



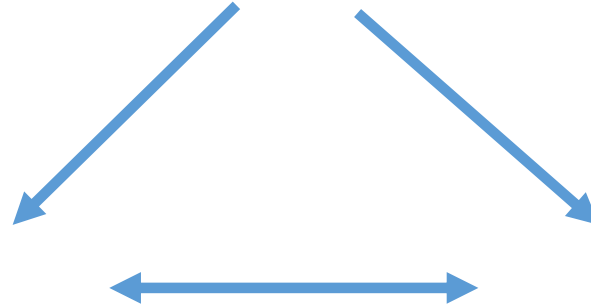
Microsoft®
System Center
User Group Sweden

A graphic element consisting of two overlapping, curved lines in blue and yellow, resembling a stylized 'S' or a swoosh, positioned to the right of the text.

Managing browsers in Windows 10

Jörgen Nilsson

Challenges



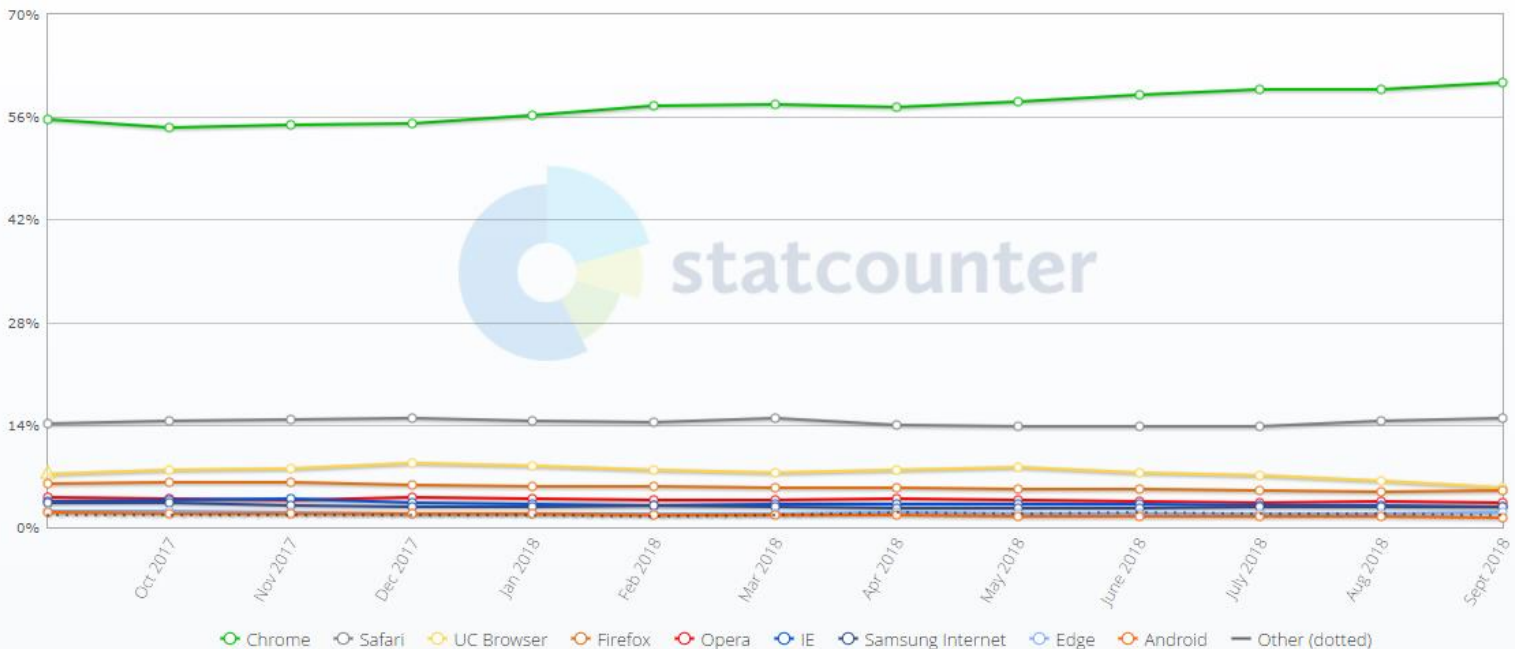


Browser market

Browser Market Share Worldwide

Sept 2017 - Sept 2018

Edit Chart Data



Internet Explorer



Challenges



Feature	Chrome	Firefox	Edge	Internet Explorer
GPO Support	X	X	X	
Server OS Support	X	X		
Windows 7 support	X	X		
Citrix support	X			
MSI Installer	X		Built-in	
Legacy Browser support	X		X	
Conditional Access	X		X	
Installs in User Profile	X	X	N/A	
Keep Up-to-date	Auto/ex.Patch-My PC	Auto/ex.Patch-My PC	Store/Windows Update	



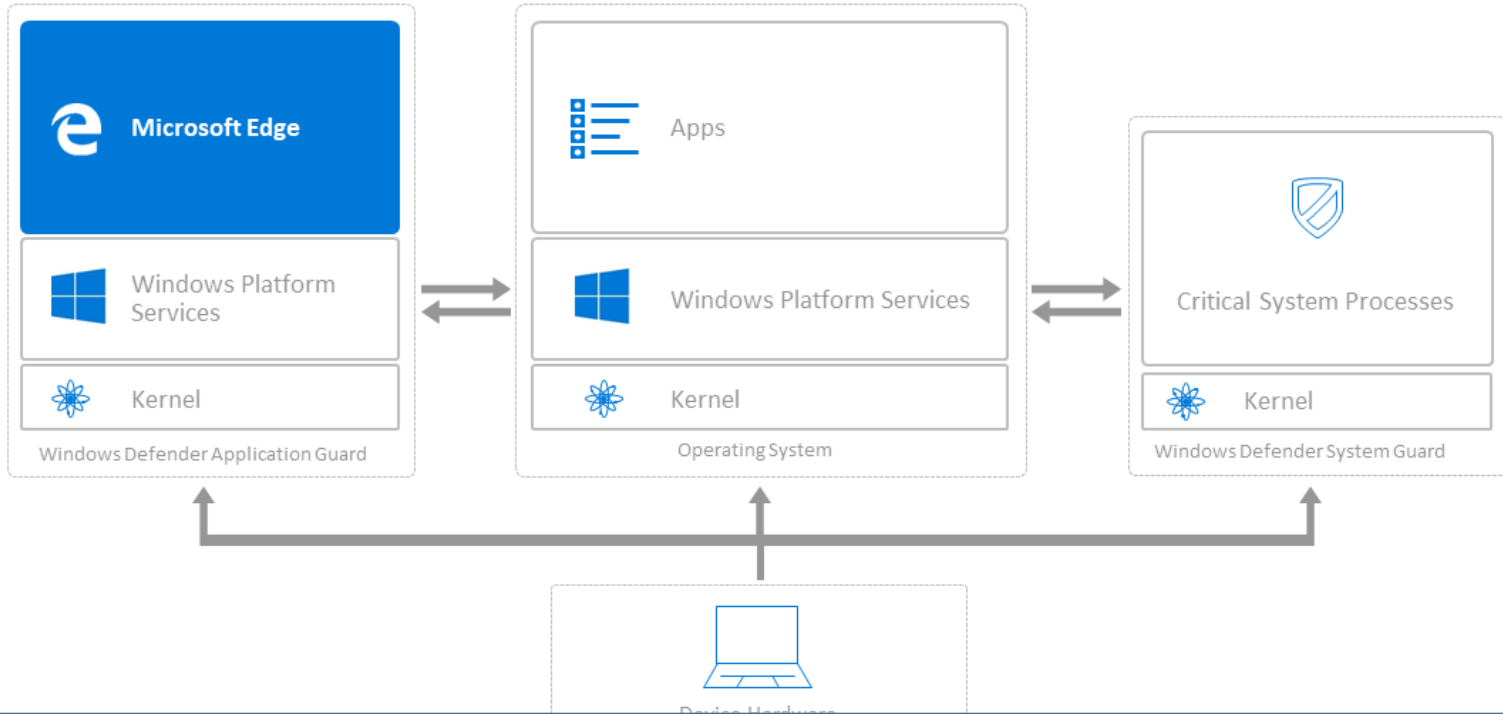
Edge



Edge

- Builtin Windows 10
- Modern App
- Extensions support
- Secure
- Application Guard integration

HARDWARE ISOLATION OF **MICROSOFT EDGE** WITH **WINDOWS DEFENDER APPLICATION GUARD**



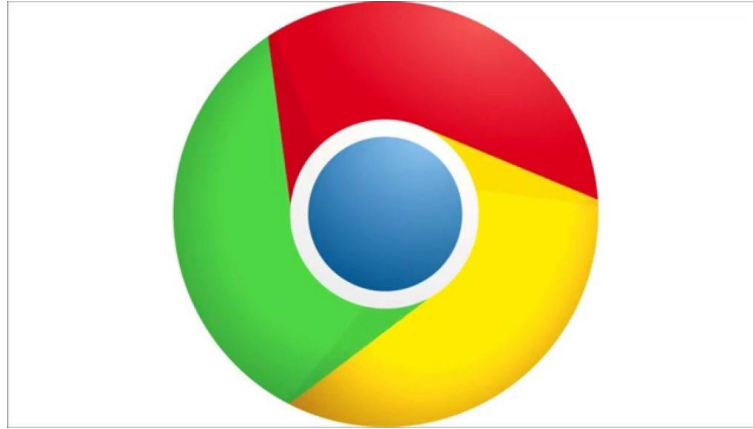


Firefox



Mozilla Firefox

- Late to the party
- No MSI Installer
- 7-zip repackaged guide for the enterprise
- Recently added Group Policy support
- A great browser for home/personal use
- Automatic Updates can be controlled with GPO



Google Chrome



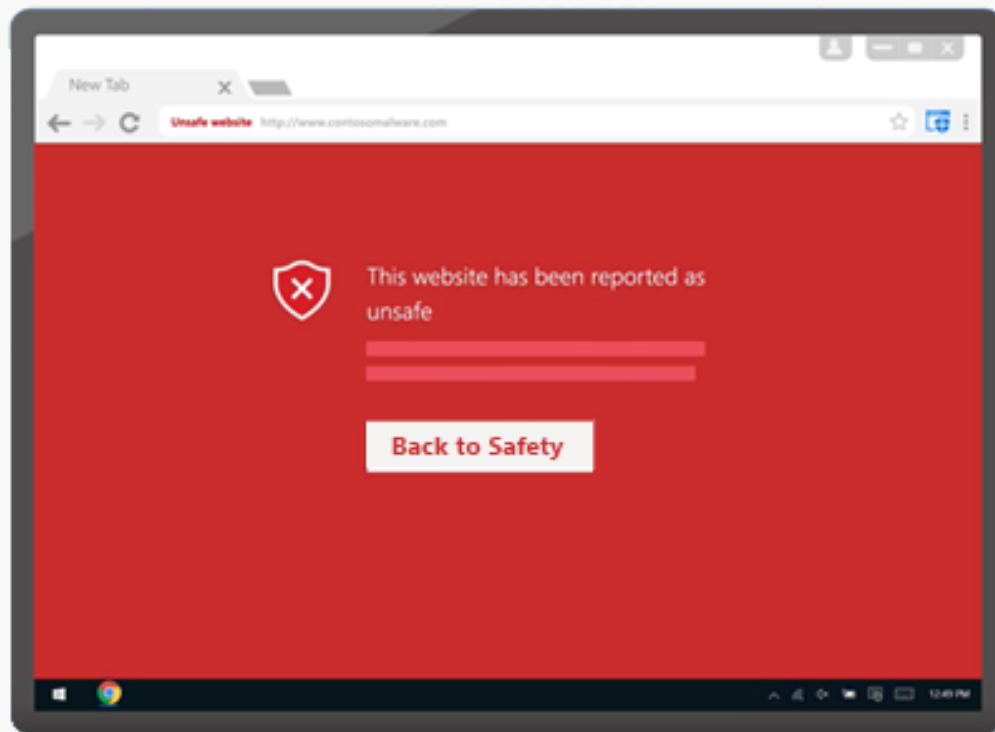
Google Chrome

- Focus on the Enterprise
- Microsoft release extensions for Windows 10 accounts and Windows Defender Browser Protection
- Group Policy support, works even if the user installed Chrome in profile.
- MSI Installer
- Official Citrix support
- Support for roaming settings/bookmarks

- Enterprise Ready!

Better Protection from Malware and Phishing Websites

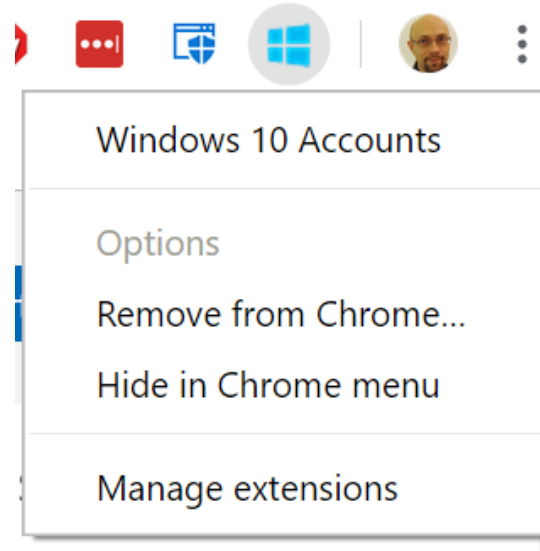
When you navigate to a website that has been reported as malicious, you will see a red screen with a warning. This gives you a clear path back to safety with one click.





Windows 10 Accounts extension

- Support Azure AD Accounts
- Support for Conditional Access
- Single-sign on
- Uses your Microsoft identity in Windows 10





Forcefully install plugins

- Done through Group Policy/MDM
- Windows Defender Browser Protection =
bkbeeffjjeopflfhgeknacdieedcoml;<https://clients2.google.com/service/update2/crx>
- Windows 10 Accounts =
ppnbnpeolgkicgegkbbjmhlideopiji;<https://clients2.google.com/service/update2/crx>
- Legacy Browser Support (also requires an .MSI to be installed) =
heildphpnddilhkemkielfhnkaagiabh;<https://clients2.google.com/service/update2/crx>.



Chrome Extensions

ZDNet [CENTRAL EUROPE](#) [MIDDLE EAST](#) [SCANDINAVIA](#) [AFRICA](#) [UK](#) [ITALY](#) [SPAIN](#) [MORE](#) [NEWSLETTERS](#) [ALL WRITERS](#)

MUST READ [FBI WON'T SAY HOW MANY INVESTIGATIONS ARE HAMPERED BY ENCRYPTION](#)

Google cuts fake ad blockers from Chrome Store: Were you among 20 million fooled?

Bogus ad-blocker extensions in the Chrome Web Store trick millions of people into installing them.



Chrome Extensions

SÄKERHET 2018-10-02 10:41

Nu slår Google ned på skadliga Chrome-tillägg

Google tar i med hårdhandskarna mot utvecklare av webbläsartillägg till Chrome. De nya kraven ska förbättra säkerheten och prestanda.



Lars Dobos
REPORTER

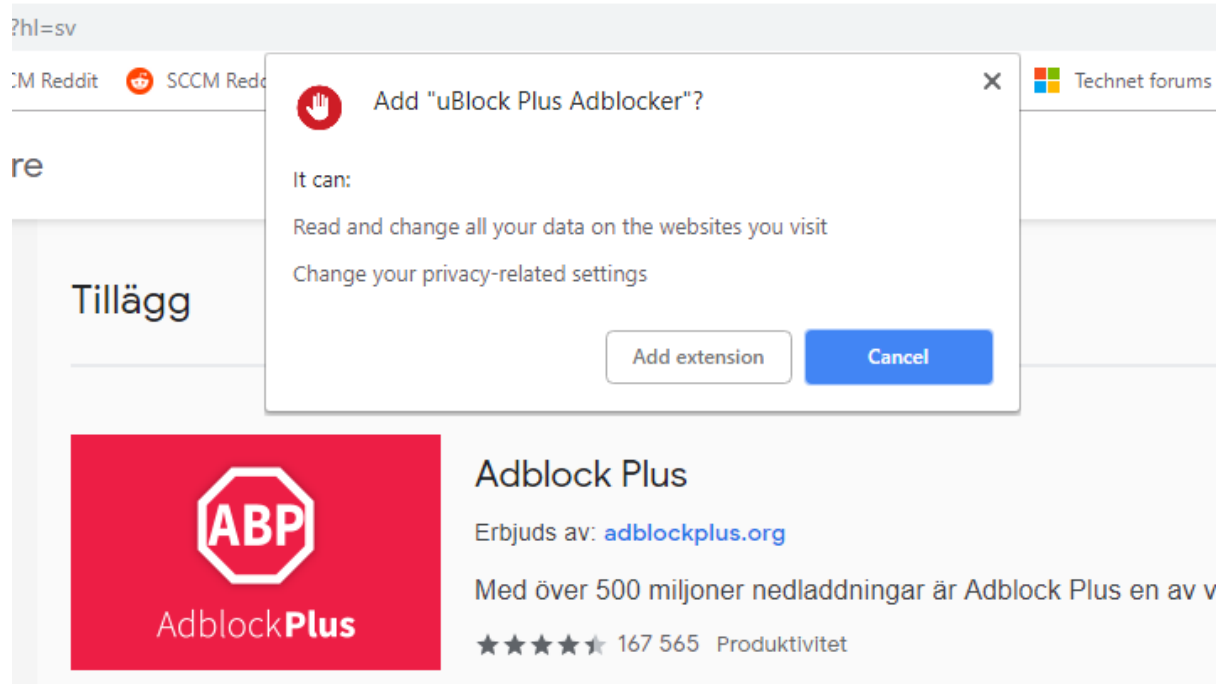
Cirka en miljard människor använder webbläsaren Chrome, och till den finns det 180 000 tillägg som hjälper oss med saker som annonsblockering, rättstavning, lösenordshantering med mera.

Google har en öppen inställning till utvecklare och uppmuntrar dem att utveckla nya tillägg, men baksidan är att det smyger sig in farlig kod i form av spionprogram, krypto-grävare, kontotjuvar och annat elände. Google har uppmärksammat detta problem tidigare och kommit fram till att närmare 10 procent av alla



Data Leakage - Privacy

- Black market for published plugins
- Read and change data



The screenshot shows a browser extension store interface. A modal dialog box is open, asking to add the "uBlock Plus Adblocker" extension. The dialog lists permissions: "Read and change all your data on the websites you visit" and "Change your privacy-related settings". Below the dialog, the extension card for "Adblock Plus" is visible, featuring the ABP logo and a red background. The card text includes "Erbjuds av: adblockplus.org", "Med över 500 miljoner nedladdningar är Adblock Plus en av v", and a star rating of "★★★★☆ 167 565 Produktivitet".

re

Tillägg

ABP
AdblockPlus

Adblock Plus

Erbjuds av: adblockplus.org

Med över 500 miljoner nedladdningar är Adblock Plus en av v

★★★★☆ 167 565 Produktivitet



Blacklist/Whitelist extensions

- Combined with forceful installation of the extensions
- Blacklist all or only specific extensions
- Whitelist specific extensions
- Both uses extensions ID
 - Windows Defender Browser Protection = bkbeeffjjeopflfhgeknacdieedcoml
 - Windows 10 Accounts = ppnbnpelgkicgegkbbjmhlideopiji
 - Legacy Browser Support (also requires an .MSI to be installed) = heildphpnddilhkemkielfhnkaagiabh

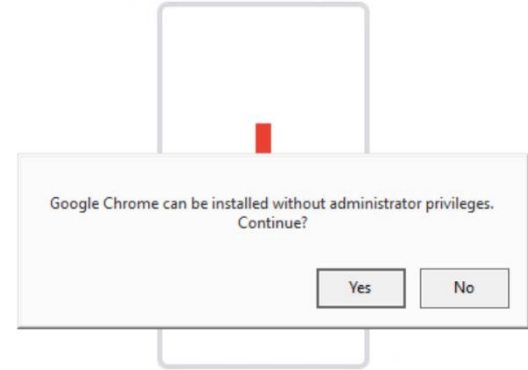


DEMO



Take control of Chrome

- If you haven't taken any action, you users have installed chrome already!
- How do we replace it?
- The Enterprise .MSI will:
 - Replace the shortcut on the end-users desktop
 - Uninstall Google Chrome installed in user profile



Thank you for downloading
Chrome!

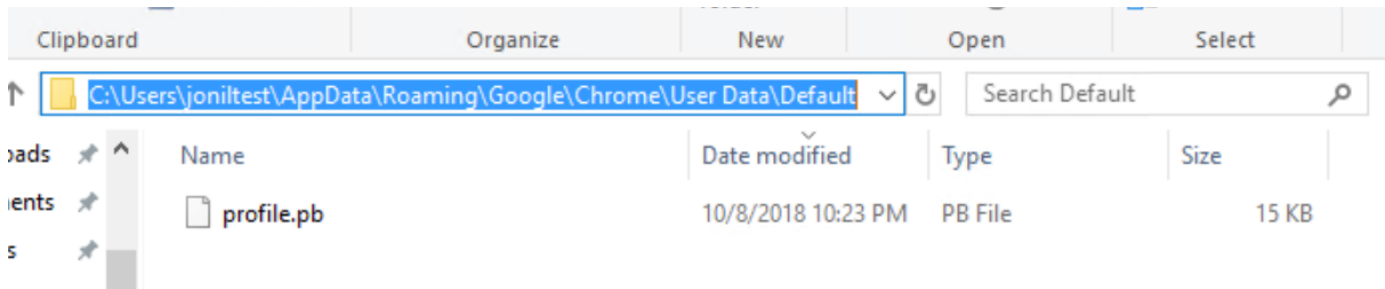


DEMO



Roam settings

- Enabled through Group Policy
- Default location:
- Location can be changed, to Onedrive perhaps ?!
- Enabling the policy disables all Synchronization with Google Cloud
- Is great to be used with UE-V





Verify policy / Roming settings

- Chrome://policy

- Chrome://sync-internals

The screenshot displays the Chrome://sync-internals page. The left sidebar shows 'Policies' and 'Chrome p...'. The main content area is divided into several sections:

- Summary:** Sync service initialized
- Version Info:**
 - Client Version: Google Chrome Windows 66.0.3359.139 (a020eddf0d85fe84d4a6787b304f50aafb670969-refs/branch-heads/3359@(#767)) stable
 - Server URL: https://clients4.google.com/chrome-sync
- Identity:**
 - Sync Client ID: psRCftRS08RvDwL0Koxzkg==
 - Invalidator Client ID: sfz4T4f5qQt+V//AxGkhtA==
 - Username: (empty)
- Credentials:**
 - Requested Token: n/a
 - Received Token: n/a
 - Token Request Status: OK
 - Next Token Request: not scheduled
- Sync Protocol Log:** (Capture Specifics checkbox is unchecked)
 - 10/10/2018, 10:30:30 PM **Commit Response**
Result: SYNCER_OK
 - 10/10/2018, 10:31:08 PM **Normal GetUpdate request**
Nudged types: Preferences, Sessions
 - 10/10/2018, 10:31:08 PM **GetUpdates Response**
Received 1 update(s).
 - 10/10/2018, 10:31:08 PM **Commit Request**
Item count: 2
Contributing types: Preferences, Sessions
 - 10/10/2018, 10:31:08 PM **Commit Response**
Result: SYNCER_OK
 - 10/10/2018, 10:31:23 PM **Normal GetUpdate request**
Nudged types: Sessions












DEMO



Legacy Browser Support

- Windows Installer + Extension
- Configurable through GPO (separate download)

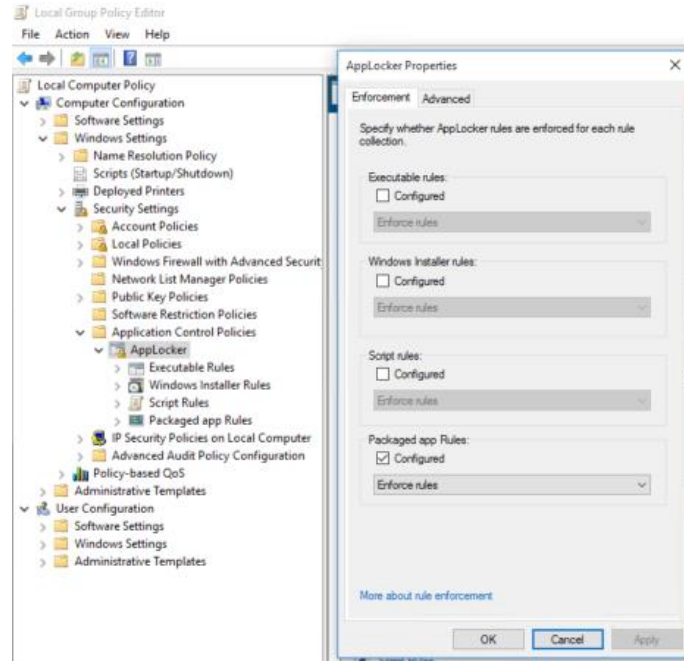
Setting	State	Comment
 Alternative Browser Arguments	Not configured	No
 Alternative Browser Path	Not configured	No
 Chrome Arguments	Not configured	No
 Chrome Path	Not configured	No
 Keep Last Chrome Tab On Transition	Not configured	No
 Show Transition Screen in Chrome For Some Time	Not configured	No
 Hosts that Should Not Trigger a Transition in Either Browser	Not configured	No
 Hosts to Open In the Alternative Browser	Not configured	No
 Use IE Enterprise Mode Site List Policy	Not configured	No



DEMO

Use AppLocker to enforce your Browser Policy!

- Even default rules work!
- Blocks more than browsers
- Application Control can also be used





Summary

- Develop and document a browser strategy
- A browser strategy makes testing easier
- Enforce it with AppLocker for example
- Inform end-users
- Support for Internet Explorer is being dropped by more and more sites, it should never be the default browser
- Google Chrome is the most Enterprise Ready 3rd party browser