User Guide

ABC-Update V3.2.3

Install Windows Updates on demand.

Simple as your first ABC
Flexible as an alphabet

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ABC-Deploy.Com

Table of Contents

What it is and why you might like it

ABC-Update is a freeware tool from ABC-Deploy. The tool has a GUI version to push MS Updates to networked computers, and a command line utility for the scripting guys.

ABC-Update connect to MS Update servers, or own managed server (WSUS), and optionally download and install or uninstall update categories of choice.
You can do things like schedule activity to an off-hour's service window, control reboot loops and allow users to keep using their computers. Windows 10 feature upgrades can be treated as normal updates.

SysAdmins with responsibility of patching Windows servers and endpoints often face a few frustrations with MS Update or WSUS. One such is that we want the ability to get these updates installed NOW, when we want, where we want, not when Automatic Update Services decides to.
Another frustration among many admins is that the "Automatic Updates Service" since Vista is such a performance hog. Often severely slowing down the end user experience even hours before patch installations begin, and therefore we use ABC-Update to schedule patch activity off office hours.
And many of us share the need to easily see which updates are installed or missing without having to manually be clicking through windows.
This gap between what Microsoft is offering out of the box, and what many admins really want is what the ABC-Update tool is made to fill.

Requirements

Tested with all Windows versions since Windows XP
.Net Framework V2.0 or higher are required for the clients
.Net Framework V4.5 or higher are required for the GUI version
Microsoft Automatic Update Service must not be disabled at client

Downloads

The tool: Https://abc-deploy.com/files/ABC-Update.zip
User Guide: Https://abc-deploy.com/files/ABC-Update.pdf
EULA: Https://abc-deploy.com/files/ABC-Update-EULA.pdf

Feedback

Your personal feedback, positive, negative and your ideas to improve the product are always welcomed.
Pls. write to ABC-Update@ABC-Deploy.Com

The GUI Version

Selecting the basics

Update Source:
MS Update is Microsoft servers on the Internet.
WSUS will be your own managed server as registered for clients by Group Policy.
Also possible to type URL path of WSUS server and port to use.

Example
http://server.domain.com#8530
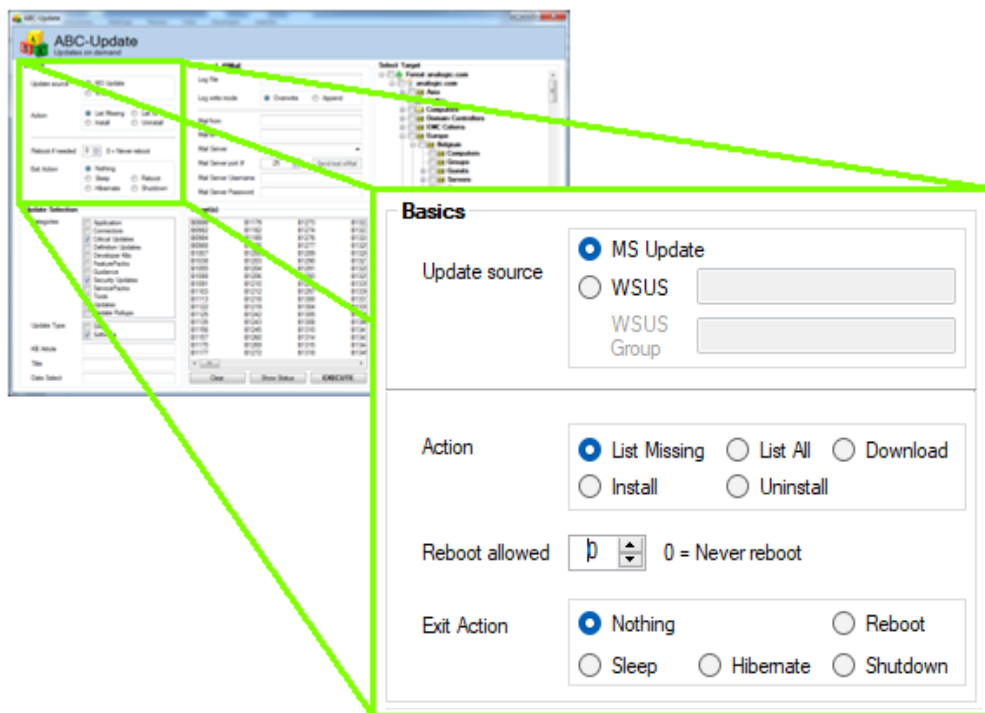
WSUS Group
Most sites do not use or need this, and the field can be left blank.
Field is used for client side targeting, where the client instruct the WSUS server about which particular WSUS computer group it should belong to.
Read more here: https://docs.microsoft.com/en-us/windows-server/administration/windows-server-update-services/manage/managing-wsus-client-computers-and-wsus-computer-groups

Action:
Uninstallation only works with updates which have been installed from a WSUS. This is a limitation of MS Update.
If you try to uninstall updates that is installed from MS Update
it only gives the error code
0x80240028 - WU_E_UNINSTALL_NOT_ALLOWED
If you need to uninstall such updates use the
Dism.Exe utility available from Windows 7

Reboot_Loops:
This switch control reboots after installations or uninstalls. A value higher than 0 will install updates and reboot if needed by any of the installations. After each successful update and reboot ABC-Update start again and continue execution, until max reboot count is reached, or until all updates are installed.

Exit Action:
When the program has finished (Maybe after a series of reboots) you can control what the ABC-Update tool should do next.

Select what to Report / Install / Uninstall

Categories:
Combination of "Critical" and
"Security" is what MS would
refer to as "Important" updates.

Update Type:
MS Updates comes in two flavors
Most users would prefer to get
drivers from other sources and only
patch software.

KB Article
Each update has a number in the
MS Knowledge Base library. And we can
filt er on these numbers.
Accept a comma separated list of KB
numbers
Like: KB2631813,KB2231652,KB2243533

Use a "-" sign in front of a KB number to
exclude updates
Like: - KB2631813

Title:
Updates can also be selected by title.
    * Matches anything
    % Matches one character
    # Matches one digit

Comma separated list is accepted
Like: *.NET*,*Microsoft Office*2010*

Use a "-" sign in front of a title pattern to exclude updates with this title match
Like: -*SilverLight*

Date Select:
Some of us do not want to install the latest updates. With ABC-Update you can select updates based on
a date interval. Like for instance "all updates more than 30 days old"

```
Format: From-To
Default *,*              Meaning all

Examples
*,dd.mm.yyyy             from anytime    to  dd.mm.yyyy
dd.mm.yyyy,Now           from dd.mm.yyyy to  Now
dd.mm.yyyy,-30           from dd.mm.yyyy to  30 days ago
```
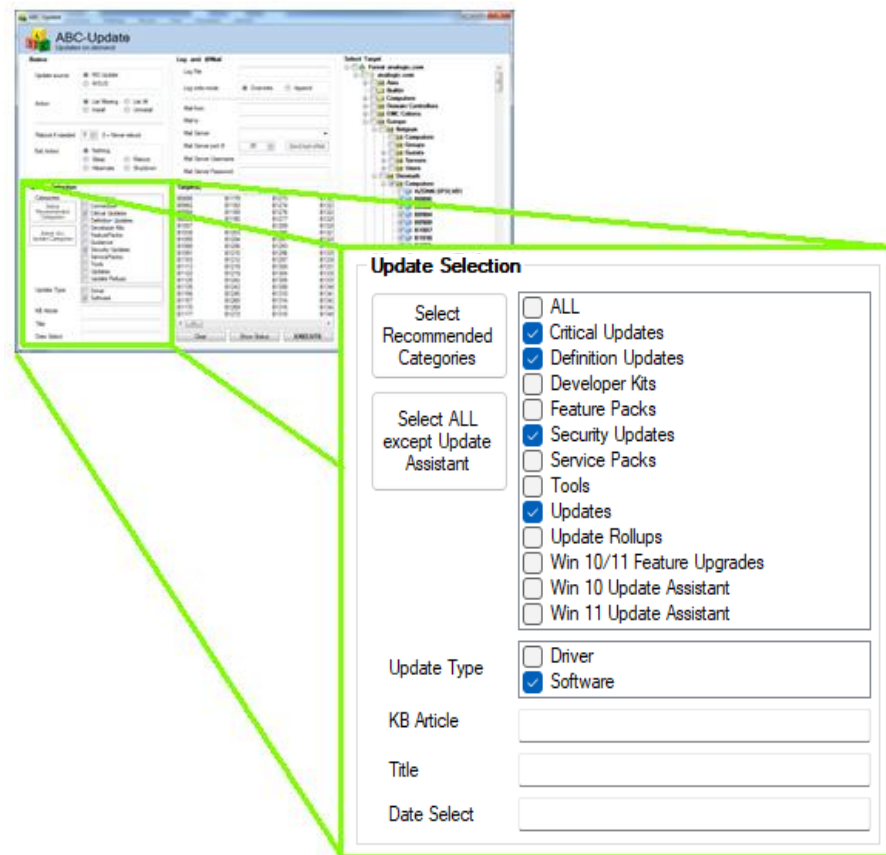
eMail and logging options

Log File:
ABC-Update can log all activity to a file on the client. Logging also works in the cases where you use ABC-Update to control a reboot loop then the log file will contain data from all iterations.

Log write mode:
Choose to append or overwrite

Mail options:
ABC-Update can send status eMails when finished.

Mail to: Comma separated list accepted
Mail server: Sending SMTP server name or IP address
Port #: Port 25 is default

If sending SMTP server require authentication it is possible to specify username/password and in that case port 587 would often be used, but it all depends on the SMTP server used for mail delivery.
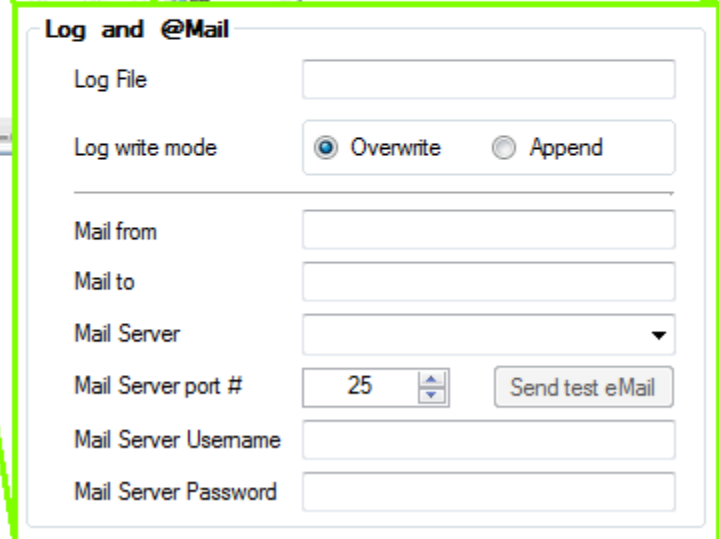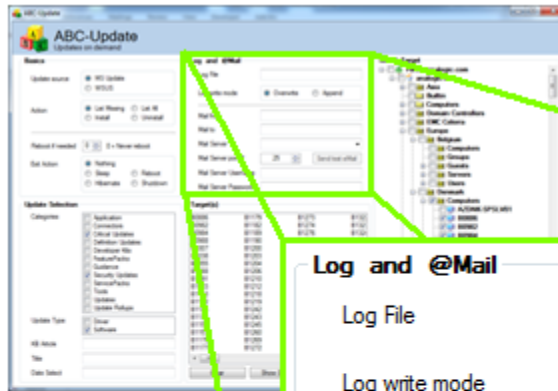
Choice of SMTP server tell the client where it should deliver the eMail, it can be a smarthost on the network or any other SMTP server where the client have access and which is willing to deliver the eMail. Click the "down" arrow to see a list of possible choices found from the "To Address" in the DNS system – while this will work for most clients there might be local policies and restrictions enforced that require another SMTP server.
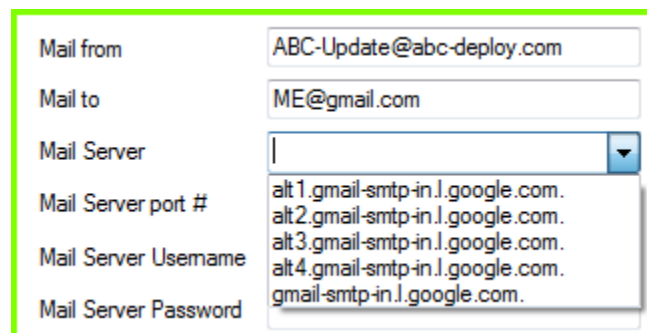
Showing SMTP servers to choose from
Found by looking up MX records for the send to domain

Select computers for update

Computers for updating can be selected
from Windows AD, from files or typed
directly.

This is you AD browser to select computers
for updating.
Clicking an OU which will select all
computers in the OU, or even
the entire domain can be selected.

While this might include quite many
computers it is not a problems to
ABC-Update who can easily handle hundreds of simultanious
remote update sessions but it might be challenging to your
network or to the WSUS if it get hammered by hundreds of
simultanious update operations.
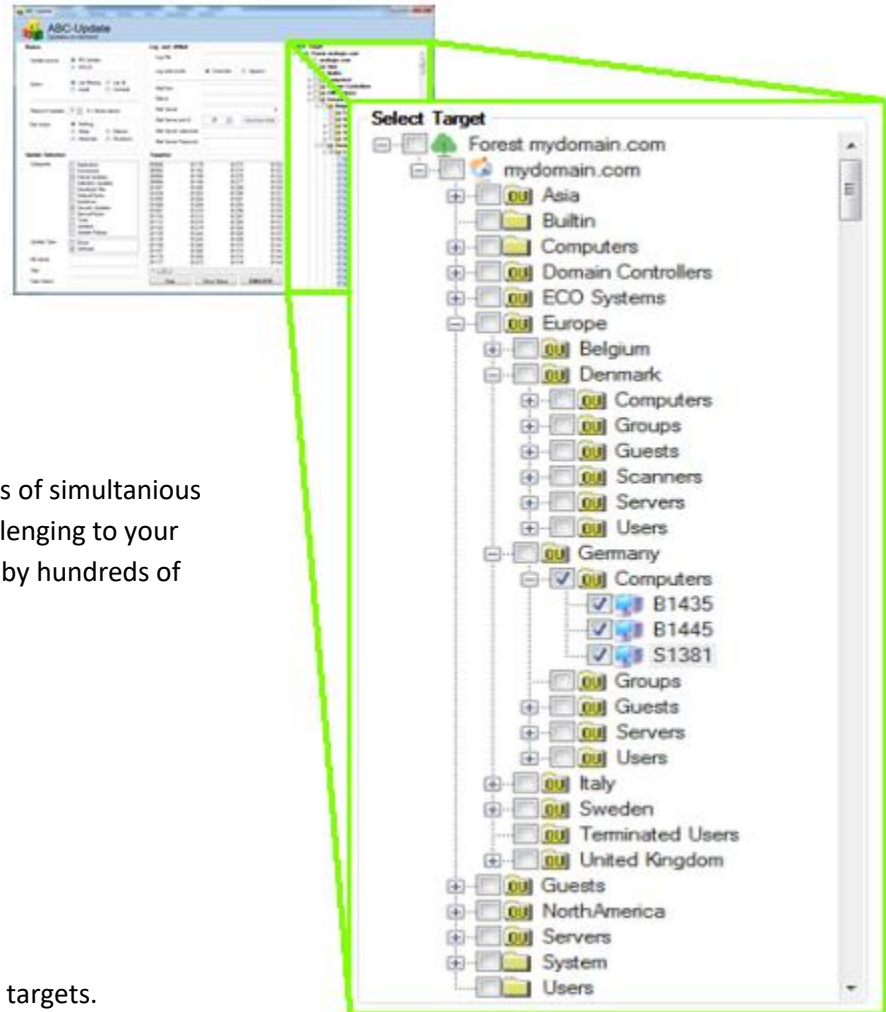
Or click the "input" button to write name of targets.
Named targets can be saved to a file for later use, and you can
read targets from files.
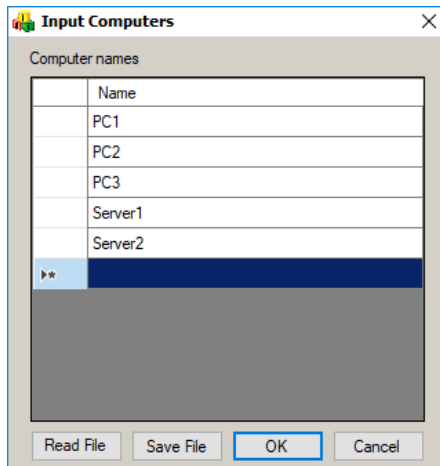
Schedule in a Service Window

For systems that you cannot patch or reboot during work hours it is practical to schedule updates and
reboots during night time. Use ABC-Update to define a service window and kick off operations to only

run only in that timespan.

As sysadmins we are used to perform critical tasks on servers in the middle of the night, but why not stay in bed and let ABC-Update perform scheduled updates and reboots, and wake up in the morning to check your emails and logs.

Scheduled update tasks are not appropriate for every situation. Some updates or reboots might be too critical to be executed without manual oversight and you will always need to be prepared for something to go wrong. We all experienced servers not starting after a reboot due to some unpredicted error. It might be a nasty hardware error that only shows at the reboot, or an update might show unpredicted negative side effects. However, assuming you've decided that you want to run updates/reboots in the middle of the night, here's how you can do it with ABC-Update.
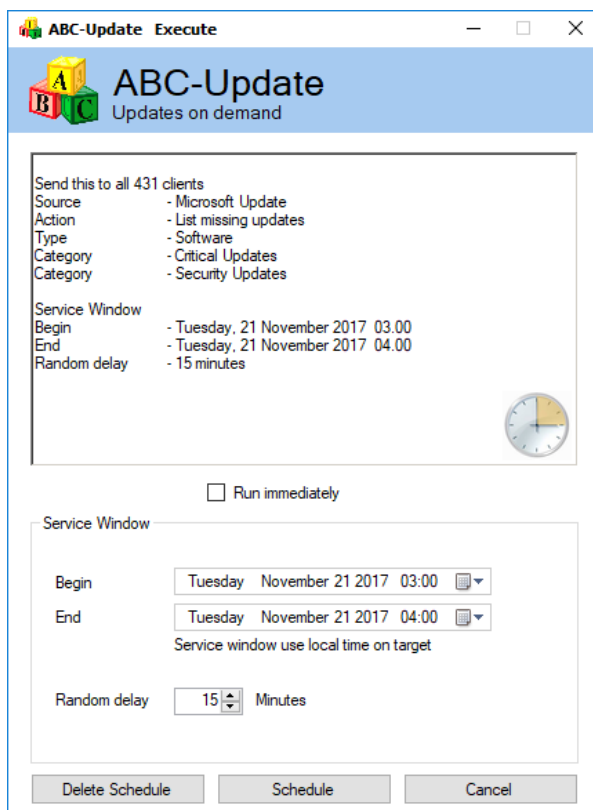
The scheduled tasks will run at the designated time.

Scheduling is only available in the GUI version, users of the command line version must schedule the execution themselves.

Delete Schedule

Button "Delete Schedule" is used to delete any saves schedules created by ABC-update at the selected machines.

Watching ABC-Update as it updates computers

When targets are selected and the program is kicked off to run at remote PCs then we see a new information window where the process of pinging, starting and executing at the remote locations can be followed. For each step it is easy to see what happens, and when clicking a machine name anywhere in the program we get access to a live log window for that machine where the complete process can be followed in further details.

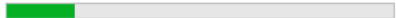Live log window from a machine searching for missing updates and installing

ABC-Update Status

ABC-Update
Updates on demand

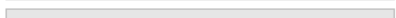**Click the progressbars for details**

Working	7
Finished	2
Status Fail	4
Missing Upd.	0
Need Reboot	0

ABC-Update process finished

	Client	Time	Status
▶	S1559	05-03-2017 08:17:18	Finished
	S1560	05-03-2017 08:17:18	Finished

ABC-Update B1760

Log (B1760)

Admin Share C$ Computer Manager   Remote Command . . .   Remote Desktop
Reboot . . .   Shutdown . . .

```
12/09/2021 13.42.35 Ping: Success <1 ms
12/09/2021 13.42.35 Started OK
12/09/2021 13.42.56 Working ...


Time                   : 12/09/2021 13.42.35
Computer Name          : B1760
Windows version        : Windows 10 Enterprise / 21H1
Reboot request         : Yes

ABC-Update Version     : 2.2.9.0
Windows Update Version : 10.0.19041.1151
Update API Version     : 8.0

Action    : Install
Max reboots  : 0
Server Type  : MS Update
Type         : Driver,Software
Category     : Critical Updates
Category     : Definition Updates
Category     : Feature Packs
Category     : Security Updates
Category     : Updates
Category     : Update Rollups
Title Include: *
Query        : IsHidden=0 AND IsInstalled=0
Input require: Include


12/09/2021 13.42.36 Connecting to WindowsUpdate
    Missing    | 2021-08-10 12.00 | KB5004331 | REV.200 | 2021-08 Cumulative Up

12/09/2021 13.42.43 Build download queue


12/09/2021 13.42.43 Downloading 001 updates...
    Download present | KB5004331 | 2021-08 Cumulative Update for .NET Framework
    Download Result: Succeeded

    Successfull downloads
    001 | KB5004331 | 2021-08 Cumulative Update for .NET Framework 3.5 and 4.8 f

12/09/2021 13.42.43 001 Updates will be installed now

12/09/2021 13.42.43    001/001 | KB: 5004331 | 2021-08 Cumulative Update for .NE
                                | Succeeded, Reboot needed

Successes      :   1
Failures       :   0
Reboot requests:   2

Finished - successful, reboot required
```

Right Click Tools

Everywhere one or more computers are displayed in the program, it is possible to right click selected computers and get a menu where remote actions that can be started against the remote targets.
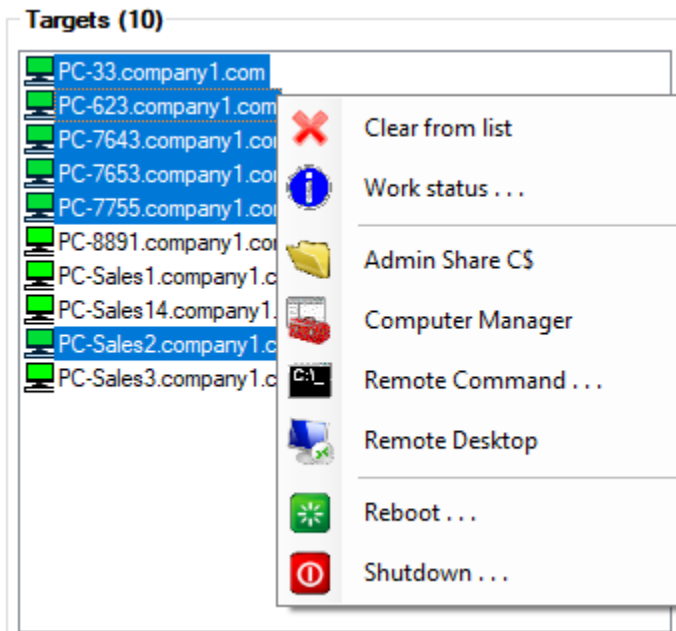
The Command Line version

Run without parameters to list all missing relevant updates from MS Update
For syntax information use - ABC-Update.exe   /?

```
ABC-Update.exe  v2.3.3
List and Install updates from MSUpdate or from managed Server (WSUS)
Documentation: Https://abc-deploy.com/files/ABC-Update.Pdf
Copyright (C) ABC-Deploy  -  Https://abc-deploy.com

Usage:
    ABC-Update.exe
    Default is to list applicable missing updates from MS Update

    [/A:] Action
          Default List
          Download | List | Install | Uninstall
    [/C:] Category(s)
          Comma separated list of Category Names to include
          Default  Include all categories
          Valid Names:
               Application
               Connectors
               CriticalUpdates
               DefinitionUpdates
               DeveloperKits
               FeaturePacks
               Guidance
               SecurityUpdates
               ServicePacks
               Tools
               UpdateRollups
               Updates
               Upgrades
    [/D:] Date Interval of update
          Default *,*           Meaning all
          Format: From-To
          *,dd.mm.yyyy          from anytime    to  dd.mm.yyyy
          dd.mm.yyyy,Now        from dd.mm.yyyy to  Now
          dd.mm.yyyy,-30        from dd.mm.yyyy to  30 days ago
    [/Exit:]
          Exit Action
          Default  "Nothing"
          Valid actions: Nothing | Logoff | Sleep | Hibernate | Restart | Shutdown
    [/Input:] Also get updates that require user input?
          Default  /Input:Exclude
          /Input:Exclude or /Input:Include
    [/K:] KB Article Number(s)
          Default  include all KB's
          Comma separated list of KB Article numbers to include or exclude
          Use a "-" sign in front of KB number to exclude an update
    [/Log:]
          Filename for logging textual output
          File is overwritten if already exist
    [/Log_Append:]
          Filename for logging textual output
          Log data is appended to file
    [/MailTo:]
          eMail address to receive status when finished
          Comma separated list accepted
    [/MailFrom:]
          eMail address to use as originator of status eMails
    [/MailServ:]
          Sending SMTP server name or IP address
          Optional specify port number smtp.mydomain.com:25 (Port 25 is default)
    [/MailUser:]
          SMTP Username (If sending SMTP server require authentication)
    [/MailPwd:]
          SMTP Password (If sending SMTP server require authentication)
    [/N:] Name / Title
          Default include all titles
          Comma separated list of Update Titles to include or exclude
          Use a "-" sign in front of Update Title to exclude an update
          * Anything
          % One character
          # One digit
    [/Q:] Query String
          Default  IsHidden=0 AND Isinstalled=0
    [/R:] Reboot If Needed  (Y/N) | Number
          Default  N
          /R:Y      to allow one reboot if needed same as /R:1
          /R:number to allow "count" reboots. Example /R:3
    [/S:] Server Type
          Default  MSUpdate
          WSUS | MSUpdate
          or specify WSUS server  /S:WSUS=http://myserver.mydomain.com:8530
    [/Schedule:] Service Window where ABC-Update is allowed to run
          Default  Run Now
          /Schedule:Name1; From Time; To Time; Delay Minutes
          Example:  /Schedule:ABC-Update1;2018-12-30 21:00;2018-12-31 22:00;60
          Example:  /Schedule:ABC-Update1;Delete
    [/T:] Type
          Default  /T:Software
          Comma separated list of update types to include
          /T:Driver or /T:Software or /T:Driver,Software
    [/TG:] WSUS Target Group
          Default  "All Computers"
          Name of target group in WSUS
          Example:  /TG:Sales Office
    [/WUA:] Windows Update Assistant
          Name of Windows Update Assistant to use if target not at latest Win10/Win11 version
          Default  Not set
          Valid values:  /WUA:Win10 | /WUA:Win11
          Example:  /WUA:Win11

Examples:

    ABC-Update.exe
    Default is to list installed and applicable missing updates from MSUpdate

    ABC-Update.exe /S:WSUS
    List applicable but missing updates from WSUS server

    ABC-Update.exe /S:MSUpdate /A:Install /R:N
    Install all applicable updates from MS Update
    No reboot

    ABC-Update.exe /S:WSUS /A:Install /R:3 /C:SecurityUpdates
    Install all applicable SecurityUpdates from WSUS server
    Reboot if needed - Max 3 times

    ABC-Update.exe /S:WSUS /A:UnInstall /R:N /K:KB2585542,KB2631813
    Uninstall two specific updates installed from WSUS Server
```
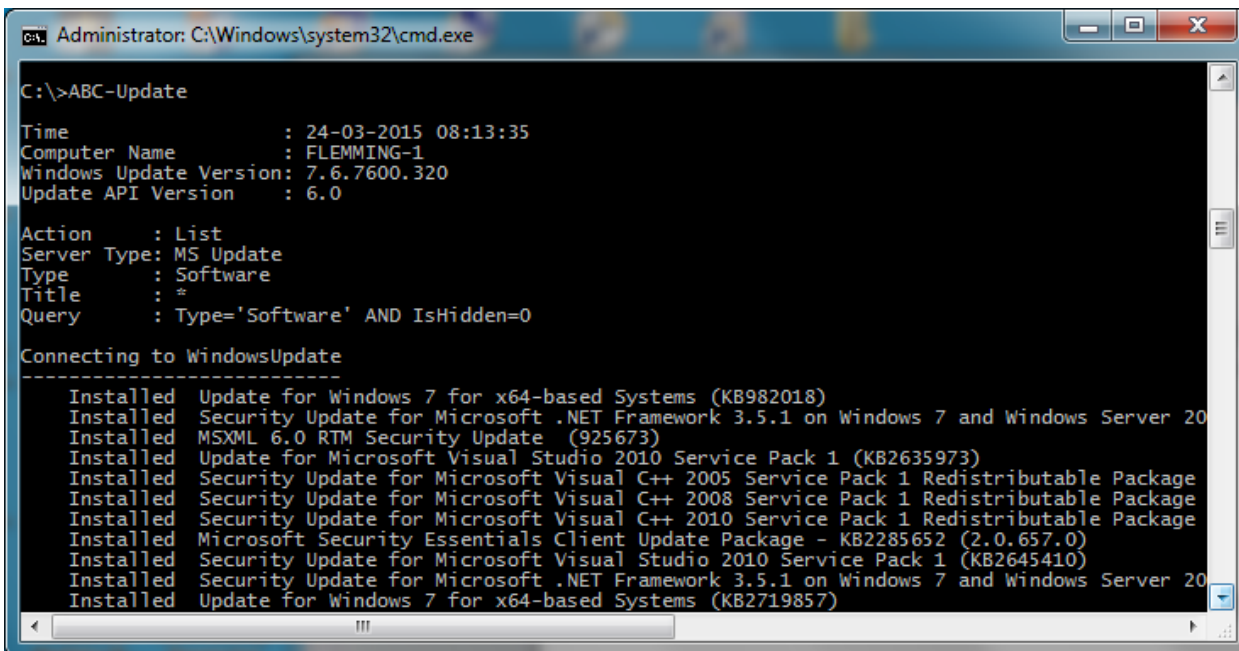
Examples

List all missing relevant updates from MS Update
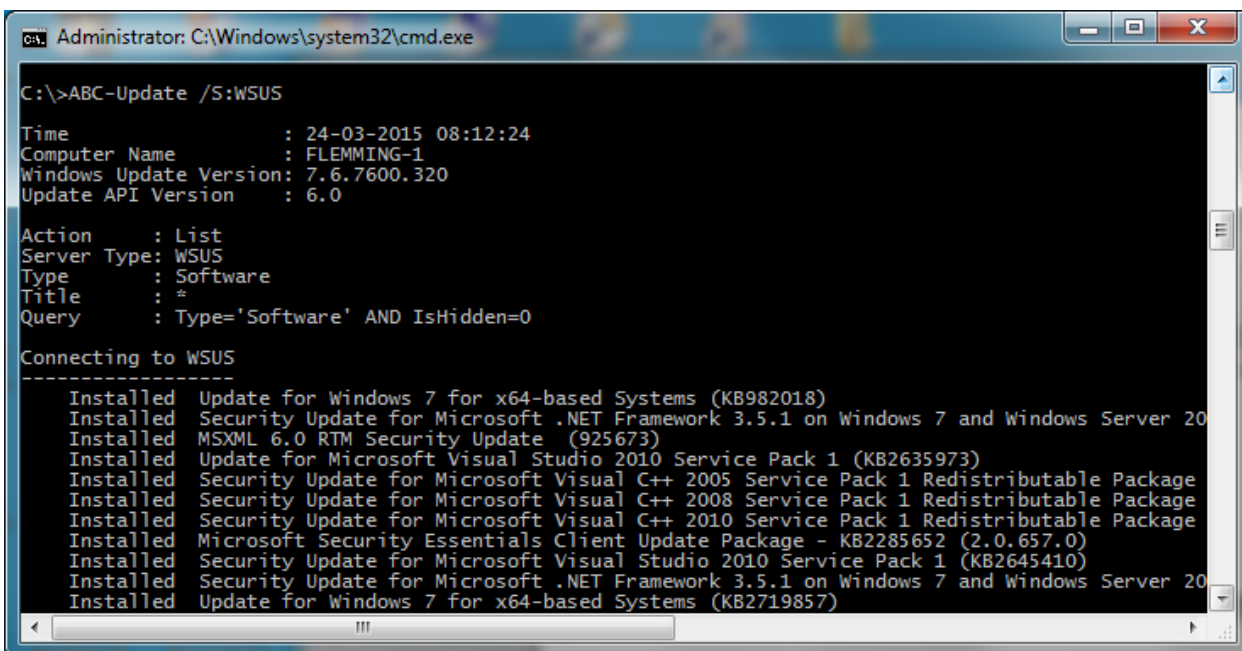ABC-Update – Default is to list from MS Update

List all relevant missing updates from WSUS server
Output from: ABC-Update /S:WSUS

Optionally specify WSUS server to use if you want to override client default.
For example, enter http://*wsusServer*[:*port*], where *wsusServer* is the name of the WSUS server, and
port is the port number if the WSUS server uses a port other than port 80.
Port 8530 is the most used port for WSUS.

List, download and install all missing updates of type Software from WSUS. No reboot
ABC-Update.exe /S:WSUS /A:Install /Q:IsInstalled=0 /T:Software

```
Administrator: C:\Windows\system32\cmd.exe

C:\>ABC-Update.exe /S:WSUS /A:Install /Q:IsInstalled=0 /T:Software

Time                 : 24-03-2015 08:16:29
Computer Name        : FLEMMING-1
Windows Update Version: 7.6.7600.320
Update API Version   : 6.0

Action    : Install
Server Type: WSUS
Type      : Software
Title     : *
Query     : Type='Software' AND IsInstalled=0

Connecting to WSUS
------------------
    Missing     Security Update for Microsoft Visual C++ 2010 Service Pack 1 Redistributable Package
    Missing     Update for Windows 7 for x64-based Systems (KB3014406)
    Missing     Security Update for Windows 7 for x64-based Systems (KB3019215)
    Missing     Definition Update for Microsoft Security Essentials - KB2310138 (Definition 1.195.92.

Build collection of updates to download:
----------------------------------------
    Adding: Security Update for Microsoft Visual C++ 2010 Service Pack 1 Redistributable Package (KB
    Adding: Update for Windows 7 for x64-based Systems (KB3014406)
    Adding: Security Update for Windows 7 for x64-based Systems (KB3019215)
    Adding: Definition Update for Microsoft Security Essentials - KB2310138 (Definition 1.195.92.0)

Downloading 004 updates...
-------------------------
    Download Result: Succeeded
    Successfull downloads:
    001 Security Update for Microsoft Visual C++ 2010 Service Pack 1 Redistributable Package (KB2565
    002 Update for Windows 7 for x64-based Systems (KB3014406)
    003 Security Update for Windows 7 for x64-based Systems (KB3019215)
    004 Definition Update for Microsoft Security Essentials - KB2310138 (Definition 1.195.92.0)

004 Updates will be installed now
---------------------------------
*    Start  : 001/004
     Title  : Security Update for Microsoft Visual C++ 2010 Service Pack 1 Redistributable Package (K
     Status : Succeeded, Reboot needed
*    Start  : 002/004
     Title  : Update for Windows 7 for x64-based Systems (KB3014406)
     Status : Succeeded, Reboot needed
*    Start  : 003/004
     Title  : Security Update for Windows 7 for x64-based Systems (KB3019215)
     Status : Succeeded, Reboot needed
*    Start  : 004/004
     Title  : Definition Update for Microsoft Security Essentials - KB2310138 (Definition 1.195.92.0)
     Status : Succeeded

Status
--------------------
Successes       :   4
Failures        :   0
Reboot requests:    3

C:\>
```

List and install all missing Security Updates from WSUS. Reboot if needed
ABC-Update.exe /S:WSUS /A:Install /R:Y /C:SecurityUpdates /Q:IsInstalled=0

```
Administrator: C:\windows\system32\cmd.exe                                    _ □ X

C:\>
C:\>ABC-Update.exe /S:WSUS /A:Install /R:Y /C:SecurityUpdates /Q: IsInstalled=0 AND isAssigned=1

Windows Update Version: 7.5.7601.17514
Update API Version: 6.0

Action      : Install
Server Type: WSUS
Query       : Type='Software' AND IsInstalled=0 AND isAssigned=1
Category    : SecurityUpdates

Connecting to WSUS
------------------
    Missing     Security Update for Windows 7 for x64-based Systems (KB2631813)
    Missing     Security Update for Windows 7 for x64-based Systems (KB2585542)
    Missing     Security Update for Windows 7 for x64-based Systems (KB2690533)
    Missing     Security Update for Windows 7 for x64-based Systems (KB2620704)

Build collection of updates to download:
----------------------------------------
    Adding: Security Update for Windows 7 for x64-based Systems (KB2631813)
    Adding: Security Update for Windows 7 for x64-based Systems (KB2585542)
    Adding: Security Update for Windows 7 for x64-based Systems (KB2690533)
    Adding: Security Update for Windows 7 for x64-based Systems (KB2620704)

Downloading updates...
----------------------
    Download Result: Succeeded
    Successfull downloads:
    1> Security Update for Windows 7 for x64-based Systems (KB2631813)
    2> Security Update for Windows 7 for x64-based Systems (KB2585542)
    3> Security Update for Windows 7 for x64-based Systems (KB2690533)
    4> Security Update for Windows 7 for x64-based Systems (KB2620704)

Updates will be installed now
-----------------------------
    Start   : Security Update for Windows 7 for x64-based Systems (KB2631813)
    Status : Succeeded, Reboot needed
    Start   : Security Update for Windows 7 for x64-based Systems (KB2585542)
    Status : Succeeded, Reboot needed
    Start   : Security Update for Windows 7 for x64-based Systems (KB2690533)
    Status : Succeeded, Reboot needed
    Start   : Security Update for Windows 7 for x64-based Systems (KB2620704)
    Status : Succeeded, Reboot needed

Booting in 30 sec.

C:\>
```

Uninstalling Updates

The /A:Uninstall option uninstalls updates.

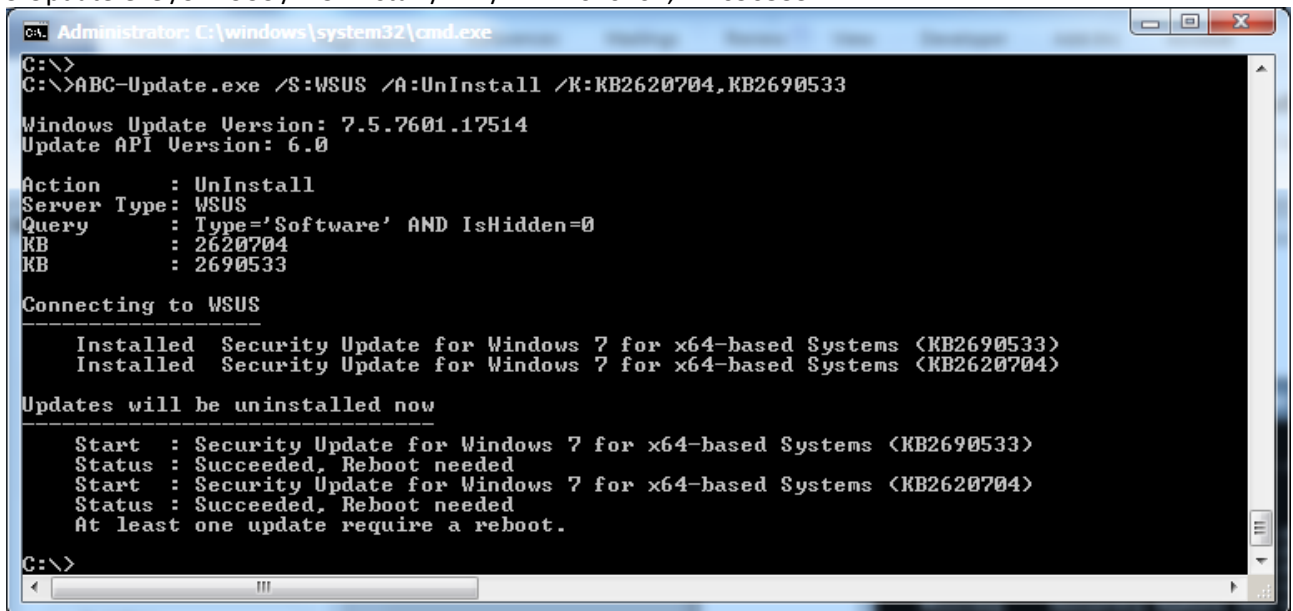For example, to uninstall KB2631813 and KB2631414
ABC-Update.exe /A:Uninstall /S :WSUS /K: KB2631813,KB2631414

Uninstallation only works with updates which have been installed from a WSUS. This is a limitation of MS Update. If you try to uninstall updates that is originally installed from MS Update it only gives the error code 0x80240028 - WU_E_UNINSTALL_NOT_ALLOWED
If you need to uninstall such updates use the Dism.Exe utility available from Windows 7

Uninstall two named updates. No reboot
ABC-Update.exe /S:WSUS /A:UnInstall /R:N /K: KB2620704,KB2690533

```
C:\>
C:\>ABC-Update.exe /S:WSUS /A:UnInstall /K:KB2620704,KB2690533

Windows Update Version: 7.5.7601.17514
Update API Version: 6.0

Action      : UnInstall
Server Type : WSUS
Query       : Type='Software' AND IsHidden=0
KB          : 2620704
KB          : 2690533

Connecting to WSUS
-------------------
    Installed  Security Update for Windows 7 for x64-based Systems (KB2690533)
    Installed  Security Update for Windows 7 for x64-based Systems (KB2620704)

Updates will be uninstalled now
-------------------------------
    Start  : Security Update for Windows 7 for x64-based Systems (KB2690533)
    Status : Succeeded, Reboot needed
    Start  : Security Update for Windows 7 for x64-based Systems (KB2620704)
    Status : Succeeded, Reboot needed
    At least one update require a reboot.

C:\>
```

Filter options

Filtering by Category

Updates are grouped by MS into Categories, and we can filter on these categories with the /C: switch

The switch accepts a comma separated list of categories
Like: ABC-Update.exe /C: FeaturePacks, SecurityUpdates, UpdateRollups

Available categories are:
  Application
  Connectors
  CriticalUpdates
  DefinitionUpdates
  DeveloperKits
  FeaturePacks
  Guidance
  SecurityUpdates
  ServicePacks
  Tools
  UpdateRollups
  Updates
  Upgrades

Filtering by KB number

Each update has a number in the MS Knowledge Base library.
And we can filter on these numbers with the /K: switch

The switch accept a comma separated list of KB numbers
Like: ABC-Update.exe /K: KB2631813,KB2231652,KB2243533

Use a "-" sign in front of a KB number to exclude updates with this KB number
Like: ABC-Update.exe /K:- KB2631813,KB2231652,KB2243533

Filtering by Type

Updates comes from Microsoft as two types, "Software" or "Driver"
The /T: switch determines which type you will be working with. Default is "Software"

The switch accept a comma separated list of update types
Like: ABC-Update.exe /T: Software,Driver

Filtering by Name / Title

Updates can be selected form their title.
Use the /N: switch to specify a pattern to search for.
Difference between uppercase and lowercase characters are ignored.

  * Matches anything
  % Matches one character
  # Matches one digit

The switch accept a comma separated list
Like: ABC-Update.exe /N: *.NET*,*Microsoft Office*2010*

Use a "-" sign in front of a title pattern to exclude updates with this title match
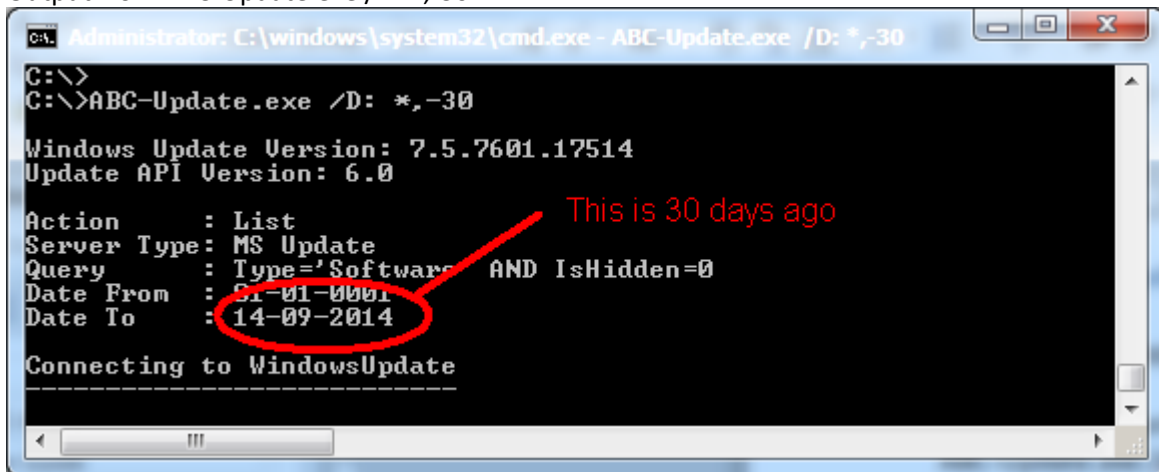Like: ABC-Update.exe /N: *.NET*,-*Microsoft Office*2010*

Filtering by Date

Some of us do not want to install the latest updates. With ABC-Update you can select updates based on a date interval. Like for instance "all updates more than 30 days old"
Controlled by the /D: switch

```
[/D:] Date Interval of update
      Format: From-To
      Default *,*              Meaning all
      *,dd.mm.yyyy             from anytime    to  dd.mm.yyyy
      dd.mm.yyyy,Now           from dd.mm.yyyy to  Now
      dd.mm.yyyy,-30           from dd.mm.yyyy to  30 days ago
```

  Output from ABC-Update.exe /:D *,-30

Filtering by query string

ABC-Update form and send queries to the relevant update server to select the collection of updates that will be listed, installed, or uninstalled

The available switches to select updates should cover most needs so that you will not need to learn about formatting query strings, but you have the freedom to define the query string yourself if you want.
For more information about formatting queries please visit:
http://msdn.microsoft.com/en-us/library/aa386526%28VS.85%29.aspx

One example of a query string matching what MS describes as "Express Updates" are:
   /Q:"Type=Software AND isHidden=0 and isInstalled=0 and IsAssigned=1"

Controlling reboots and reboot loops

Use the /R: switch to control reboots after installations or uninstalls

/R:N This is the default. No Reboots
/R:Y to reboot one time if any of the installations or uninstalls are requesting this
/R:*count*   ie. /R:3

Example:
ABC-Update.exe /A:Install /R:3
This will install updates and reboot if needed by any of the installations. The loop will have a maximum of 3 reboots
After each successful update and reboot, ABC-Update.exe start again and continue execution, until max reboot count is reached, or all updates are installed.

Logging

ABC-Update can log all activity to a file. Logging also works in the cases where you use ABC-Update to control a reboot loop. Then the log file will have data from all iterations.

/Log:
     Filename for logging textual output
     File is overwritten if already exist
 /Log_Append:
     Filename for logging textual output
     Log data is appended to file if it exist

Examples:
ABC-Update.exe /A:Install /Log: C:\Update.Log
Environment variables can also be used
ABC-Update.exe /A:Install /Log: %Temp%\Update_%ComputerName%.Log

eMail status

ABC-Update can send status eMails when finished.

  [/MailTo:]
      eMail address to receive status when finished
      Comma separated list accepted
  [/MailFrom:]
      eMail address to use as originator of status eMails
  [/MailServ:]
      Sending SMTP server name or IP address
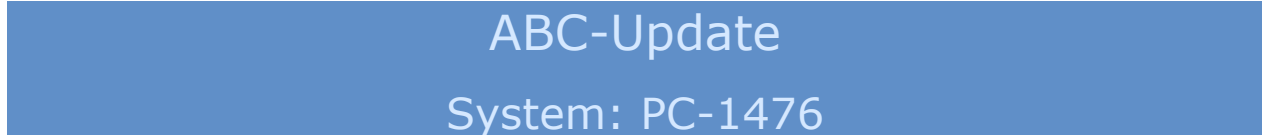   Optional specify port number smtp.mydomain.com:25 (Port 25 is default)
  [/MailUser:]
      SMTP Username (If sending SMTP server require authentication)
  [/MailPwd:]
      SMTP Password (If sending SMTP server require authentication)

eMail example

<div style="background-color:#5B8ED0; color:white; text-align:center;">

ABC-Update

System: PC-1476

</div>

```
Time                 : 14-08-2016 07:50:12
Computer Name        : PC-1476
Windows Update Version: 7.6.7601.23435
Update API Version    : 6.0

Action       : install
Max reboots  : 3
Server Type  : MS Update
Type         : Software
Title Include: *
Query        : Type='Software' AND IsHidden=0 AND IsInstalled=0

Connecting to WindowsUpdate
Missing | 2014-03-21 12:00 | KB2912390 | REV.204 | Security Update for Windows 7 for x64-based Systems
Missing | 2015-03-20 12:00 | KB3035132 | REV.201 | Security Update for Windows 7 for x64-based Systems
Missing | 2015-03-20 12:00 | KB3035126 | REV.201 | Security Update for Windows 7 for x64-based Systems

Build download queue
Adding | Security Update for Windows 7 for x64-based Systems (KB2912390)
Adding | Security Update for Windows 7 for x64-based Systems (KB3035132)
Adding | Security Update for Windows 7 for x64-based Systems (KB3035126)

Downloading 007 updates...
Download Result: Succeeded
001 Security Update for Windows 7 for x64-based Systems (KB2912390)
002 Security Update for Windows 7 for x64-based Systems (KB3035132)
003 Security Update for Windows 7 for x64-based Systems (KB3035126)

007 Updates will be installed now
* Start | 001/007 | KB: 2912390 | Security Update for Windows 7 for x64-based Systems (KB2912390)
  Status | Succeeded
* Start | 002/007 | KB: 3035132 | Security Update for Windows 7 for x64-based Systems (KB3035132)
  Status | Succeeded, Reboot needed
* Start | 003/007 | KB: 3035126 | Security Update for Windows 7 for x64-based Systems (KB3035126)
  Status | Succeeded, Reboot needed

Status
Successes : 3
Failures : 0
Reboot requests: 2

Booting in 30 sec. at 14-08-2016 08:29:51
```

Network availability check

In order to ensure network is available when ABC-Update is starting, we check for ability to resolve DNS queries, and optional one can also check if a user defined server is available for ping.

Waiting for network availability is relevant when computers for some reason do not get their network connection right after Windows start. Reasons might be when computers connect to WiFi, or when slow 802.1x authentication for the LAN is used.

The GUI version use a default of max. 30 seconds to wait for DNS resolution to become active, while the command line version has more options to fine-tune the network check by using the parameter /NW:

```
Example:  /NW:30                      Wait max 30 sec. for working DNS services
Example:  /NW:30,myserver.mydomain.com  Wait max 30 sec. for Ping answer from myserver.mydomain.com
```

If test is timing out, then ABC-Update log this, and continue execution.

Exit actions

When the program has finished (Maybe after a series of reboots) you can control what the ABC-Update tool should do next.

/Exit:
    Default "Nothing"
    Valid actions: Nothing | Logoff | Sleep | Hibernate | Restart | Shutdown

Example:
ABC-Update.exe /A:Install /R:3 /Exit: Sleep

Return Codes

When the program exits it sets one of these return codes.

 0: successful, no reboot required
 1: successful, reboot required
 2: at least one error occurred, no reboot required
 3: at least one error occurred, reboot required
11: no updates downloaded
12: error querying MS Update
13: error querying managed server
20: Syntax Error
50: reboot/shutdown initialized successful
51: Reboot cycle successfully initiated
60: No privileges to install updates

Driver updates

DELL, HP, Lenovo and the other big vendors have started to distribute their driver packages trough Microsoft Update, and it is therefore possible to use ABC-Update to distribute these driver packages, and to keep them updated also.

Any update you want to distribute automatically and unattended cannot rely on user input, and default from ABC-Update is to avoid updates that are marked with the attribute "Might require user input" unless you ask for this specifically.
For drivers, it so happens that this attribute is set by Microsoft on almost all packages, possibly as a precaution because drivers are from 3rd party vendors and outside MS control. Vendors know about the need to run unattended, and driver packages are generally independent of user input. But a little more testing is in its place with drivers.

Using the GUI version you should simply select "Update Type" = "Drivers", and then ABC-Update will accept all the driver packages automatically.

Update Type
☑ Driver
☐ Software

If you use the command line version you must specifically accept updates that are marked to maybe require user input with the /input:Include parameter.

```
ABC-Update.exe /A:install /Type:Driver /Input:Include
```

Windows 10 & 11 Feature Upgrades

These upgrades are technically new versions of the Windows OS, which Microsoft releases every spring (18-month support) and every fall (30-month support).

With ABC-Update you can schedule Windows 10 & 11 feature upgrade deployment to non-production hours and reduce downtime, and you can decide when you want these upgrades. This reduces unproductive downtime and let you inform users well in advance.

It is also possible to update from eligible Windows 7 → Windows 10, and from eligible Windows 10 → Windows 11.
Please note however that Windows 7 Advanced editions cannot upgrade to Windows 10.

Feature Upgrades using MS Update

The recommended approach even though it might not always update to latest version. Typically, you shouldn't rush to force the upgrade during the early days of a release because it may not still be fully compatible with all hardware and software configurations. And it is one of the reasons why Microsoft releases feature updates gradually, placing temporary holds on specific devices to prevent problems.

Because of the enormous number of machines that receive Windows updates, Microsoft throttles automatic update delivery to manage the load on its servers. As a result, it may take weeks or even months for a feature update to be offered to all of the hundreds of millions of devices, and you as an IT administrator really do not know when users will be hit by the upgrade process which often take hours, and also bring new features and looks that users should be informed about beforehand.

Feature Upgrades using Windows 10/11 Update Assistant

The Windows Update Assistant is for you who cannot wait and know what you are doing.
This option downloads the relevant "Win10 Update Assistant" or "Windows 11 Update Assistant" from MS and run the upgrade process unattended. It is a 2 Mbyte download that will run unattended in the background until a reboot is required.

The Upgrade process download whatever is needed for that particular machine to upgrade it's OS, and that might be anything between a few hundred Mbytes and up to 3 Gbytes, all depending on the status of the receiving machine, and therefore it is recommended to spread upgrades over a time period, which ABC-Update can also do when you schedule for later execution in a service window.
The Windows 10/11 Update Assistant is automatically uninstalled when the upgrade finish.

Windows 10 Update Assistant

- Update eligible Windows 7 → Windows 10
- Update Windows 10 machines to latest version.

Windows 11 Update Assistant

- Update eligible Windows 10 → Windows 11
- Update Windows 11 machines to latest version.

Feature Upgrades using the GUI

It is strongly recommended that you also select "Critical Updates" and "Security Updates" because there might be patches to the new Windows 10/11 version that should be applied after the OS upgrade.

ABC-Update give you tree options.

- "Win 10/11 Feature Upgrades"
  Uses normal MS update process from MS or WSUS.
- "Win 10 Update Assistant"
  The Windows Update Assistant is for you who cannot wait and know what you are doing. This option downloads the "Win10 Update Assistant" from MS and run the upgrade process unattended. Both Windows 7 and Windows 10 machines will be updated to latest Windows 10 version.
- "Win 11 Update Assistant"
  Downloads the "Win11 update assistant" from MS and run the upgrade process unattended.
  This will perform an unattended upgrade to latest Windows 11 version and can also upgrade eligible Windows 10 machines to Windows 11.

Feature Upgrades using the command line tool

It is strongly recommended that you also select "Critical Updates" and "Security Updates" because there might be patches to the new Windows 10/11 version that should be applied after the OS upgrade.

Using MS Update:

Use the category "Upgrades" to ask a feature upgrade from MS Update or WSUS

```
ABC-Update.Exe /A:Install /R:3 /C:Upgrades,SecurityUpdates, CriticalUpdates
```

Using "Windows 10 Update Assistant"

Specify to use the "Windows 10 Update Assistant"

```
ABC-Update.Exe /A:Install /R:3 /WUA:Win10 /C: SecurityUpdates, CriticalUpdates
```

Using "Windows 11 Update Assistant"

Specify to use the "Windows 11 Update Assistant"

```
ABC-Update.Exe /A:Install /R:3 /WUA:Win11 /C: SecurityUpdates, CriticalUpdates
```

When used together with ABC-Deploy

ABC-Update also has a sister tool named ABC-Deploy
It is a software deployment and inventory tool for Windows and use a policy-driven approach to distribute software or any other scriptable tasks to Windows endpoints. And ABC-Deploy is also packed with inventory features and are capable of reporting on patches installed or missing.

ABC-Deploy is a commercial tool for Windows AD shops scaling to thousands of computers, and it is completely free with all pro features for smaller networks.
Compare versions in this table.

Where pc's also have the agent from ABC-Deploy installed we deliver all data collected to the SQL Database behind ABC-Deploy. And all this data about updates are then used inside ABC-Deploy for reporting with options to drill down in the data.
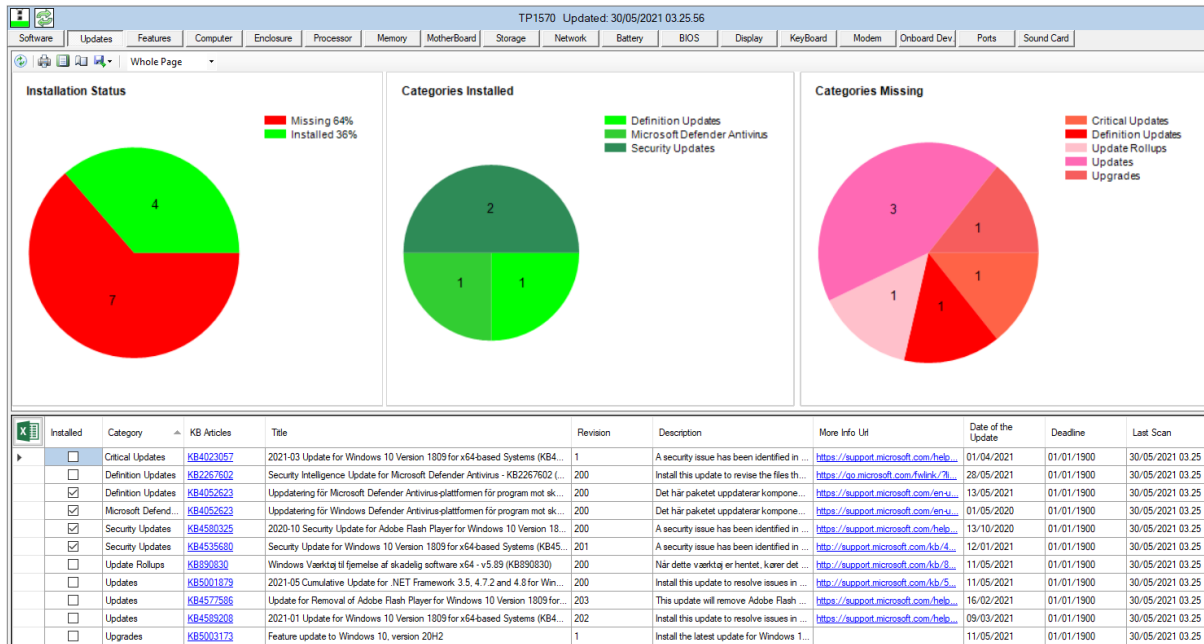
ABC-Deploy will also give you visibility into which Windows 10 versions you have.
Again with drill down capabilities, and option to export all data to excel for further investigation.

And remember that you can always use ABC-Update to push unattended Windows 10 feature
Upgrades over the network, and that these upgrades can be scheduled for off hours.
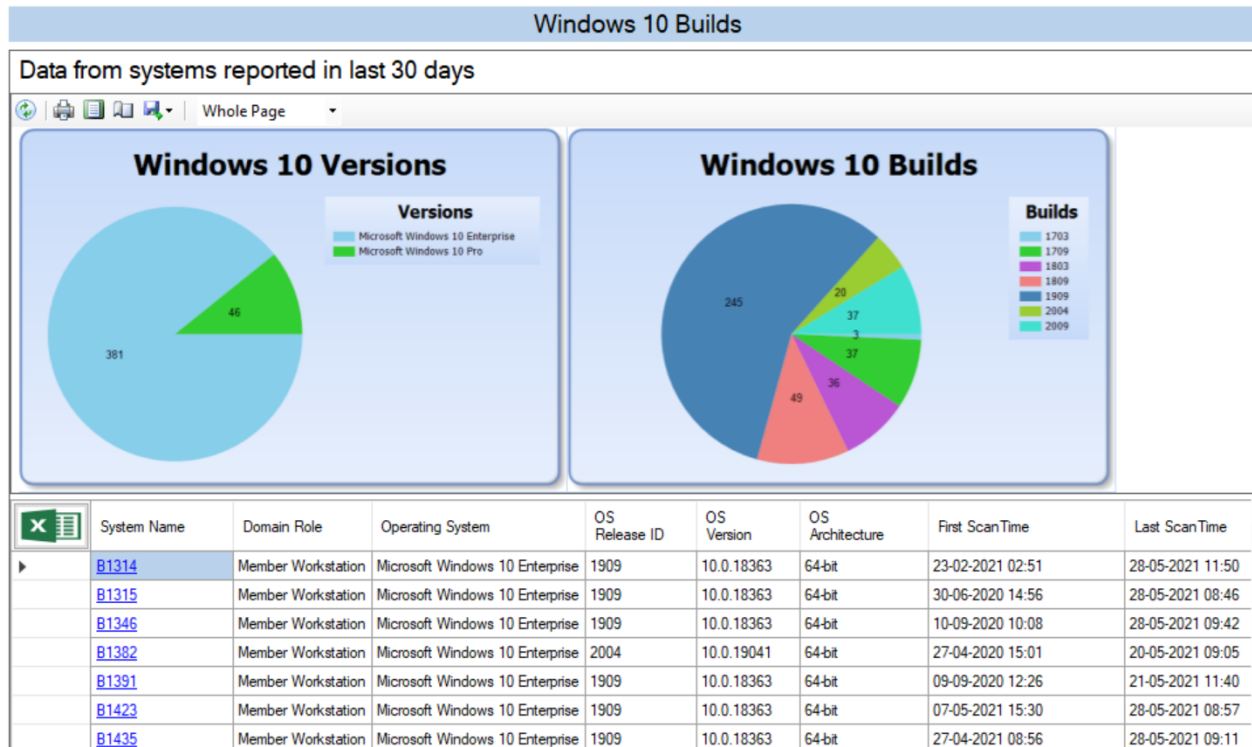
Data as exported to MS Excel

[Click to download ABC-Deploy](#)