Advanced Gtk+ Sequencer

OSC Server's Handbook

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Advanced Gtk+ Sequencer: OSC Server's Handbook

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Chapter 1. The Advanced Gtk+ Sequencer OSC server

The OSC server implementation supports connections by UDP/TCP over IPv4 and IPv6. There are different server paths available. Each context path handled by its own OSC controller.

Context paths

The context path is the address pattern of your OSC message. Every OSC message passes the front controller. Then it is scheduled and delegated to the matching controller. The OSC timetag specifies at what time the message should be dispatched. The OSC timetag is taken from your OSC bundle.

Addressing nodes can be done by using ranges or wildcard. The context path matches the first string of your type tag. The common prefix is `/AgsSoundProvider` for accessing the audio layer of GSequencer.

Table 1.1. OSC server context paths

Context path	description
/info	Provides OSC server identifier
/status	Rerowieve OSC server status
/config	Configure the GSequencer engine
/action	Run tasks specified by action
/node	Read values of nodes
/renew	Modify values of nodes
/meter	Continuing update meter values

OSC server context paths

Chapter 2. The info controller

The **/info** context path shows you version information. The type tag of the request should be ommited.

Type tag and parameters

The type tag of the response looks like following: `,ssss`.

Table 2.1. Type tag description

index	type indentifier	value
#0	s	`V2.1.0`
#1	s	`osc-server`
#2	s	`Advanced Gtk+ Sequencer`
#3	s	`2.1.0`

Type tag description

Chapter 3. The status controller

The **/status** context path shows you the server status. Pass an empty type tag to the request.

Type tag and parameters

The type tag of the response looks like following: `,s`.

Table 3.1. Type tag description

index	type indentifier	value
#0	s	`server up and running`, `server started` or `server stopped`

Type tag description

Chapter 4. The config controller

The **/config** context path allows you to apply a new configuration. The configuration is applied silently.

Type tag and parameters

The type tag of the request looks like following: `,s`.

Table 4.1. Type tag description

index	type indentifier	value
#0	s	Your new configuration to apply

Type tag description

Chapter 5. The action controller

The **/action** context path runs the specified task. The action is run silently.

Type tag and parameters

The type tag of the request looks like following: `,ss`.

Table 5.1. Type tag description

index	type indentifier	value
#0	s	Path is either `/AgsSoundProvider/AgsSoundcard`, `/AgsSoundProvider/AgsSequencer` or `/AgsSoundProvider/AgsAudio[[0-9]+|"[\w]+"]`
#1	s	Action is either `start` or `stop`

Type tag description

The path `/AgsSoundProvider/AgsAudio[[0-9]+|"[\w]+"]` is a valid audio node accessor. Allowed are indices or its property audio-name. Currently only one single audio object can be accessed, for example `/AgsSoundProvider/AgsAudio[1]` or `/AgsSoundProvider/AgsAudio["drum"]`.

Chapter 6. The node controller

The **/node** context path returns the value assigned to node. The response type tag matches the port value type held.

Type tag and parameters

The type tag of the request looks like following: `,s`.

Table 6.1. Type tag description

index	type indentifier	value
#0	s	Path is any valid accessor for properties or port value.

Type tag description

The path supports indices, ranges, wildcard or some even names as accessors. This 2 examples shows you the access to an AgsAudio port and AgsChannel:

- /AgsSoundProvider/AgsAudio[0]/AgsMuteAudio[0]/AgsPort["./muted[0]"]:value
- /AgsSoundProvider/AgsAudio[0]/AgsInput[0]/AgsVolumeChannel[0]/AgsPort["./volume[0]"]:value

The response contains as first argument of the type the tag the matching path. Followed by type or array of types requested. The requested value follows the path argument.

Chapter 7. The renew controller

The **/renew** context path applies the provided value to the specified node. There is no response.

Type tag and parameters

The type tag of the request starts like following: `,s`.

Table 7.1. Type tag description

index	type indentifier	value
#0	s	Path is any valid accessor for properties or port value.
#1	any valid value or array of values type	One or more values to apply

Type tag description

Table 7.2. Value specification

index	type indentifier	value
#0 - #n	binary data	The amount of data matches the type tag

Value specification

The path supports indices, ranges, wildcard or some even names as accessors.

Chapter 8. The meter controller

The **/meter** context path returns continuing a value from the specified node. You can either turn monitoring on or off.

Type tag and parameters

The type tag of the request starts like following: `,s`.

Table 8.1. Type tag description

index	type indentifier	value
#0	s	Path is any valid accessor for properties or port value.
#1	T or F	T turns on monitoring of a port, F turns off.

Type tag description

The path supports indices, ranges, wildcard or some even names as accessors.

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