () [inline, protected]

#### 4.3.2 Member Function Documentation

4.3.2.1 const **AnimationMaterial**\* **getAnimationMaterial** () const [inline]

4.3.2.2 **AnimationMaterial**\* **getAnimationMaterial** () [inline]

4.3.2.3 double **getAnimationTime** () const

get the animation time that is used to specify the position along the **AnimationMaterial** (p. 11). Animation time is computed from the formula  $((\_latestTime - \_firstTime) - \_timeOffset) * \_timeMultiplier$ .

4.3.2.4 `double getTimeMultiplier () const [inline]`

4.3.2.5 `double getTimeOffset () const [inline]`

4.3.2.6 `META_Object (osg, AnimationMaterialCallback)`

4.3.2.7 `void operator() (osg::Node * node, osg::NodeVisitor * nv) [virtual]`

implements the callback

4.3.2.8 `void reset ()`

4.3.2.9 `void setAnimationMaterial (AnimationMaterial * path) [inline]`

4.3.2.10 `void setPause (bool pause)`

4.3.2.11 `void setTimeMultiplier (double multiplier) [inline]`

4.3.2.12 `void setTimeOffset (double offset) [inline]`

4.3.2.13 `void update (osg::Node & node)`

### 4.3.3 Member Data Documentation

4.3.3.1 `osg::ref_ptr<AnimationMaterial> _animationMaterial`

4.3.3.2 `double _firstTime`

4.3.3.3 `double _latestTime`

4.3.3.4 `bool _pause`

4.3.3.5 `double _pauseTime`

4.3.3.6 `double _timeMultiplier`

4.3.3.7 `double _timeOffset`

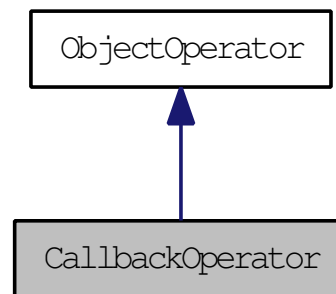
4.3.3.8 `bool _useInverseMatrix`

The documentation for this class was generated from the following files:

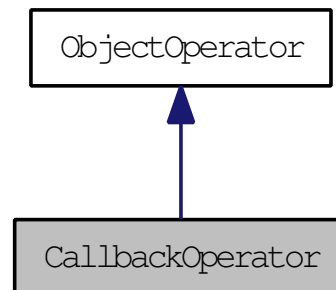
- **AnimationMaterial**
- **AnimationMaterial.cpp**

## 4.4 CallbackOperator Struct Reference

Inheritance diagram for CallbackOperator:



Collaboration diagram for CallbackOperator:



### Public Member Functions

- **CallbackOperator** (osg::Node \*node, osg::Referenced \*callback)
- virtual void **enter** ()
- virtual void **leave** ()
- virtual void **maintain** ()
- virtual void \* **ptr** () const
- virtual void **reset** ()
- virtual void **setPause** (bool pause)

### Public Attributes

- osg::ref\_ptr< osg::Referenced > **\_callback**
- osg::ref\_ptr< osg::Node > **\_node**

#### 4.4.1 Constructor & Destructor Documentation

4.4.1.1 **CallbackOperator** (osg::Node \* *node*, osg::Referenced \* *callback*) [inline]

#### 4.4.2 Member Function Documentation

4.4.2.1 **virtual void enter** () [inline, virtual]

Implements **ObjectOperator** (p. 40).

4.4.2.2 **virtual void leave** () [inline, virtual]

Implements **ObjectOperator** (p. 40).

4.4.2.3 **virtual void maintain** () [inline, virtual]

Implements **ObjectOperator** (p. 40).

**4.4.2.4 virtual void\* ptr () const [inline, virtual]**

Implements **ObjectOperator** (p. 40).

**4.4.2.5 virtual void reset () [inline, virtual]**

Implements **ObjectOperator** (p. 40).

**4.4.2.6 virtual void setPause (bool *pause*) [inline, virtual]**

Implements **ObjectOperator** (p. 40).

**4.4.3 Member Data Documentation****4.4.3.1 osg::ref\_ptr<osg::Referenced> \_callback****4.4.3.2 osg::ref\_ptr<osg::Node> \_node**

The documentation for this struct was generated from the following file:

- **SlideEventHandler.cpp**

## 4.5 CompileSlideCallback Class Reference

### Public Member Functions

- **CompileSlideCallback** ()
- void **needCompile** (osg::Node \*node)
- virtual void **operator()** (const osg::Camera &camera) const

### Protected Member Functions

- virtual **~CompileSlideCallback** ()

### Protected Attributes

- int **\_frameNumber**
- bool **\_needCompile**
- osg::ref\_ptr< osg::Node > **\_sceneToCompile**

#### 4.5.1 Constructor & Destructor Documentation

4.5.1.1 **CompileSlideCallback** () [inline]

4.5.1.2 **virtual ~CompileSlideCallback** () [inline, protected, virtual]

#### 4.5.2 Member Function Documentation

4.5.2.1 **void needCompile** (osg::Node \* *node*) [inline]

4.5.2.2 **void operator()** (const osg::Camera & *camera*) const [virtual]

#### 4.5.3 Member Data Documentation

4.5.3.1 **int \_frameNumber** [mutable, protected]

4.5.3.2 **bool \_needCompile** [mutable, protected]

4.5.3.3 **osg::ref\_ptr<osg::Node> \_sceneToCompile** [protected]

The documentation for this class was generated from the following files:

- **CompileSlideCallback**
- **CompileSlideCallback.cpp**

## 4.6 dereference\_less Struct Reference

### Public Member Functions

- `template<class T , class U >`  
`bool operator() (const T &lhs, const U &rhs) const`

### 4.6.1 Member Function Documentation

#### 4.6.1.1 `bool operator() (const T & lhs, const U & rhs) const` [`inline`]

The documentation for this struct was generated from the following file:

- `SlideEventHandler`

## 4.7 DraggerVolumeTileCallback Class Reference

### Public Member Functions

- **DraggerVolumeTileCallback** (osgVolume::VolumeTile \*volume, osgVolume::Locator \*locator)
- virtual bool **receive** (const osgManipulator::MotionCommand &command)

### Public Attributes

- osg::Matrix **\_localToWorld**
- osg::ref\_ptr< osgVolume::Locator > **\_locator**
- osg::Matrix **\_startMotionMatrix**
- osg::observer\_ptr< osgVolume::VolumeTile > **\_volume**
- osg::Matrix **\_worldToLocal**

### 4.7.1 Constructor & Destructor Documentation

4.7.1.1 **DraggerVolumeTileCallback** (osgVolume::VolumeTile \* *volume*, osgVolume::Locator \* *locator*)  
[inline]

### 4.7.2 Member Function Documentation

4.7.2.1 bool **receive** (const osgManipulator::MotionCommand & *command*) [virtual]

### 4.7.3 Member Data Documentation

4.7.3.1 osg::Matrix **\_localToWorld**

4.7.3.2 osg::ref\_ptr<osgVolume::Locator> **\_locator**

4.7.3.3 osg::Matrix **\_startMotionMatrix**

4.7.3.4 osg::observer\_ptr<osgVolume::VolumeTile> **\_volume**

4.7.3.5 osg::Matrix **\_worldToLocal**

The documentation for this class was generated from the following file:

- **SlideShowConstructor.cpp**

## 4.8 FilePathData Struct Reference

### Public Member Functions

- **FilePathData** (const osgDB::FilePathList &fpl)

### Public Attributes

- osgDB::FilePathList **filePathList**

### 4.8.1 Constructor & Destructor Documentation

4.8.1.1 **FilePathData** (const osgDB::FilePathList & *fpl*) [inline]

### 4.8.2 Member Data Documentation

4.8.2.1 **osgDB::FilePathList filePathList**

The documentation for this struct was generated from the following file:

- **SlideEventHandler**

## 4.9 FindFilePathDataVisitor Class Reference

### Public Member Functions

- **FindFilePathDataVisitor** ()
- void **apply** (osg::Node &node)

### 4.9.1 Constructor & Destructor Documentation

#### 4.9.1.1 FindFilePathDataVisitor () [inline]

### 4.9.2 Member Function Documentation

#### 4.9.2.1 void apply (osg::Node & *node*) [inline]

The documentation for this class was generated from the following file:

- **SlideEventHandler.cpp**

## 4.10 FindHomePositionVisitor Class Reference

### Public Member Functions

- **FindHomePositionVisitor** ()
- void **apply** (osg::Node &node)

### Public Attributes

- osg::ref\_ptr< **HomePosition** > **\_homePosition**

### 4.10.1 Constructor & Destructor Documentation

#### 4.10.1.1 FindHomePositionVisitor () [inline]

### 4.10.2 Member Function Documentation

#### 4.10.2.1 void apply (osg::Node & *node*) [inline]

### 4.10.3 Member Data Documentation

#### 4.10.3.1 osg::ref\_ptr<HomePosition> **\_homePosition**

The documentation for this class was generated from the following file:

- **SlideEventHandler.cpp**

## 4.11 FindImageStreamsVisitor Class Reference

### Public Member Functions

- **FindImageStreamsVisitor** ()
- virtual void **apply** (osg::Geode &node)
- virtual void **apply** (osg::Node &node)
- void **process** (osg::StateSet \*ss)

### 4.11.1 Constructor & Destructor Documentation

4.11.1.1 **FindImageStreamsVisitor** () [inline]

### 4.11.2 Member Function Documentation

4.11.2.1 virtual void **apply** (osg::Geode & *node*) [inline, virtual]

4.11.2.2 virtual void **apply** (osg::Node & *node*) [inline, virtual]

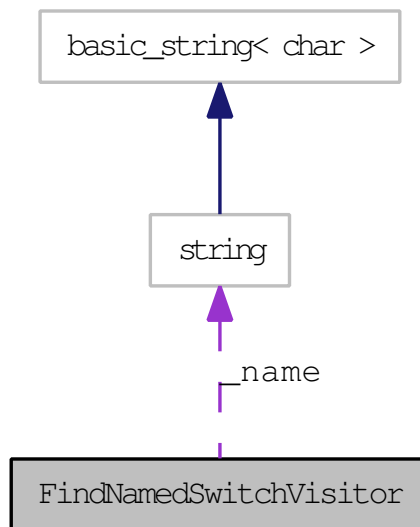
4.11.2.3 void **process** (osg::StateSet \* *ss*) [inline]

The documentation for this class was generated from the following file:

- **SlideShowConstructor.cpp**

## 4.12 FindNamedSwitchVisitor Class Reference

Collaboration diagram for FindNamedSwitchVisitor:



### Public Member Functions

- **FindNamedSwitchVisitor** (const std::string &name)
- void **apply** (osg::Switch &sw)

### Public Attributes

- std::string **\_name**
- osg::Switch \* **\_switch**

### 4.12.1 Constructor & Destructor Documentation

4.12.1.1 **FindNamedSwitchVisitor** (const std::string & *name*) [inline]

### 4.12.2 Member Function Documentation

4.12.2.1 void **apply** (osg::Switch & *sw*) [inline]

### 4.12.3 Member Data Documentation

4.12.3.1 std::string **\_name**

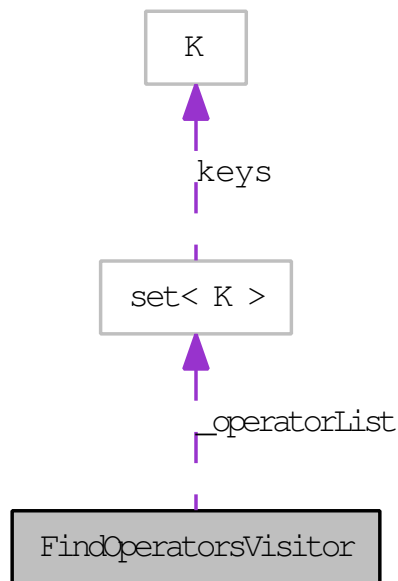
4.12.3.2 osg::Switch\* **\_switch**

The documentation for this class was generated from the following file:

- **SlideEventHandler.cpp**

## 4.13 FindOperatorsVisitor Class Reference

Collaboration diagram for FindOperatorsVisitor:



### Public Member Functions

- **FindOperatorsVisitor** (**ActiveOperators::OperatorList** &operatorList, osg::NodeVisitor::TraversalMode tm)
- void **apply** (osg::Geode &node)
- void **apply** (osg::Node &node)
- virtual void **process** (osg::StateSet \*ss)

### Public Attributes

- **ActiveOperators::OperatorList** & **\_operatorList**

### 4.13.1 Constructor & Destructor Documentation

- 4.13.1.1 **FindOperatorsVisitor** (**ActiveOperators::OperatorList** & *operatorList*, osg::NodeVisitor::TraversalMode *tm*) [inline]

### 4.13.2 Member Function Documentation

- 4.13.2.1 void **apply** (osg::Geode & *node*) [inline]
- 4.13.2.2 void **apply** (osg::Node & *node*) [inline]
- 4.13.2.3 virtual void **process** (osg::StateSet \* *ss*) [inline, virtual]

### 4.13.3 Member Data Documentation

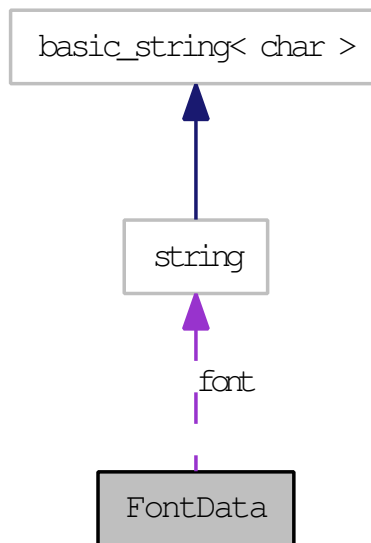
- 4.13.3.1 **ActiveOperators::OperatorList**& **\_operatorList**

The documentation for this class was generated from the following file:

- **SlideEventHandler.cpp**

## 4.14 FontData Struct Reference

Collaboration diagram for FontData:



### Public Member Functions

- `FontData ()`

### Public Attributes

- `osgText::Text::AlignmentType alignment`
- `osgText::Text::AxisAlignment axisAlignment`
- `float characterSize`
- `osg::Vec4 color`
- `std::string font`
- `osgText::Text::Layout layout`
- `float maximumHeight`
- `float maximumWidth`

#### 4.14.1 Constructor & Destructor Documentation

##### 4.14.1.1 `FontData ()` [inline]

#### 4.14.2 Member Data Documentation

##### 4.14.2.1 `osgText::Text::AlignmentType alignment`

##### 4.14.2.2 `osgText::Text::AxisAlignment axisAlignment`

##### 4.14.2.3 `float characterSize`

##### 4.14.2.4 `osg::Vec4 color`

##### 4.14.2.5 `std::string font`

##### 4.14.2.6 `osgText::Text::Layout layout`

##### 4.14.2.7 `float maximumHeight`

##### 4.14.2.8 `float maximumWidth`

The documentation for this struct was generated from the following file:

- `SlideShowConstructor`

## 4.15 HomePosition Struct Reference

### Public Member Functions

- **HomePosition** (const osg::Vec3 &in\_eye, const osg::Vec3 &in\_center, const osg::Vec3 &in\_up)
- **HomePosition** ()

### Public Attributes

- osg::Vec3 **center**
- osg::Vec3 **eye**
- osg::Vec3 **up**

### 4.15.1 Constructor & Destructor Documentation

4.15.1.1 **HomePosition** () [inline]

4.15.1.2 **HomePosition** (const osg::Vec3 & *in\_eye*, const osg::Vec3 & *in\_center*, const osg::Vec3 & *in\_up*) [inline]

### 4.15.2 Member Data Documentation

4.15.2.1 **osg::Vec3 center**

4.15.2.2 **osg::Vec3 eye**

4.15.2.3 **osg::Vec3 up**

The documentation for this struct was generated from the following file:

- **SlideEventHandler**

## 4.16 ImageData Struct Reference

### Public Member Functions

- **ImageData ()**

### Public Attributes

- osg::Vec4 **backgroundColor**
- float **height**
- osg::ImageStream::LoopingMode **loopingMode**
- int **page**
- osg::Vec4 **region**
- bool **region\_in\_pixel\_coords**
- float **texcoord\_rotate**
- float **width**

### 4.16.1 Constructor & Destructor Documentation

#### 4.16.1.1 ImageData () [inline]

### 4.16.2 Member Data Documentation

#### 4.16.2.1 osg::Vec4 backgroundColor

#### 4.16.2.2 float height

#### 4.16.2.3 osg::ImageStream::LoopingMode loopingMode

#### 4.16.2.4 int page

#### 4.16.2.5 osg::Vec4 region

#### 4.16.2.6 bool region\_in\_pixel\_coords

#### 4.16.2.7 float texcoord\_rotate

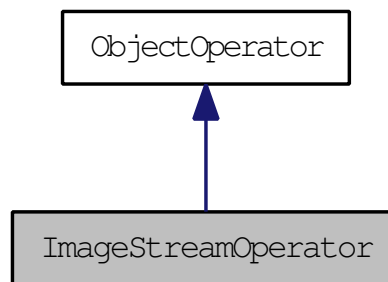
#### 4.16.2.8 float width

The documentation for this struct was generated from the following file:

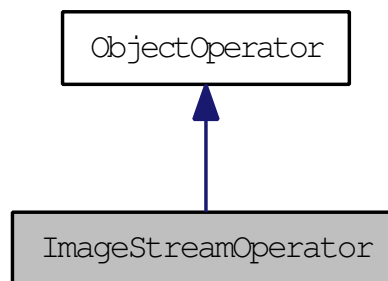
- **SlideShowConstructor**

## 4.17 ImageStreamOperator Struct Reference

Inheritance diagram for ImageStreamOperator:



Collaboration diagram for ImageStreamOperator:



### Public Member Functions

- **ImageStreamOperator** (osg::ImageStream \*imageStream)
- virtual void **enter** ()
- virtual void **leave** ()
- virtual void **maintain** ()
- virtual void \* **ptr** () const
- virtual void **reset** ()
- virtual void **setPause** (bool pause)

### Public Attributes

- osg::ref\_ptr< osg::ImageStream > **\_imageStream**

### 4.17.1 Constructor & Destructor Documentation

4.17.1.1 **ImageStreamOperator** (osg::ImageStream \* *imageStream*) [inline]

### 4.17.2 Member Function Documentation

4.17.2.1 **virtual void enter** () [inline, virtual]

Implements **ObjectOperator** (p. 40).

4.17.2.2 **virtual void leave** () [inline, virtual]

Implements **ObjectOperator** (p. 40).

4.17.2.3 **virtual void maintain** () [inline, virtual]

Implements **ObjectOperator** (p. 40).

**4.17.2.4 virtual void\* ptr () const [inline, virtual]**

Implements **ObjectOperator** (p. 40).

**4.17.2.5 virtual void reset () [inline, virtual]**

Implements **ObjectOperator** (p. 40).

**4.17.2.6 virtual void setPause (bool *pause*) [inline, virtual]**

Implements **ObjectOperator** (p. 40).

**4.17.3 Member Data Documentation****4.17.3.1 osg::ref\_ptr<osg::ImageStream> \_imageStream**

The documentation for this struct was generated from the following file:

- **SlideEventHandler.cpp**

## 4.18 KeyPosition Struct Reference

### Public Member Functions

- **KeyPosition** (unsigned int key=0, float x=FLT\_MAX, float y=FLT\_MAX)
- void **set** (unsigned int key=0, float x=FLT\_MAX, float y=FLT\_MAX)

### Public Attributes

- osgGA::GUIEventAdapter::KeySymbol **\_key**
- float **\_x**
- float **\_y**

### 4.18.1 Constructor & Destructor Documentation

4.18.1.1 **KeyPosition** (unsigned int *key* = 0, float *x* = FLT\_MAX, float *y* = FLT\_MAX) [inline]

### 4.18.2 Member Function Documentation

4.18.2.1 void **set** (unsigned int *key* = 0, float *x* = FLT\_MAX, float *y* = FLT\_MAX) [inline]

### 4.18.3 Member Data Documentation

4.18.3.1 osgGA::GUIEventAdapter::KeySymbol **\_key**

4.18.3.2 float **\_x**

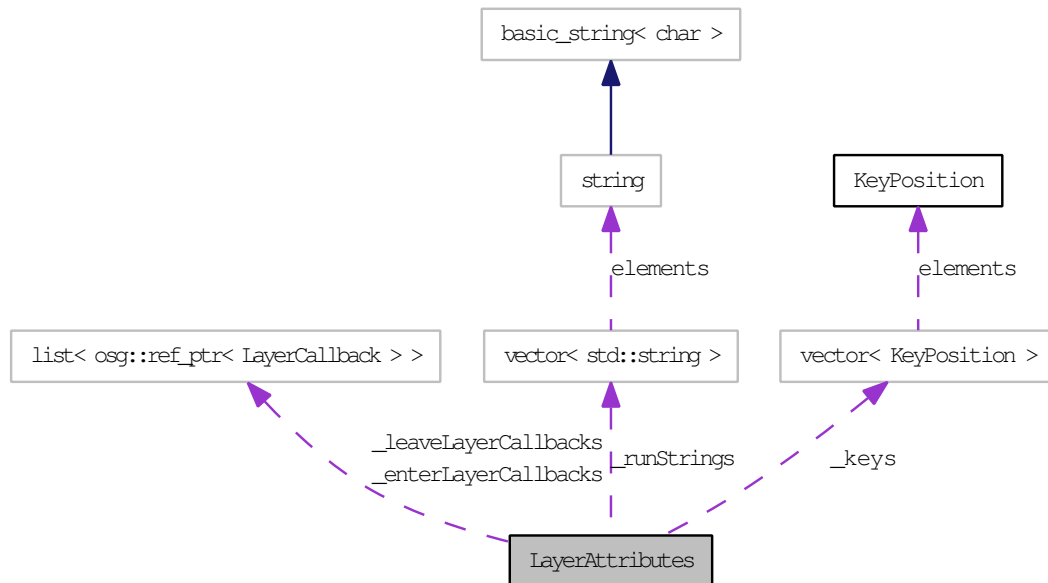
4.18.3.3 float **\_y**

The documentation for this struct was generated from the following file:

- **SlideEventHandler**

## 4.19 LayerAttributes Struct Reference

Collaboration diagram for LayerAttributes:



### Public Types

- typedef std::vector< **KeyPosition** > **Keys**
- typedef std::list< osg::ref\_ptr< **LayerCallback** > > **LayerCallbacks**
- typedef std::vector< std::string > **RunStrings**

### Public Member Functions

- **LayerAttributes** (double in\_duration)
- **LayerAttributes** ()
- void **addEnterCallback** (**LayerCallback** \*lc)
- void **addKey** (const **KeyPosition** &kp)
- void **addLeaveCallback** (**LayerCallback** \*lc)
- void **addRunString** (const std::string &runString)
- void **callEnterCallbacks** (osg::Node \*node)
- void **callLeaveCallbacks** (osg::Node \*node)
- double **getDuration** () const
- const **Keys** & **getKeys** () const
- int **getLayerNum** () const
- bool **getRelativeJump** () const
- const **RunStrings** & **getRunStrings** () const
- int **getSlideNum** () const
- bool **requiresJump** () const
- void **setDuration** (double duration)
- void **setJump** (bool relativeJump, int slideNum, int layerNum)
- void **setKeys** (const **Keys** &keys)
- void **setRunStrings** (const **RunStrings** &runStrings)

### Public Attributes

- double **\_duration**
- **LayerCallbacks** **\_enterLayerCallbacks**
- **Keys** **\_keys**
- int **\_layerNum**

- **LayerCallbacks \_leaveLayerCallbacks**
- **bool \_relativeJump**
- **RunStrings \_runStrings**
- **int \_slideNum**

#### 4.19.1 Member Typedef Documentation

4.19.1.1 **typedef std::vector<KeyPosition> Keys**

4.19.1.2 **typedef std::list< osg::ref\_ptr<LayerCallback> > LayerCallbacks**

4.19.1.3 **typedef std::vector<std::string> RunStrings**

#### 4.19.2 Constructor & Destructor Documentation

4.19.2.1 **LayerAttributes () [inline]**

4.19.2.2 **LayerAttributes (double *in\_duration*) [inline]**

#### 4.19.3 Member Function Documentation

4.19.3.1 **void addEnterCallback (LayerCallback \* *lc*) [inline]**

4.19.3.2 **void addKey (const KeyPosition & *kp*) [inline]**

4.19.3.3 **void addLeaveCallback (LayerCallback \* *lc*) [inline]**

4.19.3.4 **void addRunString (const std::string & *runString*) [inline]**

4.19.3.5 **void callEnterCallbacks (osg::Node \* *node*)**

4.19.3.6 **void callLeaveCallbacks (osg::Node \* *node*)**

4.19.3.7 **double getDuration () const [inline]**

4.19.3.8 **const Keys& getKeys () const [inline]**

4.19.3.9 **int getLayerNum () const [inline]**

4.19.3.10 **bool getRelativeJump () const [inline]**

4.19.3.11 **const RunStrings& getRunStrings () const [inline]**

4.19.3.12 **int getSlideNum () const [inline]**

4.19.3.13 **bool requiresJump () const [inline]**

4.19.3.14 **void setDuration (double *duration*) [inline]**

4.19.3.15 **void setJump (bool *relativeJump*, int *slideNum*, int *layerNum*) [inline]**

4.19.3.16 **void setKeys (const Keys & *keys*) [inline]**

4.19.3.17 **void setRunStrings (const RunStrings & *runStrings*) [inline]**

#### 4.19.4 Member Data Documentation

4.19.4.1 **double \_duration**

4.19.4.2 **LayerCallbacks \_enterLayerCallbacks**

4.19.4.3 **Keys \_keys**

4.19.4.4 **int \_layerNum**

4.19.4.5 **LayerCallbacks \_leaveLayerCallbacks**

4.19.4.6 **bool \_relativeJump**

4.19.4.7 **RunStrings \_runStrings**

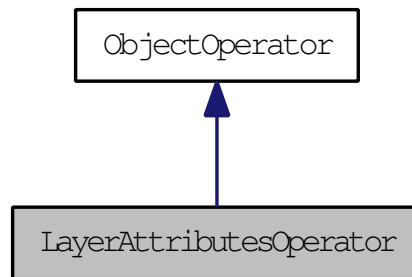
4.19.4.8 **int \_slideNum**

The documentation for this struct was generated from the following files:

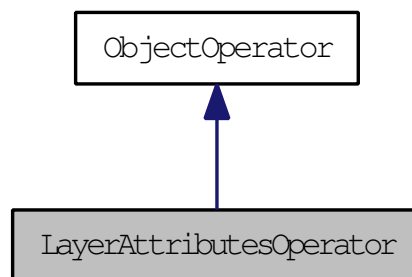
- SlideEventHandler
- SlideEventHandler.cpp

## 4.20 LayerAttributesOperator Struct Reference

Inheritance diagram for LayerAttributesOperator:



Collaboration diagram for LayerAttributesOperator:



### Public Member Functions

- **LayerAttributesOperator** (osg::Node \*node, **LayerAttributes** \*la)
- virtual void **enter** ()
- virtual void **leave** ()
- virtual void **maintain** ()
- virtual void \* **ptr** () const
- virtual void **reset** ()
- virtual void **setPause** (bool pause)

### Public Attributes

- osg::ref\_ptr< **LayerAttributes** > **\_layerAttribute**
- osg::ref\_ptr< osg::Node > **\_node**

#### 4.20.1 Constructor & Destructor Documentation

4.20.1.1 **LayerAttributesOperator** (osg::Node \* *node*, **LayerAttributes** \* *la*) [inline]

#### 4.20.2 Member Function Documentation

4.20.2.1 virtual void **enter** () [inline, virtual]

Implements **ObjectOperator** (p. 40).

4.20.2.2 virtual void **leave** () [inline, virtual]

Implements **ObjectOperator** (p. 40).

4.20.2.3 virtual void **maintain** () [inline, virtual]

Implements **ObjectOperator** (p. 40).

**4.20.2.4 virtual void\* ptr () const [inline, virtual]**

Implements **ObjectOperator** (p. 40).

**4.20.2.5 virtual void reset () [inline, virtual]**

Implements **ObjectOperator** (p. 40).

**4.20.2.6 virtual void setPause (bool *pause*) [inline, virtual]**

Implements **ObjectOperator** (p. 40).

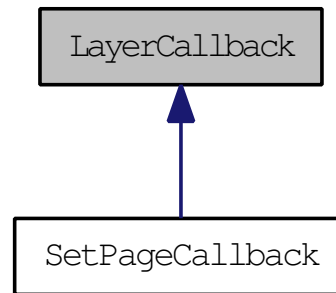
**4.20.3 Member Data Documentation****4.20.3.1 osg::ref\_ptr<LayerAttributes> \_layerAttribute****4.20.3.2 osg::ref\_ptr<osg::Node> \_node**

The documentation for this struct was generated from the following file:

- **SlideEventHandler.cpp**

## 4.21 LayerCallback Struct Reference

Inheritance diagram for LayerCallback:



### Public Member Functions

- virtual void **operator()** (osg::Node \*node) const =0

#### 4.21.1 Member Function Documentation

##### 4.21.1.1 virtual void operator() (osg::Node \* *node*) const [pure virtual]

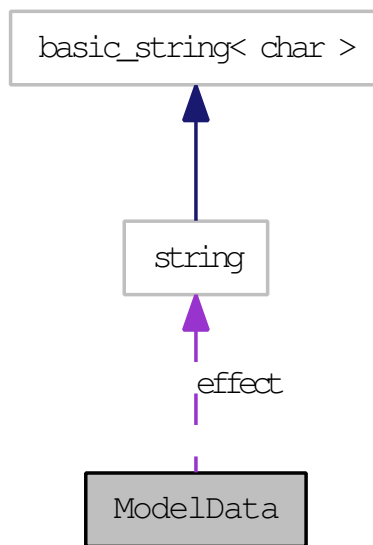
Implemented in **SetPageCallback** (p. 45).

The documentation for this struct was generated from the following file:

- **SlideEventHandler**

## 4.22 ModelData Struct Reference

Collaboration diagram for ModelData:



### Public Member Functions

- `ModelData ()`

### Public Attributes

- `std::string effect`

### 4.22.1 Constructor & Destructor Documentation

#### 4.22.1.1 `ModelData ()` [inline]

### 4.22.2 Member Data Documentation

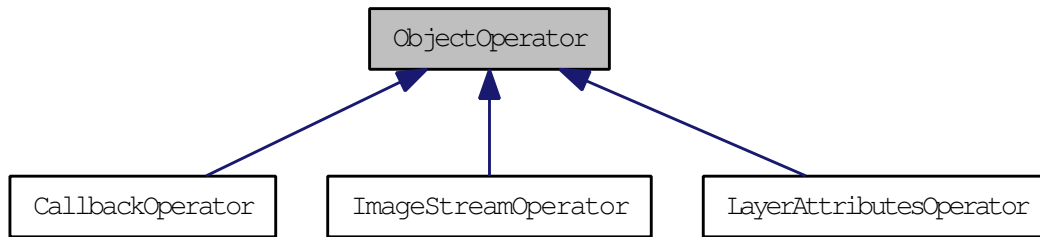
#### 4.22.2.1 `std::string effect`

The documentation for this struct was generated from the following file:

- `SlideShowConstructor`

## 4.23 ObjectOperator Struct Reference

Inheritance diagram for ObjectOperator:



### Public Member Functions

- virtual `~ObjectOperator ()`
- virtual void `enter ()=0`
- virtual void `leave ()=0`
- virtual void `maintain ()=0`
- bool `operator< (const ObjectOperator &rhs) const`
- virtual void `* ptr () const =0`
- virtual void `reset ()=0`
- virtual void `setPause (bool pause)=0`

#### 4.23.1 Constructor & Destructor Documentation

4.23.1.1 virtual `~ObjectOperator () [inline, virtual]`

#### 4.23.2 Member Function Documentation

4.23.2.1 virtual void `enter () [pure virtual]`

Implemented in `ImageStreamOperator` (p.30), `CallbackOperator` (p.16), and `LayerAttributesOperator` (p.36).

4.23.2.2 virtual void `leave () [pure virtual]`

Implemented in `ImageStreamOperator` (p.30), `CallbackOperator` (p.16), and `LayerAttributesOperator` (p.36).

4.23.2.3 virtual void `maintain () [pure virtual]`

Implemented in `ImageStreamOperator` (p.30), `CallbackOperator` (p.16), and `LayerAttributesOperator` (p.36).

4.23.2.4 bool `operator< (const ObjectOperator & rhs) const [inline]`

4.23.2.5 virtual void `* ptr () const [pure virtual]`

Implemented in `ImageStreamOperator` (p.31), `CallbackOperator` (p.17), and `LayerAttributesOperator` (p.37).

4.23.2.6 virtual void `reset () [pure virtual]`

Implemented in `ImageStreamOperator` (p.31), `CallbackOperator` (p.17), and `LayerAttributesOperator` (p.37).

4.23.2.7 virtual void `setPause (bool pause) [pure virtual]`

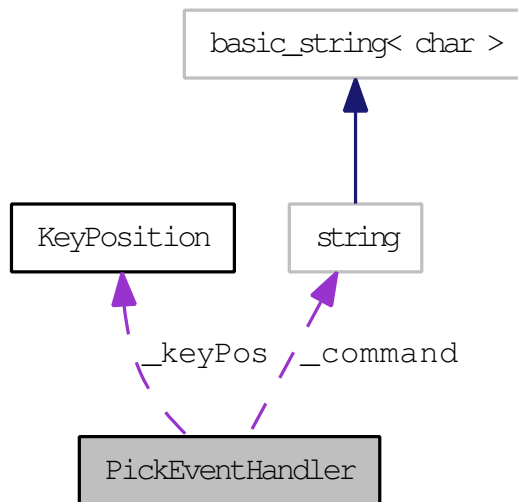
Implemented in `ImageStreamOperator` (p.31), `CallbackOperator` (p.17), and `LayerAttributesOperator` (p.37).

The documentation for this struct was generated from the following file:

- `SlideEventHandler`

## 4.24 PickEventHandler Class Reference

Collaboration diagram for PickEventHandler:



### Public Member Functions

- **PickEventHandler** (const **osgPresentation::KeyPosition** &keyPos, bool relativeJump=true, int slideNum=0, int layerNum=0)
- **PickEventHandler** (const std::string &str, **osgPresentation::Operation** operation, bool relativeJump=true, int slideNum=0, int layerNum=0)
- **PickEventHandler** (**osgPresentation::Operation** operation, bool relativeJump=true, int slideNum=0, int layerNum=0)
- virtual void **accept** (osgGA::GUIEventHandlerVisitor &v)
- void **doOperation** ()
- const std::string & **getCommand** () const
- const **osgPresentation::KeyPosition** & **getKeyPosition** () const
- int **getLayerNum** () const
- **osgPresentation::Operation** **getOperation** () const
- bool **getRelativeJump** () const
- int **getSlideNum** () const
- virtual void **getUsage** (osg::ApplicationUsage &usage) const
- virtual bool **handle** (const osgGA::GUIEventAdapter &ea, osgGA::GUIActionAdapter &aa, osg::Object \*object, osg::NodeVisitor \*nv)
- bool **requiresJump** () const
- void **setAbsoluteJump** (int slideNum, int layerNum)
- void **setCommand** (const std::string &str)
- void **setKeyPosition** (const **osgPresentation::KeyPosition** &keyPos)
- void **setOperation** (**osgPresentation::Operation** operation)
- void **setRelativeJump** (int slideDelta, int layerDelta)

### Public Attributes

- std::string **\_command**
- **osgPresentation::KeyPosition** **\_keyPos**
- int **\_layerNum**
- **osgPresentation::Operation** **\_operation**
- bool **\_relativeJump**
- int **\_slideNum**

#### 4.24.1 Constructor & Destructor Documentation

- 4.24.1.1 `PickEventHandler (osgPresentation::Operation operation, bool relativeJump = true, int slideNum = 0, int layerNum = 0)`
- 4.24.1.2 `PickEventHandler (const std::string & str, osgPresentation::Operation operation, bool relativeJump = true, int slideNum = 0, int layerNum = 0)`
- 4.24.1.3 `PickEventHandler (const osgPresentation::KeyPosition & keyPos, bool relativeJump = true, int slideNum = 0, int layerNum = 0)`

#### 4.24.2 Member Function Documentation

- 4.24.2.1 `void accept (osgGA::GUIEventHandlerVisitor & v) [virtual]`
- 4.24.2.2 `void doOperation ()`
- 4.24.2.3 `const std::string& getCommand () const [inline]`
- 4.24.2.4 `const osgPresentation::KeyPosition& getKeyPosition () const [inline]`
- 4.24.2.5 `int getLayerNum () const [inline]`
- 4.24.2.6 `osgPresentation::Operation getOperation () const [inline]`
- 4.24.2.7 `bool getRelativeJump () const [inline]`
- 4.24.2.8 `int getSlideNum () const [inline]`
- 4.24.2.9 `void getUsage (osg::ApplicationUsage & usage) const [virtual]`
- 4.24.2.10 `bool handle (const osgGA::GUIEventAdapter & ea, osgGA::GUIActionAdapter & aa, osg::Object * object, osg::NodeVisitor * nv) [virtual]`
- 4.24.2.11 `bool requiresJump () const [inline]`
- 4.24.2.12 `void setAbsoluteJump (int slideNum, int layerNum)`
- 4.24.2.13 `void setCommand (const std::string & str) [inline]`
- 4.24.2.14 `void setKeyPosition (const osgPresentation::KeyPosition & keyPos) [inline]`
- 4.24.2.15 `void setOperation (osgPresentation::Operation operation) [inline]`
- 4.24.2.16 `void setRelativeJump (int slideDelta, int layerDelta)`

#### 4.24.3 Member Data Documentation

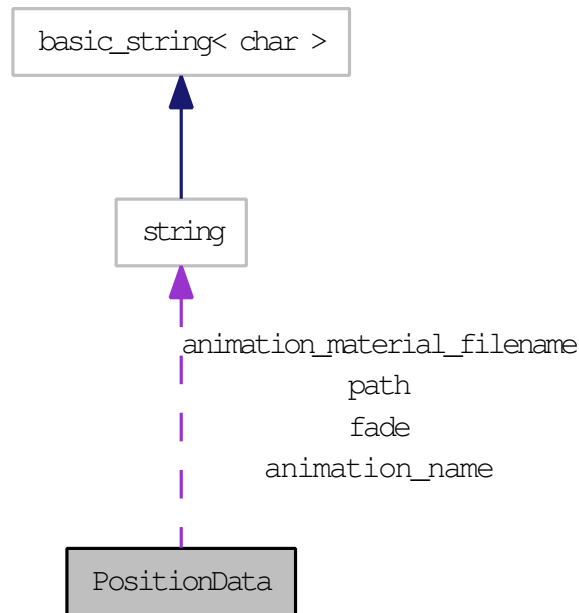
- 4.24.3.1 `std::string _command`
- 4.24.3.2 `osgPresentation::KeyPosition _keyPos`
- 4.24.3.3 `int _layerNum`
- 4.24.3.4 `osgPresentation::Operation _operation`
- 4.24.3.5 `bool _relativeJump`
- 4.24.3.6 `int _slideNum`

The documentation for this class was generated from the following files:

- `PickEventHandler`
- `PickEventHandler.cpp`

## 4.25 PositionData Struct Reference

Collaboration diagram for PositionData:



### Public Member Functions

- `PositionData ()`
- `bool requiresAnimation () const`
- `bool requiresMaterialAnimation () const`
- `bool requiresPosition () const`
- `bool requiresRotate () const`
- `bool requiresScale () const`

### Public Attributes

- `bool absolute_path`
- `std::string animation_material_filename`
- `AnimationMaterial::LoopMode animation_material_loop_mode`
- `double animation_material_time_multiplier`
- `double animation_material_time_offset`
- `std::string animation_name`
- `std::string fade`
- `CoordinateFrame frame`
- `bool inverse_path`
- `std::string path`
- `osg::AnimationPath::LoopMode path_loop_mode`
- `double path_time_multiplier`
- `double path_time_offset`
- `osg::Vec3 position`
- `osg::Vec4 rotate`
- `osg::Vec4 rotation`
- `osg::Vec3 scale`

## 4.25.1 Constructor & Destructor Documentation

4.25.1.1 PositionData () [inline]

## 4.25.2 Member Function Documentation

4.25.2.1 bool requiresAnimation () const [inline]

4.25.2.2 bool requiresMaterialAnimation () const [inline]

4.25.2.3 bool requiresPosition () const [inline]

4.25.2.4 bool requiresRotate () const [inline]

4.25.2.5 bool requiresScale () const [inline]

## 4.25.3 Member Data Documentation

4.25.3.1 bool absolute\_path

4.25.3.2 std::string animation\_material\_filename

4.25.3.3 AnimationMaterial::LoopMode animation\_material\_loop\_mode

4.25.3.4 double animation\_material\_time\_multiplier

4.25.3.5 double animation\_material\_time\_offset

4.25.3.6 std::string animation\_name

4.25.3.7 std::string fade

4.25.3.8 CoordinateFrame frame

4.25.3.9 bool inverse\_path

4.25.3.10 std::string path

4.25.3.11 osg::AnimationPath::LoopMode path\_loop\_mode

4.25.3.12 double path\_time\_multiplier

4.25.3.13 double path\_time\_offset

4.25.3.14 osg::Vec3 position

4.25.3.15 osg::Vec4 rotate

4.25.3.16 osg::Vec4 rotation

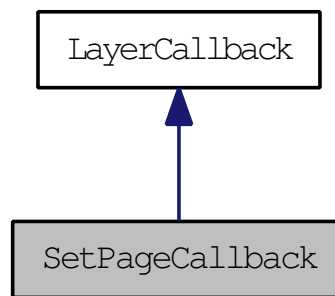
4.25.3.17 osg::Vec3 scale

The documentation for this struct was generated from the following file:

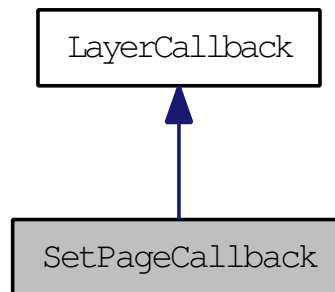
- **SlideShowConstructor**

## 4.26 SetPageCallback Class Reference

Inheritance diagram for SetPageCallback:



Collaboration diagram for SetPageCallback:



### Public Member Functions

- **SetPageCallback** (osgWidget::PdfImage \*pdfImage, int pageNum)
- virtual void **operator()** (osg::Node \*) const

### Public Attributes

- int **\_pageNum**
- osg::observer\_ptr< osgWidget::PdfImage > **\_pdfImage**

### 4.26.1 Constructor & Destructor Documentation

4.26.1.1 **SetPageCallback** (osgWidget::PdfImage \* *pdfImage*, int *pageNum*) [inline]

### 4.26.2 Member Function Documentation

4.26.2.1 virtual void **operator()** (osg::Node \*) const [inline, virtual]

Implements **LayerCallback** (p. 38).

### 4.26.3 Member Data Documentation

4.26.3.1 int **\_pageNum**

4.26.3.2 osg::observer\_ptr< osgWidget::PdfImage > **\_pdfImage**

The documentation for this class was generated from the following file:

- **SlideShowConstructor.cpp**

## 4.27 SetToTransparentBin Class Reference

### Public Member Functions

- **SetToTransparentBin** ()
- virtual void **apply** (osg::Geode &geode)
- virtual void **apply** (osg::Node &node)

### 4.27.1 Constructor & Destructor Documentation

4.27.1.1 **SetToTransparentBin** () [inline]

### 4.27.2 Member Function Documentation

4.27.2.1 virtual void **apply** (osg::Geode & *geode*) [inline, virtual]

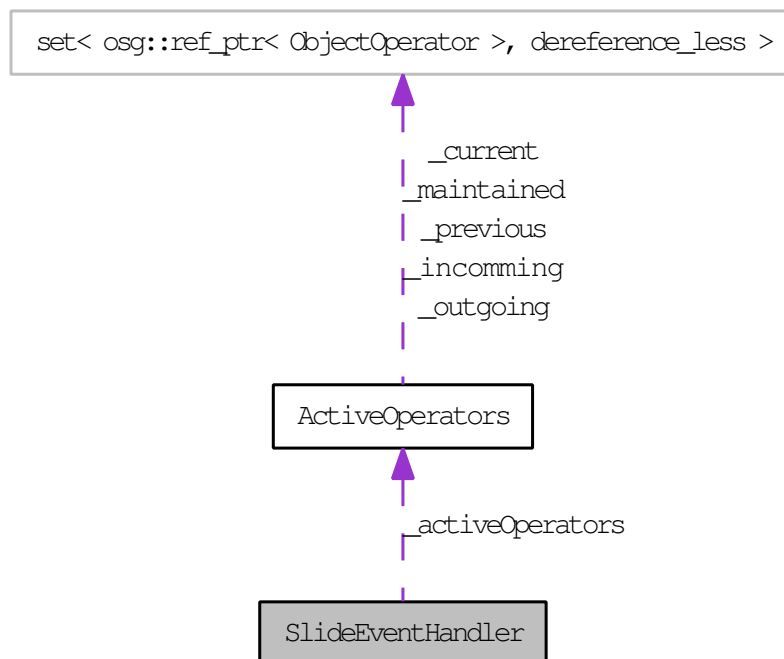
4.27.2.2 virtual void **apply** (osg::Node & *node*) [inline, virtual]

The documentation for this class was generated from the following file:

- **SlideShowConstructor.cpp**

## 4.28 SlideEventHandler Class Reference

Collaboration diagram for SlideEventHandler:



### Public Types

- enum **ObjectMask** { **MOVIE** = 1<<0, **OBJECTS** = 1<<1, **ALL\_OBJECTS** = MOVIE | OBJECTS }
- enum **WhichPosition** { **FIRST\_POSITION** = 0, **LAST\_POSITION** = -1 }

### Public Member Functions

- **SlideEventHandler** (osgViewer::Viewer \*viewer=0)
- virtual void **accept** (osgGA::GUIEventHandlerVisitor &v)
- void **compileSlide** (unsigned int slideNum)
- void **dispatchEvent** (const **KeyPosition** &keyPosition)
- int **getActiveLayer** () const
- int **getActiveSlide** () const
- bool **getAutoSteppingActive** () const
- double **getCurrentTimeDelayBetweenSlides** () const
- double **getDuration** (const osg::Node \*node) const
- bool **getLoopPresentation** () const
- unsigned int **getNumSlides** ()
- bool **getReleaseAndCompileOnEachNewSlide** () const
- double **getTimeDelayBetweenSlides** () const
- float **getTimeDelayOnNewSlideWithMovies** () const
- virtual void **getUsage** (osg::ApplicationUsage &usage) const
- osgViewer::Viewer \* **getView** ()
- virtual bool **handle** (const osgGA::GUIEventAdapter &ea, osgGA::GUIActionAdapter &)
- bool **home** ()
- **META\_Object** (osgslideshowApp, **SlideEventHandler**)
- bool **nextLayer** ()
- bool **nextLayerOrSlide** ()
- bool **nextSlide** ()
- virtual void **operator()** (osg::Node \*node, osg::NodeVisitor \*nv)

*Event traversal node callback method.*

- bool **previousLayer** ()
- bool **previousLayerOrSlide** ()
- bool **previousSlide** ()
- void **releaseSlide** (unsigned int slideNum)
- bool **selectLayer** (int layerNum)
- bool **selectSlide** (int slideNum, int layerNum=FIRST\_POSITION)
- void **set** (osg::Node \*model)
- void **setAutoSteppingActive** (bool flag=true)
- void **setLoopPresentation** (bool loop)
- void **setReleaseAndCompileOnEachNewSlide** (bool flag)
- void **setTimeDelayBetweenSlides** (double dt)
- void **setTimeDelayOnNewSlideWithMovies** (float t)

### Static Public Member Functions

- static **SlideEventHandler** \* **instance** ()

### Protected Member Functions

- **SlideEventHandler** (const **SlideEventHandler** &, const osg::CopyOp &)
- **~SlideEventHandler** ()
- bool **home** (const osgGA::GUIEventAdapter &ea, osgGA::GUIActionAdapter &aa)
- void **updateAlpha** (bool, bool, float x, float y)
- void **updateLight** (float x, float y)
- void **updateOperators** ()

### Protected Attributes

- int **\_activeLayer**
- **ActiveOperators** **\_activeOperators**
- int **\_activePresentation**
- int **\_activeSlide**
- bool **\_autoSteppingActive**
- osg::ref\_ptr< **CompileSlideCallback** > **\_compileSlideCallback**
- bool **\_cursorOn**
- bool **\_firstSlideOrLayerChange**
- bool **\_firstTraversal**
- bool **\_hold**
- bool **\_loopPresentation**
- double **\_minimumTimeBetweenKeyPresses**
- bool **\_pause**
- osg::observer\_ptr< osg::Switch > **\_presentationSwitch**
- double **\_previousTime**
- float **\_previousX**
- float **\_previousY**
- bool **\_releaseAndCompileOnEachNewSlide**
- osg::observer\_ptr< osg::Switch > **\_showSwitch**
- osg::observer\_ptr< osg::Switch > **\_slideSwitch**
- osg::Timer\_t **\_tickAtFirstSlideOrLayerChange**
- osg::Timer\_t **\_tickAtLastSlideOrLayerChange**
- float **\_timeDelayOnNewSlideWithMovies**
- double **\_timeLastKeyPresses**
- double **\_timePerSlide**
- bool **\_updateLightActive**
- bool **\_updateOpacityActive**
- osg::observer\_ptr< osgViewer::Viewer > **\_viewer**

## 4.28.1 Member Enumeration Documentation

### 4.28.1.1 enum ObjectMask

Enumerator:

*MOVIE*

*OBJECTS*

*ALL\_OBJECTS*

### 4.28.1.2 enum WhichPosition

Enumerator:

*FIRST\_POSITION*

*LAST\_POSITION*

## 4.28.2 Constructor & Destructor Documentation

4.28.2.1 `SlideEventHandler (osgViewer::Viewer * viewer = 0)`

4.28.2.2 `~SlideEventHandler () [inline, protected]`

4.28.2.3 `SlideEventHandler (const SlideEventHandler &, const osg::CopyOp &) [inline, protected]`

## 4.28.3 Member Function Documentation

4.28.3.1 `virtual void accept (osgGA::GUIEventHandlerVisitor & v) [inline, virtual]`

4.28.3.2 `void compileSlide (unsigned int slideNum)`

4.28.3.3 `void dispatchEvent (const KeyPosition & keyPosition)`

4.28.3.4 `int getActiveLayer () const [inline]`

4.28.3.5 `int getActiveSlide () const [inline]`

4.28.3.6 `bool getAutoSteppingActive () const [inline]`

4.28.3.7 `double getCurrentTimeDelayBetweenSlides () const`

4.28.3.8 `double getDuration (const osg::Node * node) const`

4.28.3.9 `bool getLoopPresentation () const [inline]`

4.28.3.10 `unsigned int getNumSlides ()`

4.28.3.11 `bool getReleaseAndCompileOnEachNewSlide () const [inline]`

4.28.3.12 `double getTimeDelayBetweenSlides () const [inline]`

4.28.3.13 `float getTimeDelayOnNewSlideWithMovies () const [inline]`

4.28.3.14 `void getUsage (osg::ApplicationUsage & usage) const [virtual]`

4.28.3.15 `osgViewer::Viewer* getView () [inline]`

4.28.3.16 `bool handle (const osgGA::GUIEventAdapter & ea, osgGA::GUIActionAdapter & aa) [virtual]`

4.28.3.17 `bool home (const osgGA::GUIEventAdapter & ea, osgGA::GUIActionAdapter & aa) [protected]`

4.28.3.18 `bool home ()`

4.28.3.19 `SlideEventHandler * instance () [static]`

4.28.3.20 `META_Object (osglideshowApp, SlideEventHandler)`

4.28.3.21 `bool nextLayer ()`

4.28.3.22 `bool nextLayerOrSlide ()`

4.28.3.23 `bool nextSlide ()`

4.28.3.24 `void operator() (osg::Node * node, osg::NodeVisitor * nv) [virtual]`

Event traversal node callback method.

- 4.28.3.25 `bool previousLayer ()`
- 4.28.3.26 `bool previousLayerOrSlide ()`
- 4.28.3.27 `bool previousSlide ()`
- 4.28.3.28 `void releaseSlide (unsigned int slideNum)`
- 4.28.3.29 `bool selectLayer (int layerNum)`
- 4.28.3.30 `bool selectSlide (int slideNum, int layerNum = FIRST_POSITION)`
- 4.28.3.31 `void set (osg::Node * model)`
- 4.28.3.32 `void setAutoSteppingActive (bool flag = true) [inline]`
- 4.28.3.33 `void setLoopPresentation (bool loop) [inline]`
- 4.28.3.34 `void setReleaseAndCompileOnEachNewSlide (bool flag) [inline]`
- 4.28.3.35 `void setTimeDelayBetweenSlides (double dt) [inline]`
- 4.28.3.36 `void setTimeDelayOnNewSlideWithMovies (float t) [inline]`
- 4.28.3.37 `void updateAlpha (bool modAlphaFunc, bool modMaterial, float x, float y) [protected]`
- 4.28.3.38 `void updateLight (float x, float y) [protected]`
- 4.28.3.39 `void updateOperators () [protected]`

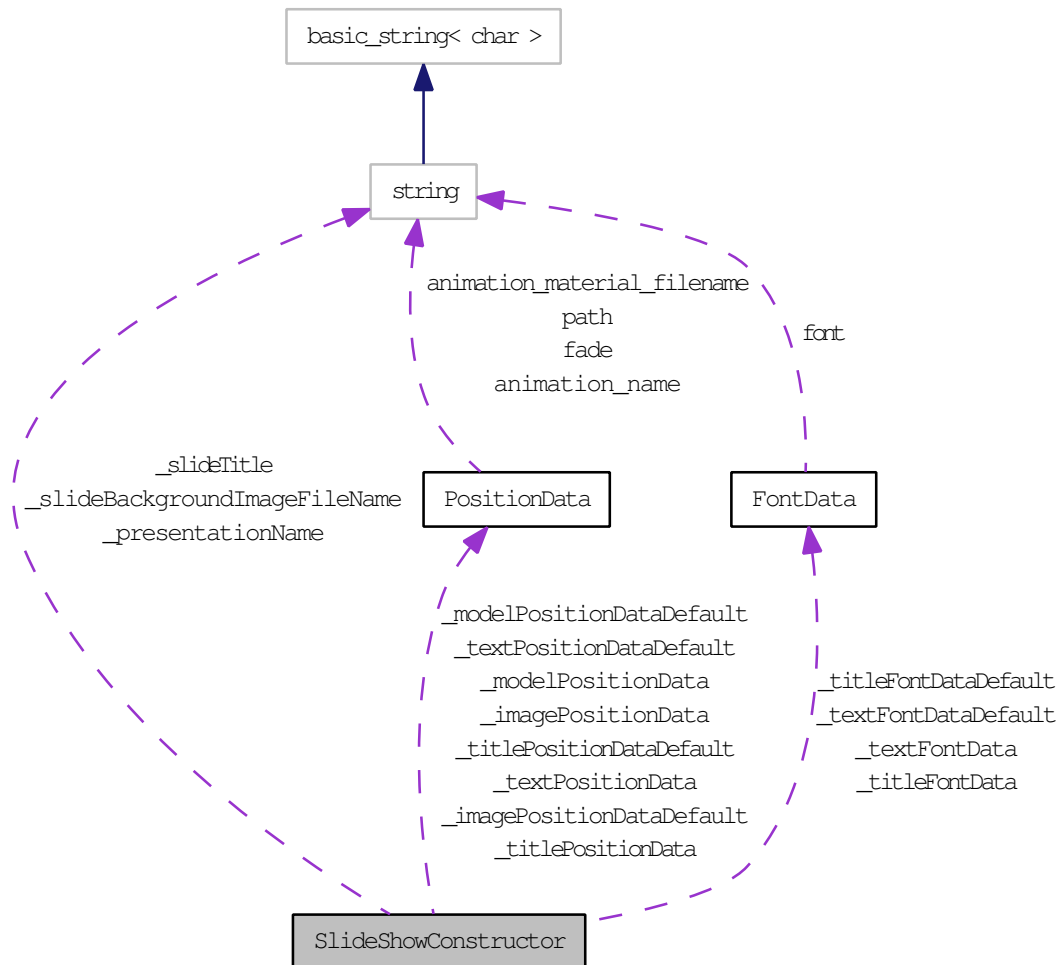
#### 4.28.4 Member Data Documentation

- 4.28.4.1 `int _activeLayer [protected]`
- 4.28.4.2 `ActiveOperators _activeOperators [protected]`
- 4.28.4.3 `int _activePresentation [protected]`
- 4.28.4.4 `int _activeSlide [protected]`
- 4.28.4.5 `bool _autoSteppingActive [protected]`
- 4.28.4.6 `osg::ref_ptr<CompileSlideCallback> _compileSlideCallback [protected]`
- 4.28.4.7 `bool _cursorOn [protected]`
- 4.28.4.8 `bool _firstSlideOrLayerChange [protected]`
- 4.28.4.9 `bool _firstTraversal [protected]`
- 4.28.4.10 `bool _hold [protected]`
- 4.28.4.11 `bool _loopPresentation [protected]`
- 4.28.4.12 `double _minimumTimeBetweenKeyPresses [protected]`
- 4.28.4.13 `bool _pause [protected]`
- 4.28.4.14 `osg::observer_ptr<osg::Switch> _presentationSwitch [protected]`
- 4.28.4.15 `double _previousTime [protected]`
- 4.28.4.16 `float _previousX [protected]`
- 4.28.4.17 `float _previousY [protected]`
- 4.28.4.18 `bool _releaseAndCompileOnEachNewSlide [protected]`
- 4.28.4.19 `osg::observer_ptr<osg::Switch> _showSwitch [protected]`
- 4.28.4.20 `osg::observer_ptr<osg::Switch> _slideSwitch [protected]`
- 4.28.4.21 `osg::Timer_t _tickAtFirstSlideOrLayerChange [protected]`
- 4.28.4.22 `osg::Timer_t _tickAtLastSlideOrLayerChange [protected]`
- 4.28.4.23 `float _timeDelayOnNewSlideWithMovies [protected]`
- 4.28.4.24 `double _timeLastKeyPresses [protected]`
- 4.28.4.25 `double _timePerSlide [protected]`
- 4.28.4.26 `bool _updateLightActive [protected]`
- 4.28.4.27 `bool _updateOpacityActive [protected]`

- [SlideEventHandler](#)
- [SlideEventHandler.cpp](#)

## 4.29 SlideShowConstructor Class Reference

Collaboration diagram for SlideShowConstructor:



### Classes

- struct **FontData**
- struct **ImageData**
- struct **ModelData**
- struct **PositionData**
- struct **VolumeData**

### Public Types

- enum **CoordinateFrame** { **SLIDE**, **MODEL** }

### Public Member Functions

- **SlideShowConstructor** (const osgDB::ReaderWriter::Options \*options)
- void **addBrowser** (const std::string &filename, const **PositionData** &positionData, const **ImageData** &imageData)
- void **addBullet** (const std::string &bullet, **PositionData** &positionData, **FontData** &fontData)
- void **addImage** (const std::string &filename, const **PositionData** &positionData, const **ImageData** &imageData)
- osg::Image \* **addInteractivelImage** (const std::string &filename, const **PositionData** &positionData, const **ImageData** &imageData)
- void **addKey** (osg::Node \*node, const **KeyPosition** &kp)

- void **addLayer** (bool inheritPreviousLayers=true, bool defineAsBaseLayer=false)
- void **addLayerKey** (const **KeyPosition** &kp)
- void **addLayerRunString** (const std::string &runString)
- void **addModel** (const std::string &filename, const **PositionData** &positionData, const **ModelData** &modelData)
- void **addModel** (osg::Node \*subgraph, const **PositionData** &positionData, const **ModelData** &modelData)
- void **addParagraph** (const std::string &paragraph, **PositionData** &positionData, **FontData** &fontData)
- void **addPDF** (const std::string &filename, const **PositionData** &positionData, const **ImageData** &imageData)
- void **addPresentationKey** (const **KeyPosition** &kp)
- void **addPresentationRunString** (const std::string &runString)
- void **addRunString** (osg::Node \*node, const std::string &runString)
- void **addSlide** ()
- void **addSlideKey** (const **KeyPosition** &kp)
- void **addSlideRunString** (const std::string &runString)
- void **addStereolImagePair** (const std::string &filenameLeft, const **ImageData** &imageDataLeft, const std::string &filenameRight, const **ImageData** &imageDataRight, const **PositionData** &positionData)
- void **addVNC** (const std::string &filename, const **PositionData** &positionData, const **ImageData** &imageData)
- void **addVolume** (const std::string &filename, const **PositionData** &positionData, const **VolumeData** &volumeData)
- void **createPresentation** ()
- bool **getAutoSteppingActive** () const
- const osg::Vec4 & **getBackgroundColor** () const
- osg::Group \* **getCurrentLayer** ()
- osg::Switch \* **getCurrentSlide** ()
- **PositionData** & **getImagePositionData** ()
- **PositionData** & **getImagePositionDataDefault** ()
- bool **getLoopPresentation** () const
- **PositionData** & **getModelPositionData** ()
- **PositionData** & **getModelPositionDataDefault** ()
- **LayerAttributes** \* **getOrCreateLayerAttributes** (osg::Node \*node)
- osg::Group \* **getPresentation** ()
- osg::Switch \* **getPresentationSwitch** ()
- const osg::Vec4 & **getTextColor** () const
- **FontData** & **getTextFontData** ()
- **FontData** & **getTextFontDataDefault** ()
- **PositionData** & **getTextPositionData** ()
- **PositionData** & **getTextPositionDataDefault** ()
- **FontData** & **getTitleFontData** ()
- **FontData** & **getTitleFontDataDefault** ()
- **PositionData** & **getTitlePositionData** ()
- **PositionData** & **getTitlePositionDataDefault** ()
- void **layerClickEventOperation** (const **KeyPosition** &keyPos, bool relativeJump=true, int slideNum=0, int layerNum=0)
- void **layerClickToDoOperation** (const std::string &command, **Operation** operation, bool relativeJump=true, int slideNum=0, int layerNum=0)
- void **layerClickToDoOperation** (**Operation** operation, bool relativeJump=true, int slideNum=0, int layerNum=0)
- void **selectLayer** (int layerNum)
- void **selectSlide** (int slideNum)
- void **setAutoSteppingActive** (bool flag=true)
- void **setBackgroundColor** (const osg::Vec4 &color, bool updateClearNode)
- void **setDuration** (osg::Node \*node, double duration)
- void **setJump** (osg::Node \*node, bool relativeJump, int slideNum, int layerNum)
- void **setLayerDuration** (double duration)
- void **setLayerJump** (bool relativeJump, int switchNum, int layerNum)

- void **setLoopPresentation** (bool loop)
- void **setPresentationAspectRatio** (const std::string &str)
- void **setPresentationAspectRatio** (float aspectRatio)
- void **setPresentationDuration** (double duration)
- void **setPresentationName** (const std::string &name)
- void **setSlideBackground** (const std::string &name)
- void **setSlideDuration** (double duration)
- void **setSlideJump** (bool relativeJump, int switchNum, int layerNum)
- void **setSlideTitle** (const std::string &name, **PositionData** &positionData, **FontData** &fontData)
- void **setTextColor** (const osg::Vec4 &color)
- osg::Group \* **takePresentation** ()
- void **translateTextCursor** (const osg::Vec3 &delta)

### Protected Member Functions

- osg::Node \* **attachMaterialAnimation** (osg::Node \*model, const **PositionData** &positionData)
- bool **attachTexMat** (osg::StateSet \*stateset, const **ImageData** &imageData, float s, float t, bool textureRectangle)
- osg::Vec3 **computePositionInModelCoords** (const **PositionData** &positionData) const
- osg::Vec3 **convertModelToSlide** (const osg::Vec3 &position) const
- osg::Vec3 **convertSlideToModel** (const osg::Vec3 &position) const
- osg::Geometry \* **createTexturedQuadGeometry** (const osg::Vec3 &pos, const osg::Vec4 &rotation, float width, float height, osg::Image \*image, bool &usedTextureRectangle)
- osg::StateSet \* **createTransformStateSet** ()
- std::string **findFileAndRecordPath** (const std::string &filename)
- void **findImageStreamsAndAddCallbacks** (osg::Node \*node)
- osg::AnimationPathCallback \* **getAnimationPathCallback** (const **PositionData** &positionData)
- void **recordOptionsFilePath** (const osgDB::Options \*options)
- void **updatePositionFromInModelCoords** (const osg::Vec3 &vertex, **PositionData** &positionData) const

### Protected Attributes

- bool **\_autoSteppingActive**
- osg::Vec4 **\_backgroundColor**
- osg::ref\_ptr< osg::Group > **\_currentLayer**
- osg::Vec3 **\_eyeOrigin**
- osg::ref\_ptr< **FilePathData** > **\_filePathData**
- **PositionData** **\_imagePositionData**
- **PositionData** **\_imagePositionDataDefault**
- bool **\_loopPresentation**
- **PositionData** **\_modelPositionData**
- **PositionData** **\_modelPositionDataDefault**
- osg::ref\_ptr< const osgDB::ReaderWriter::Options > **\_options**
- double **\_presentationDuration**
- std::string **\_presentationName**
- osg::ref\_ptr< osg::Switch > **\_presentationSwitch**
- osg::ref\_ptr< osg::Group > **\_previousLayer**
- osg::ref\_ptr< osg::Group > **\_root**
- osg::ref\_ptr< osg::Switch > **\_slide**
- std::string **\_slideBackgroundImageFileName**
- osg::ref\_ptr< osg::ClearNode > **\_slideClearNode**
- float **\_slideDistance**
- float **\_slideHeight**
- osg::Vec3 **\_slideOrigin**
- std::string **\_slideTitle**
- float **\_slideWidth**
- **FontData** **\_textFontData**

- **FontData\_textFontDataDefault**
  
- **PositionData\_textPositionData**
  
- **PositionData\_textPositionDataDefault**
  
- **FontData\_titleFontData**
  
- **FontData\_titleFontDataDefault**
  
- **PositionData\_titlePositionData**
  
- **PositionData\_titlePositionDataDefault**

## 4.29.1 Member Enumeration Documentation

### 4.29.1.1 enum CoordinateFrame

Enumerator:

***SLIDE***

***MODEL***

## 4.29.2 Constructor & Destructor Documentation

4.29.2.1 SlideShowConstructor (const osgDB::ReaderWriter::Options \* *options*)

## 4.29.3 Member Function Documentation

- 4.29.3.1 void addBrowser (const std::string & *filename*, const PositionData & *positionData*, const ImageData & *imageData*)
- 4.29.3.2 void addBullet (const std::string & *bullet*, PositionData & *positionData*, FontData & *fontData*)
- 4.29.3.3 void addImage (const std::string & *filename*, const PositionData & *positionData*, const ImageData & *imageData*)
- 4.29.3.4 osg::Image \* addInteractivelImage (const std::string & *filename*, const PositionData & *positionData*, const ImageData & *imageData*)
- 4.29.3.5 void addKey (osg::Node \* *node*, const KeyPosition & *kp*) [inline]
- 4.29.3.6 void addLayer (bool *inheritPreviousLayers* = true, bool *defineAsBaseLayer* = false)
- 4.29.3.7 void addLayerKey (const KeyPosition & *kp*) [inline]
- 4.29.3.8 void addLayerRunString (const std::string & *runString*) [inline]
- 4.29.3.9 void addModel (const std::string & *filename*, const PositionData & *positionData*, const ModelData & *modelData*)
- 4.29.3.10 void addModel (osg::Node \* *subgraph*, const PositionData & *positionData*, const ModelData & *modelData*)
- 4.29.3.11 void addParagraph (const std::string & *paragraph*, PositionData & *positionData*, FontData & *fontData*)
- 4.29.3.12 void addPDF (const std::string & *filename*, const PositionData & *positionData*, const ImageData & *imageData*)
- 4.29.3.13 void addPresentationKey (const KeyPosition & *kp*) [inline]
- 4.29.3.14 void addPresentationRunString (const std::string & *runString*) [inline]
- 4.29.3.15 void addRunString (osg::Node \* *node*, const std::string & *runString*) [inline]
- 4.29.3.16 void addSlide ()
- 4.29.3.17 void addSlideKey (const KeyPosition & *kp*) [inline]
- 4.29.3.18 void addSlideRunString (const std::string & *runString*) [inline]
- 4.29.3.19 void addStereolImagePair (const std::string & *filenameLeft*, const ImageData & *imageDataLeft*, const std::string & *filenameRight*, const ImageData & *imageDataRight*, const PositionData & *positionData*)
- 4.29.3.20 void addVNC (const std::string & *filename*, const PositionData & *positionData*, const ImageData & *imageData*)
- 4.29.3.21 void addVolume (const std::string & *filename*, const PositionData & *positionData*, const VolumeData & *volumeData*)
- 4.29.3.22 osg::Node \* attachMaterialAnimation (osg::Node \* *model*, const PositionData & *positionData*) [protected]
- 4.29.3.23 bool attachTexMat (osg::StateSet \* *stateset*, const ImageData & *imageData*, float *s*, float *t*, bool *textureRectangle*) [protected]
- 4.29.3.24 osg::Vec3 computePositionInModelCoords (const PositionData & *positionData*) const [protected]
- 4.29.3.25 osg::Vec3 convertModelToSlide (const osg::Vec3 & *position*) const [protected]
- 4.29.3.26 osg::Vec3 convertSlideToModel (const osg::Vec3 & *position*) const [protected]
- 4.29.3.27 void createPresentation ()
- 4.29.3.28 ~~osg::Geometry \* createTexturedQuadGeometry (const osg::Vec3 & *pos*, const osg::Vec4 & *rotation*, float *width*, float *height*, osg::Image \* *image*, bool & *usedTextureRectangle*)~~ [protected]
- 4.29.3.29 osg::StateSet\* createTransformStateSet () [inline, protected]

- [SlideShowConstructor](#)
- [SlideShowConstructor.cpp](#)

## 4.30 UpdateAlphaVisitor Class Reference

### Public Member Functions

- **UpdateAlphaVisitor** (bool *modAlphaFunc*, bool *modMaterial*, float *currentX*, float *currentY*)
- void **apply** (osg::StateSet &*stateset*)
- void **apply** (osg::Node &*node*)

### Public Attributes

- float **\_currentX**
- float **\_currentY**
- bool **\_modAlphaFunc**
- bool **\_modMaterial**

### 4.30.1 Constructor & Destructor Documentation

4.30.1.1 **UpdateAlphaVisitor** (bool *modAlphaFunc*, bool *modMaterial*, float *currentX*, float *currentY*)  
[inline]

### 4.30.2 Member Function Documentation

4.30.2.1 void **apply** (osg::StateSet & *stateset*) [inline]

4.30.2.2 void **apply** (osg::Node & *node*) [inline]

### 4.30.3 Member Data Documentation

4.30.3.1 float **\_currentX**

4.30.3.2 float **\_currentY**

4.30.3.3 bool **\_modAlphaFunc**

4.30.3.4 bool **\_modMaterial**

The documentation for this class was generated from the following file:

- **SlideEventHandler.cpp**

## 4.31 UpdateLightVisitor Class Reference

### Public Member Functions

- **UpdateLightVisitor** (const osg::Matrixd &viewMatrix, float currentX, float currentY)
- void **apply** (osg::TexEnvCombine &texenv)
- void **apply** (osg::StateSet &stateset)
- void **apply** (osg::LightSource &lightsource)
- void **apply** (osg::Node &node)

### Public Attributes

- float **\_currentX**
- float **\_currentY**
- osg::Matrixd **\_viewMatrix**

#### 4.31.1 Constructor & Destructor Documentation

4.31.1.1 UpdateLightVisitor (const osg::Matrixd & *viewMatrix*, float *currentX*, float *currentY*) [inline]

#### 4.31.2 Member Function Documentation

4.31.2.1 void apply (osg::TexEnvCombine & *texenv*) [inline]

4.31.2.2 void apply (osg::StateSet & *stateset*) [inline]

4.31.2.3 void apply (osg::LightSource & *lightsource*) [inline]

4.31.2.4 void apply (osg::Node & *node*) [inline]

#### 4.31.3 Member Data Documentation

4.31.3.1 float **\_currentX**

4.31.3.2 float **\_currentY**

4.31.3.3 osg::Matrixd **\_viewMatrix**

The documentation for this class was generated from the following file:

- **SlideEventHandler.cpp**

## 4.32 VolumeData Struct Reference

### Public Types

- enum **ShadingModel** { **Standard**, **Light**, **Isosurface**, **MaximumIntensityProjection** }

### Public Member Functions

- **VolumeData** ()

### Public Attributes

- float **alphaValue**
- float **cutoffValue**
- float **region** [6]
- bool **region\_in\_pixel\_coords**
- float **sampleDensityValue**
- **ShadingModel** **shadingModel**
- osg::ref\_ptr< osg::TransferFunction1D > **transferFunction**
- bool **useTabbedDragger**
- bool **useTrackballDragger**

### 4.32.1 Member Enumeration Documentation

#### 4.32.1.1 enum ShadingModel

Enumerator:

*Standard*

*Light*

*Isosurface*

*MaximumIntensityProjection*

### 4.32.2 Constructor & Destructor Documentation

#### 4.32.2.1 VolumeData () [inline]

### 4.32.3 Member Data Documentation

#### 4.32.3.1 float alphaValue

#### 4.32.3.2 float cutoffValue

#### 4.32.3.3 float region[6]

#### 4.32.3.4 bool region\_in\_pixel\_coords

#### 4.32.3.5 float sampleDensityValue

#### 4.32.3.6 ShadingModel shadingModel

#### 4.32.3.7 osg::ref\_ptr<osg::TransferFunction1D> transferFunction

#### 4.32.3.8 bool useTabbedDragger

#### 4.32.3.9 bool useTrackballDragger

The documentation for this struct was generated from the following file:

- **SlideShowConstructor**



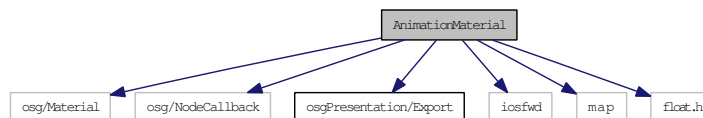
# File Documentation

---

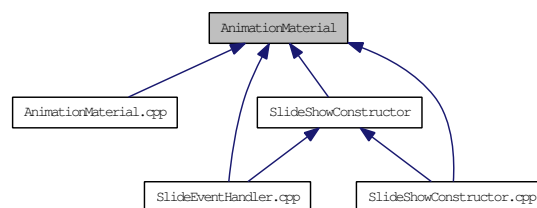
## 5.1 AnimationMaterial File Reference

```
#include <osg/Material>
#include <osg/NodeCallback>
#include <osgPresentation/Export>
#include <iosfwd>
#include <map>
#include <float.h>
```

Include dependency graph for AnimationMaterial:



This graph shows which files directly or indirectly include this file:



### Classes

- class **AnimationMaterial**

*AnimationMaterial* (p. 11) for specify the time varying transformation pathway to use when update camera and model objects.

- class **AnimationMaterialCallback**

### Namespaces

- namespace **osgPresentation**

The *osgPresentation* (p. 7) library is a NodeKit that extends the core scene graph to support 3D scene graph based presentations.

**Defines**

- #define OSG\_ANIMATIONMATERIAL 1

**5.1.1 Define Documentation****5.1.1.1 #define OSG\_ANIMATIONMATERIAL 1**

## 5.2 AnimationMaterial.cpp File Reference

```
#include <osgPresentation/AnimationMaterial>
```

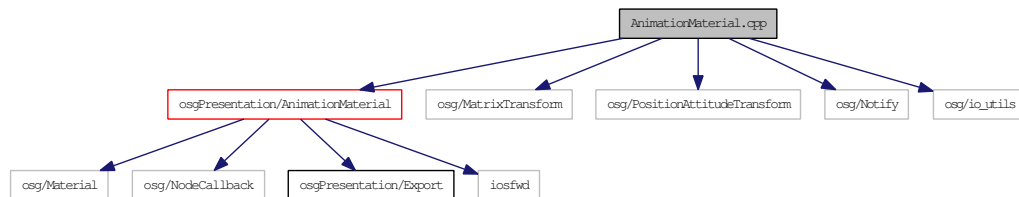
```
#include <osg/MatrixTransform>
```

```
#include <osg/PositionAttitudeTransform>
```

```
#include <osg/Notify>
```

```
#include <osg/io_utils>
```

Include dependency graph for AnimationMaterial.cpp:



### Functions

- template<class T >  
T **interp** (float r, const T &lhs, const T &rhs)

#### 5.2.1 Function Documentation

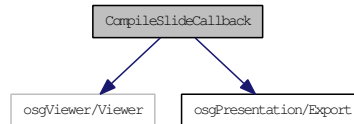
##### 5.2.1.1 T interp (float r, const T &lhs, const T &rhs) [inline]

## 5.3 CompileSlideCallback File Reference

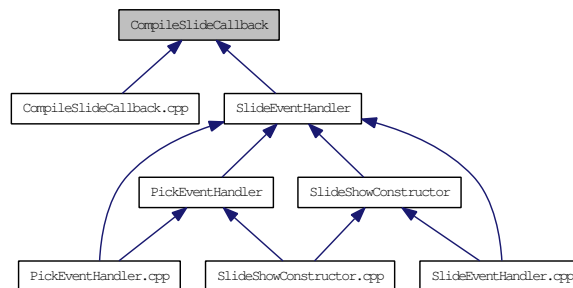
```
#include <osgViewer/Viewer>
```

```
#include <osgPresentation/Export>
```

Include dependency graph for CompileSlideCallback:



This graph shows which files directly or indirectly include this file:



### Classes

- class **CompileSlideCallback**

### Namespaces

- namespace **osgPresentation**

*The **osgPresentation** (p. 7) library is a NodeKit that extends the core scene graph to support 3D scene graph based presentations.*

### Defines

- #define **OSG\_COMPILESLIDECALLBACK** 1

#### 5.3.1 Define Documentation

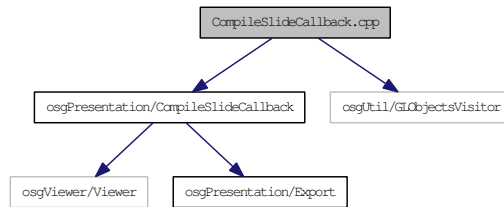
##### 5.3.1.1 #define OSG\_COMPILESLIDECALLBACK 1

## 5.4 CompileSlideCallback.cpp File Reference

```
#include <osgPresentation/CompileSlideCallback>
```

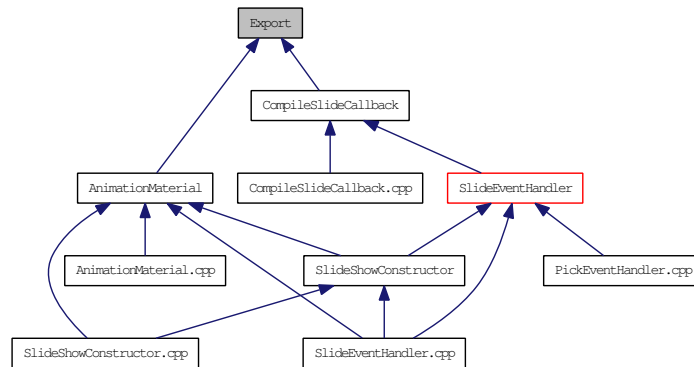
```
#include <osgUtil/GLObjectsVisitor>
```

Include dependency graph for CompileSlideCallback.cpp:



## 5.5 Export File Reference

This graph shows which files directly or indirectly include this file:



### Namespaces

- namespace **osgPresentation**

The *osgPresentation* (p. 7) library is a NodeKit that extends the core scene graph to support 3D scene graph based presentations.

### Defines

- #define **OSGPresentation\_EXPORT**
- #define **OSGPresentation\_EXPORT\_1**

#### 5.5.1 Define Documentation

##### 5.5.1.1 #define OSGPresentation\_EXPORT

##### 5.5.1.2 #define OSGPresentation\_EXPORT\_1

## 5.6 mainpage.h File Reference

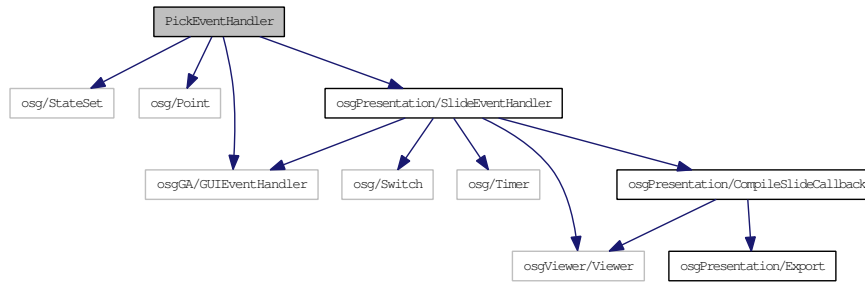
### 5.6.1 Detailed Description

This file contains doxygen special commands and text for the **Main Page** (p. ??) and some other minor aspects of this documentation. It is not part of the OSG.

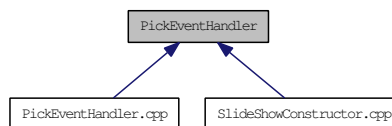
## 5.7 PickEventHandler File Reference

```
#include <osg/StateSet>
#include <osg/Point>
#include <osgGA/GUIEventHandler>
#include <osgPresentation/SlideEventHandler>
```

Include dependency graph for PickEventHandler:



This graph shows which files directly or indirectly include this file:



### Classes

- class **PickEventHandler**

### Namespaces

- namespace **osgPresentation**

*The **osgPresentation** (p. 7) library is a NodeKit that extends the core scene graph to support 3D scene graph based presentations.*

### Defines

- #define **PICKEVENTHANDLER** 1

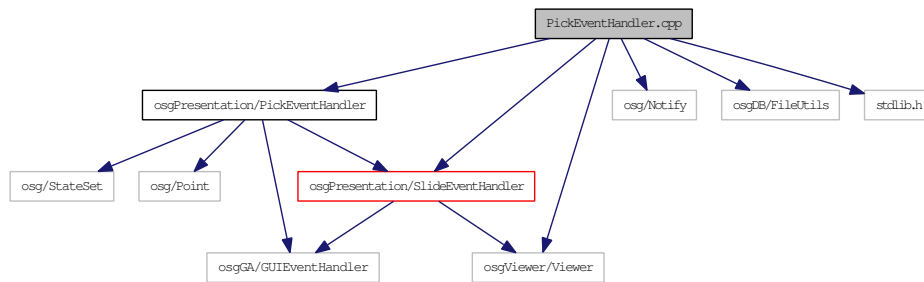
#### 5.7.1 Define Documentation

##### 5.7.1.1 #define PICKEVENTHANDLER 1

## 5.8 PickEventHandler.cpp File Reference

```
#include <osgPresentation/PickEventHandler>
#include <osgPresentation/SlideEventHandler>
#include <osgViewer/Viewer>
#include <osg/Notify>
#include <osgDB/FileUtils>
#include <stdlib.h>
```

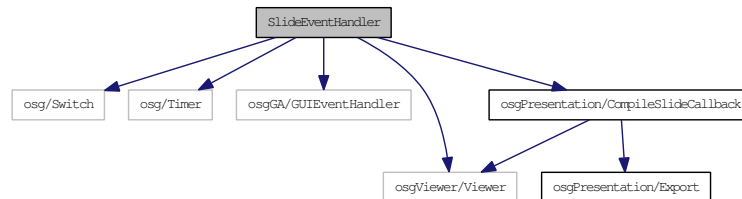
Include dependency graph for PickEventHandler.cpp:



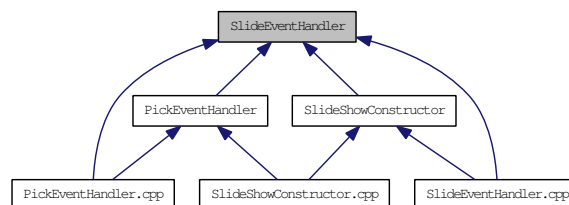
## 5.9 SlideEventHandler File Reference

```
#include <osg/Switch>
#include <osg/Timer>
#include <osgGA/GUIEventHandler>
#include <osgViewer/Viewer>
#include <osgPresentation/CompileSlideCallback>
```

Include dependency graph for SlideEventHandler:



This graph shows which files directly or indirectly include this file:



### Classes

- class **ActiveOperators**
- struct **dereference\_less**
- struct **FilePathData**
- struct **HomePosition**
- struct **KeyPosition**
- struct **LayerAttributes**
- struct **LayerCallback**
- struct **ObjectOperator**
- class **SlideEventHandler**

### Namespaces

- namespace **osgPresentation**

*The **osgPresentation** (p. 7) library is a NodeKit that extends the core scene graph to support 3D scene graph based presentations.*

### Defines

- #define **SLIDEEVENTHANDLER** 1

### Enumerations

- enum **Operation** { **RUN, LOAD, EVENT, JUMP** }
- Operations related to click to run/load/key events.*

### 5.9.1 Define Documentation

#### 5.9.1.1 #define SLIDEEVENTHANDLER 1

## 5.10 SlideEventHandler.cpp File Reference

```
#include <osgPresentation/SlideEventHandler>
#include <osgPresentation/SlideShowConstructor>
#include <osg/AnimationPath>
#include <osg/Transform>
#include <osg/TexEnvCombine>
#include <osg/LightSource>
#include <osg/AlphaFunc>
#include <osg/io_utils>
#include <osgUtil/TransformCallback>
#include <osgUtil/GLObjectsVisitor>
#include <osgGA/AnimationPathManipulator>
#include <osgPresentation/AnimationMaterial>
#include <iostream>
```

### Classes

- struct **CallbackOperator**
- class **FindFilePathDataVisitor**
- class **FindHomePositionVisitor**
- class **FindNamedSwitchVisitor**
- class **FindOperatorsVisitor**
- struct **ImageStreamOperator**
- struct **LayerAttributesOperator**
- class **UpdateAlphaVisitor**
- class **UpdateLightVisitor**

### Variables

- static osg::observer\_ptr< **SlideEventHandler** > **s\_seh**

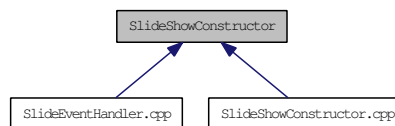
#### 5.10.1 Variable Documentation

5.10.1.1 **osg::observer\_ptr<SlideEventHandler> s\_seh** [static]

## 5.11 SlideShowConstructor File Reference

```
#include <osg/Vec3>
#include <osg/Vec4>
#include <osg/Group>
#include <osg/ClearNode>
#include <osg/Switch>
#include <osg/AnimationPath>
#include <osg/TransferFunction>
#include <osg/ImageStream>
#include <osgText/Text>
#include <osgGA/GUIEventAdapter>
#include <osgDB/FileUtils>
#include <osgPresentation/AnimationMaterial>
#include <osgPresentation/SlideEventHandler>
```

This graph shows which files directly or indirectly include this file:



### Classes

- struct **FontData**
- struct **ImageData**
- struct **ModelData**
- struct **PositionData**
- class **SlideShowConstructor**
- struct **VolumeData**

### Namespaces

- namespace **osgPresentation**

*The **osgPresentation** (p. 7) library is a NodeKit that extends the core scene graph to support 3D scene graph based presentations.*

## 5.12 SlideShowConstructor.cpp File Reference

```
#include <osgPresentation/SlideShowConstructor>
#include <osg/Geometry>
#include <osg/PolygonOffset>
#include <osg/Geode>
#include <osg/Texture2D>
#include <osg/TextureRectangle>
#include <osg/MatrixTransform>
#include <osg/PositionAttitudeTransform>
#include <osg/TexMat>
#include <osg/ShapeDrawable>
#include <osg/Notify>
#include <osg/io_utils>
#include <osgUtil/TransformCallback>
#include <osgDB/ReadFile>
#include <osgDB/WriteFile>
#include <osgDB/FileUtils>
#include <osgDB/Input>
#include <osgDB/FileNameUtils>
#include <osgWidget/PdfReader>
#include <osgViewer/ViewerEventHandlers>
#include <osgText/Text>
#include <osgFX/SpecularHighlights>
#include <osgVolume/Volume>
#include <osgVolume/RayTracedTechnique>
#include <osgVolume/FixedFunctionTechnique>
#include <sstream>
#include <algorithm>
#include <osgPresentation/AnimationMaterial>
#include <osgPresentation/PickEventHandler>
#include <osgManipulator/TabBoxDragger>
#include <osgManipulator/TabBoxTrackballDragger>
#include <osgManipulator/TrackballDragger>
```

### Classes

- class **DraggerVolumeTileCallback**
- class **FindImageStreamsVisitor**
- class **SetPageCallback**
- class **SetToTransparentBin**

# Index

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## - Symbols -

- ~ActiveOperators
  - osgPresentation::ActiveOperators, 10
- ~AnimationMaterial
  - osgPresentation::AnimationMaterial, 12
- ~AnimationMaterialCallback
  - osgPresentation::AnimationMaterialCallback, 14
- ~CompileSlideCallback
  - osgPresentation::CompileSlideCallback, 18
- ~ObjectOperator
  - osgPresentation::ObjectOperator, 40
- ~SlideEventHandler
  - osgPresentation::SlideEventHandler, 50
- \_activeLayer
  - osgPresentation::SlideEventHandler, 51
- \_activeOperators
  - osgPresentation::SlideEventHandler, 51
- \_activePresentation
  - osgPresentation::SlideEventHandler, 51
- \_activeSlide
  - osgPresentation::SlideEventHandler, 51
- \_animationMaterial
  - osgPresentation::AnimationMaterialCallback, 15
- \_autoSteppingActive
  - osgPresentation::SlideEventHandler, 51
  - osgPresentation::SlideShowConstructor, 57
- \_backgroundColor
  - osgPresentation::SlideShowConstructor, 57
- \_callback
  - CallbackOperator, 17
- \_command
  - osgPresentation::PickEventHandler, 42
- \_compileSlideCallback
  - osgPresentation::SlideEventHandler, 51
- \_current
  - osgPresentation::ActiveOperators, 10
- \_currentLayer
  - osgPresentation::SlideShowConstructor, 57
- \_currentX
  - UpdateAlphaVisitor, 59
  - UpdateLightVisitor, 60
- \_currentY
  - UpdateAlphaVisitor, 59
  - UpdateLightVisitor, 60
- \_cursorOn
  - osgPresentation::SlideEventHandler, 51
- \_duration
  - osgPresentation::LayerAttributes, 34
- \_enterLayerCallbacks
  - osgPresentation::LayerAttributes, 34
- \_eyeOrigin
  - osgPresentation::SlideShowConstructor, 57
- \_filePathData
  - osgPresentation::SlideShowConstructor, 57
- \_firstSlideOrLayerChange
  - osgPresentation::SlideEventHandler, 51
- \_firstTime
  - osgPresentation::AnimationMaterialCallback, 15
- \_firstTraversal
  - osgPresentation::SlideEventHandler, 51
- \_frameNumber
  - osgPresentation::CompileSlideCallback, 18
- \_hold
  - osgPresentation::SlideEventHandler, 51
- \_homePosition
  - FindHomePositionVisitor, 23
- \_imagePositionData
  - osgPresentation::SlideShowConstructor, 57
- \_imagePositionDataDefault
  - osgPresentation::SlideShowConstructor, 57
- \_imageStream
  - ImageStreamOperator, 31
- \_incomming
  - osgPresentation::ActiveOperators, 10
- \_key
  - osgPresentation::KeyPosition, 32
- \_keyPos
  - osgPresentation::PickEventHandler, 42
- \_keys
  - osgPresentation::LayerAttributes, 34
- \_latestTime
  - osgPresentation::AnimationMaterialCallback, 15
- \_layerAttribute
  - LayerAttributesOperator, 37
- \_layerNum
  - osgPresentation::LayerAttributes, 34
  - osgPresentation::PickEventHandler, 42
- \_leaveLayerCallbacks
  - osgPresentation::LayerAttributes, 34
- \_localToWorld
  - DraggerVolumeTileCallback, 20
- \_locator
  - DraggerVolumeTileCallback, 20
- \_loopMode
  - osgPresentation::AnimationMaterial, 12
- \_loopPresentation
  - osgPresentation::SlideEventHandler, 51
  - osgPresentation::SlideShowConstructor, 57
- \_maintained
  - osgPresentation::ActiveOperators, 10
- \_minimumTimeBetweenKeyPresses
  - osgPresentation::SlideEventHandler, 51
- \_modAlphaFunc
  - UpdateAlphaVisitor, 59
- \_modMaterial
  - UpdateAlphaVisitor, 59
- \_modelPositionData
  - osgPresentation::SlideShowConstructor, 57
- \_modelPositionDataDefault
  - osgPresentation::SlideShowConstructor, 57
- \_name
  - FindNamedSwitchVisitor, 25
- \_needCompile
  - osgPresentation::CompileSlideCallback, 18
- \_node
  - CallbackOperator, 17
  - LayerAttributesOperator, 37
- \_operation
  - osgPresentation::PickEventHandler, 42
- \_operatorList

- FindOperatorsVisitor, 26
- \_options
  - osgPresentation::SlideShowConstructor, 57
- \_outgoing
  - osgPresentation::ActiveOperators, 10
- \_pageNum
  - SetPageCallback, 45
- \_pause
  - osgPresentation::ActiveOperators, 10
  - osgPresentation::AnimationMaterialCallback, 15
  - osgPresentation::SlideEventHandler, 51
- \_pauseTime
  - osgPresentation::AnimationMaterialCallback, 15
- \_pdfImage
  - SetPageCallback, 45
- \_presentationDuration
  - osgPresentation::SlideShowConstructor, 57
- \_presentationName
  - osgPresentation::SlideShowConstructor, 57
- \_presentationSwitch
  - osgPresentation::SlideEventHandler, 51
  - osgPresentation::SlideShowConstructor, 57
- \_previous
  - osgPresentation::ActiveOperators, 10
- \_previousLayer
  - osgPresentation::SlideShowConstructor, 57
- \_previousTime
  - osgPresentation::SlideEventHandler, 51
- \_previousX
  - osgPresentation::SlideEventHandler, 51
- \_previousY
  - osgPresentation::SlideEventHandler, 51
- \_relativeJump
  - osgPresentation::LayerAttributes, 34
  - osgPresentation::PickEventHandler, 42
- \_releaseAndCompileOnEachNewSlide
  - osgPresentation::SlideEventHandler, 51
- \_root
  - osgPresentation::SlideShowConstructor, 57
- \_runStrings
  - osgPresentation::LayerAttributes, 34
- \_sceneToCompile
  - osgPresentation::CompileSlideCallback, 18
- \_showSwitch
  - osgPresentation::SlideEventHandler, 51
- \_slide
  - osgPresentation::SlideShowConstructor, 57
- \_slideBackgroundImageFileName
  - osgPresentation::SlideShowConstructor, 57
- \_slideClearNode
  - osgPresentation::SlideShowConstructor, 57
- \_slideDistance
  - osgPresentation::SlideShowConstructor, 57
- \_slideHeight
  - osgPresentation::SlideShowConstructor, 57
- \_slideNum
  - osgPresentation::LayerAttributes, 34
  - osgPresentation::PickEventHandler, 42
- \_slideOrigin
  - osgPresentation::SlideShowConstructor, 57
- \_slideSwitch
  - osgPresentation::SlideEventHandler, 51
- \_slideTitle
  - osgPresentation::SlideShowConstructor, 57
- \_slideWidth
  - osgPresentation::SlideShowConstructor, 57
- \_startMotionMatrix
  - DraggerVolumeTileCallback, 20
- \_switch
  - FindNamedSwitchVisitor, 25
- \_textFontData
  - osgPresentation::SlideShowConstructor, 57
- \_textFontDataDefault
  - osgPresentation::SlideShowConstructor, 57
- \_textPositionData
  - osgPresentation::SlideShowConstructor, 57
- \_textPositionDataDefault
  - osgPresentation::SlideShowConstructor, 57
- \_tickAtFirstSlideOrLayerChange
  - osgPresentation::SlideEventHandler, 51
- \_tickAtLastSlideOrLayerChange
  - osgPresentation::SlideEventHandler, 51
- \_timeControlPointMap
  - osgPresentation::AnimationMaterial, 12
- \_timeDelayOnNewSlideWithMovies
  - osgPresentation::SlideEventHandler, 51
- \_timeLastKeyPresses
  - osgPresentation::SlideEventHandler, 51
- \_timeMultiplier
  - osgPresentation::AnimationMaterialCallback, 15
- \_timeOffset
  - osgPresentation::AnimationMaterialCallback, 15
- \_timePerSlide
  - osgPresentation::SlideEventHandler, 51
- \_titleFontData
  - osgPresentation::SlideShowConstructor, 57
- \_titleFontDataDefault
  - osgPresentation::SlideShowConstructor, 57
- \_titlePositionData
  - osgPresentation::SlideShowConstructor, 57
- \_titlePositionDataDefault
  - osgPresentation::SlideShowConstructor, 57
- \_updateLightActive
  - osgPresentation::SlideEventHandler, 51
- \_updateOpacityActive
  - osgPresentation::SlideEventHandler, 51
- \_useInverseMatrix
  - osgPresentation::AnimationMaterialCallback, 15
- \_viewMatrix
  - UpdateLightVisitor, 60
- \_viewer
  - osgPresentation::SlideEventHandler, 51
- \_volume
  - DraggerVolumeTileCallback, 20
- \_worldToLocal
  - DraggerVolumeTileCallback, 20
- \_x
  - osgPresentation::KeyPosition, 32
- \_y
  - osgPresentation::KeyPosition, 32
- A -**
- absolute\_path
  - osgPresentation::SlideShowConstructor::PositionData, 44
- accept
  - osgPresentation::PickEventHandler, 42
  - osgPresentation::SlideEventHandler, 50
- ActiveOperators
  - osgPresentation::ActiveOperators, 10
- addBrowser
  - osgPresentation::SlideShowConstructor, 57

- addBullet
  - osgPresentation::SlideShowConstructor, 57
- addEnterCallback
  - osgPresentation::LayerAttributes, 34
- addImage
  - osgPresentation::SlideShowConstructor, 57
- addInteractiveImage
  - osgPresentation::SlideShowConstructor, 57
- addKey
  - osgPresentation::LayerAttributes, 34
  - osgPresentation::SlideShowConstructor, 57
- addLayer
  - osgPresentation::SlideShowConstructor, 57
- addLayerKey
  - osgPresentation::SlideShowConstructor, 57
- addLayerRunString
  - osgPresentation::SlideShowConstructor, 57
- addLeaveCallback
  - osgPresentation::LayerAttributes, 34
- addModel
  - osgPresentation::SlideShowConstructor, 57
- addParagraph
  - osgPresentation::SlideShowConstructor, 57
- addPDF
  - osgPresentation::SlideShowConstructor, 57
- addPresentationKey
  - osgPresentation::SlideShowConstructor, 57
- addPresentationRunString
  - osgPresentation::SlideShowConstructor, 57
- addRunString
  - osgPresentation::LayerAttributes, 34
  - osgPresentation::SlideShowConstructor, 57
- addSlide
  - osgPresentation::SlideShowConstructor, 57
- addSlideKey
  - osgPresentation::SlideShowConstructor, 57
- addSlideRunString
  - osgPresentation::SlideShowConstructor, 57
- addStereoImagePair
  - osgPresentation::SlideShowConstructor, 57
- addVNC
  - osgPresentation::SlideShowConstructor, 57
- addVolume
  - osgPresentation::SlideShowConstructor, 57
- alignment
  - osgPresentation::SlideShowConstructor::FontData, 27
- ALL\_OBJECTS
  - osgPresentation::SlideEventHandler, 49
- alphaValue
  - osgPresentation::SlideShowConstructor::VolumeData, 61
- animation\_material\_filename
  - osgPresentation::SlideShowConstructor::PositionData, 44
- animation\_material\_loop\_mode
  - osgPresentation::SlideShowConstructor::PositionData, 44
- animation\_material\_time\_multiplier
  - osgPresentation::SlideShowConstructor::PositionData, 44
- animation\_material\_time\_offset
  - osgPresentation::SlideShowConstructor::PositionData, 44
- animation\_name
  - osgPresentation::SlideShowConstructor::PositionData, 44
- AnimationMaterial, 63
  - OSG\_ANIMATIONMATERIAL, 64
  - osgPresentation::AnimationMaterial, 12
- AnimationMaterial.cpp, 65
  - interp, 65
- AnimationMaterialCallback
  - osgPresentation::AnimationMaterialCallback, 14
- apply
  - FindFilePathDataVisitor, 22
  - FindHomePositionVisitor, 23
  - FindImageStreamsVisitor, 24
  - FindNamedSwitchVisitor, 25
  - FindOperatorsVisitor, 26
  - SetToTransparentBin, 46
  - UpdateAlphaVisitor, 59
  - UpdateLightVisitor, 60
- apply
  - SetToTransparentBin, 46
- attachMaterialAnimation
  - osgPresentation::SlideShowConstructor, 57
- attachTexMat
  - osgPresentation::SlideShowConstructor, 57
- axisAlignment
  - osgPresentation::SlideShowConstructor::FontData, 27
- B -**
- backgroundColor
  - osgPresentation::SlideShowConstructor::ImageData, 29
- C -**
- CallbackOperator, 16
  - \_callback, 17
  - \_node, 17
  - CallbackOperator, 16
  - enter, 16
  - leave, 16
  - maintain, 16
  - ptr, 16
  - reset, 17
  - setPause, 17
- callEnterCallbacks
  - osgPresentation::LayerAttributes, 34
- callLeaveCallbacks
  - osgPresentation::LayerAttributes, 34
- center
  - osgPresentation::HomePosition, 28
- characterSize
  - osgPresentation::SlideShowConstructor::FontData, 27
- collect
  - osgPresentation::ActiveOperators, 10
- color
  - osgPresentation::SlideShowConstructor::FontData, 27
- compileSlide
  - osgPresentation::SlideEventHandler, 50
- CompileSlideCallback, 66
  - OSG\_COMPILESLIDECALLBACK, 66
  - osgPresentation::CompileSlideCallback, 18
- CompileSlideCallback.cpp, 67
- computePositionInModelCoords
  - osgPresentation::SlideShowConstructor, 57
- convertModelToSlide
  - osgPresentation::SlideShowConstructor, 57
- convertSlideToModel
  - osgPresentation::SlideShowConstructor, 57
- CoordinateFrame

- osgPresentation::SlideShowConstructor, 56
- createPresentation
  - osgPresentation::SlideShowConstructor, 57
- createTexturedQuadGeometry
  - osgPresentation::SlideShowConstructor, 57
- createTransformStateSet
  - osgPresentation::SlideShowConstructor, 57
- cutoffValue
  - osgPresentation::SlideShowConstructor::VolumeData, 61
- D -**
- dispatchEvent
  - osgPresentation::SlideEventHandler, 50
- doOperation
  - osgPresentation::PickEventHandler, 42
- DraggerVolumeTileCallback, 20
  - \_localToWorld, 20
  - \_locator, 20
  - \_startMotionMatrix, 20
  - \_volume, 20
  - \_worldToLocal, 20
  - DraggerVolumeTileCallback, 20
  - receive, 20
- E -**
- effect
  - osgPresentation::SlideShowConstructor::ModelData, 39
- enter
  - CallbackOperator, 16
  - ImageStreamOperator, 30
  - LayerAttributesOperator, 36
  - osgPresentation::ObjectOperator, 40
- EVENT
  - osgPresentation, 7
- Export, 68
  - OSGPresentation\_EXPORT, 68
  - OSGPresentation\_EXPORT\_, 68
- eye
  - osgPresentation::HomePosition, 28
- F -**
- fade
  - osgPresentation::SlideShowConstructor::PositionData, 44
- FilePathData
  - osgPresentation::FilePathData, 21
- filePathList
  - osgPresentation::FilePathData, 21
- findFileAndRecordPath
  - osgPresentation::SlideShowConstructor, 57
- FindFilePathDataVisitor, 22
  - apply, 22
  - FindFilePathDataVisitor, 22
- FindHomePositionVisitor, 23
  - \_homePosition, 23
  - apply, 23
  - FindHomePositionVisitor, 23
- findImageStreamsAndAddCallbacks
  - osgPresentation::SlideShowConstructor, 57
- FindImageStreamsVisitor, 24
  - apply, 24
  - FindImageStreamsVisitor, 24
  - process, 24
- FindNamedSwitchVisitor, 25
  - \_name, 25
  - \_switch, 25
  - apply, 25
  - FindNamedSwitchVisitor, 25
- FindOperatorsVisitor, 26
  - \_operatorList, 26
  - apply, 26
  - FindOperatorsVisitor, 26
  - process, 26
- FIRST\_POSITION
  - osgPresentation::SlideEventHandler, 49
- font
  - osgPresentation::SlideShowConstructor::FontData, 27
- FontData
  - osgPresentation::SlideShowConstructor::FontData, 27
- frame
  - osgPresentation::SlideShowConstructor::PositionData, 44
- G -**
- getActiveLayer
  - osgPresentation::SlideEventHandler, 50
- getActiveSlide
  - osgPresentation::SlideEventHandler, 50
- getAnimationMaterial
  - osgPresentation::AnimationMaterialCallback, 14
- getAnimationPathCallback
  - osgPresentation::SlideShowConstructor, 57
- getAnimationTime
  - osgPresentation::AnimationMaterialCallback, 14
- getAutoSteppingActive
  - osgPresentation::SlideEventHandler, 50
  - osgPresentation::SlideShowConstructor, 57
- getBackgroundColor
  - osgPresentation::SlideShowConstructor, 57
- getCommand
  - osgPresentation::PickEventHandler, 42
- getCurrentLayer
  - osgPresentation::SlideShowConstructor, 57
- getCurrentSlide
  - osgPresentation::SlideShowConstructor, 57
- getCurrentTimeDelayBetweenSlides
  - osgPresentation::SlideEventHandler, 50
- getDuration
  - osgPresentation::LayerAttributes, 34
  - osgPresentation::SlideEventHandler, 50
- getFirstTime
  - osgPresentation::AnimationMaterial, 12
- getImagePositionData
  - osgPresentation::SlideShowConstructor, 57
- getImagePositionDataDefault
  - osgPresentation::SlideShowConstructor, 57
- getKeyPosition
  - osgPresentation::PickEventHandler, 42
- getKeys
  - osgPresentation::LayerAttributes, 34
- getLastTime
  - osgPresentation::AnimationMaterial, 12
- getLayerNum
  - osgPresentation::LayerAttributes, 34
  - osgPresentation::PickEventHandler, 42
- getLoopMode
  - osgPresentation::AnimationMaterial, 12
- getLoopPresentation
  - osgPresentation::SlideEventHandler, 50
  - osgPresentation::SlideShowConstructor, 57

- getMaterial
    - osgPresentation::AnimationMaterial, 12
  - getModelPositionData
    - osgPresentation::SlideShowConstructor, 57
  - getModelPositionDataDefault
    - osgPresentation::SlideShowConstructor, 57
  - getNumSlides
    - osgPresentation::SlideEventHandler, 50
  - getOperation
    - osgPresentation::PickEventHandler, 42
  - getOrCreateLayerAttributes
    - osgPresentation::SlideShowConstructor, 57
  - getPause
    - osgPresentation::ActiveOperators, 10
  - getPeriod
    - osgPresentation::AnimationMaterial, 12
  - getPresentation
    - osgPresentation::SlideShowConstructor, 57
  - getPresentationSwitch
    - osgPresentation::SlideShowConstructor, 57
  - getRelativeJump
    - osgPresentation::LayerAttributes, 34
    - osgPresentation::PickEventHandler, 42
  - getReleaseAndCompileOnEachNewSlide
    - osgPresentation::SlideEventHandler, 50
  - getRunStrings
    - osgPresentation::LayerAttributes, 34
  - getSlideNum
    - osgPresentation::LayerAttributes, 34
    - osgPresentation::PickEventHandler, 42
  - getTextColor
    - osgPresentation::SlideShowConstructor, 57
  - getTextFontData
    - osgPresentation::SlideShowConstructor, 57
  - getTextFontDataDefault
    - osgPresentation::SlideShowConstructor, 57
  - getTextPositionData
    - osgPresentation::SlideShowConstructor, 57
  - getTextPositionDataDefault
    - osgPresentation::SlideShowConstructor, 57
  - getTimeControlPointMap
    - osgPresentation::AnimationMaterial, 12
  - getTimeDelayBetweenSlides
    - osgPresentation::SlideEventHandler, 50
  - getTimeDelayOnNewSlideWithMovies
    - osgPresentation::SlideEventHandler, 50
  - getTimeMultiplier
    - osgPresentation::AnimationMaterialCallback, 14
  - getTimeOffset
    - osgPresentation::AnimationMaterialCallback, 15
  - getTitleFontData
    - osgPresentation::SlideShowConstructor, 57
  - getTitleFontDataDefault
    - osgPresentation::SlideShowConstructor, 57
  - getTitlePositionData
    - osgPresentation::SlideShowConstructor, 57
  - getTitlePositionDataDefault
    - osgPresentation::SlideShowConstructor, 57
  - getUsage
    - osgPresentation::PickEventHandler, 42
    - osgPresentation::SlideEventHandler, 50
  - getViewer
    - osgPresentation::SlideEventHandler, 50
- H -**
- handle
    - osgPresentation::PickEventHandler, 42
    - osgPresentation::SlideEventHandler, 50
  - height
    - osgPresentation::SlideShowConstructor::ImageData, 29
  - home
    - osgPresentation::SlideEventHandler, 50
  - HomePosition
    - osgPresentation::HomePosition, 28
- I -**
- ImageData
    - osgPresentation::SlideShowConstructor::ImageData, 29
  - ImageStreamOperator, 30
    - \_imageStream, 31
    - enter, 30
    - ImageStreamOperator, 30
    - leave, 30
    - maintain, 30
    - ptr, 30
    - reset, 31
    - setPause, 31
  - include/ Directory Reference, 3
  - include/osgPresentation/ Directory Reference, 5
  - insert
    - osgPresentation::AnimationMaterial, 12
  - instance
    - osgPresentation::SlideEventHandler, 50
  - interp
    - AnimationMaterial.cpp, 65
  - interpolate
    - osgPresentation::AnimationMaterial, 12
  - inverse\_path
    - osgPresentation::SlideShowConstructor::PositionData, 44
  - Isosurface
    - osgPresentation::SlideShowConstructor::VolumeData, 61
- J -**
- JUMP
    - osgPresentation, 7
- K -**
- KeyPosition
    - osgPresentation::KeyPosition, 32
  - Keys
    - osgPresentation::LayerAttributes, 34
- L -**
- LAST\_POSITION
    - osgPresentation::SlideEventHandler, 49
  - LayerAttributes
    - osgPresentation::LayerAttributes, 34
  - LayerAttributesOperator, 36
    - \_layerAttribute, 37
    - \_node, 37
    - enter, 36
    - LayerAttributesOperator, 36
    - leave, 36
    - maintain, 36
    - ptr, 36
    - reset, 37
    - setPause, 37
  - LayerCallbacks
    - osgPresentation::LayerAttributes, 34

- layerClickEventOperation
  - osgPresentation::SlideShowConstructor, 57
- layerClickToDoOperation
  - osgPresentation::SlideShowConstructor, 57
- layout
  - osgPresentation::SlideShowConstructor::FontData, 27
- leave
  - CallbackOperator, 16
  - ImageStreamOperator, 30
  - LayerAttributesOperator, 36
  - osgPresentation::ObjectOperator, 40
- Light
  - osgPresentation::SlideShowConstructor::VolumeData, 61
- LOAD
  - osgPresentation, 7
- LOOP
  - osgPresentation::AnimationMaterial, 12
- loopingMode
  - osgPresentation::SlideShowConstructor::ImageData, 29
- LoopMode
  - osgPresentation::AnimationMaterial, 12
- M -**
- mainpage.h, 69
- maintain
  - CallbackOperator, 16
  - ImageStreamOperator, 30
  - LayerAttributesOperator, 36
  - osgPresentation::ObjectOperator, 40
- maximumHeight
  - osgPresentation::SlideShowConstructor::FontData, 27
- MaximumIntensityProjection
  - osgPresentation::SlideShowConstructor::VolumeData, 61
- maximumWidth
  - osgPresentation::SlideShowConstructor::FontData, 27
- META\_Object
  - osgPresentation::AnimationMaterial, 12
  - osgPresentation::AnimationMaterialCallback, 15
  - osgPresentation::SlideEventHandler, 50
- MODEL
  - osgPresentation::SlideShowConstructor, 56
- ModelData
  - osgPresentation::SlideShowConstructor::ModelData, 39
- MOVIE
  - osgPresentation::SlideEventHandler, 49
- N -**
- needCompile
  - osgPresentation::CompileSlideCallback, 18
- nextLayer
  - osgPresentation::SlideEventHandler, 50
- nextLayerOrSlide
  - osgPresentation::SlideEventHandler, 50
- nextSlide
  - osgPresentation::SlideEventHandler, 50
- NO\_LOOPING
  - osgPresentation::AnimationMaterial, 12
- O -**
- ObjectMask
  - osgPresentation::SlideEventHandler, 49
- OBJECTS
  - osgPresentation::SlideEventHandler, 49
- Operation
  - osgPresentation, 7
- operator<
  - osgPresentation::ObjectOperator, 40
- operator()
  - osgPresentation::AnimationMaterialCallback, 15
  - osgPresentation::CompileSlideCallback, 18
  - osgPresentation::dereference\_less, 19
  - osgPresentation::LayerCallback, 38
  - osgPresentation::SlideEventHandler, 50
  - SetPageCallback, 45
- OperatorList
  - osgPresentation::ActiveOperators, 10
- OSG\_ANIMATIONMATERIAL
  - AnimationMaterial, 64
- OSG\_COMPILESLIDECALLBACK
  - CompileSlideCallback, 66
- osgPresentation, 7
  - EVENT, 7
  - JUMP, 7
  - LOAD, 7
  - Operation, 7
  - RUN, 7
- osgPresentation::ActiveOperators, 9
  - ~ActiveOperators, 10
  - \_current, 10
  - \_incomming, 10
  - \_maintained, 10
  - \_outgoing, 10
  - \_pause, 10
  - \_previous, 10
  - ActiveOperators, 10
  - collect, 10
  - getPause, 10
  - OperatorList, 10
  - process, 10
  - processIncomming, 10
  - processMaintained, 10
  - processOutgoing, 10
  - reset, 10
  - setPause, 10
- osgPresentation::AnimationMaterial, 11
  - ~AnimationMaterial, 12
  - \_loopMode, 12
  - \_timeControlPointMap, 12
  - AnimationMaterial, 12
  - getFirstTime, 12
  - getLastTime, 12
  - getLoopMode, 12
  - getMaterial, 12
  - getPeriod, 12
  - getTimeControlPointMap, 12
  - insert, 12
  - interpolate, 12
  - LOOP, 12
  - LoopMode, 12
  - META\_Object, 12
  - NO\_LOOPING, 12
  - read, 12
  - requiresBlending, 12
  - setLoopMode, 12
  - SWING, 12
  - TimeControlPointMap, 12
  - write, 12
- osgPresentation::AnimationMaterialCallback, 14
  - ~AnimationMaterialCallback, 14

- \_animationMaterial, 15
  - \_firstTime, 15
  - \_latestTime, 15
  - \_pause, 15
  - \_pauseTime, 15
  - \_timeMultiplier, 15
  - \_timeOffset, 15
  - \_useInverseMatrix, 15
- AnimationMaterialCallback, 14
- getAnimationMaterial, 14
- getAnimationTime, 14
- getTimeMultiplier, 14
- getTimeOffset, 15
- META\_Object, 15
- operator(), 15
- reset, 15
- setAnimationMaterial, 15
- setPause, 15
- setTimeMultiplier, 15
- setTimeOffset, 15
- update, 15
- osgPresentation::CompileSlideCallback, 18
  - ~CompileSlideCallback, 18
  - \_frameNumber, 18
  - \_needCompile, 18
  - \_sceneToCompile, 18
  - CompileSlideCallback, 18
  - needCompile, 18
  - operator(), 18
- osgPresentation::dereference\_less, 19
  - operator(), 19
- osgPresentation::FilePathData, 21
  - FilePathData, 21
  - filePathList, 21
- osgPresentation::HomePosition, 28
  - center, 28
  - eye, 28
  - HomePosition, 28
  - up, 28
- osgPresentation::KeyPosition, 32
  - \_key, 32
  - \_x, 32
  - \_y, 32
  - KeyPosition, 32
  - set, 32
- osgPresentation::LayerAttributes, 33
  - \_duration, 34
  - \_enterLayerCallbacks, 34
  - \_keys, 34
  - \_layerNum, 34
  - \_leaveLayerCallbacks, 34
  - \_relativeJump, 34
  - \_runStrings, 34
  - \_slideNum, 34
  - addEnterCallback, 34
  - addKey, 34
  - addLeaveCallback, 34
  - addRunString, 34
  - callEnterCallbacks, 34
  - callLeaveCallbacks, 34
  - getDuration, 34
  - getKeys, 34
  - getLayerNum, 34
  - getRelativeJump, 34
  - getRunStrings, 34
  - getSlideNum, 34
  - Keys, 34
  - LayerAttributes, 34
  - LayerCallbacks, 34
  - requiresJump, 34
  - RunStrings, 34
  - setDuration, 34
  - setJump, 34
  - setKeys, 34
  - setRunStrings, 34
- osgPresentation::LayerCallback, 38
  - operator(), 38
- osgPresentation::ObjectOperator, 40
  - ~ObjectOperator, 40
  - enter, 40
  - leave, 40
  - maintain, 40
  - operator<, 40
  - ptr, 40
  - reset, 40
  - setPause, 40
- osgPresentation::PickEventHandler, 41
  - \_command, 42
  - \_keyPos, 42
  - \_layerNum, 42
  - \_operation, 42
  - \_relativeJump, 42
  - \_slideNum, 42
  - accept, 42
  - doOperation, 42
  - getCommand, 42
  - getKeyPosition, 42
  - getLayerNum, 42
  - getOperation, 42
  - getRelativeJump, 42
  - getSlideNum, 42
  - getUsage, 42
  - handle, 42
  - PickEventHandler, 42
  - requiresJump, 42
  - setAbsoluteJump, 42
  - setCommand, 42
  - setKeyPosition, 42
  - setOperation, 42
  - setRelativeJump, 42
- osgPresentation::SlideEventHandler, 47
  - ~SlideEventHandler, 50
  - \_activeLayer, 51
  - \_activeOperators, 51
  - \_activePresentation, 51
  - \_activeSlide, 51
  - \_autoSteppingActive, 51
  - \_compileSlideCallback, 51
  - \_cursorOn, 51
  - \_firstSlideOrLayerChange, 51
  - \_firstTraversal, 51
  - \_hold, 51
  - \_loopPresentation, 51
  - \_minimumTimeBetweenKeyPresses, 51
  - \_pause, 51
  - \_presentationSwitch, 51
  - \_previousTime, 51
  - \_previousX, 51
  - \_previousY, 51
  - \_releaseAndCompileOnEachNewSlide, 51
  - \_showSwitch, 51
  - \_slideSwitch, 51

- \_tickAtFirstSlideOrLayerChange, 51
- \_tickAtLastSlideOrLayerChange, 51
- \_timeDelayOnNewSlideWithMovies, 51
- \_timeLastKeyPresses, 51
- \_timePerSlide, 51
- \_updateLightActive, 51
- \_updateOpacityActive, 51
- \_viewer, 51
- accept, 50
- ALL\_OBJECTS, 49
- compileSlide, 50
- dispatchEvent, 50
- FIRST\_POSITION, 49
- getActiveLayer, 50
- getActiveSlide, 50
- getAutoSteppingActive, 50
- getCurrentTimeDelayBetweenSlides, 50
- getDuration, 50
- getLoopPresentation, 50
- getNumSlides, 50
- getReleaseAndCompileOnEachNewSlide, 50
- getTimeDelayBetweenSlides, 50
- getTimeDelayOnNewSlideWithMovies, 50
- getUsage, 50
- getViewer, 50
- handle, 50
- home, 50
- instance, 50
- LAST\_POSITION, 49
- META\_Object, 50
- MOVIE, 49
- nextLayer, 50
- nextLayerOrSlide, 50
- nextSlide, 50
- ObjectMask, 49
- OBJECTS, 49
- operator(), 50
- previousLayer, 50
- previousLayerOrSlide, 51
- previousSlide, 51
- releaseSlide, 51
- selectLayer, 51
- selectSlide, 51
- set, 51
- setAutoSteppingActive, 51
- setLoopPresentation, 51
- setReleaseAndCompileOnEachNewSlide, 51
- setTimeDelayBetweenSlides, 51
- setTimeDelayOnNewSlideWithMovies, 51
- SlideEventHandler, 50
- updateAlpha, 51
- updateLight, 51
- updateOperators, 51
- WhichPosition, 49
- osgPresentation::SlideShowConstructor, 53
  - \_autoSteppingActive, 57
  - \_backgroundColor, 57
  - \_currentLayer, 57
  - \_eyeOrigin, 57
  - \_filePathData, 57
  - \_imagePositionData, 57
  - \_imagePositionDataDefault, 57
  - \_loopPresentation, 57
  - \_modelPositionData, 57
  - \_modelPositionDataDefault, 57
  - \_options, 57
  - \_presentationDuration, 57
  - \_presentationName, 57
  - \_presentationSwitch, 57
  - \_previousLayer, 57
  - \_root, 57
  - \_slide, 57
  - \_slideBackgroundImageFileName, 57
  - \_slideClearNode, 57
  - \_slideDistance, 57
  - \_slideHeight, 57
  - \_slideOrigin, 57
  - \_slideTitle, 57
  - \_slideWidth, 57
  - \_textFontData, 57
  - \_textFontDataDefault, 57
  - \_textPositionData, 57
  - \_textPositionDataDefault, 57
  - \_titleFontData, 57
  - \_titleFontDataDefault, 57
  - \_titlePositionData, 57
  - \_titlePositionDataDefault, 57
  - addBrowser, 57
  - addBullet, 57
  - addImage, 57
  - addInteractiveImage, 57
  - addKey, 57
  - addLayer, 57
  - addLayerKey, 57
  - addLayerRunString, 57
  - addModel, 57
  - addParagraph, 57
  - addPDF, 57
  - addPresentationKey, 57
  - addPresentationRunString, 57
  - addRunString, 57
  - addSlide, 57
  - addSlideKey, 57
  - addSlideRunString, 57
  - addStereoImagePair, 57
  - addVNC, 57
  - addVolume, 57
  - attachMaterialAnimation, 57
  - attachTexMat, 57
  - computePositionInModelCoords, 57
  - convertModelToSlide, 57
  - convertSlideToModel, 57
  - CoordinateFrame, 56
  - createPresentation, 57
  - createTexturedQuadGeometry, 57
  - createTransformStateSet, 57
  - findFileAndRecordPath, 57
  - findImageStreamsAndAddCallbacks, 57
  - getAnimationPathCallback, 57
  - getAutoSteppingActive, 57
  - getBackgroundColor, 57
  - getCurrentLayer, 57
  - getCurrentSlide, 57
  - getImagePositionData, 57
  - getImagePositionDataDefault, 57
  - getLoopPresentation, 57
  - getModelPositionData, 57
  - getModelPositionDataDefault, 57
  - getOrCreateLayerAttributes, 57
  - getPresentation, 57
  - getPresentationSwitch, 57
  - getTextColor, 57

- getTextFontData, 57
- getTextFontDataDefault, 57
- getTextPositionData, 57
- getTextPositionDataDefault, 57
- getTitleFontData, 57
- getTitleFontDataDefault, 57
- getTitlePositionData, 57
- getTitlePositionDataDefault, 57
- layerClickEventOperation, 57
- layerClickToDoOperation, 57
- MODEL, 56
- recordOptionsFilePath, 57
- selectLayer, 57
- selectSlide, 57
- setAutoSteppingActive, 57
- setBackground-color, 57
- setDuration, 57
- setJump, 57
- setLayerDuration, 57
- setLayerJump, 57
- setLoopPresentation, 57
- setPresentationAspectRatio, 57
- setPresentationDuration, 57
- setPresentationName, 57
- setSlideBackground, 57
- setSlideDuration, 57
- setSlideJump, 57
- setSlideTitle, 57
- setTextColor, 57
- SLIDE, 56
- SlideShowConstructor, 57
- takePresentation, 57
- translateTextCursor, 57
- updatePositionFromInModelCoords, 57
- osgPresentation::SlideShowConstructor::FontData, 27
  - alignment, 27
  - axisAlignment, 27
  - characterSize, 27
  - color, 27
  - font, 27
  - FontData, 27
  - layout, 27
  - maximumHeight, 27
  - maximumWidth, 27
- osgPresentation::SlideShowConstructor::ImageData, 29
  - backgroundColor, 29
  - height, 29
  - ImageData, 29
  - loopingMode, 29
  - page, 29
  - region, 29
  - region\_in\_pixel\_coords, 29
  - texcoord\_rotate, 29
  - width, 29
- osgPresentation::SlideShowConstructor::ModelData, 39
  - effect, 39
  - ModelData, 39
- osgPresentation::SlideShowConstructor::PositionData, 43
  - absolute\_path, 44
  - animation\_material\_filename, 44
  - animation\_material\_loop\_mode, 44
  - animation\_material\_multiplier, 44
  - animation\_material\_time\_offset, 44
  - animation\_name, 44
  - fade, 44
  - frame, 44
  - inverse\_path, 44
  - path, 44
  - path\_loop\_mode, 44
  - path\_time\_multiplier, 44
  - path\_time\_offset, 44
  - position, 44
  - PositionData, 44
  - requiresAnimation, 44
  - requiresMaterialAnimation, 44
  - requiresPosition, 44
  - requiresRotate, 44
  - requiresScale, 44
  - rotate, 44
  - rotation, 44
  - scale, 44
- osgPresentation::SlideShowConstructor::VolumeData, 61
  - alphaValue, 61
  - cutoffValue, 61
  - Isosurface, 61
  - Light, 61
  - MaximumIntensityProjection, 61
  - region, 61
  - region\_in\_pixel\_coords, 61
  - sampleDensityValue, 61
  - ShadingModel, 61
  - shadingModel, 61
  - Standard, 61
  - transferFunction, 61
  - useTabbedDragger, 61
  - useTrackballDragger, 61
  - VolumeData, 61
- OSGPresentation\_EXPORT
  - Export, 68
- OSGPresentation\_EXPORT\_
  - Export, 68
- P -**
- page
  - osgPresentation::SlideShowConstructor::ImageData, 29
- path
  - osgPresentation::SlideShowConstructor::PositionData, 44
- path\_loop\_mode
  - osgPresentation::SlideShowConstructor::PositionData, 44
- path\_time\_multiplier
  - osgPresentation::SlideShowConstructor::PositionData, 44
- path\_time\_offset
  - osgPresentation::SlideShowConstructor::PositionData, 44
- PICKEVENTHANDLER
  - PickEventHandler, 70
- PickEventHandler, 70
  - osgPresentation::PickEventHandler, 42
  - PICKEVENTHANDLER, 70
- PickEventHandler.cpp, 71
- position
  - osgPresentation::SlideShowConstructor::PositionData, 44
- PositionData
  - osgPresentation::SlideShowConstructor::PositionData, 44
- previousLayer
  - osgPresentation::SlideEventHandler, 50
- previousLayerOrSlide

- osgPresentation::SlideEventHandler, 51
- previousSlide
  - osgPresentation::SlideEventHandler, 51
- process
  - FindImageStreamsVisitor, 24
  - FindOperatorsVisitor, 26
  - osgPresentation::ActiveOperators, 10
- processIncomming
  - osgPresentation::ActiveOperators, 10
- processMaintained
  - osgPresentation::ActiveOperators, 10
- processOutgoing
  - osgPresentation::ActiveOperators, 10
- ptr
  - CallbackOperator, 16
  - ImageStreamOperator, 30
  - LayerAttributesOperator, 36
  - osgPresentation::ObjectOperator, 40
- R -**
- read
  - osgPresentation::AnimationMaterial, 12
- receive
  - DraggerVolumeTileCallback, 20
- recordOptionsFilePath
  - osgPresentation::SlideShowConstructor, 57
- region
  - osgPresentation::SlideShowConstructor::ImageData, 29
  - osgPresentation::SlideShowConstructor::VolumeData, 61
- region\_in\_pixel\_coords
  - osgPresentation::SlideShowConstructor::ImageData, 29
  - osgPresentation::SlideShowConstructor::VolumeData, 61
- releaseSlide
  - osgPresentation::SlideEventHandler, 51
- requiresAnimation
  - osgPresentation::SlideShowConstructor::PositionData, 44
- requiresBlending
  - osgPresentation::AnimationMaterial, 12
- requiresJump
  - osgPresentation::LayerAttributes, 34
  - osgPresentation::PickEventHandler, 42
- requiresMaterialAnimation
  - osgPresentation::SlideShowConstructor::PositionData, 44
- requiresPosition
  - osgPresentation::SlideShowConstructor::PositionData, 44
- requiresRotate
  - osgPresentation::SlideShowConstructor::PositionData, 44
- requiresScale
  - osgPresentation::SlideShowConstructor::PositionData, 44
- reset
  - CallbackOperator, 17
  - ImageStreamOperator, 31
  - LayerAttributesOperator, 37
  - osgPresentation::ActiveOperators, 10
  - osgPresentation::AnimationMaterialCallback, 15
  - osgPresentation::ObjectOperator, 40
- rotate
  - osgPresentation::SlideShowConstructor::PositionData, 44
- rotation
  - osgPresentation::SlideShowConstructor::PositionData, 44
- RUN
  - osgPresentation, 7
- RunStrings
  - osgPresentation::LayerAttributes, 34
- S -**
- s\_seh
  - SlideEventHandler.cpp, 74
- sampleDensityValue
  - osgPresentation::SlideShowConstructor::VolumeData, 61
- scale
  - osgPresentation::SlideShowConstructor::PositionData, 44
- selectLayer
  - osgPresentation::SlideEventHandler, 51
  - osgPresentation::SlideShowConstructor, 57
- selectSlide
  - osgPresentation::SlideEventHandler, 51
  - osgPresentation::SlideShowConstructor, 57
- set
  - osgPresentation::KeyPosition, 32
  - osgPresentation::SlideEventHandler, 51
- setAbsoluteJump
  - osgPresentation::PickEventHandler, 42
- setAnimationMaterial
  - osgPresentation::AnimationMaterialCallback, 15
- setAutoSteppingActive
  - osgPresentation::SlideEventHandler, 51
  - osgPresentation::SlideShowConstructor, 57
- setBackgroundcolor
  - osgPresentation::SlideShowConstructor, 57
- setCommand
  - osgPresentation::PickEventHandler, 42
- setDuration
  - osgPresentation::LayerAttributes, 34
  - osgPresentation::SlideShowConstructor, 57
- setJump
  - osgPresentation::LayerAttributes, 34
  - osgPresentation::SlideShowConstructor, 57
- setKeyPosition
  - osgPresentation::PickEventHandler, 42
- setKeys
  - osgPresentation::LayerAttributes, 34
- setLayerDuration
  - osgPresentation::SlideShowConstructor, 57
- setLayerJump
  - osgPresentation::SlideShowConstructor, 57
- setLoopMode
  - osgPresentation::AnimationMaterial, 12
- setLoopPresentation
  - osgPresentation::SlideEventHandler, 51
  - osgPresentation::SlideShowConstructor, 57
- setOperation
  - osgPresentation::PickEventHandler, 42
- SetPageCallback, 45
  - \_pageNum, 45
  - \_pdfImage, 45
  - operator(), 45
  - SetPageCallback, 45
- setPause
  - CallbackOperator, 17
  - ImageStreamOperator, 31

- LayerAttributesOperator, 37
- osgPresentation::ActiveOperators, 10
- osgPresentation::AnimationMaterialCallback, 15
- osgPresentation::ObjectOperator, 40
- setPresentationAspectRatio
  - osgPresentation::SlideShowConstructor, 57
- setPresentationDuration
  - osgPresentation::SlideShowConstructor, 57
- setPresentationName
  - osgPresentation::SlideShowConstructor, 57
- setRelativeJump
  - osgPresentation::PickEventHandler, 42
- setReleaseAndCompileOnEachNewSlide
  - osgPresentation::SlideEventHandler, 51
- setRunStrings
  - osgPresentation::LayerAttributes, 34
- setSlideBackground
  - osgPresentation::SlideShowConstructor, 57
- setSlideDuration
  - osgPresentation::SlideShowConstructor, 57
- setSlideJump
  - osgPresentation::SlideShowConstructor, 57
- setSlideTitle
  - osgPresentation::SlideShowConstructor, 57
- setTextColor
  - osgPresentation::SlideShowConstructor, 57
- setTimeDelayBetweenSlides
  - osgPresentation::SlideEventHandler, 51
- setTimeDelayOnNewSlideWithMovies
  - osgPresentation::SlideEventHandler, 51
- setTimeMultiplier
  - osgPresentation::AnimationMaterialCallback, 15
- setTimeOffset
  - osgPresentation::AnimationMaterialCallback, 15
- SetToTransparentBin, 46
  - apply, 46
  - apply, 46
  - SetToTransparentBin, 46
- ShadingModel
  - osgPresentation::SlideShowConstructor::VolumeData, 61
- shadingModel
  - osgPresentation::SlideShowConstructor::VolumeData, 61
- SLIDE
  - osgPresentation::SlideShowConstructor, 56
- SLIDEEVENTHANDLER
  - SlideEventHandler, 73
- SlideEventHandler, 72
  - osgPresentation::SlideEventHandler, 50
  - SLIDEEVENTHANDLER, 73
- SlideEventHandler.cpp, 74
  - s\_seh, 74
- SlideShowConstructor, 75
  - osgPresentation::SlideShowConstructor, 57
- SlideShowConstructor.cpp, 76
- src/ Directory Reference, 6
- src/osgPresentation/ Directory Reference, 4
- Standard
  - osgPresentation::SlideShowConstructor::VolumeData, 61
- SWING
  - osgPresentation::AnimationMaterial, 12
- T -**
- takePresentation
  - osgPresentation::SlideShowConstructor, 57
- texcoord\_rotate
  - osgPresentation::SlideShowConstructor::ImageData, 29
- TimeControlPointMap
  - osgPresentation::AnimationMaterial, 12
- transferFunction
  - osgPresentation::SlideShowConstructor::VolumeData, 61
- translateTextCursor
  - osgPresentation::SlideShowConstructor, 57
- U -**
- up
  - osgPresentation::HomePosition, 28
- update
  - osgPresentation::AnimationMaterialCallback, 15
- updateAlpha
  - osgPresentation::SlideEventHandler, 51
- UpdateAlphaVisitor, 59
  - \_currentX, 59
  - \_currentY, 59
  - \_modAlphaFunc, 59
  - \_modMaterial, 59
  - apply, 59
  - UpdateAlphaVisitor, 59
- updateLight
  - osgPresentation::SlideEventHandler, 51
- UpdateLightVisitor, 60
  - \_currentX, 60
  - \_currentY, 60
  - \_viewMatrix, 60
  - apply, 60
  - UpdateLightVisitor, 60
- updateOperators
  - osgPresentation::SlideEventHandler, 51
- updatePositionFromInModelCoords
  - osgPresentation::SlideShowConstructor, 57
- useTabbedDragger
  - osgPresentation::SlideShowConstructor::VolumeData, 61
- useTrackballDragger
  - osgPresentation::SlideShowConstructor::VolumeData, 61
- V -**
- VolumeData
  - osgPresentation::SlideShowConstructor::VolumeData, 61
- W -**
- WhichPosition
  - osgPresentation::SlideEventHandler, 49
- width
  - osgPresentation::SlideShowConstructor::ImageData, 29
- write
  - osgPresentation::AnimationMaterial, 12