Framework Goals

• define the logical entities for the protocol:
  ▶ Application Server (AS)
  ▶ Media Server (MS)
  ▶ Media Resource Broker (MRB)

• define a model for core interactions

• define entity roles for several key use case scenarios

Non goal: define specific protocol functions
Model - Control Channel

- AS uses SIP to establish TCP/TLS connection to MS
  - SIP dialog called “Control Dialog”
  - TCP/TLS connection called “Control Channel”
- SIP/SDP signaling based on COMEDIA
  - draft-boulton-sip-control-framework-05
- may be m:n control channels between AS(s) & MS(s)
- control channels used as transport for MediaCtrl Protocol

Application Server

SIP (Control Dialog)

TCP/TLS (Control Channel)

Media Server
Model - Media Sessions

- Signaling for media sessions between UA & AS may be SIP or other protocol
- AS signals to MS using SIP
  - SIP dialog called “Media Dialog”
- Standard 3PCC model if UA & AS use SIP
- no relation between media sessions and control channels
  - media sessions identified within the MediaCtrl Protocol
Model Benefits

- Using SIP to establish both Control Channels and media sessions provides a common framework and allows leveraging SIP for:
  - location and rendezvous capabilities
  - security and identity properties
  - session negotiation (RTP for media, TCP for control)
  - selection of MS based on capability sets (RFC 3840)

- TCP/TLS Control Channel(s) allows for reliable transmission of arbitrary sized PDUs
IVR Services

• For simple announcement services, an AS may use the R-URI mechanism from RFC 4240 instead of Control Channels

• For interactive services, AS uses MediaCtrl Protocol in the Control Channel to request MS IVR functions

• VoiceXML services may be requested by an AS using either MediaCtrl Protocol in the Control Channel or the RFC 4240 R-URI mechanism
XCON Mapping

- AS has the role of the conference focus
- MS acts as the media mixer
Conference Services

• AS uses MediaCtrl Protocol in the Control Channel to request functions such as:
  ‣ allocate, manage, and remove media mixers
  ‣ IVR functions for participants or the mix (e.g. announcements or recording)
  ‣ media related controls, such as requested by conference aware participants through an XCON protocol (e.g. “unmute me”)

• Participants are added/removed via either SIP (conference URI of the SIP Media Dialog) or using the MediaCtrl Protocol
Floor Control & BFCP

- BFCP defines Floor Control Server (FCS) & Floor Chair
  - Floor Chair is part of application logic and if automated, should be part of the AS
  - FCS could be co-located with either the AS or MS but both need to interact with the FCS (e.g. via the Control Channel)
    - Scenario of the FCS co-located with MS is described in the draft
Discussion

• Is this the right model?

• What else is needed?
  ▶ MRB discussion?
  ▶ Control Channel usage (e.g. which entity initiates)?
  ▶ more/less scenario discussion?
  ▶ other?

• Adopt as WG item?