

Narrator

COLLABORATORS

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|------------|---------------------|---------------|-----------|
| | TITLE : Narrator | | |
| ACTION | NAME | DATE | SIGNATURE |
| WRITTEN BY | | July 22, 2024 | |

REVISION HISTORY

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|--------|------|-------------|------|
| NUMBER | DATE | DESCRIPTION | NAME |
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Chapter 1

Narrator

1.1 Narrator

Konstanten

| | | |
|-----------|--------------|-------------|
| cantAlloc | centPhonErr | dCentErr |
| defArtic | defCentral | defF0Enthus |
| defF0Pert | defFreq | defMode |
| defPitch | defPriority | defRate |
| defSex | defVol | expunged |
| female | freqErr | makeBad |
| male | manual | maxCent |
| maxFreq | maxPitch | maxRate |
| maxVol | minCent | minFreq |
| minPitch | minRate | minVol |
| modeErr | narratorName | natural |
| noAudLib | noMem | noWrite |
| phonErr | pitchErr | rateErr |
| robotic | sexErr | unimpl |
| unitErr | volErr | |

Typ-Deklarationen

| | | |
|------------------|-----------------|---------------|
| IONarrator | IONarratorPtr | IONewNarrator |
| IONewNarratorPtr | Mouth | MouthPtr |
| Narrator | NarratorFlagSet | NarratorFlags |
| NarratorPtr | NewMouth | NewMouthPtr |
| NewNarrator | NewNarratorPtr | |

1.2 TMP:Modula-2/Narrator.def

```
DEFINITION MODULE Narrator ; (*$ Implementation:=FALSE *)
(* 05-May-92/cn *)
```

```
FROM SYSTEM IMPORT ADDRESS, BYTE, LONGSET;
```

```
FROM ExecD
IMPORT IOStdReq ;
```

```
CONST
  narratorName="narrator.device";

  noMem=-2;
  noAudLib=-3;
  makeBad=-4;
  unitErr=-5;
  cantAlloc=-6;
  unimpl=-7;
  noWrite=-8;
  expunged=-9;
  phonErr=-20;
  rateErr=-21;
  pitchErr=-22;
  sexErr=-23;
  modeErr=-24;
  freqErr=-25;
  volErr=-26;
  dCentErr=-27;
  centPhonErr=-28;

  defPitch=110;
  defRate=150;
  defVol=64;
  defFreq=22200;
  male=0;
  female=1;
  natural=0;
  robotic=1;
  manual=2;
  defSex=male;
  defMode=natural;
  defArtic=100;
  defCentral=0;
  defF0Pert=0;
  defF0Enthus=32;
  defPriority=100;

  minRate=40;
  maxRate=400;
  minPitch=65;
  maxPitch=320;
  minFreq=5000;
  maxFreq=28000;
  minVol=0;
  maxVol=64;
  minCent=0;
  maxCent=100;

TYPE
  NarratorFlags =(newIORB,wordSync,sylSync,nf3,nf4,nf5,nf6,nf7);
  NarratorFlagSet =SET OF NarratorFlags ;

(*
  Eine 1:1 Umsetzung der C-Schnittstelle wäre zwar möglich,
  führte jedoch dazu, daß Programme, die dies Modul importieren,
```

unter Kickstart 1.3 nicht mehr laufen!

Das Device ab Version 36/37 sieht in der Mouth-Message die eingetragene Länge an und füllt entsprechend die Felder width, height, shape und pad aus.

Für die vom Device angenommene Größe des Mouth-RECORDs ist allein der in voice.message.message.length eingetragene Wert (wird durch CreateExtIO() eingetragen!) maßgebend, die voice.flags haben hier keinen Einfluß"

*)

```
Narrator =RECORD
message: IOStdReq ;
rate: CARDINAL;
pitch: CARDINAL;
mode: CARDINAL;
sex: CARDINAL;
chMasks: ADDRESS;
nmMasks: CARDINAL;
volume: CARDINAL;
sampFreq: CARDINAL;
mouths: SHORTCARD;
chanMask: SHORTCARD;
numChan: SHORTCARD;
(*37*) flags: NarratorFlagSet ;
END;
NarratorPtr = POINTER TO Narrator ;
```

```
NewNarrator =RECORD
message: IOStdReq ;
rate: CARDINAL;
pitch: CARDINAL;
mode: CARDINAL;
sex: CARDINAL;
chMasks: ADDRESS;
nmMasks: CARDINAL;
volume: CARDINAL;
sampFreq: CARDINAL;
mouths: SHORTCARD;
chanMask: SHORTCARD;
numChan: SHORTCARD;
(*37*) flags: NarratorFlagSet ;
(*36*) f0Enthusiasm: SHORTCARD;
(*36*) f0Perturb: SHORTCARD;
(*36*) f1Adj: SHORTINT;
(*36*) f2Adj: SHORTINT;
(*36*) f3Adj: SHORTINT;
(*36*) a1Adj: SHORTINT;
(*36*) a2Adj: SHORTINT;
(*36*) a3Adj: SHORTINT;
(*36*) articulate: SHORTCARD;
(*36*) centralize: SHORTCARD;
(*36*) centphon: ADDRESS;
(*36*) avBias: SHORTINT;
(*36*) afBias: SHORTINT;
(*36*) priority: SHORTINT;
```

```
(*36*)pad1:SHORTINT;
END;
NewNarratorPtr =POINTER TO  NewNarrator ;

Mouth =RECORD
voice: Narrator ;
width:SHORTCARD;
height:SHORTCARD;
shape:BYTE;
pad:BYTE;
END;
MouthPtr =POINTER TO  Mouth ;

NewMouth =RECORD
voice: NewNarrator ;
width:SHORTCARD;
height:SHORTCARD;
shape:BYTE;
(*37*)sync: NarratorFlagSet ;
END;
NewMouthPtr =POINTER TO  NewMouth ;

(*
Synonyme mit einheitlicher Namensgebung
*)
IONarrator = Narrator ;
IONarratorPtr = NarratorPtr ;
IONewNarrator = NewNarrator ;
IONewNarratorPtr = NewNarratorPtr ;

END  Narrator .noimp
```
