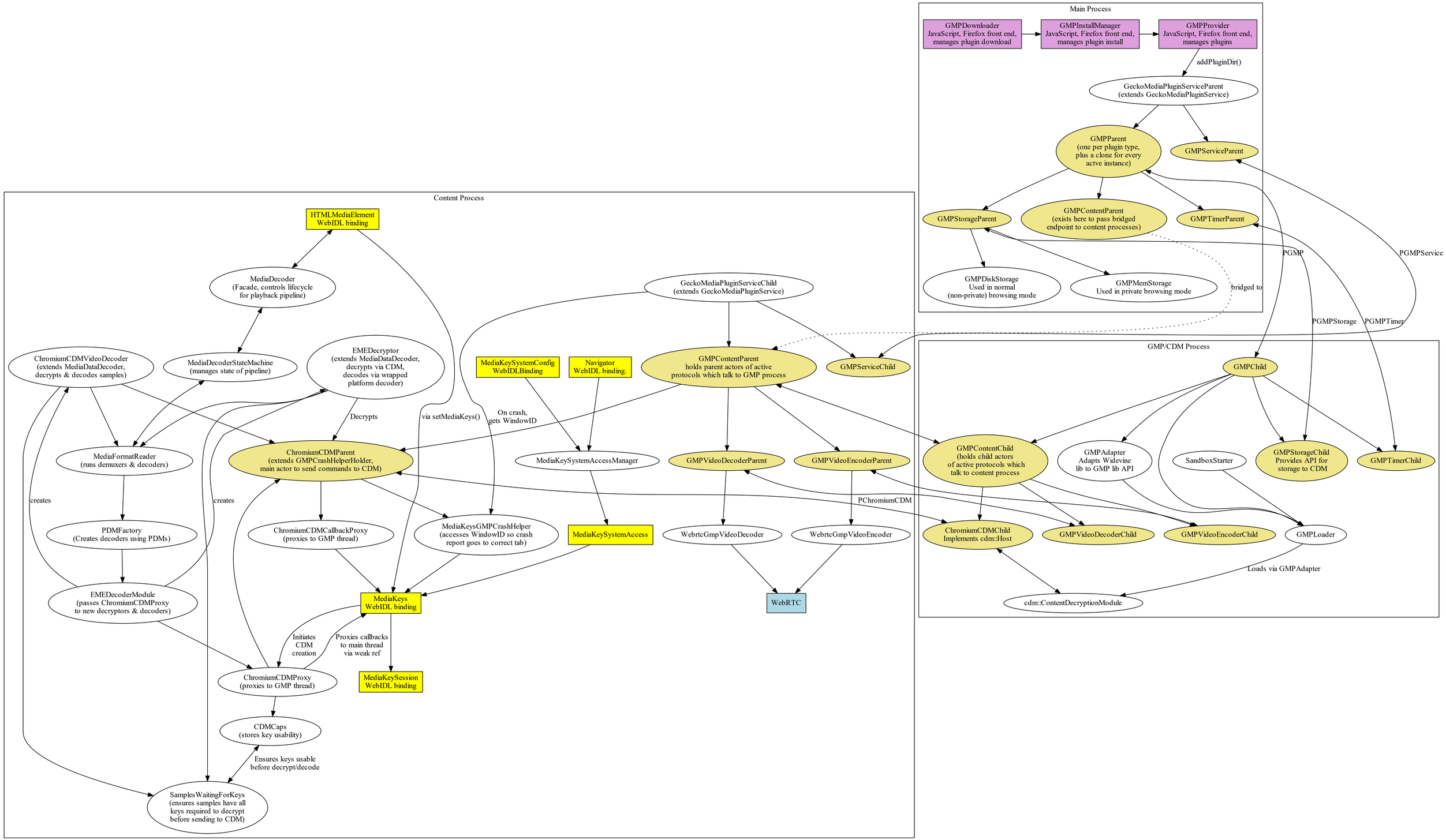
Main Process
GMPDownloader
JavaScript, Firefox front end, manages plugin download
GMPInstallManager
JavaScript, Firefox front end, manages plugin install
GMPProvider
JavaScript, Firefox front end, manages plugins
addPluginDir()
GeckoMediaPluginServiceParent
(extends GeckoMediaPluginService)
GMPParent
(one per plugin type, plus a clone for every actve instance)
GMPServiceParent
GMPStorageParent
GMPContentParent
(exists here to pass bridged endpoint to content processes)
GMPTimerParent
GMPDiskStorage
Used in normal (non-private) browsing mode
GMPMemStorage
Used in private browsing mode
bridged to
PGMP
PGMPService
PGMPStorage
PGMPTimer
Content Process
HTMLMediaElement
WebIDL binding
MediaDecoder
(Facade, controls lifecycle for playback pipeline)
GeckoMediaPluginServiceChild
(extends GeckoMediaPluginService)
ChromiumCDMVideoDecoder
(extends MediaDataDecoder, decrypts & decodes samples)
MediaDecoderStateMachine
(manages state of pipeline)
EMEDecryptor
(extends MediaDataDecoder, decrypts via CDM, decodes via wrapped platform decoder)
MediaKeySystemConfig
WebIDLBinding
Navigator
WebIDL binding.
GMPContentParent
holds parent actors of active protocols which talk to GMP process
GMPServiceChild
Decrypts
via setMediaKeys()
On crash, gets WindowID
MediaFormatReader
(runs demuxers & decoders)
ChromiumCDMParent
(extends GMPCrashHelperHolder, main actor to send commands to CDM)
MediaKeySystemAccessManager
GMPVideoDecoderParent
GMPVideoEncoderParent
creates
creates
PChromiumCDM
PDMFactory
(Creates decoders using PDMs)
ChromiumCDMCallbackProxy
(proxies to GMP thread)
MediaKeysGMPCrashHelper
(accesses WindowID so crash report goes to correct tab)
MediaKeySystemAccess
WebrtcGmpVideoDecoder
WebrtcGmpVideoEncoder
EMEDecoderModule
(passes ChromiumCDMProxy to new decryptors & decoders)
MediaKeys
WebIDL binding
WebRTC
Initiates CDM creation
Proxies callbacks to main thread via weak ref
ChromiumCDMProxy
(proxies to GMP thread)
MediaKeySession
WebIDL binding
CDMCaps
(stores key usability)
Ensures keys usable before decrypt/decode
SamplesWaitingForKeys
(ensures samples have all keys required to decrypt before sending to CDM)
GMP/CDM Process
GMPChild
GMPContentChild
(holds child actors of active protocols which talk to content process
GMPAdapter
Adapts Widevine lib to GMP lib API
SandboxStarter
GMPStorageChild
Provides API for storage to CDM
GMPTimerChild
ChromiumCDMChild
Implements cdm::Host
GMPVideoDecoderChild
GMPVideoEncoderChild
GMPLoader
Loads via GMPAdapter
cdm::ContentDecryptionModule