

# SDPng Update

**draft-ietf-mmusic-sdpng-05.txt**

Dirk Kutscher	dku@tzi.org
Jörg Ott	jo@tzi.org
Carsten Bormann	cabo@tzi.org

# Overview

- **Changes in -05**
- **Open Issues**
- **Next steps**

# Overview of Changes in -05

- **Consolidation and simplification**
  - Removed introductory and motivation sections
  - Moved examples to appendix
  - Moved profile definitions to appendices
- **Simplification**
  - Unification of reference mechanisms
    - Only one reference scheme
    - Easier to process by applications
- **SDPng XML-Schema updates**

# Internal References

- **Used to have different mechanisms for referencing**
  - `sdpng:use` element type for referencing definitions
  - **Profile-specific attribute for referencing**
    - `ref` attribute of element type `audio:codec`
    - `format` attribute of element type `rtp:pt`
- **New solution:**
  - **General attribute `ref` for elements that should be referenced**

# Reference Example (1)

## Audio codec definition inline:

```
<rtp:pt name="rtp-avp-0" pt="0">  
  <audio:codec name="audio-basic" encoding="PCMU"  
    sampling="8000" channels="1"/>  
</rtp:pt>
```

## Audio codec definition by reference:

```
<rtp:pt name="rtp-avp-0" pt="0">  
  <audio:codec ref="audio-basic"/>  
</rtp:pt>
```

# Reference Example (2)

## Adding/overwriting properties:

```
<rtp:pt name="stereo" pt="98">  
  <audio:codec ref="audio-basic"  
              name="audio-basic-stereo" channels="2"/>  
</rtp:pt>
```

# Internal References

- **Formal definition**
  - `ref` is optional attribute of the base type  
`Definition`
  - All element types that are derived from  
`Definition` provide the referencing feature
- **Removed features**
  - Grouping definitions with the `group` element
  - Adding properties with the `prop` element
  - Most of the functionality can be achieved with the `ref` attribute.

# Issue for References

- **Augmenting and changing referenced definitions**
  - **Currently we can provide new values for attributes only**
  - **Changing of element content also required?**
    - **More demanding for implementations**
    - **Unclear semantics for overwriting a (partially) existing element tree**
  - **Proposal: Restrict extension to attributes**



# SDPng XML Schema

- **Changes**
  - Adopted to the new referencing mechanism
  - Bug fixes, changed some GIs
- **XML Schema vs. other schema definition mechanisms**
  - XML Schema not the most popular example of the KISS paradigm...
    - Other alternatives have been considered
  - **Proposal: stick to XML Schema**

# Profiles

- **Previous draft version contained sample definitions of two profiles**
  - **Audio codec profile**
    - **With definitions of the RTP AVP codecs**
  - **RTP profile**
    - **Used to define RTP payload types and to specify transport parameters**
- **Will be published as separate documents**
  - **Moved to appendix in –05**
  - **Not yet complete**

# Future Work on Profiles

- **Probably need guidelines document for profile writers**
  - Will provide text
  - Could also be integrated into base spec
- **Contributions on other profiles solicited**
  - Complete RTP profile
  - Video codec profile(s)
  - Meta-Information
    - SDPng base spec currently covers SDP's data model
  - QoS (user perceived QoS) profiles are under construction

# Remaining Issues

- **Capability negotiation**
  - Work in progress
- **Requirements for using external definitions**
  - More implementation experience required!

# Next Steps

- **Provide guidelines for profile authors**
- **Re-submit SDPng base spec**
  - Remove profiles etc.
- **Submit individual profile drafts**