Test Scenarios

1. Verify blocklisting works with original G:\Mozilla\xxx\browser\blocklist.xml --- PASS

This tests the last line in the XML: "<gfxBlacklistEntry blockID="g511"> <os>WINNT 5.1</os> <vendor>0x8086</vendor> <feature>DIRECT3D_9_LAYERS, WEBGL_ANGLE</feature> <featureStatus>BLOCKED_DRIVER_VERSION</featureStatus>

<driverVersion>6.14.10.5218</driverVersion>

- <driverVersionComparator>LESS_THAN</driverVersionComparator> </gfxBlacklistEntry>"
- a) Install clean Firefox 33 at G:\Mozilla\xxx\.
- b) Create "spoofed-firefox.bat" file with following content:

SET MOZ GFX SPOOF WINDOWS VERSION=50001

SET MOZ GFX SPOOF VENDOR ID=0x8086

SET MOZ_GFX_SPOOF_DEVICE_ID=0x2e23

SET MOZ GFX SPOOF DRIVER VERSION=6.14.10.5217

"G:\Mozilla\xxx\firefox.exe" -p -no-remote

- c) Save the file, open it to launch Firefox, create a new profile, start Firefox, and verify "about:support" -> Graphics. ---> D2D, OMTC, and WebGL were disabled.
- d) Close Firefox, edit "spoofed-firefox.bat" by changing "SET

MOZ_GFX_SPOOF_DRIVER_VERSION=6.14.10.5218", save the file, open it to launch Firefox, create a new profile, start Firefox, and verify "about:support" -> Graphics.

RESULT: D2D, OMTC, and WebGL were enabled (note that you need to create a new profile because of bug 1045055... using the same profile will not enable WebGL).

2. Repeat scenario 1 with WINNT 6.1 in place of WINNT 5.1, to see how blocklisting applies to WINNT 6.1 --- PASS

- a) Edit the last line from G:\Mozilla\xxx\browser\blocklist.xml (blockID="g511"), and change WINNT 5.1 to WINNT 6.1 then save the xml file.
- b) Repeat steps 1b), 1c) and 1d), but with "SET MOZ_GFX_SPOOF_WINDOWS_VERSION=60001".

RESULT:

- for version 6.14.10.5217 ---> D2D, OMTC, and WebGL are disabled and they recommend updating the driver to 6.1400.1000.5218 or higher
- for version 6.14.10.5218 ---> D2D, OMTC, and WebGL are disabled and they recommend updating the driver to 7.1500.1000.1666 for OMTC and WebGL, and to 8.1500.1000.2202 for Direct2D
- for version 8.15.10.2202 ---> D2D, OMTC, and WebGL are enabled

I believe that the blocklist.xml file applies the blocking for 6.14.10.5218, while some other part (probably internal code) applies the blocking for 7.15.10.1666 and 8.15.10.2202.

3. Repeat scenario 2 with WINNT in place of WINNT 6.1, to see if WINNT will block Windows Version 60001 --- FAIL

- a) Edit the last line from G:\Mozilla\xxx\browser\blocklist.xml (blockID="g511"), and change WINNT 6.1 to WINNT then save the xml file.
- b) Repeat steps 1b), 1c) and 1d), with "SET MOZ_GFX_SPOOF_WINDOWS_VERSION=60001".

RESULT:

- for version 6.14.10.5217 ---> D2D, OMTC, and WebGL are disabled and they recommend updating the driver to 7.1500.1000.1666 for OMTC and WebGL, and to 8.1500.1000.2202 for Direct2D
- for version 6.14.10.5218 ---> D2D, OMTC, and WebGL are disabled and they recommend updating the driver to 7.1500.1000.1666 for OMTC and WebGL, and to 8.1500.1000.2202 for Direct2D

I believe this means that the setting for WINNT is fully overridden by the settings in the code, thus making the WINNT setting in the XML useless

4. Repeat scenario 2 with WINNT 6.1, and with "<feature>ALL_FEATURES</feature>" to see if ALL_FEATURES will block all video features --- PASS

- a) Edit the last line from G:\Mozilla\xxx\browser\blocklist.xml (blockID="g511"), make sure you have "WINNT 6.1" os set, and set "<feature>ALL FEATURES</feature>".
- b) Repeat steps 1b), 1c) and 1d), with "SET MOZ_GFX_SPOOF_WINDOWS_VERSION=60001".

RESULT: same as scenario 2.

5. Repeat scenario 2 with WINNT 6.1, with "<feature>ALL_FEATURES</feature>", and with "<driverVersion>8.15.10.2321</driverVersion>" to see how this behaves when the new version is set --- FAIL

- a) Edit the last line from G:\Mozilla\xxx\browser\blocklist.xml (blockID="g511"), make sure you have "WINNT 6.1" os, and "<feature>ALL_FEATURES</feature>" set, and then manually set "<driverVersion>8.15.10.2321</driverVersion>".
- b) Repeat steps 1b), 1c) and 1d), with "SET MOZ_GFX_SPOOF_WINDOWS_VERSION=60001".

RESULT:

- for version 7.15.10.1665 ---> D2D, OMTC, and WebGL are disabled and they recommend updating the driver to 8.1500.1000.2321 or higher
- for version 7.15.10.1666 ---> OMTC is now enabled, while D2D, and WebGL are disabled and they recommend updating the driver to 8.1500.1000.2321 or higher
- for version 8.15.10.2201 ---> same as above (for 7.5.10.1666)

- for version 8.15.10.2202 ---> D2D and OMTC are now enabled, while WebGL is disabled and recommends updating the driver to 8.1500.1000.2321 or higher
- for version 8.15.10.2320 ---> same as above
- for version 8.15.10.2321 ---> D2D, OMTC, and WebGL are now all enabled

I believe this means that setting (in blocklist.xml) a version higher than the ones from the code (7.15.10.1666 and 8.15.10.2202 in this case) will NOT work, as the code values will simply override these, so setting version 8.15.10.2321 will likely not work unless it's done in the code itself. The part of the code that handles this seems to live in "widget/windows/GfxInfo.cpp", it was once removed and then added back in bug https://bugzilla.mozilla.org/show_bug.cgi?id=984417.

- 6. Repeat scenario 5 without always creating a new profile when starting Firefox from "spoofed-firefox.bat", to see if https://bugzilla.mozilla.org/show_bug.cgi?id=1045055 still applies --- FAIL (bug 1045055)
- a) Repeat scenario 5 exactly as described, but use the same profile from beginning to end

RESULT:

- for version 7.15.10.1665 ---> D2D, OMTC, and WebGL are disabled and they recommend updating the driver to 8.1500.1000.2321 or higher
- for version 7.15.10.1666 ---> same as above
- for version 8.15.10.2201 ---> same as above
- for version 8.15.10.2202 ---> same as above
- for version 8.15.10.2320 ---> same as above
- for version 8.15.10.2321 ---> same as above = bug 1045055