# **UniOSC Manual**

vers. 1.8



# **Contents**

1	Intro	oduction Control of the Control of t	1
2	Insta	allation	3
3	UniC	OSC main components	5
	3.1	OSCEditor	5
	3.2	OSCConnection	6
	3.3	OSC Mapping file	7
	3.4	OSCMappingItem	8
	3.5	OSC Session file	8
	3.6	OSCEventTarget	8
	3.7	OSCEventDispatcher	9
4	UniC	OSC Editor Interface	11
	4.1	Trace OSC	11
	4.2	OSC Connections	12
	4.3	OSC Mapping	14
	4.4	OSC Session	15
	4.5	Learn OSC	17
	4.6	Editor Mode	18
5	Basi	ic workflow (with TouchOSC)	19
	5.1	Setup a OSC connection	19
	5.2	Setup TouchOSC	19
	5.3	Test communication	19
	5.4	Map OSC data (Optional)	19
	5.5	Handle data in Unity	20
6	Com	nponents	21
	6.1	Example Components	22
		6.1.1 Toggle	22
		6.1.2 Change Color	23
		6.1.3 Scale GameObject	24

iv CONTENTS

		6.1.4	Rotate GameObject	25
		6.1.5	Move GameObject	25
		6.1.6	TouchOSC Gyro Rotate	26
		6.1.7	Send Button	27
		6.1.8	OSC GUI	28
		6.1.9	Transform Sender	28
		6.1.10	JavaScript Communication	28
		6.1.11	UnityEvent Relay	29
		6.1.12	uGUI Elements	29
7	Carin	ting cla		31
•	_	_	ng OSC data	31
		7.1.1	Constructors	31
			g OSC data	
				32
		7.2.1	Constructors	32
8	Sendi	ing OS	c	33
	8.1	Messag	ge Mode	33
	8.2	Bundle	Mode	33
9	Comr	non pit	falle	35
•	••••			-
10	Know	ın Issu	es	37
	Know Histo		es	37 39
11		ry	es	
11 12	Histo	ry	es	39
11 12 13	Histo Credi	ry	es	39 43
11 12 13 14	Histo Credi Links Supp	ry ts ort		39 43 45
11 12 13 14	Histo Credi Links Supp Name	ry ts ort	Documentation	39 43 45 47
11 12 13 14	Histo Credi Links Supp Name 15.1	ry ts ort espace UniOS0	Documentation C Namespace Reference	39 43 45 47 49
11 12 13 14	Histo Credi Links Supp Name 15.1	ry ts ort espace UniOS0	Documentation	39 43 45 47 49
11 12 13 14 15	Histo Credi Links Supp Name 15.1 15.2 Class	ry  ts  ort  espace UniOS0 UnityEr	Documentation C Namespace Reference	39 43 45 47 49 51
11 12 13 14 15	Histo Credi Links Supp Name 15.1 15.2 Class 16.1	ry  ts  ort  espace UniOSC UnityEr  Docur UnityEr	Documentation C Namespace Reference Ingine Namespace Reference Ingine Namespace Reference Ingine Namespace Reference Ingine Namespace Reference	39 43 45 47 49 51 53
11 12 13 14 15	Histo Credi Links Supp Name 15.1 15.2 Class 16.1	ry ts ort espace UniOSC UnityEr Docur UnityEr 16.1.1	Documentation C Namespace Reference Ingine Namespace Reference Ingine Namespace Reference Ingine Old Scaler Class Reference Ingine GUIScaler Class Reference Ingine Detailed Description	39 43 45 47 49 51 53 53
11 12 13 14 15	Histo Credi Links Supp Name 15.1 15.2 Class 16.1	ry ts ort espace UniOSC UnityEr Docur UnityEr 16.1.1	Documentation C Namespace Reference Ingine Namespace Reference Ingine Namespace Reference Ingine GUIScaler Class Reference Detailed Description Ingine Member Function Documentation	39 43 45 47 49 51 53
11 12 13 14 15	Histo Credi Links Supp Name 15.1 15.2 Class 16.1	ry ts ort espace UniOSC UnityEr Docur UnityEr 16.1.1	Documentation C Namespace Reference Ingine Namespace Reference Ingine GUIScaler Class Reference Detailed Description Member Function Documentation 16.1.2.1 Begin()	39 43 45 47 49 51 53 53 53 53
11 12 13 14 15	Histo Credi Links Supp Name 15.1 15.2 Class 16.1	ry ts ort espace UniOSC UnityEr Docur UnityEr 16.1.1	Documentation C Namespace Reference Ingine Namespace Reference Ingine GUIScaler Class Reference Detailed Description Member Function Documentation 16.1.2.1 Begin() 16.1.2.2 End()	39 43 45 47 49 51 53 53 53
11 12 13 14 15	Histo Credi Links Supp Name 15.1 15.2 Class 16.1	ry ts ort espace UniOSC UnityEr Docur UnityEr 16.1.1	Documentation C Namespace Reference Ingine Namespace Reference Ingine GUIScaler Class Reference Detailed Description Member Function Documentation 16.1.2.1 Begin()	39 43 45 47 49 51 53 53 53 53

CONTENTS

	16.1.3	Property D	ocumentation	54
		16.1.3.1	GuiScale	54
16.2	UniOS	C.UniOSC_u	uGUI_Button Class Reference	54
	16.2.1	Detailed D	escription	55
	16.2.2	Member E	numeration Documentation	55
		16.2.2.1 E	ButtonMode	55
	16.2.3	Member Fu	unction Documentation	55
		16.2.3.1	Awake()	55
		16.2.3.2	OnDisable()	55
		16.2.3.3	OnEnable()	55
		16.2.3.4	OnPointerDown(PointerEventData eventData)	55
		16.2.3.5	OnPointerUp(PointerEventData eventData)	55
		16.2.3.6	SendOSCMessage(object data)	55
	16.2.4	Member Da	ata Documentation	55
		16.2.4.1 k	puttonMode	55
		16.2.4.2	OSCDataValueDown	55
		16.2.4.3	OSCDataValueUp	55
16.3	UniOS	C.UniOSC_u	uGUI_Slider Class Reference	55
	16.3.1	Member Fu	unction Documentation	56
		16.3.1.1	Awake()	56
		16.3.1.2	OnDisable()	56
		16.3.1.3	OnEnable()	56
		16.3.1.4	OnPointerUp(PointerEventData eventData)	56
		16.3.1.5	SendOSCMessage(float data)	56
	16.3.2	Member Da	ata Documentation	56
		16.3.2.1	_slider	56
16.4	UniOS	C.UniOSC_u	uGUI_Toggle Class Reference	56
	16.4.1	Member Fu	unction Documentation	57
		16.4.1.1	Awake()	57
		16.4.1.2	OnDisable()	57
		16.4.1.3	OnEnable()	57
		16.4.1.4	SendOSCMessage(object data)	57
	16.4.2	Member Da	ata Documentation	57
		16.4.2.1	_toggle	57
		16.4.2.2	OSCDataValueOFF	57
		16.4.2.3	OSCDataValueON	57
16.5	UniOS	C.UniOSCA	bstractItem Class Reference	58
	16.5.1	Detailed D	escription	58
	16.5.2	Member Da	ata Documentation	58
		16.5.2.1	address	58

vi CONTENTS

16.5.2.2 isLearning	58
16.6 UniOSCAutoRun Class Reference	58
16.7 UniOSC.UniOSCChangeColor Class Reference	58
16.7.1 Detailed Description	59
16.7.2 Member Function Documentation	59
16.7.2.1 OnEnable()	59
16.7.2.2 OnOSCMessageReceived(UniOSCEventArgs args)	59
16.7.3 Member Data Documentation	59
16.7.3.1 B_Address	59
16.7.3.2 G_Address	59
16.7.3.3 R_Address	59
16.7.3.4 sharedMaterial	59
16.8 UniOSC.UniOSCChangeColorEditor Class Reference	59
16.8.1 Member Function Documentation	60
16.8.1.1 OnInspectorGUI()	60
16.9 UniOSCClassBasedDemo Class Reference	60
16.9.1 Detailed Description	60
16.9.2 Member Data Documentation	60
16.9.2.1 Light1	60
16.9.2.2 Light2	60
16.9.2.3 Light3	60
16.9.2.4 OSCAddress	60
16.9.2.5 OSCAddressOUT	60
16.9.2.6 OSCConnection	61
16.9.2.7 OSCConnectionOUT	61
16.9.2.8 OSCIPAddressOUT	61
16.9.2.9 OSCPort	61
16.9.2.10 OSCPortOUT	61
16.9.2.11 sendData	61
16.9.2.12 sendInterval	61
16.10UniOSC.UniOSCConnection Class Reference	61
16.10.1 Detailed Description	63
16.10.2 Member Function Documentation	63
16.10.2.1 Awake()	63
16.10.2.2 ConnectOSC()	63
16.10.2.3 ConnectOSCOut()	63
16.10.2.4 DisconnectOSC()	63
16.10.2.5 DisconnectOSCOut()	63
16.10.2.6 Force_SetupChanged_IN()	63
16.10.2.7 Force_SetupChanged_OUT()	63

CONTENTS vii

16.10.2.8 Init()	63
16.10.2.9 RenderGUI()	63
16.10.2.10SendOSCMessage(object sender, UniOSCEventArgs args)	63
16.10.2.11SendSessionData()	64
16.10.2.12SendTestMessage()	64
16.10.2.13Start()	64
16.10.2.14Update_AvailableOSCSettings()	64
16.10.2.15ValidateOscInIPAddress()	64
16.10.2.16ValidateOscOutIPAddress()	64
16.10.3 Member Data Documentation	64
16.10.3.1 autoConnectOSCIn	64
16.10.3.2 autoConnectOSCOut	64
16.10.3.3 dispatchOSC	64
16.10.3.4 dispatchOSCOut	64
16.10.3.5 foldoutOSCIn	64
16.10.3.6 foldoutOSCOut	64
16.10.3.7 isEditorEnabled	64
16.10.3.8 isOSCLearning	64
16.10.3.9 localIPAddress	64
16.10.3.10oscMappingFileObjList	64
16.10.3.11oscOut	64
16.10.3.12oscSessionFileObjList	64
16.10.3.13redrawFlag	64
16.10.3.14SendSessionDataOnStart	64
16.10.4 Property Documentation	65
16.10.4.1 AvailableINPorts	65
16.10.4.2 AvailableOUTIPAddresses	65
16.10.4.3 AvailableOUTPorts	65
16.10.4.4 hasOSCMappingFileAttached	65
16.10.4.5 hasOSCSessionFileAttached	65
16.10.4.6 hasValidOscIPAddress	65
16.10.4.7 hasValidOscOutlPAddress	65
16.10.4.8 Instances	65
16.10.4.9 isConnected	65
16.10.4.10sConnectedOut	65
16.10.4.11oscInIPAddress	65
16.10.4.12oscInIPAddressAsIPAddress	65
16.10.4.13oscOutlPAddress	65
16.10.4.14oscOutlPAddressAsIPAddress	65
16.10.4.15oscOutPort	65

viii CONTENTS

16.10.4.16oscPort	65
16.10.4.17transmissionTypeIn	65
16.10.4.1&ransmissionTypeOut	65
16.10.5 Event Documentation	65
16.10.5.1 ConnectionInStatusChange	65
16.10.5.2 ConnectionOutStatusChange	65
16.10.5.3 OSCMessageReceived	65
16.10.5.4 OSCMessageReceivedRaw	65
16.10.5.5 OSCMessageSend	65
16.11 UniOSC.UniOSCConnectionEditor Class Reference	65
16.11.1 Member Function Documentation	66
16.11.1.1 ForceUpdate()	66
16.11.1.2 LoadTextures()	66
16.11.1.3 OnInspectorGUI()	66
16.11.1.4 Show(string label, SerializedProperty list)	66
16.11.1.5 ShowOSCReciverStatus(UniOSCConnection oscConnection)	66
16.11.2 Member Data Documentation	67
16.11.2.1 _currOSCMulticastIPAddress	67
16.11.2.2 _currOSCMulticastIPAddressOut	67
16.11.2.3 _isValidOSCMulticastIPAddress	67
16.11.2.4 _isValidOSCMulticastIPAddressOut	67
16.11.2.5 _oldOSCMulticastIPAddress	67
16.11.2.6 _oldOSCMulticastIPAddressOut	67
16.11.2.7 _TransmissionTypeIndex	67
16.11.2.8 _TransmissionTypeIndexOut	67
16.11.2.9 _TransmissionTypes	67
16.11.2.10_TransmissionTypesOut	67
16.11.2.1 ttexOFF	67
16.11.2.12texON	67
16.11.2.13texTestMessage	67
16.12UniOSC.UniOSCEditor Class Reference	67
16.12.1 Detailed Description	68
16.12.2 Member Function Documentation	68
16.12.2.1 Init()	68
16.12.2.2 OnDisable()	68
16.12.2.3 OnEnable()	68
16.12.2.4 OnHierarchyChange()	68
16.12.2.5 OSCLearning(bool flag)	68
16.12.3 Member Data Documentation	68
16.12.3.1 TRACEWIDTH	68

CONTENTS

16.12.4 Property Documentation	68
16.12.4.1 Instance	68
16.12.4.2 IsOpen	69
16.12.4.3 isOSCLearning	69
16.12.5 Event Documentation	69
16.12.5.1 OSCMessageReceived	69
16.13UniOSC.UniOSCEditorConfigObj Class Reference	69
16.13.1 Detailed Description	69
16.13.2 Member Function Documentation	69
16.13.2.1 OnEnable()	69
16.13.3 Member Data Documentation	69
16.13.3.1 configTraceScrollpos	70
16.13.3.2 isEditorEnabled	70
16.13.3.3 isLastMessageTracing	70
16.13.3.4 isOSCLearning	70
16.13.3.5 isOSCTracing	70
16.13.3.6 learnStyle	70
16.13.3.7 mySkin	70
16.13.3.8 OSCMappingFileObjList	70
16.13.3.9 OSCSessionFileObjList	70
16.13.3.10selectedMappingFileObjIndex	70
16.13.3.11selectedSessionFileObjIndex	70
16.13.3.12tex_LearnFrame	70
16.13.3.13tex_logo	70
16.13.3.14toolbarInt	70
16.14UniOSC.UniOSCEventArgs Class Reference	70
16.14.1 Detailed Description	71
16.14.2 Constructor & Destructor Documentation	71
16.14.2.1 UniOSCEventArgs(int port, OscPacket packet)	71
16.14.3 Member Function Documentation	71
16.14.3.1 SetupAddressMetaData()	71
16.14.4 Member Data Documentation	71
16.14.4.1 IPAddress	71
16.14.5 Property Documentation	71
16.14.5.1 Address	71
16.14.5.2 AddressIndex	71
16.14.5.3 AddressRoot	71
16.14.5.4 Group	71
16.14.5.5 Packet	71
16.14.5.6 Port	71

CONTENTS

16.15UniOSC.UniOSCEventDispatcher Class Reference	71
16.15.1 Detailed Description	73
16.15.2 Member Function Documentation	73
16.15.2.1 _ConnectToOSCConnections()	73
16.15.2.2 _DisconnectFromOSCConnections()	73
16.15.2.3 _OnConnectionOutStatusChanged(UniOSCConnection con)	73
16.15.2.4 _OnTimedEvent(object source, System.Timers.ElapsedEventArgs e)	73
16.15.2.5 _SendOSCMessage(UniOSCEventArgs args)	73
16.15.2.6 _SetupOSCMessage(bool _isBundle)	73
16.15.2.7 _Update()	73
16.15.2.8 AppendData(object _data)	74
16.15.2.9 Awake()	74
16.15.2.10ClearData()	74
16.15.2.11ForceSetupChange(bool resetMessage)	74
16.15.2.12OnDestroy()	74
16.15.2.13OnDisable()	74
16.15.2.14OnEnable()	74
16.15.2.15SendOSCMessage()	74
16.15.2.16SetBundleMode(bool _isBundle)	75
16.15.2.17Start()	75
16.15.2.1&startSendIntervalTimer()	75
16.15.2.19StopSendIntervalTimer()	75
16.15.3 Member Data Documentation	75
16.15.3.1 _drawDefaultInspector	75
16.15.3.2 _explicitConnection	75
16.15.3.3 _isOSCDirty	75
16.15.3.4 _mylock	75
16.15.3.5 _myOSCConnections	75
16.15.3.6 _OSCeArg	75
16.15.3.7 _oscOutAddress	75
16.15.3.8 _oscOutlPAddress	75
16.15.3.9 _oscOutPort	75
16.15.3.10_OSCpkg	75
16.15.3.11_sendIntervalTimer	75
16.15.3.12_useExplicitConnection	75
16.15.3.13sendInterval	75
16.15.4 Property Documentation	75
16.15.4.1 explicitConnection	75
16.15.4.2 isBundle	75
16.15.4.3 oscOutAddress	75

CONTENTS xi

16.15.4.4 oscOutlPAddress	75
16.15.4.5 oscOutPort	76
16.15.4.6 useExplicitConnection	76
16.16UniOSC.UniOSCEventDispatcherButton Class Reference	76
16.16.1 Detailed Description	76
16.16.2 Member Function Documentation	76
16.16.2.1 Awake()	76
16.16.2.2 OnDisable()	77
16.16.2.3 OnEnable()	77
16.16.2.4 SendOSCMessageDown()	77
16.16.2.5 SendOSCMessageUp()	77
16.16.3 Member Data Documentation	77
16.16.3.1 downOSCDataValue	77
16.16.3.2 showGUI	77
16.16.3.3 upOSCDataValue	77
16.16.3.4 xPos	77
16.16.3.5 yPos	77
16.17UniOSC.UniOSCEventDispatcherButtonEditor Class Reference	77
16.17.1 Detailed Description	78
16.17.2 Member Function Documentation	78
16.17.2.1 OnEnable()	78
16.17.2.2 OnInspectorGUI()	78
16.17.3 Member Data Documentation	78
16.17.3.1 downOSCDataValueProp	78
16.17.3.2 ShowGUIProp	78
16.17.3.3 upOSCDataValueProp	78
16.17.3.4 xProp	78
16.17.3.5 yProp	78
16.18UniOSC.UniOSCEventDispatcherCB Class Reference	78
16.18.1 Constructor & Destructor Documentation	80
16.18.1.1 UniOSCEventDispatcherCB(stringoscOutAddress, stringoscOutIPAddress, intoscPort)	80
16.18.1.2 UniOSCEventDispatcherCB(stringoscOutAddress, UniOSCConnection← explicitConnection)	80
16.18.2 Member Function Documentation	80
16.18.2.1 _ConnectToOSCConnections()	80
16.18.2.2 _DisconnectFromOSCConnections()	80
16.18.2.3 _OnConnectionOutStatusChanged(UniOSCConnection con)	80
16.18.2.4 _OnTimedEvent(object source, System.Timers.ElapsedEventArgs e)	80
16.18.2.5 _SendOSCMessage(UniOSCEventArgs args)	80

xii CONTENTS

16.18.2.6 _SetupOSCMessage(bool _isBundle)	80
16.18.2.7 AppendData(object _data)	80
16.18.2.8 Awake()	80
16.18.2.9 ClearData()	80
16.18.2.10Disable()	81
16.18.2.11Dispose()	81
16.18.2.12Enable()	81
16.18.2.13ForceSetupChange(bool resetMessage)	81
16.18.2.14OnDestroy()	81
16.18.2.15SendOSCMessage()	81
16.18.2.16SetBundleMode(bool _isBundle)	81
16.18.2.17StartSendIntervalTimer()	81
16.18.2.18StopSendIntervalTimer()	82
16.18.2.19UpdateDataAt(int index, object value)	82
16.18.3 Member Data Documentation	82
16.18.3.1 _explicitConnection	82
16.18.3.2 _isOSCDirty	82
16.18.3.3 _mylock	82
16.18.3.4 _OSCeArg	82
16.18.3.5 _oscOutAddress	82
16.18.3.6 _oscOutlPAddress	82
16.18.3.7 _oscOutPort	82
16.18.3.8 _OSCpkg	82
16.18.3.9 _sendIntervalTimer	82
16.18.3.10_useExplicitConnection	82
16.18.3.11sendInterval	82
16.18.4 Property Documentation	82
16.18.4.1 explicitConnection	82
16.18.4.2 isBundle	82
16.18.4.3 isEnabled	82
16.18.4.4 oscOutAddress	82
16.18.4.5 oscOutlPAddress	82
16.18.4.6 oscOutPort	82
16.18.4.7 useExplicitConnection	82
16.19UniOSC.UniOSCEventDispatcherCBImplementation Class Reference	82
16.19.1 Detailed Description	83
16.19.2 Constructor & Destructor Documentation	83
16.19.2.1 UniOSCEventDispatcherCBImplementation(string _oscOutAddress, string _ coscOutIPAddress, int _oscPort)	83

CONTENTS xiii

16.19.2.2 UniOSCEventDispatcherCBImplementation(string _oscOutAddress, UniOSC⇔	0.0
Connection _explicitConnection)	
16.19.3 Member Function Documentation	
16.19.3.1 Awake()	
16.19.3.2 Disable()	
16.19.3.3 Enable()	
16.19.3.4 SetDataAtIndex0(bool val)	84
16.20UniOSC.UniOSCEventDispatcherCBRawImplementation Class Reference	84
16.20.1 Detailed Description	85
16.20.2 Constructor & Destructor Documentation	85
16.20.2.1 UniOSCEventDispatcherCBRawImplementation(string _oscOutAddress, string ← _oscOutIPAddress, int _oscPort)	85
16.20.2.2 UniOSCEventDispatcherCBRawImplementation(string _oscOutAddress, UniO⇔ SCConnection _explicitConnection)	85
16.20.3 Member Function Documentation	85
16.20.3.1 Awake()	85
16.20.3.2 Disable()	85
16.20.3.3 Enable()	85
16.21 UniOSC.UniOSCEventDispatcherCBSimple Class Reference	85
16.21.1 Detailed Description	86
16.21.2 Constructor & Destructor Documentation	86
16.21.2.1 UniOSCEventDispatcherCBSimple(stringoscOutAddress, stringoscOutIP← Address, intoscPort)	86
16.21.2.2 UniOSCEventDispatcherCBSimple(stringoscOutAddress, UniOSCConnectionexplicitConnection)	86
16.21.3 Member Function Documentation	86
16.21.3.1 Awake()	86
16.21.3.2 Disable()	86
16.21.3.3 Enable()	86
16.21.3.4 SetDataAtIndex0(object val)	87
16.22UniOSC.UniOSCEventDispatcherEditor Class Reference	87
16.22.1 Member Function Documentation	88
16.22.1.1 DrawConnectionInfo()	88
16.22.1.2 DrawlPAddress()	88
16.22.1.3 DrawPort()	88
16.22.1.4 OnEnable()	88
16.22.1.5 OnInspectorGUI()	88
16.22.1.6 Show(string label, SerializedProperty list)	88
16.22.2 Member Data Documentation	88
16.22.2.1 _myOSCConnectionsProp	88
16.22.2.2 _options	88

XIV

16.22.2.3 _portIndex	. 88
16.22.2.4 _target	. 88
16.22.2.5 _tex_logo	. 88
16.22.2.6 drawDefaultInspectorProp	. 88
16.22.2.7 ExplicitConnectionProp	. 88
16.22.2.8 OSCConnectionsProp	. 88
16.22.2.9 OSCOutAddressProp	. 88
16.22.2.1@SCOutlPAddressProp	. 88
16.22.2.11OSCOutPortProp	. 88
16.22.2.12OSCOutProp	. 88
16.22.2.13UseExplicitConnectionProp	. 88
16.23UniOSC.UniOSCEventDispatcherImplementation Class Reference	. 88
16.23.1 Detailed Description	. 89
16.23.2 Member Function Documentation	. 89
16.23.2.1 Awake()	. 89
16.23.2.2 MySendOSCMessageTriggerMethod()	. 89
16.23.2.3 OnDisable()	. 89
16.23.2.4 OnEnable()	. 89
16.23.3 Member Data Documentation	. 90
16.23.3.1 dynamicFloatValue	. 90
16.23.3.2 dynamicIntValue	. 90
16.23.3.3 dynamicStringValue	. 90
16.24UniOSC.UniOSCEventDispatcherMultiAddressSender Class Reference	. 90
16.24.1 Detailed Description	. 90
16.24.2 Member Function Documentation	. 90
16.24.2.1 Awake()	. 90
16.24.2.2 MySendOSCMessageTriggerMethod()	. 91
16.24.2.3 OnDisable()	. 91
16.24.2.4 OnEnable()	. 91
16.24.2.5 OnGUI()	. 91
16.24.3 Member Data Documentation	. 91
16.24.3.1 addressArray	. 91
16.24.3.2 bundleMode	. 91
16.24.3.3 data	. 91
16.25UniOSC.UniOSCEventDispatcherMultiConnectionSender Class Reference	. 91
16.25.1 Detailed Description	. 92
16.25.2 Member Function Documentation	. 92
16.25.2.1 Awake()	. 92
16.25.2.2 MySendOSCMessageTrigerMethod()	. 92
16.25.2.3 OnDisable()	. 92

CONTENTS xv

16.25.2.4 OnEnable()	92
16.25.2.5 OnGUI()	92
16.25.3 Member Data Documentation	92
16.25.3.1 connectionArray	92
16.25.3.2 data	92
16.26UniOSC.UniOSCEventDispatcherSlider Class Reference	92
16.26.1 Detailed Description	93
16.26.2 Member Enumeration Documentation	93
16.26.2.1 SliderMode	93
16.26.3 Member Function Documentation	93
16.26.3.1 Awake()	93
16.26.3.2 OnDisable()	93
16.26.3.3 OnEnable()	93
16.26.3.4 SendOSCMessage()	94
16.26.4 Member Data Documentation	94
16.26.4.1 maxOSCDataValue	94
16.26.4.2 minOSCDataValue	94
16.26.4.3 showGUI	94
16.26.4.4 sliderMode	94
16.26.4.5 sliderSize	94
16.26.4.6 xPos	94
16.26.4.7 yPos	94
16.27UniOSC.UniOSCEventDispatcherToggle Class Reference	94
16.27.1 Detailed Description	95
16.27.2 Member Function Documentation	95
16.27.2.1 Awake()	95
16.27.2.2 OnDisable()	95
16.27.2.3 OnEnable()	95
16.27.2.4 SendOSCMessageOff()	95
16.27.2.5 SendOSCMessageOn()	95
16.27.3 Member Data Documentation	95
16.27.3.1 offOSCDataValue	95
16.27.3.2 onOSCDataValue	95
16.27.3.3 showGUI	95
16.27.3.4 xPos	95
16.27.3.5 yPos	95
16.28UniOSC.UniOSCEventTarget Class Reference	95
16.28.1 Detailed Description	97
16.28.2 Member Function Documentation	97
16.28.2.1 _ConnectToDispatchers()	97

xvi CONTENTS

16.28.2.2 _DisconnectFromDispatchers()	. 97
16.28.2.3 _OnConnectionInStatusChanged(UniOSCConnection con)	. 97
16.28.2.4 ForceSetupChange()	. 97
16.28.2.5 OnDestroy()	. 97
16.28.2.6 OnDisable()	. 97
16.28.2.7 OnEnable()	. 98
16.28.2.8 OnOSCMessageReceived(UniOSCEventArgs args)	. 98
16.28.2.9 Start()	. 98
16.28.2.10Update()	. 98
16.28.3 Member Data Documentation	. 98
16.28.3.1 _explicitConnection	. 98
16.28.3.2 _foldoutList	. 98
16.28.3.3 _oscAddress	. 98
16.28.3.4 _oscAddresses	. 98
16.28.3.5 _oscPort	. 98
16.28.3.6 _receiveAllAddresses	. 98
16.28.3.7 _receiveAllPorts	. 98
16.28.3.8 _redrawFlag	. 98
16.28.3.9 _useExplicitConnection	. 98
16.28.3.10ConnectToDict	. 99
16.28.4 Property Documentation	. 99
16.28.4.1 explicitConnection	. 99
16.28.4.2 GetOSCAddresses	. 99
16.28.4.3 oscAddress	. 99
16.28.4.4 oscPort	. 99
16.28.4.5 receiveAllAddresses	. 99
16.28.4.6 receiveAllPorts	. 99
16.28.4.7 useExplicitConnection	. 99
16.28.5 Event Documentation	. 99
16.28.5.1 OSCMessageReceived	. 99
16.29UniOSC.UniOSCEventTargetCB Class Reference	. 99
16.29.1 Detailed Description	. 100
16.29.2 Constructor & Destructor Documentation	. 101
16.29.2.1 UniOSCEventTargetCB(intoscPort)	. 101
16.29.2.2 UniOSCEventTargetCB(string _oscAddress)	. 101
16.29.2.3 UniOSCEventTargetCB(string _oscAddress, intoscPort)	. 101
16.29.2.4 UniOSCEventTargetCB(UniOSCConnection con)	. 101
16.29.2.5 UniOSCEventTargetCB(string _oscAddress, UniOSCConnection con)	. 101
16.29.3 Member Function Documentation	
16.29.3.1 _ConnectToDispatchers()	. 101

CONTENTS xvii

16.29.3.2 AddAddress(stringoscAddress)	101
16.29.3.3 Awake()	101
16.29.3.4 Disable()	101
16.29.3.5 Dispose()	101
16.29.3.6 Enable()	101
16.29.3.7 ForceSetupChange()	101
16.29.3.8 OnOSCMessageReceived(UniOSCEventArgs args)	101
16.29.3.9 oscAddressAt(int index)	102
16.29.4 Member Data Documentation	102
16.29.4.1 _explicitConnection	102
16.29.4.2 _oscAddress	102
16.29.4.3 _oscAddresses	102
16.29.4.4 _oscPort	102
16.29.4.5 _receiveAllAddresses	102
16.29.4.6 _receiveAllPorts	102
16.29.4.7 _useExplicitConnection	102
16.29.4.8 ConnectToDict	102
16.29.5 Property Documentation	102
16.29.5.1 explicitConnection	102
16.29.5.2 isEnabled	102
16.29.5.3 oscAddress	102
16.29.5.4 oscPort	102
16.29.5.5 receiveAllAddresses	102
16.29.5.6 receiveAllPorts	102
16.29.5.7 useExplicitConnection	102
16.29.6 Event Documentation	102
16.29.6.1 OSCMessageReceived	102
16.30 UniOSC.UniOSCEventTargetCBImplementation Class Reference	102
16.30.1 Detailed Description	103
16.30.2 Constructor & Destructor Documentation	103
16.30.2.1 UniOSCEventTargetCBImplementation(int oscPort)	103
16.30.2.2 UniOSCEventTargetCBImplementation(string oscAddress)	103
16.30.2.3 UniOSCEventTargetCBImplementation(UniOSCConnection con)	103
16.30.2.4 UniOSCEventTargetCBImplementation(string oscAddress, int oscPort)	103
16.30.2.5 UniOSCEventTargetCBImplementation(string oscAddress, UniOSCConnection con)	103
16.30.3 Member Function Documentation	103
16.30.3.1 Awake()	104
16.30.3.2 Disable()	104
16.30.3.3 Enable()	104

xviii CONTENTS

16.30.3.4 OnOSCMessageReceived(UniOSCEventArgs args)
16.31 UniOSC.UniOSCEventTargetEditor Class Reference
16.31.1 Member Function Documentation
16.31.1.1 DrawConnectionInfo()
16.31.1.2 DrawConnectionSetup()
16.31.1.3 DrawPort()
16.31.1.4 OnEnable()
16.31.1.5 OnInspectorGUI()
16.31.1.6 ShowFoldoutConnectionStatus(string label, SerializedProperty list, IDictionary dict)10
16.31.2 Member Data Documentation
16.31.2.1 _options
16.31.2.2 _portIndex
16.31.2.3 _target
16.31.2.4 _tex_logo
16.31.2.5 AvailableINPortsProp
16.31.2.6 ExplicitConnectionProp
16.31.2.7 FoldoutListProp
16.31.2.8 OSCAddressProp
16.31.2.9 OSCPortProp
16.31.2.10ReceiveAllAddressesProp
16.31.2.11ReceiveAllPortsProp
16.31.2.12JseExplicitConnectionProp
16.32UniOSC.UniOSCEventTargetImplementation Class Reference
16.32.1 Detailed Description
16.32.2 Member Function Documentation
16.32.2.1 OnDisable()
16.32.2.2 OnEnable()
16.32.2.3 OnOSCMessageReceived(UniOSCEventArgs args)
16.32.2.4 Start()
16.32.2.5 Update()
16.33UniOSC.UniOSCFileObj Class Reference
16.33.1 Detailed Description
16.33.2 Member Data Documentation
16.33.2.1 IsLearning
16.33.2.2 my_guid
16.33.2.3 scrollpos
16.33.2.4 scrollposInspector
16.33.3 Event Documentation
16.33.3.1 OSCMessageSend
16.34UniOSC.UniOSCGUI Class Reference

CONTENTS xix

16.34.1 Detailed Description	108
16.34.2 Member Data Documentation	108
16.34.2.1 ShowInEditMode	108
16.34.2.2 traceMessages	108
16.35UniOSC.UniOSCMappingFileObj Class Reference	108
16.35.1 Detailed Description	109
16.35.2 Member Function Documentation	109
16.35.2.1 AddOSCMappingItem()	109
16.35.2.2 OnEnable()	109
16.35.2.3 OnOSCMessageReceived(object sender, UniOSCEventArgs args)	109
16.35.2.4 RemoveOSCMappingItem(UniOSCMappingItem obj)	110
16.35.3 Member Data Documentation	110
16.35.3.1 oscMappingItemList	110
16.36UniOSC.UniOSCMappingFileObjEditor Class Reference	110
16.36.1 Member Function Documentation	110
16.36.1.1 Init()	110
16.36.1.2 OnGUI_OSCMappingData_Editor(UniOSCMappingFileObj obj, float screen⊷ Width, float screenHeight)	110
16.36.1.3 OnGUI_OSCMappingData_Inspector(UniOSCMappingFileObj obj, float screen↔ Width, float screenHeight)	110
16.36.1.4 OnInspectorGUI()	111
16.36.2 Member Data Documentation	111
16.36.2.1 style	111
16.37UniOSC.UniOSCMappingItem Class Reference	111
16.37.1 Detailed Description	111
16.37.2 Constructor & Destructor Documentation	111
16.37.2.1 UniOSCMappingItem()	111
16.37.2.2 UniOSCMappingItem(UniOSCMappingFileObj _hostObj)	111
16.37.3 Member Function Documentation	112
16.37.3.1 MapData(UniOSCEventArgs args)	112
16.37.3.2 OnOSCMappingItemDelete()	112
16.37.4 Member Data Documentation	112
16.37.4.1 address	112
16.37.4.2 collapsed	112
16.37.4.3 hostObj	112
16.37.4.4 isLearning	112
16.37.4.5 mappingMAX	112
16.37.4.6 mappingMIN	112
16.37.4.7 max	112
16.37.4.8 MAXHEIGTH	112

CONTENTS

16.37.4.9 MAXWIDTH
16.37.4.10min
16.38UniOSC.UniOSCMappingItemEditor Class Reference
16.38.1 Member Function Documentation
16.38.1.1 OnEnable()
16.38.1.2 OnGUI_Editor(UniOSCMappingItem obj)
16.38.1.3 OnGUI_Inspector(UniOSCMappingItem obj)
16.39UniOSC.UniOSCMoveGameObject Class Reference
16.39.1 Detailed Description
16.39.2 Member Enumeration Documentation
16.39.2.1 Mode
16.39.3 Member Function Documentation
16.39.3.1 OnEnable()
16.39.3.2 OnOSCMessageReceived(UniOSCEventArgs args)
16.39.4 Member Data Documentation
16.39.4.1 movementMode
16.39.4.2 nearClipPlaneOffset
16.39.4.3 transformToMove
16.40UniOSC.UniOSCReceiver Class Reference
16.40.1 Detailed Description
16.40.2 Constructor & Destructor Documentation
16.40.2.1 UniOSCReceiver()
16.40.2.2 UniOSCReceiver(int port, string MulticastAddress)
16.40.2.3 UniOSCReceiver(int port, TransmissionType ttype, IPAddress MulticastAddress) 115
16.40.3 Member Function Documentation
16.40.3.1 Connect()
16.40.3.2 Disconnect()
16.40.4 Property Documentation
16.40.4.1 FrameNumber
16.40.4.2 Port
16.40.5 Event Documentation
16.40.5.1 OSCErrorOccured
16.40.5.2 OSCMessageReceived
16.41UniOSC.UniOSCRotateGameObject Class Reference
16.41.1 Detailed Description
16.41.2 Member Function Documentation
16.41.2.1 OnEnable()
16.41.2.2 OnOSCMessageReceived(UniOSCEventArgs args)
16.41.3 Member Data Documentation
16.41.3.1 transformToRotate

CONTENTS xxi

16.41.3.2 X_Address	17
16.41.3.3 x_RotationFactor	17
16.41.3.4 Y_Address	17
16.41.3.5 y_RotationFactor	17
16.41.3.6 Z_Address	17
16.41.3.7 z_RotationFactor	17
16.42UniOSC.UniOSCRotateGameObjectEditor Class Reference	17
16.42.1 Member Function Documentation	17
16.42.1.1 OnInspectorGUI()	17
16.43UniOSC.UniOSCRotateGameObjectTouchOSCGyro Class Reference	17
16.43.1 Member Function Documentation	18
16.43.1.1 OnEnable()	18
16.43.1.2 OnOSCMessageReceived(UniOSCEventArgs args)	18
16.43.2 Member Data Documentation	18
16.43.2.1 damping	18
16.43.2.2 transformToRotate	18
16.43.2.3 x_RotationFactor	18
16.43.2.4 y_RotationFactor	18
16.43.2.5 z_RotationFactor	18
16.44UniOSC.UniOSCScaleGameObject Class Reference	19
16.44.1 Detailed Description	19
16.44.2 Member Function Documentation	19
16.44.2.1 OnEnable()	19
16.44.2.2 OnOSCMessageReceived(UniOSCEventArgs args)	19
16.44.3 Member Data Documentation	20
16.44.3.1 scaleFactor	20
16.44.3.2 transformToScale	20
16.45UniOSC.UniOSCScriptTestEditor Class Reference	20
16.45.1 Detailed Description	20
16.45.2 Member Function Documentation	20
16.45.2.1 OnDisable()	20
16.45.2.2 OnEnable()	20
16.45.3 Property Documentation	20
16.45.3.1 Instance	20
16.45.3.2 IsOpen	20
16.46UniOSC.UniOSCSessionFileObj Class Reference	20
16.46.1 Detailed Description	21
16.46.2 Member Function Documentation	21
16.46.2.1 AddOSCSessionItem()	21
16.46.2.2 OnEnable()	21

xxii CONTENTS

16.46.2.3 OnOSCMessageReceived(object sender, UniOSCEventArgs args)	121
16.46.2.4 RemoveOSCSessionItem(UniOSCSessionItem obj)	122
16.46.3 Member Data Documentation	122
16.46.3.1 oscSessionItemList	122
16.47UniOSC.UniOSCSessionFileObjEditor Class Reference	122
16.47.1 Member Function Documentation	122
16.47.1.1 Init()	122
16.47.1.2 OnGUI_OSCSessionData_Editor(UniOSCSessionFileObj obj, float screenWidth, float screenHeight)	122
16.47.1.3 OnGUI_OSCSessionData_Inspector(UniOSCSessionFileObj obj, float screen⊷ Width, float screenHeight)	122
16.47.1.4 OnInspectorGUI()	122
16.47.2 Member Data Documentation	123
16.47.2.1 style	123
16.48UniOSC.UniOSCSessionItem Class Reference	123
16.48.1 Detailed Description	123
16.48.2 Constructor & Destructor Documentation	123
16.48.2.1 UniOSCSessionItem()	123
16.48.2.2 UniOSCSessionItem(UniOSCSessionFileObj _hostObj)	123
16.48.3 Member Function Documentation	123
16.48.3.1 OnOSCSessionItemDelete()	123
16.48.4 Member Data Documentation	124
16.48.4.1 address	124
16.48.4.2 collapsed	124
16.48.4.3 data	124
16.48.4.4 dataTypeList	124
16.48.4.5 hostObj	124
16.48.4.6 isLearning	124
16.48.4.7 MAXHEIGTH	124
16.48.4.8 MAXWIDTH	124
16.49UniOSC.UniOSCSessionItemEditor Class Reference	124
16.49.1 Member Function Documentation	124
16.49.1.1 OnEnable()	124
16.49.1.2 OnGUI_Editor(UniOSCSessionItem obj)	124
16.49.1.3 OnGUI_Inspector(UniOSCSessionItem obj)	124
16.50UniOSC.UniOSCToggle Class Reference	124
16.50.1 Detailed Description	125
16.50.2 Member Function Documentation	125
16.50.2.1 OnEnable()	125
16.50.2.2 OnOSCMessageReceived(UniOSCEventArgs args)	125

CONTENTS xxiii

16.50.2.3 UpdateComponentState()	26
16.50.3 Member Data Documentation	26
16.50.3.1 componentToToggle	26
16.50.3.2 toggleState	26
16.51 UniOSC.UniOSCToggleEditor Class Reference	26
16.51.1 Member Function Documentation	26
16.51.1.1 ForceUpdate()	26
16.51.1.2 OnEnable()	26
16.51.1.3 OnInspectorGUI()	27
16.51.2 Member Data Documentation	27
16.51.2.1 _componentIndex	27
16.51.2.2 _targetToggle	27
16.51.2.3 _updateFlag	27
16.51.2.4 ComponentToToggleProp	27
16.51.2.5 ToggleStateProp	27
16.52UniOSC.UniOSCTransformSender Class Reference	27
16.52.1 Member Function Documentation	
16.52.1.1 _Update()	27
16.52.1.2 OnDisable()	27
16.52.1.3 OnEnable()	28
16.52.2 Member Data Documentation	28
16.52.2.1 trackedGameObject	
16.53UniOSC.UniOSCTransmitter Class Reference	28
16.53.1 Constructor & Destructor Documentation	28
16.53.1.1 UniOSCTransmitter()	28
16.53.1.2 UniOSCTransmitter(string ipAddress, int port)	28
16.53.1.3 UniOSCTransmitter(IPAddress ipAddress, int port)	28
16.53.1.4 UniOSCTransmitter(IPAddress ipAddress, TransmissionType ttype, int port) 1	28
16.53.2 Member Function Documentation	28
16.53.2.1 Close()	28
16.53.2.2 Connect()	28
16.53.2.3 SendOSCMessage(object sender, UniOSCEventArgs args)	
16.53.3 Property Documentation	28
16.53.3.1 IPAddress	28
16.53.3.2 Port	29
16.53.3.3 transmissionType	29
	29
16.53.4.1 OSCErrorOccured	
16.54UniOSC.UniOSCUnityEvent_Receiver Class Reference	
16.54.1 Detailed Description	29

xxiv CONTENTS

16.54.2 Member Function Documentation	129
16.54.2.1 OnOSCMessageReceived(OscMessage msg)	129
16.54.3 Member Data Documentation	129
16.54.3.1 debug	129
16.55UniOSC.UniOSCUnityEventRelay Class Reference	130
16.55.1 Member Function Documentation	130
16.55.1.1 OnDisable()	130
16.55.1.2 OnEnable()	130
16.55.1.3 OnOSCMessageReceived(UniOSCEventArgs args)	131
16.55.1.4 Start()	131
16.55.1.5 Update()	131
16.55.2 Member Data Documentation	131
16.55.2.1 unioscEvent	131
16.56UniOSC.UniOSCUnityEventRelayEditor Class Reference	131
16.56.1 Member Function Documentation	131
16.56.1.1 OnEnable()	132
16.56.1.2 OnInspectorGUI()	132
16.56.2 Member Data Documentation	132
16.56.2.1 unioscEventProp	132
16.57UniOSC.UniOSCUnityEventRelay.UnityEvent_OscMessage Class Reference	132
Index	133

# **Chapter 1**

## Introduction

- UniOSC is a tool to easy create Unity applications which can be controlled by hard/software that uses the OSC protocol for communication. OSC is a protocol for distributed systems that is mainly used in the music industry and is often used as an alternative to MIDI. If you need more information about OSC please visit <a href="http://opensoundcontrol.org/">http://opensoundcontrol.org/</a>. For the OSC communication UniOSC uses a modified version of the OSCsharp library. You can use UniOSC to send/receive OSC messages to/from other devices that are connected via Wi-Fi or create your own GUI-app for controlling another Unity application via OSC but it is strongly recommended to use a third party software like TouchOSC for creating the GUI part. For more info about TouchOSC please visit <a href="http://hexler.net">http://hexler.net</a>
- UniOSC works in play- and edit-mode. That means you can check/setup your system without entering the play mode of Unity. You could also use it to remote control the Editor.

2 Introduction

### **Chapter 2**

### Installation

1. Import the UniOSC package from the Assetstore. You should now have a folder named UniOSC with the following structure in your Unity project:



Figure 2.1: package structure

- Examples: UniOSC comes with a demo scene to show all components in a ready setup. For your mobile device we provide the UniOSC.Mobile scene.
- · Lib: Here is the OSCsharp dll located
- MappingFiles: Preconfigured mapping files for TouchOSC
- · Scripts: All the c# code
- 2. After installation you should see a menu item under 'Window/UniOSC'. If there is no UniOSC menu item you have to reimport the unitypackage or close & reopen Unity.
- 3. You should change the script execution order for the UniOSCConnection class in order to prevent problems with auto connecting UniOSC components at start time. Go to "Edit/Project Settings/Script Execution Order" and set the value for the UniOSCConnection class to a negative value so it is executed before other scripts.

4 Installation



Figure 2.2: Script Execution Order

4. For a quick test with a mobile device it is recommend getting the TouchOSC app. Or you make an app from the UniOSC.Mobile scene and run it on your device.

## **Chapter 3**

# **UniOSC** main components

#### 3.1 OSCEditor

The OSC Editor is a tool to administrate your OSC setup in an easy and visual way and to speed up your workflow. You have access to the main components and tools to create a working OSC setup. It is also very useful for tracing the OSC data flow. For more info please look at UniOSC Editor Interface.

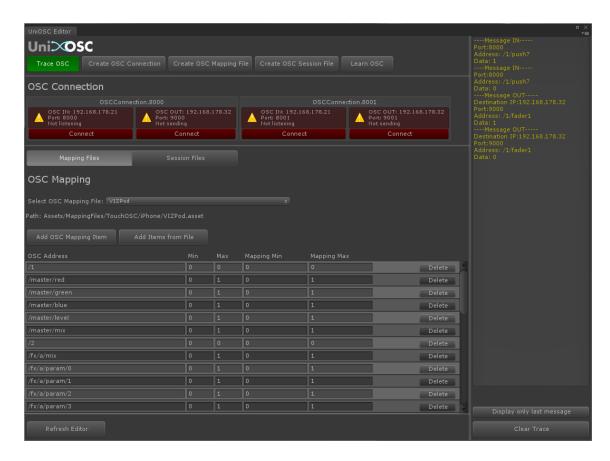


Figure 3.1: OSCEditor

#### 3.2 OSCConnection

•	The OSCConnection is a component that handles all the network related tasks of the OSC communication.
	You can start listening on a local port for receiving incoming OSC data or open an OSC Out connection ready
	to send data to an IP address on a given port. Depending on your transmission type you can specify the IP
	addresses. The inspector gives you visual feedback if you use not a valid address to make the setup as easy
	as possible.

- Connect On Start: If you select this option the connection is established automatically when your Unity app starts or when you enter the play mode in the editor.
- OSC IN: If you use the Unicast mode you can only specify the port the connection is listening on as in this mode the local IP address is used. In Multicast mode you specify the multicast group address.(see below)
- OSC OUT: You have to specify a port, IP address and the transmission type for outgoing OSC data. When using the Broadcast mode the standard broadcast address is used.
- Transmission Type :
  - Unicast (default): one-to-one transmission.
     You only specify a single IP address for sending or listening to.
  - Multicast: one-to-many transmission.

With multicast, the message is sent to a multicast address, and the network delivers it only to those hosts that have indicated that they want to receive messages sent on that address. A valid multicast address lies in the range between 224.0.0.0 - 239.255.255.255.

The range of addresses between 224.0.0.0 & 224.0.0.255, inclusive, is reserved for the use of routing protocols and other low-level topology discovery or maintenance protocols, such as gateway discovery and group membership reporting and should not be used due the special purpose they are destined to.

iana IPv4 Multicast Address Space Registry

- Broadcast: one-to-all transmission.

In this mode you use the fixed broadcast address 255.255.255.255 to send your message to all hosts on the network. Regardless of the OSC IN transmission type of your host it will receive the broadcast message if the port matches. Broadcasting is the most general communication method, and is also the most intensive in the sense that a large number of messages are required.

3.3 OSC Mapping file 7

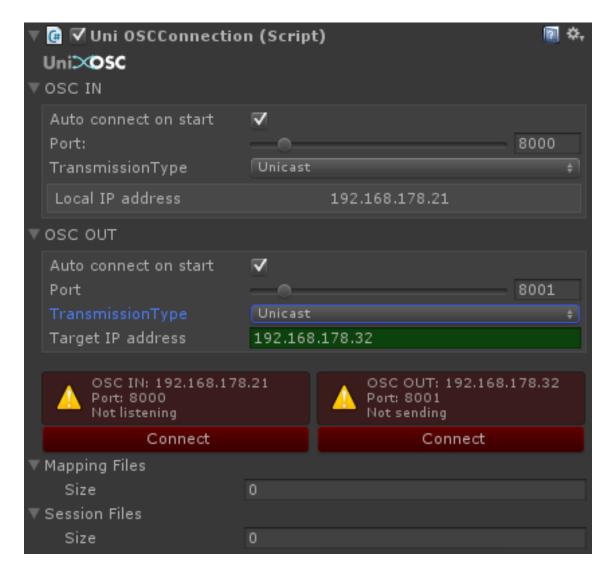


Figure 3.2: OSCConnection

#### 3.3 OSC Mapping file

- The data of an OSC message is defined by your OSC sending application and so sometimes out of your control. On the other side these values don't comply with your workflow. It is useful to have some sort of transformation of the data before it gets handled by your GameObject scripts. In this case you can create a mapping file that you can attach to an OSC connection.
- The mapping file acts as a filter so the data of all the messages that are included in the mapping file are mapped to new values before they pass through to the Unity GameObjects.
- A mapping file is a Scriptable Object asset that is located in your Assets folder so you can create one and copy it to several Unity projects.
- For every OSC address you want to remap the data you have to create a mapping item entry in the mapping file.
- UniOSC comes with some preconfigured mappings files to remap the default layouts that are included with TouchOSC. They are located in 'UniOSC/MappingFiles'.

#### 3.4 OSCMappingItem

- A OSC message consists of an OSC Address Pattern followed by zero or more OSC Arguments that contain the data in form of different data types .(For more info please look at the OSC Specification.)
- To map the data part of the message you first specify the range of the data when it arrives (min/max) and the range to what it should be mapped (MapMin/MapMax).
- Normally the data comes in a normalized range from 0 to 1, or -1 to 1. It's always a good practice to send OSC data in this way when you create your own GUI app. You can map the values afterwards with the help of a mapping file or remap the data in your OSCEventTarget components.



Figure 3.3: OSCMappingItem

#### 3.5 OSC Session file

- When you work with a tool like TouchOSC you will realize that your GUI will reset when you start TouchOSC
  after its task is suspended. To be able to set the GUI to the latest state from your Unity session it is possible
  to store the last OSC data for a given OSC address.
- The OSC Session file is a container like a mapping file where you specify the addresses that should be stored. After the file is attached to your OSC Connection you store the latest data that belongs to the addresses. You are able to send all the data to your mobile device with one click so the GUI gets updated.(At the moment only numbers&strings as data are supported).

#### 3.6 OSCEventTarget

To handle OSC data on a Unity GameObject you can add a component that is derived from the abstract class OS← CEventTarget. It handles all the connections to the OSCConnection and the filtering, so you can get the data and do whatever you want with your GameObject. UniOSC comes with some premade components (look in the Scripts.← Examples folder). The OSCEventTargetImplementation class is good blueprint for your own implementations.

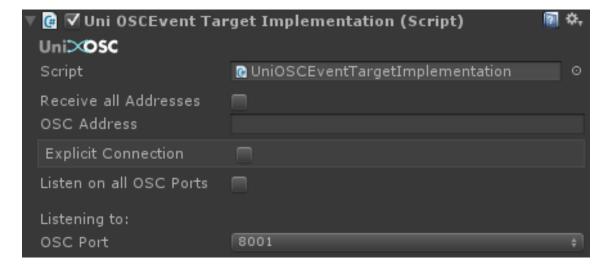


Figure 3.4: OSCEventTargetImplementation Inspector

### 3.7 OSCEventDispatcher

This is the opposite component as it's passing some message to a OSCconnection for sending it out to another device.

# **Chapter 4**

# **UniOSC Editor Interface**

- · Open the OSC Editor under 'Window/UniOSC/OSCEditor'
- At the top of the OSCEditor you see the main buttons:

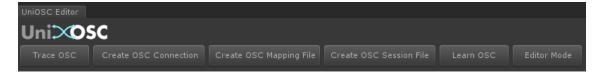


Figure 4.1: OSCEditor

#### 4.1 Trace OSC

- For tracing all incoming & outgoing OSC messages you can toggle the trace OSC button. If you trace a text field appears on the right side of the editor which displays all the OSC messages that Unity receives/send.
- Before Unity can receive/ send OSC data you have to turn on the OSC connections with the ports you want to listen/send to.
- You can clear the content of the text field or use the 'Display only last message' option (useful when your get a constant data stream like info from a Gyro).

12 UniOSC Editor Interface

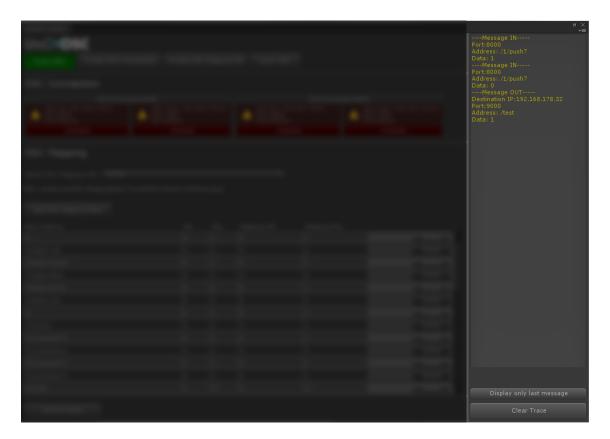


Figure 4.2: Tracing

#### 4.2 OSC Connections

• The UniOSC Editor displays all OSCConnections that are in your project hierarchy currently enabled. If you have any problems with an OSCConnection not displayed hit the 'Refresh Editor' button to force a rescan for available OSCConnection instances.

You see the same status boxes like in the Component Inspector. You can start and stop the connections but
if you want to administrate a connection you have to select the OSCConnection GameObject in the hierarchy
and work with the component inspector (Just click onto one of the status boxes and the OSCConnection get
selected in the project hierarchy for editing).

4.2 OSC Connections 13

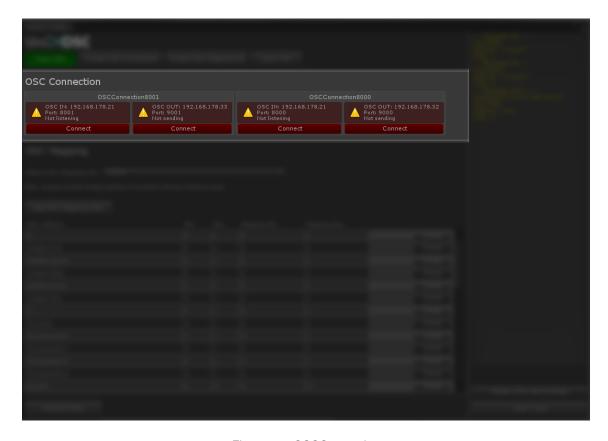


Figure 4.3: OSCConnection

When an OSC connection is not connected it is displayed red. This means that no OSC data will be received/send.



Figure 4.4: OSCConnection 'off'

When you hit the connect button the connection establish the underlying network resources for communication. The connection box turns to green and a tiny button with a green status light appears.



Figure 4.5: OSCConnection 'on'

14 UniOSC Editor Interface

You're now ready to go. In some circumstances it is useful to stop the message flow into Unity, but trace incoming OSC messages. In this case you can click on the status light to set the communication in a kind of 'pause' mode. You can trace the OSC data but the data is blocked and is not send to other GameObjects. This is useful when you want to test your connections but don't want that the properties of your GameObjects are changed.



Figure 4.6: OSCConnection 'paused'

### 4.3 OSC Mapping

- You can attach multiple mapping files to an OSC Connection, but to prevent troubles with duplicated entries
  that cause only confusion with overriding mapping values it is recommended to use only one mapping file for
  an OSCConnection.
- To create a mapping file just click the 'Create mapping file' button in the editor or go to the Unity Editor menu under GameObject/Create Other/UniOSC/OSC Mapping File.
- In the mapping area you see a dropdown list of all available mapping files in your project. The current selected file is displayed below the dropdown list.
- If you want to attach a mapping file to a connection you can drop a mapping file asset from the Project Browser
  onto the connection status boxes in the editor or in the component inspector. The other way is to click on the
  path of the current displayed mapping file and drag to a connection box.
- If you want to add a mapping item entry to the current mapping file just hit the 'Add OSC Mapping Item' button and a new empty mapping item is appended to the mapping file. (The address is left empty but the other values are preconfigured with default values.
- To specify which message a mapping item is related to you enter a string into the OSC address text field or you can enter the learn mode.
- If you have a mapping file and need most of the addresses from another file that already exists, you can add all addresses from that file if you select an asset (mapping or session file) via the 'add Items from file' button. You can also just drag&drop the file asset from the hierarchy onto the button.

4.4 OSC Session 15

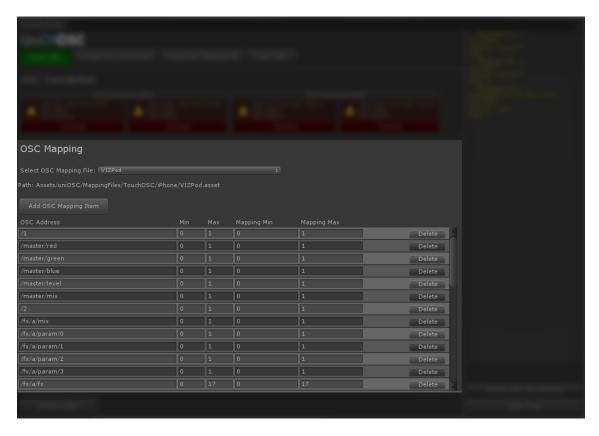


Figure 4.7: Mapping

### 4.4 OSC Session

- To store the latest data values that come with an OSC Message you can create a Session File. The behavior to create and assign it to an OSC Connection is the same as with a Mapping File.
- When you added a Session File to an OSC Connection the last data of the specified addresses are now stored to the file.
- The current values that are stored could be watched if you select the Session File from the popup. The first four data values from an address are displayed. (Normally only one data value comes with a OSC message)
- When you attached a Session File to an OSC Connection a button 'Send Session Data' appears in the
  component inspector. When you click the button (OSC Out Connection has to be enabled) all the data (OSC
  messages) from the attached files is sent on the Out Connection. This is mainly for initialization of your GUI
  (TouchOSC) useful, so all the elements are in sync with your last settings.

16 UniOSC Editor Interface

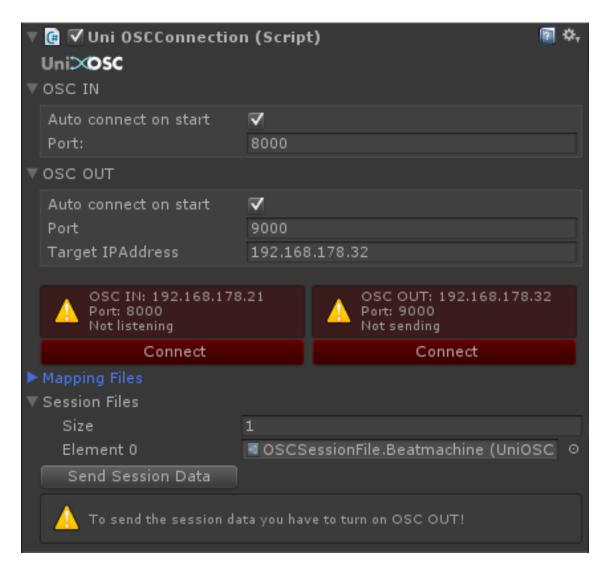


Figure 4.8: Session

4.5 Learn OSC

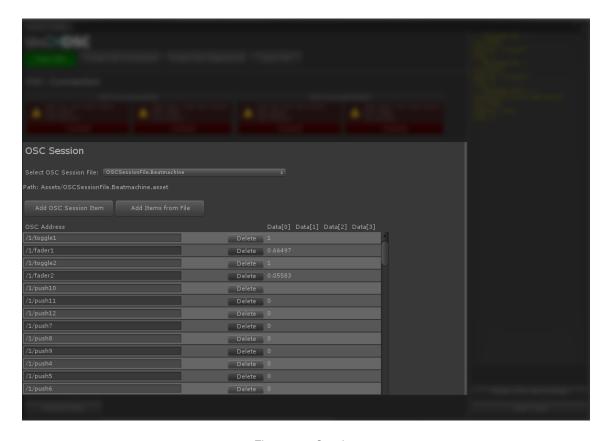


Figure 4.9: Session

## 4.5 Learn OSC

• In this mode a 'learn' button for every mapping/session item appears. If you push and the button the address is set automatically to the address of the actual message that arrives on a port that you are listen to. So you don't need to write it by hand and can be sure of the right spelling.

• In learn mode the OSC data is not routed into Unity so you don't have to think about if some values of your Unity GameObjects are changed when you are in edit mode.

18 UniOSC Editor Interface

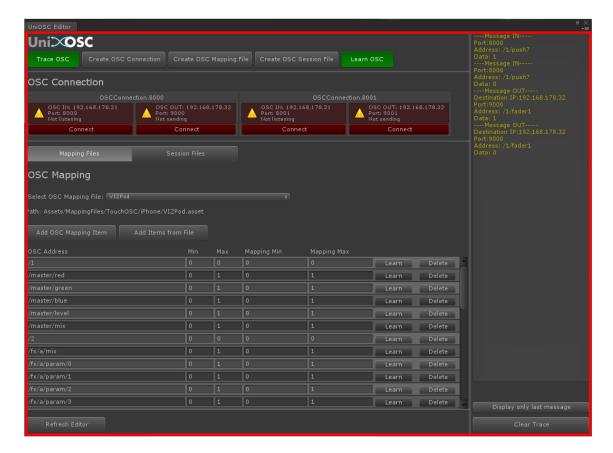


Figure 4.10: Learn mode

### 4.6 Editor Mode

- A huge benefit of UniOSC is the possibility to work also in Edit mode so you don't have to change to Play mode if you want to test your data flow.
- When you disable this mode you can still trace your incoming data in the UniOSCEditor but the OSC data is not routed any further.
- When you enable the Editor Mode you have to keep in mind that your incoming OSC data can change your scene permanently! This mode is useful if you want to create some editor tools.

# **Basic workflow (with TouchOSC)**

## 5.1 Setup a OSC connection

- · Click the 'Create OSC Connection' button. You should see now the new created OSC connection in the editor.
- IN Connection: enter a port number of your choice (or use Port(outgoing) from TouchOSC). The transmission type should be left to 'Unicast'
- OUT Connection: specify the port (or use Port(incoming) from TouchOSC and the IP address (Local IP address from your mobile device).

## 5.2 Setup TouchOSC

- Go to: Settings/Connections/OSC
- · Host(target IP address): has to match with the local IP address of the computer running Unity.
- Port(outgoing): has to match with the OSC IN port of an OSCConnection.

#### 5.3 Test communication

- Push the connect buttons to establish a OSC connection.
- Use the Trace option in the Editor to check if OSC data is received by Unity.
- Send some OSC data from your app on your mobile device. You should see now the OSC messages in the
  trace text field. If you see nothing you have to check if your OSC connection is running, that your ports are
  matching or if you have a reliable network connection.

### 5.4 Map OSC data (Optional)

- · Create a OSC mapping file
- · Create OSC mapping item
- Learn OSC for setting a mapping item

## 5.5 Handle data in Unity

- Attach one of the UniOSC scripting components to your GameObjects you want to control and specify the address and port you want to listen to. (See Scripting classes for more info)
- If you stay in edit mode you have to be aware that if you have an open OSCConnection you can change right now your GameObject properties via OSC live in the Unity editor!

## Components

- To work with the OSC data inside Unity you have to add one of the components to your GameObject or write a
  component by yourself, based on a base class that UniOSC provides. For easy access to the UniOSC editor
  all component inspectors have a small icon at the top where you can click on to open the UniOSC editor.
- You always have to set the OSC address so the component can filter if a message should be handled respectively what OSC address should be sent.
- If you select the option 'Listen to all Addresses' your component receives all messages, this is handy if you
  want to listen to multiple OSC addresses, but are too lazy to add every message to the \_oscAddresses list in
  code.
- All receiving components have in common that you have to specify the port you want to listen to. You can listen on one port or use the 'Listen on all Ports' option where the component listens on all available IN ports in your Scene.
- If you change a port the component reconnects it to the appropriate OSCConnection, so you can change your port live without restarting your scene.
- As this approach is not so flexible when you change the settings on your OSCConnection frequently but want to bind to only one specific port there is a third approach how you specify your binding:
- Explicit Connection. If you select this option you don't have to specify a port but only select the OSC ← Connection you want to bind to. Your component uses now always the actual port from your OSCConnection. When you change the settings of your OSCConnection your components also bind to the new port or IP-← Address.
- In play mode the inspector gives you visual feedback to which port the component is actual listen to.

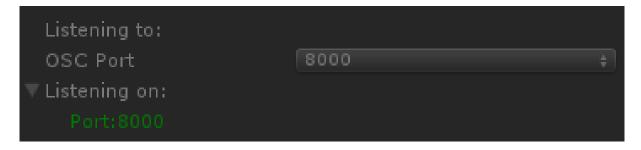


Figure 6.1: Listen to running connection

22 Components



Figure 6.2: Listen but connection not running

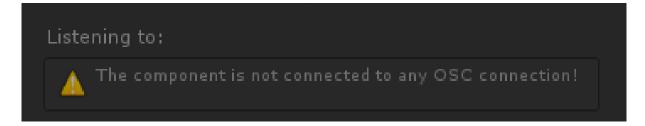


Figure 6.3: Not connected

- For receiving OSC Data you can use the UniOSCEventTarget class as a starting point to subclass from. The main method you have to implement by yourself is the 'OnOSCMessageReceived' method
- Additionally to the OnOSCMessageReceived method calling on your subclass there is also the OSC
   MessageReceived event fired to handle the data on other classes that subscribe to this event.
- We provide the **UniOSCEventTargetImplementation** class where you could see how your own class should look like and what parsing possibilities you have.

### 6.1 Example Components

Most of the example components are assuming that the OSC data comes in normalized values between 0 and 1. It's up to you how you want to remap the data. You can make a mapping item for the address and make so a global remapping with a mapping file or you can remap the values on the component level with a scale factor.

### 6.1.1 Toggle

- This is a universal component to enable/disable most of the existing Unity components.
- With the 'ComponentToToggle' dropdown list you select one of the component types that are attached to the current GameObject you want to toggle.
- The data of the OSC message you use should be 0(disabled) or 1 (enabled).

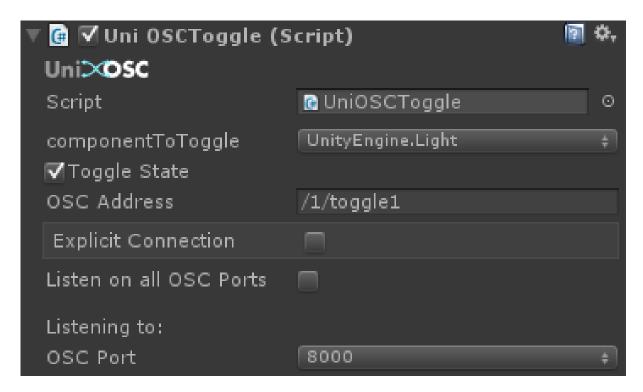


Figure 6.4: Toggle

### 6.1.2 Change Color

• For every color channel you can set a OSC address.

• The 'Shared Material' option is only in play mode relevant as in editor mode you always change the shared material property (Changes are stored permanently). In play mode you normally change the material (If you leave the play mode all changes are lost). If you are unfamiliar with the difference between material and shared material please look at the Unity documentation.

24 Components

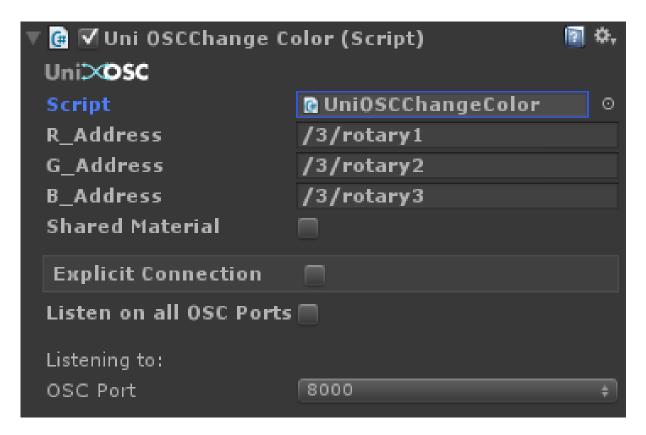


Figure 6.5: ChangeColor

### 6.1.3 Scale GameObject

• You can specify a scale factor for your scaling. The incoming OSC data gets multiplied by the factor.



Figure 6.6: Scale GameObject

### 6.1.4 Rotate GameObject

• For every axis you set the OSC address and a rotation factor.

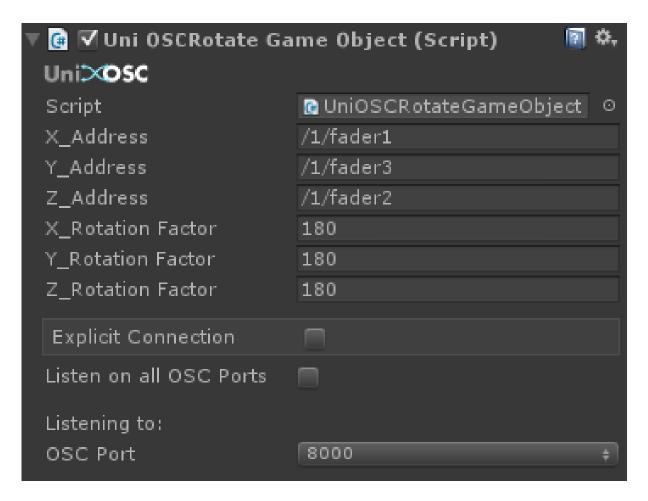


Figure 6.7: Rotate GameObject

#### 6.1.5 Move GameObject

- In Screen Mode this component moves a GameObject in front of the main camera over the whole screen
  area. It assumes an OSC message with data for x and y axis normalized. (Like the XY Pad from TouchOSC
  . Just specify the offset from the near clipping plane from the camera. The object will move in front of the
  camera.
- In Relative Mode the current data values are added to the current position. So you can move your object out of the screen

26 Components

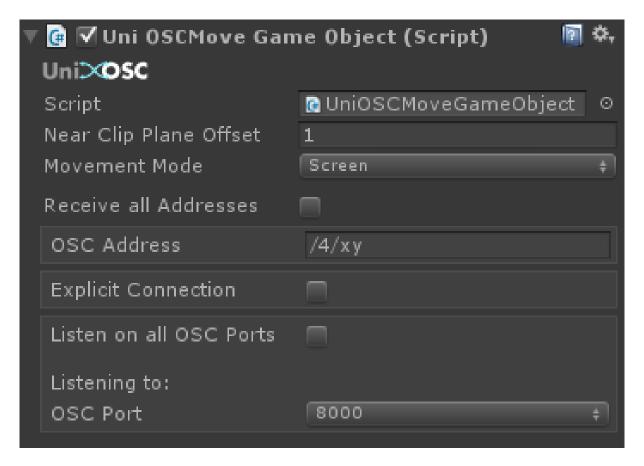


Figure 6.8: Move GameObject

### 6.1.6 TouchOSC Gyro Rotate

- This component is for receiving the gyro data from a TouchOSC device. (Always use the '/accxyz' string as the OSC address)
- In TouchOSC you can turn on an option to send the accelerometer data from your device. (TouchOSC Settings/Options/Accelerometer (/xyz))
- TouchOSC send the '/accxyz' message now permanently.
- The data of every axis comes in the range from -1 to +1.

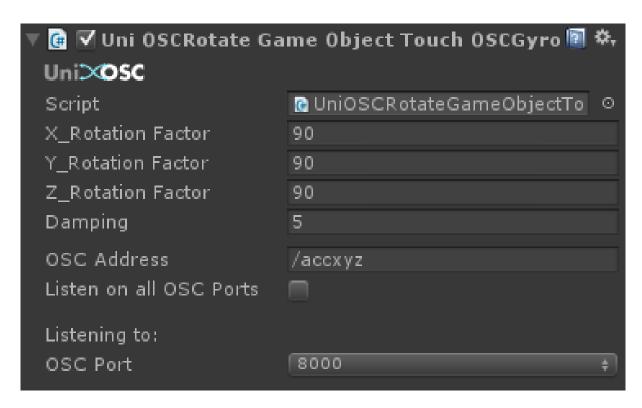


Figure 6.9: Gyro Rotate

#### 6.1.7 Send Button

• With this component you can send an OSC message. You have to turn on the 'Show GUI' option to actually see a GUI button on your screen otherwise it's more of an abstract button you can trigger from other scripts.

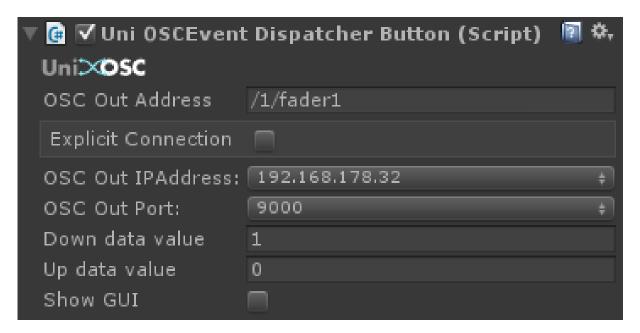


Figure 6.10: Send Button

28 Components

### 6.1.8 OSC GUI

• This component is intended for testing and debugging the OSCConnections on a running app and gives you parts of the UniOSC editor functionality.



Figure 6.11: OSC GUI component

#### 6.1.9 Transform Sender

• With this component you can send the transform data of a GameObject in a continuously way. If you don't specify a Tracked GameObject the current hosting GameObject is used.

#### 6.1.10 JavaScript Communication

UniOSC is written in C# so if you want to code in JS you have to know that there are some limitations. There is only one direction of where the C# world can communicate with the JS world. This is a general problem of Unity. So first you have to decide from which direction your communication should flow (C# -> JS or JS -> C#. Depending on that the scripts of one Language must be located in the Plugins folder to be compiled

first. Look at http://docs.unity3d.com/Manual/ScriptCompileOrderFolders.html for more info. To prevent a lot of trouble with compilation problems we only suggest that you use C# -> JS communication so you only have to locate your JS scripts in the Plugins folder. We provide a JSBridge-Demo.unityPackage that installs a little demo scene with a demo setup that you can use as a starting point for your own JS scripting. As we are limited in the way to send custom data types from C# to JS we have to parse our OSC data before we can send only primitive types like int or strings and the one way communication we strongly suggest to only script in C#!

#### 6.1.11 UnityEvent Relay

• With this component you can send an OSCMessage to all attached calbacks (UnityEvent<OSCMessage>). The UnityEvent system (https://docs.unity3d.com/Manual/UnityEvents.html) makes it very easy to wire scripts together without some additional programming and only using the inspector GUI. So you can call every method that match this pattern: void MyMethod(OSCMessage msg). UniOSC provides a demo UnityEvent receiver script (UniOSC/Scripts/ExampleComponents/UniOSCUnity Event Receiver.cs) where you can see how to parse the data from an OSCMessage.

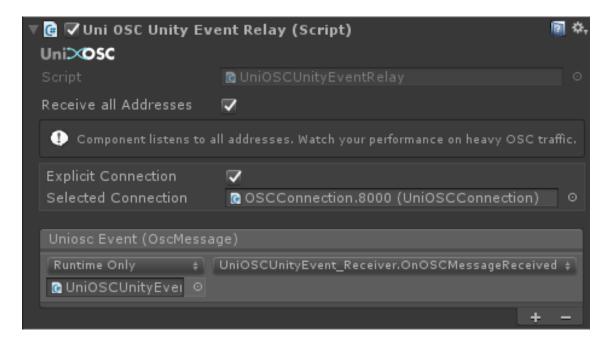


Figure 6.12: UnityEvent Relay component

#### 6.1.12 uGUI Elements

#### EventdispatcherButton uGUI

With this component you can make every gameobject that has a Recttransform to an uGUI button. You can specify at which events you want to send data. (Up,Down or both)

#### EventdispatcherToggle uGUI

With this component you can force a uGUI Toggle to send OSC data.(Requires an uGUI Toggle component)

#### · EventdispatcherSlider uGUI

With this component you can force a uGUI Slider to send OSC data.(Requires an uGUI Slider component)

30 Components

# **Scripting classes**

- Working with Components is easy and you have visual inspectors for the set up but if you need to handle OSCData in classes that don't derive from a MonoBehaviour or prefer to work mostly in pure code you can use the class based versions of the OSCDispachers and OSCReceiver classes.
- · The common handling for class based instances are:
  - Create a instance with calling one of the constructors. There are several class constructors you can use
    to specify your type of instance like the way you can specify it on the component based versions. You
    only have to override the constructors you want to use and call the base constructor of that type
  - 2. Call instance.Enable(). Without enabling, the OSC data handling will not be initialized. Later the Enable() methods could re-enable your instance when it is temporary disabled.
  - 3. Call instance. Disable() if you want to disable the instance only temporary.
  - 4. Call instance.Dispose() if you want to delete the instance. This is important to make sure that the On← OSCMessageReceived method isn't called any further or none of your Event callbacks are still called, even if your instance is set to null or the class that hosting your instance is destroyed.
- The UniOSCEventTargetCBImplementation and UniOSCEventDispatcherCBImplementation classes are good blueprints for your own scripting
- If you want to use the class based scripts in a Unity Editor class you have to consider a couple of additional steps. The problem is that your scripts will lose the references to the OSCConnections when you change the playmode state of Unity. For the instances that don't use the ExplicitConnection feature you only have to re-enable your instance to force a new connection set up on your instance. For the other instances you have to re-create a reference to the OSCConection from the InstanceID and call the SetExplicitConnection() method. We provide a UniOSCTestEditor script that shows exactly what steps you have to do for your own Editors.( In Unity go to: Window/UniOSC/Test/ScriptTestEditor)

### 7.1 Receiving OSC data

To create a class that needs to listen to an OSC Message you can create a class that is a subclass from the **UniOSCEventTargetCB** class.

#### 7.1.1 Constructors

You can choose between several constructors to get the same features you know from the component versions:

#### UniOSCEventTargetCB(int oscPort)

Your instance auto connect to the first OSCConnection that has the given IN port and handles all OSC 

Addresses

32 Scripting classes

#### UniOSCEventTargetCB(string oscAddress)

Your instance auto connects to all available OSCConnections and handle all OSCMessages that match the given OSCAddress

#### UniOSCEventTargetCB(string oscAddress, int oscPort)

Your instance only react to a OSCMessage that comes from a given port with a given address pattern

#### UniOSCEventTargetCB(UniOSCConnection con)

This is the Explicit Connection feature. You listen to all OSCMessages that come from a given OSC← Connection, regardless if the port is changed later.

#### UniOSCEventTargetCB(string oscAddress, UniOSCConnection con)

Explicit Connection feature but you specify the OSCAddress pattern that you want to react to.

## 7.2 Sending OSC data

For sending data it is almost the same like receiving

#### 7.2.1 Constructors

You can only choose between two constructors:

- UniOSCEventDispatcherCB(string oscOutAddress, string oscOutIPAddress,int oscPort)
   The OSC data you have added are sent with the OSCOutAddress to a given IPAddress on a given port when there is a OSCConnection with a matching IPAddress/port available
- UniOSCEventDispatcherCB(string oscOutAddress, UniOSCConnection explicitConnection)
   An OSC Message is sent with a given OSCConnection. The current settings of the OSCConnection determine the IPAddress/port

# **Sending OSC**

- For sending OSC Data you can create your own subclasses from the abstract class UniOSCEventDispatcher
  or UniOSCEventDispatcherCB. You specify an OSC address, the port and an IP address. (The UniOSC

  EventDispatcherImplementation class is a good starting point for your own implementations.)
- UniOSC supports sending OscMessages and OscBundles. The default state of the components is sending
  an OscMessage. If you try to add a OscMessage without setting the bundle mode you get a debug warning
  that this is not possible. You can change at any time from bundle mode to normal message mode back
  (SetBundleMode(false);), but then you have to reassign your data with AppendData().
- UniOSC creates a default OSC Message/Bundle for you in the background so you don't have to explicit add
  one, but if you want to send several OSCMessages with one component you can use a bundle or add separate
  OSCMessages. We provide an MultiAddress/MultiConnection example to show you how this could be done.
- When you want to clear the data you can call the ClearData() method.
- If you need to send OSC data constantly (from an Input device for example) you can specify the "sendInterval" property were you set the interval in milliseconds the component should send OSC data. (Sending too much OSC Messages in a short timespan can cause transmission problems)

### 8.1 Message Mode

- If you work on the OscMessage level you just call the AppendData(data) method and add the data to your OscMessage you want to send. You can add as much data as you want as long as the data type is supported by the OSC protocol.
- Supported types are: Int32, Int64, Single, Double, String, Byte[], OscTimeTag, Char, Color, Boolean.

#### 8.2 Bundle Mode

- If you want to send a OSCBundle you just call the SetBundleMode(true); After that you can append several OscMessages with the AppendData(oscMessage) method.
- The main advantage of Bundles is that you can encapsulate several OscMessages into one OscBundle and
  only need to force one sending of the whole bundle. This also reduces the network traffic. Keep in mind that
  your OscReceiving app needs to support the handling of bundles. If it doesn't support bundles you need to
  send every OscMessage with a separate call.

34 Sending OSC

# **Common pitfalls**

- If an OSCConnection is connected the port of the connection is in use, so no other OSC connection can
  use this port. To prevent confusion it's always a good practice to always use different ports for every OSC

  Connection.
- If you use multiple mapping files on an OSCConnection are sure that the address spaces don't overlap. Otherwise only the mapping values of the last mapping file that is parsed will be used for remapping.
- The OSC message appears in the trace text field but my game objects don't receive a message:
- Are you in learning mode?
  - Is the OSCConnection paused?
  - Check your port at the GameObject component.
- When you use the gyro data from TouchOSC other OSC controlled objects that listen on the same port can begin to react sluggish. It's best to use a separate device for the gyro and use another device on another port for the other GameObjects.
- Depending on your network topology you will have a latency when you use your mobile device to send/receive OSC data. To get the best performance we recommend setup an Ad-Hoc Network to get the lowest latency for best user experience. See the Links section for further information.

36 Common pitfalls

# **Known Issues**

- Only float/int data types are mappable
- Mapping files .assets cause issues when importing in a project with other Unity version from the version of creation. Please read the 'Read.Me.First!.txt' file in the 'Mapping Files' folder.

38 Known Issues

# **History**

#### Version 1.8 - 2016.12.22

- · uGUI elements to send OSC data
  - Button, Slider, Toggle
- UnityEvent<OSCMessage> Relay component
  - Wire scripts together without some additional programming
- · UniOSCReceiver uses now a pool of UniOSCEventArgs to avoid garbage collection
- · Documentation update

#### Version 1.7 - 2015.09.01

- · Multicast & Broadcast support
  - In the OSCConnection component you specify now the transmission type (Unicast, Multicast or Broadcast)
- Improved IP address validation
  - The OSCConnection inspector gives visual feedback if a chosen IP address is not valid. At runtime you
    get error messages in the console that makes debugging easy.
- · OSCSharp.dll update
- · Documentation update

#### Version 1.6 - 2015.04.29

- · Sending OSC Bundle support
  - A OSC Bundle encapsulates several OSC messages into one package to reduce network traffic overhead
  - You can always change between the old Message mode (default) and the Bundle mode
- OSCEventArgs has now the Packet property (OscPacket) instead of a Message property for supporting Osc
   Messages and OscBundles. If you have legacy code where you access the message of a UniOSCEventArgs
   object you have to change it this way: OscMessage msg = ((OscMessage)my UniOSCEventArgsObj.Packet);

40 History

- · Changing a property of a Dispatcher/EventTarget (from inspector or via code) now works transparently.
  - No need for manually re-enable your component/class (auto-reconfiguration).
- · AppendData is much more flexible
  - You don't have to enable your dispatcher/eventTarget before add some data.
  - Data is now persistent. No need to reassign your data when your component is disabled once.
- · AppendData works in Message and in Bundle mode almost the same way
  - Message mode: AppendData(myDataType);
  - Bundle mode: AppendData( myOSCMessage);
- · New demo classes
  - MultiAddressSender to show how to send multiple OSC messages with one script (several individual messages or one bundle)
  - MultiConnectionSender to show how to send one message or bundle via several connections with one script.
- · Flux Timeline Editor support
  - You can now sent OSC messages at points in time with the Flux Timeline editor http://u3d.← as/content/nuno-afonso/flux
- · Cleanup folder structure
  - All code that relies on external assets are now under UniOSC/scripts/External
  - Some Editor classes are rearranged into new folders
- · Documentation update

#### Version 1.5 - 2015.02.27

- · Unity 5 ready
- Added Editor Mode
  - You have to enable the editor mode now explicit to route your OSC data to the Components.
- · Changed the Component Inspector for Dispatchers and Receivers
  - The base Inspectors are now drawing the DefaultInspector.
  - You can now create your own scripts based on the UniOSCEventTarget & UniOSCEventDispatcher and all public properties are displayed right out of the box. (You don't need to write a custom inspector any more to show your own public properties)
- · Added a Mode option at UniOSCMoveGameObject.
  - You have now a Screen mode (like before) and a Relative Mode (additive movement that is not bound to the camera rect)
- Added a UniOSCTransformSender component for sending the transform data (position & rotation) of a GameObjects continuously

- Class based versions of OSCEventTarget and OSCDispatcher. You can now handle OSC messages in classes that don't derive from MonoBehaviour. This makes it possible to work only in code and in editors.
- · Created a demo editor to show the new class based feature to use in Unity Editors.
- Created a demo scene with class based sending and receiving.
- Fixed a bug with the explicit connection mode (OSC data of OSCEventDispatchers was always reset when a status changed event was fired from a OSCConnection)
- · Added a ClearData method to the OSCEventDispatcher class so you can clear the OSC data.
- Added an OSCMessageReceived event to the OSCEventTarget classes. This event is additionally fired when the OnOSCMessageReceived method is called.
- · Documentation update

#### Version 1.3 - 2014.11.07

- Added Explicit Connection mode for OSCEventTargets and OSCEventDispatchers.
- · UniOSCGUI updated: You can now change the port and IP-Address in the GUI at runtime for a flexible setup.
- Mobile Example scene updated with new UniOSCGUI and added several components that use the Explicit Connection.
- Added the JSBridgeDemo.unitypackage for showing how to send data to a JavaScript class.
- · Documentation update

#### Version 1.2 - 2014.07.02

- UniOSCEventDispatcher can now send more than only one float value as data. You can add as much data as
  you want as long as the data type is supported by the OSC protocol (Int32,Int64,Single,Double,String,Byte[],Osc
  TimeTag,Char,Color,Boolean)
- · Added a UniOSCEventDispatcherImplementation class as a blueprint for OSC sending components.
- · Added External InputDevice scripts (Third party Assets need to be installed to work)
  - Send OSC data with the SpacNavigator Controller (Asset from Patrik Hogenboom): https←://www.assetstore.unity3d.com/en/#!/content/9774
  - Send OSC data with Razor Hydra Controller from Sixsense Studios: https://www.← assetstore.unity3d.com/en/#!/content/7953
- Unity 4.5 Bug fixed (Tracing of OSC messages causes an exception when there were more than 15000 chars in the TextField. Tracing TextField now displays maximal 8192 chars.
- · Documentation update

#### Version 1.1 - 2014.05.29

- · Session file support
  - Store the latest data that comes with a OSC message

42 History

- Send all data to update the GUI state of an external app like TouchOSC
- Change in OSCsharp lib: made the TypeTag property of a OSC message accessible
- Type of the data could now be verified with the Typetag string. No GetType() necessary if you have performance problems
- receiveAllAddresses property is now accessible via the component inspector
- UniOSCEventArgs could now be filtered by Group, AddressRoot or AddressIndex if the OSC address matches a specific pattern
- · Documentation update

Version 1.0 - 2014.05.13

· Initial release

## **Credits**

**UniOSC** uses a modified version of **OSCsharp** written by Valentin Simonov based on Bespoke Open Sound Control Library by Paul Varolik

- Original version https://github.com/valyard/OSCsharp
- Modified version: https://github.com/sloopidoopi/OSCsharp
- GuiScaler class from: https://gist.github.com/darktable/2018687
- TouchOSC by Hexler: http://hexler.net/software/touchosc

44 Credits

## Links

- OSC: http://opensoundcontrol.org/spec-1\_0
- TouchOSC control reference: http://hexler.net/docs/touchosc-controls-reference
- Establishing a Computer-to-Computer (Ad-Hoc) network without a router

 $\label{lem:microsoft.com/en-us/windows/set-computer-to-computer-adhoc-network \#1 GeV indows = 100 GeV indo$ 

#### OSX:

http://support.apple.com/kb/PH10666

### Multicast-addresses:

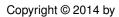
 $\verb|http://www.iana.org/assignments/multicast-addresses/multicast-addresses. \leftarrow \verb|xhtml||$ 

46 Links

# **Support**

If you need support or have any question/suggestions please contact us.

- Website: http://uniosc.monoflow.org
- Email: info@monoflow.org
- Unity Forum: http://forum.unity3d.com/threads/247204





48 **Support** 

# **Chapter 15**

# **Namespace Documentation**

# 15.1 UniOSC Namespace Reference

#### Classes

· class UniOSC\_uGUI\_Button

Dispatcher button that forces a OSCConnection to send a OSC Message.

- · class UniOSC\_uGUI\_Slider
- class UniOSC\_uGUI\_Toggle
- · class UniOSCAbstractItem

Uni OSC abstract item is the base class for Mapping/Session Items.

• class UniOSCChangeColor

Change the color of the material from the GameObjects.

- · class UniOSCChangeColorEditor
- class UniOSCConnection

This class is responsible for all the network related tasks.

- · class UniOSCConnectionEditor
- · class UniOSCEditor

Editor for the administration of OSCconnections, mapping files.

· class UniOSCEditorConfigObj

UniOSC editor config object.

class UniOSCEventArgs

A wrapper to a OscMessage class to also store the port and have a quick way to access the message address.

class UniOSCEventDispatcher

This is the abstract class you should subclass from when you want to sent OSC data

• class UniOSCEventDispatcherButton

Dispatcher button that forces a OSCConnection to send a OSC Message.

class UniOSCEventDispatcherButtonEditor

Uni OSC event dispatcher button editor.

- · class UniOSCEventDispatcherCB
- class UniOSCEventDispatcherCBImplementation

This class is a blueprint for your own implementations of the abstract class UniOSCEventDispatcherCodeBased Dispatcher forces a OSCConnection to send a OSC Message.

· class UniOSCEventDispatcherCBRawImplementation

This class is a blueprint for your own implementations of the abstract class UniOSCEventDispatcherCodeBased Dispatcher forces a OSCConnection to send a OSC Message.

class UniOSCEventDispatcherCBSimple

This class is a blueprint for your own implementations of the abstract class UniOSCEventDispatcherCodeBased Dispatcher forces a OSCConnection to send a OSC Message.

- class UniOSCEventDispatcherEditor
- class UniOSCEventDispatcherImplementation

This class is a blueprint for your own implementations of the abstract class UniOSCEventDispatcher Dispatcher forces a OSCConnection to send a OSC Message.

· class UniOSCEventDispatcherMultiAddressSender

This class is a blueprint for your own implementations of the abstract class UniOSCEventDispatcher Dispatcher forces a OSCConnection to send a OSC Message.

· class UniOSCEventDispatcherMultiConnectionSender

This class is a blueprint for your own implementations of the abstract class UniOSCEventDispatcher Dispatcher forces a OSCConnection to send a OSC Message.

class UniOSCEventDispatcherSlider

Dispatcher toggle that forces a OSCConnection to send a OSC Message.

class UniOSCEventDispatcherToggle

Dispatcher toggle that forces a OSCConnection to send a OSC Message.

· class UniOSCEventTarget

UniOSC event target.

class UniOSCEventTargetCB

UniOSC event target for class based scripting.

class UniOSCEventTargetCBImplementation

This class is a blueprint for your own implementations of the abstract class OSCDispatcherTargetCB //Don't forget the base callings !!!! The OnOSCMessageReceived method is where you should parse the OSC data

- class UniOSCEventTargetEditor
- class UniOSCEventTargetImplementation

This class is a blueprint for your own implementations of the abstract class OSCDispatcherTarget //Don't forget the base callings !!!! The OnOSCMessageReceived method is where you should parse the OSC data

- · class UniOSCFileObj
- class UniOSCGUI

GUI class that mimics the UniOSC editor interface for runtime use You can start/stop the OSCConnections and trace OSC data messages

class UniOSCMappingFileObj

Mapping file class .

- · class UniOSCMappingFileObjEditor
- · class UniOSCMappingItem

Uni OSC mapping item.

- · class UniOSCMappingItemEditor
- · class UniOSCMoveGameObject

Moves a GameObject in normalized coordinates (ScreenToWorldPoint)

• class UniOSCReceiver

Uni OSC receiver.

class UniOSCRotateGameObject

Rotates (localRotation) the hosting game object.

- class UniOSCRotateGameObjectEditor
- · class UniOSCRotateGameObjectTouchOSCGyro
- · class UniOSCScaleGameObject

Uni OSC scale game object.

· class UniOSCScriptTestEditor

Editor for the administration of OSCconnections, mapping files.

class UniOSCSessionFileObj

OSC Session file class .

- · class UniOSCSessionFileObjEditor
- · class UniOSCSessionItem

Uni OSC mapping item.

- class UniOSCSessionItemEditor
- class UniOSCToggle

With this class you can toggle most of the Unity Components on/off The data of the OSC message should be only 0(off) or 1(on)

- class UniOSCToggleEditor
- class UniOSCTransformSender
- class UniOSCTransmitter
- class UniOSCUnityEvent\_Receiver

Demo class to show how you can use the UnityEvent system.

- class UniOSCUnityEventRelay
- class UniOSCUnityEventRelayEditor

# 15.2 UnityEngine Namespace Reference

# Classes

class GUIScaler

Usage:

# **Chapter 16**

# **Class Documentation**

# 16.1 UnityEngine.GUIScaler Class Reference

Usage:

#### **Static Public Member Functions**

• static void Initialize (float scale)

Initialize the gui scaler with a specific scale.

static void Initialize ()

Initialize the gui scaler using the detected screen dpi.

• static void Begin ()

All gui elements drawn after this will be scaled.

• static void End ()

Restores the default gui scale.

# **Properties**

• static Vector3 GuiScale [get]

# 16.1.1 Detailed Description

# Usage:

(optional) Call GUIScaler.Initialize() in Start(), Awake() or OnEnable() (only needed once) Call GUIScaler.Begin() at the top of your OnGUI() methods Call GUIScaler.End() at the bottom of your OnGUI() methods

WARNING: If you don't match Begin() and End() strange things will happen.

# 16.1.2 Member Function Documentation

16.1.2.1 static void UnityEngine.GUIScaler.Begin ( ) [static]

All gui elements drawn after this will be scaled.

16.1.2.2 static void UnityEngine.GUIScaler.End() [static]

Restores the default gui scale.

All gui elements drawn after this will not be scaled.

16.1.2.3 static void UnityEngine.GUIScaler.Initialize (float scale) [static]

Initialize the gui scaler with a specific scale.

**16.1.2.4** static void UnityEngine.GUIScaler.Initialize() [static]

Initialize the gui scaler using the detected screen dpi.

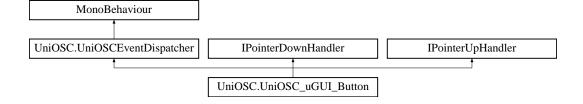
# 16.1.3 Property Documentation

**16.1.3.1 Vector3 UnityEngine.GUIScaler.GuiScale** [static], [get]

# 16.2 UniOSC.UniOSC uGUI Button Class Reference

Dispatcher button that forces a OSCConnection to send a OSC Message.

Inheritance diagram for UniOSC.UniOSC\_uGUI\_Button:



# **Public Types**

• enum ButtonMode { ButtonMode.Down, ButtonMode.Up, ButtonMode.UpAndDown }

#### **Public Member Functions**

- override void Awake ()
- override void OnEnable ()
- override void OnDisable ()
- void SendOSCMessage (object data)
- void OnPointerDown (PointerEventData eventData)
- void OnPointerUp (PointerEventData eventData)

#### **Public Attributes**

- float OSCDataValueDown = 1
- float OSCDataValueUp = 1
- ButtonMode buttonMode = ButtonMode.Down

#### **Additional Inherited Members**

# 16.2.1 Detailed Description

Dispatcher button that forces a OSCConnection to send a OSC Message.

Two separate states: Down and Up

#### 16.2.2 Member Enumeration Documentation

```
16.2.2.1 enum UniOSC.UniOSC_uGUI_Button.ButtonMode [strong]
```

**Enumerator** 

Down

Up

**UpAndDown** 

#### 16.2.3 Member Function Documentation

```
16.2.3.1 override void UniOSC.UniOSC_uGUI_Button.Awake( ) [virtual]
```

Reimplemented from UniOSC.UniOSCEventDispatcher.

```
\textbf{16.2.3.2} \quad \textbf{override void UniOSC.UniOSC\_uGUI\_Button.OnDisable ( )} \quad [\texttt{virtual}]
```

Reimplemented from UniOSC.UniOSCEventDispatcher.

```
16.2.3.3 override void UniOSC_UniOSC_uGUI_Button.OnEnable() [virtual]
```

Reimplemented from UniOSC.UniOSCEventDispatcher.

```
16.2.3.4 void UniOSC.UniOSC_uGUI_Button.OnPointerDown ( PointerEventData eventData )
```

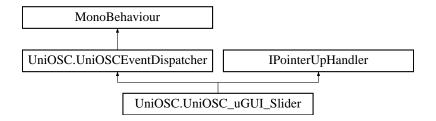
- 16.2.3.5 void UniOSC.UniOSC\_uGUI\_Button.OnPointerUp ( PointerEventData eventData )
- 16.2.3.6 void UniOSC.UniOSC\_uGUI\_Button.SendOSCMessage ( object data )

#### 16.2.4 Member Data Documentation

- 16.2.4.1 ButtonMode UniOSC.UniOSC\_uGUI\_Button.buttonMode = ButtonMode.Down
- 16.2.4.2 float UniOSC.UniOSC\_uGUI\_Button.OSCDataValueDown = 1
- 16.2.4.3 float UniOSC.UniOSC\_uGUI\_Button.OSCDataValueUp = 1

# 16.3 UniOSC.UniOSC\_uGUI\_Slider Class Reference

Inheritance diagram for UniOSC.UniOSC\_uGUI\_Slider:



# **Public Member Functions**

- override void Awake ()
- override void OnEnable ()
- override void OnDisable ()
- void SendOSCMessage (float data)
- void OnPointerUp (PointerEventData eventData)

# **Protected Attributes**

· Slider \_slider

# **Additional Inherited Members**

# 16.3.1 Member Function Documentation

```
16.3.1.1 override void UniOSC.UniOSC_uGUI_Slider.Awake( ) [virtual]
```

 $Reimplemented\ from\ UniOSC. UniOSC Event Dispatcher.$ 

```
16.3.1.2 override void UniOSC.UniOSC_uGUI_Slider.OnDisable ( ) [virtual]
```

Reimplemented from UniOSC.UniOSCEventDispatcher.

```
16.3.1.3 override void UniOSC.UniOSC_uGUI_Slider.OnEnable() [virtual]
```

Reimplemented from UniOSC.UniOSCEventDispatcher.

```
16.3.1.4 void UniOSC.UniOSC_uGUI_Slider.OnPointerUp ( PointerEventData eventData )
```

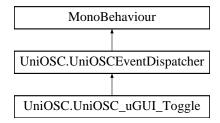
16.3.1.5 void UniOSC.UniOSC\_uGUI\_Slider.SendOSCMessage (float data)

#### 16.3.2 Member Data Documentation

16.3.2.1 Slider UniOSC.UniOSC\_uGUI\_Slider.\_slider [protected]

# 16.4 UniOSC.UniOSC\_uGUI\_Toggle Class Reference

Inheritance diagram for UniOSC.UniOSC\_uGUI\_Toggle:



#### **Public Member Functions**

- override void Awake ()
- override void OnEnable ()
- override void OnDisable ()
- void SendOSCMessage (object data)

#### **Public Attributes**

- float OSCDataValueON = 1
- float OSCDataValueOFF = 0

#### **Protected Attributes**

• Toggle \_toggle

#### **Additional Inherited Members**

# 16.4.1 Member Function Documentation

```
16.4.1.1 override void UniOSC.UniOSC_uGUI_Toggle.Awake( ) [virtual]
```

Reimplemented from UniOSC.UniOSCEventDispatcher.

```
16.4.1.2 override void UniOSC.UniOSC_uGUI_Toggle.OnDisable( ) [virtual]
```

Reimplemented from UniOSC.UniOSCEventDispatcher.

```
16.4.1.3 override void UniOSC.UniOSC_uGUI_Toggle.OnEnable() [virtual]
```

Reimplemented from UniOSC.UniOSCEventDispatcher.

```
16.4.1.4 void UniOSC.UniOSC_uGUI_Toggle.SendOSCMessage ( object data )
```

# 16.4.2 Member Data Documentation

- **16.4.2.1 Toggle UniOSC.UniOSC\_uGUI\_Toggle.\_toggle** [protected]
- 16.4.2.2 float UniOSC.UniOSC\_uGUI\_Toggle.OSCDataValueOFF = 0
- 16.4.2.3 float UniOSC.UniOSC\_uGUI\_Toggle.OSCDataValueON = 1

# 16.5 UniOSC.UniOSCAbstractItem Class Reference

Uni OSC abstract item is the base class for Mapping/Session Items.

#### **Public Attributes**

- · bool isLearning
- string address = ""

# 16.5.1 Detailed Description

Uni OSC abstract item is the base class for Mapping/Session Items.

# 16.5.2 Member Data Documentation

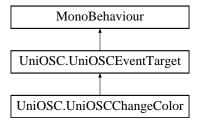
- 16.5.2.1 string UniOSC.UniOSCAbstractItem.address = ""
- 16.5.2.2 bool UniOSC.UniOSCAbstractItem.isLearning

# 16.6 UniOSCAutoRun Class Reference

# 16.7 UniOSC.UniOSCChangeColor Class Reference

Change the color of the material from the GameObjects.

 $Inheritance\ diagram\ for\ UniOSC. UniOSC Change Color:$ 



#### **Public Member Functions**

- override void OnEnable ()
   Enable this component and reinitialize.
- override void OnOSCMessageReceived (UniOSCEventArgs args)

You should override this method in a subclass to handle the OSC data.

# **Public Attributes**

- string R\_Address
- · string G\_Address
- string B\_Address
- · bool sharedMaterial

#### **Additional Inherited Members**

# 16.7.1 Detailed Description

Change the color of the material from the GameObjects.

Option to choose between Material and SharedMaterial

#### 16.7.2 Member Function Documentation

16.7.2.1 override void UniOSC.UniOSCChangeColor.OnEnable() [virtual]

Enable this component and reinitialize.

If a property of the component is changed via the inspector we force a OnEnable to update the status of the component. In general the component disconnects from all OSCConnections and try to find a new OSCConnection to connect to with a matching port. If you change properties via code you should call this explicit.

Reimplemented from UniOSC.UniOSCEventTarget.

16.7.2.2 override void UniOSC.UniOSCChangeColor.OnOSCMessageReceived ( UniOSCEventArgs args ) [virtual]

You should override this method in a subclass to handle the OSC data.

#### **Parameters**

|--|

Implements UniOSC.UniOSCEventTarget.

#### 16.7.3 Member Data Documentation

16.7.3.1 string UniOSC.UniOSCChangeColor.B\_Address

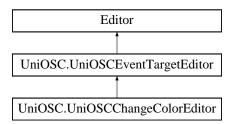
16.7.3.2 string UniOSC.UniOSCChangeColor.G\_Address

16.7.3.3 string UniOSC.UniOSCChangeColor.R\_Address

16.7.3.4 bool UniOSC.UniOSCChangeColor.sharedMaterial

# 16.8 UniOSC.UniOSCChangeColorEditor Class Reference

 $Inheritance\ diagram\ for\ UniOSC. UniOSC Change Color Editor:$ 



#### **Public Member Functions**

• override void OnInspectorGUI ()

#### **Additional Inherited Members**

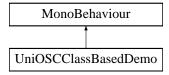
#### 16.8.1 Member Function Documentation

16.8.1.1 override void UniOSC.UniOSCChangeColorEditor.OnInspectorGUI ( )

# 16.9 UniOSCClassBasedDemo Class Reference

Demo to show how to use the class based scripts.

Inheritance diagram for UniOSCClassBasedDemo:



# **Public Attributes**

- string OSCAddress
- int OSCPort
- UniOSCConnection OSCConnection
- string OSCAddressOUT
- string OSCIPAddressOUT = "192.168.178.32"
- int OSCPortOUT
- UniOSCConnection OSCConnectionOUT
- Light Light1
- Light Light2
- Light Light3
- bool sendData
- float sendInterval =1000

# 16.9.1 Detailed Description

Demo to show how to use the class based scripts.

# 16.9.2 Member Data Documentation

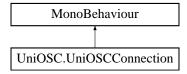
- 16.9.2.1 Light UniOSCClassBasedDemo.Light1
- 16.9.2.2 Light UniOSCClassBasedDemo.Light2
- 16.9.2.3 Light UniOSCClassBasedDemo.Light3
- 16.9.2.4 string UniOSCClassBasedDemo.OSCAddress
- 16.9.2.5 string UniOSCClassBasedDemo.OSCAddressOUT

- 16.9.2.6 UniOSCConnection UniOSCClassBasedDemo.OSCConnection
  16.9.2.7 UniOSCConnection UniOSCClassBasedDemo.OSCConnectionOUT
  16.9.2.8 string UniOSCClassBasedDemo.OSCIPAddressOUT = "192.168.178.32"
  16.9.2.9 int UniOSCClassBasedDemo.OSCPort
  16.9.2.10 int UniOSCClassBasedDemo.OSCPortOUT
  16.9.2.11 bool UniOSCClassBasedDemo.sendData
- 16.9.2.12 float UniOSCClassBasedDemo.sendInterval =1000

# 16.10 UniOSC.UniOSCConnection Class Reference

This class is responsible for all the network related tasks.

Inheritance diagram for UniOSC.UniOSCConnection:



# **Public Member Functions**

- void ValidateOscInIPAddress ()
- void ValidateOscOutIPAddress ()
- void Awake ()
- IEnumerator Start ()
- void ConnectOSC ()

creates internally an UniOSCReciver which handles all the Network setup.

• void DisconnectOSC ()

Disconnects and destroys the OSCConnection.

- void Force\_SetupChanged\_IN ()
- void ConnectOSCOut ()

Connects the OSC out.

void DisconnectOSCOut ()

Disconnects and release the OSC out connection.

- void Force\_SetupChanged\_OUT ()
- void RenderGUI ()

Renders the GUI of a OSCConnection in the GameView.

void SendOSCMessage (object sender, UniOSCEventArgs args)

Sends the OSC message.

· void SendTestMessage ()

Sends the test message.

void SendSessionData ()

Sends the session data.

#### **Static Public Member Functions**

· static void Init ()

Init this instance.

• static void Update\_AvailableOSCSettings ()

Updates the available ports.

#### **Public Attributes**

- bool autoConnectOSCIn = true
- bool oscOut = true
- bool autoConnectOSCOut = true
- bool foldoutOSCOut = true
- bool foldoutOSCIn = true
- · bool redrawFlag
- bool dispatchOSC = true
- bool dispatchOSCOut = true
- List< UniOSCMappingFileObj > oscMappingFileObjList = new List<UniOSCMappingFileObj>()
- List< UniOSCSessionFileObj > oscSessionFileObjList = new List< UniOSCSessionFileObj>()
- bool SendSessionDataOnStart

#### **Static Public Attributes**

- static string localIPAddress = null
- static bool isOSCLearning = false
- static bool isEditorEnabled = false

# **Properties**

- static List< UniOSCConnection > Instances [get]
- static List < int > Available INPorts [get]
- static List< int > AvailableOUTPorts [get]
- static List< string > AvailableOUTIPAddresses [get]
- OSCsharp.Net.TransmissionType transmissionTypeIn [get, set]
- OSCsharp.Net.TransmissionType transmissionTypeOut [get, set]
- int oscPort [get, set]
- string oscInIPAddress [get, set]
- IPAddress oscInIPAddressAsIPAddress [get]
- bool has ValidOscIPAddress [get]
- string oscOutlPAddress [get, set]
- IPAddress oscOutIPAddressAsIPAddress [get]
- bool has ValidOscOutlPAddress [get]
- int oscOutPort [get, set]
- bool isConnected [get]
- bool isConnectedOut [get]
- bool hasOSCMappingFileAttached [get]
- bool hasOSCSessionFileAttached [get]

#### **Events**

- EventHandler< UniOSCEventArgs > OSCMessageReceivedRaw
- EventHandler < UniOSCEventArgs > OSCMessageReceived
- EventHandler < UniOSCEventArgs > OSCMessageSend
- Action < UniOSCConnection > ConnectionInStatusChange
- Action < UniOSCConnection > ConnectionOutStatusChange

# 16.10.1 Detailed Description

This class is responsible for all the network related tasks.

It is a wrapper for OSCsharp and handles the event system for the Unity components.

```
16.10.2 Member Function Documentation
```

```
16.10.2.1 void UniOSC.UniOSCConnection.Awake ( )
```

16.10.2.2 void UniOSC.UniOSCConnection.ConnectOSC ( )

creates internally an UniOSCReciver which handles all the Network setup.

Called from GUI/Inspector

```
16.10.2.3 void UniOSC.UniOSCConnection.ConnectOSCOut ( )
```

Connects the OSC out.

```
16.10.2.4 void UniOSC.UniOSCConnection.DisconnectOSC ( )
```

Disconnects and destroys the OSCConnection.

```
16.10.2.5 void UniOSC.UniOSCConnection.DisconnectOSCOut ( )
```

Disconnects and release the OSC out connection.

```
16.10.2.6 void UniOSC.UniOSCConnection.Force_SetupChanged_IN ( )
```

16.10.2.7 void UniOSC.UniOSCConnection.Force\_SetupChanged\_OUT()

16.10.2.8 static void UniOSC.UniOSCConnection.Init() [static]

Init this instance.

Is called from Awake and OSCAutoRun

```
16.10.2.9 void UniOSC.UniOSCConnection.RenderGUI ( )
```

Renders the GUI of a OSCConnection in the GameView.

This is different from the rendering in the editor/inspector

16.10.2.10 void UniOSC.UniOSCConnection.SendOSCMessage ( object sender, UniOSCEventArgs args )

Sends the OSC message.

#### **Parameters**

sender	Sender.
args	UniOSCEventArgs

16.10.2.11 void UniOSC.UniOSCConnection.SendSessionData ( )

```
Sends the session data.
This is useful for updating the GUI of TouOSC for example with the last data values from incomming OSC messages.
You have to add a OSC Session file to the OSCConnection to use this feature.
16.10.2.12 void UniOSC.UniOSCConnection.SendTestMessage ( )
Sends the test message.
Only for testing the OSC Out connection.
16.10.2.13 IEnumerator UniOSC.UniOSCConnection.Start ( )
16.10.2.14 static void UniOSC.UniOSCConnection.Update_AvailableOSCSettings() [static]
Updates the available ports.
Should be called when a OSCConnection changes the Port.
16.10.2.15 void UniOSC.UniOSCConnection.ValidateOscInIPAddress ( )
16.10.2.16 void UniOSC.UniOSCConnection.ValidateOscOutlPAddress ( )
16.10.3 Member Data Documentation
16.10.3.1 bool UniOSC.UniOSCConnection.autoConnectOSCIn = true
16.10.3.2 bool UniOSC.UniOSCConnection.autoConnectOSCOut = true
16.10.3.3 bool UniOSC.UniOSCConnection.dispatchOSC = true
16.10.3.4 bool UniOSC.UniOSCConnection.dispatchOSCOut = true
16.10.3.5 bool UniOSC.UniOSCConnection.foldoutOSCIn = true
16.10.3.6 bool UniOSC.UniOSCConnection.foldoutOSCOut = true
16.10.3.7 bool UniOSC.UniOSCConnection.isEditorEnabled = false [static]
16.10.3.8 bool UniOSC.UniOSCConnection.isOSCLearning = false [static]
16.10.3.9 string UniOSC.UniOSCConnection.locallPAddress = null [static]
16.10.3.10 List<UniOSCMappingFileObj> UniOSC.UniOSCConnection.oscMappingFileObjList = new
          List<UniOSCMappingFileObj>()
16.10.3.11 bool UniOSC.UniOSCConnection.oscOut = true
16.10.3.12 List<UniOSCSessionFileObj> UniOSC.UniOSCConnection.oscSessionFileObjList = new
          List<UniOSCSessionFileObj>()
16.10.3.13 bool UniOSC.UniOSCConnection.redrawFlag
16.10.3.14 bool UniOSC.UniOSCConnection.SendSessionDataOnStart
```

# 16.10.4 Property Documentation **16.10.4.1 List**<int> UniOSC.UniOSCConnection.AvailableINPorts [static], [get] **16.10.4.2** List<string> UniOSC.UniOSCConnection.AvailableOUTIPAddresses [static], [qet] 16.10.4.3 List<int> UniOSC.UniOSCConnection.AvailableOUTPorts [static], [get] 16.10.4.4 bool UniOSC.UniOSCConnection.hasOSCMappingFileAttached [get] 16.10.4.5 bool UniOSC.UniOSCConnection.hasOSCSessionFileAttached [get] $\textbf{16.10.4.6} \quad \textbf{bool UniOSC.UniOSCConnection.hasValidOsclPAddress} \quad [\texttt{get}]$ 16.10.4.7 bool UniOSC.UniOSCConnection.hasValidOscOutlPAddress [get] **16.10.4.8** List<UniOSCConnection> UniOSC.UniOSCConnection.Instances [static], [get] 16.10.4.9 bool UniOSC.UniOSCConnection.isConnected [get] 16.10.4.10 bool UniOSC.UniOSCConnection.isConnectedOut [get] **16.10.4.11 string UniOSC.UniOSCConnection.oscInIPAddress** [get], [set] 16.10.4.12 IPAddress UniOSC.UniOSCConnection.oscInIPAddressAsIPAddress [get] **16.10.4.13** string UniOSC.UniOSCConnection.oscOutlPAddress [get], [set] 16.10.4.14 IPAddress UniOSC.UniOSCConnection.oscOutlPAddressAsIPAddress [get] **16.10.4.15** int UniOSC.UniOSCConnection.oscOutPort [get], [set] **16.10.4.16** int UniOSC.UniOSCConnection.oscPort [get], [set] 16.10.4.17 OSCsharp.Net.TransmissionType UniOSC.UniOSCConnection.transmissionTypeIn [get], [set] 16.10.4.18 OSCsharp.Net.TransmissionType UniOSC.UniOSCConnection.transmissionTypeOut [get], [set] 16.10.5 Event Documentation 16.10.5.1 Action < UniOSCConnection > UniOSC.UniOSCConnection.ConnectionInStatusChange $16.10.5.2 \quad Action < UniOSCConnection > UniOSC. UniOSCConnection. Connection OutStatus Change$ 16.10.5.3 EventHandler < UniOSCEventArgs > UniOSC.UniOSCConnection.OSCMessageReceived 16.10.5.4 EventHandler < UniOSCEventArgs > UniOSC.UniOSCConnection.OSCMessageReceivedRaw 16.10.5.5 EventHandler < UniOSCEventArgs > UniOSC.UniOSCConnection.OSCMessageSend

# 16.11 UniOSC.UniOSCConnectionEditor Class Reference

Inheritance diagram for UniOSC.UniOSCConnectionEditor:



#### **Public Member Functions**

• override void OnInspectorGUI ()

#### **Static Public Member Functions**

- static void LoadTextures ()
- · static void Show (string label, SerializedProperty list)
- static void ShowOSCReciverStatus (UniOSCConnection oscConnection)

#### **Static Public Attributes**

- static Texture2D texTestMessage
- static Texture2D texON
- static Texture2D texOFF

#### **Protected Member Functions**

· void ForceUpdate ()

#### **Protected Attributes**

- string[] \_TransmissionTypes
- int \_TransmissionTypeIndex = 0
- string \_oldOSCMulticastIPAddress
- string \_currOSCMulticastIPAddress
- bool \_isValidOSCMulticastIPAddress
- string[] \_TransmissionTypesOut
- int \_TransmissionTypeIndexOut = 0
- string oldOSCMulticastIPAddressOut
- string \_currOSCMulticastIPAddressOut
- bool \_isValidOSCMulticastIPAddressOut

# 16.11.1 Member Function Documentation

```
16.11.1.1 void UniOSC.UniOSCConnectionEditor.ForceUpdate() [protected]

16.11.1.2 static void UniOSC.UniOSCConnectionEditor.LoadTextures() [static]

16.11.1.3 override void UniOSC.UniOSCConnectionEditor.OnInspectorGUI()

16.11.1.4 static void UniOSC.UniOSCConnectionEditor.Show(string label, SerializedProperty list) [static]

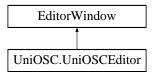
16.11.1.5 static void UniOSC.UniOSCConnectionEditor.ShowOSCReciverStatus(UniOSCConnection oscConnection) [static]
```

# 16.11.2 Member Data Documentation

16.11.2.1 string UniOSC.UniOSCConnectionEditorcurrOSCMulticastIPAddress [protected]
16.11.2.2 string UniOSC.UniOSCConnectionEditorcurrOSCMulticastIPAddressOut [protected]
16.11.2.3 bool UniOSC.UniOSCConnectionEditor_isValidOSCMulticastlPAddress [protected]
16.11.2.4 bool UniOSC.UniOSCConnectionEditorisValidOSCMulticastlPAddressOut [protected]
16.11.2.5 string UniOSC.UniOSCConnectionEditoroldOSCMulticastIPAddress [protected]
16.11.2.6 string UniOSC.UniOSCConnectionEditoroldOSCMulticastlPAddressOut [protected]
16.11.2.7 int UniOSC.UniOSCConnectionEditorTransmissionTypeIndex = 0 [protected]
16.11.2.8 int UniOSC.UniOSCConnectionEditorTransmissionTypeIndexOut = 0 [protected]
16.11.2.9 string [] UniOSC.UniOSCConnectionEditorTransmissionTypes [protected]
16.11.2.10 string[]UniOSC.UniOSCConnectionEditorTransmissionTypesOut [protected]
16.11.2.11 Texture2D UniOSC.UniOSCConnectionEditor.texOFF [static]
16.11.2.12 Texture2D UniOSC.UniOSCConnectionEditor.texON [static]
16.11.2.13 Texture2D UniOSC.UniOSCConnectionEditor.texTestMessage [static]

# 16.12 UniOSC.UniOSCEditor Class Reference

Editor for the administration of OSCconnections, mapping files. Inheritance diagram for UniOSC.UniOSCEditor:



# **Public Member Functions**

- void OnEnable ()
- void OnDisable ()
- void OnHierarchyChange ()

# **Static Public Member Functions**

- static void Init ()
  - Init this instance.
- static void OSCLearning (bool flag)

When entering the OSC learning mode the editor connects all mapping files to the event system so the OSC address for a mapping item can be recorded.

#### **Public Attributes**

• const float TRACEWIDTH = 250f

# **Properties**

- static bool isOSCLearning [get]
- static UniOSCEditor Instance [get]
- static bool IsOpen [get]

#### **Events**

• static EventHandler< UniOSCEventArgs > OSCMessageReceived

# 16.12.1 Detailed Description

Editor for the administration of OSCconnections, mapping files.

You can also trace the OSC data flow .

#### 16.12.2 Member Function Documentation

```
16.12.2.1 static void UniOSC.UniOSCEditor.Init() [static]
```

Init this instance.

Called everytime the editor is opened or when we have to update the editor (After creating a OSCConnection, hit the 'Refresh' button)

```
16.12.2.2 void UniOSC.UniOSCEditor.OnDisable ( )

16.12.2.3 void UniOSC.UniOSCEditor.OnEnable ( )

16.12.2.4 void UniOSC.UniOSCEditor.OnHierarchyChange ( )

16.12.2.5 static void UniOSC.UniOSCEditor.OSCLearning ( bool flag ) [static]
```

When entering the OSC learning mode the editor connects all mapping files to the event system so the OSC address for a mapping item can be recorded.

#### **Parameters**

```
flag If set to true flag.
```

# 16.12.3 Member Data Documentation

16.12.3.1 const float UniOSC.UniOSCEditor.TRACEWIDTH = 250f

# 16.12.4 Property Documentation

**16.12.4.1 UniOSCEditor UniOSC.UniOSCEditor.Instance** [static], [get]

```
16.12.4.2 bool UniOSC.UniOSCEditor.IsOpen [static], [get]

16.12.4.3 bool UniOSC.UniOSCEditor.isOSCLearning [static], [get]

16.12.5 Event Documentation
```

16.12.5.1 EventHandler < UniOSCEventArgs > UniOSC.UniOSCEditor.OSCMessageReceived [static]

# 16.13 UniOSC.UniOSCEditorConfigObj Class Reference

UniOSC editor config object.

Inheritance diagram for UniOSC.UniOSCEditorConfigObj:



#### **Public Member Functions**

· void OnEnable ()

#### **Public Attributes**

- int selectedMappingFileObjIndex
- int selectedSessionFileObjIndex
- Vector2 configTraceScrollpos
- bool isOSCTracing
- bool isOSCLearning
- · bool isEditorEnabled
- bool isLastMessageTracing
- GUISkin mySkin
- GUIStyle learnStyle
- List< UniOSCMappingFileObj > OSCMappingFileObjList
- List< UniOSCSessionFileObj > OSCSessionFileObjList
- int toolbarInt = 0
- Texture2D tex\_LearnFrame
- Texture2D tex logo

# 16.13.1 Detailed Description

UniOSC editor config object.

Storage of all the UniOSCEditor settings

# 16.13.2 Member Function Documentation

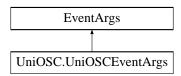
16.13.2.1 void UniOSC.UniOSCEditorConfigObj.OnEnable ( )

#### 16.13.3 Member Data Documentation

16.13.3.1	Vector2 UniOSC.UniOSCEditorConfigObj.configTraceScrollpos
16.13.3.2	bool UniOSC.UniOSCEditorConfigObj.isEditorEnabled
16.13.3.3	bool UniOSC.UniOSCEditorConfigObj.isLastMessageTracing
16.13.3.4	bool UniOSC.UniOSCEditorConfigObj.isOSCLearning
16.13.3.5	bool UniOSC.UniOSCEditorConfigObj.isOSCTracing
16.13.3.6	GUIStyle UniOSC.UniOSCEditorConfigObj.learnStyle
16.13.3.7	GUISkin UniOSC.UniOSCEditorConfigObj.mySkin
16.13.3.8	$List < \textbf{UniOSCMappingFileObj} > \textbf{UniOSC.UniOSCE} \\ ditor \textbf{ConfigObj.OSCMappingFileObjList}$
16.13.3.9	List < UniOSCSessionFileObj > UniOSC.UniOSCEditorConfigObj.OSCSessionFileObjList
16.13.3.10	int UniOSC.UniOSCEditorConfigObj.selectedMappingFileObjIndex
16.13.3.11	int UniOSC.UniOSCEditorConfigObj.selectedSessionFileObjIndex
16.13.3.12	Texture2D UniOSC.UniOSCEditorConfigObj.tex_LearnFrame
16.13.3.13	Texture2D UniOSC.UniOSCEditorConfigObj.tex_logo
16.13.3.14	int UniOSC.UniOSCEditorConfigObj.toolbarInt = 0

# 16.14 UniOSC.UniOSCEventArgs Class Reference

A wrapper to a OscMessage class to also store the port and have a quick way to access the message address. Inheritance diagram for UniOSC.UniOSCEventArgs:



# **Public Member Functions**

- UniOSCEventArgs (int port, OscPacket packet)
- void SetupAddressMetaData ()

If you use the UniOSCReiver pool you have to manually call this method when you need access to the AddressRoot or AddressIndex

# **Public Attributes**

string IPAddress

# **Properties**

• OscPacket Packet [get, set]

```
string Address [get, set]
int Port [get, set]
int Group [get]
string AddressRoot [get]
int AddressIndex [get]
```

# 16.14.1 Detailed Description

A wrapper to a OscMessage class to also store the port and have a quick way to access the message address.

UniOSC use this class for the internal communication

this is a paragraph

See also

UniOSC.OSCEventTarget

UniOSC.OSCEventTarget

#### 16.14.2 Constructor & Destructor Documentation

16.14.2.1 UniOSC.UniOSCEventArgs.UniOSCEventArgs ( int port, OscPacket packet )

#### 16.14.3 Member Function Documentation

16.14.3.1 void UniOSC.UniOSCEventArgs.SetupAddressMetaData ( )

If you use the UniOSCReiver pool you have to manually call this method when you need access to the AddressRoot or AddressIndex

#### 16.14.4 Member Data Documentation

16.14.4.1 string UniOSC.UniOSCEventArgs.IPAddress

# 16.14.5 Property Documentation

```
16.14.5.1 string UniOSC.UniOSCEventArgs.Address [get], [set]

16.14.5.2 int UniOSC.UniOSCEventArgs.AddressIndex [get]
```

```
16.14.5.3 string UniOSC.UniOSCEventArgs.AddressRoot [get]
```

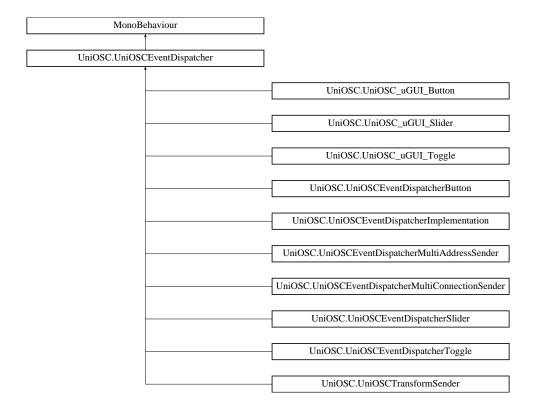
```
16.14.5.4 int UniOSC.UniOSCEventArgs.Group [get]
```

**16.14.5.5** OscPacket UniOSC.UniOSCEventArgs.Packet [get], [set]

**16.14.5.6** int UniOSC.UniOSCEventArgs.Port [get], [set]

# 16.15 UniOSC.UniOSCEventDispatcher Class Reference

This is the abstract class you should subclass from when you want to sent OSC data Inheritance diagram for UniOSC.UniOSCEventDispatcher:



#### **Public Member Functions**

- virtual void Awake ()
- · virtual void Start ()
- virtual void OnEnable ()
- void ForceSetupChange (bool resetMessage)

This method is mainly for the EventDispatcherEditor to force an update of the internal message setup

- virtual void OnDestroy ()
- virtual void OnDisable ()
- void SetBundleMode (bool \_isBundle)

Sets the bundle mode.

• virtual void SendOSCMessage ()

Sends the OSC message.

void AppendData (object \_data)

Appends the data.

- void ClearData ()
- void StartSendIntervalTimer ()
- void StopSendIntervalTimer ()

# **Public Attributes**

• float sendInterval =100

# **Protected Member Functions**

- void \_OnTimedEvent (object source, System.Timers.ElapsedEventArgs e)
- virtual void Update ()
- void \_OnConnectionOutStatusChanged (UniOSCConnection con)

- void \_ConnectToOSCConnections ()
- void \_DisconnectFromOSCConnections ()
- void SetupOSCMessage (bool isBundle)
- void \_SendOSCMessage (UniOSCEventArgs args)

#### **Protected Attributes**

- string oscOutAddress = "/"
- string \_oscOutlPAddress
- int oscOutPort
- bool useExplicitConnection
- UniOSCConnection \_explicitConnection
- OscPacket OSCpkg
- UniOSCEventArgs \_OSCeArg
- System.Timers.Timer sendIntervalTimer
- bool isOSCDirty
- object \_mylock = new object()
- bool \_drawDefaultInspector = true
- List< UniOSCConnection > \_myOSCConnections = new List< UniOSCConnection>()

#### **Properties**

- string oscOutAddress [get, set]
- string oscOutlPAddress [get, set]
- int oscOutPort [get, set]
- bool isBundle [get]
- bool useExplicitConnection [get, set]
- UniOSCConnection explicitConnection [get, set]

# 16.15.1 Detailed Description

This is the abstract class you should subclass from when you want to sent OSC data

#### 16.15.2 Member Function Documentation

```
\textbf{16.15.2.1} \quad \textbf{void UniOSC.UniOSCE} \textbf{ventDispatcher.\_ConnectToOSCConnections} \textbf{( )} \quad \texttt{[protected]}
```

16.15.2.2 void UniOSC.UniOSCEventDispatcher\_DisconnectFromOSCConnections() [protected]

16.15.2.3 void UniOSC.UniOSCEventDispatcher.\_OnConnectionOutStatusChanged ( UniOSCConnection con ) [protected]

16.15.2.4 void UniOSC.UniOSCEventDispatcher.\_OnTimedEvent ( object source, System.Timers.ElapsedEventArgs e )
[protected]

16.15.2.5 void UniOSC.UniOSCEventDispatcher.\_SendOSCMessage ( UniOSCEventArgs args ) [protected]

16.15.2.6 void UniOSC.UniOSCEventDispatcher. SetupOSCMessage (bool\_isBundle) [protected]

16.15.2.7 virtual void UniOSC.UniOSCEventDispatcher.\_Update() [protected], [virtual]

Reimplemented in UniOSC.UniOSCTransformSender.

16.15.2.8 void UniOSC.UniOSCEventDispatcher.AppendData (object \_data)

Appends the data.

Depending on your bundle mode the AppendData method works in a different way. If you use bundles you can append multiple OscMessages. If you don't use bundles (default) you append data to your OscMessage We only can append data types that are supported by the OSC specification: (Int32,Int64,Single,Double,String,Byte[],Osc—TimeTag,Char,Color,Boolean)

#### **Parameters**

\_*data* \_data.

16.15.2.9 virtual void UniOSC.UniOSCEventDispatcher.Awake( ) [virtual]

Reimplemented in UniOSC.UniOSCEventDispatcherSlider, UniOSC.UniOSCEventDispatcherToggle, UniO← SC.UniOSCEventDispatcherButton, UniOSC.UniOSC\_uGUI\_Button, UniOSC.UniOSCEventDispatcherMulti← ConnectionSender, UniOSC.UniOSCEventDispatcherMultiAddressSender, UniOSC.UniOSCEventDispatcher← Implementation, UniOSC.UniOSC\_uGUI\_Toggle, and UniOSC.UniOSC\_uGUI\_Slider.

16.15.2.10 void UniOSC.UniOSCEventDispatcher.ClearData ( )

16.15.2.11 void UniOSC.UniOSCEventDispatcher.ForceSetupChange ( bool resetMessage )

This method is mainly for the EventDispatcherEditor to force an update of the internal message setup

#### **Parameters**

resetMessage

16.15.2.12 virtual void UniOSC.UniOSCEventDispatcher.OnDestroy() [virtual]

16.15.2.13 virtual void UniOSC.UniOSCEventDispatcher.OnDisable() [virtual]

Reimplemented in UniOSC.UniOSCEventDispatcherMultiAddressSender, UniOSC.UniOSCEventDispatcherMultiConnectionSender, UniOSC.UniOSCEventDispatcherImplementation, UniOSC.UniOSCEventDispatcherSlider, UniOSC.UniOSCEventDispatcherToggle, UniOSC.UniOSCEventDispatcherButton, UniOSC.UniOSC\_uGUI\_Co

16.15.2.14 virtual void UniOSC.UniOSCEventDispatcher.OnEnable ( ) [virtual]

Reimplemented in UniOSC.UniOSCEventDispatcherSlider, UniOSC.UniOSCEventDispatcherToggle, UniOSC-C.UniOSCEventDispatcherButton, UniOSC.UniOSCEventDispatcherMultiConnectionSender, UniOSC.UniOSC.UniOSC.UniOSC.UniOSC.UniOSC.UniOSC.UniOSC.UniOSC.UniOSC.UniOSCEventDispatcherMultiAddressSender, UniOSC.UniOSCEventDispatcherchlipplementation, UniOSC.UniOSC\_uGUI\_Toggle, UniOSC.UniOSC\_uGUI\_Slider, and UniOSC.UniOSC

16.15.2.15 virtual void UniOSC.UniOSCEventDispatcher.SendOSCMessage( ) [virtual]

Sends the OSC message.

 $Reimplemented \ in \ UniOSC. UniOSC Event Dispatcher Slider.$ 

16.15.2.16 void UniOSC.UniOSCEventDispatcher.SetBundleMode (bool\_isBundle)

Sets the bundle mode.

You can change the mode at any time but you have to be careful what data you trying to append with UniOSC.Uni⇔ OSCEventDispatcher.AppendData(object)

#### **Parameters**

isBundle   If set to true is
------------------------------

16.15.2.17	virtual void UniOSC.UniOSCEventDispatcher.Start( ) [virtual]
16.15.2.18	void UniOSC.UniOSCEventDispatcher.StartSendIntervalTimer ( )
16.15.2.19	void UniOSC.UniOSCEventDispatcher.StopSendIntervalTimer ( )
16.15.3	Member Data Documentation
16.15.3.1	bool UniOSC.UniOSCEventDispatcherdrawDefaultInspector = true [protected]
16.15.3.2	UniOSCConnection UniOSC.UniOSCEventDispatcherexplicitConnection [protected]
16.15.3.3	bool UniOSC.UniOSCEventDispatcherisOSCDirty [protected]
16.15.3.4	<pre>object UniOSC.UniOSCEventDispatchermylock = new object() [protected]</pre>
16.15.3.5	List <unioscconnection> UniOSC.UniOSCEventDispatchermyOSCConnections = new List<unioscconnection>() [protected]</unioscconnection></unioscconnection>
16.15.3.6	UniOSCEventArgs UniOSC.UniOSCEventDispatcherOSCeArg [protected]
16.15.3.7	string UniOSC.UniOSCEventDispatcheroscOutAddress = "/" [protected]
16.15.3.8	string UniOSC.UniOSCEventDispatcheroscOutlPAddress [protected]
16.15.3.9	<pre>int UniOSC.UniOSCEventDispatcheroscOutPort [protected]</pre>
16.15.3.10	OscPacket UniOSC.UniOSCEventDispatcherOSCpkg [protected]
16.15.3.11	System.Timers.Timer UniOSC.UniOSCEventDispatchersendIntervalTimer [protected]
16.15.3.12	bool UniOSC.UniOSCEventDispatcheruseExplicitConnection [protected]
16.15.3.13	float UniOSC.UniOSCEventDispatcher.sendInterval =100
16.15.4	Property Documentation
16.15.4.1	UniOSCConnection UniOSC.UniOSCEventDispatcher.explicitConnection [get], [set]
16.15.4.2	bool UniOSC.UniOSCEventDispatcher.isBundle [get]
16.15.4.3	string UniOSC.UniOSCEventDispatcher.oscOutAddress [get], [set]
16.15.4.4	string UniOSC.UniOSCEventDispatcher.oscOutlPAddress [get], [set]

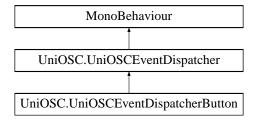
```
16.15.4.5 int UniOSC.UniOSCEventDispatcher.oscOutPort [get], [set]
```

**16.15.4.6** bool UniOSC.UniOSCEventDispatcher.useExplicitConnection [get], [set]

# 16.16 UniOSC.UniOSCEventDispatcherButton Class Reference

Dispatcher button that forces a OSCConnection to send a OSC Message.

Inheritance diagram for UniOSC.UniOSCEventDispatcherButton:



#### **Public Member Functions**

- override void Awake ()
- override void OnEnable ()
- override void OnDisable ()
- void SendOSCMessageDown ()

Sends the OSC message with the downOSCDataValue.

• void SendOSCMessageUp ()

Sends the OSC message with the upOSCDataValue.

# **Public Attributes**

- float downOSCDataValue =1
- float upOSCDataValue =0
- bool showGUI
- float xPos
- · float yPos

# **Additional Inherited Members**

# 16.16.1 Detailed Description

Dispatcher button that forces a OSCConnection to send a OSC Message.

Two separate states: Down and Up

# 16.16.2 Member Function Documentation

16.16.2.1 override void UniOSC.UniOSCEventDispatcherButton.Awake() [virtual]

Reimplemented from UniOSC.UniOSCEventDispatcher.

```
16.16.2.2 override void UniOSC.UniOSCEventDispatcherButton.OnDisable ( ) [virtual]
Reimplemented from UniOSC.UniOSCEventDispatcher.

16.16.2.3 override void UniOSC.UniOSCEventDispatcherButton.OnEnable ( ) [virtual]
Reimplemented from UniOSC.UniOSCEventDispatcher.

16.16.2.4 void UniOSC.UniOSCEventDispatcherButton.SendOSCMessageDown ( )
Sends the OSC message with the downOSCDataValue.
```

#### 16.16.3 Member Data Documentation

Sends the OSC message with the upOSCDataValue.

16.16.3.1 float UniOSC.UniOSCEventDispatcherButton.downOSCDataValue =1

16.16.2.5 void UniOSC.UniOSCEventDispatcherButton.SendOSCMessageUp ( )

16.16.3.2 bool UniOSC.UniOSCEventDispatcherButton.showGUI

16.16.3.3 float UniOSC.UniOSCEventDispatcherButton.upOSCDataValue =0

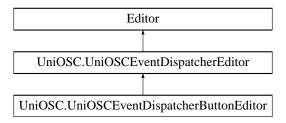
16.16.3.4 float UniOSC.UniOSCEventDispatcherButton.xPos

16.16.3.5 float UniOSC.UniOSCEventDispatcherButton.yPos

# 16.17 UniOSC.UniOSCEventDispatcherButtonEditor Class Reference

Uni OSC event dispatcher button editor.

Inheritance diagram for UniOSC.UniOSCEventDispatcherButtonEditor:



#### **Public Member Functions**

- override void OnEnable ()
- override void OnInspectorGUI ()

#### **Protected Attributes**

- SerializedProperty downOSCDataValueProp
- SerializedProperty upOSCDataValueProp

- SerializedProperty ShowGUIProp
- SerializedProperty xProp
- SerializedProperty yProp

#### **Additional Inherited Members**

#### 16.17.1 Detailed Description

Uni OSC event dispatcher button editor.

#### 16.17.2 Member Function Documentation

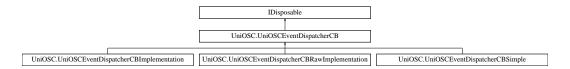
16.17.2.1 override void UniOSC.UniOSCEventDispatcherButtonEditor.OnEnable() [virtual]

Reimplemented from UniOSC.UniOSCEventDispatcherEditor.

- 16.17.2.2 override void UniOSC.UniOSCEventDispatcherButtonEditor.OnInspectorGUI ( )
- 16.17.3 Member Data Documentation
- 16.17.3.1 SerializedProperty UniOSC.UniOSCEventDispatcherButtonEditor.downOSCDataValueProp [protected]
- 16.17.3.2 SerializedProperty UniOSC.UniOSCEventDispatcherButtonEditor.ShowGUIProp [protected]
- 16.17.3.3 SerializedProperty UniOSC.UniOSCEventDispatcherButtonEditor.upOSCDataValueProp [protected]
- **16.17.3.4 SerializedProperty UniOSC.UniOSCEventDispatcherButtonEditor.xProp** [protected]
- 16.17.3.5 SerializedProperty UniOSC.UniOSCEventDispatcherButtonEditor.yProp [protected]

# 16.18 UniOSC.UniOSCEventDispatcherCB Class Reference

Inheritance diagram for UniOSC.UniOSCEventDispatcherCB:



#### **Public Member Functions**

- UniOSCEventDispatcherCB (string \_\_oscOutAddress, string \_\_oscOutIPAddress, int \_\_oscPort)
   Sets the explicitConnection property to the new UniOSCConnection when we have turned on the useExplicit
   — Connection mode
- UniOSCEventDispatcherCB (string \_\_oscOutAddress, UniOSCConnection \_\_explicitConnection)
- virtual void Awake ()
- virtual void Enable ()

Enable this instance.

• virtual void Disable ()

Disable this instance.

• virtual void OnDestroy ()

void ForceSetupChange (bool resetMessage)

This method forces an reconfiguration with the current settings.

void SetBundleMode (bool isBundle)

Sets the bundle mode.

void SendOSCMessage ()

Sends the OSC message.

void AppendData (object \_data)

Appends the data.

· void ClearData ()

Clears all data.

- void UpdateDataAt (int index, object value)
- void StartSendIntervalTimer ()

Starts the send interval timer.

void StopSendIntervalTimer ()

Stops the send interval timer.

• void Dispose ()

Performs application-defined tasks associated with freeing, releasing, or resetting resources.

#### **Public Attributes**

float sendInterval =100

#### **Protected Member Functions**

- void <u>OnTimedEvent</u> (object source, System.Timers.ElapsedEventArgs e)
- void \_OnConnectionOutStatusChanged (UniOSCConnection con)
- void \_ConnectToOSCConnections ()
- void \_DisconnectFromOSCConnections ()
- void <u>SetupOSCMessage</u> (bool <u>isBundle</u>)
- void SendOSCMessage (UniOSCEventArgs args)

# **Protected Attributes**

- OscPacket OSCpkg
- UniOSCEventArgs \_OSCeArg
- System.Timers.Timer <u>sendIntervalTimer</u>
- bool \_isOSCDirty
- object \_mylock = new object()
- string oscOutAddress
- string \_oscOutIPAddress
- int oscOutPort
- bool \_useExplicitConnection
- UniOSCConnection \_explicitConnection

# **Properties**

- bool isEnabled [get]
- string oscOutAddress [get, set]
- string oscOutlPAddress [get, set]
- int oscOutPort [get, set]
- bool isBundle [get]
- bool useExplicitConnection [get, set]
- UniOSCConnection explicitConnection [get, set]

#### 16.18.1 Constructor & Destructor Documentation

16.18.1.1 UniOSC.UniOSCEventDispatcherCB.UniOSCEventDispatcherCB ( string \_\_oscOutAddress, string \_\_oscOutlPAddress, int \_\_oscPort )

Sets the explicitConnection property to the new UniOSCConnection when we have turned on the useExplicit ← Connection mode

#### **Parameters**

newCon

- 16.18.1.2 UniOSC.UniOSCEventDispatcherCB.UniOSCEventDispatcherCB ( string \_\_oscOutAddress, UniOSCConnection \_\_explicitConnection )
- 16.18.2 Member Function Documentation
- 16.18.2.1 void UniOSC.UniOSCEventDispatcherCB.\_ConnectToOSCConnections() [protected]
- 16.18.2.2 void UniOSC.UniOSCEventDispatcherCB.\_DisconnectFromOSCConnections() [protected]
- 16.18.2.3 void UniOSC.UniOSCEventDispatcherCB.\_OnConnectionOutStatusChanged ( UniOSCConnection con )
  [protected]
- 16.18.2.4 void UniOSC.UniOSCEventDispatcherCB.\_OnTimedEvent (object source, System.Timers.ElapsedEventArgs e)
  [protected]
- 16.18.2.5 void UniOSC.UniOSCEventDispatcherCB.\_SendOSCMessage ( UniOSCEventArgs args ) [protected]
- 16.18.2.6 void UniOSC.UniOSCEventDispatcherCB.\_SetupOSCMessage (bool\_isBundle) [protected]
- 16.18.2.7 void UniOSC.UniOSCEventDispatcherCB.AppendData (object \_data)

Appends the data.

Depending on your bundle mode the AppendData method works in a different way. If you use bundles you can append multiple OscMessages. If you don't use bundles (default) you append data to your OscMessage We only can append data types that are supported by the OSC specification: (Int32,Int64,Single,Double,String,Byte[],Osc—TimeTag,Char,Color,Boolean)

# Parameters

\_data \_data.

16.18.2.8 virtual void UniOSC.UniOSCEventDispatcherCB.Awake() [virtual]

Reimplemented in UniOSC.UniOSCEventDispatcherCBSimple, UniOSC.UniOSCEventDispatcherCBRaw-Implementation, and UniOSC.UniOSCEventDispatcherCBImplementation.

16.18.2.9 void UniOSC.UniOSCEventDispatcherCB.ClearData ( )

Clears all data.

16.18.2.10 virtual void UniOSC.UniOSCEventDispatcherCB.Disable ( ) [virtual]

Disable this instance.

Reimplemented in UniOSC.UniOSCEventDispatcherCBImplementation, UniOSC.UniOSCEventDispatcherCB⇔ Simple, and UniOSC.UniOSCEventDispatcherCBRawImplementation.

16.18.2.11 void UniOSC.UniOSCEventDispatcherCB.Dispose ( )

Performs application-defined tasks associated with freeing, releasing, or resetting resources.

Call Dispose when you are finished using the UniOSC.UniOSCEventDispatcherCB. The Dispose method leaves the UniOSC.UniOSCEventDispatcherCB in an unusable state. After calling Dispose, you must release all references to the UniOSC.UniOSCEventDispatcherCB so the garbage collector can reclaim the memory that the UniOSC.Uni
OSCEventDispatcherCB was occupying.

16.18.2.12 virtual void UniOSC.UniOSCEventDispatcherCB.Enable() [virtual]

Enable this instance.

Reimplemented in UniOSC.UniOSCEventDispatcherCBSimple, UniOSC.UniOSCEventDispatcherCBImplementation, and UniOSC.UniOSCEventDispatcherCBRawImplementation.

16.18.2.13 void UniOSC.UniOSCEventDispatcherCB.ForceSetupChange (bool resetMessage)

This method forces an reconfiguration with the current settings.

Normaly you don't need to call this method. You can specify if you want to reset all the data from the OSC Message/Bundle that is used when sending data out.

#### **Parameters**

resetMessage

16.18.2.14 virtual void UniOSC.UniOSCEventDispatcherCB.OnDestroy( ) [virtual]

16.18.2.15 void UniOSC.UniOSCEventDispatcherCB.SendOSCMessage ( )

Sends the OSC message.

16.18.2.16 void UniOSC.UniOSCEventDispatcherCB.SetBundleMode (bool\_isBundle)

Sets the bundle mode.

You can change the mode at any time but you have to be careful what data you trying to append with UniOSC.Uni← OSCEventDispatcherCB.AppendData(object)

#### **Parameters**

\_isBundle | If set to true is bundle.

16.18.2.17 void UniOSC.UniOSCEventDispatcherCB.StartSendIntervalTimer ( )

Starts the send interval timer.

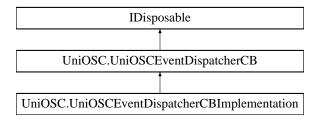
This is useful when you need to send OSC data frequently. With the sendInterval property you specify the interval in milliseconds

```
16.18.2.18 void UniOSC.UniOSCEventDispatcherCB.StopSendIntervalTimer ( )
Stops the send interval timer.
16.18.2.19 void UniOSC.UniOSCEventDispatcherCB.UpdateDataAt ( int index, object value )
16.18.3 Member Data Documentation
16.18.3.1 UniOSCConnection UniOSC.UniOSCEventDispatcherCB._explicitConnection [protected]
16.18.3.2 bool UniOSC.UniOSCEventDispatcherCB._isOSCDirty [protected]
16.18.3.3 object UniOSC.UniOSCEventDispatcherCB._mylock = new object() [protected]
16.18.3.4 UniOSCEventArgs UniOSC.UniOSCEventDispatcherCB._OSCeArg [protected]
16.18.3.5 string UniOSC.UniOSCEventDispatcherCB._oscOutAddress [protected]
16.18.3.6 string UniOSC.UniOSCEventDispatcherCB._oscOutlPAddress [protected]
16.18.3.7
         int UniOSC.UniOSCEventDispatcherCB._oscOutPort [protected]
16.18.3.8 OscPacket UniOSC.UniOSCEventDispatcherCB._OSCpkg [protected]
16.18.3.9 System.Timers.Timer UniOSC.UniOSCEventDispatcherCB._sendIntervalTimer [protected]
16.18.3.10 bool UniOSC.UniOSCEventDispatcherCB._useExplicitConnection [protected]
16.18.3.11 float UniOSC.UniOSCEventDispatcherCB.sendInterval =100
16.18.4 Property Documentation
16.18.4.1 UniOSCConnection UniOSC.UniOSCEventDispatcherCB.explicitConnection [get], [set]
16.18.4.2 bool UniOSC.UniOSCEventDispatcherCB.isBundle [get]
16.18.4.3 bool UniOSC.UniOSCEventDispatcherCB.isEnabled [get]
16.18.4.4 string UniOSC.UniOSCEventDispatcherCB.oscOutAddress [get], [set]
16.18.4.5 string UniOSC.UniOSCEventDispatcherCB.oscOutlPAddress [get], [set]
16.18.4.6 int UniOSC.UniOSCEventDispatcherCB.oscOutPort [get], [set]
16.18.4.7 bool UniOSC.UniOSCEventDispatcherCB.useExplicitConnection [get], [set]
```

# 16.19 UniOSC.UniOSCEventDispatcherCBImplementation Class Reference

This class is a blueprint for your own implementations of the abstract class UniOSCEventDispatcherCodeBased Dispatcher forces a OSCConnection to send a OSC Message.

 $Inheritance\ diagram\ for\ UniOSC. UniOSC Event Dispatcher CBImplementation:$ 



#### **Public Member Functions**

- $\bullet \ \ UniOSCE vent Dispatcher CBImplementation \ (string \_oscOut Address, string \_oscOut IPAddress, int \_oscPort)$ 
  - You have to override the constructors you want to use from the base class UniOSC.UniOSCEventDispatcherCode← Based class.
- UniOSCEventDispatcherCBImplementation (string \_oscOutAddress, UniOSCConnection \_explicit
   — Connection)
- override void Awake ()
- override void Enable ()

Enable this instance.

• override void Disable ()

Disable this instance.

· void SetDataAtIndex0 (bool val)

Just a demo method to show how you can change the data of your OSC Message

#### **Additional Inherited Members**

# 16.19.1 Detailed Description

This class is a blueprint for your own implementations of the abstract class UniOSCEventDispatcherCodeBased Dispatcher forces a OSCConnection to send a OSC Message.

//Don't forget the base callings !!!!

# 16.19.2 Constructor & Destructor Documentation

16.19.2.1 UniOSC.UniOSCEventDispatcherCBImplementation.UniOSCEventDispatcherCBImplementation ( string \_oscOutAddress, string \_oscOutlPAddress, int \_oscPort )

You have to override the constructors you want to use from the base class UniOSC.UniOSCEventDispatcherCode ← Based class.

- 16.19.2.2 UniOSC.UniOSCEventDispatcherCBImplementation.UniOSCEventDispatcherCBImplementation ( string \_oscOutAddress, UniOSCConnection \_explicitConnection )
- 16.19.3 Member Function Documentation
- 16.19.3.1 override void UniOSC.UniOSCEventDispatcherCBImplementation.Awake( ) [virtual]

Reimplemented from UniOSC.UniOSCEventDispatcherCB.

16.19.3.2 override void UniOSC.UniOSCEventDispatcherCBImplementation.Disable() [virtual]

Disable this instance.

Reimplemented from UniOSC.UniOSCEventDispatcherCB.

16.19.3.3 override void UniOSC.UniOSCEventDispatcherCBImplementation.Enable( ) [virtual]

Enable this instance.

 $\label{lem:lemented_loss} Reimplemented from \ UniOSC. UniOSC Event Dispatcher CB.$ 

16.19.3.4 void UniOSC.UniOSCEventDispatcherCBImplementation.SetDataAtIndex0 ( bool val )

Just a demo method to show how you can change the data of your OSC Message

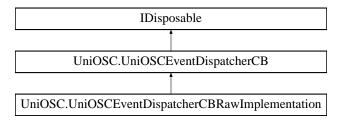
#### **Parameters**

val If set to true value.

# 16.20 UniOSC.UniOSCEventDispatcherCBRawImplementation Class Reference

This class is a blueprint for your own implementations of the abstract class UniOSCEventDispatcherCodeBased Dispatcher forces a OSCConnection to send a OSC Message.

Inheritance diagram for UniOSC.UniOSCEventDispatcherCBRawImplementation:



#### **Public Member Functions**

UniOSCEventDispatcherCBRawImplementation (string \_oscOutAddress, string \_oscOutIPAddress, int \_← oscPort)

You have to override the constructors you want to use from the base class UniOSC.UniOSCEventDispatcherCode← Based class.

- UniOSCEventDispatcherCBRawImplementation (string \_oscOutAddress, UniOSCConnection \_explicit
   — Connection)
- override void Awake ()
- override void Enable ()

Enable this instance.

• override void Disable ()

Disable this instance.

#### **Additional Inherited Members**

# 16.20.1 Detailed Description

This class is a blueprint for your own implementations of the abstract class UniOSCEventDispatcherCodeBased Dispatcher forces a OSCConnection to send a OSC Message.

//Don't forget the base callings !!!!

#### 16.20.2 Constructor & Destructor Documentation

16.20.2.1 UniOSC.UniOSCEventDispatcherCBRawImplementation.UniOSCEventDispatcherCBRawImplementation ( string \_oscOutAddress, string \_oscOutIPAddress, int \_oscPort )

You have to override the constructors you want to use from the base class UniOSC.UniOSCEventDispatcherCode ← Based class.

16.20.2.2 UniOSC.UniOSCEventDispatcherCBRawImplementation.UniOSCEventDispatcherCBRawImplementation ( string \_oscOutAddress, UniOSCConnection \_explicitConnection )

#### 16.20.3 Member Function Documentation

16.20.3.1 override void UniOSC.UniOSCEventDispatcherCBRawImplementation.Awake( ) [virtual]

Reimplemented from UniOSC.UniOSCEventDispatcherCB.

 $\textbf{16.20.3.2} \quad \textbf{override void UniOSC.UniOSCE} \\ \textbf{ventDispatcherCBRawImplementation.Disable ( ) } \\ \textbf{[virtual]} \\ \textbf{}$ 

Disable this instance.

Reimplemented from UniOSC.UniOSCEventDispatcherCB.

16.20.3.3 override void UniOSC.UniOSCEventDispatcherCBRawImplementation.Enable() [virtual]

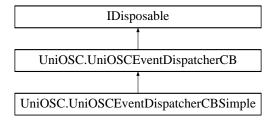
Enable this instance.

Reimplemented from UniOSC.UniOSCEventDispatcherCB.

# 16.21 UniOSC.UniOSCEventDispatcherCBSimple Class Reference

This class is a blueprint for your own implementations of the abstract class UniOSCEventDispatcherCodeBased Dispatcher forces a OSCConnection to send a OSC Message.

Inheritance diagram for UniOSC.UniOSCEventDispatcherCBSimple:



#### **Public Member Functions**

UniOSCEventDispatcherCBSimple (string \_\_oscOutAddress, string \_\_oscOutIPAddress, int \_\_oscPort)
 You have to override the constructors you want to use from the base class UniOSC.UniOSCEventDispatcherCode

• UniOSCEventDispatcherCBSimple (string \_\_oscOutAddress, UniOSCConnection \_\_explicitConnection)

• override void Awake ()

Based class.

• override void Enable ()

Enable this instance.

• override void Disable ()

Disable this instance.

void SetDataAtIndex0 (object val)

Just a demo method to show how you can change the data of your OSC Message

## **Additional Inherited Members**

#### 16.21.1 Detailed Description

This class is a blueprint for your own implementations of the abstract class UniOSCEventDispatcherCodeBased Dispatcher forces a OSCConnection to send a OSC Message.

//Don't forget the base callings !!!!

#### 16.21.2 Constructor & Destructor Documentation

16.21.2.1 UniOSC.UniOSCEventDispatcherCBSimple.UniOSCEventDispatcherCBSimple ( string \_\_oscOutAddress, string \_\_oscOutIPAddress, int \_\_oscPort )

You have to override the constructors you want to use from the base class UniOSC.UniOSCEventDispatcherCode ← Based class.

16.21.2.2 UniOSC.UniOSCEventDispatcherCBSimple.UniOSCEventDispatcherCBSimple ( string \_\_oscOutAddress, UniOSCConnection \_\_explicitConnection )

# 16.21.3 Member Function Documentation

16.21.3.1 override void UniOSC.UniOSCEventDispatcherCBSimple.Awake( ) [virtual]

Reimplemented from UniOSC.UniOSCEventDispatcherCB.

16.21.3.2 override void UniOSC.UniOSCEventDispatcherCBSimple.Disable ( ) [virtual]

Disable this instance.

Reimplemented from UniOSC.UniOSCEventDispatcherCB.

16.21.3.3 override void UniOSC.UniOSCEventDispatcherCBSimple.Enable() [virtual]

Enable this instance.

Reimplemented from UniOSC.UniOSCEventDispatcherCB.

16.21.3.4 void UniOSC.UniOSCEventDispatcherCBSimple.SetDataAtIndex0 ( object val )

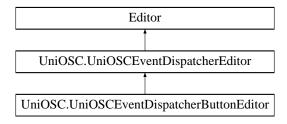
Just a demo method to show how you can change the data of your OSC Message

#### **Parameters**

val If set to true value.

# 16.22 UniOSC.UniOSCEventDispatcherEditor Class Reference

Inheritance diagram for UniOSC.UniOSCEventDispatcherEditor:



# **Public Member Functions**

- virtual void OnEnable ()
- override void OnInspectorGUI ()

#### **Static Public Member Functions**

• static void Show (string label, SerializedProperty list)

# **Protected Member Functions**

- void DrawPort ()
- void DrawlPAddress ()
- void DrawConnectionInfo ()

#### **Protected Attributes**

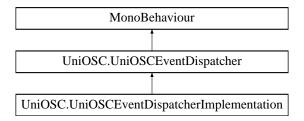
- UniOSCEventDispatcher \_target
- SerializedProperty \_myOSCConnectionsProp
- SerializedProperty OSCConnectionsProp
- SerializedProperty OSCOutPortProp
- SerializedProperty OSCOutAddressProp
- SerializedProperty OSCOutIPAddressProp
- SerializedProperty OSCOutProp
- SerializedProperty UseExplicitConnectionProp
- SerializedProperty ExplicitConnectionProp
- SerializedProperty drawDefaultInspectorProp
- int \_portIndex = 0
- string[]\_options
- Texture2D \_tex\_logo

```
16.22.1 Member Function Documentation
16.22.1.1 void UniOSC.UniOSCEventDispatcherEditor.DrawConnectionInfo() [protected]
16.22.1.2 void UniOSC.UniOSCEventDispatcherEditor.DrawlPAddress() [protected]
16.22.1.3 void UniOSC.UniOSCEventDispatcherEditor.DrawPort() [protected]
16.22.1.4 virtual void UniOSC.UniOSCEventDispatcherEditor.OnEnable() [virtual]
Reimplemented in UniOSC.UniOSCEventDispatcherButtonEditor.
16.22.1.5 override void UniOSC.UniOSCEventDispatcherEditor.OnInspectorGUI ( )
16.22.1.6 static void UniOSC.UniOSCEventDispatcherEditor.Show ( string label, SerializedProperty list ) [static]
16.22.2
         Member Data Documentation
16.22.2.1 SerializedProperty UniOSC.UniOSCEventDispatcherEditor._myOSCConnectionsProp [protected]
16.22.2.2 string[] UniOSC.UniOSCEventDispatcherEditor._options [protected]
16.22.2.3 int UniOSC.UniOSCEventDispatcherEditor._portIndex = 0 [protected]
16.22.2.4 UniOSCEventDispatcher UniOSC.UniOSCEventDispatcherEditor_target [protected]
16.22.2.5 Texture2D UniOSC.UniOSCEventDispatcherEditor_tex_logo [protected]
16.22.2.6 SerializedProperty UniOSC.UniOSCEventDispatcherEditor.drawDefaultInspectorProp [protected]
16.22.2.7 SerializedProperty UniOSC.UniOSCEventDispatcherEditor.ExplicitConnectionProp [protected]
16.22.2.8 SerializedProperty UniOSC.UniOSCEventDispatcherEditor.OSCConnectionsProp [protected]
         SerializedProperty UniOSC.UniOSCEventDispatcherEditor.OSCOutAddressProp [protected]
16.22.2.10 SerializedProperty UniOSC.UniOSCEventDispatcherEditor.OSCOutlPAddressProp [protected]
16.22.2.11 SerializedProperty UniOSC.UniOSCEventDispatcherEditor.OSCOutPortProp [protected]
16.22.2.12 SerializedProperty UniOSC.UniOSCEventDispatcherEditor.OSCOutProp [protected]
16.22.2.13 SerializedProperty UniOSC.UniOSCEventDispatcherEditor.UseExplicitConnectionProp [protected]
```

# 16.23 UniOSC.UniOSCEventDispatcherImplementation Class Reference

This class is a blueprint for your own implementations of the abstract class UniOSCEventDispatcher Dispatcher forces a OSCConnection to send a OSC Message.

Inheritance diagram for UniOSC.UniOSCEventDispatcherImplementation:



#### **Public Member Functions**

- override void Awake ()
- override void OnEnable ()
- override void OnDisable ()
- void MySendOSCMessageTriggerMethod ()

Just a dummy method that shows how you trigger the OSC sending and how you could change the data of the OSC Message

# **Public Attributes**

- int dynamicIntValue = 1000
- float dynamicFloatValue = 1000f
- string dynamicStringValue = "Test"

# **Additional Inherited Members**

# 16.23.1 Detailed Description

This class is a blueprint for your own implementations of the abstract class UniOSCEventDispatcher Dispatcher forces a OSCConnection to send a OSC Message.

//Don't forget the base callings !!!!

#### 16.23.2 Member Function Documentation

16.23.2.1 override void UniOSC.UniOSCEventDispatcherImplementation.Awake( ) [virtual]

Reimplemented from UniOSC.UniOSCEventDispatcher.

16.23.2.2 void UniOSC.UniOSCEventDispatcherImplementation.MySendOSCMessageTriggerMethod ( )

Just a dummy method that shows how you trigger the OSC sending and how you could change the data of the OSC Message

16.23.2.3 override void UniOSC.UniOSCEventDispatcherImplementation.OnDisable() [virtual]

Reimplemented from UniOSC.UniOSCEventDispatcher.

16.23.2.4 override void UniOSC.UniOSCEventDispatcherImplementation.OnEnable ( ) [virtual]

Reimplemented from UniOSC.UniOSCEventDispatcher.

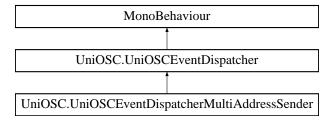
# 16.23.3 Member Data Documentation

- 16.23.3.1 float UniOSC.UniOSCEventDispatcherImplementation.dynamicFloatValue = 1000f
- 16.23.3.2 int UniOSC.UniOSCEventDispatcherImplementation.dynamicIntValue = 1000
- 16.23.3.3 string UniOSC.UniOSCEventDispatcherImplementation.dynamicStringValue = "Test"

# 16.24 UniOSC.UniOSCEventDispatcherMultiAddressSender Class Reference

This class is a blueprint for your own implementations of the abstract class UniOSCEventDispatcher Dispatcher forces a OSCConnection to send a OSC Message.

Inheritance diagram for UniOSC.UniOSCEventDispatcherMultiAddressSender:



#### **Public Member Functions**

- override void Awake ()
- override void OnEnable ()
- override void OnDisable ()
- void MySendOSCMessageTriggerMethod ()

Just a dummy method that shows how you trigger the OSC sending and how you could change the data of the OSC Message

• void OnGUI ()

# **Public Attributes**

- bool bundleMode
- float data = 1000f
- string[] addressArray

#### **Additional Inherited Members**

# 16.24.1 Detailed Description

This class is a blueprint for your own implementations of the abstract class UniOSCEventDispatcher Dispatcher forces a OSCConnection to send a OSC Message.

//Don't forget the base callings !!!!

#### 16.24.2 Member Function Documentation

16.24.2.1 override void UniOSC.UniOSCEventDispatcherMultiAddressSender.Awake() [virtual]

Reimplemented from UniOSC.UniOSCEventDispatcher.

16.24.2.2 void UniOSC.UniOSCEventDispatcherMultiAddressSender.MySendOSCMessageTriggerMethod ( )

Just a dummy method that shows how you trigger the OSC sending and how you could change the data of the OSC Message

16.24.2.3 override void UniOSC.UniOSCEventDispatcherMultiAddressSender.OnDisable( ) [virtual]

Reimplemented from UniOSC.UniOSCEventDispatcher.

16.24.2.4 override void UniOSC.UniOSCEventDispatcherMultiAddressSender.OnEnable() [virtual]

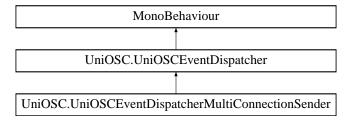
Reimplemented from UniOSC.UniOSCEventDispatcher.

- 16.24.2.5 void UniOSC.UniOSCEventDispatcherMultiAddressSender.OnGUI ( )
- 16.24.3 Member Data Documentation
- 16.24.3.1 string [] UniOSC.UniOSCEventDispatcherMultiAddressSender.addressArray
- 16.24.3.2 bool UniOSC.UniOSCEventDispatcherMultiAddressSender.bundleMode
- 16.24.3.3 float UniOSC.UniOSCEventDispatcherMultiAddressSender.data = 1000f

# 16.25 UniOSC.UniOSCEventDispatcherMultiConnectionSender Class Reference

This class is a blueprint for your own implementations of the abstract class UniOSCEventDispatcher Dispatcher forces a OSCConnection to send a OSC Message.

Inheritance diagram for UniOSC.UniOSCEventDispatcherMultiConnectionSender:



# **Public Member Functions**

- override void Awake ()
- override void OnEnable ()
- override void OnDisable ()
- void MySendOSCMessageTrigerMethod ()

Just a dummy method that shows how you trigger the OSC sending and how you could change the data of the OSC Message

• void OnGUI ()

#### **Public Attributes**

- float data = 1000f
- UniOSCConnection[] connectionArray

#### **Additional Inherited Members**

# 16.25.1 Detailed Description

This class is a blueprint for your own implementations of the abstract class UniOSCEventDispatcher Dispatcher forces a OSCConnection to send a OSC Message.

//Don't forget the base callings !!!!

#### 16.25.2 Member Function Documentation

16.25.2.1 override void UniOSC.UniOSCEventDispatcherMultiConnectionSender.Awake( ) [virtual]

Reimplemented from UniOSC.UniOSCEventDispatcher.

16.25.2.2 void UniOSC.UniOSCEventDispatcherMultiConnectionSender.MySendOSCMessageTrigerMethod ( )

Just a dummy method that shows how you trigger the OSC sending and how you could change the data of the OSC Message

16.25.2.3 override void UniOSC.UniOSCEventDispatcherMultiConnectionSender.OnDisable ( ) [virtual]

Reimplemented from UniOSC.UniOSCEventDispatcher.

 $\textbf{16.25.2.4} \quad \textbf{override void UniOSC.UniOSCE} \\ \textbf{ventDispatcherMultiConnectionSender.OnEnable ( ) } \\ \textbf{[virtual]} \\ \textbf{16.25.2.4} \quad \textbf{verride void UniOSC.UniOSCE} \\ \textbf{ventDispatcherMultiConnectionSender.OnEnable ( ) } \\ \textbf{16.25.2.4} \\ \textbf{16.25$ 

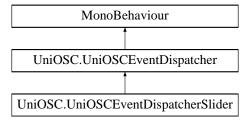
Reimplemented from UniOSC.UniOSCEventDispatcher.

- 16.25.2.5 void UniOSC.UniOSCEventDispatcherMultiConnectionSender.OnGUI ( )
- 16.25.3 Member Data Documentation
- 16.25.3.1 UniOSCConnection [] UniOSC.UniOSCEventDispatcherMultiConnectionSender.connectionArray
- 16.25.3.2 float UniOSC.UniOSCEventDispatcherMultiConnectionSender.data = 1000f

# 16.26 UniOSC.UniOSCEventDispatcherSlider Class Reference

Dispatcher toggle that forces a OSCConnection to send a OSC Message.

Inheritance diagram for UniOSC.UniOSCEventDispatcherSlider:



# **Public Types**

enum SliderMode { SliderMode.Horizontal, SliderMode.Vertical }

#### **Public Member Functions**

- override void Awake ()
- override void OnEnable ()
- override void OnDisable ()
- override void SendOSCMessage ()

Sends the OSC message with the sliderValue.

#### **Public Attributes**

- SliderMode sliderMode
- float minOSCDataValue = 0
- float maxOSCDataValue = 1
- bool showGUI
- float xPos
- float yPos
- float sliderSize = 100f

#### **Additional Inherited Members**

# 16.26.1 Detailed Description

Dispatcher toggle that forces a OSCConnection to send a OSC Message.

Two separate states: On and Off

# 16.26.2 Member Enumeration Documentation

16.26.2.1 enum UniOSC.UniOSCEventDispatcherSlider.SliderMode [strong]

Enumerator

Horizontal

Vertical

# 16.26.3 Member Function Documentation

16.26.3.1 override void UniOSC.UniOSCEventDispatcherSlider.Awake() [virtual]

Reimplemented from UniOSC.UniOSCEventDispatcher.

16.26.3.2 override void UniOSC.UniOSCEventDispatcherSlider.OnDisable ( ) [virtual]

Reimplemented from UniOSC.UniOSCEventDispatcher.

16.26.3.3 override void UniOSC.UniOSCEventDispatcherSlider.OnEnable() [virtual]

Reimplemented from UniOSC.UniOSCEventDispatcher.

16.26.3.4 override void UniOSC.UniOSCEventDispatcherSlider.SendOSCMessage() [virtual]

Sends the OSC message with the sliderValue.

Reimplemented from UniOSC.UniOSCEventDispatcher.

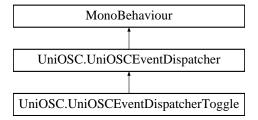
#### 16.26.4 Member Data Documentation

- 16.26.4.1 float UniOSC.UniOSCEventDispatcherSlider.maxOSCDataValue = 1
- 16.26.4.2 float UniOSC.UniOSCEventDispatcherSlider.minOSCDataValue = 0
- 16.26.4.3 bool UniOSC.UniOSCEventDispatcherSlider.showGUI
- 16.26.4.4 SliderMode UniOSC.UniOSCEventDispatcherSlider.sliderMode
- 16.26.4.5 float UniOSC.UniOSCEventDispatcherSlider.sliderSize = 100f
- 16.26.4.6 float UniOSC.UniOSCEventDispatcherSlider.xPos
- 16.26.4.7 float UniOSC.UniOSCEventDispatcherSlider.yPos

# 16.27 UniOSC.UniOSCEventDispatcherToggle Class Reference

Dispatcher toggle that forces a OSCConnection to send a OSC Message.

Inheritance diagram for UniOSC.UniOSCEventDispatcherToggle:



#### **Public Member Functions**

- override void Awake ()
- override void OnEnable ()
- override void OnDisable ()
- void SendOSCMessageOn ()

Sends the OSC message with the downOSCDataValue.

void SendOSCMessageOff ()

Sends the OSC message with the upOSCDataValue.

#### **Public Attributes**

- float onOSCDataValue =1
- float offOSCDataValue =0
- bool showGUI
- float xPos
- float yPos

#### **Additional Inherited Members**

# 16.27.1 Detailed Description

Dispatcher toggle that forces a OSCConnection to send a OSC Message.

Two separate states: On and Off

# 16.27.2 Member Function Documentation

16.27.2.1 override void UniOSC.UniOSCEventDispatcherToggle.Awake( ) [virtual]

Reimplemented from UniOSC.UniOSCEventDispatcher.

16.27.2.2 override void UniOSC.UniOSCEventDispatcherToggle.OnDisable() [virtual]

Reimplemented from UniOSC.UniOSCEventDispatcher.

16.27.2.3 override void UniOSC.UniOSCEventDispatcherToggle.OnEnable ( ) [virtual]

Reimplemented from UniOSC.UniOSCEventDispatcher.

16.27.2.4 void UniOSC.UniOSCEventDispatcherToggle.SendOSCMessageOff ( )

Sends the OSC message with the upOSCDataValue.

16.27.2.5 void UniOSC.UniOSCEventDispatcherToggle.SendOSCMessageOn ( )

Sends the OSC message with the downOSCDataValue.

#### 16.27.3 Member Data Documentation

16.27.3.1 float UniOSC.UniOSCEventDispatcherToggle.offOSCDataValue =0

16.27.3.2 float UniOSC.UniOSCEventDispatcherToggle.onOSCDataValue =1

16.27.3.3 bool UniOSC.UniOSCEventDispatcherToggle.showGUI

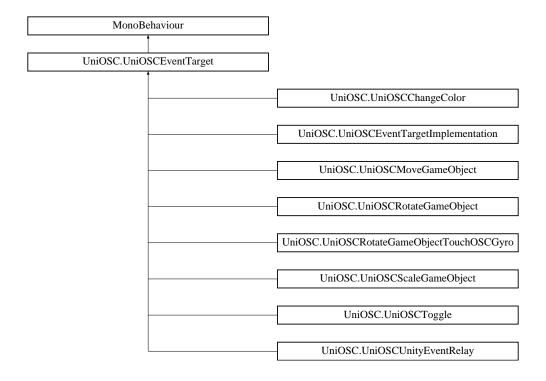
16.27.3.4 float UniOSC.UniOSCEventDispatcherToggle.xPos

16.27.3.5 float UniOSC.UniOSCEventDispatcherToggle.yPos

# 16.28 UniOSC.UniOSCEventTarget Class Reference

UniOSC event target.

Inheritance diagram for UniOSC.UniOSCEventTarget:



#### **Public Member Functions**

- virtual void Start ()
- virtual void Update ()
- virtual void OnEnable ()

Enable this component and reinitialize.

• void ForceSetupChange ()

This method is mainly for the EventTargetEditor to force an update of the internal message setup

- virtual void OnDestroy ()
- virtual void OnDisable ()

When the component is disabled we disconnect from all OSCConnections and clear some internal data.

abstract void OnOSCMessageReceived (UniOSCEventArgs args)

You should override this method in a subclass to handle the OSC data.

# **Public Attributes**

Dictionary < UniOSCConnection, List < UniOSCMappingItem > > ConnectToDict = new Dictionary < UniO← SCConnection, List < UniOSCMappingItem >> ()

## **Protected Member Functions**

- void \_OnConnectionInStatusChanged (UniOSCConnection con)
- void \_ConnectToDispatchers ()
- void \_DisconnectFromDispatchers ()

#### **Protected Attributes**

- string \_oscAddress = "/"
- List< string > \_oscAddresses = new List<string>()
- bool \_receiveAllAddresses

- bool \_useExplicitConnection
- UniOSCConnection \_explicitConnection
- int oscPort
- bool \_receiveAllPorts
- · bool \_redrawFlag
- List< UnityEngine.Object > foldoutList = new List<UnityEngine.Object>()

#### **Properties**

```
    List< string > GetOSCAddresses [get]
    string oscAddress [get, set]
    bool receiveAllAddresses [get, set]
    bool useExplicitConnection [get, set]
    UniOSCConnection explicitConnection [get, set]
    int oscPort [get, set]
```

#### **Events**

EventHandler < UniOSCEventArgs > OSCMessageReceived
 Occurs when the OnOSCMessageReceived method is called.

# 16.28.1 Detailed Description

UniOSC event target.

This is the abstract class you should subclass from when you want to receive OSC data

# 16.28.2 Member Function Documentation

• bool receiveAllPorts [get, set]

```
16.28.2.1 void UniOSC.UniOSCEventTarget._ConnectToDispatchers( ) [protected]
16.28.2.2 void UniOSC.UniOSCEventTarget._DisconnectFromDispatchers( ) [protected]
16.28.2.3 void UniOSC.UniOSCEventTarget._OnConnectionInStatusChanged ( UniOSCConnection con )
        [protected]
16.28.2.4 void UniOSC.UniOSCEventTarget.ForceSetupChange( )
```

This method is mainly for the EventTargetEditor to force an update of the internal message setup

```
16.28.2.5 virtual void UniOSC.UniOSCEventTarget.OnDestroy( ) [virtual]

16.28.2.6 virtual void UniOSC.UniOSCEventTarget.OnDisable( ) [virtual]
```

When the component is disabled we disconnect from all OSCConnections and clear some internal data. Reimplemented in UniOSC.UniOSCEventTargetImplementation, and UniOSC.UniOSCUnityEventRelay.

```
16.28.2.7 virtual void UniOSC.UniOSCEventTarget.OnEnable() [virtual]
```

Enable this component and reinitialize.

If a property of the component is changed via the inspector we force a OnEnable to update the status of the component. In general the component disconnects from all OSCConnections and try to find a new OSCConnection to connect to with a matching port. If you change properties via code you should call this explicit.

Reimplemented in UniOSC.UniOSCToggle, UniOSC.UniOSCChangeColor, UniOSC.UniOSCRotateGameObject, UniOSC.UniOSCEventTargetImplementation, UniOSC.UniOSCScaleGameObject, UniOSC.UniOSCRotateGameCobject, UniOSC.UniOSCMoveGameObject, and UniOSC.UniOSCUnityEventRelay.

```
16.28.2.8 abstract void UniOSC.UniOSCEventTarget.OnOSCMessageReceived ( UniOSCEventArgs args ) [pure virtual]
```

You should override this method in a subclass to handle the OSC data.

#### **Parameters**

args	The current OSCEventArgs object
args	The current OSCEventArgs object

Implemented in UniOSC.UniOSCEventTargetImplementation, UniOSC.UniOSCToggle, UniOSC.UniOSCRotate ← GameObject, UniOSC.UniOSCUnityEventRelay, UniOSC.UniOSCChangeColor, UniOSC.UniOSCRotateGame ← ObjectTouchOSCGyro, UniOSC.UniOSCMoveGameObject, and UniOSC.UniOSCScaleGameObject.

```
16.28.2.9 virtual void UniOSC.UniOSCEventTarget.Start() [virtual]
```

Reimplemented in UniOSC.UniOSCEventTargetImplementation, and UniOSC.UniOSCUnityEventRelay.

```
16.28.2.10 virtual void UniOSC.UniOSCEventTarget.Update() [virtual]
```

Reimplemented in UniOSC.UniOSCEventTargetImplementation, and UniOSC.UniOSCUnityEventRelay.

```
16.28.3 Member Data Documentation
```

```
16.28.3.1 UniOSCConnection UniOSC.UniOSCEventTarget._explicitConnection [protected]
```

```
16.28.3.2 List<UnityEngine.Object> UniOSC.UniOSCEventTarget._foldoutList = new List<UnityEngine.Object>()

[protected]
```

```
16.28.3.3 string UniOSC.UniOSCEventTarget._oscAddress = "/" [protected]
```

```
16.28.3.4 List<string> UniOSC.UniOSCEventTarget._oscAddresses = new List<string>() [protected]
```

```
16.28.3.5 int UniOSC.UniOSCEventTarget._oscPort [protected]
```

**16.28.3.6** bool UniOSC.UniOSCEventTarget.\_receiveAllAddresses [protected]

**16.28.3.7 bool UniOSC.UniOSCEventTarget.\_receiveAllPorts** [protected]

**16.28.3.8 bool UniOSC.UniOSCEventTarget.\_redrawFlag** [protected]

**16.28.3.9** bool UniOSC.UniOSCEventTarget.\_useExplicitConnection [protected]

16.28.3.10 Dictionary < UniOSCConnection, List < UniOSCMappingItem >> UniOSC. UniOSCEventTarget. ConnectTo ← Dict = new Dictionary < UniOSCConnection, List < UniOSCMappingItem >> ()

# 16.28.4 Property Documentation

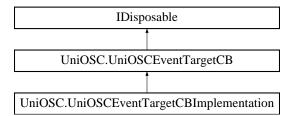
- **16.28.4.1 UniOSCConnection UniOSC.UniOSCEventTarget.explicitConnection** [get], [set]
- 16.28.4.2 List<string> UniOSC.UniOSCEventTarget.GetOSCAddresses [get]
- **16.28.4.3 string UniOSC.UniOSCEventTarget.oscAddress** [get], [set]
- **16.28.4.4** int UniOSC.UniOSCEventTarget.oscPort [get], [set]
- **16.28.4.5** bool UniOSC.UniOSCEventTarget.receiveAllAddresses [get], [set]
- **16.28.4.6** bool UniOSC.UniOSCEventTarget.receiveAllPorts [get], [set]
- **16.28.4.7** bool UniOSC.UniOSCEventTarget.useExplicitConnection [get], [set]
- 16.28.5 Event Documentation
- 16.28.5.1 EventHandler < UniOSCEventArgs > UniOSC.UniOSCEventTarget.OSCMessageReceived

Occurs when the OnOSCMessageReceived method is called.

# 16.29 UniOSC.UniOSCEventTargetCB Class Reference

UniOSC event target for class based scripting.

Inheritance diagram for UniOSC.UniOSCEventTargetCB:



# **Public Member Functions**

- string oscAddressAt (int index)
  - If you call this method you will remove all addresses that you added before!
- bool AddAddress (string \_\_oscAddress)
- UniOSCEventTargetCB (int \_\_oscPort)
- UniOSCEventTargetCB (string \_oscAddress)
- UniOSCEventTargetCB (string \_oscAddress, int \_\_oscPort)
- UniOSCEventTargetCB (UniOSCConnection con)
- UniOSCEventTargetCB (string \_oscAddress, UniOSCConnection con)
- virtual void Awake ()
- · virtual void Enable ()

Enable this instance.

virtual void Disable ()

Disable this instance.

· void Dispose ()

Performs application-defined tasks associated with freeing, releasing, or resetting unmanaged resources.

void ForceSetupChange ()

This method forces a reconnection.

abstract void OnOSCMessageReceived (UniOSCEventArgs args)

You should override this method in a subclass to handle the OSC data.

#### **Public Attributes**

• Dictionary< UniOSCConnection, List< UniOSCMappingItem > > ConnectToDict = new Dictionary<UniO← SCConnection,List<UniOSCMappingItem>>()

#### **Protected Member Functions**

void ConnectToDispatchers ()

#### **Protected Attributes**

- List< string > \_oscAddresses = new List<string>()
- string \_oscAddress
- bool \_receiveAllAddresses
- · bool \_useExplicitConnection
- UniOSCConnection \_explicitConnection
- int \_oscPort
- bool \_receiveAllPorts

# **Properties**

```
• bool isEnabled [get]
```

- string oscAddress [get, set]
- bool receiveAllAddresses [get, set]
- bool useExplicitConnection [get, set]
- UniOSCConnection explicitConnection [get, set]
- int oscPort [get, set]
- bool receiveAllPorts [get, set]

## **Events**

• EventHandler< UniOSCEventArgs > OSCMessageReceived

# 16.29.1 Detailed Description

UniOSC event target for class based scripting.

This is the abstract class you should subclass from

```
16.29.2 Constructor & Destructor Documentation
16.29.2.1 UniOSC.UniOSCEventTargetCB.UniOSCEventTargetCB ( int __oscPort )
16.29.2.2 UniOSC.UniOSCEventTargetCB.UniOSCEventTargetCB ( string _oscAddress )
16.29.2.3 UniOSC.UniOSCEventTargetCB.UniOSCEventTargetCB ( string _oscAddress, int __oscPort )
16.29.2.4 UniOSC.UniOSCEventTargetCB.UniOSCEventTargetCB ( UniOSCConnection con )
16.29.2.5 UniOSC.UniOSCEventTargetCB.UniOSCEventTargetCB ( string _oscAddress, UniOSCConnection con )
16.29.3
         Member Function Documentation
16.29.3.1 void UniOSC.UniOSCEventTargetCB._ConnectToDispatchers ( ) [protected]
16.29.3.2 bool UniOSC.UniOSCEventTargetCB.AddAddress ( string __oscAddress )
16.29.3.3 virtual void UniOSC.UniOSCEventTargetCB.Awake( ) [virtual]
Reimplemented in UniOSC.UniOSCEventTargetCBImplementation.
16.29.3.4 virtual void UniOSC.UniOSCEventTargetCB.Disable() [virtual]
Disable this instance.
Reimplemented in UniOSC.UniOSCEventTargetCBImplementation.
16.29.3.5 void UniOSC.UniOSCEventTargetCB.Dispose ( )
```

Performs application-defined tasks associated with freeing, releasing, or resetting unmanaged resources.

Call Dispose when you are finished using the UniOSC.UniOSCEventTargetCB. The Dispose method leaves the UniOSC.UniOSCEventTargetCB in an unusable state. After calling Dispose, you must release all references to the UniOSC.UniOSCEventTargetCB so the garbage collector can reclaim the memory that the UniOSC.UniOSCEvent TargetCB was occupying.

```
16.29.3.6 virtual void UniOSC.UniOSCEventTargetCB.Enable() [virtual]
```

Enable this instance.

Reimplemented in UniOSC.UniOSCEventTargetCBImplementation.

```
16.29.3.7 void UniOSC.UniOSCEventTargetCB.ForceSetupChange ( )
```

This method forces a reconnection.

Normally you don't need to call this method explicit but when you use this class for editor scripting you have to call this method when the playmode has changed.

```
16.29.3.8 abstract void UniOSC.UniOSCEventTargetCB.OnOSCMessageReceived ( UniOSCEventArgs args ) [pure virtual]
```

You should override this method in a subclass to handle the OSC data.

#### **Parameters**

The current OSCEventArgs obje	ect
-------------------------------	-----

Implemented in UniOSC.UniOSCEventTargetCBImplementation.

```
16.29.3.9 string UniOSC.UniOSCEventTargetCB.oscAddressAt (int index)
```

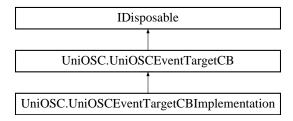
If you call this method you will remove all addresses that you added before!

```
16.29.4 Member Data Documentation
16.29.4.1 UniOSCConnection UniOSC.UniOSCEventTargetCB._explicitConnection [protected]
16.29.4.2 string UniOSC.UniOSCEventTargetCB._oscAddress [protected]
16.29.4.3 List<string> UniOSC.UniOSCEventTargetCB._oscAddresses = new List<string>() [protected]
16.29.4.4 int UniOSC.UniOSCEventTargetCB._oscPort [protected]
16.29.4.5 bool UniOSC.UniOSCEventTargetCB._receiveAllAddresses [protected]
16.29.4.6 bool UniOSC.UniOSCEventTargetCB._receiveAllPorts [protected]
16.29.4.7 bool UniOSC.UniOSCEventTargetCB._useExplicitConnection [protected]
16.29.4.8 Dictionary < UniOSCConnection, List < UniOSCMapping Item > > UniOSC. UniOSCE vent Target CB. Connect ←
         ToDict = new Dictionary < UniOSCConnection, List < UniOSCMappingItem >> ()
16.29.5 Property Documentation
16.29.5.1 UniOSCConnection UniOSC.UniOSCEventTargetCB.explicitConnection [get], [set]
16.29.5.2 bool UniOSC.UniOSCEventTargetCB.isEnabled [get]
16.29.5.3 string UniOSC.UniOSCEventTargetCB.oscAddress [get], [set]
16.29.5.4 int UniOSC.UniOSCEventTargetCB.oscPort [get], [set]
16.29.5.5 bool UniOSC.UniOSCEventTargetCB.receiveAllAddresses [get], [set]
16.29.5.6 bool UniOSC.UniOSCEventTargetCB.receiveAllPorts [get], [set]
16.29.5.7 bool UniOSC.UniOSCEventTargetCB.useExplicitConnection [get], [set]
16.29.6 Event Documentation
16.29.6.1 EventHandler < UniOSCEventArgs > UniOSCEventTargetCB.OSCMessageReceived
```

# 16.30 UniOSC.UniOSCEventTargetCBImplementation Class Reference

This class is a blueprint for your own implementations of the abstract class OSCDispatcherTargetCB //Don't forget the base callings !!!! The OnOSCMessageReceived method is where you should parse the OSC data

Inheritance diagram for UniOSC.UniOSCEventTargetCBImplementation:



# **Public Member Functions**

UniOSCEventTargetCBImplementation (int oscPort)

You have to override the constructors you want to use from the base class UniOSC.UniOSCEventTargetCB class.

- UniOSCEventTargetCBImplementation (string oscAddress)
- UniOSCEventTargetCBImplementation (UniOSCConnection con)
- UniOSCEventTargetCBImplementation (string oscAddress, int oscPort)
- UniOSCEventTargetCBImplementation (string oscAddress, UniOSCConnection con)
- override void Awake ()
- override void Enable ()

Enable this instance.

override void Disable ()

Disable this instance.

override void OnOSCMessageReceived (UniOSCEventArgs args)

Method is called from a OSCConnection when a OSC message arrives.

#### **Additional Inherited Members**

# 16.30.1 Detailed Description

This class is a blueprint for your own implementations of the abstract class OSCDispatcherTargetCB //Don't forget the base callings !!!! The OnOSCMessageReceived method is where you should parse the OSC data

# 16.30.2 Constructor & Destructor Documentation

16.30.2.1 UniOSC.UniOSCEventTargetCBImplementation.UniOSCEventTargetCBImplementation ( int oscPort )

You have to override the constructors you want to use from the base class UniOSC.UniOSCEventTargetCB class.

- 16.30.2.2 UniOSC.UniOSCEventTargetCBImplementation.UniOSCEventTargetCBImplementation ( string oscAddress )
- 16.30.2.3 UniOSC.UniOSCEventTargetCBImplementation.UniOSCEventTargetCBImplementation ( UniOSCConnection con )
- 16.30.2.4 UniOSC.UniOSCEventTargetCBImplementation.UniOSCEventTargetCBImplementation ( string oscAddress, int oscPort )
- 16.30.2.5 UniOSC.UniOSCEventTargetCBImplementation.UniOSCEventTargetCBImplementation ( string oscAddress, UniOSCConnection con )

#### 16.30.3 Member Function Documentation

16.30.3.1 override void UniOSC.UniOSCEventTargetCBImplementation.Awake( ) [virtual]

Reimplemented from UniOSC.UniOSCEventTargetCB.

16.30.3.2 override void UniOSC.UniOSCEventTargetCBImplementation.Disable ( ) [virtual]

Disable this instance.

Reimplemented from UniOSC.UniOSCEventTargetCB.

16.30.3.3 override void UniOSC.UniOSCEventTargetCBImplementation.Enable ( ) [virtual]

Enable this instance.

Reimplemented from UniOSC.UniOSCEventTargetCB.

16.30.3.4 override void UniOSC.UniOSCEventTargetCBImplementation.OnOSCMessageReceived ( UniOSCEventArgs args ) [virtual]

Method is called from a OSCConnection when a OSC message arrives.

The argument is a UniOSCEventArgs object where all the related data is enclosed

**Parameters** 

args OSCEventArgs

Implements UniOSC.UniOSCEventTargetCB.

# 16.31 UniOSC.UniOSCEventTargetEditor Class Reference

Inheritance diagram for UniOSC.UniOSCEventTargetEditor:



#### **Public Member Functions**

- virtual void OnEnable ()
- override void OnInspectorGUI ()

#### **Protected Member Functions**

- void DrawConnectionSetup ()
- void DrawPort ()
- void DrawConnectionInfo ()
- · void ShowFoldoutConnectionStatus (string label, SerializedProperty list, IDictionary dict)

#### **Protected Attributes**

- UniOSCEventTarget target
- SerializedProperty ReceiveAllAddressesProp
- SerializedProperty ReceiveAllPortsProp
- SerializedProperty OSCAddressProp
- SerializedProperty OSCPortProp
- SerializedProperty FoldoutListProp
- SerializedProperty AvailableINPortsProp
- SerializedProperty UseExplicitConnectionProp
- SerializedProperty ExplicitConnectionProp
- Texture2D \_tex\_logo
- int portIndex = 0
- string[]\_options

#### 16.31.1 Member Function Documentation

```
16.31.1.1 void UniOSC.UniOSCEventTargetEditor.DrawConnectionInfo() [protected]
16.31.1.2 void UniOSC.UniOSCEventTargetEditor.DrawConnectionSetup() [protected]
16.31.1.3 void UniOSC.UniOSCEventTargetEditor.DrawPort() [protected]
16.31.1.4 virtual void UniOSC.UniOSCEventTargetEditor.OnEnable() [virtual]
Reimplemented in UniOSC.UniOSCToggleEditor, and UniOSC.UniOSCUnityEventRelayEditor.
16.31.1.5 override void UniOSC.UniOSCEventTargetEditor.OnInspectorGUI ( )
16.31.1.6 void UniOSC.UniOSCEventTargetEditor.ShowFoldoutConnectionStatus ( string label, SerializedProperty list,
         IDictionary dict ) [protected]
16.31.2 Member Data Documentation
16.31.2.1 string[] UniOSC.UniOSCEventTargetEditor._options [protected]
16.31.2.2 int UniOSC.UniOSCEventTargetEditor._portIndex = 0 [protected]
16.31.2.3 UniOSCEventTarget UniOSC.UniOSCEventTargetEditor._target [protected]
16.31.2.4 Texture2D UniOSC.UniOSCEventTargetEditor._tex_logo [protected]
16.31.2.5 SerializedProperty UniOSC.UniOSCEventTargetEditor.AvailableINPortsProp [protected]
16.31.2.6 SerializedProperty UniOSC.UniOSCEventTargetEditor.ExplicitConnectionProp [protected]
16.31.2.7 SerializedProperty UniOSC.UniOSCEventTargetEditor.FoldoutListProp [protected]
16.31.2.8 SerializedProperty UniOSC.UniOSCEventTargetEditor.OSCAddressProp [protected]
16.31.2.9 SerializedProperty UniOSC.UniOSCEventTargetEditor.OSCPortProp [protected]
```

16.31.2.10 SerializedProperty UniOSC.UniOSCEventTargetEditor.ReceiveAllAddressesProp [protected]

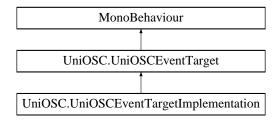
16.31.2.11 SerializedProperty UniOSC.UniOSCEventTargetEditor.ReceiveAllPortsProp [protected]

16.31.2.12 SerializedProperty UniOSC.UniOSCEventTargetEditor.UseExplicitConnectionProp [protected]

# 16.32 UniOSC.UniOSCEventTargetImplementation Class Reference

This class is a blueprint for your own implementations of the abstract class OSCDispatcherTarget //Don't forget the base callings !!!! The OnOSCMessageReceived method is where you should parse the OSC data

Inheritance diagram for UniOSC.UniOSCEventTargetImplementation:



#### **Public Member Functions**

• override void Start ()

Start this instance.

• override void OnEnable ()

Raises the enable event.

• override void OnDisable ()

Raises the disable event.

- override void Update ()
- override void OnOSCMessageReceived (UniOSCEventArgs args)

Method is called from a OSCConnection when a OSC message arrives.

# **Additional Inherited Members**

# 16.32.1 Detailed Description

This class is a blueprint for your own implementations of the abstract class OSCDispatcherTarget //Don't forget the base callings !!!! The OnOSCMessageReceived method is where you should parse the OSC data

# 16.32.2 Member Function Documentation

16.32.2.1 override void UniOSC.UniOSCEventTargetImplementation.OnDisable ( ) [virtual]

Raises the disable event.

Reimplemented from UniOSC.UniOSCEventTarget.

16.32.2.2 override void UniOSC.UniOSCEventTargetImplementation.OnEnable( ) [virtual]

Raises the enable event.

If you want to listen to several OSC messages you have to set the OSCAddresses property before you call base. ← OnEnable() OSCAddresses.Clear(); OSCAddresses.Add(...);

Reimplemented from UniOSC.UniOSCEventTarget.

16.32.2.3 override void UniOSC.UniOSCEventTargetImplementation.OnOSCMessageReceived ( UniOSCEventArgs args )
[virtual]

Method is called from a OSCConnection when a OSC message arrives.

The argument is a UniOSCEventArgs object where all the related data is enclosed

#### **Parameters**

```
args OSCEventArgs
```

Implements UniOSC.UniOSCEventTarget.

16.32.2.4 override void UniOSC.UniOSCEventTargetImplementation.Start() [virtual]

Start this instance.

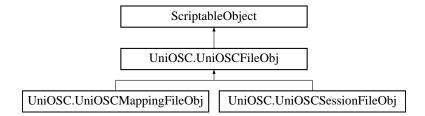
Reimplemented from UniOSC.UniOSCEventTarget.

16.32.2.5 override void UniOSC.UniOSCEventTargetImplementation.Update() [virtual]

Reimplemented from UniOSC.UniOSCEventTarget.

# 16.33 UniOSC.UniOSCFileObj Class Reference

Inheritance diagram for UniOSC.UniOSCFileObj:



#### **Public Attributes**

- · string my\_guid
- · bool IsLearning
- Vector2 scrollpos = new Vector2()
- Vector2 scrollposInspector = new Vector2()

# **Events**

• EventHandler< UniOSCEventArgs > OSCMessageSend

# 16.33.1 Detailed Description

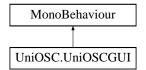
# 16.33.2 Member Data Documentation

16.33.2.1 bool UniOSC.UniOSCFileObj.IsLearning
16.33.2.2 string UniOSC.UniOSCFileObj.my\_guid
16.33.2.3 Vector2 UniOSC.UniOSCFileObj.scrollpos = new Vector2()
16.33.2.4 Vector2 UniOSC.UniOSCFileObj.scrollposInspector = new Vector2()
16.33.3 Event Documentation
16.33.3.1 EventHandler<UniOSCEventArgs> UniOSC.UniOSCFileObj.OSCMessageSend

# 16.34 UniOSC.UniOSCGUI Class Reference

GUI class that mimics the UniOSC editor interface for runtime use You can start/stop the OSCConnections and trace OSC data messages

Inheritance diagram for UniOSC.UniOSCGUI:



#### **Public Attributes**

- bool ShowInEditMode
- bool traceMessages

# 16.34.1 Detailed Description

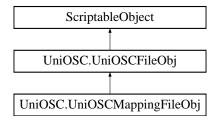
GUI class that mimics the UniOSC editor interface for runtime use You can start/stop the OSCConnections and trace OSC data messages

- 16.34.2 Member Data Documentation
- 16.34.2.1 bool UniOSC.UniOSCGUI.ShowInEditMode
- 16.34.2.2 bool UniOSC.UniOSCGUI.traceMessages

# 16.35 UniOSC.UniOSCMappingFileObj Class Reference

Mapping file class.

Inheritance diagram for UniOSC.UniOSCMappingFileObj:



#### **Public Member Functions**

- void OnEnable ()
- void AddOSCMappingItem ()

Adds a new OSC Mapping item.

void RemoveOSCMappingItem (UniOSCMappingItem obj)

Removes the OSC Mapping item from the list and destroys the item instance.

void OnOSCMessageReceived (object sender, UniOSCEventArgs args)

Checks if we are in learning mode an writes the OSC message address into the address property of a mapping item that is in learn mode(when user hold down the 'learn' button in the editor.

#### **Public Attributes**

List< UniOSCMappingItem > oscMappingItemList

#### **Additional Inherited Members**

#### 16.35.1 Detailed Description

Mapping file class.

Every mapping file get stored as a .asset file. You can copy & paste a mapping file to another Unity project but you have to aware that sometimes Unity changes the serialization format. If you have any trouble go to 'Edit/Project Settings/Editor' and change the serialization mode to 'Force Text' and then switch back to 'Force Binary'

# 16.35.2 Member Function Documentation

16.35.2.1 void UniOSC.UniOSCMappingFileObj.AddOSCMappingItem ( )

Adds a new OSC Mapping item.

16.35.2.2 void UniOSC.UniOSCMappingFileObj.OnEnable ( )

16.35.2.3 void UniOSC.UniOSCMappingFileObj.OnOSCMessageReceived ( object sender, UniOSCEventArgs args )

Checks if we are in learning mode an writes the OSC message address into the address property of a mapping item that is in learn mode(when user hold down the 'learn' button in the editor.

#### **Parameters**

sender	Sender.
args	UniOSCEventArgs that contains the OSC message

16.35.2.4 void UniOSC.UniOSCMappingFileObj.RemoveOSCMappingItem ( UniOSCMappingItem obj )

Removes the OSC Mapping item from the list and destroys the item instance.

UniOSC.UniOSCMappingItem.OnOSCDataDispatcherDelete

#### **Parameters**

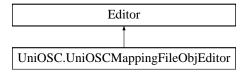
obj Object to remove.

#### 16.35.3 Member Data Documentation

16.35.3.1 List<UniOSCMappingItem> UniOSC.UniOSCMappingFileObj.oscMappingItemList

# 16.36 UniOSC.UniOSCMappingFileObjEditor Class Reference

Inheritance diagram for UniOSC.UniOSCMappingFileObjEditor:



#### **Public Member Functions**

• override void OnInspectorGUI ()

# **Static Public Member Functions**

- static void Init ()
- static void OnGUI\_OSCMappingData\_Editor (UniOSCMappingFileObj obj, float screenWidth, float screen
   Height)
- static void OnGUI\_OSCMappingData\_Inspector (UniOSCMappingFileObj obj, float screenWidth, float screenHeight)

# **Static Public Attributes**

• static GUIStyle style

## 16.36.1 Member Function Documentation

- 16.36.1.1 static void UniOSC.UniOSCMappingFileObjEditor.Init() [static]
- 16.36.1.2 static void UniOSC.UniOSCMappingFileObjEditor.OnGUI\_OSCMappingData\_Editor ( UniOSCMappingFileObj obj, float screenWidth, float screenHeight ) [static]
- 16.36.1.3 static void UniOSC.UniOSCMappingFileObjEditor.OnGUI\_OSCMappingData\_Inspector ( UniOSCMappingFileObj obj, float screenWidth, float screenHeight ) [static]

```
16.36.1.4 override void UniOSC.UniOSCMappingFileObjEditor.OnInspectorGUI ( )

16.36.2 Member Data Documentation
```

16.36.2.1 GUIStyle UniOSC.UniOSCMappingFileObjEditor.style [static]

# 16.37 UniOSC.UniOSCMappingItem Class Reference

Uni OSC mapping item.

#### **Public Member Functions**

- UniOSCMappingItem ()
- UniOSCMappingItem (UniOSCMappingFileObj \_hostObj)

Initializes a new instance of the UniOSC.UniOSCMappingItem class.

void OnOSCMappingItemDelete ()

Removes this item from the UniOSCMappingFileObj host object. Afterwards it gets destroyed.

void MapData (UniOSCEventArgs args)

Maps the incoming OSC data.

# **Public Attributes**

- UniOSCMappingFileObj hostObj
- string address = ""
- float min =0f
- float max =1f
- float mappingMIN =0f
- float mappingMAX =1f
- bool isLearning
- const int MAXWIDTH = 250
- const int MAXHEIGTH = 150
- bool collapsed = true

# 16.37.1 Detailed Description

Uni OSC mapping item.

```
<author> Stefan Schlupek </author>
```

#### 16.37.2 Constructor & Destructor Documentation

16.37.2.1 UniOSC.UniOSCMappingItem.UniOSCMappingItem ( )

16.37.2.2 UniOSC.UniOSCMappingItem.UniOSCMappingItem ( UniOSCMappingFileObj \_hostObj )

Initializes a new instance of the UniOSC.UniOSCMappingItem class.

# **Parameters**

hostObi	The UniOSCMappingFileObj object that host the item

# 16.37.3 Member Function Documentation

16.37.3.1 void UniOSC.UniOSCMappingItem.MapData ( UniOSCEventArgs args )

Maps the incoming OSC data.

#### **Parameters**

args Argun	nents.
------------	--------

# 16.37.3.2 void UniOSC.UniOSCMappingItem.OnOSCMappingItemDelete ( )

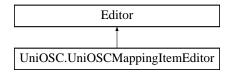
Removes this item from the UniOSCMappingFileObj host object.Afterwards it gets destroyed.

# 16.37.4 Member Data Documentation

- 16.37.4.1 string UniOSC.UniOSCMappingItem.address = ""
- 16.37.4.2 bool UniOSC.UniOSCMappingItem.collapsed = true
- 16.37.4.3 UniOSCMappingFileObj UniOSC.UniOSCMappingItem.hostObj
- 16.37.4.4 bool UniOSC.UniOSCMappingItem.isLearning
- 16.37.4.5 float UniOSC.UniOSCMappingItem.mappingMAX =1f
- 16.37.4.6 float UniOSC.UniOSCMappingItem.mappingMIN =0f
- 16.37.4.7 float UniOSC.UniOSCMappingItem.max =1f
- 16.37.4.8 const int UniOSC.UniOSCMappingItem.MAXHEIGTH = 150
- 16.37.4.9 const int UniOSC.UniOSCMappingItem.MAXWIDTH = 250
- 16.37.4.10 float UniOSC.UniOSCMappingItem.min =0f

# 16.38 UniOSC.UniOSCMappingItemEditor Class Reference

Inheritance diagram for UniOSC.UniOSCMappingItemEditor:



#### **Public Member Functions**

void OnEnable ()

#### **Static Public Member Functions**

- static void OnGUI\_Editor (UniOSCMappingItem obj)
- static void OnGUI\_Inspector (UniOSCMappingItem obj)

# 16.38.1 Member Function Documentation

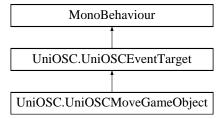
```
16.38.1.1 void UniOSC.UniOSCMappingItemEditor.OnEnable ( )
```

16.38.1.2 static void UniOSC.UniOSCMappingItemEditor.OnGUI\_Editor( UniOSCMappingItem obj ) [static]

16.38.1.3 static void UniOSC.UniOSCMappingItemEditor.OnGUI\_Inspector ( UniOSCMappingItem obj ) [static]

# 16.39 UniOSC.UniOSCMoveGameObject Class Reference

Moves a GameObject in normalized coordinates (ScreenToWorldPoint)
Inheritance diagram for UniOSC.UniOSCMoveGameObject:



# **Public Types**

• enum Mode { Mode.Screen, Mode.Relative }

#### **Public Member Functions**

• override void OnEnable ()

Enable this component and reinitialize.

override void OnOSCMessageReceived (UniOSCEventArgs args)

You should override this method in a subclass to handle the OSC data.

# **Public Attributes**

- Transform transformToMove
- float nearClipPlaneOffset = 1
- Mode movementMode

#### **Additional Inherited Members**

# 16.39.1 Detailed Description

Moves a GameObject in normalized coordinates (ScreenToWorldPoint)

# 16.39.2 Member Enumeration Documentation

16.39.2.1 enum UniOSC.UniOSCMoveGameObject.Mode [strong]

Enumerator

Screen

Relative

#### 16.39.3 Member Function Documentation

```
16.39.3.1 override void UniOSC.UniOSCMoveGameObject.OnEnable() [virtual]
```

Enable this component and reinitialize.

If a property of the component is changed via the inspector we force a OnEnable to update the status of the component. In general the component disconnects from all OSCConnections and try to find a new OSCConnection to connect to with a matching port. If you change properties via code you should call this explicit.

Reimplemented from UniOSC.UniOSCEventTarget.

```
16.39.3.2 override void UniOSC.UniOSCMoveGameObject.OnOSCMessageReceived ( UniOSCEventArgs args )
[virtual]
```

You should override this method in a subclass to handle the OSC data.

#### **Parameters**

	args	The current OSCEventArgs object
--	------	---------------------------------

Implements UniOSC.UniOSCEventTarget.

#### 16.39.4 Member Data Documentation

- 16.39.4.1 Mode UniOSC.UniOSCMoveGameObject.movementMode
- 16.39.4.2 float UniOSC.UniOSCMoveGameObject.nearClipPlaneOffset = 1
- 16.39.4.3 Transform UniOSC.UniOSCMoveGameObject.transformToMove

#### 16.40 UniOSC.UniOSCReceiver Class Reference

Uni OSC receiver.

#### **Public Member Functions**

- UniOSCReceiver ()
- UniOSCReceiver (int port, string MulticastAddress)
- UniOSCReceiver (int port, TransmissionType ttype, IPAddress MulticastAddress)
- bool Connect ()

Connect this instance.

· void Disconnect ()

Disconnect this instance.

# **Properties**

```
int Port [get]int FrameNumber [get]
```

#### **Events**

- EventHandler< UniOSCEventArgs > OSCMessageReceived
- EventHandler< ExceptionEventArgs > OSCErrorOccured

# 16.40.1 Detailed Description

Uni OSC receiver.

```
16.40.2 Constructor & Destructor Documentation
```

```
16.40.2.1 UniOSC.UniOSCReceiver.UniOSCReceiver ( )
```

16.40.2.2 UniOSC.UniOSCReceiver.UniOSCReceiver (int port, string MulticastAddress)

16.40.2.3 UniOSC.UniOSCReceiver.UniOSCReceiver (int port, TransmissionType ttype, IPAddress MulticastAddress)

#### 16.40.3 Member Function Documentation

16.40.3.1 bool UniOSC.UniOSCReceiver.Connect ( )

Connect this instance.

16.40.3.2 void UniOSC.UniOSCReceiver.Disconnect ( )

Disconnect this instance.

# 16.40.4 Property Documentation

```
16.40.4.1 int UniOSC.UniOSCReceiver.FrameNumber [get]
```

**16.40.4.2** int UniOSC.UniOSCReceiver.Port [get]

# 16.40.5 Event Documentation

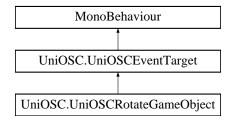
16.40.5.1 EventHandler < Exception EventArgs > UniOSC. UniOSCReceiver. OSC Error Occured

 $16.40.5.2 \quad Event Handler < \textbf{UniOSCEventArgs} > \textbf{UniOSC.UniOSCReceiver.OSCMessageReceived}$ 

# 16.41 UniOSC.UniOSCRotateGameObject Class Reference

Rotates (localRotation) the hosting game object.

Inheritance diagram for UniOSC.UniOSCRotateGameObject:



#### **Public Member Functions**

• override void OnEnable ()

Enable this component and reinitialize.

override void OnOSCMessageReceived (UniOSCEventArgs args)

You should override this method in a subclass to handle the OSC data.

#### **Public Attributes**

- Transform transformToRotate
- string X Address
- string Y\_Address
- string Z\_Address
- float x RotationFactor
- float y\_RotationFactor
- float z\_RotationFactor

# **Additional Inherited Members**

# 16.41.1 Detailed Description

Rotates (localRotation) the hosting game object.

For every axis you have a separate OSC address to specify

#### 16.41.2 Member Function Documentation

16.41.2.1 override void UniOSC.UniOSCRotateGameObject.OnEnable ( ) [virtual]

Enable this component and reinitialize.

If a property of the component is changed via the inspector we force a OnEnable to update the status of the component. In general the component disconnects from all OSCConnections and try to find a new OSCConnection to connect to with a matching port. If you change properties via code you should call this explicit.

Reimplemented from UniOSC.UniOSCEventTarget.

# 16.41.2.2 override void UniOSC.UniOSCRotateGameObject.OnOSCMessageReceived ( UniOSCEventArgs args ) [virtual]

You should override this method in a subclass to handle the OSC data.

#### **Parameters**

args	The current OSCEventArgs object

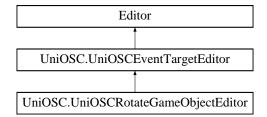
Implements UniOSC.UniOSCEventTarget.

#### 16.41.3 Member Data Documentation

- 16.41.3.1 Transform UniOSC.UniOSCRotateGameObject.transformToRotate
- 16.41.3.2 string UniOSC.UniOSCRotateGameObject.X\_Address
- 16.41.3.3 float UniOSC.UniOSCRotateGameObject.x\_RotationFactor
- 16.41.3.4 string UniOSC.UniOSCRotateGameObject.Y\_Address
- 16.41.3.5 float UniOSC.UniOSCRotateGameObject.y\_RotationFactor
- 16.41.3.6 string UniOSC.UniOSCRotateGameObject.Z\_Address
- 16.41.3.7 float UniOSC.UniOSCRotateGameObject.z\_RotationFactor

# 16.42 UniOSC.UniOSCRotateGameObjectEditor Class Reference

 $Inheritance\ diagram\ for\ UniOSC. UniOSCRotate Game Object Editor:$ 



#### **Public Member Functions**

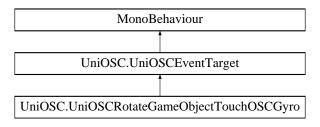
• override void OnInspectorGUI ()

#### **Additional Inherited Members**

- 16.42.1 Member Function Documentation
- 16.42.1.1 override void UniOSC.UniOSCRotateGameObjectEditor.OnInspectorGUI ( )

# 16.43 UniOSC.UniOSCRotateGameObjectTouchOSCGyro Class Reference

Inheritance diagram for UniOSC.UniOSCRotateGameObjectTouchOSCGyro:



#### **Public Member Functions**

override void OnEnable ()

Enable this component and reinitialize.

override void OnOSCMessageReceived (UniOSCEventArgs args)

You should override this method in a subclass to handle the OSC data.

#### **Public Attributes**

- Transform transformToRotate
- float x RotationFactor =90
- float y RotationFactor =90
- float z\_RotationFactor =90
- float damping =1

#### **Additional Inherited Members**

#### 16.43.1 Member Function Documentation

16.43.1.1 override void UniOSC.UniOSCRotateGameObjectTouchOSCGyro.OnEnable( ) [virtual]

Enable this component and reinitialize.

If a property of the component is changed via the inspector we force a OnEnable to update the status of the component. In general the component disconnects from all OSCConnections and try to find a new OSCConnection to connect to with a matching port. If you change properties via code you should call this explicit.

Reimplemented from UniOSC.UniOSCEventTarget.

16.43.1.2 override void UniOSC.UniOSCRotateGameObjectTouchOSCGyro.OnOSCMessageReceived ( UniOSCEventArgs args ) [virtual]

You should override this method in a subclass to handle the OSC data.

#### **Parameters**

args	The current OSCEventArgs object
------	---------------------------------

Implements UniOSC.UniOSCEventTarget.

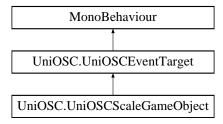
# 16.43.2 Member Data Documentation

- 16.43.2.1 float UniOSC.UniOSCRotateGameObjectTouchOSCGyro.damping =1
- 16.43.2.2 Transform UniOSC.UniOSCRotateGameObjectTouchOSCGyro.transformToRotate
- 16.43.2.3 float UniOSC.UniOSCRotateGameObjectTouchOSCGyro.x\_RotationFactor =90
- 16.43.2.4 float UniOSC.UniOSCRotateGameObjectTouchOSCGyro.y\_RotationFactor =90
- 16.43.2.5 float UniOSC.UniOSCRotateGameObjectTouchOSCGyro.z\_RotationFactor =90

# 16.44 UniOSC.UniOSCScaleGameObject Class Reference

Uni OSC scale game object.

Inheritance diagram for UniOSC.UniOSCScaleGameObject:



# **Public Member Functions**

- override void OnEnable ()
   Enable this component and reinitialize.
- override void OnOSCMessageReceived (UniOSCEventArgs args)

You should override this method in a subclass to handle the OSC data.

#### **Public Attributes**

- Transform transformToScale
- float scaleFactor = 1

# **Additional Inherited Members**

# 16.44.1 Detailed Description

Uni OSC scale game object.

# 16.44.2 Member Function Documentation

16.44.2.1 override void UniOSC.UniOSCScaleGameObject.OnEnable() [virtual]

Enable this component and reinitialize.

If a property of the component is changed via the inspector we force a OnEnable to update the status of the component. In general the component disconnects from all OSCConnections and try to find a new OSCConnection to connect to with a matching port. If you change properties via code you should call this explicit.

Reimplemented from UniOSC.UniOSCEventTarget.

# 16.44.2.2 override void UniOSC.UniOSCScaleGameObject.OnOSCMessageReceived ( UniOSCEventArgs args ) [virtual]

You should override this method in a subclass to handle the OSC data.

# **Parameters**

args	The current OSCEventArgs object

Implements UniOSC.UniOSCEventTarget.

#### 16.44.3 Member Data Documentation

- 16.44.3.1 float UniOSC.UniOSCScaleGameObject.scaleFactor = 1
- 16.44.3.2 Transform UniOSC.UniOSCScaleGameObject.transformToScale

# 16.45 UniOSC.UniOSCScriptTestEditor Class Reference

Editor for the administration of OSCconnections, mapping files.

Inheritance diagram for UniOSC.UniOSCScriptTestEditor:



#### **Public Member Functions**

- void OnEnable ()
- void OnDisable ()

# **Properties**

- static UniOSCScriptTestEditor Instance [get]
- static bool IsOpen [get]

# 16.45.1 Detailed Description

Editor for the administration of OSCconnections, mapping files.

You can also trace the OSC data flow .

# 16.45.2 Member Function Documentation

- 16.45.2.1 void UniOSC.UniOSCScriptTestEditor.OnDisable ( )
- 16.45.2.2 void UniOSC.UniOSCScriptTestEditor.OnEnable ( )

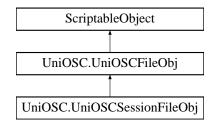
# 16.45.3 Property Documentation

- **16.45.3.1 UniOSCScriptTestEditor UniOSC.UniOSCScriptTestEditor.Instance** [static], [get]
- $\textbf{16.45.3.2} \quad \textbf{bool UniOSC.UniOSCScriptTestEditor.lsOpen} \quad \texttt{[static],[get]}$

# 16.46 UniOSC.UniOSCSessionFileObj Class Reference

OSC Session file class.

Inheritance diagram for UniOSC.UniOSCSessionFileObj:



#### **Public Member Functions**

- void OnEnable ()
- void AddOSCSessionItem ()

Adds a new OSC Session item.

void RemoveOSCSessionItem (UniOSCSessionItem obj)

Removes the OSC Session item from the list and destroys the item instance.

void OnOSCMessageReceived (object sender, UniOSCEventArgs args)

Checks if we are in learning mode an writes the OSC message address into the address property of a session item that is in learn mode(when user hold down the 'learn' button in the editor.

# **Public Attributes**

• List< UniOSCSessionItem > oscSessionItemList

# **Additional Inherited Members**

# 16.46.1 Detailed Description

OSC Session file class.

Every Session file get stored as a .asset file. You can copy & paste a Session file to another Unity project but you have to aware that sometimes Unity changes the serialization format. If you have any trouble go to 'Edit/Project Settings/Editor' and change the serialization mode to 'Force Text' and then switch back to 'Force Binary'

# 16.46.2 Member Function Documentation

16.46.2.1 void UniOSC.UniOSCSessionFileObj.AddOSCSessionItem ( )

Adds a new OSC Session item.

16.46.2.2 void UniOSC.UniOSCSessionFileObj.OnEnable ( )

16.46.2.3 void UniOSC.UniOSCSessionFileObj.OnOSCMessageReceived (object sender, UniOSCEventArgs args)

Checks if we are in learning mode an writes the OSC message address into the address property of a session item that is in learn mode(when user hold down the 'learn' button in the editor.

# **Parameters**

sender	Sender.
args	UniOSCEventArgs that contains the OSC message

16.46.2.4 void UniOSC.UniOSCSessionFileObj.RemoveOSCSessionItem ( UniOSCSessionItem obj )

Removes the OSC Session item from the list and destroys the item instance.

UniOSC.UniOSCSessionItem.OnOSCSessionItemDelete

#### **Parameters**

obj	UniOSCSessionItem to remove.
-----	------------------------------

# 16.46.3 Member Data Documentation

16.46.3.1 List<UniOSCSessionItem> UniOSC.UniOSCSessionFileObj.oscSessionItemList

# 16.47 UniOSC.UniOSCSessionFileObjEditor Class Reference

Inheritance diagram for UniOSC.UniOSCSessionFileObjEditor:



# **Public Member Functions**

• override void OnInspectorGUI ()

#### Static Public Member Functions

- static void Init ()
- static void OnGUI\_OSCSessionData\_Editor (UniOSCSessionFileObj obj, float screenWidth, float screen
   Height)
- static void OnGUI\_OSCSessionData\_Inspector (UniOSCSessionFileObj obj, float screenWidth, float screenHeight)

# **Static Public Attributes**

• static GUIStyle style

# 16.47.1 Member Function Documentation

- 16.47.1.1 static void UniOSC.UniOSCSessionFileObjEditor.Init( ) [static]
- 16.47.1.2 static void UniOSC.UniOSCSessionFileObjEditor.OnGUI\_OSCSessionData\_Editor ( UniOSCSessionFileObj obj, float screenWidth, float screenHeight ) [static]
- 16.47.1.3 static void UniOSC.UniOSCSessionFileObjEditor.OnGUI\_OSCSessionData\_Inspector ( UniOSCSessionFileObj obj, float screenWidth, float screenHeight ) [static]
- 16.47.1.4 override void UniOSC.UniOSCSessionFileObjEditor.OnInspectorGUI ( )

# 16.47.2 Member Data Documentation

**16.47.2.1 GUIStyle UniOSC.UniOSCSessionFileObjEditor.style** [static]

# 16.48 UniOSC.UniOSCSessionItem Class Reference

Uni OSC mapping item.

# **Public Member Functions**

- UniOSCSessionItem ()
- UniOSCSessionItem (UniOSCSessionFileObj \_hostObj)

Initializes a new instance of the UniOSC. UniOSCS essionItem class.

void OnOSCSessionItemDelete ()

Removes this item from the UniOSCSessionFileObj host object. Afterwards it gets destroyed.

# **Public Attributes**

- UniOSCSessionFileObj hostObj
- string address = ""
- List< string > data = new List<string>()
- List< string > dataTypeList = new List<string>()
- bool isLearning
- const int MAXWIDTH = 250
- const int MAXHEIGTH = 150
- bool collapsed = true

# 16.48.1 Detailed Description

Uni OSC mapping item.

<author> Stefan Schlupek </author>

# 16.48.2 Constructor & Destructor Documentation

16.48.2.1 UniOSC.UniOSCSessionItem.UniOSCSessionItem ( )

16.48.2.2 UniOSC.UniOSCSessionItem.UniOSCSessionItem ( UniOSCSessionFileObj \_hostObj )

Initializes a new instance of the UniOSC. UniOSCS essionItem class.

# **Parameters**

\_hostObj | The UniOSCSessionFileObj object that host the item

# 16.48.3 Member Function Documentation

16.48.3.1 void UniOSC.UniOSCSessionItem.OnOSCSessionItemDelete ( )

Removes this item from the UniOSCSessionFileObj host object.Afterwards it gets destroyed.

16.48.4	Member Data Documentation
16.48.4.1	string UniOSC.UniOSCSessionItem.address = ""
16.48.4.2	bool UniOSC.UniOSCSessionItem.collapsed = true
16.48.4.3	List <string> UniOSC.UniOSCSessionItem.data = new List<string>()</string></string>
16.48.4.4	List <string> UniOSC.UniOSCSessionItem.dataTypeList = new List<string>()</string></string>
16.48.4.5	UniOSCSessionFileObj UniOSC.UniOSCSessionItem.hostObj
16.48.4.6	bool UniOSC.UniOSCSessionItem.isLearning
16.48.4.7	const int UniOSC.UniOSCSessionItem.MAXHEIGTH = 150
16.48.4.8	const int UniOSC.UniOSCSessionItem.MAXWIDTH = 250

# 16.49 UniOSC.UniOSCSessionItemEditor Class Reference

Inheritance diagram for UniOSC.UniOSCSessionItemEditor:



# **Public Member Functions**

• void OnEnable ()

# **Static Public Member Functions**

- static void OnGUI\_Editor (UniOSCSessionItem obj)
- static void OnGUI Inspector (UniOSCSessionItem obj)

# 16.49.1 Member Function Documentation

16.49.1.1 void UniOSC.UniOSCSessionItemEditor.OnEnable ( )

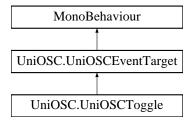
16.49.1.2 static void UniOSC.UniOSCSessionItemEditor.OnGUI\_Editor( UniOSCSessionItem obj ) [static]

 $\textbf{16.49.1.3} \quad \textbf{static void UniOSC.UniOSCSessionItemEditor.OnGUI\_Inspector (\ \textbf{UniOSCSessionItem} \ \textbf{\textit{obj}} \ ) \quad [\, \texttt{static} \,]$ 

# 16.50 UniOSC.UniOSCToggle Class Reference

With this class you can toggle most of the Unity Components on/off The data of the OSC message should be only 0(off) or 1(on)

Inheritance diagram for UniOSC.UniOSCToggle:



#### **Public Member Functions**

- void UpdateComponentState ()
  - Updates the state of the component.
- override void OnEnable ()

Enable this component and reinitialize.

override void OnOSCMessageReceived (UniOSCEventArgs args)

You should override this method in a subclass to handle the OSC data.

# **Public Attributes**

- Component component To Toggle
- · bool toggleState

# **Additional Inherited Members**

# 16.50.1 Detailed Description

With this class you can toggle most of the Unity Components on/off The data of the OSC message should be only 0(off) or 1(on)

#### 16.50.2 Member Function Documentation

16.50.2.1 override void UniOSC.UniOSCToggle.OnEnable() [virtual]

Enable this component and reinitialize.

If a property of the component is changed via the inspector we force a OnEnable to update the status of the component. In general the component disconnects from all OSCConnections and try to find a new OSCConnection to connect to with a matching port. If you change properties via code you should call this explicit.

Reimplemented from UniOSC.UniOSCEventTarget.

16.50.2.2 override void UniOSC.UniOSCToggle.OnOSCMessageReceived ( UniOSCEventArgs args ) [virtual]

You should override this method in a subclass to handle the OSC data.

# **Parameters**

args The current OSCEventArgs object

Implements UniOSC.UniOSCEventTarget.

16.50.2.3 void UniOSC.UniOSCToggle.UpdateComponentState ( )

Updates the state of the component.

(enabled)

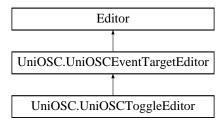
# 16.50.3 Member Data Documentation

16.50.3.1 Component UniOSC.UniOSCToggle.componentToToggle

16.50.3.2 bool UniOSC.UniOSCToggle.toggleState

# 16.51 UniOSC.UniOSCToggleEditor Class Reference

Inheritance diagram for UniOSC.UniOSCToggleEditor:



# **Public Member Functions**

- override void OnEnable ()
- override void OnInspectorGUI ()

# **Protected Member Functions**

• void ForceUpdate ()

# **Protected Attributes**

- UniOSCToggle \_targetToggle
- SerializedProperty ComponentToToggleProp
- SerializedProperty ToggleStateProp
- int \_componentIndex = 0
- bool \_updateFlag

# 16.51.1 Member Function Documentation

16.51.1.1 void UniOSC.UniOSCToggleEditor.ForceUpdate( ) [protected]

**16.51.1.2 override void UniOSC.UniOSCToggleEditor.OnEnable()** [virtual]

 $Reimplemented \ from \ UniOSC. UniOSC Event Target Editor.$ 

```
16.51.1.3 override void UniOSC.UniOSCToggleEditor.OnInspectorGUI()

16.51.2 Member Data Documentation

16.51.2.1 int UniOSC.UniOSCToggleEditor._componentIndex = 0 [protected]

16.51.2.2 UniOSCToggle UniOSC.UniOSCToggleEditor._targetToggle [protected]

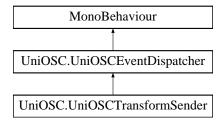
16.51.2.3 bool UniOSC.UniOSCToggleEditor._updateFlag [protected]

16.51.2.4 SerializedProperty UniOSC.UniOSCToggleEditor.ComponentToToggleProp [protected]
```

# 16.52 UniOSC.UniOSCTransformSender Class Reference

16.51.2.5 SerializedProperty UniOSC.UniOSCToggleEditor.ToggleStateProp [protected]

Inheritance diagram for UniOSC.UniOSCTransformSender:



# **Public Member Functions**

- override void OnEnable ()
- override void OnDisable ()

# **Public Attributes**

· GameObject trackedGameObject

# **Protected Member Functions**

• override void \_Update ()

# **Additional Inherited Members**

# 16.52.1 Member Function Documentation

16.52.1.1 override void UniOSC.UniOSCTransformSender.\_Update() [protected], [virtual]

 $\label{lem:lemented_rom_uniOSC} Reimplemented from \ UniOSC. UniOSC Event Dispatcher.$ 

**16.52.1.2** override void UniOSC.UniOSCTransformSender.OnDisable ( ) [virtual]

Reimplemented from UniOSC.UniOSCEventDispatcher.

```
16.52.1.3 override void UniOSC.UniOSCTransformSender.OnEnable() [virtual]
```

Reimplemented from UniOSC.UniOSCEventDispatcher.

# 16.52.2 Member Data Documentation

16.52.2.1 GameObject UniOSC.UniOSCTransformSender.trackedGameObject

# 16.53 UniOSC.UniOSCTransmitter Class Reference

# **Public Member Functions**

- UniOSCTransmitter ()
- UniOSCTransmitter (string ipAddress, int port)
- · UniOSCTransmitter (IPAddress ipAddress, int port)
- UniOSCTransmitter (IPAddress ipAddress, TransmissionType ttype, int port)
- bool Connect ()
- void Close ()
- bool SendOSCMessage (object sender, UniOSCEventArgs args)

# **Properties**

- IPAddress IPAddress [get]
- int Port [get]
- TransmissionType transmissionType [get]

# **Events**

• EventHandler < ExceptionEventArgs > OSCErrorOccured

# 16.53.1 Constructor & Destructor Documentation

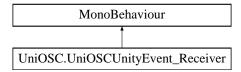
- 16.53.1.1 UniOSC.UniOSCTransmitter.UniOSCTransmitter()
- $16.53.1.2 \quad UniOSC. UniOSC Transmitter. UniOSC Transmitter ( \ string \ \textit{ipAddress}, \ int \ \textit{port} \ )$
- 16.53.1.3 UniOSC.UniOSCTransmitter.UniOSCTransmitter ( IPAddress ipAddress, int port )
- $16.53.1.4 \quad UniOSC. UniOSC Transmitter. UniOSC Transmitter ( \ \textbf{IPAddress}, \ \textbf{TransmissionType} \ \textit{ttype}, \ \text{int} \ \textit{port} \ )$
- 16.53.2 Member Function Documentation
- 16.53.2.1 void UniOSC.UniOSCTransmitter.Close ( )
- 16.53.2.2 bool UniOSC.UniOSCTransmitter.Connect ( )
- 16.53.2.3 bool UniOSC.UniOSCTransmitter.SendOSCMessage ( object sender, UniOSCEventArgs args )
- 16.53.3 Property Documentation
- 16.53.3.1 IPAddress UniOSC.UniOSCTransmitter.IPAddress [get]

- **16.53.3.2** int UniOSC.UniOSCTransmitter.Port [get]
- **16.53.3.3 TransmissionType UniOSC.UniOSCTransmitter.transmissionType** [get]
- 16.53.4 Event Documentation
- 16.53.4.1 EventHandler < Exception EventArgs > UniOSC. UniOSCTransmitter. OSCError Occured

# 16.54 UniOSC.UniOSCUnityEvent\_Receiver Class Reference

Demo class to show how you can use the UnityEvent system.

Inheritance diagram for UniOSC.UniOSCUnityEvent\_Receiver:



# **Public Member Functions**

• void OnOSCMessageReceived (OscMessage msg)

This is a method you can add as listener to an UnityEvent<OscMessage>

# **Public Attributes**

• bool debug

# 16.54.1 Detailed Description

Demo class to show how you can use the UnityEvent system.

Message is sent from a UniOSCUnityEventRelay instance <![CDATA[UnityEvent<OscMessage>]]>

# 16.54.2 Member Function Documentation

16.54.2.1 void UniOSC.UniOSCUnityEvent\_Receiver.OnOSCMessageReceived (OscMessage msg)

This is a method you can add as listener to an UnityEvent<OscMessage>

# **Parameters**

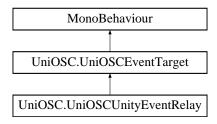
msg

# 16.54.3 Member Data Documentation

16.54.3.1 bool UniOSC.UniOSCUnityEvent\_Receiver.debug

# 16.55 UniOSC.UniOSCUnityEventRelay Class Reference

Inheritance diagram for UniOSC.UniOSCUnityEventRelay:



# Classes

• class UnityEvent\_OscMessage

#### **Public Member Functions**

- · override void Start ()
- override void OnEnable ()

Enable this component and reinitialize.

• override void OnDisable ()

When the component is disabled we disconnect from all OSCConnections and clear some internal data.

- override void Update ()
- override void OnOSCMessageReceived (UniOSCEventArgs args)

Method is called from a OSCConnection when a OSC message arrives.

# **Public Attributes**

UnityEvent\_OscMessage unioscEvent

# **Additional Inherited Members**

# 16.55.1 Member Function Documentation

16.55.1.1 override void UniOSC.UniOSCUnityEventRelay.OnDisable() [virtual]

When the component is disabled we disconnect from all OSCConnections and clear some internal data.

Reimplemented from UniOSC.UniOSCEventTarget.

**16.55.1.2** override void UniOSC.UniOSCUnityEventRelay.OnEnable() [virtual]

Enable this component and reinitialize.

If a property of the component is changed via the inspector we force a OnEnable to update the status of the component. In general the component disconnects from all OSCConnections and try to find a new OSCConnection to connect to with a matching port. If you change properties via code you should call this explicit.

Reimplemented from UniOSC.UniOSCEventTarget.

16.55.1.3 override void UniOSC.UniOSCUnityEventRelay.OnOSCMessageReceived ( UniOSCEventArgs args ) [virtual]

Method is called from a OSCConnection when a OSC message arrives.

The OSCMessage is then relayed as a normal UnityEvent(OscMessage)

#### **Parameters**

args	OSCEventArgs

Implements UniOSC.UniOSCEventTarget.

16.55.1.4 override void UniOSC.UniOSCUnityEventRelay.Start() [virtual]

Reimplemented from UniOSC.UniOSCEventTarget.

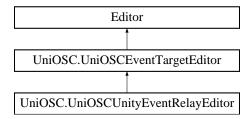
16.55.1.5 override void UniOSC.UniOSCUnityEventRelay.Update() [virtual]

Reimplemented from UniOSC.UniOSCEventTarget.

- 16.55.2 Member Data Documentation
- 16.55.2.1 UnityEvent\_OscMessage UniOSC.UniOSCUnityEventRelay.unioscEvent

# 16.56 UniOSC.UniOSCUnityEventRelayEditor Class Reference

Inheritance diagram for UniOSC.UniOSCUnityEventRelayEditor:



# **Public Member Functions**

- override void OnEnable ()
- override void OnInspectorGUI ()

# **Protected Attributes**

SerializedProperty unioscEventProp

**Additional Inherited Members** 

# 16.56.1 Member Function Documentation

16.56.1.1 override void UniOSC.UniOSCUnityEventRelayEditor.OnEnable() [virtual]

 $Reimplemented \ from \ UniOSC. UniOSC Event Target Editor.$ 

- 16.56.1.2 override void UniOSC.UniOSCUnityEventRelayEditor.OnInspectorGUI ( )
- 16.56.2 Member Data Documentation
- **16.56.2.1 SerializedProperty UniOSC.UniOSCUnityEventRelayEditor.unioscEventProp** [protected]

# 16.57 UniOSC.UniOSCUnityEventRelay.UnityEvent\_OscMessage Class Reference

 $Inheritance\ diagram\ for\ UniOSC. UniOSCUnityEventRelay. UnityEvent\_OscMessage:$ 



# Index

_Connect IoDispatchers	UniOSC::UniOSCEventDispatcher, 75
UniOSC::UniOSCEventTarget, 97	_explicitConnection
UniOSC::UniOSCEventTargetCB, 101	UniOSC::UniOSCEventDispatcher, 75
_ConnectToOSCConnections	UniOSC::UniOSCEventDispatcherCB, 82
UniOSC::UniOSCEventDispatcher, 73	UniOSC::UniOSCEventTarget, 98
UniOSC::UniOSCEventDispatcherCB, 80	UniOSC::UniOSCEventTargetCB, 102
_DisconnectFromDispatchers	_foldoutList
UniOSC::UniOSCEventTarget, 97	UniOSC::UniOSCEventTarget, 98
DisconnectFromOSCConnections	_isOSCDirty
UniOSC::UniOSCEventDispatcher, 73	UniOSC::UniOSCEventDispatcher, 75
UniOSC::UniOSCEventDispatcherCB, 80	UniOSC::UniOSCEventDispatcherCB, 82
OSCeArg	isValidOSCMulticastIPAddress
UniOSC::UniOSCEventDispatcher, 75	UniOSC::UniOSCConnectionEditor, 67
UniOSC::UniOSCEventDispatcherCB, 82	isValidOSCMulticastIPAddressOut
_OSCpkg	UniOSC::UniOSCConnectionEditor, 67
UniOSC::UniOSCEventDispatcher, 75	myOSCConnections
UniOSC::UniOSCEventDispatcherCB, 82	UniOSC::UniOSCEventDispatcher, 75
OnConnectionInStatusChanged	myOSCConnectionsProp
UniOSC::UniOSCEventTarget, 97	UniOSC::UniOSCEventDispatcherEditor, 88
OnConnectionOutStatusChanged	_mylock
UniOSC::UniOSCEventDispatcher, 73	UniOSC::UniOSCEventDispatcher, 75
UniOSC::UniOSCEventDispatcherCB, 80	UniOSC::UniOSCEventDispatcherCB, 82
_OnTimedEvent	oldOSCMulticastIPAddress
UniOSC::UniOSCEventDispatcher, 73	UniOSC::UniOSCConnectionEditor, 67
UniOSC::UniOSCEventDispatcherCB, 80	oldOSCMulticastIPAddressOut
_SendOSCMessage	UniOSC::UniOSCConnectionEditor, 67
UniOSC::UniOSCEventDispatcher, 73	_options
UniOSC::UniOSCEventDispatcherCB, 80	UniOSC::UniOSCEventDispatcherEditor, 88
_SetupOSCMessage	UniOSC::UniOSCEventTargetEditor, 105
UniOSC::UniOSCEventDispatcher, 73	oscAddress
UniOSC::UniOSCEventDispatcherCB, 80	UniOSC::UniOSCEventTarget, 98
_TransmissionTypeIndex	UniOSC::UniOSCEventTargetCB, 102
UniOSC::UniOSCConnectionEditor, 67	oscAddresses
_TransmissionTypeIndexOut	UniOSC::UniOSCEventTarget, 98
UniOSC::UniOSCConnectionEditor, 67	UniOSC::UniOSCEventTargetCB, 102
_TransmissionTypes	oscOutAddress
UniOSC::UniOSCConnectionEditor, 67	UniOSC::UniOSCEventDispatcher, 75
_TransmissionTypesOut	UniOSC::UniOSCEventDispatcherCB, 82
UniOSC::UniOSCConnectionEditor, 67	oscOutlPAddress
_Update	UniOSC::UniOSCEventDispatcher, 75
UniOSC::UniOSCEventDispatcher, 73	UniOSC::UniOSCEventDispatcherCB, 82
UniOSC::UniOSCTransformSender, 127	_oscOutPort
	UniOSC::UniOSCEventDispatcher, 75
_componentIndex	•
UniOSC::UniOSCToggleEditor, 127	UniOSC::UniOSCEventDispatcherCB, 82
_currOSCMulticastIPAddress	_oscPort
UniOSC::UniOSCConnectionEditor, 67	UniOSC::UniOSCEventTarget, 98
_currOSCMulticastIPAddressOut	UniOSC::UniOSCEventTargetCB, 102
UniOSC::UniOSCConnectionEditor, 67	_portIndex
_drawDefaultInspector	UniOSC::UniOSCEventDispatcherEditor, 88

UniOSC::UniOSCEventTargetEditor, 105	UniOSC::UniOSCConnection, 65
_receiveAllAddresses	AvailableINPortsProp
UniOSC::UniOSCEventTarget, 98	UniOSC::UniOSCEventTargetEditor, 105
UniOSC::UniOSCEventTargetCB, 102	AvailableOUTIPAddresses
_receiveAllPorts	UniOSC::UniOSCConnection, 65
UniOSC::UniOSCEventTarget, 98	AvailableOUTPorts
UniOSC::UniOSCEventTargetCB, 102	UniOSC::UniOSCConnection, 65
_redrawFlag	Awake
UniOSC::UniOSCEventTarget, 98	UniOSC::UniOSC_uGUI_Button, 55
_sendIntervalTimer	UniOSC::UniOSC_uGUI_Slider, 56
UniOSC::UniOSCEventDispatcher, 75	UniOSC::UniOSC_uGUI_Toggle, 57
UniOSC::UniOSCEventDispatcherCB, 82	UniOSC::UniOSCConnection, 63
_slider	UniOSC::UniOSCEventDispatcher, 74
UniOSC::UniOSC_uGUI_Slider, 56	UniOSC::UniOSCEventDispatcherButton, 76
_target	UniOSC::UniOSCEventDispatcherCBImplementation
UniOSC::UniOSCEventDispatcherEditor, 88	83
UniOSC::UniOSCEventTargetEditor, 105	UniOSC::UniOSCEventDispatcherCBRaw←
_targetToggle	Implementation, 85
UniOSC::UniOSCToggleEditor, 127	UniOSC::UniOSCEventDispatcherCBSimple, 86
_tex_logo	UniOSC::UniOSCEventDispatcherCB, 80
UniOSC::UniOSCEventDispatcherEditor, 88	UniOSC::UniOSCEventDispatcherImplementation,
UniOSC::UniOSCEventTargetEditor, 105	89
_toggle	UniOSC::UniOSCEventDispatcherMultiAddress↔
UniOSC::UniOSC_uGUI_Toggle, 57	Sender, 90
_updateFlag	UniOSC::UniOSCEventDispatcherMultiConnection ←
UniOSC::UniOSCToggleEditor, 127	Sender, 92
_useExplicitConnection	UniOSC::UniOSCEventDispatcherSlider, 93
UniOSC::UniOSCEventDispatcher, 75	UniOSC::UniOSCEventDispatcherToggle, 95
UniOSC::UniOSCEventDispatcherCB, 82	UniOSC::UniOSCEventTargetCBImplementation,
UniOSC::UniOSCEventTarget, 98	103
UniOSC::UniOSCEventTargetCB, 102	UniOSC::UniOSCEventTargetCB, 101
<b>3</b> ,	, , , , , , , , , , , , , , , , , , ,
AddAddress	B_Address
UniOSC::UniOSCEventTargetCB, 101	UniOSC::UniOSCChangeColor, 59
AddOSCMappingItem	Begin
UniOSC::UniOSCMappingFileObj, 109	UnityEngine::GUIScaler, 53
AddOSCSessionItem	bundleMode
UniOSC::UniOSCSessionFileObj, 121	UniOSC::UniOSCEventDispatcherMultiAddress↔
Address	Sender, 91
UniOSC::UniOSCEventArgs, 71	ButtonMode
address	UniOSC::UniOSC_uGUI_Button, 55
UniOSC::UniOSCAbstractItem, 58	buttonMode
UniOSC::UniOSCMappingItem, 112	UniOSC::UniOSC uGUI Button, 55
UniOSC::UniOSCSessionItem, 124	oniocoonioco_ucoi_button, oo
addressArray	ClearData
UniOSC::UniOSCEventDispatcherMultiAddress⇔	UniOSC::UniOSCEventDispatcher, 74
Sender, 91	UniOSC::UniOSCEventDispatcherCB, 80
AddressIndex	Close
UniOSC::UniOSCEventArgs, 71	UniOSC::UniOSCTransmitter, 128
AddressRoot	collapsed
UniOSC::UniOSCEventArgs, 71	UniOSC::UniOSCMappingItem, 112
AppendData	UniOSC::UniOSCSessionItem, 124
UniOSC::UniOSCEventDispatcher, 73	componentToToggle
•	UniOSC::UniOSCToggle, 126
UniOSC::UniOSCEventDispatcherCB, 80	
autoConnectOSCIn	ComponentToToggleProp
UniOSC::UniOSCConnection, 64	UniOSC::UniOSCToggleEditor, 127
autoConnectOSCOut	configTraceScrollpos
UniOSC::UniOSCConnection, 64	UniOSC::UniOSCEditorConfigObj, 69
AvailableINPorts	Connect

UniOSC::UniOSCReceiver, 115 UniOSC::UniOSCTransmitter, 128	DrawConnectionInfo UniOSC::UniOSCEventDispatcherEditor, 88
ConnectOSCOut	UniOSC::UniOSCEventTargetEditor, 105
UniOSC::UniOSCConnection, 63	DrawConnectionSetup
ConnectOSC	UniOSC::UniOSCEventTargetEditor, 105
UniOSC::UniOSCConnection, 63	drawDefaultInspectorProp
ConnectToDict	UniOSC::UniOSCEventDispatcherEditor, 88
UniOSC::UniOSCEventTarget, 98	DrawIPAddress
UniOSC::UniOSCEventTargetCB, 102	UniOSC::UniOSCEventDispatcherEditor, 88
connectionArray	DrawPort Draw Port
UniOSC::UniOSCEventDispatcherMultiConnection←	
Sender, 92	UniOSC::UniOSCEventTargetEditor, 105
ConnectionInStatusChange	dynamicFloatValue
UniOSC::UniOSCConnection, 65	UniOSC::UniOSCEventDispatcherImplementation,
ConnectionOutStatusChange	90
UniOSC::UniOSCConnection, 65	dynamicIntValue
,	UniOSC::UniOSCEventDispatcherImplementation,
damping	90
UniOSC::UniOSCRotateGameObjectTouchOSC←	dynamicStringValue
Gyro, 118	UniOSC::UniOSCEventDispatcherImplementation,
data	90
UniOSC::UniOSCEventDispatcherMultiAddress←	
Sender, 91	Enable
UniOSC::UniOSCEventDispatcherMultiConnection ←	UniOSC::UniOSCEventDispatcherCBImplementation
Sender, 92	84
UniOSC::UniOSCSessionItem, 124	UniOSC::UniOSCEventDispatcherCBRaw←
dataTypeList	Implementation, 85
UniOSC::UniOSCSessionItem, 124	UniOSC::UniOSCEventDispatcherCBSimple, 86
debug	UniOSC::UniOSCEventDispatcherCB, 81
UniOSC::UniOSCUnityEvent_Receiver, 129	UniOSC::UniOSCEventTargetCBImplementation,
Disable	104
UniOSC::UniOSCEventDispatcherCBImplementation	UniOSC::UniOSCEventTargetCB, 101
83	End
UniOSC::UniOSCEventDispatcherCBRaw←	UnityEngine::GUIScaler, 53
Implementation, 85	explicitConnection
UniOSC::UniOSCEventDispatcherCBSimple, 86	UniOSC::UniOSCEventDispatcher, 75
UniOSC::UniOSCEventDispatcherCB, 80	UniOSC::UniOSCEventDispatcherCB, 82
UniOSC::UniOSCEventTargetCBImplementation,	UniOSC::UniOSCEventTarget, 99
104	UniOSC::UniOSCEventTargetCB, 102
UniOSC::UniOSCEventTargetCB, 101	ExplicitConnectionProp
Disconnect	UniOSC::UniOSCEventDispatcherEditor, 88
UniOSC::UniOSCReceiver, 115	UniOSC::UniOSCEventTargetEditor, 105
DisconnectOSCOut	-
UniOSC::UniOSCConnection, 63	FoldoutListProp
DisconnectOSC	UniOSC::UniOSCEventTargetEditor, 105
UniOSC::UniOSCConnection, 63	foldoutOSCIn
dispatchOSCOut	UniOSC::UniOSCConnection, 64
UniOSC::UniOSCConnection, 64	foldoutOSCOut
dispatchOSC	UniOSC::UniOSCConnection, 64
UniOSC::UniOSCConnection, 64	Force_SetupChanged_IN
Dispose	UniOSC::UniOSCConnection, 63
UniOSC::UniOSCEventDispatcherCB, 81	Force_SetupChanged_OUT
UniOSC::UniOSCEventTargetCB, 101	UniOSC::UniOSCConnection, 63
Down	ForceSetupChange
UniOSC::UniOSC_uGUI_Button, 55	UniOSC::UniOSCEventDispatcher, 74
downOSCDataValue	UniOSC::UniOSCEventDispatcherCB, 81
UniOSC::UniOSCEventDispatcherButton, 77	UniOSC::UniOSCEventTarget, 97
downOSCDataValueProp	UniOSC::UniOSCEventTargetCB, 101
UniOSC::UniOSCEventDispatcherButtonEditor, 78	ForceUpdate

UniOSC::UniOSCConnectionEditor, 66 UniOSC::UniOSCToggleEditor, 126	UniOSC::UniOSCFileObj, 107 isLearning
FrameNumber	UniOSC::UniOSCAbstractItem, 58
UniOSC::UniOSCReceiver, 115	UniOSC::UniOSCMappingItem, 112
G Address	UniOSC::UniOSCSessionItem, 124
<del>-</del>	isOSCLearning
UniOSC::UniOSCChangeColor, 59	UniOSC::UniOSCConnection, 64
GetOSCAddresses	UniOSC::UniOSCEditor, 69
UniOSC::UniOSCEventTarget, 99	UniOSC::UniOSCEditorConfigObj, 70
Group	isOSCTracing
UniOSC::UniOSCEventArgs, 71	UniOSC::UniOSCEditorConfigObj, 70
GuiScale	IsOpen
UnityEngine::GUIScaler, 54	UniOSC::UniOSCEditor, 68
	UniOSC::UniOSCScriptTestEditor, 120
hasOSCMappingFileAttached	•
UniOSC::UniOSCConnection, 65	learnStyle
hasOSCSessionFileAttached	UniOSC::UniOSCEditorConfigObj, 70
UniOSC::UniOSCConnection, 65	Light1
hasValidOscIPAddress	UniOSCClassBasedDemo, 60
UniOSC::UniOSCConnection, 65	
hasValidOscOutIPAddress	Light2
UniOSC::UniOSCConnection, 65	UniOSCClassBasedDemo, 60
Horizontal	Light3
UniOSC::UniOSCEventDispatcherSlider, 93	UniOSCClassBasedDemo, 60
hostObj	LoadTextures
UniOSC::UniOSCMappingItem, 112	UniOSC::UniOSCConnectionEditor, 66
UniOSC::UniOSCSessionItem, 124	localIPAddress
Oniooooniooooessionitem, 124	UniOSC::UniOSCConnection, 64
IPAddress	
UniOSC::UniOSCEventArgs, 71	MAXHEIGTH
UniOSC::UniOSCTransmitter, 128	UniOSC::UniOSCMappingItem, 112
	UniOSC::UniOSCSessionItem, 124
Init	MAXWIDTH
UniOSC::UniOSCConnection, 63	UniOSC::UniOSCMappingItem, 112
UniOSC::UniOSCEditor, 68	UniOSC::UniOSCSessionItem, 124
UniOSC::UniOSCMappingFileObjEditor, 110	
UniOSC::UniOSCSessionFileObjEditor, 122	MapData
Initialize	UniOSC::UniOSCMappingItem, 112
UnityEngine::GUIScaler, 54	mappingMAX
Instance	UniOSC::UniOSCMappingItem, 112
UniOSC::UniOSCEditor, 68	mappingMIN
UniOSC::UniOSCScriptTestEditor, 120	UniOSC::UniOSCMappingItem, 112
Instances	max
UniOSC::UniOSCConnection, 65	UniOSC::UniOSCMappingItem, 112
isBundle	maxOSCDataValue
UniOSC::UniOSCEventDispatcher, 75	UniOSC::UniOSCEventDispatcherSlider, 94
UniOSC::UniOSCEventDispatcherCB, 82	min
isConnected	UniOSC::UniOSCMappingItem, 112
UniOSC::UniOSCConnection, 65	minOSCDataValue
isConnectedOut	UniOSC::UniOSCEventDispatcherSlider, 94
UniOSC::UniOSCConnection, 65	Mode
isEditorEnabled	UniOSC::UniOSCMoveGameObject, 114
UniOSC::UniOSCConnection, 64	movementMode
UniOSC::UniOSCEditorConfigObj, 70	UniOSC::UniOSCMoveGameObject, 114
isEnabled	my_guid
UniOSC::UniOSCEventDispatcherCB, 82	UniOSC::UniOSCFileObj, 108
UniOSC::UniOSCEventTargetCB, 102	MySendOSCMessageTrigerMethod
isLastMessageTracing	UniOSC::UniOSCEventDispatcherMultiConnection
UniOSC::UniOSCEditorConfigObj, 70	Sender, 92
IsLearning	MySendOSCMessageTriggerMethod

UniOSC::UniOSCEventDispatcherImplementation,	UniOSCClassBasedDemo, 61
89	OSCPortOUT
UniOSC::UniOSCEventDispatcherMultiAddress↔	UniOSCClassBasedDemo, 61
Sender, 90	OSCPortProp
mySkin	UniOSC::UniOSCEventTargetEditor, 105
UniOSC::UniOSCEditorConfigObj, 70	OSCSessionFileObjList
nearClin Plana Officet	UniOSC::UniOSCEditorConfigObj, 70
nearClipPlaneOffset	offOSCDataValue
UniOSC::UniOSCMoveGameObject, 114	UniOSC::UniOSCEventDispatcherToggle, 95
OSCAddress	OnDestroy
UniOSCClassBasedDemo, 60	UniOSC::UniOSCEventDispatcher, 74
OSCAddressOUT	UniOSC::UniOSCEventDispatcherCB, 81
UniOSCClassBasedDemo, 60	UniOSC::UniOSCEventTarget, 97
OSCAddressProp	OnDisable
UniOSC::UniOSCEventTargetEditor, 105	UniOSC::UniOSC_uGUI_Button, 55
OSCConnection	UniOSC::UniOSC_uGUI_Slider, 56
UniOSCClassBasedDemo, 60	UniOSC::UniOSC_uGUI_Toggle, 57
OSCConnectionOUT	UniOSC::UniOSCEditor, 68
UniOSCClassBasedDemo, 61	UniOSC::UniOSCEventDispatcher, 74
OSCConnectionsProp	UniOSC::UniOSCEventDispatcherButton, 76
UniOSC::UniOSCEventDispatcherEditor, 88	UniOSC::UniOSCEventDispatcherImplementation,
OSCDataValueDown	89
UniOSC::UniOSC_uGUI_Button, 55	UniOSC::UniOSCEventDispatcherMultiAddress←
OSCDataValueOFF	Sender, 91
UniOSC::UniOSC_uGUI_Toggle, 57	UniOSC::UniOSCEventDispatcherMultiConnection ←
OSCDataValueON	Sender, 92
UniOSC::UniOSC_uGUI_Toggle, 57	UniOSC::UniOSCEventDispatcherSlider, 93
OSCDataValueUp	UniOSC::UniOSCEventDispatcherToggle, 95
UniOSC::UniOSC_uGUI_Button, 55	UniOSC::UniOSCEventTarget, 97
OSCErrorOccured	UniOSC::UniOSCEventTargetImplementation, 106
UniOSC::UniOSCReceiver, 115	UniOSC::UniOSCScriptTestEditor, 120
UniOSC::UniOSCTransmitter, 129	UniOSC::UniOSCTransformSender, 127
OSCIPAddressOUT	UniOSC::UniOSCUnityEventRelay, 130
UniOSCClassBasedDemo, 61	OnEnable
OSCLearning	UniOSC::UniOSC_uGUI_Button, 55
UniOSC::UniOSCEditor, 68	UniOSC::UniOSC_uGUI_Slider, 56
OSCMappingFileObjList	UniOSC::UniOSC_uGUI_Toggle, 57
UniOSC::UniOSCEditorConfigObj, 70	UniOSC::UniOSCChangeColor, 59
_ ·	UniOSC::UniOSCEditor, 68
OSCMessageReceived UniOSC::UniOSCConnection, 65	UniOSC::UniOSCEditorConfigObj, 69
UniOSC::UniOSCEditor, 69	UniOSC::UniOSCEventDispatcher, 74
UniOSC::UniOSCEventTarget, 99	UniOSC::UniOSCEventDispatcherButton, 77
UniOSC::UniOSCEventTargetCB, 102	UniOSC::UniOSCEventDispatcherButtonEditor, 78
UniOSC::UniOSCEventrargetos, 102	UniOSC::UniOSCEventDispatcherEditor, 88
	UniOSC::UniOSCEventDispatcherImplementation,
OSCMessageReceivedRaw UniOSC::UniOSCConnection, 65	89
	UniOSC::UniOSCEventDispatcherMultiAddress←
OSCMessageSend	Sender, 91
UniOSC::UniOSCConnection, 65	UniOSC::UniOSCEventDispatcherMultiConnection ←
UniOSC::UniOSCFileObj, 108	Sender, 92
OSCOutAddressProp	UniOSC::UniOSCEventDispatcherSlider, 93
UniOSC::UniOSCEventDispatcherEditor, 88	
OSCOutlPAddressProp	UniOSC::UniOSCEventDispatcherToggle, 95
UniOSC::UniOSCEventDispatcherEditor, 88	UniOSC::UniOSCEventTarget, 97
OSCOutPortProp	UniOSC::UniOSCEventTargetEditor, 105
UniOSC::UniOSCEventDispatcherEditor, 88	UniOSC::UniOSCEventTargetImplementation, 106
OSCOutProp	UniOSC::UniOSCMappingFileObj, 109
UniOSC::UniOSCEventDispatcherEditor, 88	UniOSC::UniOSCMappingItemEditor, 113
OSCPort	UniOSC::UniOSCMoveGameObject, 114

UniOSC::UniOSCRotateGameObject, 116 UniOSC::UniOSCRotateGameObjectTouchOSC⊷	UniOSC::UniOSCRotateGameObjectTouchOSC- Gyro, 118
Gyro, 118	UniOSC::UniOSCScaleGameObject, 119
UniOSC::UniOSCScaleGameObject, 119	UniOSC::UniOSCSessionFileObj, 121
UniOSC::UniOSCScriptTestEditor, 120	UniOSC::UniOSCToggle, 125
UniOSC::UniOSCSessionFileObj, 121	UniOSC::UniOSCUnityEvent_Receiver, 129
UniOSC::UniOSCSessionItemEditor, 124	UniOSC::UniOSCUnityEventRelay, 130
UniOSC::UniOSCToggle, 125	OnOSCSessionItemDelete
UniOSC::UniOSCToggleEditor, 126	UniOSC::UniOSCSessionItem, 123
UniOSC::UniOSCTransformSender, 127	OnPointerDown
UniOSC::UniOSCUnityEventRelay, 130	UniOSC::UniOSC_uGUI_Button, 55
UniOSC::UniOSCUnityEventRelayEditor, 131	OnPointerUp
OnGUI_Editor	UniOSC::UniOSC_uGUI_Button, 55
UniOSC::UniOSCMappingItemEditor, 113	UniOSC::UniOSC_uGUI_Slider, 56
UniOSC::UniOSCSessionItemEditor, 124	oscAddress
OnGUI_Inspector	UniOSC::UniOSCEventTarget, 99
_ •	UniOSC::UniOSCEventTargetCB, 102
UniOSC::UniOSCMappingItemEditor, 113	oscAddressAt
UniOSC::UniOSCSessionItemEditor, 124	UniOSC::UniOSCEventTargetCB, 102
OnGUI_OSCMappingData_Editor	oscInIPAddress
UniOSC::UniOSCMappingFileObjEditor, 110	UniOSC::UniOSCConnection, 65
OnGUI_OSCMappingData_Inspector	oscInIPAddressAsIPAddress
UniOSC::UniOSCMappingFileObjEditor, 110	
OnGUI_OSCSessionData_Editor	UniOSC::UniOSCConnection, 65
UniOSC::UniOSCSessionFileObjEditor, 122	oscMappingFileObjList
OnGUI_OSCSessionData_Inspector	UniOSC::UniOSCConnection, 64
UniOSC::UniOSCSessionFileObjEditor, 122	oscMappingItemList
OnGUI	UniOSC::UniOSCMappingFileObj, 110
UniOSC::UniOSCEventDispatcherMultiAddress←	oscOut
Sender, 91	UniOSC::UniOSCConnection, 64
UniOSC::UniOSCEventDispatcherMultiConnection -	oscOutAddress
Sender, 92	UniOSC::UniOSCEventDispatcher, 75
OnHierarchyChange	UniOSC::UniOSCEventDispatcherCB, 82
UniOSC::UniOSCEditor, 68	oscOutlPAddress
OnInspectorGUI	UniOSC::UniOSCConnection, 65
UniOSC::UniOSCChangeColorEditor, 60	UniOSC::UniOSCEventDispatcher, 75
UniOSC::UniOSCConnectionEditor, 66	UniOSC::UniOSCEventDispatcherCB, 82
UniOSC::UniOSCEventDispatcherButtonEditor, 78	oscOutIPAddressAsIPAddress
UniOSC::UniOSCEventDispatcherEditor, 88	UniOSC::UniOSCConnection, 65
UniOSC::UniOSCEventTargetEditor, 105	oscOutPort
UniOSC::UniOSCMappingFileObjEditor, 110	UniOSC::UniOSCConnection, 65
UniOSC::UniOSCRotateGameObjectEditor, 117	UniOSC::UniOSCEventDispatcher, 75
	UniOSC::UniOSCEventDispatcherCB, 82
UniOSC::UniOSCSessionFileObjEditor, 122	oscPort
UniOSC::UniOSCToggleEditor, 126	UniOSC::UniOSCConnection, 65
UniOSC::UniOSCUnityEventRelayEditor, 132	UniOSC::UniOSCEventTarget, 99
onOSCDataValue	UniOSC::UniOSCEventTargetCB, 102
UniOSC::UniOSCEventDispatcherToggle, 95	oscSessionFileObjList
OnOSCMappingItemDelete	UniOSC::UniOSCConnection, 64
UniOSC::UniOSCMappingItem, 112	oscSessionItemList
OnOSCMessageReceived	UniOSC::UniOSCSessionFileObj, 122
UniOSC::UniOSCChangeColor, 59	J,
UniOSC::UniOSCEventTarget, 98	Packet
UniOSC::UniOSCEventTargetCBImplementation,	UniOSC::UniOSCEventArgs, 71
104	Port
UniOSC::UniOSCEventTargetCB, 101	UniOSC::UniOSCEventArgs, 71
UniOSC::UniOSCEventTargetImplementation, 106	UniOSC::UniOSCReceiver, 115
UniOSC::UniOSCMappingFileObj, 109	UniOSC::UniOSCTransmitter, 128
UniOSC::UniOSCMoveGameObject, 114	5656
UniOSC::UniOSCRotateGameObject, 116	R_Address

UniOSC::UniOSCChangeColor, 59	SendSessionDataOnStart
receiveAllAddresses	UniOSC::UniOSCConnection, 64
UniOSC::UniOSCEventTarget, 99	SendTestMessage
UniOSC::UniOSCEventTargetCB, 102	UniOSC::UniOSCConnection, 64
ReceiveAllAddressesProp	SetBundleMode
UniOSC::UniOSCEventTargetEditor, 105	UniOSC::UniOSCEventDispatcher, 74
receiveAllPorts	UniOSC::UniOSCEventDispatcherCB, 81
UniOSC::UniOSCEventTarget, 99	SetDataAtIndex0
UniOSC::UniOSCEventTargetCB, 102	UniOSC::UniOSCEventDispatcherCBImplementation,
ReceiveAllPortsProp	84
UniOSC::UniOSCEventTargetEditor, 105	UniOSC::UniOSCEventDispatcherCBSimple, 86
redrawFlag UniOSC::UniOSCConnection, 64	SetupAddressMetaData UniOSC::UniOSCEventArgs, 71
Relative	sharedMaterial
UniOSC::UniOSCMoveGameObject, 114	UniOSC::UniOSCChangeColor, 59
RemoveOSCMappingItem	Show
UniOSC::UniOSCMappingFileObj, 109	UniOSC::UniOSCConnectionEditor, 66
RemoveOSCSessionItem	UniOSC::UniOSCEventDispatcherEditor, 88
UniOSC::UniOSCSessionFileObj, 122	ShowFoldoutConnectionStatus
RenderGUI	UniOSC::UniOSCEventTargetEditor, 105
UniOSC::UniOSCConnection, 63	ShowGUIProp
	UniOSC::UniOSCEventDispatcherButtonEditor, 78
scaleFactor	showGUI
UniOSC::UniOSCScaleGameObject, 120	UniOSC::UniOSCEventDispatcherButton, 77
Screen	UniOSC::UniOSCEventDispatcherSlider, 94
UniOSC::UniOSCMoveGameObject, 114	UniOSC::UniOSCEventDispatcherToggle, 95
scrollpos	ShowInEditMode
UniOSC::UniOSCFileObj, 108	UniOSC::UniOSCGUI, 108
scrollposInspector	ShowOSCReciverStatus
UniOSC::UniOSCFileObj, 108	UniOSC::UniOSCConnectionEditor, 66
selectedMappingFileObjIndex UniOSC::UniOSCEditorConfigObj, 70	SliderMode
selectedSessionFileObjIndex	UniOSC::UniOSCEventDispatcherSlider, 93
UniOSC::UniOSCEditorConfigObj, 70	sliderMode
sendData	UniOSC::UniOSCEventDispatcherSlider, 94
UniOSCClassBasedDemo, 61	sliderSize
sendInterval	UniOSC::UniOSCEventDispatcherSlider, 94 Start
UniOSC::UniOSCEventDispatcher, 75	UniOSC::UniOSCConnection, 64
UniOSC::UniOSCEventDispatcherCB, 82	UniOSC::UniOSCEventDispatcher, 75
UniOSCClassBasedDemo, 61	UniOSC::UniOSCEventTarget, 98
SendOSCMessage	UniOSC::UniOSCEventTargetImplementation, 107
UniOSC::UniOSC_uGUI_Button, 55	UniOSC::UniOSCUnityEventRelay, 131
UniOSC::UniOSC_uGUI_Slider, 56	StartSendIntervalTimer
UniOSC::UniOSC_uGUI_Toggle, 57	UniOSC::UniOSCEventDispatcher, 75
UniOSC::UniOSCConnection, 63	UniOSC::UniOSCEventDispatcherCB, 81
UniOSC::UniOSCEventDispatcher, 74	StopSendIntervalTimer
UniOSC::UniOSCEventDispatcherCB, 81	UniOSC::UniOSCEventDispatcher, 75
UniOSC::UniOSCEventDispatcherSlider, 93	UniOSC::UniOSCEventDispatcherCB, 82
UniOSC::UniOSCTransmitter, 128	style
SendOSCMessageDown	UniOSC::UniOSCMappingFileObjEditor, 111
UniOSC::UniOSCEventDispatcherButton, 77	UniOSC::UniOSCSessionFileObjEditor, 123
SendOSCMessageOff	TDAGENUDTU
UniOSC::UniOSCEventDispatcherToggle, 95	TRACEWIDTH
SendOSCMessageOn  UniOSC::UniOSCEventDispatcherToggle, 05	UniOSC::UniOSCEditor, 68
UniOSC::UniOSCEventDispatcherToggle, 95	tex_LearnFrame
SendOSCMessageUp UniOSC::UniOSCEventDispatcherButton, 77	UniOSC::UniOSCEditorConfigObj, 70
SendSessionData	tex_logo UniOSC::UniOSCEditorConfigObj, 70
UniOSC::UniOSCConnection, 63	texOFF
Jinggoginggoodinieghon, 00	LONG! I

UniOSC::UniOSCConnectionEditor, 67	UniOSC.UniOSCEventTargetCB, 99
texON	UniOSC.UniOSCEventTargetEditor, 104
UniOSC::UniOSCConnectionEditor, 67	UniOSC.UniOSCEventTargetImplementation, 106
texTestMessage	UniOSC.UniOSCFileObj, 107
UniOSC::UniOSCConnectionEditor, 67	UniOSC.UniOSCGUI, 108
toggleState	UniOSC.UniOSCMappingFileObj, 108
UniOSC::UniOSCToggle, 126	UniOSC.UniOSCMappingFileObjEditor, 110
ToggleStateProp	UniOSC.UniOSCMappingItem, 111
UniOSC::UniOSCToggleEditor, 127	UniOSC.UniOSCMappingItemEditor, 112
toolbarInt	UniOSC.UniOSCMoveGameObject, 113
UniOSC::UniOSCEditorConfigObj, 70	UniOSC.UniOSCReceiver, 114
traceMessages	UniOSC.UniOSCRotateGameObject, 115
UniOSC::UniOSCGUI, 108	UniOSC.UniOSCRotateGameObjectEditor, 117
trackedGameObject	UniOSC. UniOSCRotate Game Object Touch OSC Gyro,
UniOSC::UniOSCTransformSender, 128	117
transformToMove	UniOSC.UniOSCScaleGameObject, 119
UniOSC::UniOSCMoveGameObject, 114	UniOSC.UniOSCScriptTestEditor, 120
transformToRotate	UniOSC.UniOSCSessionFileObj, 120
UniOSC::UniOSCRotateGameObject, 117	UniOSC.UniOSCSessionFileObjEditor, 122
UniOSC::UniOSCRotateGameObjectTouchOSC←	UniOSC.UniOSCSessionItem, 123
Gyro, 118	UniOSC.UniOSCSessionItemEditor, 124
transformToScale	UniOSC.UniOSCToggle, 124
UniOSC::UniOSCScaleGameObject, 120	UniOSC.UniOSCToggleEditor, 126
transmissionType	UniOSC.UniOSCTransformSender, 127
UniOSC::UniOSCTransmitter, 129	UniOSC.UniOSCTransmitter, 128
transmissionTypeIn	UniOSC.UniOSCUnityEvent_Receiver, 129
UniOSC::UniOSCConnection, 65	UniOSC.UniOSCUnityEventRelay, 130
transmissionTypeOut	UniOSC.UniOSCUnityEventRelay.UnityEvent_Osc←
UniOSC::UniOSCConnection, 65	Message, 132
UniOSC.UniOSC_uGUI_Button, 54	UniOSC.UniOSCUnityEventRelayEditor, 131
UniOSC.UniOSC_uGUI_Slider, 55	UniOSC::UniOSC_uGUI_Button
	Awake, 55
UniOSC.UniOSC_uGUI_Toggle, 56 UniOSC.UniOSCAbstractItem, 58	ButtonMode, 55
UniOSC.UniOSCAbstractitem, 58 UniOSC.UniOSCChangeColor, 58	buttonMode, 55
UniOSC.UniOSCChangeColorEditor, 59	Down, 55
UniOSC.UniOSCConnection, 61	OSCDataValueDown, 55
UniOSC.UniOSCConnectionEditor, 65	OSCDataValueUp, 55
UniOSC.UniOSCEditor, 67	OnDisable, 55
UniOSC.UniOSCEditorConfigObj, 69	OnEnable, 55
UniOSC.UniOSCEventArgs, 70	OnPointerDown, 55
UniOSC.UniOSCEventDispatcher, 71	OnPointerUp, 55
UniOSC.UniOSCEventDispatcherButton, 76	SendOSCMessage, 55
UniOSC.UniOSCEventDispatcherButtonEditor, 77	Up, 55
UniOSC.UniOSCEventDispatcherCBImplementation, 82	UpAndDown, 55
UniOSC.UniOSCEventDispatcherCBRawImplementation,	
84	_slider, 56
UniOSC.UniOSCEventDispatcherCBSimple, 85	Awake, 56
UniOSC.UniOSCEventDispatcherCB, 78	OnDisable, 56
UniOSC.UniOSCEventDispatcherEditor, 87	OnEnable, 56
UniOSC.UniOSCEventDispatcherImplementation, 88	OnPointerUp, 56
UniOSC.UniOSCEventDispatcherMultiAddressSender,	SendOSCMessage, 56
90	UniOSC::UniOSC_uGUI_Toggle
UniOSC.UniOSCEventDispatcherMultiConnection ←	_toggle, 57
Sender, 91	Awake, 57
UniOSC.UniOSCEventDispatcherSlider, 92	OSCDataValueOFF, 57
UniOSC.UniOSCEventDispatcherToggle, 94	OSCDataValueON, 57
UniOSC.UniOSCEventTarget, 95	OnDisable, 57
UniOSC.UniOSCEventTargetCBImplementation, 102	OnEnable, 57
÷ , -	•

SendOSCMessage, 57	SendSessionData, 63
UniOSC::UniOSCAbstractItem	SendSessionDataOnStart, 64
address, 58	SendTestMessage, 64
isLearning, 58	Start, 64
UniOSC::UniOSCChangeColor	transmissionTypeIn, 65
B_Address, 59	transmissionTypeOut, 65
G Address, 59	Update_AvailableOSCSettings, 64
OnEnable, 59	ValidateOscInIPAddress, 64
OnOSCMessageReceived, 59	ValidateOscOutIPAddress, 64
R_Address, 59	UniOSC::UniOSCConnectionEditor
sharedMaterial, 59	_TransmissionTypeIndex, 67
UniOSC::UniOSCChangeColorEditor	_TransmissionTypeIndex, 67
OnInspectorGUI, 60	_TransmissionTypes, 67
UniOSC::UniOSCConnection	_TransmissionTypesOut, 67
autoConnectOSCIn, 64	_currOSCMulticastIPAddress, 67
autoConnectOSCOut, 64	_currOSCMulticastIPAddressOut, 67
AvailableINPorts, 65	_curroscividiticastir AddressOdt, 67 _isValidOSCMulticastIPAddress, 67
Available OUTPAddresses, 65	_isValidOSCMulticastIPAddressOut, 67
AvailableOUTPorts, 65	_oldOSCMulticastIPAddress, 67
Awake, 63	_oldOSCMulticastIPAddressOut, 67
ConnectOSCOut, 63	ForceUpdate, 66
ConnectOSC, 63	LoadTextures, 66
ConnectionInStatusChange, 65	OnInspectorGUI, 66
ConnectionOutStatusChange, 65	Show, 66
DisconnectOSCOut, 63	ShowOSCReciverStatus, 66
DisconnectOSC, 63	texOFF, 67
dispatchOSCOut, 64	texON, 67
dispatchOSC, 64	texTestMessage, 67
foldoutOSCIn, 64	UniOSC::UniOSCEditor
foldoutOSCOut, 64	Init, 68
Force_SetupChanged_IN, 63	Instance, 68
Force_SetupChanged_OUT, 63	isOSCLearning, 69
hasOSCMappingFileAttached, 65	IsOpen, 68
hasOSCSessionFileAttached, 65	OSCLearning, 68
hasValidOscIPAddress, 65	OSCMessageReceived, 69
hasValidOscOutIPAddress, 65	OnDisable, 68
Init, 63	OnEnable, 68
Instances, 65	OnHierarchyChange, 68
isConnected, 65	TRACEWIDTH, 68
isConnectedOut, 65	UniOSC::UniOSCEditorConfigObj
isEditorEnabled, 64	configTraceScrollpos, 69
isOSCLearning, 64	isEditorEnabled, 70
localIPAddress, 64	isLastMessageTracing, 70
OSCMessageReceived, 65	isOSCLearning, 70
OSCMessageReceivedRaw, 65	isOSCTracing, 70
OSCMessageSend, 65	learnStyle, 70
oscInIPAddress, 65	mySkin, 70
oscInIPAddressAsIPAddress, 65	OSCMappingFileObjList, 70
oscMappingFileObjList, 64	OSCSessionFileObjList, 70
oscOut, 64	OnEnable, 69
oscOutlPAddress, 65	selectedMappingFileObjIndex, 70
oscOutlPAddressAsIPAddress, 65	selectedSessionFileObjIndex, 70
oscOutPort, 65	tex_LearnFrame, 70
oscPort, 65	tex_logo, 70
oscSessionFileObjList, 64	toolbarInt, 70
redrawFlag, 64	UniOSC::UniOSCEventArgs
RenderGUI, 63	Address, 71
SendOSCMessage, 63	AddressIndex, 71
oenuooowiessaye, vo	Audicoolliucx, / I

1 000D 1 1/1 D 70
downOSCDataValueProp, 78
OnEnable, 78
OnInspectorGUI, 78
ShowGUIProp, 78
upOSCDataValueProp, 78
xProp, 78
yProp, 78
UniOSC::UniOSCEventDispatcherCBImplementation
Awake, 83
Disable, 83
Enable, 84
SetDataAtIndex0, 84
UniOSCEventDispatcherCBImplementation, 83
UniOSC::UniOSCEventDispatcherCBRawImplementation
Awake, 85
Disable, 85
Enable, 85
UniOSCEventDispatcherCBRawImplementation,
85
UniOSC::UniOSCEventDispatcherCBSimple
Awake, 86
Disable, 86
Enable, 86
SetDataAtIndex0, 86
UniOSCEventDispatcherCBSimple, 86
UniOSC::UniOSCEventDispatcherCB
_ConnectToOSCConnections, 80
_DisconnectFromOSCConnections, 80
_OSCeArg, 82
_OSCpkg, 82
_OnConnectionOutStatusChanged, 80
_OnTimedEvent, 80
_SendOSCMessage, 80
_SetupOSCMessage, 80
_explicitConnection, 82
isOSCDirty, 82
— *·
_mylock, 82
_oscOutBAddress, 82
_oscOutlPAddress, 82
_oscOutPort, 82
_sendIntervalTimer, 82
_useExplicitConnection, 82
AppendData, 80
Awake, 80
ClearData, 80
Disable, 80
Dispose, 81
Enable, 81
explicitConnection, 82
ForceSetupChange, 81
isBundle, 82
isEnabled, 82
OnDestroy, 81
oscOutAddress, 82
oscOutlPAddress, 82
oscOutPort, 82
sendInterval, 82
SendOSCMessage, 81

SetBundleMode, 81	OnEnable, 93
StartSendIntervalTimer, 81	SendOSCMessage, 93
StopSendIntervalTimer, 82	showGUI, 94
UniOSCEventDispatcherCB, 80	SliderMode, 93
UpdateDataAt, 82	sliderMode, 94
useExplicitConnection, 82	sliderSize, 94
UniOSC::UniOSCEventDispatcherEditor	Vertical, 93
_myOSCConnectionsProp, 88	xPos, 94
_options, 88	yPos, 94
_options, 88	UniOSC::UniOSCEventDispatcherToggle
_target, 88	Awake, 95
_tex_logo, 88	offOSCDataValue, 95
DrawConnectionInfo, 88	OnDisable, 95
drawDefaultInspectorProp, 88	OnEnable, 95
DrawlPAddress, 88	onOSCDataValue, 95
DrawPort, 88	SendOSCMessageOff, 95
ExplicitConnectionProp, 88	SendOSCMessageOn, 95
OSCConnectionsProp, 88	showGUI, 95
OSCOutAddressProp, 88	xPos, 95
OSCOutlPAddressProp, 88	yPos, 95
OSCOutPortProp, 88	UniOSC::UniOSCEventTarget
OSCOutProp, 88	_ConnectToDispatchers, 97
OnEnable, 88	
OnInspectorGUI, 88	OnConnectionInStatusChanged, 97
Show, 88	_explicitConnection, 98
UseExplicitConnectionProp, 88	_foldoutList, 98
UniOSC::UniOSCEventDispatcherImplementation	_oscAddress, 98
Awake, 89	_oscAddresses, 98
dynamicFloatValue, 90	_oscPort, 98
dynamicIntValue, 90	_receiveAllAddresses, 98
dynamicStringValue, 90	_receiveAllPorts, 98
MySendOSCMessageTriggerMethod, 89	_redrawFlag, 98
OnDisable, 89	_useExplicitConnection, 98
OnEnable, 89	ConnectToDict, 98
UniOSC::UniOSCEventDispatcherMultiAddressSender	explicitConnection, 99
addressArray, 91	ForceSetupChange, 97
Awake, 90	GetOSCAddresses, 99
bundleMode, 91	OSCMessageReceived, 99
data, 91	OnDestroy, 97
MySendOSCMessageTriggerMethod, 90	OnDisable, 97
OnDisable, 91	OnEnable, 97
OnEnable, 91	OnOSCMessageReceived, 98
OnGUI, 91	oscAddress, 99
UniOSC::UniOSCEventDispatcherMultiConnection←	oscPort, 99
Sender	receiveAllAddresses, 99
Awake, 92	receiveAllPorts, 99
connectionArray, 92	Start, 98
data, 92	Update, 98
	•
MySendOSCMessageTrigerMethod, 92	useExplicitConnection, 99
OnDisable, 92	UniOSC::UniOSCEventTargetCBImplementation
OnEnable, 92	Awake, 103
OnGUI, 92	Disable, 104
UniOSC::UniOSCEventDispatcherSlider	Enable, 104
Awake, 93	OnOSCMessageReceived, 104
Horizontal, 93	UniOSCEventTargetCBImplementation, 103
maxOSCDataValue, 94	UniOSC::UniOSCEventTargetCB
minOSCDataValue, 94	_ConnectToDispatchers, 101
OnDisable, 93	_explicitConnection, 102

_oscAddress, 102 _oscAddresses, 102	UniOSC::UniOSCMappingFileObj AddOSCMappingItem, 109
_oscPort, 102	OnEnable, 109
_receiveAllAddresses, 102	OnOSCMessageReceived, 109
receiveAllPorts, 102	oscMappingItemList, 110
useExplicitConnection, 102	RemoveOSCMappingItem, 109
AddAddress, 101	UniOSC::UniOSCMappingFileObjEditor
Awake, 101	Init, 110
ConnectToDict, 102	OnGUI_OSCMappingData_Editor, 110
Disable, 101	OnGUI_OSCMappingData_Inspector, 110
Dispose, 101	OnInspectorGUI, 110
Enable, 101	style, 111
explicitConnection, 102	UniOSC::UniOSCMappingItem
ForceSetupChange, 101	address, 112
isEnabled, 102	collapsed, 112
OSCMessageReceived, 102	hostObj, 112
OnOSCMessageReceived, 101	isLearning, 112
oscAddress, 102	MAXHEIGTH, 112
oscAddressAt, 102	MAXWIDTH, 112
oscPort, 102	MapData, 112
receiveAllAddresses, 102	mappingMAX, 112
receiveAllPorts, 102	mappingMIN, 112
UniOSCEventTargetCB, 101	max, 112
useExplicitConnection, 102	min, 112
UniOSC::UniOSCEventTargetEditor	OnOSCMappingItemDelete, 112
_options, 105	UniOSCMappingItem, 111
_portIndex, 105	UniOSC::UniOSCMappingItemEditor
_target, 105	OnEnable, 113
_tex_logo, 105	OnGUI_Editor, 113
AvailableINPortsProp, 105	OnGUI_Inspector, 113
DrawConnectionInfo, 105	UniOSC::UniOSCMoveGameObject
DrawConnectionSetup, 105	Mode, 114
DrawPort, 105	movementMode, 114
ExplicitConnectionProp, 105	nearClipPlaneOffset, 114
FoldoutListProp, 105	OnEnable, 114
OSCAddressProp, 105	OnOSCMessageReceived, 114
OSCPortProp, 105	Relative, 114
OnEnable, 105	Screen, 114
OnInspectorGUI, 105	transformToMove, 114
ReceiveAllAddressesProp, 105	UniOSC::UniOSCReceiver
ReceiveAllPortsProp, 105	Connect, 115
ShowFoldoutConnectionStatus, 105	Disconnect, 115
UseExplicitConnectionProp, 106	FrameNumber, 115
UniOSC::UniOSCEventTargetImplementation	OSCErrorOccured, 115
OnDisable, 106	OSCMessageReceived, 115
OnEnable, 106	Port, 115
OnOSCMessageReceived, 106	UniOSCReceiver, 115
Start, 107	UniOSC::UniOSCRotateGameObject
Update, 107	OnEnable, 116
UniOSC::UniOSCFileObj	OnOSCMessageReceived, 116
IsLearning, 107	transformToRotate, 117
my_guid, 108	X_Address, 117
OSCMessageSend, 108	x_RotationFactor, 117
scrollpos, 108	Y_Address, 117
scrollposInspector, 108	y_RotationFactor, 117
UniOSC::UniOSCGUI	Z_Address, 117
ShowInEditMode, 108	z_RotationFactor, 117
traceMessages, 108	UniOSC::UniOSCRotateGameObjectEditor

OnInspectorGUI, 117	OnEnable, 126
UniOSC::UniOSCRotateGameObjectTouchOSCGyro	OnInspectorGUI, 126
damping, 118	ToggleStateProp, 127
OnEnable, 118	UniOSC::UniOSCTransformSender
OnOSCMessageReceived, 118	_Update, 127
transformToRotate, 118	OnDisable, 127
x_RotationFactor, 118	OnEnable, 127
y_RotationFactor, 118	trackedGameObject, 128
z_RotationFactor, 118	UniOSC::UniOSCTransmitter
UniOSC::UniOSCScaleGameObject	Close, 128
OnEnable, 119	Connect, 128
OnOSCMessageReceived, 119	IPAddress, 128
scaleFactor, 120	OSCErrorOccured, 129
transformToScale, 120	Port, 128
UniOSC::UniOSCScriptTestEditor	SendOSCMessage, 128
Instance, 120	transmissionType, 129
IsOpen, 120	UniOSCTransmitter, 128
OnDisable, 120	UniOSC::UniOSCUnityEvent_Receiver
OnEnable, 120	debug, 129
UniOSC::UniOSCSessionFileObj	OnOSCMessageReceived, 129
AddOSCSessionItem, 121	UniOSC::UniOSCUnityEventRelay
OnEnable, 121	OnDisable, 130
OnOSCMessageReceived, 121	OnEnable, 130
oscSessionItemList, 122	OnOSCMessageReceived, 130
RemoveOSCSessionItem, 122	Start, 131
UniOSC::UniOSCSessionFileObjEditor	unioscEvent, 131
Init, 122	Update, 131
OnGUI_OSCSessionData_Editor, 122	UniOSC::UniOSCUnityEventRelayEditor
OnGUI_OSCSessionData_Inspector, 122	OnEnable, 131
OnInspectorGUI, 122	OnInspectorGUI, 132
style, 123	unioscEventProp, 132
UniOSC::UniOSCSessionItem	UniOSCAutoRun, 58
address, 124	UniOSCClassBasedDemo, 60
collapsed, 124	Light1, 60
data, 124	Light2, 60
dataTypeList, 124	Light3, 60
hostObj, 124	OSCAddress, 60
isLearning, 124	OSCAddressOUT, 60
MAXMEIGTH, 124	OSCConnection, 60
MAXWIDTH, 124	OSCConnectionOUT, 61
OnOSCSessionItemDelete, 123	OSCIPAddressOUT, 61
UniOSCSessionItem, 123	OSCPort, 61
UniOSC::UniOSCSessionItemEditor	OSCPortOUT, 61
OnEnable, 124	sendData, 61
OnGUI_Editor, 124	sendInterval, 61
OnGUI_Inspector, 124	UniOSCEventArgs
UniOSC::UniOSCToggle	UniOSC::UniOSCEventArgs, 71
componentToToggle, 126	UniOSCEventDispatcherCBImplementation
OnEnable, 125	UniOSC::UniOSCEventDispatcherCBImplementation
OnOSCMessageReceived, 125	83
toggleState, 126	UniOSCEventDispatcherCBRawImplementation
UpdateComponentState, 125	UniOSC::UniOSCEventDispatcherCBRaw  January and et al. 205
UniOSC::UniOSCToggleEditor	Implementation, 85
_componentIndex, 127	UniOSCEventDispatcherCBSimple
_targetToggle, 127	UniOSC::UniOSCEventDispatcherCBSimple, 86
_updateFlag, 127	UniOSCEventDispatcherCB
ComponentToToggleProp, 127	UniOSC::UniOSCEventDispatcherCB, 80
ForceUpdate, 126	UniOSCEventTargetCBImplementation

UniOSC::UniOSCEventTargetCBImplementation,	UniOSC::UniOSCRotateGameObject, 117
103	x_RotationFactor
UniOSCEventTargetCB	UniOSC::UniOSCRotateGameObject, 117
UniOSC::UniOSCEventTargetCB, 101	UniOSC::UniOSCRotateGameObjectTouchOSC←
UniOSCMappingItem	Gyro, 118
UniOSC::UniOSCMappingItem, 111	xPos
UniOSCReceiver	UniOSC::UniOSCEventDispatcherButton, 77
UniOSC::UniOSCReceiver, 115	UniOSC::UniOSCEventDispatcherSlider, 94
UniOSCSessionItem	UniOSC::UniOSCEventDispatcherToggle, 95
UniOSC::UniOSCSessionItem, 123	xProp
UniOSCTransmitter	
	UniOSC::UniOSCEventDispatcherButtonEditor, 78
UniOSC::UniOSCTransmitter, 128	Y_Address
UniOSC, 49	
unioscEvent	UniOSC::UniOSCRotateGameObject, 117
UniOSC::UniOSCUnityEventRelay, 131	y_RotationFactor
unioscEventProp	UniOSC::UniOSCRotateGameObject, 117
UniOSC::UniOSCUnityEventRelayEditor, 132	UniOSC::UniOSCRotateGameObjectTouchOSC←
UnityEngine, 51	Gyro, 118
UnityEngine.GUIScaler, 53	yPos
UnityEngine::GUIScaler	UniOSC::UniOSCEventDispatcherButton, 77
Begin, 53	UniOSC::UniOSCEventDispatcherSlider, 94
End, 53	UniOSC::UniOSCEventDispatcherToggle, 95
GuiScale, 54	yProp
Initialize, 54	UniOSC::UniOSCEventDispatcherButtonEditor, 78
Up	·
UniOSC::UniOSC_uGUI_Button, 55	Z_Address
UpAndDown	UniOSC::UniOSCRotateGameObject, 117
UniOSC::UniOSC_uGUI_Button, 55	z_RotationFactor
	UniOSC::UniOSCRotateGameObject, 117
upOSCDataValue	UniOSC::UniOSCRotateGameObjectTouchOSC←
UniOSC::UniOSCEventDispatcherButton, 77	Gyro, 118
upOSCDataValueProp	Cijio, 110
UniOSC::UniOSCEventDispatcherButtonEditor, 78	
Update	
UniOSC::UniOSCEventTarget, 98	
UniOSC::UniOSCEventTargetImplementation, 107	
UniOSC::UniOSCUnityEventRelay, 131	
Update_AvailableOSCSettings	
UniOSC::UniOSCConnection, 64	
UpdateComponentState	
UniOSC::UniOSCToggle, 125	
UpdateDataAt	
UniOSC::UniOSCEventDispatcherCB, 82	
useExplicitConnection	
UniOSC::UniOSCEventDispatcher, 76	
UniOSC::UniOSCEventDispatcherCB, 82	
UniOSC::UniOSCEventTarget, 99	
UniOSC::UniOSCEventTargetCB, 102	
UseExplicitConnectionProp	
UniOSC::UniOSCEventDispatcherEditor, 88	
UniOSC::UniOSCEventTargetEditor, 106	
Validata Ocala IB Address	
ValidateOscInIPAddress	
UniOSC::UniOSCConnection, 64	
ValidateOscOutIPAddress	
UniOSC::UniOSCConnection, 64	
Vertical	
UniOSC::UniOSCEventDispatcherSlider, 93	
X_Address	