HOWTO: Backup and View All Contents of an Android Device (https://pleasework.robbievance.net/howto-backup-and-view-all-contents-of-an-android-device/)

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Nov 25 2018

HOWTO: Force (really) WSUS Clients to Check in on Demand

You're most likely here because you are an IT administrator and you have a network that deploys Windows Updates via Windows Server Update Services or WSUS. Perhaps you're relatively new to WSUS or you're a veteran that has been using the product since its inception. In either case, you are mostly frustrated because even in the latest release of WSUS that there is no *reliable* way to force clients to check in and report their status. You know about **wuauclt /reportnow** and **/detectnow**. You may even be aware of the .NET method **(New-Object -ComObject Microsoft.Update.AutoUpdate).DetectNow().**

But despite having tried everything, you're at at a loss. All you want is for your clients to report their current status into WSUS on demand. Is that really too much to ask? Actually, it might be. If you google "force wsus client to check in to wsus server", you'll see almost 300,000 results. And I swear I've read every single one of them and tried every single suggestion.

I finally decided to take matters into my own hands. I built a lab environment consisting of a domain controller, a WSUS server and a client machine. I then proceeded to deep dive with process monitor and packet analyzers to try and find a way to "trick" the WSUS client into thinking it's time to report in. After many hours at this, I was just about to give up when I accidentally stumbled upon the magic command I was looking for.

Ladies and gentlemen, without further adieu, I present to you, THE command to run on your Windows clients to force them to check in on demand:

$updateSession = new-object -com "Microsoft.Update.Session";
$updates=$updateSession.CreateupdateSearcher().Search($criteria).Updates

Running this command will "prime" the Windows Update engine to submit its most recent status on the next poll. To trigger that next poll, use:

wuauclt /reportnow

Yes, I know. you've done that a million times and it's never worked. But if you run the command above first, then it works. I've had a nearly 100% rate with this now over probably hundreds of machines.

To use it, open an administrative PowerShell prompt on the client machine and paste that in. It won't return anything but a few moments later you should see the WSUS last contact and last detect time update and more importantly, if all the updates were installed successfully, the computer will instantly change to green in the WSUS console. I've tested it on both Windows 7 and Windows 10 clients successfully.

If you want to run centrally from your WSUS server, I found that you can't use PowerShell remoting because of some kind of permissions thing. There may be a way around that but for now I found that psexec works fine. So below is a function you can add to your profile.ps1 file on your WSUS server to allow you to automatically update any client machines on demand:

This has been a life changer in terms of improving my frustration level with managing WSUS. I hope you find it useful.

```
Function Force-WSUSCheckin($Computer)
{
   Invoke-Command -computername $Computer -scriptblock { Start-Service wuauserv -Verbose }
   # Have to use psexec with the -s parameter as otherwise we receive an "Access denied" message loading the comobject
   $Cmd = '$updateSession = new-object -com "Microsoft.Update.Session";$updates=$updateSession.CreateupdateSearcher().Search($cr
iteria).Updates'
   &amp; c:\bin\psexec.exe -s \\$Computer powershell.exe -command $Cmd
   Write-host "Waiting 10 seconds for SyncUpdates webservice to complete to add to the wuauserv queue so that it can be reported
on"
   Start-sleep -seconds 10
   Invoke-Command -computername $Computer -scriptblock
   {
      # Now that the system is told it CAN report in, run every permutation of commands to actually trigger the report in operat
ion
      wuauclt /detectnow
      (New-Object -ComObject Microsoft.Update.AutoUpdate).DetectNow()
      wuauclt /reportnow
      c:\windows\system32\UsoClient.exe startscan
   }
}
```

(https://pleasework.robbievance.net/author/robbie/)

Robbie

- (mailto:robbie.vance@gmail.com)

40 comments

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1.
   - Kyle on February 22, 2019
   - # (https://pleasework.robbievance.net/howto-force-really-wsus-clients-to-check-in-on-demand/#comment-65769)
   - Reply (/howto-force-really-wsus-clients-to-check-in-on-demand/?replytocom=65769#respond)

   Worked for me! Thanks! I’ve been looking everywhere for answers

   1.
      - Mats on February 7, 2020
      - # (https://pleasework.robbievance.net/howto-force-really-wsus-clients-to-check-in-on-demand/#comment-73123)
      - Reply (/howto-force-really-wsus-clients-to-check-in-on-demand/?replytocom=73123#respond)

      I was just about to give up.

      Thanks a lot!

2.
   - Laurenz Duerbeck on March 1, 2019
   - # (https://pleasework.robbievance.net/howto-force-really-wsus-clients-to-check-in-on-demand/#comment-66135)
   - Reply (/howto-force-really-wsus-clients-to-check-in-on-demand/?replytocom=66135#respond)

Hi Robbie.
That's the most promising approach I've found on the web. And just like you I tried a lot of Things. #-(
It sometimes works for me but not always. I'm trying to figure out what causes the problem....
I always have to run "Usoclient RefreshSettings" first, since my Win 10 1803 does not reflect all settings although group policies are already applied. Seems to me that this is a problem with Windows' servicing stack.
One more question: Does your script also work if no one is actually logged on interactively?

3.
    - Robbie () on March 7, 2019
    - Author
    - # (https://pleasework.robbievance.net/howto-force-really-wsus-clients-to-check-in-on-demand/#comment-66501)
  - Reply (/howto-force-really-wsus-clients-to-check-in-on-demand/?replytocom=66501#respond)

I realize I forgot a step in my instructions.

The command above "tricks" WSUS into being able to report its status. But once it's run you still have to tell it to actually report its status.

Follow up the command above with a wuauclt /reportnow and you should be golden.

Yes, the script works regardless if a user is logged in or not as you are logging in yourself via psexec.

4.
    - Renzo F. on March 18, 2019
    - # (https://pleasework.robbievance.net/howto-force-really-wsus-clients-to-check-in-on-demand/#comment-67087)
    - Reply (/howto-force-really-wsus-clients-to-check-in-on-demand/?replytocom=67087#respond)

Thanks for this, I've searching a solution to the report problem for a long time.
Just a note: there's a typo in the post: it says "wuault /reportnow" annd it shuld be "wuauclt /reportnow".

The script is correct, but it may cause confusion.

5.
    - Rudy on April 8, 2019
    - # (https://pleasework.robbievance.net/howto-force-really-wsus-clients-to-check-in-on-demand/#comment-67908)
    - Reply (/howto-force-really-wsus-clients-to-check-in-on-demand/?replytocom=67908#respond)

Is there a way to do this for 200 machines without having to log in to each one?

1.
    - Robbie () on April 8, 2019
    - Author
    - # (https://pleasework.robbievance.net/howto-force-really-wsus-clients-to-check-in-on-demand/#comment-67911)

- Reply (/howto-force-really-wsus-clients-to-check-in-on-demand/?replytocom=67911#respond)

Hi Rudy,

Yes there is. You'll need some basic PowerShell scripting experience to do so and you're environment would need to be configured to allow administrative remoting via psexec.

Here is the pseudo code to do that:

```
$Computers = (Get-ADComputers -Filter *).name

ForEach $Computer in $Computers)
{
Force-WSUSCheckin($Computer)
}
```

You'd want to add in some error handling and ping tests to speed it up and you'll need to specify the path where your psexec.exe lives.

But otherwise that's about it. I've refreshed my entire environment lots of times using this technique.

6.
  - Jonathan B on April 30, 2019
  - # (https://pleasework.robbievance.net/howto-force-really-wsus-clients-to-check-in-on-demand/#comment-69059)
  - Reply (/howto-force-really-wsus-clients-to-check-in-on-demand/?replytocom=69059#respond)

How long does it take you to run that command.. For me, it seems to be timing out..

I get a COM Error once it decides it's enough..

My WSUS assets are not reporting back to wsus, and I get a time out. I opened all firewalls on the windows client/server for testing purpose, I can reach the webpage, but in the error message it says it failed to get a HTTP reply..
I've set my IIS to the best practices except that I followed the instruction saying I should leave it at 4GB Ram..

Man .. no idea what to do from here.

1.
  - Jonathan B on April 30, 2019
  - # (https://pleasework.robbievance.net/howto-force-really-wsus-clients-to-check-in-on-demand/#comment-69060)
  - Reply (/howto-force-really-wsus-clients-to-check-in-on-demand/?replytocom=69060#respond)

Exception from HRESULT: 0x80240440
At line:1 char:1
+ $updates=$updateSession.CreateupdateSearcher().Search($criteria).Upda ...
+ ~~~

+ ~~~

One little problem: the scalar variable $criteria is not defined. That could cause some people problems, for example if they are using set-strictmode. So, presumably one can leave that out of the code. This web site seems to explain the Search method and what goes into the criteria area, though I didn't really understand it or look that hard.
https://docs.microsoft.com/en-us/windows/desktop/api/wuapi/nf-wuapi-iupdatesearcher-search (https://docs.microsoft.com/en-us/windows/desktop/api/wuapi/nf-wuapi-iupdatesearcher-search)

8.
- Roman on May 3, 2019
- # (https://pleasework.robbievance.net/howto-force-really-wsus-clients-to-check-in-on-demand/#comment-69248)
- Reply (/howto-force-really-wsus-clients-to-check-in-on-demand/?replytocom=69248#respond)

Awesome, that works! Thanks!
I didn't have the problem with getting an error when creating the COM object. Here's a minimal version assuming that that will work (and only using /reportnow):

```
Function Force-WSUSCheckin($Computer)
{
invoke-command -computername $Computer -scriptblock {
Start-Service wuauserv -Verbose
$updateSession = new-object -com "Microsoft.Update.Session";
# More info about the Search method: https://docs.microsoft.com/en-us/windows/desktop/api/wuapi/nf-wuapi-iupdatesearcher-search (https://docs.microsoft.com/en-us/windows/desktop/api/wuapi/nf-wuapi-iupdatesearcher-search)
$criteria = $null
$updateSession.CreateupdateSearcher().Search($criteria) | out-null
Write-host "Waiting 10 seconds for SyncUpdates webservice to complete to add to the wuauserv queue so that it can be reported on"
Start-sleep -seconds 10
Write-host "running wuauclt /reportnow ..."
wuauclt /reportnow
}
}
```

And yes, you do need the null value in the Search($criteria) method.

9.
- Ruhel on June 27, 2019
- # (https://pleasework.robbievance.net/howto-force-really-wsus-clients-to-check-in-on-demand/#comment-70434)
- Reply (/howto-force-really-wsus-clients-to-check-in-on-demand/?replytocom=70434#respond)

typo – missing the c wuault….

10.
- dane on July 1, 2019
- # (https://pleasework.robbievance.net/howto-force-really-wsus-clients-to-check-in-on-demand/#comment-70485)
- Reply (/howto-force-really-wsus-clients-to-check-in-on-demand/?replytocom=70485#respond)

Getting errors from psexec

psexec.exe : Exception from HRESULT: 0x8024401C
At C:\Temp\force-WSUSCheckin-from-list.ps1:9 char:4
+ & c:\temp\psexec.exe -s \\$Computer powershell.exe -ExecutionPolic …
+ ~~~

13.

- Neil on August 16, 2019
- # (https://pleasework.robbievance.net/howto-force-really-wsus-clients-to-check-in-on-demand/#comment-71057)
- Reply (/howto-force-really-wsus-clients-to-check-in-on-demand/?replytocom=71057#respond)

Thanks you for the fix Robbie.

However your command in your comments at the top is missing a ‘c’

wuault /reportnow

should read

wuauclt /reportnow

14.

- Dave on September 12, 2019
- # (https://pleasework.robbievance.net/howto-force-really-wsus-clients-to-check-in-on-demand/#comment-71365)
- Reply (/howto-force-really-wsus-clients-to-check-in-on-demand/?replytocom=71365#respond)

This worked great! Thank you. Have been looking for this fix for many months.

15.

- Punithraj on September 25, 2019
- # (https://pleasework.robbievance.net/howto-force-really-wsus-clients-to-check-in-on-demand/#comment-71614)
- Reply (/howto-force-really-wsus-clients-to-check-in-on-demand/?replytocom=71614#respond)

HI Robbie,

this command in individual works fine . thank you so much for this.. now i want know how can i run this command from server targeting on all computers which not detected or detected old dates ?

16.

- JOE-B on September 27, 2019
- # (https://pleasework.robbievance.net/howto-force-really-wsus-clients-to-check-in-on-demand/#comment-71633)
- Reply (/howto-force-really-wsus-clients-to-check-in-on-demand/?replytocom=71633#respond)

This works for some but i wrote this batch file a couple years ago that works great too.

```
@echo on
net stop wuauserv
REG DELETE “HKLM\Software\Microsoft\Windows\CurrentVersion\WindowsUpdate\Auto Update” /v LastWaitTimeout /f
REG DELETE “HKLM\Software\Microsoft\Windows\CurrentVersion\WindowsUpdate\Auto Update” /v DetectionStartTime /f
```

Reg Delete “HKLM\Software\Microsoft\Windows\CurrentVersion\WindowsUpdate\Auto Update” /v NextDetectionTime /f
net start wuauserv
wuauclt /detectnow

Hope this helps

17.
- Alexei on October 15, 2019
- # (https://pleasework.robbievance.net/howto-force-really-wsus-clients-to-check-in-on-demand/#comment-71844)
- Reply (/howto-force-really-wsus-clients-to-check-in-on-demand/?replytocom=71844#respond)

I second that, Chapeau Robbie!
Got a couple of those COM exceptions but after a reboot they were all gone.

18.
- Franc on November 12, 2019
- # (https://pleasework.robbievance.net/howto-force-really-wsus-clients-to-check-in-on-demand/#comment-72213)
- Reply (/howto-force-really-wsus-clients-to-check-in-on-demand/?replytocom=72213#respond)

HelIo,
I try to launch in admin on some Windows 10 the command $updateSession = new-object -com “Microsoft.Update.Session”; $updates=$updateSession.CreateupdateSearcher().Search($criteria).Updates but most of the time there is no result no error and it doesnt back to the prompt. Any idea?
Thank you in advance

19.
- Shuey (http://www.shueysworld.com) on November 22, 2019
- # (https://pleasework.robbievance.net/howto-force-really-wsus-clients-to-check-in-on-demand/#comment-72314)
- Reply (/howto-force-really-wsus-clients-to-check-in-on-demand/?replytocom=72314#respond)

Thanks so much Robbie! This freakin’ rocks! I always love when one guy out of thousands finds a way to make something work where no one else before him was able to! 😀

20.
- Tim on November 26, 2019
- # (https://pleasework.robbievance.net/howto-force-really-wsus-clients-to-check-in-on-demand/#comment-72346)
- Reply (/howto-force-really-wsus-clients-to-check-in-on-demand/?replytocom=72346#respond)

You’re a life-saver! Works like a charm! Solved a 2 year old mystery and now my WSUS looks like it’s freaking working again!

21

21.

- Daniel on December 17, 2019
- # (https://pleasework.robbievance.net/howto-force-really-wsus-clients-to-check-in-on-demand/#comment-72558)
- Reply (/howto-force-really-wsus-clients-to-check-in-on-demand/?replytocom=72558#respond)

Thank you!! it worked for me, now i don't have to wait for clients to report.

22.

- PhilipM on January 7, 2020
- # (https://pleasework.robbievance.net/howto-force-really-wsus-clients-to-check-in-on-demand/#comment-72755)
- Reply (/howto-force-really-wsus-clients-to-check-in-on-demand/?replytocom=72755#respond)

Great work, thank you for researching and posting!

23.

- Dinusha on January 14, 2020
- # (https://pleasework.robbievance.net/howto-force-really-wsus-clients-to-check-in-on-demand/#comment-72818)
- Reply (/howto-force-really-wsus-clients-to-check-in-on-demand/?replytocom=72818#respond)

Hi Robbie and Others,

Could you please give some advice or more information to edits profile.ps1 ?

24.

- Tom on January 16, 2020
- # (https://pleasework.robbievance.net/howto-force-really-wsus-clients-to-check-in-on-demand/#comment-72831)
- Reply (/howto-force-really-wsus-clients-to-check-in-on-demand/?replytocom=72831#respond)

hours of messing with WSUS and nothing. I run the command you suggested and it was all happy in 30 seconds. I wish i knew about this command earlier.

25.

- Andy on January 24, 2020
- # (https://pleasework.robbievance.net/howto-force-really-wsus-clients-to-check-in-on-demand/#comment-72920)
- Reply (/howto-force-really-wsus-clients-to-check-in-on-demand/?replytocom=72920#respond)

Nice guide, but in the second wuauclt /detecnow you are missing the letter C!

1.

- Robbie () on January 24, 2020
- Author
- # (https://pleasework.robbievance.net/howto-force-really-wsus-clients-to-check-in-on-demand/#comment-72935)
- Reply (/howto-force-really-wsus-clients-to-check-in-on-demand/?replytocom=72935#respond)

Thanks Andy. I've corrected the typo. I threw this HOWTO together pretty quickly once I realized the dang process actually worked. At some point I should go back and revisit it and add some additional detail for what I've determined about WHY it works. But it seems to be working for people so that's all that matters!

26.

- Ondrej on January 30, 2020
- # (https://pleasework.robbievance.net/howto-force-really-wsus-clients-to-check-in-on-demand/#comment-72990)
- Reply (/howto-force-really-wsus-clients-to-check-in-on-demand/?replytocom=72990#respond)

I just love this!!! Finally something which works!
#WSUSisPain

27.

- David on February 12, 2020
- # (https://pleasework.robbievance.net/howto-force-really-wsus-clients-to-check-in-on-demand/#comment-73230)
- Reply (/howto-force-really-wsus-clients-to-check-in-on-demand/?replytocom=73230#respond)

Very good solution, thank you so much!

28.

- cirdec on February 17, 2020
- # (https://pleasework.robbievance.net/howto-force-really-wsus-clients-to-check-in-on-demand/#comment-73328)
- Reply (/howto-force-really-wsus-clients-to-check-in-on-demand/?replytocom=73328#respond)

Hello,

Very good solution but, for me, works only if last report is not older than 8 days.
If the last report is older than 8 days Nothing happens….even if i use a GPO startup script

An idea ?
Thanks

29.

-
marcus on February 17, 2020
- # (https://pleasework.robbievance.net/howto-force-really-wsus-clients-to-check-in-on-demand/#comment-73334)
- Reply (/howto-force-really-wsus-clients-to-check-in-on-demand/?replytocom=73334#respond)

!!! Great job Man!!! Thanks

30.
    - Mike on February 17, 2020
    - # (https://pleasework.robbievance.net/howto-force-really-wsus-clients-to-check-in-on-demand/#comment-73337)
    - Reply (/howto-force-really-wsus-clients-to-check-in-on-demand/?replytocom=73337#respond)

    This looks great, but I'm having a syntx error in the script. Exactly what is going on with the "&" at the start of line 4?

    1.
        - Mike on February 17, 2020
        - # (https://pleasework.robbievance.net/howto-force-really-wsus-clients-to-check-in-on-demand/#comment-73338)
        - Reply (/howto-force-really-wsus-clients-to-check-in-on-demand/?replytocom=73338#respond)

        I'm guessing the website is doing some HTML translatinon. My complaint is about "&-a-m-p-;" at the 1st of line 4.

31.
    - rgd on February 19, 2020
    - # (https://pleasework.robbievance.net/howto-force-really-wsus-clients-to-check-in-on-demand/#comment-73372)
    - Reply (/howto-force-really-wsus-clients-to-check-in-on-demand/?replytocom=73372#respond)

    Just what a chap needed to fix the final frustration with WSUS

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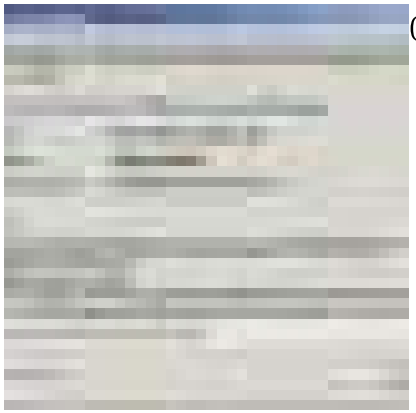

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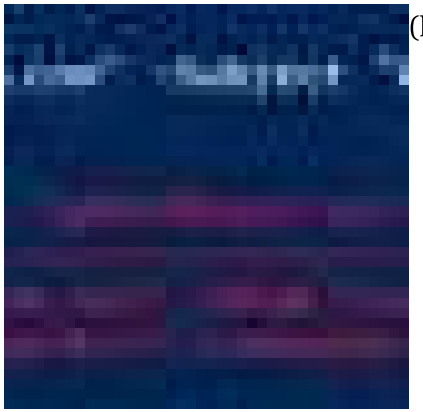

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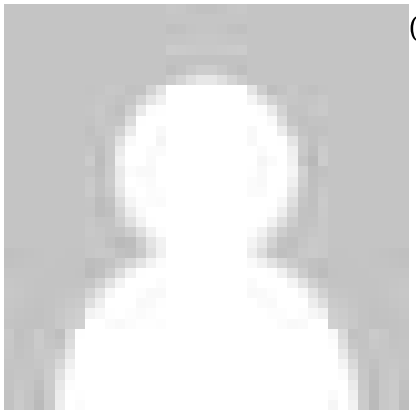

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