User Guide

ABC-Update V2.2.4
install Windows Updates on demand

Simple as your first ABC
Flexible as an alphabet

November 2020
ABC-Deploy.Com
# ABC-Update

## User Guide

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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 connects 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
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

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 filter 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.
Select computers for update

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

This is your 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 problem to ABC-Update who can easily handle hundreds of simultaneous remote update sessions but it might be challenging to your network or to the WSUS if it gets hammered by hundreds of simultaneous update operations.

Or click the “input” button to write the 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
The Command Line version
Run without parameters to list all missing relevant updates from MS Update
For syntax information use - ABC-Update.exe  /?

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

/[A]: Action
Default List
List | Install | Uninstall

/[S]: ServerType
Default MSUpdate
WSUS | MSUpdate

/[R]: Reboot If Needed (Y/N) | Number
Default N
R/Y to allow one reboot if needed same as /R:1

/[Q]: Query String
Default IsHidden=0 AND IsInstalled=0

/[T]: Type
Default Type='Software'
Comma separated list of update types to include
/Driver or /Software or /Driver,Software

/[C]: Category(s)
Default include all categories
Comma separated list of Category Names to include
Valid Names:
Application
Connectors
CriticalUpdates
DefinitionUpdates
DeveloperKits
FeaturePacks
Guidance
SecurityUpdates
Service Packs
Tools
UpdateRollups
Updates
Upgrades

/[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

/[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

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

/[Log]: File name for logging textual output
File is overwritten if already exist
/[Log_Append]: File name 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]: 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)

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

Examples:
ABC-Update.exe
Default is to list applicable but missing updates from MSUpdate

ABC-Update.exe v2.2.2
List and install updates from MSUpdate or from managed Server (WSUS)
Copyright (C) ABC-Deploy - http://abc-deploy.com
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
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
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
Filter options

Filtering by Category
Updates are grouped into Categories, and it is possible to filter by Category. And we can filter on these categories with the /C: switch

The switch accept 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 from 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

This is 30 days ago
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.

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"

For more information about formatting queries please visit:

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

ABC-Update
System: B1476

Time                 : 14-08-2016 07:50:12
Computer Name       : B1476
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
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
**Windows 10 Feature Upgrades**

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

Prior to introducing Windows 10, Microsoft would release a new Windows operating system about every 3 years. A new operating system brought new feature sets and interface layouts, but now with Windows 10, the operating system evolves over time ensuring that end users aren’t thrown into a new world, but rather slowly adapt to these new changes.

Because of the enormous number of machines that receive Windows updates, Microsoft "throttles" 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 will take hours and also bring new features and looks that users should be informed about beforehand.

With ABC-Update you can schedule Windows 10 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.

Here is where you can select to upgrade to the latest available Windows 10 in ABC-Update, and it is recommended that you also select “Critical Updates” and “Security Updates” because there might be patches to the new Windows 10 version that should be applied after the OS upgrade.

![Update Selection Table]

**How Windows 10 Upgrades are implemented in ABC-Update**

The process will download and run an Updater from Microsoft called “Windows 10 Update Assistant”. This is a 2 Mbyte download that will run unattended in the background until a reboot is required.

The Upgrade process will then 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.
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.

New from version 2.2.2. where pc’s also have the agent from ABC-Deploy installed we deliver all data collected by ABC-Update to the ABC-Deploy SQL DB. And all this nice data about updates are then used inside ABC-Deploy for reporting a consolidated view, with options to drill down in the data.

Click to download ABC-Deploy