

K.S.Rangasamy College of Arts & Science
(Autonomous)

KSR Kalvi Nagar, Tiruchengode-637215,
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Issue #76

December 2014

Ishare

Department of Computer Science UG
Monthly Magazine



Ishare

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Editorial

We would like to wholeheartedly thank our honorable Chairman, Secretary, Executive Director and Principal for their continuous encouragement and constant support for bringing out the magazine. We profoundly thank our Head of the Department for encouraging and motivating us to lead the magazine a successful one right from the beginning. Ishare serves as a platform for updating and enhancing upcoming technologies in Information and Communication. We are grateful to all the contributors to this magazine so far. The magazine has been sent to almost 60 institutions in and around Tamilnadu. So far we have received feedbacks and appreciations from various institutions.

We would be very pleased to receive your feedbacks. Please send your feedbacks to ksrcas.ishare@gmail.com

By,

Editorial Board

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1. SECURELY TRANSFER FILES WITH SFTP

Ms. B.SOWMYA

Asst. professor, Dept of CS

Why SFTP?

You have a file that's just too big to transfer over email or instant messenger. Sure, you could upload it to Dropbox or some other cloud service, but what if you don't have/want an account with them, have enough storage freed up, or what if you just want to bypass the middle man altogether? Not to mention the security concerns with cloud services.

Instead of going through that hassle, you can save time by transferring files (big and small) to your friend by using SFTP. There's no need to encrypt your files before transfer, because they are being tunneled through the very secure SSH protocol. Not only that, but now you can upload directly to your friend instead of the cloud, saving lots of time.

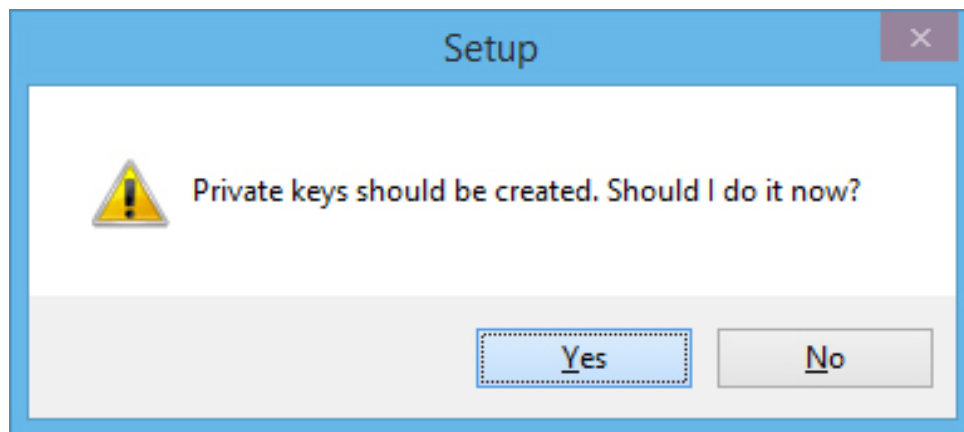
But wait, there's more! If you want to share out more files with people, you can just drop them in a specified folder and your buddies can browse that section of your PC as if it were a part of their own. Sharing files can be a whole lot easier with this method, because the uploading will be initiated by your friend instead of you. All you have to do is drag and drop, and let them know they can now download the file(s).

Setting up SFTP

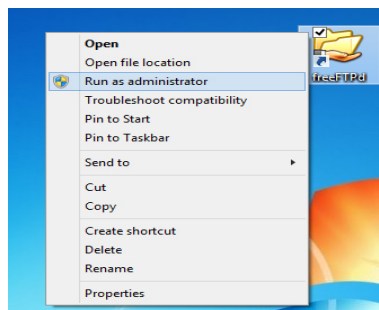
Setting up an SFTP server in Windows is going to require some third party software. Most software that has this functionality is going to cost you, but we will

be using a free one called freeFTPd. Click this link to download and install the program. Be forewarned, the developers clearly aren't native English speakers, and it shows in a lot of the text. Don't be alarmed though, it's a legitimate program that we've tested and everything checks out – you'll be hard-pressed to find a better free alternative.

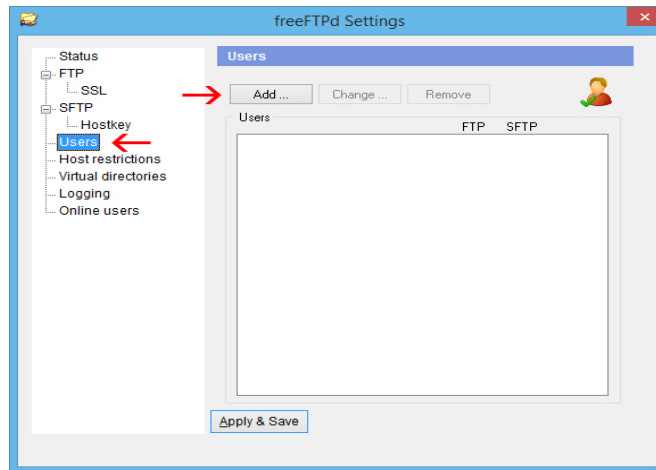
Go through installation as normal, and at the end there will two prompts, one asking if private keys should be created, and the other asking if it should run as a service; click Yes on both.



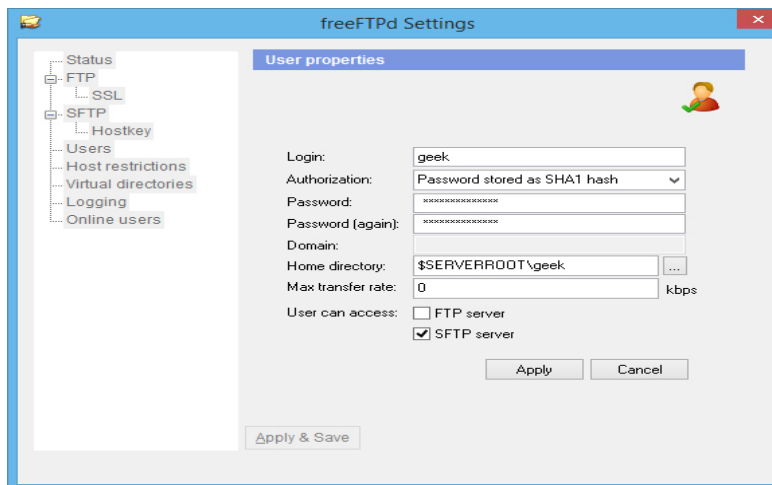
When installation finishes, open freeFTPd via the new shortcut icon on your desktop. We ran into problems writing configuration changes, so make sure you right click on the icon and run the program as Administrator.



To get started with the configuration, click on Users to the left.



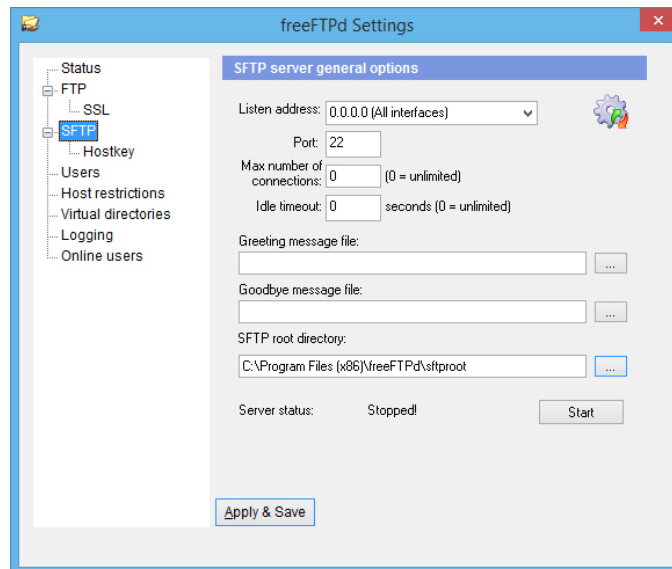
In this menu, click on Add and fill out the information for a new user account to access your server.



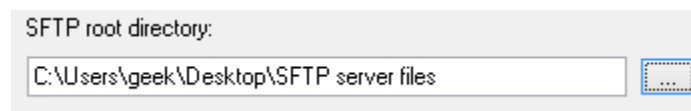
Under Authorization, you can choose to use “NT authentication” or “Password stored as SHA1 hash.” NT authentication means that it uses a Windows username and password, so you’d need to create a new user on your computer for anyone who accesses the SFTP directory. In most cases, it will

probably be best to just store the password as a SHA1 hash and keep the SFTP user separate from the Windows users.

After you've typed in the desired username and password, uncheck the "FTP server" box towards the bottom and then click Apply. Now that the user is setup, click on the SFTP tab.



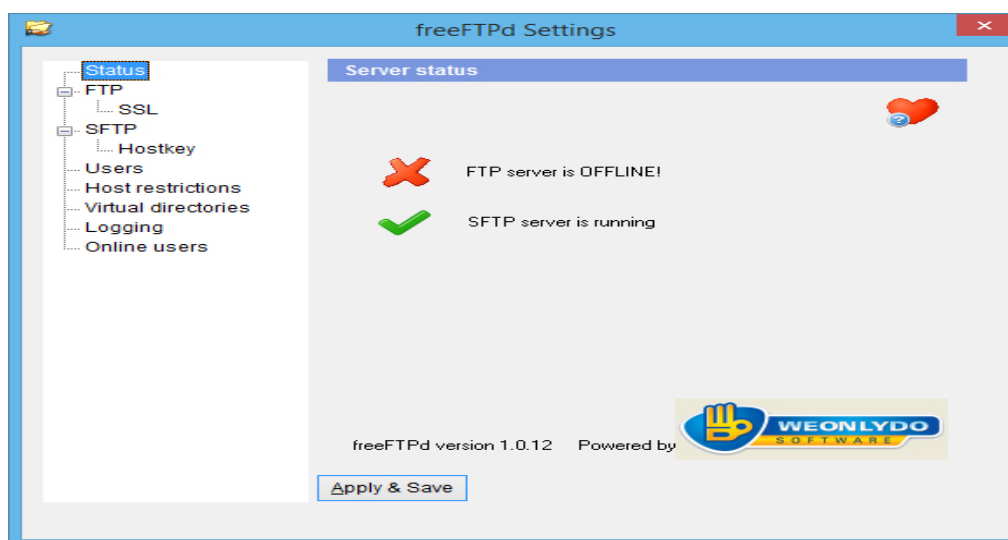
The only thing really worth changing on this tab is the SFTP root directory. This specifies where the files you want to share out will reside. For simplicity, we're just going to change the already populated directory to a folder on the desktop.



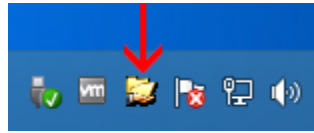
Once you're ready to begin hosting files, click the Start button in this tab. Windows Firewall will probably pop up and ask you if this is OK – click Allow access.



Now you should be able to return to the Status tab and see that your SFTP server is running.

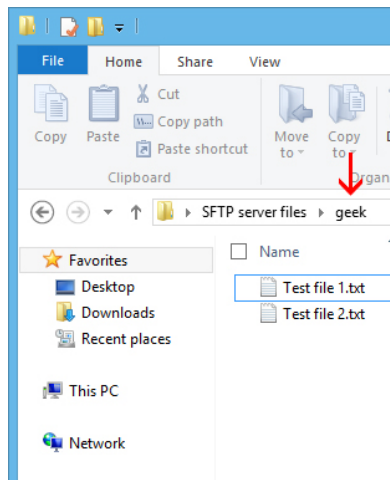


Click on Apply & Save to keep these changes and then close the window. freeFTPD will continue to run in the background. To access it, just open it up from the notification area.



Accessing the SFTP Directory

Put a couple of files in your SFTP directory so we can do some testing. If you left the home directory for the user at its default (`$SERVERROOT\geek` in our example), then you'll need to create another directory within the SFTP root directory.

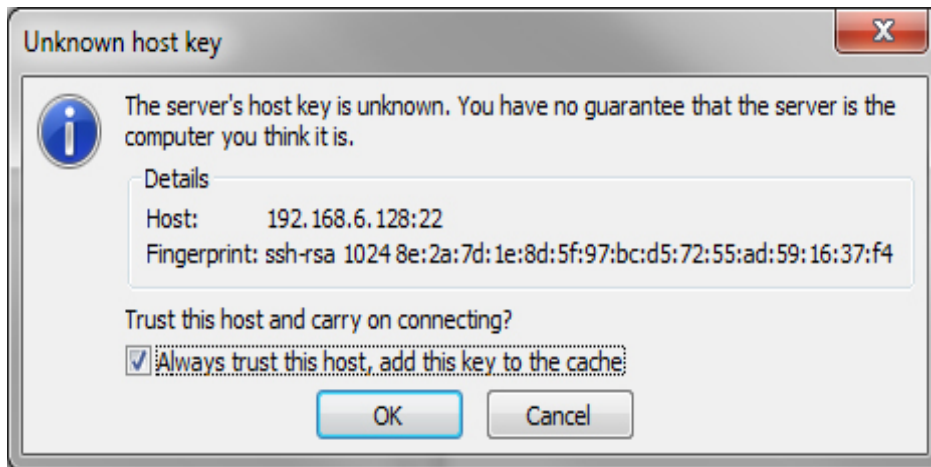


As you can see in this screenshot, we put two test files into the 'geek' directory which is inside of the 'SFTP server files' (SFTP root directory) folder. Make sure that port 22 is forwarded to your PC on your router, and then you're ready for someone to connect to your PC.

Download an FTP client that is able to access SFTP servers – our recommendation is [FileZilla](#). They will just need to type in your IP address, the username and password that you configured earlier, and specify the port your server is running on (if you left it at the default, it will be port 22).

Host: 192.168.6.128 Username: geek Password: Port: 22 Quickconnect

The first time they connect to your server, they will be prompted to save the host keys. They just need to check the “Always trust” box and click OK to never be prompted about this again (unless you change your host keys for some reason).



Your friend should now be able to access the files you placed within the SFTP directory, and add files to it that they would like to share with you.

Filename	Filesize	Filetype	Last modified	Permission
..				
Test file 1.txt	1,602	Text Docu...	12/1/2013 12:2...	-rw-rw-rw-
Test file 2.txt	4,806	Text Docu...	12/1/2013 12:2...	-rw-rw-rw-

2. Test Your Internet Speed from the Command Line

P.V.S.VenugopalChetty
II B.Sc(CS)-“B”

Testing Internet Connection Speed with Curl

This is pretty simple. Just copy and paste the following command:

curl -o /dev/null

<http://speedtest.sea01.softlayer.com/downloads/test100.zip>

The first thing to point out is that we're using a test file from Softlayer, but if your connection is really fast, you might want to use a larger file from Thinkbroadband to properly test. Secondly, that -o switch is the lower case form of the letter O. It's not a zero, and if you omit it, your terminal will turn into crazyville since curl will try to output to the screen — it's also important because we're outputting the file to /dev/null, which means it'll basically be automatically deleted.

Testing Internet Connection Speed with Wget

If you prefer using wget, or that is what you have installed, the switch is the same. That is a capital letter “o” and it sends the output straight to null, so you don't have any files to delete.

wget -O /dev/null

<http://speedtest.sea01.softlayer.com/downloads/test100.zip>

This file is only 100 MB, so if you have a really fast connection, this isn't going to work very well, and you'll want to find a bigger file to download from the site linked above.

3. GET A LIST OF SOFTWARE INSTALLED ON YOUR PC WITH A SINGLE LINE OF POWERSHELL

Mrs. S. Kayathri

Asst. Professor in CS

Suppose someone asks us for a list of applications we have installed on our computer. To get this information, we use PowerShell.

How to Get a List of Installed Software on Your PC

Getting a list of installed software is as simple as using this straightforward WMI query.

Get-WmiObject -Class Win32_Product | Select-Object -Property Name



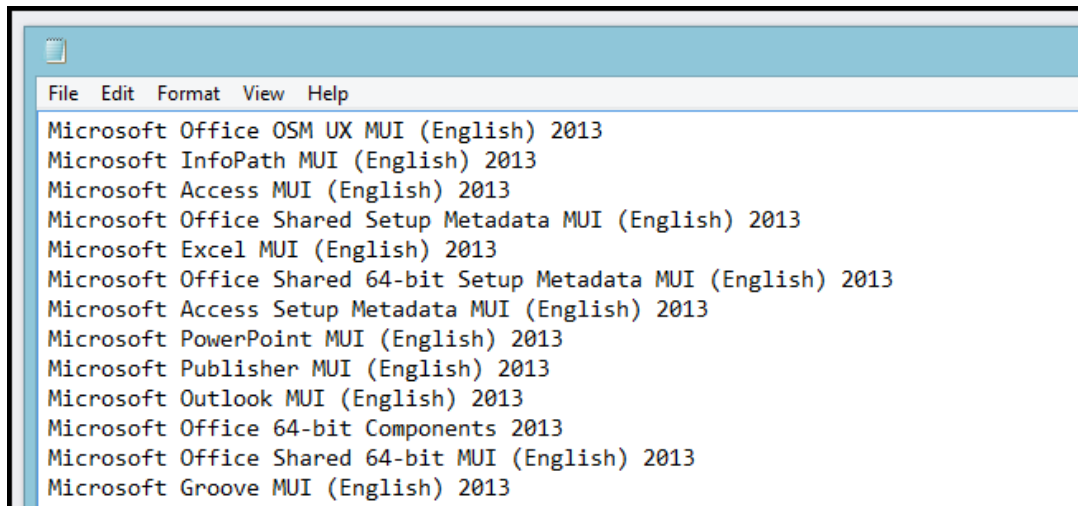
```
Windows PowerShell
Copyright (C) 2012 Microsoft Corporation. All rights reserved.

PS C:\Users\Taylor> Get-WmiObject -Class Win32_Product | Select-Object -Property Name

Name
----
Check Point Deployment Shell
Microsoft Application Error Reporting
Microsoft DCF MUI (English) 2013
Microsoft OneNote MUI (English) 2013
Microsoft Office OSM MUI (English) 2013
Microsoft Office OSM UX MUI (English) 2013
Microsoft InfoPath MUI (English) 2013
Microsoft Access MUI (English) 2013
Microsoft Office Shared Setup Metadata MUI (English) 2013
Microsoft Excel MUI (English) 2013
Microsoft Office Shared 64-bit Setup Metadata MUI (English) 2013
Microsoft Access Setup Metadata MUI (English) 2013
Microsoft PowerPoint MUI (English) 2013
Microsoft Publisher MUI (English) 2013
Microsoft Outlook MUI (English) 2013
```

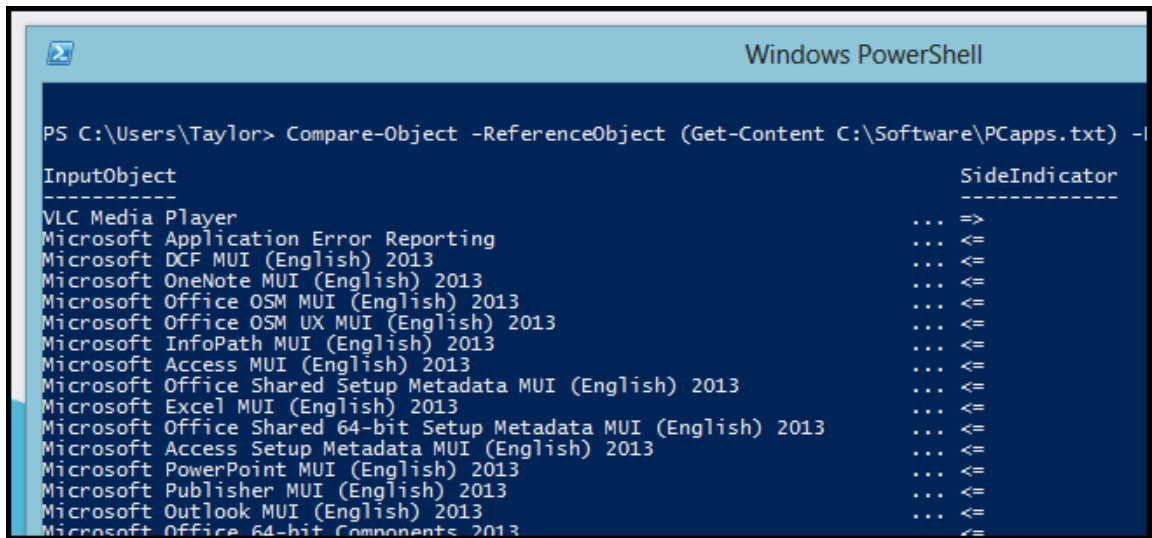
We will probably want to export that to a file though, which is also easy enough — we'll send the output using the > symbol and adding the path to a new text file that we want to create.

```
Get-WmiObject -Class Win32_Product | Select-Object -Property Name > C:\Software\PCapps.txt
```



What makes using PowerShell really neat is that if we do this on two different machines, we can easily compare the software installed on them.

```
Compare-Object -ReferenceObject (Get-Content C:\Software\PCapps.txt) - DifferenceObject (Get-Content C:\Software\LAPTOPapps.txt)
```



```

Windows PowerShell

PS C:\Users\Taylor> Compare-Object -ReferenceObject (Get-Content C:\Software\PCapps.txt) -I
InputObject                                                    SideIndicator
-----
VLC Media Player                                              ... =>
Microsoft Application Error Reporting                         ... <=
Microsoft DCF MUI (English) 2013                             ... <=
Microsoft OneNote MUI (English) 2013                          ... <=
Microsoft Office OSM MUI (English) 2013                       ... <=
Microsoft Office OSM UX MUI (English) 2013                    ... <=
Microsoft InfoPath MUI (English) 2013                         ... <=
Microsoft Access MUI (English) 2013                           ... <=
Microsoft Office Shared Setup Metadata MUI (English) 2013    ... <=
Microsoft Excel MUI (English) 2013                            ... <=
Microsoft Office Shared 64-bit Setup Metadata MUI (English) 2013 ... <=
Microsoft Access Setup Metadata MUI (English) 2013            ... <=
Microsoft PowerPoint MUI (English) 2013                       ... <=
Microsoft Publisher MUI (English) 2013                        ... <=
Microsoft Outlook MUI (English) 2013                          ... <=
Microsoft Office 64-bit Components 2013                       ... <=

```

Any entries with a side indicator pointing to the right (=>) mean that the software is installed on laptop but not on PC, and any entries with a side indicator pointing to the left (<=) mean that the software is installed on PC but not on laptop.

4. SENDING THE CONTENTS OF THE CLIPBOARD TO A TEXT FILE VIA THE SEND TO MENU

Mr. S.Venkatesan, I B.Sc. (CS) - B

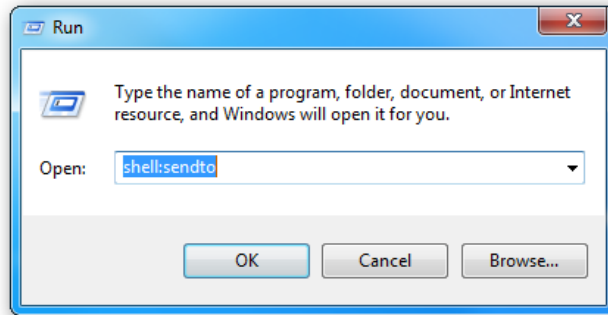
Copy the ClipOut Utility

While Windows offers the command line tool 'clip' as a way to direct console output to the clipboard, it does not have a tool to direct the clipboard contents to the console. To do this, we are going to use a small utility named ClipOut.

Simply download and extract this file to a location in our Windows PATH variable (if we don't know what this means, just extract the EXE to our C:\Windows folder) and we are ready to go.

Add the Send To Shortcut

Open your Send To folder location by going to Run > shell:sendto



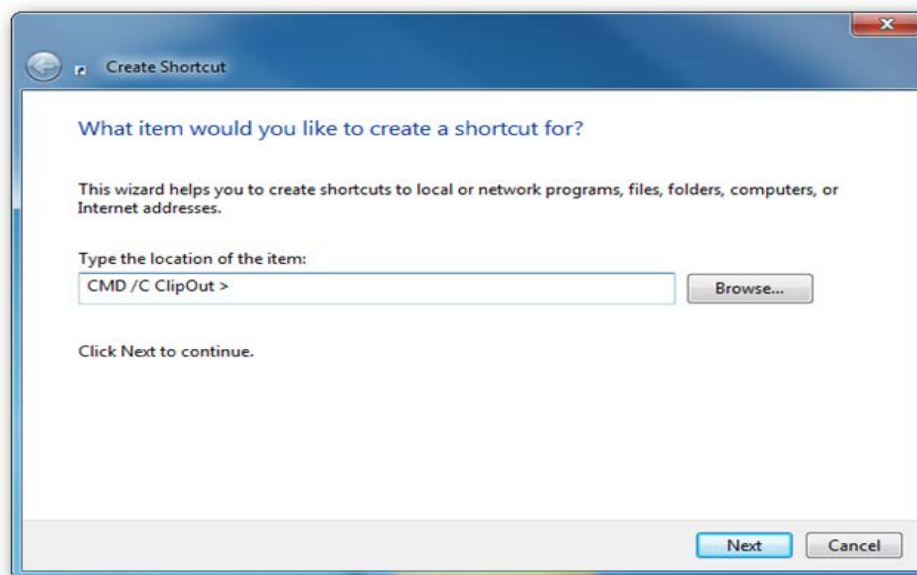
Create a new shortcut with the command:

CMD /C ClipOut >

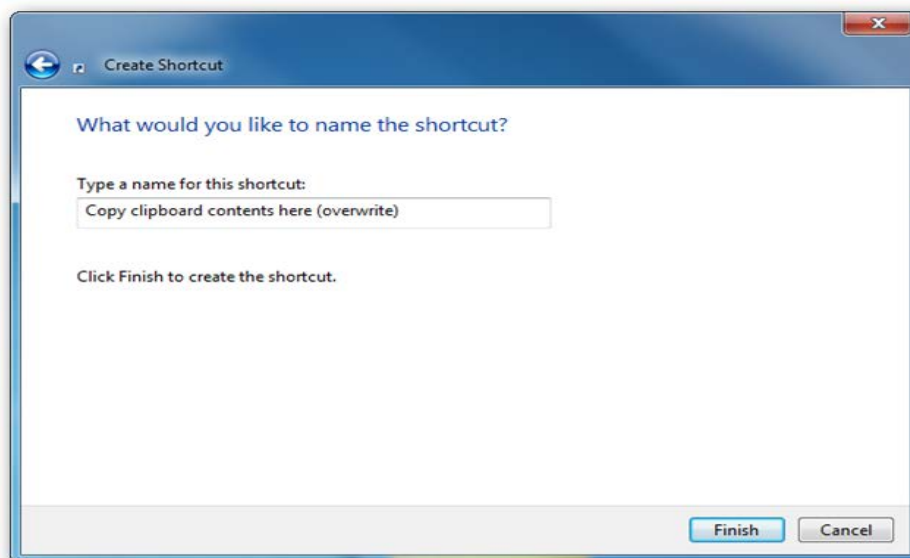
Note the above command will overwrite the contents of the selected file. If we would like to append to the contents of the selected file, use this command instead:

CMD /C ClipOut >>

Of course, we could make shortcuts for both.



Give a descriptive name to the shortcut.

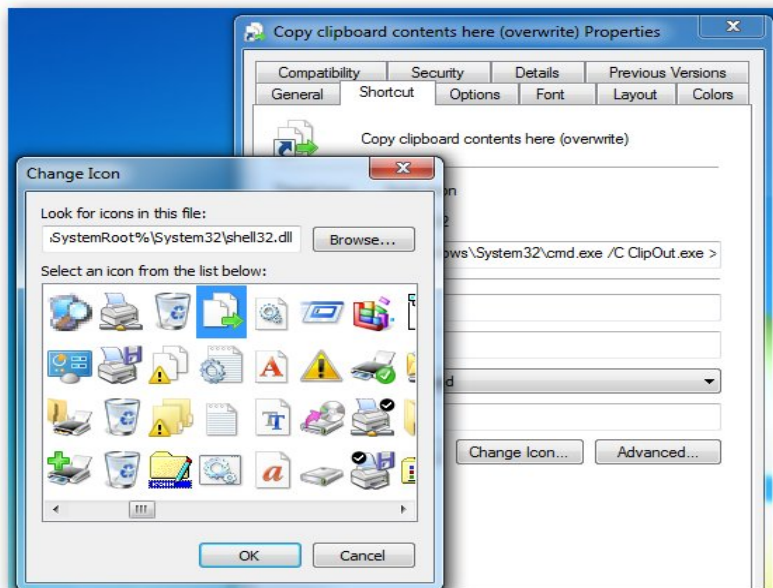


Using this shortcut will now send the text contents copied to our Windows Clipboard to the selected file.

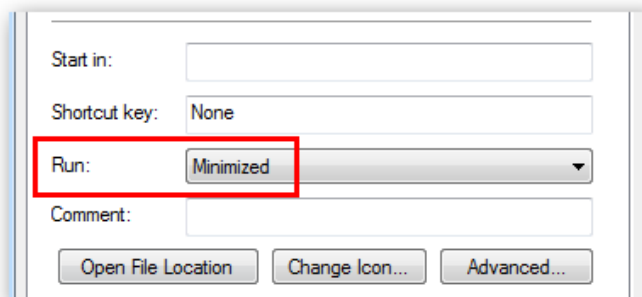
It is important to note that the ClipOut tool only supports outputting text. If we had binary data copied to our clipboard, then the output would be empty.

Changing the Icon

By default, the icon for the shortcut will appear as a command prompt, but we can easily change this by editing the properties of the shortcut and clicking the Change Icon button. We used an icon located in “%SystemRoot%\System32\shell32.dll”, but any icon of our liking will do.



As an additional tweak, set the properties of the shortcut to run minimized. This will prevent the command window from “blinking” when the send to command is run (instead it will blink in our taskbar, which is hardly noticeable).



5. 10 WAYS TO GENERATE A RANDOM PASSWORD FROM THE COMMAND LINE

C.GnanaSekaran
III-B.Sc (CS)-“A”

One of the great things about Linux is that we can do the same thing hundreds of different ways—even something as simple as generating a random password can be accomplished with dozens of different commands. Here’s 10 ways we can do it.

We should be able to use at least some of these on Windows with Cygwin installed.

Generate a Random Password

For any of these random password commands, we can either modify them to output a different password length, or we can just use the first x characters of the generated password if we don’t want such a long password. Hopefully we are using a password manager like LastPass anyway so we don’t need to memorize them.

```
date +%s | sha256sum | base64 | head -c 32 ; echo
```

This method uses SHA to hash the date, runs through base64, and then outputs the top 32 characters.

```
< /dev/urandom tr -dc _A-Z-a-z-0-9 | head -c${1:-32};echo;
```

This method used the built-in `/dev/urandom` feature, and filters out only characters that you would normally use in a password. Then it outputs the top 32.

```
openssl rand -base64 32
```

This one uses openssl's `rand` function.

```
tr -cd '[:alnum:]' < /dev/urandom | fold -w30 | head -n1
```

This one works a lot like the other `urandom` one, but just does the work in reverse. Bash is very powerful!

Here's another example that filters using the `strings` command, which outputs printable strings from a file, which in this case is the `urandom` feature.

```
strings /dev/urandom | grep -o '[:alnum:]' | head -n 30 | tr -d '\n'; echo
```

Here's an even simpler version of the `urandom` one.

```
< /dev/urandom tr -dc _A-Z-a-z-0-9 | head -c6
```

This one manages to use the very useful `dd` command.

```
dd if=/dev/urandom bs=1 count=32 2>/dev/null | base64 -w 0 | rev | cut -b 2- | rev
```

We can even create a random left-hand password, which would let us type our password with one hand.

```
</dev/urandom tr -dc '12345!@#%qwertQWERTasdfgASDFGzxcvbZXCVB' | head -c8; echo ''
```

If we are going to be using this all the time, it's probably a better idea to put it into a function. In this case, once we run the command, we will be able to use *randpw* anytime we want to generate a random password. We had probably want to put this into our `~/.bashrc` file.

```
randpw(){ < /dev/urandom tr -dc _A-Z-a-z-0-9 | head -c${1:-16};echo;}
```

We can use this same syntax to make any of these into a function—just replace everything inside the `{ }`

And here's the easiest way to make a password from the command line, which works in Linux, Windows with Cygwin, and probably Mac OS X.

```
date | md5sum
```

Yeah, that's even easy enough to remember.

There are lots of other ways that we can create a random password from the command line in Linux—for instance, the `mkpasswd` command, which can actually assign the password to a Linux user account.

6. CREATE A SHORTCUT OR HOTKEY TO TURN THE DESKTOP ICONS ON OR OFF

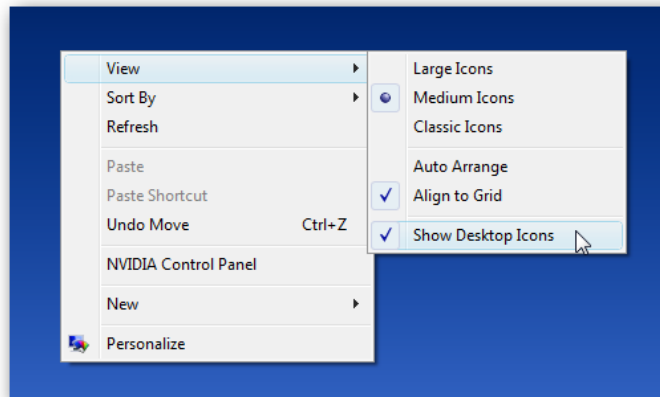
Mrs. R. Sudha, M.C.A., M.Phil.,

Asst. Professor in CS

If there are loads of icons cluttering up our desktop, we might want a quick way to turn them off without using the context menu; here's a quick and easy way to make a shortcut key to turn them on or off.

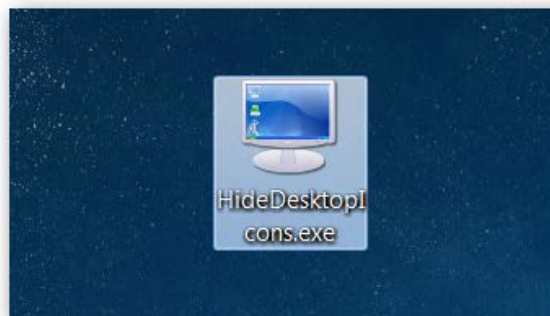
Create a Shortcut to Toggle the Desktop Icons

The solution comes through a small utility written by one of the Desktop Sidebar programmers (an alternate sidebar with loads of modules). This utility does the same thing as a right-click on the desktop and toggling the “Show Desktop Icons” item.

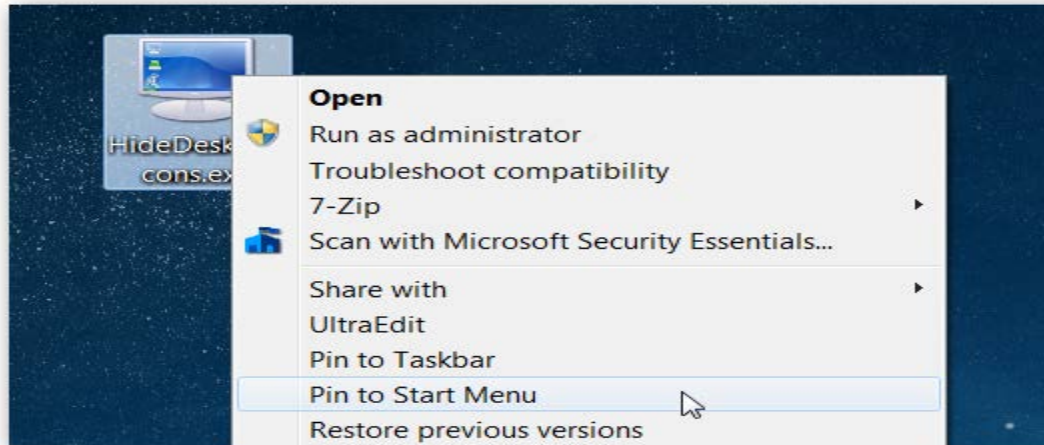


Setting Up the Shortcut

The first thing we need to do is to download the HideDesktopIcons application and save it somewhere other than the desktop, preferably somewhere where it won't be deleted—we could put it under our Program Files folder if we wanted to.



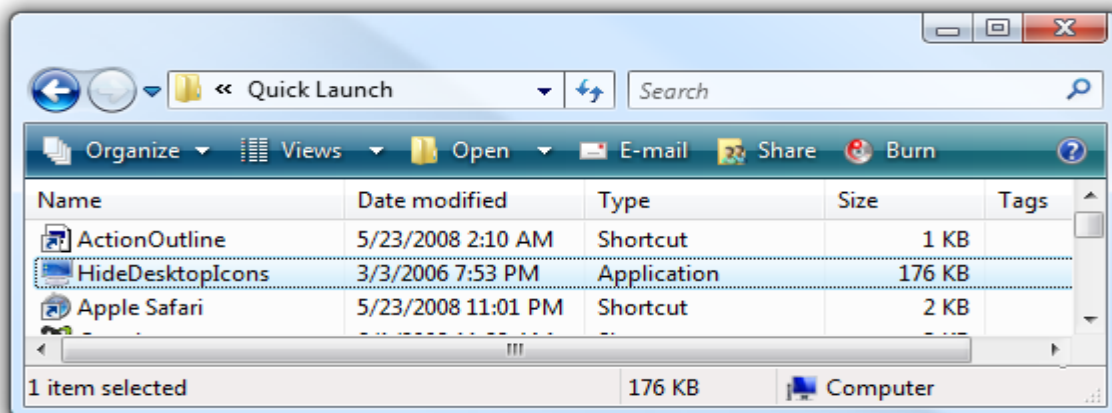
If we are using Windows 7, all we need to do is right-click on the file and choose Pin to Taskbar or Pin to Start Menu, depending on where we want it. We'll put it on the Start Menu so we can assign a hotkey to it.



Still Using the Quick Launch Bar?

If we are using a previous version of Windows and we had liked to put it on the Quick Launch bar, we can do that by opening up Explorer and typing the following into the address bar—just keep in mind that shortcuts on the Quick Launch bar don't allow shortcut keys, so we need to copy it to the Start Menu as well.

```
shell:Quick Launch
```

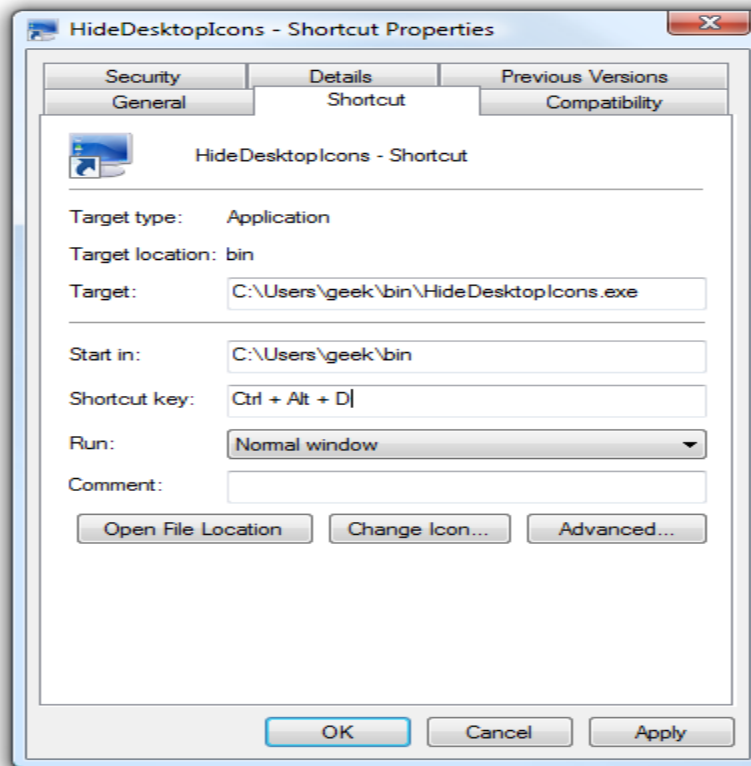


Now we have a shortcut that can be used for quick access...



Creating the Hotkey

To assign a hotkey, we're going to assume that we have pinned the shortcut to the Start Menu. Go ahead and right-click on the shortcut in the Start Menu and choose Properties to assign a hotkey (Ex: use Ctrl+Alt+D since it's easy to remember).



Now we can access the desktop icons through a shortcut icon or shortcut key.

Supporting Files (If Needed)

If we get an error when we try to run this application, we probably need to have the Microsoft C++ runtime installed.

7. PERFORM DATE CALCULATIONS IN WINDOWS

CALCULATOR

Mrs.R.Nirmala, M.Sc.,M.Phil.,MCA.,

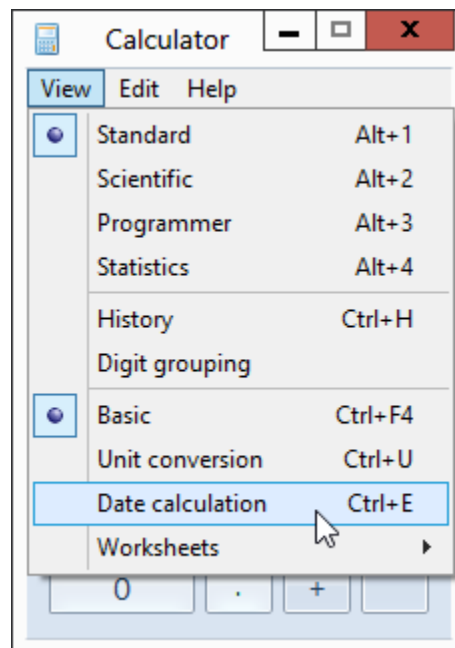
Asst. professor, Dept of CS



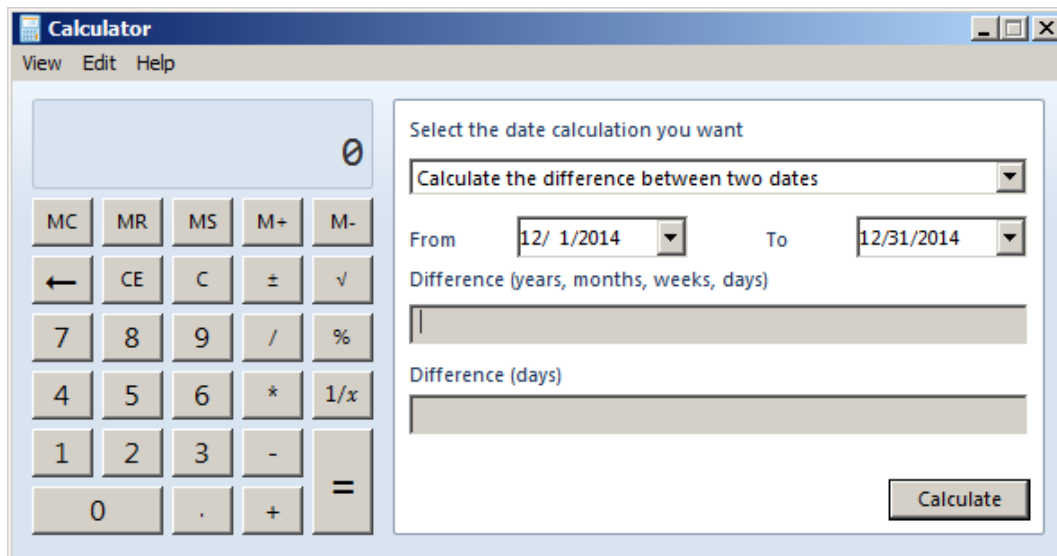
To start, open Calculator by pressing the winkey, and type calcul... (it should've popped up by now, if not, we can type the rest of the '...ator' as well just to be sure). Open it. And by the way, this date calculation function works in both Windows 7 and 8.



Once it is opened, click View, and select Date Calculation (or press Ctrl+E).



Now here's where the fun begins.



The idea is pretty straightforward. We can perform two types of calculations here:

- Calculating the difference between two dates
- Adding or subtracting a number (days) to a date

Since we are messing with dates, it is easy to work with the past, present, or even future. Let's say we want to find out our current age in terms of days, months, and years.

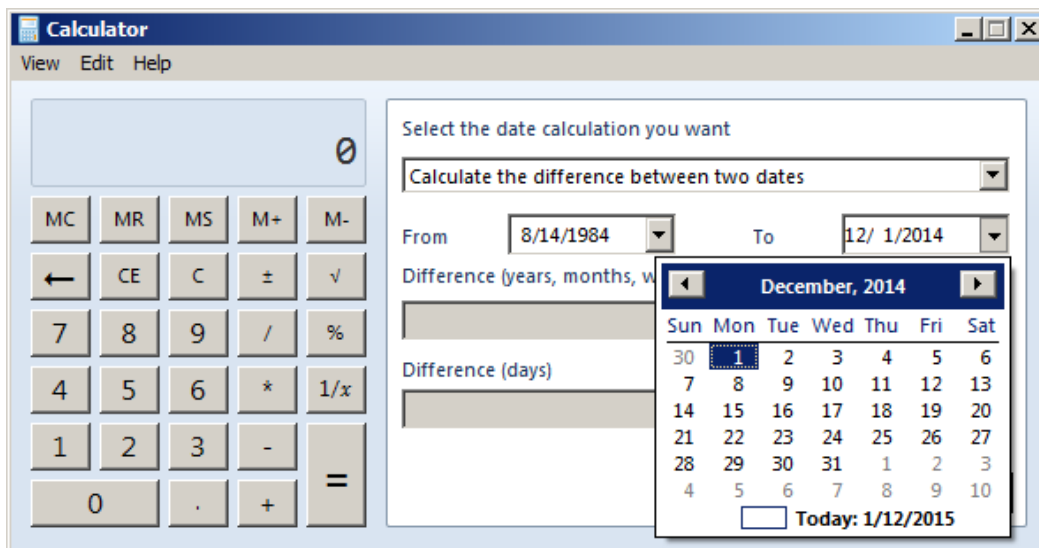
Click the Calendar button in the *From* field to select our birth date. Initially, it will be showing the current date. Navigating through the calendar is easy.

Click the title (Month), and it zooms back to show all the months of the year and the title is changed from Month to Year (in this case, November to 2012).

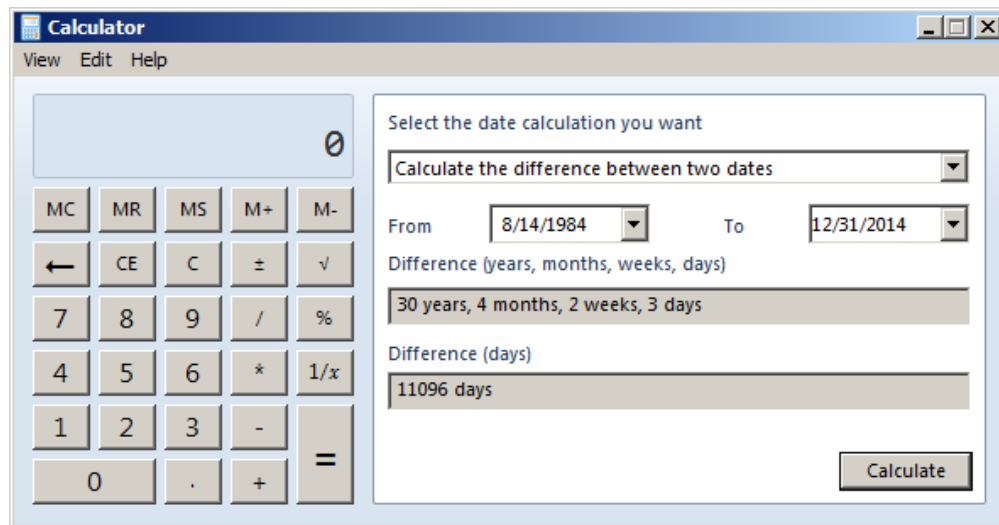
Click it again to see a list of years in the current decade, and the title changes to the decade it is showing (alternatively, click the buttons on the left and right to move between years). Click the title again to show several decades.

We can use the buttons at the left and right to navigate within months, years, decades, or list of decades. Finally, to jump to the current date, click “Today”.

Now that we have learnt how to navigate through the calendar, we can easily select your birth date (let’s assume it’s the 29th of February). Since we are going to find out how old are we *today*, so in the *To* field we’ll use today’s date by clicking ‘Today.’

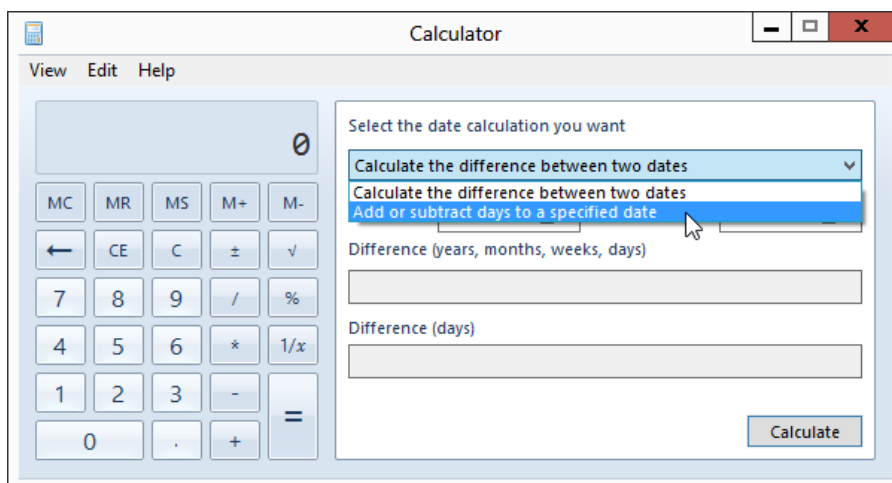


Finally, click Calculate to get the desired result. The resulting difference will be presented in terms of years, months, and days, and simply in days as well.

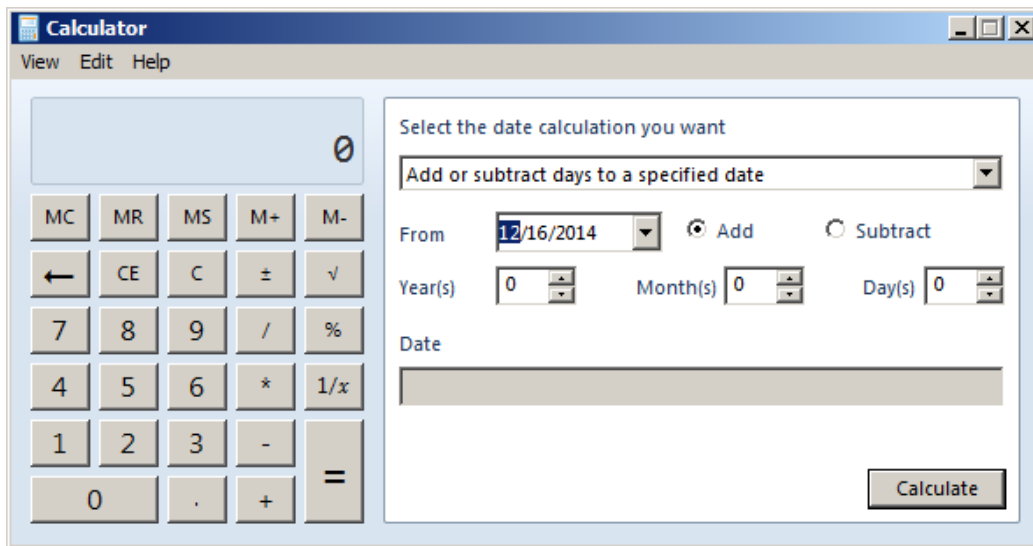


Adding or subtracting a number to a specific date is a bit tedious in real life. For instance, we see this written somewhere: “43 days remaining!”, and we ask ourself “What will be the exact date after 43 days have passed”?

Let’s see, if today is November 16, and this is a 30-day month, so after 40 days it will be December 26, and adding 3 to it makes 29th December. But what day will it be? Well, maybe we should try a different approach instead. Fire up calculator, click the drop down and select “Add or subtract days to a specified date.”

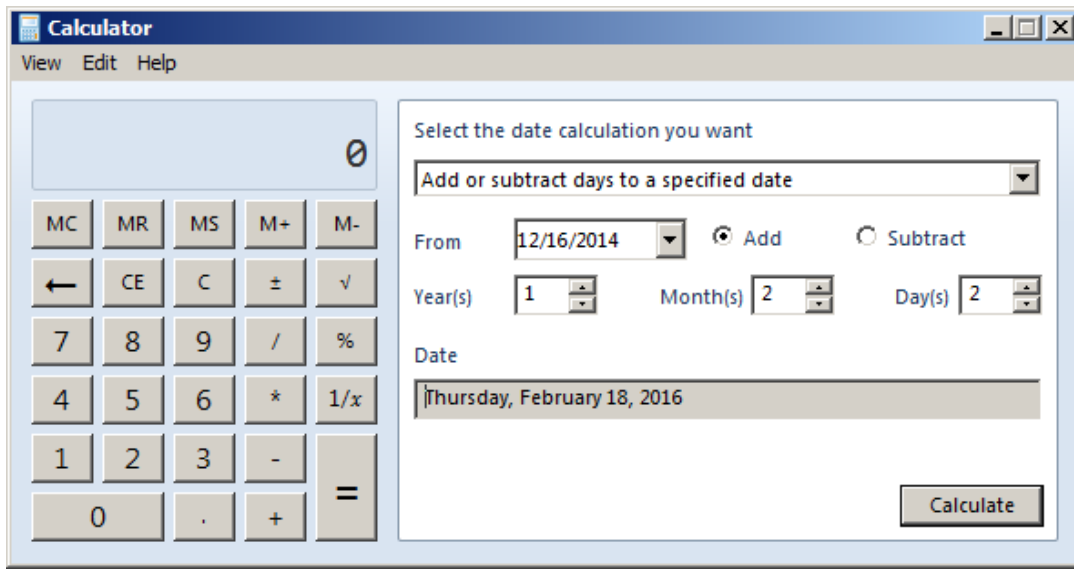


Now there's just one date field in which we have to specify the date to (or from) which you want to add (or subtract) a particular number. Once the date is set, select whether we want to add or subtract something. We'll try addition first. Select Add, and enter the number of days (or months/years) to be added to the specified date, and press the Calculate button.



So it will be Saturday on 29th December, 2012.

We can also specify how many days, months, or even years are to be added or subtracted from the set date. Once you've entered the information, click Calculate and you'll be presented with the resulting day and date. Let's see what the date was, 5 years, 8 months, and 80 days ago today.



We won't be able to use the calculator itself unless we turn it on by clicking its 'screen' (just in case we want to convert days to weeks, or do any other calculation).

8. HOW TO CREATE A PASSWORD PROTECTED FOLDER WITHOUT ANY EXTRA SOFTWARE

Mrs. R.Nirmala, M.Sc.,M.Phil.,MCA.,

Asst. Professor in CS



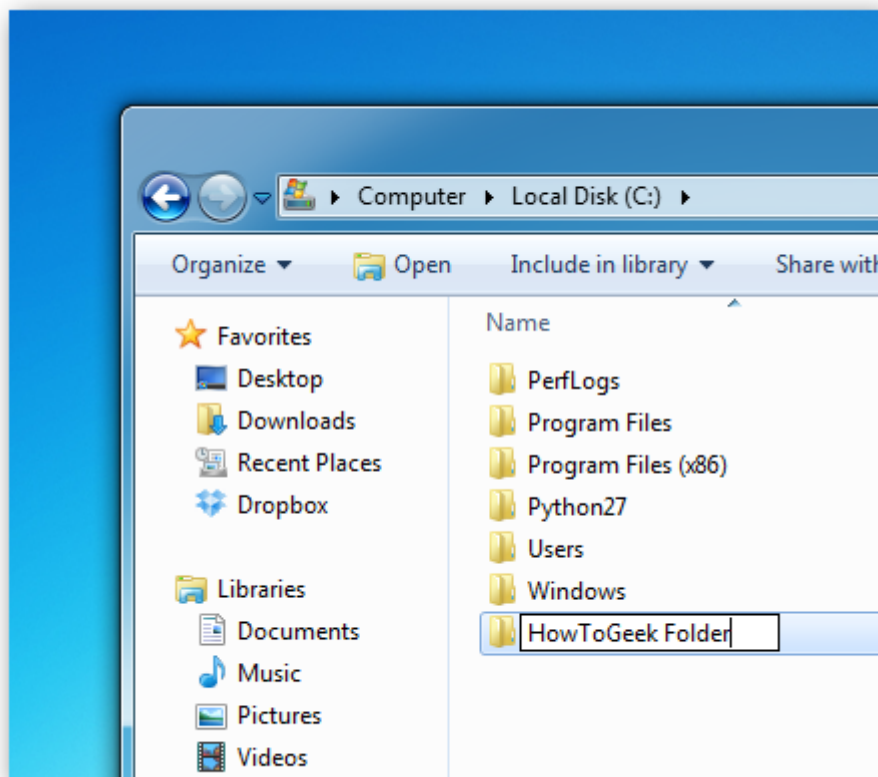
There are a lot of methods that we can use to create a password protected folder, most of which require the use of some third party software. Using this neat method you can hide your folders with a quick batch script.

It's important to note that this will not actually conceal our data from somebody who knows what they are doing.

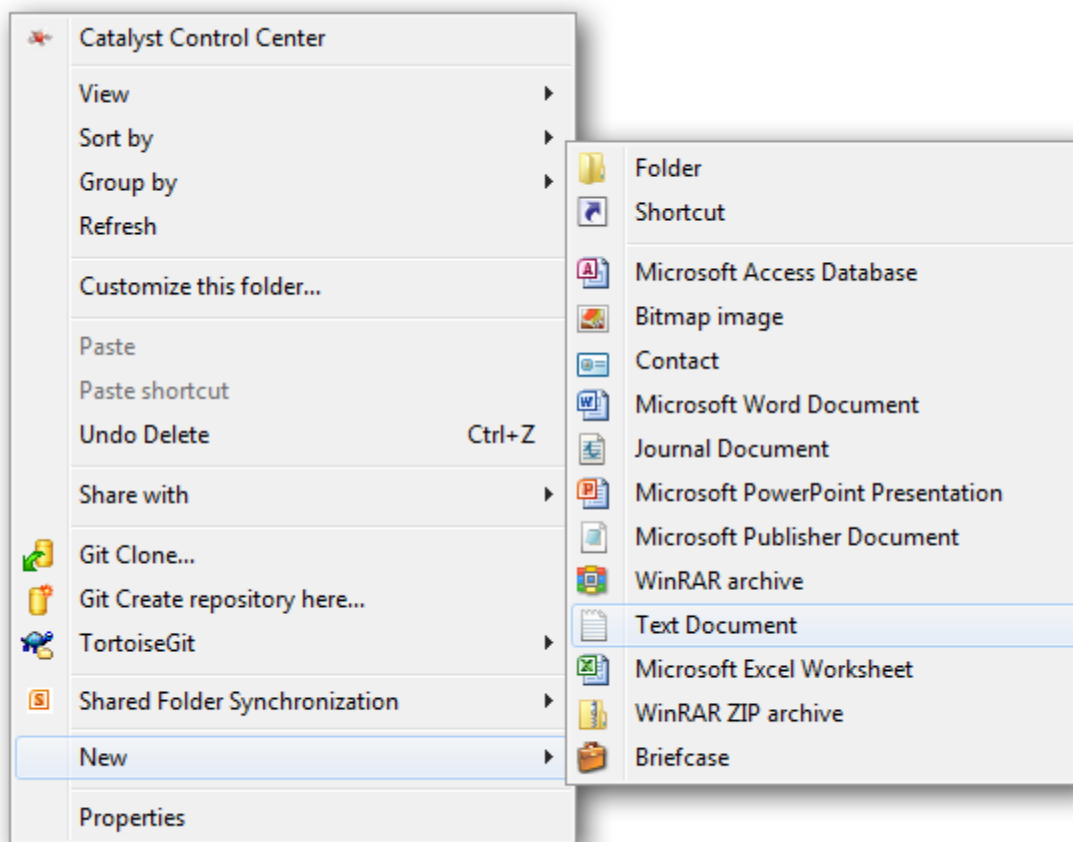
Note: if you are a beginner you should be careful with this script.

Create Your Password Protected Folder

Before we get started we need to create a folder that will house our password protected folder, this is just an ordinary folder and can be located anywhere and named anything.



Navigate into our newly created folder and create a new Text Document. This can easily be done from the context menu.

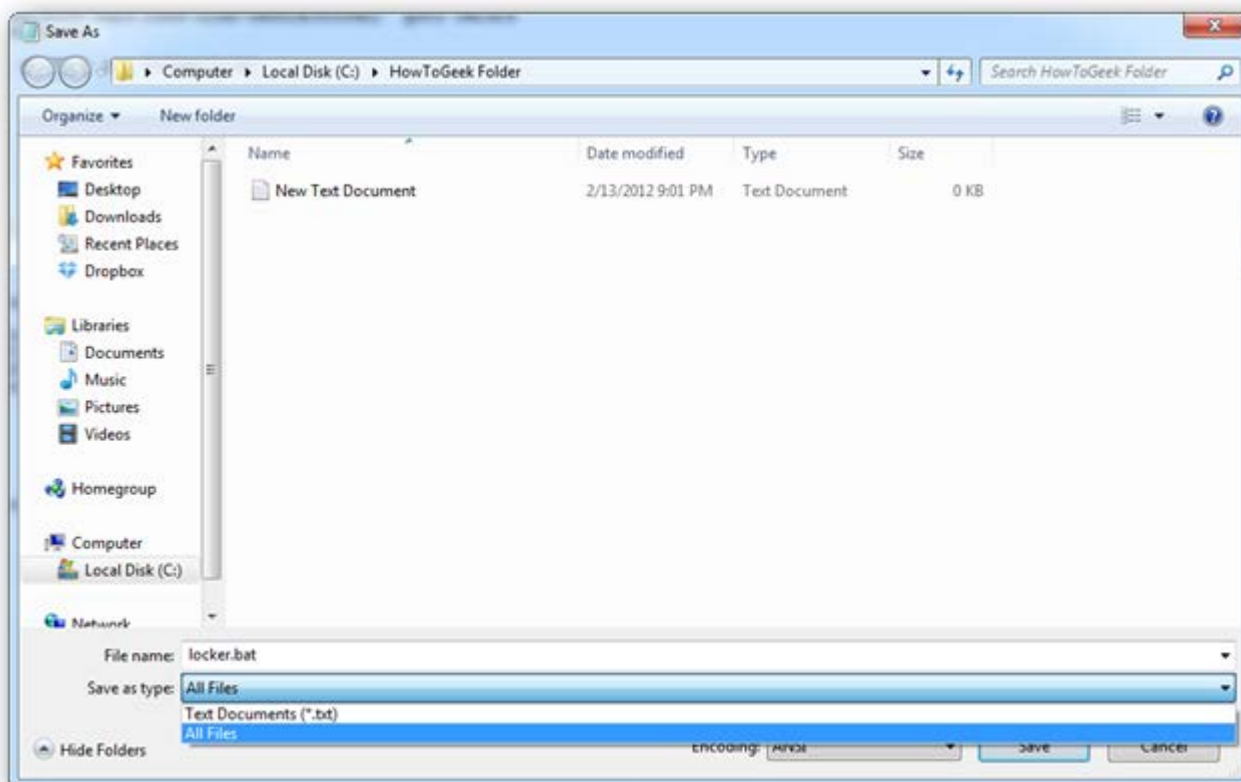


Open the document, now paste the following code into the contents of the document:

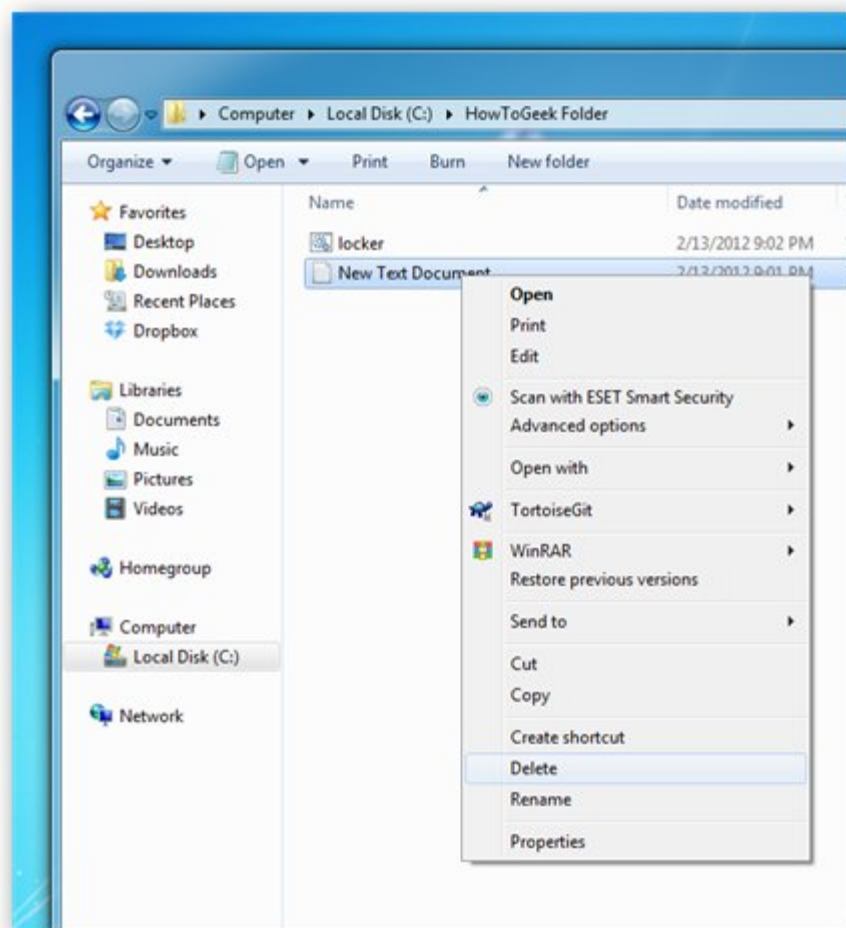
```
cls
@ECHO OFF
title Folder Private
if EXIST "HTG Locker" goto UNLOCK
if NOT EXIST Private goto MDLOCKER
:CONFIRM
echo Are you sure you want to lock the folder(Y/N)
set/p "cho=>"
if %cho%==Y goto LOCK
```

```
if %cho%==y goto LOCK
if %cho%==n goto END
if %cho%==N goto END
echo Invalid choice.
goto CONFIRM
:LOCK
ren Private "HTG Locker"
attrib +h +s "HTG Locker"
echo Folder locked
goto End
:UNLOCK
echo Enter password to unlock folder
set/p "pass=>"
if NOT %pass%== PASSWORD_GOES_HERE goto FAIL
attrib -h -s "HTG Locker"
ren "HTG Locker" Private
echo Folder Unlocked successfully
goto End
:FAIL
echo Invalid password
goto end
:MDLOCKER
md Private
echo Private created successfully
goto End
:End
```

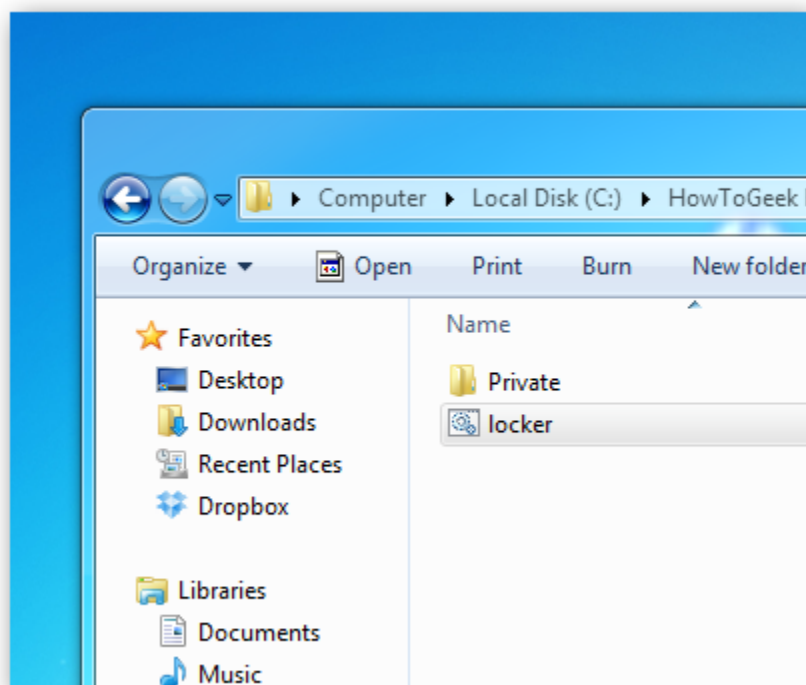
Change the PASSWORD_GOES_HERE text to the password we want to set. Now go ahead and save the file as locker.bat.



Once the file is saved as a batch file we can delete the original text file.



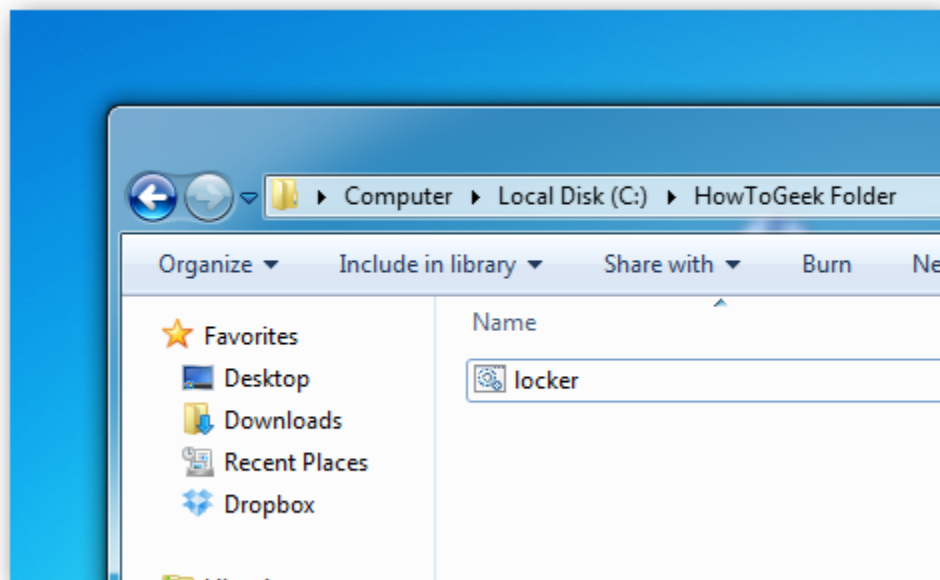
Now run our batch file by double clicking on it—the first time we run it, it will create a folder called Private. This is where we can store all your secret things. When we have finished adding all your stuff to the Private folder, run locker.bat again.



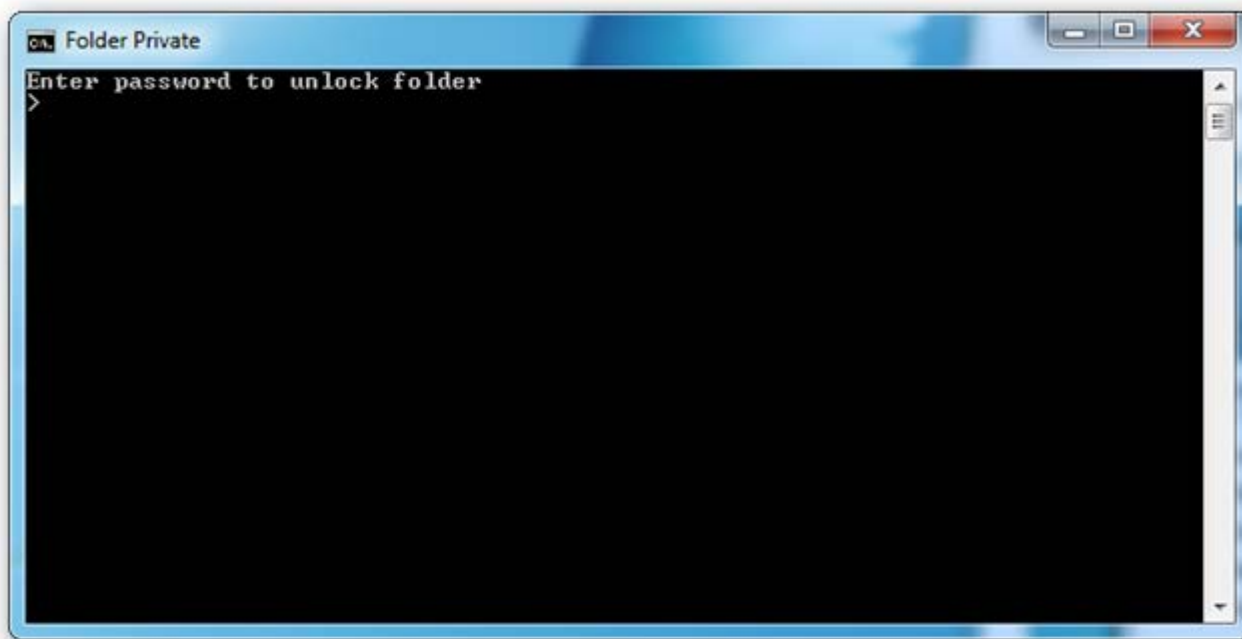
This time we will be asked if we are sure that we want to lock the folder, press the “Y” key and hit enter to lock your folder.



We will see that your Private folder quickly disappears.



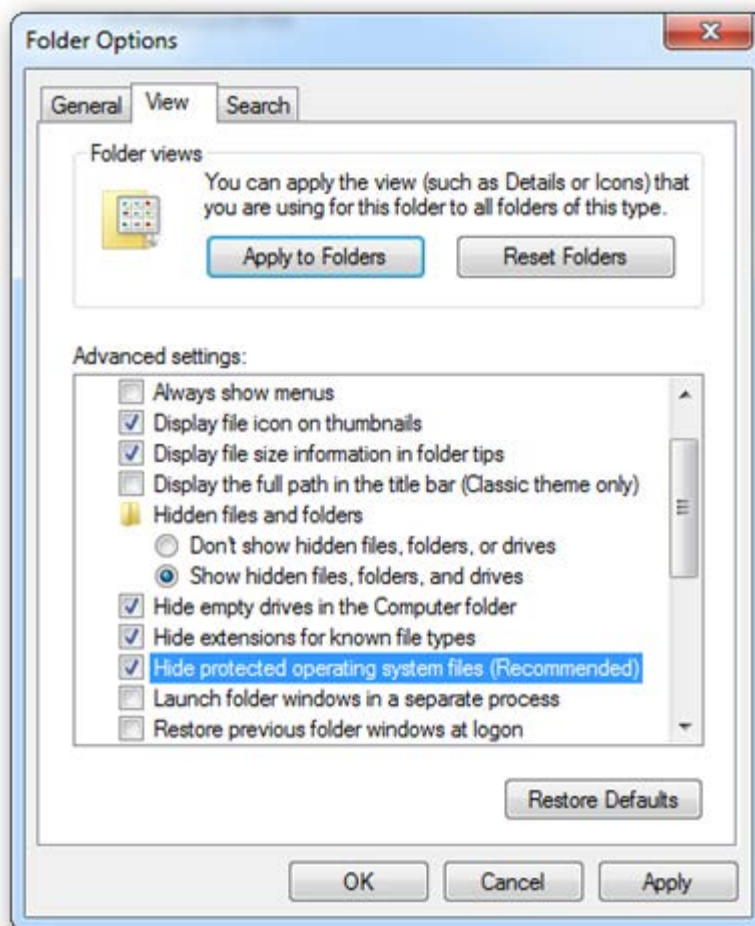
If we run the script yet again, we will prompt for a password.



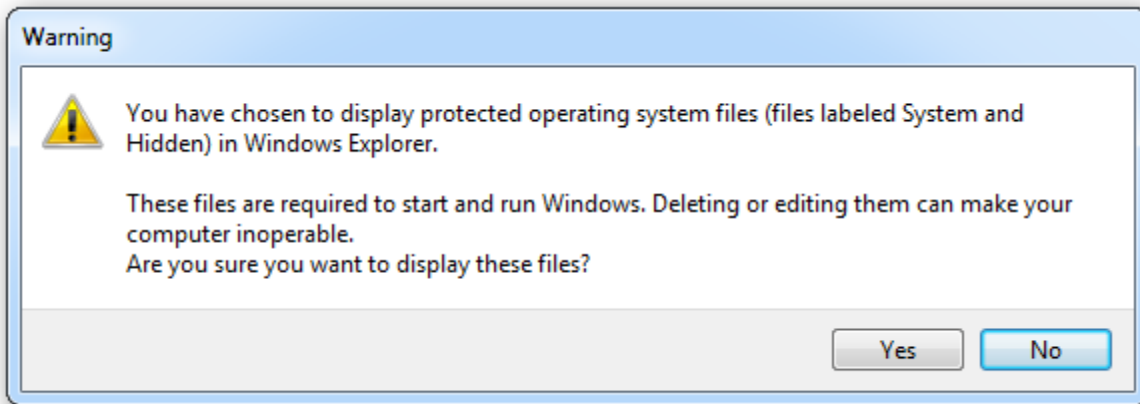
If we enter the same password as we set in the script the Private folder will reappear if we enter the incorrect password the script will just Terminate.

How to See the Files Again?

Most people don't know how to show system files, but anybody who has some experience will probably be able to quickly figure it out in the Folder Options. To see the files again, all we have to do is uncheck the boxes for "Show hidden files, folders, and drives" and uncheck the box for "Hide protected operating system files".



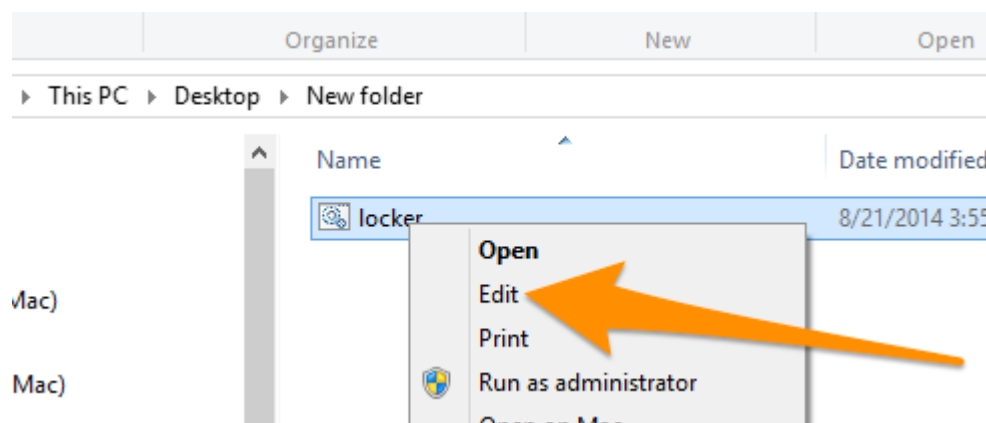
But any ordinary user who unchecks the box will most probably be scared off by the warning message that appears.



The second way someone could compromise the folder is to open the batch file and read our password. It's definitely not a really secure way to hide your files, but it is fun.

If You Forget Your Password

Seems like once a week somebody writes in asking how to figure out the password they set. And the answer is really simple: Right-click on the locker.bat file and choose Edit.



Then we can see the password we set in the file.

HOW TO CREATE A STRONG PASSWORD (AND REMEMBER IT)

Mr. R.Rajesh Kumar, I B.Sc. (CS) - B

The Traditional Password Advice:

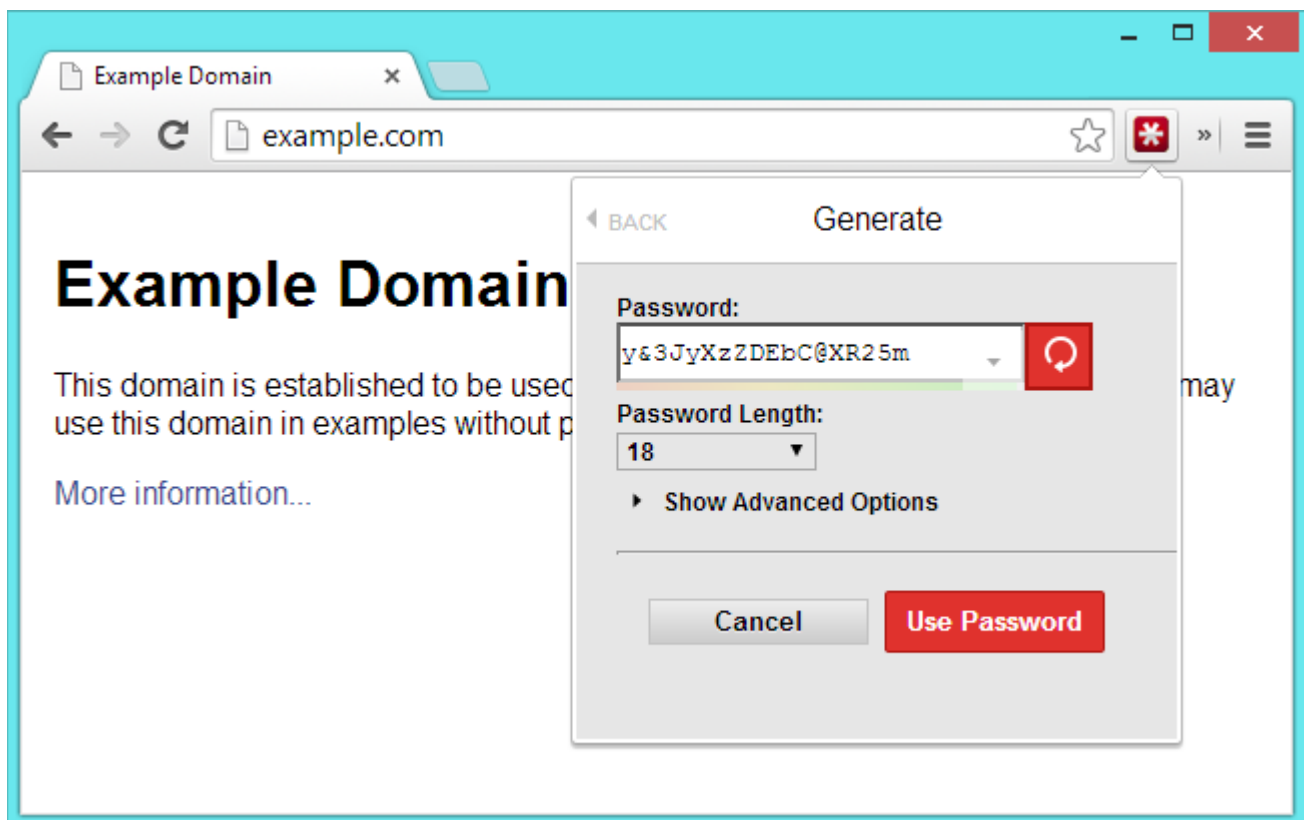
Why You Should Use a Password Manager and How to get started

The majority of people use very weak passwords and reuse them on different websites.

According to the traditional advice — which is still good — a strong password is:

- **Has 12 Characters, Minimum:** We need to choose a password that's long enough. There's no minimum password length everyone agrees on, but we should generally go for passwords that are a minimum of 12 to 14 characters in length. A longer password would be even better.
- **Includes Numbers, Symbols, Capital Letters, and Lower-Case Letters:** Use a mix of different types of characters to make the password harder to crack.
- **Isn't a Dictionary Word or Combination of Dictionary Words:** Stay away from obvious dictionary words and combinations of dictionary words. Any word on its own is bad. Any combination of a few words, especially if they're obvious, is also bad. For example, "house" is a terrible password. "Red house" is also very bad.
- **Doesn't Rely on Obvious Substitutions:** Don't use common substitutions, either — for example, "H0use" isn't strong just because you've replaced an o with a 0. That's just obvious.

Try to mix it up — for example, “BigHouse\$123” fits many of the requirements here. It’s 12 characters and includes upper-case letters, lower-case letters, a symbol, and some numbers. But it’s fairly obvious — it’s a dictionary phrase where each word is capitalized properly. There’s only a single symbol, all the numbers are at the end, and they’re in an easy order to guess.



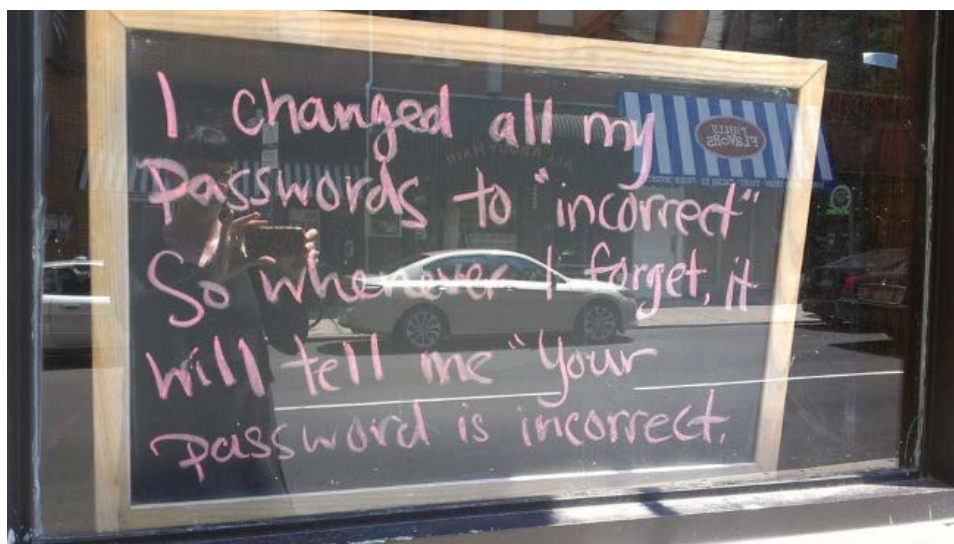
A Trick for Creating Memorable Passwords

With the tips above, it’s pretty easy to come up with a password. Just bash the fingers against the keyboard and we can come up with a strong password like 3o(t&gSp&3hZ4#t9. That’s a pretty good one — it’s 16 characters, includes a mix of many different types of characters, and is hard to guess because it’s a series of random characters.

The only problem here is memorizing this password. Assuming we don't have a photographic memory, we had have to spend time drilling these characters into your brain. There are random password generators that can come up with this type of password for us — they're generally most useful as part of a password manager that will also remember them for us.

We will need to think about how to come up with a memorable password. We don't want to use something obvious with dictionary characters, so consider using some sort of trick to memorize it.

For example, maybe you can find it easy to remember a sentence like "The first house I ever lived in was 613 Fake Street. Rent was \$400 per month." We can then turn that into a password by using the first digits of each word, so our password would become **Tfhleliw613FS.Rw\$4pm**. This is a strong password at 21 digits. Sure, a true random password might include a few more numbers and symbols and upper-case letters scrambled around, but it's not bad at all. We just need to remember two simple sentences, so it's easy to remember.



The Passphrase / Diceware Method

The traditional advice isn't the only good advice for coming up with a password XKCD did a great comic about this many years ago that is still widely linked to today. Throwing all the usual advice out, the comic advises choosing four random words and stringing them together to create a passphrase — a password that involves multiple words. The randomness of the word choice and length of the passphrase makes it strong.

The most important thing to remember here is that the words need to be random. For example, “cat in the hat” would be a terrible combination because it's such a common phrase and the word makes sense together. “my beautiful red house” would also be bad because the words make grammatical and logical sense together. But, something like “correct horse battery staple” or “seashell glaring molasses invisible” is random. The words don't make sense together and aren't in grammatically correct order, which is good. It should also be much easier to remember than a traditional random password.

People aren't good at coming up with sufficiently random combinations of words, so there's a tool we can use here. The Diceware website provides a numbered list of words. We roll traditional six-sided dice and the numbers that come up choose the words we should use. This is a great way to choose a passphrase because it ensures us use a random combination of words — we may even end up using words that aren't a normal part of our vocabulary. But, because we're just choosing from a list of words, it should be fairly easy to remember.

Mailing List

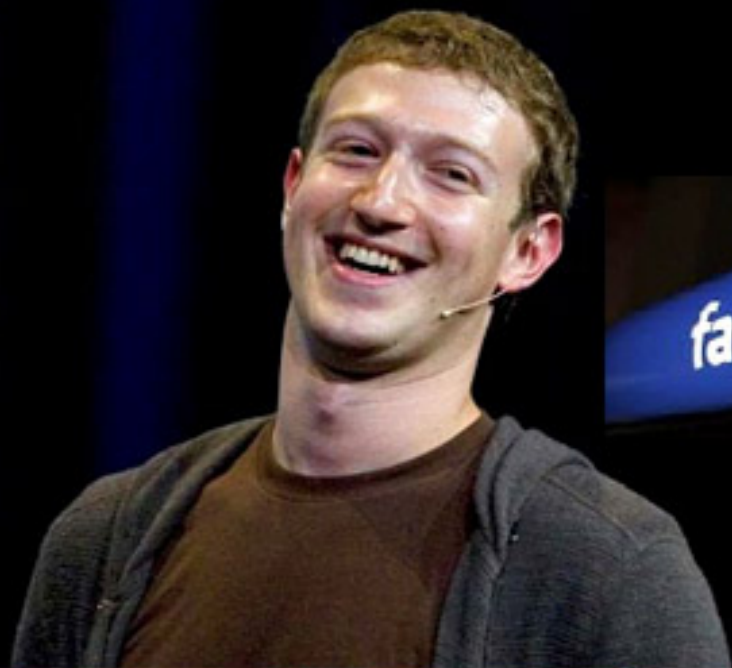


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