platform: Firefox OS(gonk)
branch: Firefox OS 2.2 (gecko37, KK gonk)

Gaia side

Gecko side

App

video

audio

HTMLVideoElement

HTMLAudioElement

- MozCaptureStream()
- MozCaptureStreamUntilEnded()

- CreateTrackUnionStream()

HTMLMediaElement

Hold references to the DOM wrappers for the MediaStreams that we're writing to.

HTMLMediaElement::OutputMediaStream

DOM wrapper for MediaStreams

A stream that will form the union of the tracks of its input streams.

TrackUnionStream

create

DOMMediaStream

ProcessedMediaStream

This stream processes zero or more input streams in parallel to produce its output.

- CreateTrackUnionStream()
- CombineWithPrincipal()
- SetCORSMode()
- GetStream()

hold reference

create

Represents a connection between a ProcessedMediaStream and one of its input streams.

MediaStream

- SetAudioCaptured()
- AddOutputStream()

- AllocateInputPort()
- IsDestroyed()
- ChangeExplicitBlockerCount(-1)
- ChangeExplicitBlockerCount(1)

- ChangeExplicitBlockerCount()
- AsProcessedStream()

MediaInputPort

MediaStreamGraph

Store ProcessedMediaStream-related data

MediaDecoder

create

MediaDecoder::OutputStreamData

- ChangeExplicitBlockerCount()

- NotifyOutput()
- NotifyEvent()

MediaStreamListener

MediaStream

- MediaDecoder::PlaybackEnded()

create

MediaDecoder::DecodedStreamGraphListener

A stream into which a decoder can write audio and video.

SourceMediaStream

create

create

MediaDecoder::DecodedStreamData

- AddAudioTrack()
- AddTrack()
- AppendToTrack()
- EndTrack()
- TicksToTimeRoundDown()
- DispatchWhenNotEnoughBuffered()
- Finish()
- HaveEnoughBuffered()
- AdvanceKnownTracksTime()
- MicrosecondsToStreamTimeRoundDown()

Store all MediaStream-related data is protected by ReentrantMonitor

- GetLastOutputTime()

- GetDecodedStream()
- UpdateStreamBlockingForStateMachinePlaying()
- RecreateDecodedStreamIfNecessary()

control

MediaDecoderStateMachine

Manage the decoding and seeking in the MediaDecoderReader on the decode task queue, and A/V sync on the shared state machine thread, and controls the audio "push" thread.

- CreateSourceStream()