Status

MVEX concepts

- general device control removed
- connectivity removed
- explicit controls added
  - frame synchronization
  - digitization control (e.g. contrast, hue)

MVEX assumptions

- timecode/frame events/info supplied outside
- vins and vouts accessible outside (for connectivity)
- video resource managers understand MVEX and other

MVEX: What's gone?

Terms:
- Connectivity state
- Control atoms
- Video device

Types:
- VIDEODEVICE
- VIDEOID
- TRANSITION
- CONTROL
- SETTING

Requests
- QueryVideoControls
- ChangeVideoControls
- ChangeConnectivity

Events
- VideoConnectivityState
- VideoControl

MVEX: What's new?

Types:

MARKER
- kind: {Timecode, Frame, None}
- relative: BOOL
- data: TIMECODE or FRAME or empty

FRAME
- negative: BOOL
- frame: CARD32
- field: CARD8

TIMECODE
- negative: BOOL
- hour, minute, second, frame, field: CARD8

MVEX: What's new?

Types:

VIDEOABILITY
frames-available: BOOL
frame-accurate: BOOL
n-saturation: CARD32
n-contrast: CARD32
n-hue: CARD32
n-bright: CARD32
saturation: LISTofFRACTIONRANGE
contrast: LISTofFRACTIONRANGE
hue: LISTofFRACTIONRANGE
bright: LISTofFRACTIONRANGE

VIDEOGEOMETRY
now has a VIDEOABILITY

MVEX: What's new?

Requests:

QueryVideoAttributes
id: VIDEOIO
mask: BITMASK {Saturation, Contrast, Hue, Bright}
reply
setting: LISTofFRACTION

ChangeVideoAttributes
id: VIDEOIO
mask: BITMASK {Saturation, Contrast, Hue, Bright}
setting: LISTofFRACTION

MVEX: Changes

Types:

VIDEOGEOMETRY
...
→ ability: VIDEOABILITY

→ means "added"

← means "deleted"

MVEX: Changes

Requests:

QueryVideo
...
← vdev: LISTofVIDEODEVICE
← videoid-controls: LISTofCONTROL
← adjacency-matrices: LISTofLISTofCARD8
← transitions: LISTofTRANSITION

RenderVideo
...
→ in, out: MARKER

CaptureGraphics
...
→ in, out: MARKER

StopVideo
...
→ marker: MARKER

MVEX: Changes

Requests:

SelectVideoEvents
...
mask: BITMASK
{VideoRedirect,
← ConnectivityNotify,
SyncNotify,
← ControlNotify,
OverrideNotify,
ViolationNotify}

Events:

VideoRequest
...
→ in, out: MARKER