

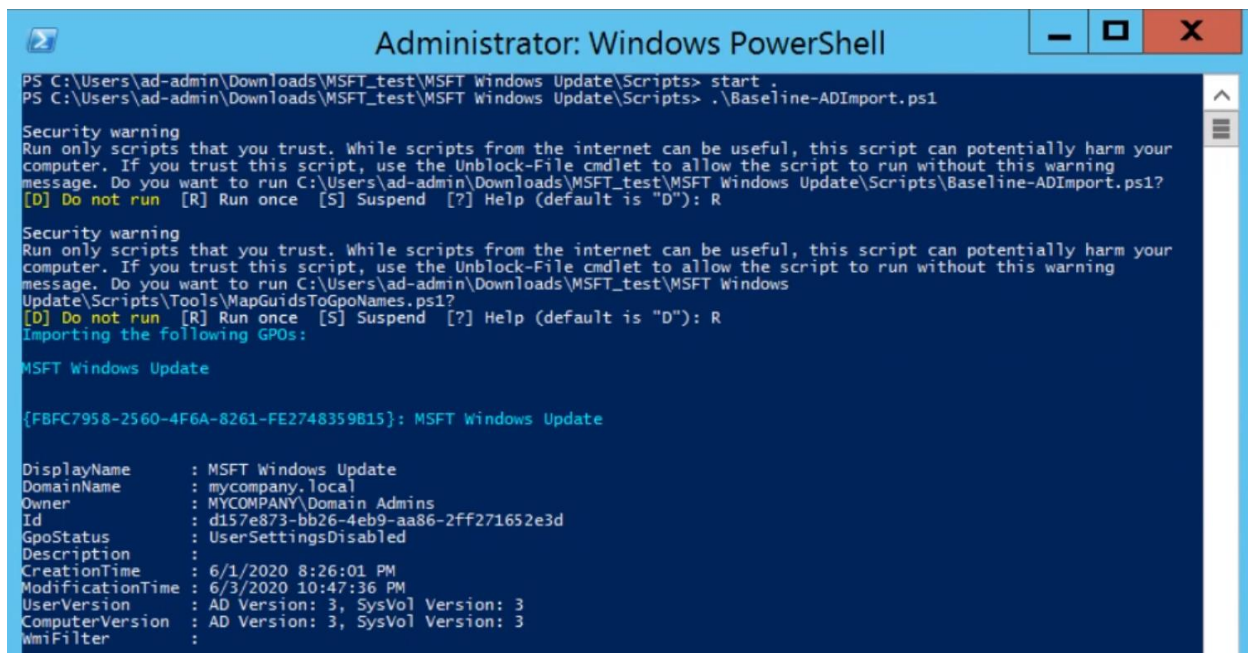
# Update Baseline Tool Documentation

## Purpose of this tool

This tool is specifically for IT Administrators that manage their devices via Group Policy Management Console (GPMC). The update baseline is a collection of Microsoft recommended policy configurations to ensure compliance while providing a great user experience. This tool is a powershell script that will preload update baseline policy configurations into GPMC. From GPMC, the update baseline can be deployed to devices across an organization.

## How to use this tool

To apply the baseline and import the Group Policy Object (GPO) into GPMC, simply run the **Baseline-ADImport.ps1** script in PowerShell.



```
Administrator: Windows PowerShell
PS C:\Users\ad-admin\Downloads\MSFT_test\MSFT Windows Update\Scripts> start .
PS C:\Users\ad-admin\Downloads\MSFT_test\MSFT Windows Update\Scripts> .\Baseline-ADImport.ps1

Security warning
Run only scripts that you trust. While scripts from the internet can be useful, this script can potentially harm your
computer. If you trust this script, use the Unblock-File cmdlet to allow the script to run without this warning
message. Do you want to run C:\Users\ad-admin\Downloads\MSFT_test\MSFT Windows Update\Scripts\Baseline-ADImport.ps1?
[D] Do not run [R] Run once [S] Suspend [?] Help (default is "D"): R

Security warning
Run only scripts that you trust. While scripts from the internet can be useful, this script can potentially harm your
computer. If you trust this script, use the Unblock-File cmdlet to allow the script to run without this warning
message. Do you want to run C:\Users\ad-admin\Downloads\MSFT_test\MSFT Windows
Update\Scripts\Tools\MapGuidsToGpoNames.ps1?
[D] Do not run [R] Run once [S] Suspend [?] Help (default is "D"): R
Importing the following GPOs:

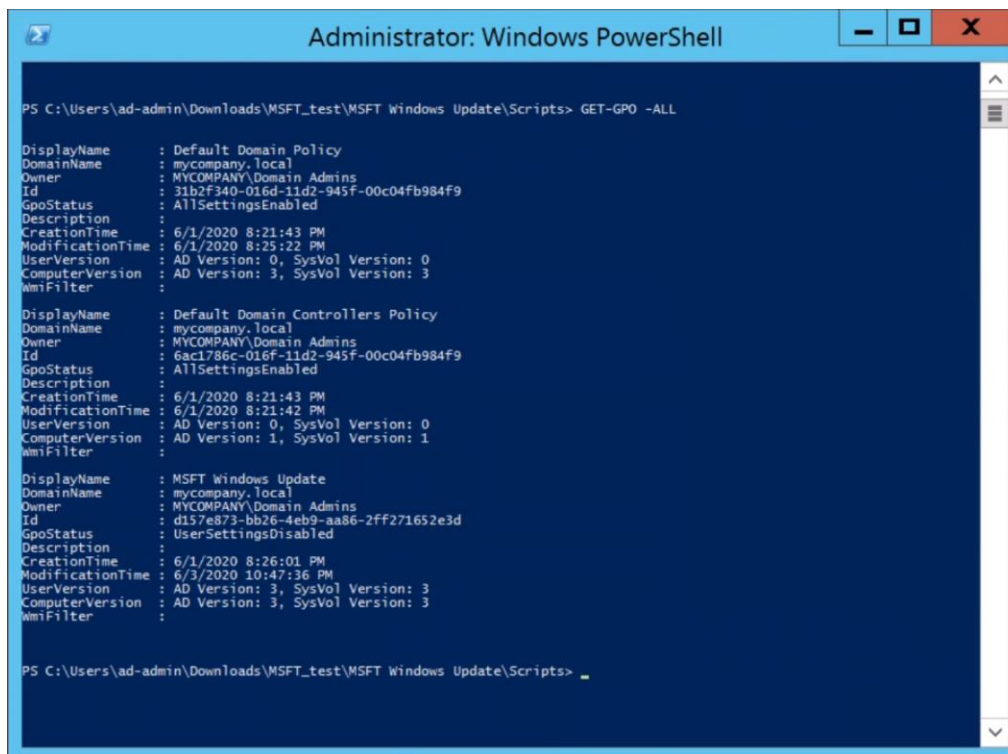
MSFT Windows Update

{FBFC7958-2560-4F6A-8261-FE2748359B15}: MSFT Windows Update

DisplayName       : MSFT Windows Update
DomainName        : mycompany.local
Owner              : MYCOMPANY\Domain Admins
Id                 : d157e873-bb26-4eb9-aa86-2ff271652e3d
GpoStatus          : UserSettingsDisabled
Description        :
CreationTime       : 6/1/2020 8:26:01 PM
ModificationTime   : 6/3/2020 10:47:36 PM
UserVersion         : AD Version: 3, SysVol Version: 3
ComputerVersion    : AD Version: 3, SysVol Version: 3
WmiFilter           :
```

To verify the GPO has been imported into GPMC via powershell run the following command:

### GET-GPO -ALL



```
Administrator: Windows PowerShell

PS C:\Users\ad-admin\Downloads\MSFT_test\MSFT Windows Update\Scripts> GET-GPO -ALL

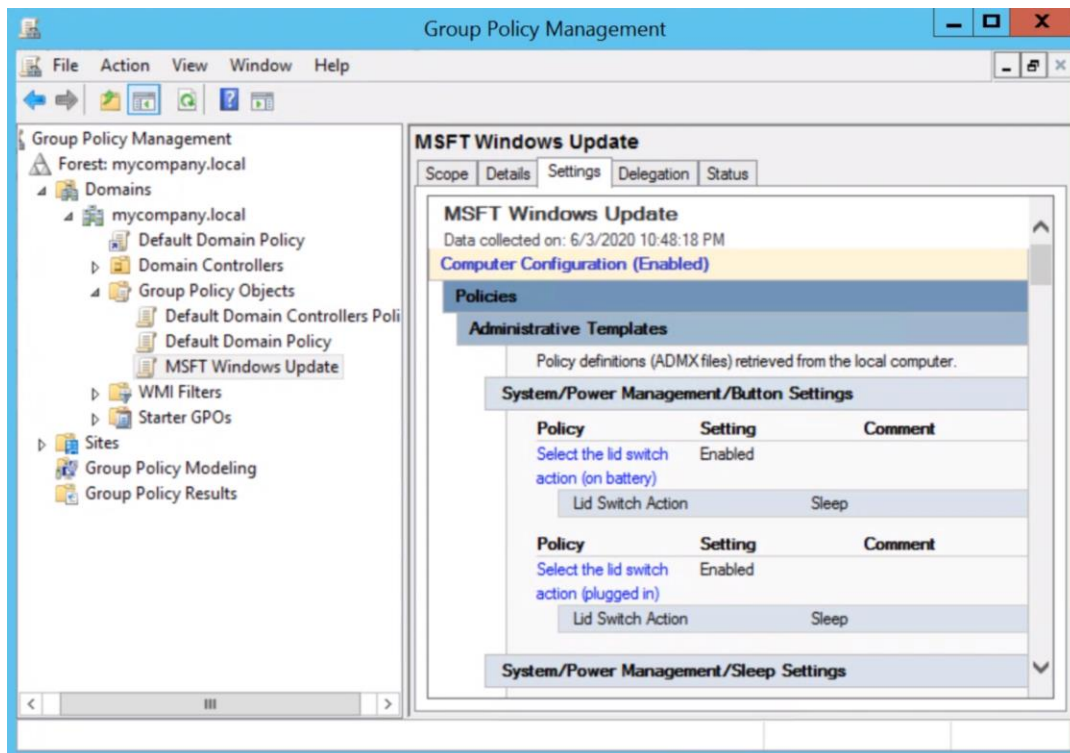
DisplayName : Default Domain Policy
DomainName  : mycompany.local
Owner       : MYCOMPANY\Domain Admins
Id          : 31b2f340-016d-11d2-945f-00c04fb984f9
GpoStatus   : AllSettingsEnabled
Description :
CreationTime : 6/1/2020 8:21:43 PM
ModificationTime : 6/1/2020 8:25:22 PM
UserVersion : AD Version: 0, SysVol Version: 0
ComputerVersion : AD Version: 3, SysVol Version: 3
WmiFilter   :

DisplayName : Default Domain Controllers Policy
DomainName  : mycompany.local
Owner       : MYCOMPANY\Domain Admins
Id          : 6ac1786c-016f-11d2-945f-00c04fb984f9
GpoStatus   : AllSettingsEnabled
Description :
CreationTime : 6/1/2020 8:21:43 PM
ModificationTime : 6/1/2020 8:21:42 PM
UserVersion : AD Version: 0, SysVol Version: 0
ComputerVersion : AD Version: 1, SysVol Version: 1
WmiFilter   :

DisplayName : MSFT Windows Update
DomainName  : mycompany.local
Owner       : MYCOMPANY\Domain Admins
Id          : d157e873-bb26-4eb9-aa86-2ff271652e3d
GpoStatus   : UserSettingsDisabled
Description :
CreationTime : 6/1/2020 8:26:01 PM
ModificationTime : 6/3/2020 10:47:36 PM
UserVersion : AD Version: 3, SysVol Version: 3
ComputerVersion : AD Version: 3, SysVol Version: 3
WmiFilter   :

PS C:\Users\ad-admin\Downloads\MSFT_test\MSFT Windows Update\Scripts> _
```

The GPO will then show up in GPMC.

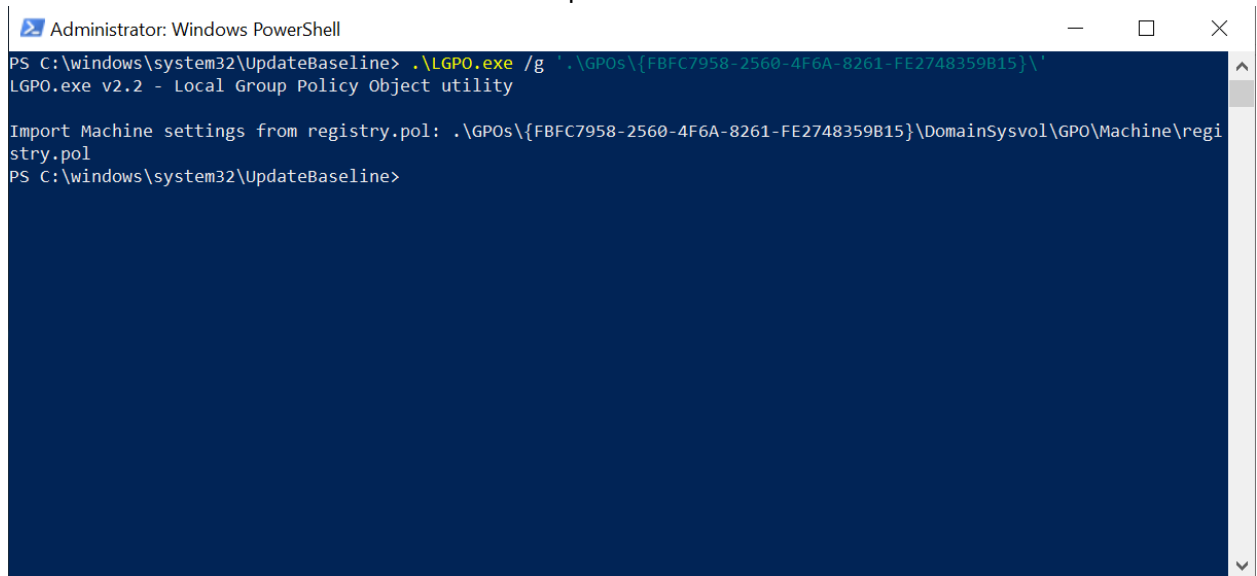


Pre-existing policies, GPOs, and settings do not have to be changed or deleted in order to apply the update baseline. Once the update baseline (which will appear in GPMC as 'MSFT Windows Update') is loaded into GPMC, it is up to the IT Administrator how to link or apply the update baseline GPO.

## Testing Local Group Policy

This is a walkthrough of how to test the update baseline locally by applying the GPO via Local Group Policy Object (LGPO).

1. Download LGPO.exe from the [Security Compliance Toolkit](#).
2. Open PowerShell in administrator mode.
3. Run the command `.\LGPO.exe /g '.\GPOs\{FBFC7958-2560-4F6A-8261-FE2748359B15}\'`
  - a. If LGPO.exe is not in the same location as the update baseline tool, replace 'LGPO.exe' with the full file location path of LGPO.exe



```
Administrator: Windows PowerShell
PS C:\windows\system32\UpdateBaseline> .\LGPO.exe /g '.\GPOs\{FBFC7958-2560-4F6A-8261-FE2748359B15}\'
LGPO.exe v2.2 - Local Group Policy Object utility

Import Machine settings from registry.pol: .\GPOs\{FBFC7958-2560-4F6A-8261-FE2748359B15}\DomainSysvol\GPO\Machine\regi
stry.pol
PS C:\windows\system32\UpdateBaseline>
```

Additional documentation on LGPO can be found [here](#) as well as in the LGPO.zip.

## Policy Analyzer

Policy Analyzer can be used to compare a current GPO against the update baseline. Download Policy Analyzer [here](#) by selecting Policy Analyzer.zip. To compare GPOs in policy analyzer, the GPO must be backed up and saved to import into Policy Analyzer.

## Manually importing update baseline GPO

Alternatively, the update baseline GPO can be added to GPMC manually by creating a new blank GPO, right clicking and selecting 'Import Settings,' and selecting the GPOs folder of this tool as the backup folder.

## Tips to improve your experience even further

- As a part of the update baseline tool, "Specify active hours range for auto-restarts" has been set to disabled which gives users the default active hours range of 18 hours. By designating active hours, Windows will not update a device during this time frame. To improve this experience, we recommend setting this policy to Not Configured. This will allow for the end user to select their own range of active hours. Alternatively, if the end user leaves the policy unconfigured intelligent active hours will be initiated. When intelligent active hours is in place, Windows detects the active hours based on the user's personal usage giving a more accurate estimate of the user's actual active hours and a more catered experience of when the update takes place. Be aware users must set the policy to Not Configured in their local policy for intelligent active hours to take effect.
- Most organizations have their own phased deployment plans set up via varying policies to manage when updates are offered across their organization. The baseline tool is designed to ensure compliance and a great experience once an update is offered, rather than to manage *when* it is offered. For those looking to receive updates as soon as they come out, configure the "Select when Preview Builds and Feature Updates are received" > "After a Preview Build or feature Update is released, defer receiving it for this many days" to 0. This policy is located under Windows Update > Windows Update for Business.
- The baseline is to provide an industry proven and tested known good state that has been fine-tuned particularly to improve update velocity while adding a good update experience. The baseline by itself may or may not fit all of an organization's needs and IT Administrators are encouraged to tweak and alter the policies set to find what configurations best suit their organization.

## Where our baseline tool differs from the whitepaper

The group policy configurations included in the update baseline tool vary slightly from those outlined in the [Optimizing Windows 10 Update Adoption whitepaper](#). To achieve the exact behavior outlined in the whitepaper, configure the following policies within GPMC after loading the update baseline GPO into GPMC:

- *Allow updates to be download automatically over metered*
  - In the whitepaper this policy is recommended to be set to enabled. Enabling this policy will indeed improve update velocity as it expands the window of opportunity to take an update (via metered connection). However, this setting has been configured as disabled in the update baseline tool because enabling this policy can incur additional costs based on how an organization's metered data plan is charged. If an organization's data plan allows for downloads over metered connections, IT Administrators are encouraged to configure this policy to enabled to improve update velocity.

- *Select when Preview Builds and Feature Updates are received > After a Preview Build or feature Update is released, defer receiving it for this many days*
  - Deferrals in the white paper are commended to 0 to get updates immediately. To respect deployment plans already in place we do not alter this.