Wonder OSC-Commands

Complete OSC reception implementation chart

Parametertypes: i = int, f = float, s = string, NULL = arbitrary number

Note: all commands have to be prefixed with /WONDER

cwonder

Command	Parameters	content	> ...	...	...	...
/source/activate	i	id				
/source/deactivate	i	id				
/source/type	i i	id	type [0=plane, 1=point]			
/source/type	i i f	id	type [0=plane, 1=point]	timestamp [seconds]		
/source/angle	i f	id	angle [degrees]			
/source/angle	i f f	id	angle [degrees]	duration [seconds]		
/source/angle	i f f f	id	angle [degrees]	duration [seconds]	timestamp [seconds]	
/source/position	i f f	id	x coordinate [meters]	y coordinate [meters]		
/source/position	i f f f	id	x coordinate [meters]	y coordinate [meters]	duration [seconds]	
/source/position	i f f f f	id	x coordinate [meters]	y coordinate [meters]	duration [seconds]	timestamp [seconds]
/source/position	i f f f f f	id	x coordinate [meters]	y coordinate [meters]	not used	timestamp [seconds]
/source/color	i i i i	id	red [0;255]	green [0;255]	blue [0; 255]	
/source/groupId	i i	id	groupId			
/source/rotationDirection	i i	id	inverted [0=false, 1=true]			
/source/scalingDirection	i i	id	inverted [0=false, 1=true]			
/source/dopplerEffect	i i	id	on [0 = false, 1 = true]			
/group/activate	i	groupId				
/group/deactivate	i	groupId				
/group/position	i f f	groupId	x coordinate [meters]	y coordinate [meters]		
/group/color	i i i i	groupId	red [0;255]	green [0;255]	blue [0; 255]	
/project/createWithScore	s	projectname				
/project/createWithoutScore	s	projectname				
/project/addScore	none					
/project/load	s	projectname				
/project/save						

...

duration [seconds]

/project/save	s	projectname	
/project/snapshot/take	i	snapshotId	
/project/snapshot/take	i s	snapshotId	name
/project/snapshot/recall	i f	snapshotId	duration [seconds]
/project/snapshot/delete	i	snapshotId	
/project/snapshot/rename	i s	snapshotId	name
/project/snapshot/copy	i i	snapshotId (from)	snapshotId (to)
/score/play	none		
/score/stop	none		
/score/setStartScenario	none		
/score/enableRecord	i	0 = off, 1 = on	
/score/enableRead	i	0 = off, 1 = on	
/score/reset			
/score/newtime	f	time [seconds]	
/score/enableMMC	i	0 = off, 1 = on	
/score/source/enableRecord	i i	sourceId	0 = off, 1 = on
/score/source/enableRead	i i	sourceId	0 = off, 1 = on
/jfwonder/frametime	i	currenttime [jackframe]	
/jfwonder/connect	none		
/jfwonder/error	s	errormessage	
/stream/render/connect	s	name	
/stream/render/connect	s s	host	port
/stream/render/connect	none		
/stream/render/disconnect	none		
/stream/render/pong	i	count	
/stream/render/send	NULL		
/stream/score/connect	s	name	
/stream/score/connect	s s	host	port
/stream/score/connect	none		
/stream/score/disconnect	none		
/stream/score/pong	i	count	
/stream/score/send	NULL		
/stream/visual/connect	s	name	
/stream/visual/connect	s s	host	port

/stream/visual/connect	none					
/stream/visual/disconnect	none					
/stream/visual/pong	i	count				
/stream/visual/send	NULL					
/stream/timer/connect	s s	host	port			
/stream/timer/connect	none					
/stream/timer/pong	i	count				
/reply	s i s	reply to message	state	message		

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twonder

/source/activate	i	id				
/source/deactivate	i	id				
/source/type	i i	id	type [0=plane, 1=point]			
/source/type	i i f	id	type [0=plane, 1=point]	timestamp [seconds]		
/source/angle	i f	id	angle [degrees]			
/source/angle	i f f	id	angle [degrees]	duration [seconds]		
/source/angle	i f f f	id	angle [degrees]	duration [seconds]	timestamp [seconds]	
/source/position	i f f	id	x coordinate [meters]	y coordinate [meters]		
/source/position	i f f f	id	x coordinate [meters]	y coordinate [meters]	duration [seconds]	
/source/position	i f f f f	id	x coordinate [meters]	y coordinate [meters]	duration [seconds]	timestamp [seconds]
/source/position	i f f f f f	id	x coordinate [meters]	y coordinate [meters]	not used	timestamp [seconds]
/source/dopplerEffect	i i	id	on [0 = false, 1 = true]			
/source/dopplerEffect	i i f	id	on [0 = false, 1 = true]	timestamp [seconds]		
/global/maxNoSources	i	number of sources				
/global/renderpolygon	s i (f f f)	roomname	number of vertices	V.1 x coord. [meters]	V.1 y coord. [meters]	V.1 z coord. [meters]
/stream/render/ping	i	pingcount				
/reply	s i s	reply to message	state	message		

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duration [seconds]

xwonder

/source/activate	i	id				
/source/deactivate	i	id				
/source/position	i f f	id	x coordinate [meters]	y coordinate [meters]		
/source/angle	i f	id	angle [degrees]			
/source/type	i i	id	type [0=plane, 1=point]			
/source/name	i s	id	name			
/source/color	i i i i	id	red [0;255]	green [0;255]	blue [0; 255]	
/source/groupId	i i	id	groupId			
/source/rotationDirection	i i	id	inverted [0=false, 1=true]			
/source/scalingDirection	i i	id	inverted [0=false, 1=true]			
/score/source/enableRecord	i i	id	0 = off, 1 = on			
/score/source/enableRead	i i	id	0 = off, 1 = on			
/source/dopplerEffect	i i	id	on [0 = false, 1 = true]			
/group/activate	i	groupId				
/group/deactivate	i	groupId				
/group/position	i f f	groupId	x coordinate [meters]	y coordinate [meters]		
/group/color	i i i i	groupId	red [0;255]	green [0;255]	blue [0; 255]	
/mtctime	i i i i	hour	minute	second	millisecond	
/score/stop	none					
/score/play	none					
/score/enableRecord	i	0 = off, 1 = on				
/score/enableRead	i	0 = off, 1 = on				
/score/enableMMC	i	0 = off, 1 = on				
/score/status	NULL (i)	scoreplayerPlayMode	scoreplayerRecordMode	scoreplayerReadMode	sourceRecordMode	sourceReadMode
/global/maxNoSources	i	number of sources				
/global/renderpolygon	s i (f f f)	roomname	number of vertices	V.1 x coord. [meters]	V.1 y coord. [meters]	V.1 z coord. [meters]
/project/xmlDump	i s	errorflag (1 = error)	project in xml (see dtd)			
/stream/visual/ping	i	pingcount				
/reply	s i s	reply to message	state	message		

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scoreplayer

/source/activate	i	id				
/source/deactivate	i	id				
/source/name	i s	id	name			
/source/position	i f f f f	id	x coordinate [meters]	y coordinate [meters]	duration [seconds]	timestamp [seconds]
/source/type	i i f	id	type [0=plane, 1=point]	timestamp [seconds]		
/source/angle	i f f f	id	angle [degrees]	timestamp [seconds]	duration [seconds]	
/score/source/enableRecord	i i	id	record [0=off, 1= on]			
/score/source/enableRead	i i	id				
/score/enableRecord	i	record (0=off, 1=on)				
/score/enableRead	i	read (0=off, 1=on)				
/score/create	s	scorename				
/score/save	NULL					
/score/load	s	scorename				
/score/play	none					
/score/stop	none					
/score/reset	none					
/score/setStartScenario	none					
/score/enableMMC	i	0 = off, 1 = on				
/score/enableMSRC	i	0 = off, 1 = on				
/score/newtime	i i i i	hours	minutes	seconds	milliseconds	
/global/maxNoSources	i	number of sources				
/stream/score/ping	i	pingcount				
/reply	s i s	reply to message	state	message		

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jfwonder

/jfwonder/connect	none	

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fwonder

/tracker/move	i f f f	source id	pan [degrees]	tilt [degrees]	rot [degrees], NOT USED	
/tracker/move/pan	f	pan [degrees]				
/tracker/move/tilt	f	tilt [degrees]				
/tracker/move/rot	f	rot [degrees], NOT USED				
/fwonder/resolution/x	i	‹ resolution of IR Matrix [> 0]				
/fwonder/resoultion/y	i	/ resolution of IR Matrix [> 0]				

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qfwonder

/qfwonder/IRLoaded	i i i i	x	y	loaded [0 = no, 1 = yes]	type [0 = static, 1= dynamic]	
/qfwonder/currentIR	i i	x	y			
/qfwonder/numLoadedIRs	i i	number of IRs	type[0 = static, 1 = dynamic]			
/qfwonder/reset	none					

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tracker

/tracker/omit	i	keep 1, omit i messages	
/tracker/reset	i	set tracker [1], else: do nothing	

WONDER OSC-Commands

WFS OSC user chart

Parametertypes: i = int s = string f = float

(interface for all messages is cwonder)

Note: all commands have to be prefixed with /WONDER

Command	Parameters	content >	...	...	...	...

Basic mode

/source/activate	i	id				
/source/deactivate	i	id				
/source/type	i i	id	type [0=plane, 1=point]			
/source/type	i i f	id	type [0=plane, 1=point]	timestamp [seconds]		
/source/angle	i f	id	angle [degrees]			
/source/angle	i f f	id	angle [degrees]	duration [seconds]		
/source/angle	i f f f	id	angle [degrees]	duration [seconds]	timestamp [seconds]	
/source/position	i f f	id	x coordinate [meters]	y coordinate [meters]		
/source/position	i f f f	id	x coordinate [meters]	y coordinate [meters]	duration [seconds]	
/source/position	i f f f f	id	x coordinate [meters]	y coordinate [meters]	duration [seconds]	timestamp [seconds]
/source/dopplerEffect	i i	id	on [0 = false, 1 = true]			

Full feature mode

/source/activate	i	id				
/source/deactivate	i	id				
/source/type	i i	id	type [0=plane, 1=point]			
/source/type	i i f	id	type [0=plane, 1=point]	timestamp [seconds]		
/source/angle	i f	id	angle [degrees]			
/source/angle	i f f	id	angle [degrees]	duration [seconds]		
/source/angle	i f f f	id	angle [degrees]	duration [seconds]	timestamp [seconds]	
/source/position	i f f	id	x coordinate [meters]	y coordinate [meters]		
/source/position	i f f f	id	x coordinate [meters]	y coordinate [meters]	duration [seconds]	
/source/position	i f f f f	id	x coordinate [meters]	y coordinate [meters]	duration [seconds]	timestamp [seconds]
/source/position	i f f f f f	id	x coordinate [meters]	y coordinate [meters]	not Used	duration [seconds]

timestamp [seconds]

/source/dopplerEffect	i i	id	on [0 = false, 1 = true]		
/project/createWithScore	s	projectname			
/project/createWithoutScore	s	projectname			
/project/addScore	none				
/project/load	s	projectname			
/project/save					
/project/save	s	projectname			
/project/snapshot/take	i	snapshotId			
/project/snapshot/take	i s	snapshotId	name		
/project/snapshot/recall	i f	snapshotId	duration [seconds]		
/project/snapshot/delete	i	snapshotId			
/project/snapshot/rename	i s	snapshotId	name		
/project/snapshot/copy	i i	snapshotId (from)	snapshotId (to)		
/score/play	none				
/score/stop	none				
/score/setStartScenario	none				
/score/enableRecord	i	0 = off, 1 = on			
/score/enableRead	i	0 = off, 1 = on			
/score/reset	none				
/score/newtime	i i i i	hours	minutes	seconds	milliseconds
/score/enableMMC	i	0 = off, 1 = on			
/score/enableMSRC	i	0 = off, 1 = on			
/score/source/enableRecord	i i	sourceId	0 = off, 1 = on		
/score/source/enableRead	i i	sourceId	0 = off, 1 = on		

Wonder Commandline arguments

cwonder

short	long	valuetype	default value
-d	--daemon	none	off
-c	--configfile	absoulte path	/*installpath*/share/wonder3/configs/cwonder_config.xml
-u	--user	string	empty
-o	--listeningport	[1, 65535]	58100
-r	--pingrate	> 0	44100
-b	--basicmode	none	off
-v	--verbose	none	off
-s	--oscverbose	none	off
-h	--help	none	-

twonder

-d	--daemon	none	off
-c	--configfile	absoulte path	/*installpath*/share/wonder3/configs/twonder_config.xml
-s	--speakerfile	absoulte path	/*installpath*/share/wonder3/configs/twonder_speakerarray.xml
-j	--jackname	string	twonder
:	--name	string	twonder
-i	--cwonderhost	ip-adress	127.0.0.1
-p	--cwonderport	[1, 65535]	58100
-o	--listeningport	[1, 65535]	58200
-m	--planecomp	[0.0, 1.0]	0.2
-v	--verbose	none	off
	--negdelay	float	20.0
	--speedofsound	float	340.0
	--alwaysin	none	off
	--alwaysout	none	off
	--nonrtdebug	none	off
-h	--help	none	-

description

run as daemonized background process

path to the configuration file

user starting the process. used as part of name of pidfile,if not provieded the pid is used
port on which cwonder “listens”, i.e. port for incoming osc messages
rate at which the pings are send to the streamlisteners (in samples)
basic functionality, just dispatching OSC messagesto renderstream, all sources active
print output to console
print osc communication to console
display commandline arguments

---

run as daemonized background process

path to twonder's config file

path to twonder's speaker file

name with which twonder registers with jack
name under which to connect to cwonder
IP adress of host where cwonder is running
port on which cwonder can be reached
port on which twonder “listens”, i.e. port for incoming osc messages
factor to compensate for the fact that planewaves are louder than point sources
print output to console
initital maximum negative delay in meters
speed of sound in meters per second
sound is always rendered as focused source
sound is always rendered as not focused source
prints data just for testing purposes, reduces performance
display commandline arguments

xwonder

-i	ip-adress	127.0.0.1
-p	[1, 65535]	58100
-o	[1, 65535]	58000
-t	[1, 10000]	3000
-n	string	xwonder
-d	none	off
-v	none	off
-h	none	-

scoreplayer

-c	--configfile	absolute path	*/installpath*/share/wonder3/configs/scoreplayer_config.xml
-i	--cwonderhost	ip-adress	127.0.0.1
-p	--cwonderport	[1, 65535]	58100
-n	--name	string	scoreplayer
-o	--listeningport	[1, 65535]	58300
-f	--offset	float	0.0
-v	--verbose	none	off
-w	--osc-verbose	none	off
-x	--mtc-verbose	none	off
-y	--screendump-verbose	none	off
-h	--help	none	-

jfwonder

-d	--daemon	none	off
-u	--user	string	empty
-i	--cwonderhost	ip-adress	127.0.0.1
-p	--cwonderport	[1, 65535]	58100
-c	--controlrate	integer	1024
-o	--listeningport	[1, 65535]	58600
-v	--verbose	none	off
-f	--jfverbose	none	off

IP adress of host where cwonder is running
port on which cwonder can be reached
port on which xwonder “listens”, i.e. port for incoming osc messages
timeout in ms for the connection to cwonder
name under which to connect to cwonder
demomode, run without connecting to cwonder
print output to console
display commandline arguments

---

path to scoreplayer's config file

IP adress of host where cwonder is running
port on which cwonder can be reached
name under which to connect to cwonder
port on which scoreplayer “listens”, i.e. port for incoming osc messages
timeoffset between scoreplayer and midi time code (mtc) in seconds
print output to console
print osc communication to console
print mtc to console
“screendump” mode, massive status output to console
display commandline arguments

---

run as daemonized background process
user starting the process. part of name of pidfile, else the pid is used
IP adress of host where cwonder is running
port on which cwonder can be reached
number of samples after which to send a time frame update (power of 2 is a good choice)
osc port on which jfwonder “listens”, i.e. port for incoming osc messages
print output to console
print jackframetime to console

-h	--help	none	-

---

fwonder

-c	--configfile	absoulte path	*/installpath*/share/wonder3/configs/fwonder_config.xml
-o	--listeningport	[1, 65535]	58500
-i	--qfwonderhost	ip-address	127.0.0.1
-p	--qfwonderport	[1, 65535]	58400
-v	--irverbose	none	off
-r	--oscresolutionverbose	none	off
-m	--oscmoveverbose	none	off
-h	--help	none	-

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qfwonder

-c	--configfile	absoulte path	*/installpath*/share/wonder3/configs/fwonder_config.xml
-o	--listeningport	[1, 65535]	58400
-h	--help	none	-

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tracker

-c	--configfile	absoulte path	*/installpath*/share/wonder3/configs/tracker_config.xml
-o	--listeningport	[1, 65535]	58700
-v	--verbose	none	off
-m	--omit	>= 0	0
-l	--latencytest	none	off
-p	--testpoints	> 0	5000
-f	--writetestfile	none	off
-n	-- testfile	absolute path	date_time_tracker_latencytest_results.data
-s	--slowdown	>= 0	1
-h	--help	none	-

---

display commandline arguments

---

path to twonder's config file

port on which fwonder “listens”, i.e. port for incoming osc messages
IP address of host where qfwonder is running
port on which qfwonder can be reached
print information about IRs to console
print received osc grid messages to console
print received osc move messages to console
display commandline arguments

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path to the config file that is used by the running instance of fwonder

port on which fwonder “listens”, i.e. port for incoming osc messages
display commandline arguments

---

path to the config file that is used by the running instance of fwonder

port on which tracker “listens”, i.e. port for incoming osc messages
print output to console
keep 1 message and omit the next x messages
do latency testing, currently works only with the ptracker
how many measurements the latency test should do
write results of latency test to file
where the latency test data should be saved
slowdown tracker_app by uwait(input_arg), as for itracker it's much to busy, use default with ptracker
display commandline arguments

Wonder Default OSC Po

Application	listening port
xwonder	58000
cwonder	58100
twonder	58200
scoreplayer	58300
qfwonder	58400
fwonder	58500
jfwonder	58600
tracker	58700