

# Scene Examples for SpatDIF 0.3

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## **Notes for this Draft Version**

This document contains scene examples of the proposed SpatDIF format 0.3. As such, this document is subject to change. **USE AT YOUR OWN RISK!** Because this is an unapproved draft, this document must not be utilized for any conformance/compliance purposes. Permission is hereby granted for participants to reproduce this document for purposes of standardization consideration.

## **Publication Plan**

This final version of this document will be published on the SpatDIF web site.

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## Participants

The examples are primarily written and developed by

Nils Peters	Jan Schacher	Trond Lossius
CNMAT	ICST	BEK
UC Berkeley	Zurich University of the Arts	Bergen Center for Electronic Arts
Berkeley, US	Zürich, Switzerland	Bergen, Norway

with additional contributions by:

Jean Bresson	Marlon Schuhmacher	Gary Kendall	Scott Wilson
Giorgio Zoia	Frank Melchior	Matthias Geier	

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# 1 Simple Scene

A 'hello SpatDIF-world' scene.

## 1.1 OSC

```
1 # NOTE: comments in this file after #
2
3 /spatdif/version 0.3
4
5 /spatdif/meta/info/annotation "this is a simple spatdif scene with 3 sources"
6 /spatdif/meta/info/date "2011-04-14"
7 /spatdif/meta/info/author "Nils Peters"
8
9 /spatdif/meta/ordering time # all entities are sorted on the time axis
10
11 # #####
12 # here the scene begins
13 # #####
14
15 /spatdif/time 0.0 # a scene starts on 0.0 seconds by default
16
17 /spatdif/source/1/position -1.41 1.41. 0.0 # defaults to 0.0 0.0 0.0 type xyz
18 /spatdif/source/1/media/type file #default is none
19 /spatdif/source/1/media/location "../audio/hello.wav" # we use a relative location here
20 /spatdif/source/1/media/gain 1.0 # default, type linear gain
21
22 /spatdif/time 1.0 # time sync marker 1.0 seconds
23
24 /spatdif/source/2/position 1.41 1.41 0.0
25 /spatdif/source/2/media/type file
26 /spatdif/source/2/media/location "../audio/salut.wav"
27
28 /spatdif/time 2.0 # time sync marker 2.0 seconds
29
30 /spatdif/source/3/position 0.0 1.0 0.0
31 /spatdif/source/3/media/type file
32 /spatdif/source/3/media/location "../audio/hey.wav"
33 /spatdif/source/3/media/gain -3.0 db # 3 db attenuation
```

## 1.2 XML

```
1 <?xml version="1.0" encoding="UTF-8" standalone="yes"?>
2 <spatdif version="0.3">
3   <meta>
4     <info>
5       <annotation>this is a simple spatdif scene with 3 sources</comment>
6       <date>2011-04-14</date>
7       <author>jasch</author>
8     </info>
9     <ordering>time</ordering>
10  </meta>
11
12  <time>0.0</time> <!-- default -->
13    <source>
14      <name>1</name>
15      <position>-1.41 1.41 0.0</position> <!-- defaults to 0. 0. 0. type
16        xyz -->
17      <media>
18        <type>file</type> <!-- defaults to none -->
19        <location>../audio/hello.wav</location>
20        <gain>1.0</gain> <!-- default -->
21      </media>
22    </source>
23  </time>
24  <time>1.0</time> <!-- source is placed at time: 1.0 seconds -->
25    <source>
26      <name>2</name>
27      <position>1.41 1.41 0.0</position>
28      <media>
29        <type>file</type>
30        <location>../audio/salut.wav</location>
31      </media>
32    </source>
33  </time>
34  <time>2.0</time> <!-- source is placed at time: 2.0 seconds -->
35    <source>
36      <name>3</name>
37      <position>0.0 1.0 0.0</position>
38      <media>
39        <type>file</type>
40        <location>../audio/salut.wav</location>
41        <gain unit="db">-3.0</gain>
42      </media>
43    </source>
44  </time>
45 </spatdif>
```

## 1.3 YAML

```
1 #YAML example validated with http://instantyaml.appspot.com/
2 spatdif:
3   version: "0.3"
4   meta:
5     info:
6       annotation: this is a simple SpatDIF scene with 3 sources
7       date: 2011-04-14
8       author: jasch
9     ordering: time
10    time:
11      - time: 0.
12        source:
13          - name: 1
14            position: -1.41 1.41 0.0
15            media:
16              type: file
17              location: ../audio/hello.wav
18              gain: 1.0 # default
19      - time: 1.
20        source:
21          - name: 2
22            position: 1.41 1.41 0.0
23            media:
24              type: file
25              location: ../audio/salut.wav
26      - time: 2.
27        source:
28          - name: 3
29            position: 0.0 1.0 0.0
30            media:
31              type: file
32              location: ../audio/hey.wav
33              gain: -3.0 db
```

## 1.4 SDIF

```
1 SDIF
2
3 INVT
4 {
5   TableName      content;
6   SpatDIF Version 0.3;
7   ordering        time;
8   storeInitials  1;
9   numSources      3;
10  numSinks        0;
11 }
12
13 INVT
14 {
15   TableName      Source-names;
16 }
17
18 INVT
19 {
20   TableName      Media;
21   1      ../audio/hello.wav;
22   2      ../audio/salut.wav;
23   3      ../audio/hey.wav;
24 }
25
26 1TYP
27 {
28   1MID XAED      {azimuth, elevation, distance}
29   1MID XXYZ      {x, y, z}
30   1MID XORI      {yaw, pitch, roll}
31
32   1FTD XSRC
33     {
34       XXYZ cartesian-coordinates;
35       XAED navigational-coordinates;
36       XORI orientation;
37       1GAI linear-gain;
38     }
39 }
40
41 SDFC
42
43 XSRC  2      1      0
44   XXYZ 0x0004 1      3
45     -1.41 1.41  0.0
46   1GAI 0x0004 1      1
47     1.0
48
49 XSRC  2      2      0
50   XXYZ 0x0004 1      3
51     1.41 1.41  0.0
52   1GAI 0x0004 1      1
53     1.0
54
55 XSRC  2      3      0
56   XXYZ 0x0004 1      3
57     0.0  1.0  0.0
58   1GAI 0x0004 1      1
59     0.707
60
61 ENDC
62 ENDF
```

## 2 Simple Scene with Sinks

### 2.1 OSC

```
1 # NOTE: comments in this file after '#'
2
3 /spatdif/version 0.3
4
5 /spatdif/meta/info/annotation "this is a simple-scene with additional information about the
   presentation setup"
6 /spatdif/meta/info/author "Nils Peters"
7 /spatdif/meta/info/date "2011-04-14"
8 /spatdif/meta/extensions sink-entity # we are going to use the media extension in this scene
9 /spatdif/meta/ordering time
10
11 /spatdif/meta/media/1/type file
12 /spatdif/meta/media/1/location "../audio/hello.wav"
13 /spatdif/meta/media/2/type file
14 /spatdif/meta/media/2/location "../audio/salut.wav"
15 /spatdif/meta/media/3/type file
16 /spatdif/meta/media/3/location "../audio/hey.wav"
17
18 #####
19 # here the scene begins
20 #
21 # time information will be available through OSC time tags
22 # #####
23
24 # the speaker configuration: ITU 5.0, 3 meter radius
25
26 /spatdif/sink/left/type loudspeaker # loudspeaker is also the default sink type in SpatDIF
27 /spatdif/sink/left/position -30.0 0.0 3.0 aed # left speaker
28
29 /spatdif/sink/center/position 0.0 0.0 3.0 aed # center speaker
30 /spatdif/sink/right/position 30.0 0.0 3.0 aed # right speaker
31 /spatdif/sink/left-surround/position 120.0 0.0 3.0 aed # left surround speaker
32 /spatdif/sink/right-surround/position 120.0 0.0 3.0 aed # left surround speaker
33
34 # now we define sources (similar to simple-scene.osc)
35
36 /spatdif/source/1/position -1.41 1.41 0.0 # defaults to 0.0 0.0 0.0 type xyz
37 /spatdif/source/1/media/1 #previously defined
38 /spatdif/source/1/media/gain 1.0 # default, type linear gain
39
40 /spatdif/time 1.0
41 /spatdif/source/2/position 1.41 1.41 0.0
42 /spatdif/source/2/media/2 #previously defined
43
44 /spatdif/time 2.0 # everything after this time tag happens at the time indicated, up to the
   next time tag
45 /spatdif/source/3/position 0.0 1.0 0.0
46 /spatdif/source/3/media/3 #previously defined
```

### 2.2 XML

```
1 <?xml version="1.0" encoding="UTF-8" standalone="yes"?>
2 <spatdif version="0.3">
3     <meta>
4         <info>
5             <annotation>this is a simple-scene with additional information about
   the presentation setup</annotation>
6             <date>2011-04-14</date>
7             <author>jasch</author>
8         </info>
```



```

9         <extensions>sink-entity</extensions>
10        <ordering>time</ordering>
11        <media>
12            <id>1</id>
13            <type>file</type>
14            <location>../audio/hello.wav</location>
15        </media>
16        <media>
17            <id>2</id>
18            <type>file</type>
19            <location>../audio/salut.wav</location>
20        </media>
21        <media>
22            <id>1</id>
23            <type>file</type>
24            <location>../audio/hey.wav</location>
25        </media>
26    </meta>
27    <time>0.0</time> <!-- default -->
28    <sink> <!-- left speaker -->
29        <name>left</name>
30        <type>loudspeaker</type> <!-- loudspeaker is also the default sink type in
31            SpatDIF -->
32        <position type="aed">-30.0 0.0 3.0</position>
33    </sink>
34    <sink> <!-- center speaker -->
35        <name>center</name>
36        <type>loudspeaker</type>
37        <position type="aed">0.0 0.0 3.0</position>
38    </sink>
39    <sink> <!-- right speaker -->
40        <name>right</name>
41        <type>loudspeaker</type>
42        <position type="aed">30.0 0.0 3.0</position>
43    </sink>
44    <sink> <!-- left surround speaker -->
45        <name>left-surround</name>
46        <type>loudspeaker</type>
47        <position type="aed">120.0 0.0 3.0</position>
48    </sink>
49    <sink> <!-- right surround speaker -->
50        <name>right-surround</name>
51        <type>loudspeaker</type>
52        <position type="aed">-120.0 0.0 3.0</position>
53    </sink>
54    <source>
55        <name>1</name>
56        <position>-1.41 1.41 0.</position> <!-- # defaults to 0. 0. 0. type xyz -->
57        <media>
58            <id>1</id> <!-- referring to media resources defined in meta section
59            -->
60            <gain>1.0</gain> <!-- default -->
61        </media>
62    </source>
63    <time>1.0</time> <!-- source is placed at time: 1.0 seconds -->
64    <source>
65        <name>2</name>
66        <position>1.41 1.41 0.</position>
67        <media>
68            <id>2</id> <!-- referring to media resources defined in meta section
69            -->
70

```

```

71         </media>
72     </source>
73     <time>2.0</time>
74     <source>
75         <name>3</name>
76         <position>0. 1.0 0.</position>
77         <media>
78             <id>3</id> <!-- referring to media resources defined in meta section
79                 →
80             <gain unit="db">-3.0</gain>
81         </media>
82     </source>
</spatdif>

```

## 2.3 YAML

```

1 #YAML example validated with http://instantyaml.appspot.com/
2 spatdif:
3     version: "0.3"
4     meta:
5         info:
6             annotation: this is a simple-scene with additional information about the
7                 presentation setup
8             date: 2011-04-14
9             author: jasch
10            extensions:
11                - sink-entity
12            ordering: time
13            media:
14                - id: 1
15                  type: file
16                  location: ../audio/hello.wav
17                - id: 2
18                  type: file
19                  location: ../audio/salut.wav
20                - id: 3
21                  type: file
22                  location: ../audio/hey.wav
23        time:
24            - time: 0.
25              sink:
26                  - name: left
27                    type: loudspeaker # loudspeaker is also the default sink type in SpatDIF
28                    position: -30.0 0.0 3.0 aed # left speaker
29                  - name: center
30                    position: 0.0 0.0 3.0 aed # center speaker
31                  - name: right
32                    position: 30.0 0.0 3.0 aed # right speaker
33                  - name: left-surround
34                    position: 120.0 0.0 3.0 aed # left surround speaker
35                  - name: right-surround
36                    position: -120.0 0.0 3.0 aed # left surround speaker
37              source:
38                  - name: 1
39                    position: -1.41 1.41 0. # defaults to 0. 0. 0. type xyz
40                    media:
41                        id: 1 #previoulsy defined in meta in meta section
42            - time: 1.
43              source:
44                  - name: 2
45                    position: 1.41 1.41 0.0
46                    media:
47                        id: 2 #previoulsy defined in meta section

```

## 2.4 SDIF

```
1 SDIF
2
3 INVT
4 {
5   TableName      content;
6   SpatDIF Version 0.3;
7   ordering        time;
8   storeInitials  1;
9   numSources      3;
10  numSinks        5;
11 }
12
13 INVT
14 {
15   TableName      extensions;
16   sink-entity    1;
17 }
18
19 INVT
20 {
21   TableName      source-names;
22 }
23
24 INVT
25 {
26   TableName      sink-types;
27   1               loudspeaker;
28   2               loudspeaker;
29   3               loudspeaker;
30   4               loudspeaker;
31   5               loudspeaker;
32 }
33
34 INVT
35 {
36   TableName      media;
37   1               ../audio/hello.wav;
38   2               ../audio/salut.wav;
39   3               ../audio/hey.wav;
40 }
41
42 ITYP
43 {
44   1MID XAED       {azimuth, elevation, distance}
45   1MID XXYZ       {x, y, z}
46   1MID XORI       {yaw, pitch, roll}
47
48   1FTD XSNK
49     {
50       XACT active;
51       XXYZ cartesian-coordinates;
52       XAED polar-coordinates;
53       XORI orientation;
54       1GAI linear-gain;
55       XGDB Db-gain;
56     }
57
58   1FTD XSRC
59     {
60       XXYZ cartesian-coordinates;
61       XAED navigational-coordinates;
62       XORI orientation;
63       1GAI linear-gain;
```

```

64         XGDB Db-gain ;
65     }
66 }
67
68
69 SDFC
70
71 XSRC      2      1      0
72   XXYZ    0x0004 1      3
73         -1.41  1.41  0.0
74   1GAI    0x0004 1      1
75         1.0
76
77 XSRC      2      2      0
78   XXYZ    0x0004 1      3
79         1.41  1.41  0.0
80   1GAI    0x0004 1      1
81         1.0
82
83 XSRC      2      3      0
84   XXYZ    0x0004 1      3
85         0.0   1.0   0.0
86   1GAI    0x0004 1      1
87         0.707
88
89 XSNC      2      4      0
90   XAED    0x0004 1      3
91         -30.0 0.0   3.0
92   1GAI    0x0004 1      1
93         1
94
95 XSNC      2      5      0
96   XAED    0x0004 1      3
97         0.0   0.0   3.0
98   1GAI    0x0004 1      1
99         1
100
101 XSNC      2      6      0
102   XAED    0x0004 1      3
103         -30.0 0.0   3.0
104   1GAI    0x0004 1      1
105         1
106
107 XSNC      2      7      0
108   XAED    0x0004 1      3
109         120.0 0.0   3.0
110   1GAI    0x0004 1      1
111         1
112
113 XSNC      2      8      0
114   XAED    0x0004 1      3
115         -120.0 0.0  3.0
116   1GAI    0x0004 1      1
117         1
118
119 ENDC
120 ENDF

```

## 3 A Dynamic Scene

This scene contains moving sources.

### 3.1 OSC

```
1 # NOTE: comments in this file after #
2
3 /spatdif/version 0.3
4
5 /spatdif/meta/info/annotation "this is a simple spatdif scene with moving sources"
6 /spatdif/meta/info/annotation/date "2011-04-14"
7 /spatdif/meta/info/annotation/author "Nils Peters"
8
9 /spatdif/meta/media/1/type file
10 /spatdif/meta/media/1/location "../audio/hello.wav"
11 /spatdif/meta/media/2/type file
12 /spatdif/meta/media/2/location "../audio/salut.wav"
13 /spatdif/meta/media/3/type file
14 /spatdif/meta/media/3/location "../audio/hey.wav"
15
16 # begin scene
17
18 /spatdif/time 0.0
19
20 /spatdif/source/1/position 0.0 5.0 0.0
21 /spatdif/source/1/media/1 #previously defined
22 /spatdif/source/1/media/1/loop/type repeat # default is none
23 /spatdif/source/1/media/1/gain 1.0
24
25 /spatdif/source/2/position 0.0 5.0 0.0
26 /spatdif/source/2/media/2 #previously defined
27 /spatdif/source/2/media/2/loop/type repeat
28
29 /spatdif/source/3/position 0.0 5.0 0.0
30 /spatdif/source/3/media/3 #previously defined
31 /spatdif/source/3/media/3/loop/type repeat
32 /spatdif/source/3/media/3/gain -3.0 db
33
34
35 /spatdif/time 0.0087944
36 /spatdif/source/1/position 0.174 4.996 0. # at time 0.0087944
37
38 /spatdif/time 0.0153903
39 /spatdif/source/2/position 0.174 4.996 0. # at time 0.0153903
40
41 /spatdif/time 0.0176514
42 /spatdif/source/1/position 0.349 4.986 0. # at time 0.0176514
43
44 /spatdif/time 0.0265303
45 /spatdif/source/1/position 0.522 4.97 0. # at time 0.0265303
46
47 /spatdif/time 0.03038955
48 /spatdif/source/2/position 0.349 4.985 0. # at time 0.03038955
49
50 /spatdif/time 0.0616048
51 /spatdif/source/3/position 0.174 4.991 0. # at time 0.0616048
52
53 # etc etc
```

## 3.2 XML

```
1 <?xml version="1.0" encoding="UTF-8" standalone="yes"?>
2 <spatdif version="0.3">
3   <meta>
4     <info>
5       <annotation>this is a simple spatdif scene with moving sources</
6         annotation>
7       <date>2011-04-14</date>
8       <author>jasch</author>
9     </info>
10    <ordering>time</ordering>
11    <media>
12      <id>1</id>
13      <type>file</type>
14      <location>../audio/hello.wav</location>
15    </media>
16    <media>
17      <id>2</id>
18      <type>file</type>
19      <location>../audio/salut.wav</location>
20    </media>
21    <media>
22      <id>3</id>
23      <type>file</type>
24      <location>../audio/hey.wav</location>
25    </media>
26  </meta>
27  <time>0.0</time> <!-- default -->
28  <source>
29    <name>1</name>
30    <position>0.0 5.0 0.0</position> <!-- defaults to 0. 0. 0. type xyz -->
31    <media id="1">
32      <gain>1.0</gain> <!-- default -->
33      <loop>
34        <type>repeat</type>
35      </loop>
36    </media>
37  </source>
38  <source>
39    <name>2</name>
40    <position>0. 5. 0.</position>
41    <media id="2">
42      <loop>
43        <type>repeat</type>
44      </loop>
45    </media>
46  </source>
47  <source>
48    <name>3</name>
49    <position>0. 5. 0.</position>
50    <media id="3">
51      <gain unit="db">0.707</gain>
52      <loop>
53        <type>repeat</type>
54      </loop>
55    </media>
56  </source>
57  <time>0.0087944</time>
58  <source>
59    <name>1</name>
60    <position>0.174 4.996 0.0</position>
61  </source>
62  <time>0.0153903</time>
63  <source>
```

```

63         <name>2</name>
64         <position>0.174 4.996 0.0</position>
65     </source>
66     <time>0.0176514</time>
67 <source>
68     <name>1</name>
69     <position>0.349 4.986 0.0</position>
70 </source>
71 <time>0.0265303</time>
72 <source>
73     <name>1</name>
74     <position>0.522 4.97 0.0</position>
75 </source>
76 <time>0.03038955</time>
77 <source>
78     <name>2</name>
79     <position>0.349 4.985 0.0</position>
80 </source>
81 <time>0.0616048</time>
82 <source>
83     <name>3</name>
84     <position>0.174 4.991 0.0</position>
85 </source>
86 <!-- etc. etc. -->
87 </spatdif>

```

### 3.3 YAML

```

1 #YAML example validated with http://instantyaml.appspot.com/
2 spatdif:
3   version: "0.3"
4   meta:
5     info:
6       annotation: this is a simple spatdif scene with moving sources
7       date: 2011-04-14
8       author: jasch
9       ordering: time
10      media:
11        - id: 1
12          type: file
13          location: ../audio/hello.wav
14        - id: 2
15          type: file
16          location: ../audio/salut.wav
17        - id: 3
18          type: file
19          location: ../audio/hey.wav
20  time:
21    - time: 0.
22      source:
23        - name: 1
24          position: 0. 5. 0.
25          media:
26            id: 1 #previously defined
27            gain: 1.0 # default
28            loop:
29              type: repeat
30        - name: 2
31          position: 0. 5. 0.
32          media:
33            id: 2 #previously defined
34            loop:
35              type: repeat
36        - name: 3
37          position: 0. 5. 0.

```

```
38         media:
39             id: 3 #peviously defined
40             gain: 0.707
41             loop:
42                 type: repeat
43 - time: 0.0087944
44   source:
45     - name: 1
46       position: 0.174 4.996 0.
47 - time: 0.0153903
48   source:
49     - name: 2
50       position: 0.174 4.996 0.
51 - time: 0.0176514
52   source:
53     - name: 1
54       position: 0.349 4.986 0.
55 - time: 0.0265303
56   source:
57     - name: 1
58       position: 0.522 4.97 0.
59 - time: 0.03038955
60   source:
61     - name: 2
62       position: 0.349 4.985 0.
63 - time: 0.0616048
64   source:
65     - name: 3
66       position: 0.174 4.991 0.
```



### 3.4 SDIF

```
1 SDIF
2
3 INVT
4 {
5   TableName      content;
6   SpatDIF Version 0.2;
7   ordering        time;
8   storeInitials  1;
9   numSources      3;
10  numSinks        0;
11 }
12
13 INVT
14 {
15   TableName      extensions;
16   media 1;
17   loop 1;
18 }
19
20 INVT
21 {
22   TableName      Source-names;
23 }
24
25 INVT
26 {
27   TableName      Media;
28   1      ../audio/hello.wav;
29   2      ../audio/salut.wav;
30   3      ../audio/hey.wav;
31 }
32
33 1TYP
34 {
35   1MID XAED {azimuth, elevation, distance}
36   1MID XXYZ {x, y, z}
37   1MID XORI {yaw, pitch, roll}
38
39   1FTD XSRC
40     {
41       XXYZ cartesian-coordinates;
42       XAED navigational-coordinates;
43       XORI orientation;
44       1GAI linear-gain;
45     }
46 }
47
48
49 SDFC
50
51 XSRC  2      1      0
52   XXYZ 0x0004 1      3
53     0      5      0
54   1GAI 0x0004 1      1
55     1.0
56
57 XSRC  2      2      0
58   XXYZ 0x0004 1      3
59     0      5      0
60   1GAI 0x0004 1      1
61     1.0
62
63 XSRC  2      3      0
```

64	XXYZ	0x0004	1	3
65		0	5	0
66	1GAI	0x0004	1	1
67		0.707		
68				
69	XSRC	2	1	0.0087944
70	XXYZ	0x0004	1	3
71		0.174	4.996	0
72	1GAI	0x0004	1	1
73		1.0		
74				
75	XSRC	2	2	0.0153903
76	XXYZ	0x0004	1	3
77		0.174	4.996	0
78	1GAI	0x0004	1	1
79		1.0		
80				
81	XSRC	2	1	0.0176514
82	XXYZ	0x0004	1	3
83		0.349	4.986	0
84	1GAI	0x0004	1	1
85		1.0		
86				
87	XSRC	2	1	0.0264303
88	XXYZ	0x0004	1	3
89		0.522	4.97	0
90	1GAI	0x0004	1	1
91		1.0		
92				
93	XSRC	2	2	0.0308955
94	XXYZ	0x0004	1	3
95		0.349	4.985	0
96	1GAI	0x0004	1	1
97		1.0		
98				
99	XSRC	2	3	0.0616048
100	XXYZ	0x0004	1	3
101		0.174	4.991	0
102	1GAI	0x0004	1	1
103		0.707		
104				
105	ENDC			
106	ENDF			

## 4 Stereo Playback

This scene describes how a setup of a stereo-playback can be defined.

### 4.1 OSC

```
1 /spatdif/version 0.3
2
3 /spatdif/meta/info/annotation "This is a stereo playback SpatDIF scene"
4 /spatdif/meta/extensions "direct-to-one sink-entity"
5
6 # #####
7 # two speakers are directly fed with the stereo file
8 # #####
9
10
11 /spatdif/sink/left/position -30. 0. 2. aed #defining a sink
12 /spatdif/sink/right/position 30. 0. 2. aed #defining a sink
13
14 /spatdif/source/1/position -30. 0. 2. aed
15 /spatdif/source/1/direct-to-one 1 #using the direct-to-one extension, the source snaps to
    the nearest sink
16 /spatdif/source/1/media/type file
17 /spatdif/source/1/media/location ../audio/stereo-hello.wav
18 /spatdif/source/1/media/channel 1
19
20 /spatdif/source/2/position 30. 0. 2. aed
21 /spatdif/source/2/direct-to-one 1 #using the direct-to-one extension, the source snaps to
    the nearest sink
22 /spatdif/source/2/media/type file
23 /spatdif/source/2/media/location ../audio/stereo-hello.wav
24 /spatdif/source/2/media/channel 2
```

## 4.2 XML

```
1 <?xml version="1.0" encoding="UTF-8" standalone="yes"?>
2 <spatdif version="0.3">
3   <meta>
4     <info>
5       <annotation>This is a stereo playback SpatDIF scene</annotation>
6     </info>
7     <extensions>direct-to-one sink-entity</extensions>
8   </meta>
9
10  <sink>
11    <name>left</name>
12    <position unit="aed">-30.0 0. 2.0</position>
13  </sink>
14  <sink>
15    <name>right</name>
16    <position unit="aed">30.0 0. 2.0</position>
17  </sink>
18
19  <source>
20    <name>1</name>
21    <position unit="aed">-30.0 0. 2.0</position>
22    <direct-to-one>1</direct-to-one>
23    <media>
24      <type>file</type>
25      <location>../audio/stereo-hello.wav</location>
26      <channel>1</channel>
27    </media>
28  </source>
29  <source>
30    <name>2</name>
31    <position unit="aed">30.0 0. 2.0</position>
32    <direct-to-one>1</direct-to-one>
33    <media>
34      <type>file</type>
35      <location>../audio/stereo-hello.wav</location>
36      <channel>2</channel>
37    </media>
38  </source>
39 </spatdif>
```

## 4.3 YAML

```
1 #YAML example validated with http://instantyaml.appspot.com/
2 spatdif:
3   version: "0.3"
4   meta:
5     info:
6       annotation: this is a stereo playback SpatDIF scene
7       extensions:
8         - sink-entity
9         - direct-to-one
10  sink:
11    - name: left
12      position: -30.0 0.0 2.0 aed
13    - name: right
14      position: 30.0 0.0 2.0 aed
15  source:
16    - name: 1
17      position: -30.0 0.0 2.0 aed
18      direct-to-one: 1 #using the direct-to-one extension, the source snaps to the
19        nearest sink
20      media:
21        type: file
22        location: ../audio/stereo-hello.wav
23        channel: 1
24    - name: 2
25      position: 30.0 0.0 2.0 aed
26      direct-to-one: 1
27      media:
28        type: file
29        location: ../audio/stereo-hello.wav
30        channel: 2
```

## References

- [1] Nils Peters. Proposing SpatDIF - The Spatial Sound Description Interchange Format. In *Proc. of the International Computer Music Conference*, Belfast, UK, 2008.
- [2] Nils Peters, Sean Ferguson, and Stephen McAdams. Towards a Spatial Sound Description Interchange Format (SpatDIF). *Canadian Acoustics*, 35(3):64 – 65, 2007.
- [3] Nils Peters, Trond Lossius, and Jan C. Schacher. SpatDIF: Principles, specification, and examples. In *Proc. of the 9th Sound and Music Computing Conference*, Copenhagen, DK, 2012.
- [4] Nils Peters, Jan Schacher, and Trond Lossius. SpatDIF specification version 0.3, draft version - rev. 271. 2010–2012.