Some video codec have mandatory parameters in their SDP.
Because of our dependance on Gstreamer and maybe a flawed design
in their RTP plugins, we need to infer those settings dynamically for a given video format.
A static video test source is created in every codec and this one pushes frame into the
GstPipeline. From the buffers collected at the sink and their GstCaps, we can infermost of the capabilities.

SDP Parameters Inference

:SipVoipLink   call:SipCall   sdp:Sdp   account:Account   :CodecFactory   codec:VideoCodec   encoder:GstEncoderH264

newOutgoingCall(id, url)

new(id, Call::Outgoing, account)

new

enabled := isVideoEnabled()

opt [enabled]

activeCodecs := getActiveVideoCodecs()

setLocalMediaCapabilities(MIME_TYPE_VIDEO, activeCodecs)

new(MIME_TYPE_VIDEO)

media:SdpMedia

loop [for every codecID in activeCodecs]

The codec factory here returns a pointer to an already existing codec instance

codec := getCodec(codecID)

add(codec)

setVideoFormat(format)

mediaList := getInitialMediaList()

loop [for each media in mediaList]

type := getMediaType()

opt [type == MIME_TYPE_VIDEO]

setVideoFormat(format)

setVideoInputFormat(format)

setVideoInputFormat(format)

generateSdpParameters()

selectVideoTestSrc(true)

buffer := getBuffer()

selectVideoTestSrc(false)