

midi_dtc.doc

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REVISION HISTORY

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Chapter 1

midi_dtc.doc

1.1 midi_dtc.doc

midi.datatype

1.2 midi.datatype/midi.datatype

NAME

midi.datatype -- data type for midi stream files with timestamps

FUNCTION

The midi data type, a base-class of all midi data, is used to load, save and play standard midi files and similar music files (using datatypes subclasses). A control panel can be applied to a window.

The control panel currently is very simple and triggers one of STM_PLAY and STM_PAUSE, depending on the playing state.

The midi player makes use of camd.library and realtime.library.

PREFS

The data type tries to load the prefs file from "ENV:DataTypes/midi.prefs" and parses it using ReadArgs() on each OM_NEW method to set up the attributes. The template is:

CLUSTER/K,VOLUME/N/K

CLUSTER - sets MDTA_Cluster to the given name, default is "out.0".
VOLUME - sets SDTA_Volume to the given value, default is 64.

The options can be on several lines. The prefs file must end with a line feed, so you cannot use SETENV.

METHODS

OM_NEW -- Create a new object from a SMF file

OM_DISPOSE -- dispose the object (triggers STM_STOP)

OM_GET -- get a attribute of the object

OM_SET -- set attributes of the object

OM_UPDATE -- update some attributes of the object

GM_HITTEST -- check if gadget has been hit

GM_GOACTIVE -- gadget pressed

GM_GOINACTIVE -- gadget released

GM_HANDLEINPUT -- handle intuition input events

GM_LAYOUT -- layout the control panel (calculate sizes)

GM_RENDER -- attach the control panel to a window

DTM_REMOVEDTOBJECT -- remove control panel from window

DTM_WRITE

- DTWM_RAW writes a SMF file
- DTWM_IFF is unsupported, since there is no IFF-MIDI format yet

DTM_TRIGGER

- STM_PLAY starts playing (a separate process will be launched)
or continues playing after pause
- STM_PAUSE pauses playing (might start playing first)
- STM_STOP stops playing and removes the player process

TAGS

MDTA_Cluster -- (UBYTE *) name of the CAMD cluster to play midi data to. Default: "out.0". Applicability is (ISG).

Tags defined in datatypes/soundclass.h:

- SDTA_Cycles
- SDTA_Volume -- volume does not get used yet
- SDTA_SignalTask
- SDTA_SignalBit

Tags defined in datatypes/datatypesclass.h

- DTA_Methods
- DTA_TriggerMethods
- DTA_NominalVert
- DTA_NominalHoriz
- DTA_Title
- DTA_ObjName
- DTA_Name
- DTA_Immediate
- DTA_Repeat

Tags that will change in future, do not use !

- MDTA_Buffer -- (UBYTE *) pointer to buffer with SMF file contents
- MDTA_BufferLen -- (ULONG) size of this buffer

LIMITATIONS

It is not very useful for loading/saving yet.

No reset gets send before starting playing.
No use is made of volume setting.

BUGS

None known.

SEE ALSO

datatypesclass (have a look at datatypes.library V45),
sound_dtc