‘lang’ sdtp attribute

- draft-ietf-slim-negotiating-human-language-01 has in chapter 5 reasoning about the sdtp ‘lang’ attribute in RFC 4566 and a conclusion that may be wrong.
- It says that all declared languages must be used in the session. More likely is that it is meant to be a list for selection.
- The ‘lang’ attribute has slightly changed wording in RFC 4566bis in the mmusic group to reflect this.
  - “Importance” changed to “preference”
  - Addition: “Events during the session can influence which language(s) are used, and the participants are not strictly bound to only use the declared languages.”
- More may be needed to really sort out how the current ‘lang’ attribute is supposed to be used. Discussions and proposals should be directed towards mmusic.
- SLIM should not document assumptions on the intentions with ‘lang’ that may be seen as unclear.
Comments on
draft-ietf-slim-negotiating-human-language-01

• Issues within current functional scope
'lang’ attribute

- The text about the 'lang’ attribute in the draft is proposed to be modified to just say that 'lang’ cannot be used because it does not support different languages in different directions.
- We should not, and do not need to document assumptions on the current 'lang’ attribute that may be wrong.
- Modify chapter 5 to contain only:
  - RFC 4566 [RFC4566] specifies an attribute 'lang' which appears similar to what is needed here. We need however a more detailed specification than the 'lang' attribute provides. We need a means to negotiate which language is used in each direction of the session. This difference means that the existing 'lang' attribute can't be used and we need to define a new attribute.
Selection or use of all indicated languages

- The current wording is fuzzy about the intentions with multiple language attributes. The author has agreed that changes are needed.
- Modify in 6.2 to indicate clearly that there is no requirement to use all specified languages.
  - "There are two attributes, one ending in "-send" and the other in "-recv" to indicate the language used when sending and receiving media." Change by deleting the ending phrase (yellow marked above).
  - In this sentence: “In an offer, the 'humintlang-send' values constitute a list in preference order (first is most preferred) of the languages the offerer wishes to send using the media.” Change from "wishes to" to "is capable to select to". Similarly for receiving.
Unclear what to do with language in multiple media

- In 6.2, there is this paragraph: 
  “When placing an emergency call, and in any other case where the language cannot be assumed from context, each media stream in an offer primarily intended for human language communication SHOULD specify one or both 'humintlang-send' and 'humintlang-recv' attributes.”

- The intention may not be decided until an answer is received. And an answer cannot be composed if the reason for specifying language in multiple media is not explained.
  - Is it an alternative, and if so, on what preference level compared to the languages in other media?
  - Or is it a complement that is wanted simultaneously with language in another media, and if so, how strong is the preference to use it?

- Even if variations in preference between media and grouping are not supported, it must be defined what values these concepts get when specifying language in more than one media.
Language specification in multiple media, (cont’d)

- Non-support of relative preference between language in different media and indication that languages are wanted together could be expressed in 6.2 by addition of:
  - "Language indications for the same direction in two or more media in an offer shall be understood as alternatives with undefined relative preference.
  - Language indications for the same direction in two or more media in an answer shall be understood as an intention to provide, or a desire to receive, these languages together during the session."

- But this solution leaves many use cases without solution, so it would be better to include support for preference indication between languages in the same direction in multiple media.
Is 6.3 ”Advisory vs required” needed?

- Section 6.3 describes a feature indicated by an asterisk for not failing a call when a match is not found.
- Is it really realistic to ever automatically fail calls because of non-matching language indications?
- Language combinations you never thought of specifying, work in reality. Norweigans can usually talk with Swedes, Spanish can usually talk with Italians.
- Provide info to users about language indications, but do not fail the calls automatically.
- Proposal: Reword 6.3, and reuse the asterisk notation for something else.
Features not covered in current draft

• A way to specify relative preference between alternative languages in same direction in different media
  • Use case: I prefer to talk English, but I can with lower preference accept to type English.

• A way to specify that two or more languages in the same direction are strongly preferred or provided together both within the same medium and across media
  • Use cases:
    • I need to get Greek text, but I also urgently want to hear the same thing in Greek speech.
    • The original English and a French interpretation will be provided taking turns in the same audio channel in the call.
Media types are not always easily related to modality

- Some media are not declared in SDP under its traditional main MIME type. The current draft expects the MIME type to indicate media type that resolves to a modality.
  - Use case: Text in WebRTC will be transported as a subchannel in a WebRTC data channel, declared by an "application" MIME type and "webrtc-datachannel" as subtype and further divided in subchannels with labels. The language attributes need to be applied on the subchannel.

**Notation for this is needed.**

RFC 5688 may provide some general food for thoughts. draft-ietf-mmusic-data-channel-sdpneg should be consulted for the indicated use case. The dsca attribute is likely part of the solution.
Thanks

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