Hauptwerk ODF objects relationship chart

Legend :

Object Type

{ object ID }

Parent object ID
(owner or controller)

Child object ID
(member or controlled)

Other interresting
attributes

_General
{ Sys_ObjectID }
Identification_UniqueOrganID
OrganInfo_InstallationPackageID
OrganInfo_...
Display_ConsoleScreenWidth...
Display_ConsoleScreenHeight...
SpecialObjects_DefaultDisplayPageID
SpecialObjects_MasterCaptureSwitchID
Display_AlternateConsoleScreenLayout...

RequiredInstallationPackage
{ InstallationPackageID }
Manufacturer...

TextInstance
{ TextInstanceID }
TextStyleID
DisplayPageID
Text
XPosPixels
YposPixels
AttachedToAnImageSetInstance
AttachedToImageSetInstanceID

TextStyle
{ StyleID }
Font_...
Colour_...
...AlignmentCode

DisplayPage
{ PageID }
AlternateConsoleScreenLayout...

ImageSetInstance
{ ImageSetInstanceID }
DisplayPageID
ImageSetID
LeftXPosPixels
TopYPosPixels
AlternateScreenLayout...
DefaultImageIndexWithinSet

ImageSet
{ ImageSetID }
InstallationPackageID
ImageWidthPixels
ImageHeightPixels
ClickableArea...
TransparencyMaskFilename

ImageSetElement
ImageSetID
ImageIndexWithinSet
BitmapFilename

ThreePositionSwitchImage
???

ReversiblePiston
???

Keyboard
{ KeyboardID }
KeyGen_DisplayPageID
KeyGen_KeyImageSetID
KeyGen_GenerateKeysAuto
KeyGen_NumberOfKeys
KeyGen_LeftXPos
KeyGen_TopYPos
KeyGen_AlternateScreenLayout...

KeyImageSet
{ KeyImageSetID }
KeyShapeImageSetID_...
ImageIndexWithinImageSets_...
HorizSpacingPixels_...

ContinuousControlImageSetStage
ImageSetID
ImageSetIndex

based on KeyAction data

KeyAction
SourceKeyboardID
DestKeyboardID
DestDivisionID
ConditionSwitchID
ActionTypeCode
ActionEffectCode
NumberOfKeys

KeyboardKey
KeyboardID
SwitchID
NormalMIDINoteNumber

SwitchLinkage
ConditionSwitchID
SourceSwitchID
DestSwitchID

SwitchExclusiveSelectGroup
{ GroupID }

SwitchExclusiveSelectGroupElement
GroupID
SwitchID

ContinuousControl
{ ControlID }
ImageSetInstanceID
Clickable

ContinuousControlDoubleLinkage
FirstSourceControl_ID
SecondSourceControl_ID
DestControl_ID

Switch
{ SwitchID }
Latching
Clickable
Disp_ImageSetInstanceID
Disp_ImageSetIndex...

ContinuousControlLinkage
SourceControlID
DestControlID
ConditionSwitchID
LinkTypeCode

ContinuousControlStageSwitch
ContinuousControlID
ControlledSwitchID

Division
{ DivisionID }

DivisionInput
DivisionID
SwitchID
NormalMIDINoteNumber

Enclosure
{ EnclosureID }
ShutterPositionContinuousControlID

EnclosurePipe
EnclosureID
PipeID

Stop
{ StopID }
DivisionID
ControllingSwitchID
Hint_PrimaryAssociatedRankID

Combination
{ CombinaisonID }
ActivatingSwitchID
CombinationTypeCode

CombinationElement
{ CombinationElementID }
CombinationID
ControlledSwitchID
CapturedSwitchID
MemorySwitchID

StopRank
StopID
RankID
ExternalRankID
AlternateRankID
SwitchIDToSwitchToAlternateRank
RankTypeCode
ActionTypeCode
ActionEffectCode
NumberOfMappedDivisionInputNodes
MIDINoteNumOfFirstMappedDivisionInputNode

Rank
{ RankID }
SoundEngine01_LayerxDesc

Pipe_SoundEngine01
{ PipeID }
RankID
ControllingPalletSwitchID
NormalMIDINoteNumber
WindSupply_SourceWindCompartmentID
WindSupply_OutputWindCompartmentID

WindCompartmentLinkage
FirstWindCompartmentID
SecondWindCompartmentID
ValveControllingSwitchID
ValveControlTypeCode
ValveControllingContinuousControlID

Tremulant
{ TremulantID }
ControllingSwitchID
PhaseAngleOutputContinuousControlID

ExternalRank
{ Index } ?
???

Pipe_SoundEngine01_Layer
{ LayerID }
PipeID
PipeLayerNumber
Main_AttackSelCriteria_ContinuousControlID
Main_ReleaseSelCriteria_ContinuousControlID
AmpLvl_ScalingContinuousControlID
PitchLvl_ScalingContinuousControlID
PitchLvl_IncrementingContinuousControlID
HarmonicShaping_IncrementingContinuousControlID
PhaseAngleOutputContinuousControlID

WindCompartment
{ WindCompartmentID }
PressureOutputContinuousControlID
Name

TremulantWaveform
{ TremulantWaveformID }
TremulantID
PitchAndFundamentalWaveformSampleID
ThirdHarmonicWaveformSampleID
PitchOutputContinuousControlID

ExternalPipe
???

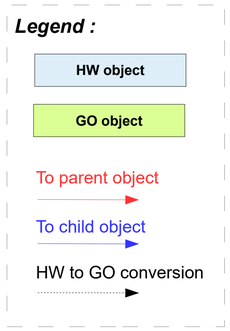
Pipe_SoundEngine01_AttackSample
{ UniqueID }
LayerID
SampleID
LoadSampleRange_StartPosition...
LoadSampleRange_EndPosition...
AttackSelCriteria_...

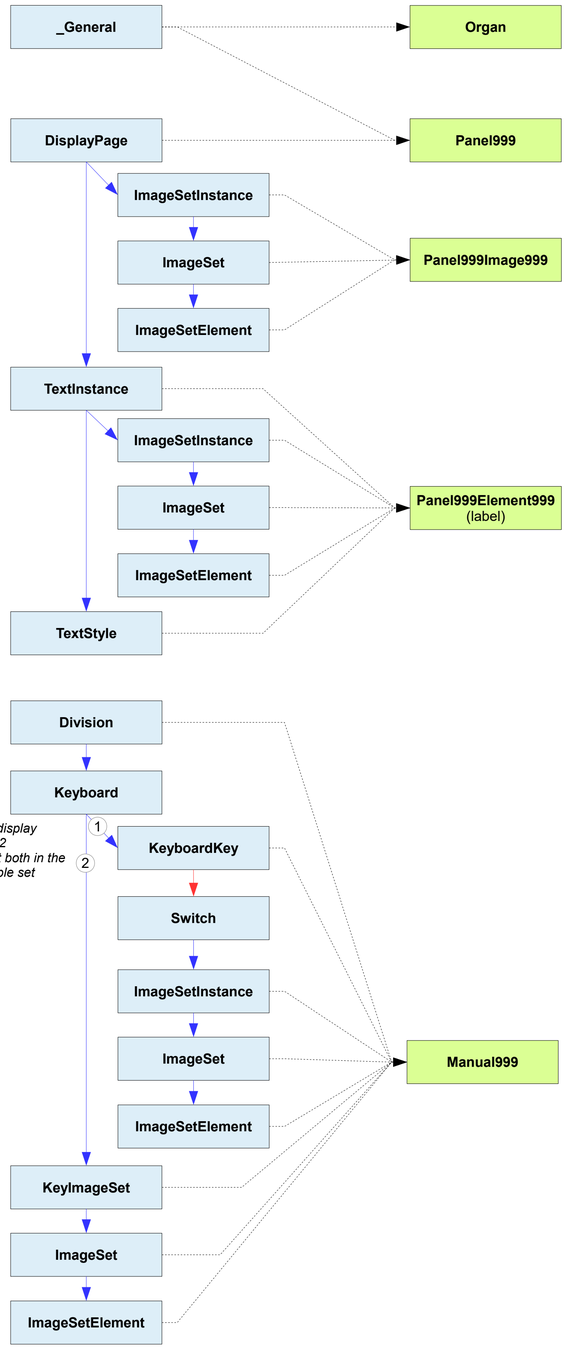
Pipe_SoundEngine01_ReleaseSample
{ UniqueID }
LayerID
SampleID
LoadSampleRange_StartPosition...
LoadSampleRange_EndPosition...
AttackSelCriteria_...
ReleaseSelCriteria_...

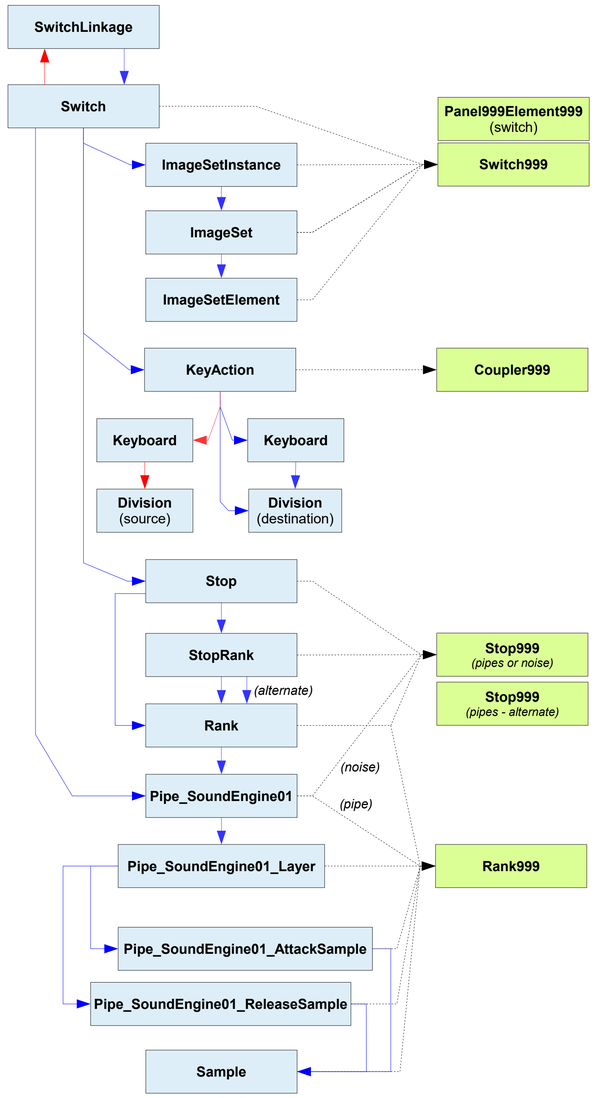
TremulantWaveformPipe
TremulantWaveformID
PipeID

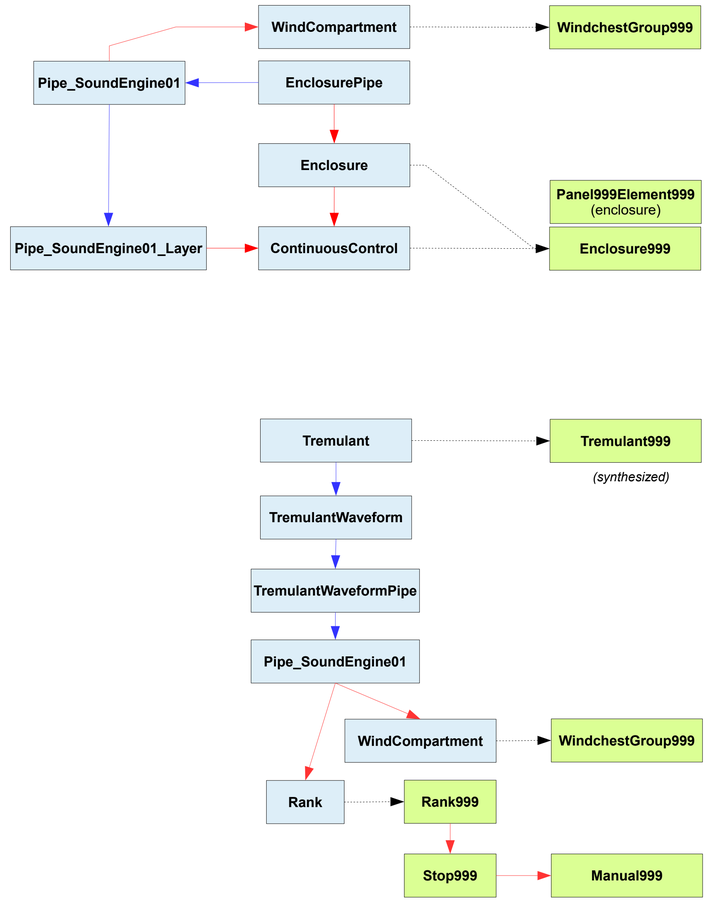
Sample
{ SampleID }
InstallationPackageID
SampleFilename
Pitch_...

Hauptwerk to GrandOrgue ODF objects relationship chart







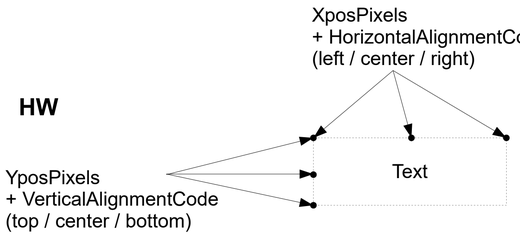


Label conversion
from HW to GO
for positions/sizes and text attributes

Without image

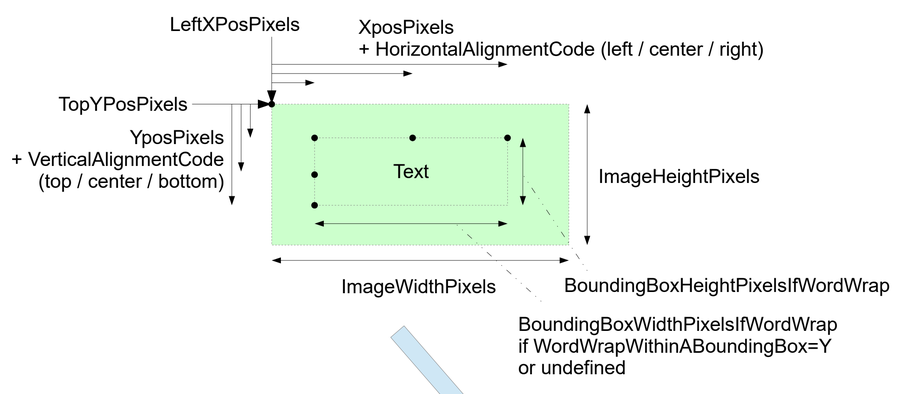
AttachedToImageSetInstanceID undefined

HW



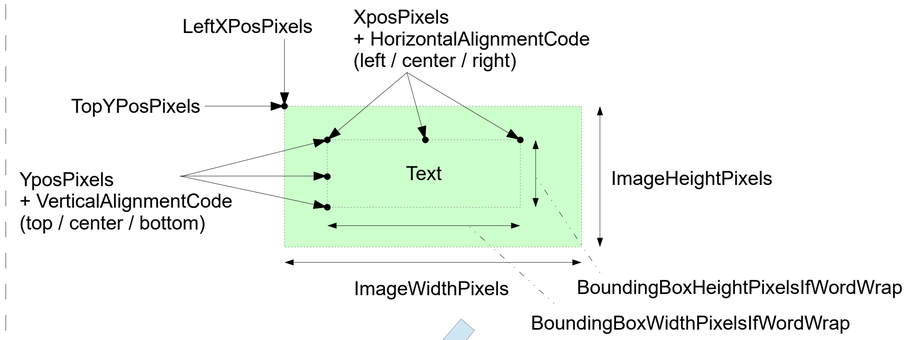
With image (text pos. relative to image pos.)

AttachedToImageSetInstanceID = xxx
PosRelativeToTopLeftOfImageSetInstance = **Y**
BitmapFilename = …
TransparencyMaskBitmapFilename = ...

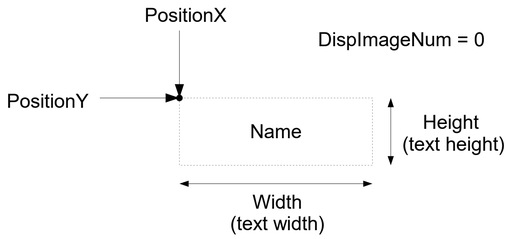


With image (text pos. NOT relative to image pos.)

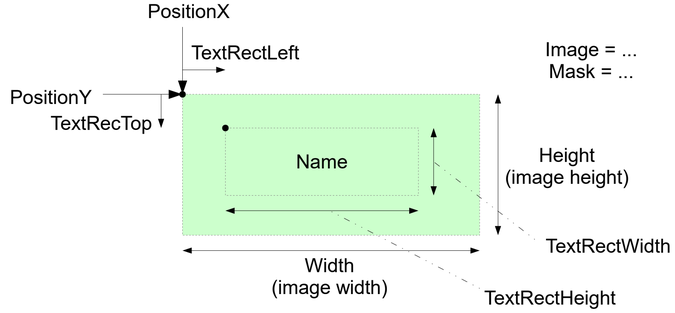
AttachedToImageSetInstanceID = xxx
PosRelativeToTopLeftOfImageSetInstance = **N**
BitmapFilename = …
TransparencyMaskBitmapFilename = ...



GO



if image
not found

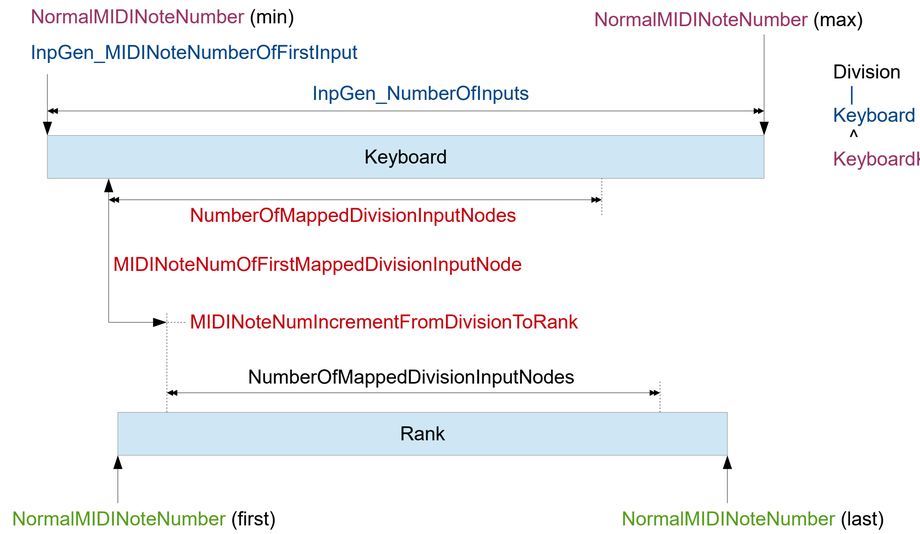


If the PositionX / PositionY of a GO label is within the display rectangle of a GO PanelElement (but Manual and Label), the GO label is not created and its Name attribute is copied in the DispLabelText of the PanelElement and TextRectLeft / TextRectTop are set to place the text in the GO PanelElement

Stop/Rank conversion
from HW to GO
for compass related attributes

| means link one to one
^ means link one to several (from up to dow)

HW



Division
|
Keyboard
^
KeyboardKey

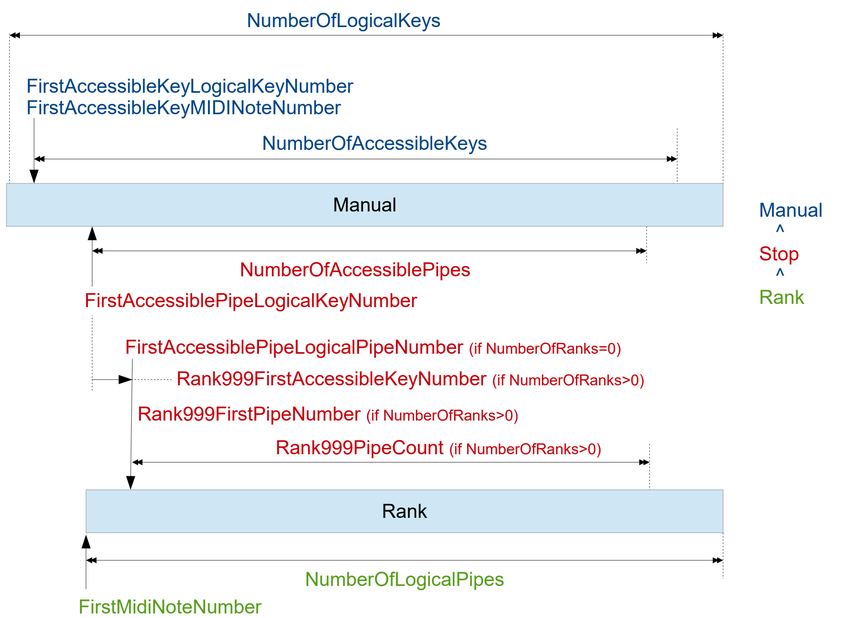
Division
^
Stop
^
StopRank
|
Rank
^
Pipe
^
Pipe_Layer
^
Pipe_Attack/Release
|
Sample

If HW MIDINoteNumIncrementFromDivisionToRank not defined
= 0

If HW MIDINoteNumOfFirstMappedDivisionInputNode not defined
= HW NormalMIDINoteNumber (first)
HW MIDINoteNumOfFirstMappedDivisionInputNode =
max (HW MIDINoteNumOfFirstMappedDivisionInputNode,
HW NormalMIDINoteNumber (first) - HW MIDINoteNumIncrementFromDivisionToRank)

If HW NumberOfMappedDivisionInputNodes not defined
= HW NormalMIDINoteNumber (last – first + 1)
HW NumberOfMappedDivisionInputNodes =
min(HW NumberOfMappedDivisionInputNodes,
HW NormalMIDINoteNumber (last)
- (HW MIDINoteNumOfFirstMappedDivisionInputNode
+ HW MIDINoteNumIncrementFromDivisionToRank) + 1

GO



Manual
^
Stop
^
Rank

GO Rank999FirstPipeNumber =
HW MIDINoteNumOfFirstMappedDivisionInputNode
+ HW MIDINoteNumIncrementFromDivisionToRank
- HW NormalMIDINoteNumber (first) + 1

GO Rank999FirstAccessibleKeyNumber (absolute value) =
HW MIDINoteNumOfFirstMappedDivisionInputNode
- GO FirstAccessibleKeyMIDINoteNumber + 1

GO Rank999PipeCount = HW NumberOfMappedDivisionInputNodes

GO FirstAccessiblePipeLogicalKeyNumber =
min(GO Rank999FirstAccessibleKeyNumber (absolute value)) of all Rank999s

GO NumberOfAccessiblePipes =
max(GO Rank999FirstAccessibleKeyNumber (absolute value)
+ GO Rank999PipeCount) of all Rank999s
- GO FirstAccessiblePipeLogicalKeyNumber + 1

GO Rank999FirstAccessibleKeyNumber (offset value) =
GO Rank999FirstAccessibleKeyNumber (absolute value)
- GO FirstAccessiblePipeLogicalKeyNumber

GO FirstMidiNoteNumber = HW NormalMIDINoteNumber (min)

GO NumberOfLogicalPipes = HW NormalMIDINoteNumber (max – min + 1)