

```

PS C:\Users\ncerry> #
#Import the connectivity test
cd C:\Users\ncerry\Desktop
cd .\HTTP-Connectivity-Tester\Examples\Microsoft\windowsDefenderAntivirus

#Import the connectivity test
Import-Module -Name .\WDAVConnectivity.psm1

#An example of a test.
$connectivity = Get-WDAVConnectivity -Verbose
$connectivity | Format-List -Property
Blocked,TestUrl,UnblockUrl,DnsAliases,IpAddresses,Description,Resolved,ActualStatusCode,ExpectedSta
tusCode,UnexpectedStatus
#=====
# Same 5 lines again, but it will import and run the adjusted ps1 module that we changed.

VERBOSE:
*****
Testing https://wdcp.microsoft.com/
*****

VERBOSE:
Test Url: https://wdcp.microsoft.com/
Url to Unblock: https://*.wdcp.microsoft.com
Url Type: Pattern
Description: windows Defender Antivirus cloud-delivered protection service, also referred to as Mic
rosoft Active Protection Service (MAPS). Used by windows Defender Antivirus to provide cloud-delive
red protection.
Resolved: True
IP Addresses: 13.82.144.201
DNS Aliases: wd-prod-cp.trafficmanager.net, wd-prod-cp-us-east-2-fe.eastus.cloudapp.azure.com
Actual Status Code: 503
Expected Status Code: 503
Is Unexpected Status Code: False
Status Message:
Blocked: False
Certificate Error: False
Certificate Error Message:
Ignore Certificate Validation Errors: False
Certificate Validation Error: False
Certificate Validation Error Message:

VERBOSE:
*****
Testing https://wdcpalt.microsoft.com/
*****

VERBOSE:
Test Url: https://wdcpalt.microsoft.com/
Url to Unblock: https://wdcpalt.microsoft.com
Url Type: Literal
Description: windows Defender Antivirus cloud-delivered protection service, also referred to as Mic
rosoft Active Protection Service (MAPS). Used by windows Defender Antivirus to provide cloud-delive
red protection.
Resolved: True
IP Addresses: 13.82.144.201
DNS Aliases: wd-prod-cp.trafficmanager.net, wd-prod-cp-us-east-2-fe.eastus.cloudapp.azure.com
Actual Status Code: 503
Expected Status Code: 503
Is Unexpected Status Code: False
Status Message:
Blocked: False
Certificate Error: False
Certificate Error Message:
Ignore Certificate Validation Errors: False
Certificate Validation Error: False
Certificate Validation Error Message:

VERBOSE:
*****
Testing https://update.microsoft.com/
*****

VERBOSE:
Test Url: https://update.microsoft.com/
Url to Unblock: https://*.update.microsoft.com
Url Type: Pattern
Description: Microsoft Update Service (MU). Signature and product updates.

```

Resolved: True
IP Addresses: 40.70.224.146
DNS Aliases: update.microsoft.com.nsatc.net, www.update.microsoft.com.nsatc.net
Actual Status Code: 200
Expected Status Code: 200
Is Unexpected Status Code: False
Status Message:
Blocked: False
Certificate Error: False
Certificate Error Message:
Ignore Certificate Validation Errors: True
Certificate Validation Error: False
Certificate Validation Error Message:

VERBOSE:

Testing https://download.microsoft.com/

VERBOSE:

Test Url: https://download.microsoft.com/
Url to Unblock: https://*.download.microsoft.com
Url Type: Pattern
Description: Alternate location for windows Defender Antivirus definition updates if the installed definitions fall out of date (7 or more days behind).
Resolved: True
IP Addresses: 23.32.68.203
DNS Aliases: dlc-shim.trafficmanager.net, main.dl.ms.akadns.net, download.microsoft.com.edgekey.net, e3673.dscg.akamaiedge.net
Actual Status Code: 200
Expected Status Code: 200
Is Unexpected Status Code: False
Status Message:
Blocked: False
Certificate Error: False
Certificate Error Message:
Ignore Certificate Validation Errors: False
Certificate Validation Error: False
Certificate Validation Error Message:

VERBOSE:

Testing https://onboardingpackageseusprd.blob.core.windows.net/

VERBOSE:

Test Url: https://onboardingpackageseusprd.blob.core.windows.net/
Url to Unblock: https://*.blob.core.windows.net
Url Type: Pattern
Description: Malware submission storage. Upload location for files submitted to Microsoft via the submission form or automatic sample submission.
Resolved: True
IP Addresses: 52.225.136.36
DNS Aliases: blob.bn6prdstr15a.store.core.windows.net
Actual Status Code: 400
Expected Status Code: 400
Is Unexpected Status Code: False
Status Message:
Blocked: False
Certificate Error: False
Certificate Error Message:
Ignore Certificate Validation Errors: False
Certificate Validation Error: False
Certificate Validation Error Message:

VERBOSE:

Testing http://www.microsoft.com/pkiops/crl

VERBOSE:

Test Url: http://www.microsoft.com/pkiops/crl
Url to Unblock: http://www.microsoft.com/pkiops/crl
Url Type: Literal
Description: Microsoft Certificate Revocation List (CRL). Used by windows when creating the SSL connection to MAPS for updating the CRL.
Resolved: True

IP Addresses: 23.50.228.154
DNS Aliases: www.microsoft.com-c-3.edgekey.net, www.microsoft.com-c-3.edgekey.net.globalredir.akadns.net, e13678.dscb.akamaiedge.net
Actual Status Code: 404
Expected Status Code: 404
Is Unexpected Status Code: False
Status Message:
Blocked: False
Certificate Error: False
Certificate Error Message:
Ignore Certificate Validation Errors: False
Certificate Validation Error: False
Certificate Validation Error Message:

VERBOSE:

Testing http://www.microsoft.com/pkiops/certs

VERBOSE:

Test Url: http://www.microsoft.com/pkiops/certs
Url to Unblock: http://www.microsoft.com/pkiops/certs
Url Type: Literal
Description:
Resolved: True
IP Addresses: 23.50.228.154
DNS Aliases: www.microsoft.com-c-3.edgekey.net, www.microsoft.com-c-3.edgekey.net.globalredir.akadns.net, e13678.dscb.akamaiedge.net
Actual Status Code: 404
Expected Status Code: 404
Is Unexpected Status Code: False
Status Message:
Blocked: False
Certificate Error: False
Certificate Error Message:
Ignore Certificate Validation Errors: False
Certificate Validation Error: False
Certificate Validation Error Message:

VERBOSE:

Testing http://crl.microsoft.com/pki/crl/products

VERBOSE:

Test Url: http://crl.microsoft.com/pki/crl/products
Url to Unblock: http://crl.microsoft.com/pki/crl/products
Url Type: Literal
Description: Microsoft Certificate Revocation List (CRL). Used by Windows when creating the SSL connection to MAPS for updating the CRL.
Resolved: True
IP Addresses: 23.46.238.203, 23.46.238.200
DNS Aliases: crl.www.ms.akadns.net, a1363.dscg.akamai.net
Actual Status Code: 404
Expected Status Code: 404
Is Unexpected Status Code: False
Status Message:
Blocked: False
Certificate Error: False
Certificate Error Message:
Ignore Certificate Validation Errors: False
Certificate Validation Error: False
Certificate Validation Error Message:

VERBOSE:

Testing http://www.microsoft.com/pki/certs

VERBOSE:

Test Url: http://www.microsoft.com/pki/certs
Url to Unblock: http://www.microsoft.com/pki/certs
Url Type: Literal
Description: Microsoft certificates.
Resolved: True
IP Addresses: 23.50.228.154
DNS Aliases: www.microsoft.com-c-3.edgekey.net, www.microsoft.com-c-3.edgekey.net.globalredir.akadns.net, e13678.dscb.akamaiedge.net

s.net, e13678.dscl.akamaiedge.net
Actual Status Code: 404
Expected Status Code: 404
Is Unexpected Status Code: False
Status Message:
Blocked: False
Certificate Error: False
Certificate Error Message:
Ignore Certificate Validation Errors: False
Certificate Validation Error: False
Certificate Validation Error Message:

VERBOSE:

Testing https://msdl.microsoft.com/download/symbols

VERBOSE:

Test Url: https://msdl.microsoft.com/download/symbols
Url to Unblock: https://msdl.microsoft.com/download/symbols
Url Type: Literal
Description: Microsoft Symbol Store. Used by Windows Defender Antivirus to restore certain critical files during remediation flows.
Resolved: True
IP Addresses: 204.79.197.219
DNS Aliases: msdl.microsoft.akadns.net, msdl-microsoft-com.a-0016.a-msedge.net, a-0016.a-msedge.net

Actual Status Code: 200
Expected Status Code: 200
Is Unexpected Status Code: False
Status Message:
Blocked: False
Certificate Error: False
Certificate Error Message:
Ignore Certificate Validation Errors: False
Certificate Validation Error: False
Certificate Validation Error Message:

VERBOSE:

Testing https://vortex-win.data.microsoft.com/

VERBOSE:

Test Url: https://vortex-win.data.microsoft.com/
Url to Unblock: https://vortex-win.data.microsoft.com
Url Type: Literal
Description: Used by Windows to send client diagnostic data, Windows Defender Antivirus uses this for product quality monitoring purposes.
Resolved: True
IP Addresses: 65.55.44.109
DNS Aliases: asimov-win.vortex.data.trafficmanager.net, global.vortex.data.trafficmanager.net

Actual Status Code: 404
Expected Status Code: 404
Is Unexpected Status Code: False
Status Message:
Blocked: False
Certificate Error: False
Certificate Error Message:
Ignore Certificate Validation Errors: False
Certificate Validation Error: False
Certificate Validation Error Message:

VERBOSE:

Testing https://settings-win.data.microsoft.com/qos

VERBOSE:

Test Url: https://settings-win.data.microsoft.com/qos
Url to Unblock: https://settings-win.data.microsoft.com/qos
Url Type: Literal
Description: Used by Windows to send client diagnostic data, Windows Defender Antivirus uses this for product quality monitoring purposes.
Resolved: True
IP Addresses: 52.167.17.97
DNS Aliases: settingsfd-geo.trafficmanager.net, settingsfd-prod-eus22-endpoint.trafficmanager.net

Actual Status Code: 200
Expected Status Code: 400
Is Unexpected Status Code: False
Status Message:
Blocked: False
Certificate Error: False
Certificate Error Message:
Ignore Certificate Validation Errors: False
Certificate Validation Error: False
Certificate Validation Error Message:

VERBOSE:

Testing https://definitionupdates.microsoft.com/

VERBOSE:

Test Url: https://definitionupdates.microsoft.com/
Url to Unblock: https://definitionupdates.microsoft.com
Url Type: Literal
Description: Windows Defender Antivirus definition updates for windows 10 1709+.
Resolved: True
IP Addresses: 23.32.68.203
DNS Aliases: definitionupdates.microsoft.com.edgekey.net, e3673.g.akamaiedge.net
Actual Status Code: 400
Expected Status Code: 200
Is Unexpected Status Code: False
Status Message:
Blocked: False
Certificate Error: False
Certificate Error Message:
Ignore Certificate Validation Errors: False
Certificate Validation Error: False
Certificate Validation Error Message:

VERBOSE:

Testing https://update.microsoft.com/

VERBOSE:

Test Url: https://update.microsoft.com/
Url to Unblock: https://*.update.microsoft.com
Url Type: Pattern
Description: MU / WU - Security intelligence and product updates.
Resolved: True
IP Addresses: 40.70.224.146
DNS Aliases: update.microsoft.com.nsatc.net, www.update.microsoft.com.nsatc.net
Actual Status Code: 200
Expected Status Code: 200
Is Unexpected Status Code: False
Status Message:
Blocked: False
Certificate Error: False
Certificate Error Message:
Ignore Certificate Validation Errors: False
Certificate Validation Error: False
Certificate Validation Error Message:

VERBOSE:

Testing https://unitedstates.cp.wd.microsoft.com/

VERBOSE:

Test Url: https://unitedstates.cp.wd.microsoft.com/
Url to Unblock: https://unitedstates.cp.wd.microsoft.com
Url Type: Literal
Description: Geo-affinity URL for wdcgcp.microsoft.com and wdcgcpalt.microsoft.com as of 06/26/2018 with WDAV 4.18.1806.18062+
Resolved: True
IP Addresses: 13.82.144.201
DNS Aliases: wd-prod-cp-us.trafficmanager.net, wd-prod-cp-us-east-2-fe.eastus.cloudapp.azure.com
Actual Status Code: 503
Expected Status Code: 503
Is Unexpected Status Code: False
Status Message:

Blocked: False
Certificate Error: False
Certificate Error Message:
Ignore Certificate Validation Errors: False
Certificate Validation Error: False
Certificate Validation Error Message:

VERBOSE:

Testing https://adldefinitionupdates-wu.azurewebsites.net/

VERBOSE:

Test Url: https://adldefinitionupdates-wu.azurewebsites.net/
Url to Unblock: https://adldefinitionupdates-wu.azurewebsites.net/
Url Type: Literal
Description: Alternative to https://adl.windows.com which allows the compatibility update to receive the latest compatibility data from Microsoft
Resolved: True
IP Addresses: 40.83.150.233
DNS Aliases: waws-prod-bay-089.vip.azurewebsites.windows.net, waws-prod-bay-089.cloudapp.net
Actual Status Code: 403
Expected Status Code: 200
Is Unexpected Status Code: False
Status Message:
Blocked: False
Certificate Error: False
Certificate Error Message:
Ignore Certificate Validation Errors: False
Certificate Validation Error: False
Certificate Validation Error Message:

VERBOSE:

Testing http://ctldl.windowsupdate.com/

VERBOSE:

Test Url: http://ctldl.windowsupdate.com/
Url to Unblock: http://ctldl.windowsupdate.com
Url Type: Literal
Description: Microsoft Certificate Trust List download URL
Resolved: True
IP Addresses: 104.97.85.54, 104.97.85.29
DNS Aliases: au-bg-shim.trafficmanager.net, audownload.windowsupdate.nsatc.net, au.download.windowsupdate.com.edgesuite.net, a767.dscg3.akamai.net
Actual Status Code: 200
Expected Status Code: 200
Is Unexpected Status Code: False
Status Message:
Blocked: False
Certificate Error: False
Certificate Error Message:
Ignore Certificate Validation Errors: False
Certificate Validation Error: False
Certificate Validation Error Message:

Blocked : False
TestUrl : https://wdcp.microsoft.com/
UnblockUrl : https://*.wdcp.microsoft.com
DnsAliases : {wd-prod-cp.trafficmanager.net,
wd-prod-cp-us-east-2-fe.eastus.cloudapp.azure.com}
IpAddresses : {13.82.144.201}
Description : Windows Defender Antivirus cloud-delivered protection service, also referred to as Microsoft Active Protection Service (MAPS). Used by Windows Defender Antivirus to provide cloud-delivered protection.
Resolved : True
ActualStatusCode : 503
ExpectedStatusCode : 503
UnexpectedStatus : False

Blocked : False
TestUrl : https://wdcpalt.microsoft.com/
UnblockUrl : https://wdcpalt.microsoft.com
DnsAliases : {wd-prod-cp.trafficmanager.net,

```

IpAddresses      : wd-prod-cp-us-east-2-fe.eastus.cloudapp.azure.com}
Description      : {13.82.144.201}
                  : Windows Defender Antivirus cloud-delivered protection service, also referred
                  : to as Microsoft Active Protection Service (MAPS). Used by Windows Defender
                  : Antivirus to provide cloud-delivered protection.
Resolved         : True
ActualStatusCode : 503
ExpectedStatusCode : 503
UnexpectedStatus : False

Blocked          : False
TestUrl          : https://update.microsoft.com/
UnblockUrl       : https://*.update.microsoft.com
DnsAliases       : {update.microsoft.com.nsatc.net, www.update.microsoft.com.nsatc.net}
IpAddresses      : {40.70.224.146}
Description      : Microsoft Update Service (MU). Signature and product updates.
Resolved         : True
ActualStatusCode : 200
ExpectedStatusCode : 200
UnexpectedStatus : False

Blocked          : False
TestUrl          : https://download.microsoft.com/
UnblockUrl       : https://*.download.microsoft.com
DnsAliases       : {dlc-shim.trafficmanager.net, main.dl.ms.akadns.net,
                  : download.microsoft.com.edgekey.net, e3673.dscg.akamaiedge.net}
IpAddresses      : {23.32.68.203}
Description      : Alternate location for Windows Defender Antivirus definition updates if the
                  : installed definitions fall out of date (7 or more days behind).
Resolved         : True
ActualStatusCode : 200
ExpectedStatusCode : 200
UnexpectedStatus : False

Blocked          : False
TestUrl          : https://onboardingpackageseusprd.blob.core.windows.net/
UnblockUrl       : https://*.blob.core.windows.net
DnsAliases       : {blob.bn6prdstr15a.store.core.windows.net}
IpAddresses      : {52.225.136.36}
Description      : Malware submission storage. Upload location for files submitted to Microsoft
                  : via the Submission form or automatic sample submission.
Resolved         : True
ActualStatusCode : 400
ExpectedStatusCode : 400
UnexpectedStatus : False

Blocked          : False
TestUrl          : http://www.microsoft.com/pkiops/crl
UnblockUrl       : http://www.microsoft.com/pkiops/crl
DnsAliases       : {www.microsoft.com-c-3.edgekey.net,
                  : www.microsoft.com-c-3.edgekey.net.globalredir.akadns.net,
                  : e13678.dscb.akamaiedge.net}
IpAddresses      : {23.50.228.154}
Description      : Microsoft Certificate Revocation List (CRL). Used by Windows when creating
                  : the SSL connection to MAPS for updating the CRL.
Resolved         : True
ActualStatusCode : 404
ExpectedStatusCode : 404
UnexpectedStatus : False

Blocked          : False
TestUrl          : http://www.microsoft.com/pkiops/certs
UnblockUrl       : http://www.microsoft.com/pkiops/certs
DnsAliases       : {www.microsoft.com-c-3.edgekey.net,
                  : www.microsoft.com-c-3.edgekey.net.globalredir.akadns.net,
                  : e13678.dscb.akamaiedge.net}
IpAddresses      : {23.50.228.154}
Description      :
Resolved         : True
ActualStatusCode : 404
ExpectedStatusCode : 404
UnexpectedStatus : False

Blocked          : False
TestUrl          : http://crl.microsoft.com/pki/crl/products
UnblockUrl       : http://crl.microsoft.com/pki/crl/products
DnsAliases       : {crl.www.ms.akadns.net, a1363.dscg.akamai.net}
IpAddresses      : {23.46.238.203, 23.46.238.200}
Description      : Microsoft Certificate Revocation List (CRL). Used by Windows when creating
                  : the SSL connection to MAPS for updating the CRL.

```

```

Resolved      : True
ActualStatusCode : 404
ExpectedStatusCode : 404
UnexpectedStatus : False

Blocked      : False
TestUrl      : http://www.microsoft.com/pki/certs
UnblockUrl   : http://www.microsoft.com/pki/certs
DnsAliases   : {www.microsoft.com-c-3.edgekey.net,
                www.microsoft.com-c-3.edgekey.net.globalredir.akadns.net,
                e13678.dscb.akamaiedge.net}
IpAddresses  : {23.50.228.154}
Description   : Microsoft certificates.
Resolved     : True
ActualStatusCode : 404
ExpectedStatusCode : 404
UnexpectedStatus : False

Blocked      : False
TestUrl      : https://msdl.microsoft.com/download/symbols
UnblockUrl   : https://msdl.microsoft.com/download/symbols
DnsAliases   : {msdl.microsoft.akadns.net, msdl-microsoft-com.a-0016.a-msedge.net,
                a-0016.a-msedge.net}
IpAddresses  : {204.79.197.219}
Description   : Microsoft Symbol Store. Used by windows Defender Antivirus to restore
                certain critical files during remediation flows.
Resolved     : True
ActualStatusCode : 200
ExpectedStatusCode : 200
UnexpectedStatus : False

Blocked      : False
TestUrl      : https://vortex-win.data.microsoft.com/
UnblockUrl   : https://vortex-win.data.microsoft.com
DnsAliases   : {asimov-win.vortex.data.trafficmanager.net,
                global.vortex.data.trafficmanager.net}
IpAddresses  : {65.55.44.109}
Description   : Used by windows to send client diagnostic data, windows Defender Antivirus
                uses this for product quality monitoring purposes.
Resolved     : True
ActualStatusCode : 404
ExpectedStatusCode : 404
UnexpectedStatus : False

Blocked      : False
TestUrl      : https://settings-win.data.microsoft.com/qos
UnblockUrl   : https://settings-win.data.microsoft.com/qos
DnsAliases   : {settingsfd-geo.trafficmanager.net,
                settingsfd-prod-eus22-endpoint.trafficmanager.net}
IpAddresses  : {52.167.17.97}
Description   : Used by windows to send client diagnostic data, windows Defender Antivirus
                uses this for product quality monitoring purposes.
Resolved     : True
ActualStatusCode : 200
ExpectedStatusCode : 400
UnexpectedStatus : False

Blocked      : False
TestUrl      : https://definitionupdates.microsoft.com/
UnblockUrl   : https://definitionupdates.microsoft.com
DnsAliases   : {definitionupdates.microsoft.com.edgekey.net, e3673.g.akamaiedge.net}
IpAddresses  : {23.32.68.203}
Description   : windows Defender Antivirus definition updates for windows 10 1709+.
Resolved     : True
ActualStatusCode : 400
ExpectedStatusCode : 200
UnexpectedStatus : False

Blocked      : False
TestUrl      : https://update.microsoft.com/
UnblockUrl   : https://*.update.microsoft.com
DnsAliases   : {update.microsoft.com.nsatc.net, www.update.microsoft.com.nsatc.net}
IpAddresses  : {40.70.224.146}
Description   : MU / WU - Security intelligence and product updates.
Resolved     : True
ActualStatusCode : 200
ExpectedStatusCode : 200
UnexpectedStatus : False

Blocked      : False

```



```

TestUrl      : https://unitedstates.cp.wd.microsoft.com/
UnblockUrl   : https://unitedstates.cp.wd.microsoft.com
DnsAliases   : {wd-prod-cp-us.trafficmanager.net,
                wd-prod-cp-us-east-2-fe.eastus.cloudapp.azure.com}
IpAddresses  : {13.82.144.201}
Description  : Geo-affinity URL for wdcpl.microsoft.com and wdcplalt.microsoft.com as of
                06/26/2018 with WDAV 4.18.1806.18062+
Resolved     : True
ActualStatusCode : 503
ExpectedStatusCode : 503
UnexpectedStatus : False

Blocked      : False
TestUrl      : https://adldefinitionupdates-wu.azurewebsites.net/
UnblockUrl   : https://adldefinitionupdates-wu.azurewebsites.net/
DnsAliases   : {waws-prod-bay-089.vip.azurewebsites.windows.net,
                waws-prod-bay-089.cloudapp.net}
IpAddresses  : {40.83.150.233}
Description  : Alternative to https://adl.windows.com which allows the compatibility update
                to receive the latest compatibility data from Microsoft
Resolved     : True
ActualStatusCode : 403
ExpectedStatusCode : 200
UnexpectedStatus : False

Blocked      : False
TestUrl      : http://ctldl.windowsupdate.com/
UnblockUrl   : http://ctldl.windowsupdate.com
DnsAliases   : {au-bg-shim.trafficmanager.net, audownload.windowsupdate.nsatc.net,
                au.download.windowsupdate.com.edgesuite.net, a767.dscg3.akamai.net}
IpAddresses  : {104.97.85.54, 104.97.85.29}
Description  : Microsoft Certificate Trust List download URL
Resolved     : True
ActualStatusCode : 200
ExpectedStatusCode : 200
UnexpectedStatus : False

```

```

PS C:\Users\ncterry\Desktop\HTTP-Connectivity-Tester\Examples\Microsoft\windowsDefenderAntivirus>

```