WebKit

https://github.com/WebKit/WebKit

The string LDMGlobalEnabled is assigned in the src file _WKSystemPreferencesInternal.h to the WKSystemPreference LDMEnabledKey

This is only referenced in the file _WKSystemPreferences.mm where we have to following code:

```
+ (BOOL)isCaptivePortalModeEnabled
{
    auto key = adoptCF(CFStringCreateWithCString(kCFAllocatorDefault, WKLockdownModeEnabledKey.characters(), kCFStringEncodingUTF8));
    auto preferenceValue = adoptCF(CFPreferencesCopyValue(key.get(), kCFPreferencesAnyApplication, kCFPreferencesCurrentUser, kCFPreferencesAnyHost));
    if (preferenceValue.get() == kCFBooleanTrue)
        return true;

    key = adoptCF(CFStringCreateWithCString(kCFAllocatorDefault, LDMEnabledKey, kCFStringEncodingUTF8));
    preferenceValue = adoptCF(CFPreferencesCopyValue(key.get(), kCFPreferencesAnyApplication, kCFPreferencesCurrentUser, kCFPreferencesAnyHost));
    return preferenceValue.get() == kCFBooleanTrue;
}
```

This method checks the CFPreferences for the key WKLockdownModeEnabled or LDMGlobalEnabled and returns True if either of them are set to True.

NOTE: It appears Lockdown Mode has been folded into Captive Portal Mode, meaning it can be thought of the same way as Captive Portal Mode in most cases.

WebKit

What does Lockdown Mode/Captive Portal Mode disable?

- WebAssembly
- MP3 Playback
- MathML
- Web Audio API
- Gamepad API
- JPEG 2000
- WebGL
- Speech Recognition API
- RTCDataChannel
- MediaDevices.getUserMedia()
- PDF Viewer
- SVG Fonts
- JIT
- ServiceWorkers

This can be seen in the function adjustSettingsForLockdownMode in the file
Source/WebKit/WebProcess/WebPage/WebPage.cpp

```cpp
static void adjustSettingsForLockdownMode(Settings& settings, const WebPreferencesStore& store)
{
    // Disable unstable Experimental settings, even if the user enabled them for local use.
    settings.disableUnstableFeaturesForModernWebKit();
    Settings::disableGlobalUnstableFeaturesForModernWebKit();

    settings.setWebGLEnabled(false);
#if ENABLE(WEBGL2)
    settings.setWebGL2Enabled(false);
#endif
#if ENABLE(GAMEPAD)
    settings.setGamepadsEnabled(false);
#endif
#if ENABLE(WIRELESS_PLAYBACK_TARGET)
    settings.setRemotePlaybackEnabled(false);
#endif
    settings.setFileSystemAccessEnabled(false);
    settings.setAllowsPictureInPictureMediaPlayback(false);
#if ENABLE(PICTURE_IN_PICTURE_API)
    settings.setPictureInPictureAPIEnabled(false);
#endif
    settings.setSpeechRecognitionEnabled(false);
#if ENABLE(SPEECH_SYNTHESIS)
    settings.setSpeechSynthesisAPIEnabled(false);
#endif
#if ENABLE(NOTIFICATIONS)
    settings.setNotificationsEnabled(false);
#endif
#if ENABLE(SERVICE_WORKER)
    settings.setPushAPIEnabled(false);
#endif
#if ENABLE(WEBXR)
    settings.setWebXREnabled(false);
    settings.setWebXRAugmentedRealityModuleEnabled(false);
#endif
#if ENABLE(MODEL_ELEMENT)
    settings.setModelElementEnabled(false);
#endif
#if ENABLE(MEDIA_STREAM)
    settings.setMediaDevicesEnabled(false);
#endif
#if ENABLE(WEB_AUDIO)
    settings.setWebAudioEnabled(false);
#endif
    settings.setDownloadableBinaryFontAllowedTypes(DownloadableBinaryFontAllowedTypes::Restricted);
#if ENABLE(WEB_CODECS)
    settings.setWebCodecsEnabled(false);
    settings.setWebCodecsAV1Enabled(false);
#endif
#if ENABLE(WEB_RTC)
    settings.setPeerConnectionEnabled(false);
    settings.setWebRTCEncodedTransformEnabled(false);
#endif
#if ENABLE(MATHML)
    settings.setMathMLEnabled(false);
#endif
#if ENABLE(PDFJS)
    settings.setPdfJSViewerEnabled(true);
#endif
#if USE(SYSTEM_PREVIEW)
    settings.setSystemPreviewEnabled(false);
#endif
    settings.setEmbedElementEnabled(false);
```