Rescue computers

There are several tools out there to help you manage and rescue computers: damaged disks, failing MBR/GRUB/Boot sectors, pics lost, passwords forgotten, etc.

Some useful tools for your use case might be some of the ones listed below

1. Make bootable usb disks

From Linux:

- several distro specific tools (USB Disk Creator, UnetBootin, Gnome USB Multiwriter, ...)
- many more, distro-specific (for fedora, slack, ...)

From Windows:

- Rufus
  https://rufus.ie[1]

Multiplatform (vesions available for Linux, Windows, ...):

- Ventoy . prepares a usb disk to host many iso files that can be booted in the fly
  https://www.ventoy.net/[2]
- Etcher
  https://etcher.balena.io[3]

2. Place several linux distributions on a bootable usb disk

2.1. Ventoy

https://www.ventoy.net/[4]

2.2. Useful Linux distros

2.2.1. SystemRescueCD

https://www.system-rescue.org/[5]

2.2.2. Rescatux

https://www.supergrubdisk.org/rescatux/[6]

2.2.3. Any + Boot-repair

https://help.ubuntu.com/community/Boot-Repair[7]

2.2.4. Any + chntpw

See, for instance:

- https://tech-couch.com/post/resetting-windows-passwords-from-linux[8]
- https://ostechnix.com/reset-windows-password-with-linux-live-cd/[9]

2.3. Change Windows Hello options

2.3.1. Disable for your user

If you MS Windows has the **Windows Hello** options enabled for loging in in your windows session, you are not using the user password for your login but those other options (such as PIN, facial recognition, etc).

In case you need it, beware that the PowerShell command specified below disables the ability to choose Windows Hello options for the user.

```
Set-ItemProperty -Path HKLM:\SOFTWARE\Policies\Microsoft\PassportForWork -Name
"Enabled" -Value 0
```

Taken from:

https://www.hexnode.com/mobile-device-management/help/script-to-disable-sign-in-options-on-windows/[10]

2.3.2. Disable for all users - from ms windows

You can also disable **Windows Hello** options for all users. If you need this solution instead, you can read this answer from the MS forums:

https://answers.microsoft.com/en-us/windows/forum/all/how-to-disable-windows-hello/05ab5492-19c7-4d44-b762-d93b44a9cf65[11]

Method 1: Using Group policy settings.

If you are on Windows 10 Pro edition, you can change the group policy settings to disable PIN sign-in option for all users.

- Open the **Run** dialog box by pressing the Windows key and the R key together.
- Type **GPEDIT.MSC** and hit the**Enter** key.
- `Go to Computer Configuration -> Administrative Templates -> System -> Logon`
- On the right side, double click on **Turn on PIN sign-in** and select**Disabled**.
- Similarly disable the other Windows Hello options if any.
- Exit the Group policy editor and reboot the computer.

Method 2: Disabling Windows Hello in Registry.

If setting Group policy doesn't work, you may disable the sign in options which should disableWindows Hello options in all user accounts.

Disclaimer: The registry is a database in Windows that contains important information about system hardware, installed programs and settings, and profiles of each of the user accounts on the computer. Windows often reads and updates the information in the registry.

Normally, software programs make registry changes automatically. You should not make unnecessary changes to the registry. Changing registry files incorrectly can cause Windows to stop working or make Windows report the wrong information.

Please take a backup of the registry. Follow the steps given in the link below:

How to back up and restore the registry in Windows[12]

- Open the **Run** dialog box by pressing the Windows key and the R key together.
- Type **Regedit** and hit the**Enter** key.
- When the Registry Editor opens, navigate to the following location:
- `HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\PolicyManager\default\Settings\AllowSignInOptions`

- In the right pane, double click on the DWORD entry named**value** set it to **0**. The above method will disable Windows Hello for all user accounts. If you want to re-enableit, change the DWORD entry **Value** back to**1**.Hope it helps.Thanks,Peer SamieMicrosoft Community-Moderator

2.3.3. Disable for all users - from linux

If using a Linux Live CD/USB, I recommend that you use a lightweight recent Linux Live distro (such as Lubuntu, Ubuntu Mate or similar), and from the Live session, install `chntpw`, which will allow you to perform 2 tasks:

1. disable "Windows Hello" options for all users, so that user passwords apply again.
2. manage a user password, as usual, from within linux

1. Mount the windows disk partition with **read & write** support.
   - This is done by default from the distro file manager, when you click a the name of the disk partition in the left column in the file manager GUI program.
2. open a terminal, and navigate to the folder where the system registry files are. You can get inspired with the examples shown here:
   https://superuser.com/a/289963[13]
3. run program `chntpw`
   1. enter the SOFTWARE section, and change value of the `AllowSignInOptions` to **0**.

Example:

```
ubuntu-mate@ubuntu-mate:/media/ubuntu-
mate/3AF82C48F82C04AB/Windows/System32/config$ sudo chntpw -i SOFTWARE
chntpw version 1.00 140201, (c) Petter N Hagen
Hive <SOFTWARE> name (from header): <emRoot\System32\Config\SOFTWARE>
ROOT KEY at offset: 0x001020 * Subkey indexing type is: 686c <lh>
File size 77070336 [4980000] bytes, containing 17001 pages (+ 1 headerpage)
Used for data: 1326705/75937000 blocks/bytes, unused: 390/429560 blocks/bytes.



<>=========<> chntpw Main Interactive Menu <>=========<>

Loaded hives: <SOFTWARE>

  3 - RecoveryConsole settings
  4 - Show product key (DigitalProductID)
      - - -
  9 - Registry editor, now with full write support!
  q - Quit (you will be asked if there is something to save)
```

```
What to do? [1] -> 9
Simple registry editor. ? for help.

> cd Microsoft\PolicyManager\default\Settings
\Microsoft\PolicyManager\default\Settings> ?
Simple registry editor:
hive [<n>]            - list loaded hives or switch to hive numer n
cd <key>             - change current key
ls | dir [<key>]     - show subkeys & values,
cat | type <value>   - show key value
dpi <value>          - show decoded DigitalProductId value
hex <value>          - hexdump of value data
ck [<keyname>]       - Show keys class data, if it has any
nk <keyname>         - add key
dk <keyname>         - delete key (must be empty)
ed <value>           - Edit value
nv <type#> <valuename> - Add value
dv <valuename>       - Delete value
delallv              - Delete all values in current key
rdel <keyname>       - Recursively delete key & subkeys
ek <filename> <prefix> <keyname>  - export key to <filename> (Windows .reg file
format)
debug                - enter buffer hexeditor
st [<hexaddr>]       - debug function: show struct info
q                    - quit

\Microsoft\PolicyManager\default\Settings> ls
Node has 14 subkeys and 0 values
  key name
  <AllowAutoPlay>
  <AllowDataSense>
  <AllowDateTime>
  <AllowEditDeviceName>
  <AllowLanguage>
  <AllowOnlineTips>
  <AllowPowerSleep>
  <AllowRegion>
  <AllowSignInOptions>
  <AllowVPN>
  <AllowWorkplace>
  <AllowYourAccount>
  <ConfigureTaskbarCalendar>
  <PageVisibilityList>

\Microsoft\PolicyManager\default\Settings> cd AllowSignInOptions

(...)\default\Settings\AllowSignInOptions> ls
Node has 0 subkeys and 6 values
  size      type                value name              [value if type DWORD]
```

```
    4  4 REG_DWORD          <Behavior>                 32 [0x20]
    4  4 REG_DWORD          <highrange>                 1 [0x1]
    4  4 REG_DWORD          <lowrange>                  0 [0x0]
    4  4 REG_DWORD          <mergealgorithm>            1 [0x1]
    4  4 REG_DWORD          <policytype>                4 [0x4]
    4  4 REG_DWORD          <value>                     1 [0x1]


(...)\default\Settings\AllowSignInOptions> ?
Simple registry editor:
hive [<n>]              - list loaded hives or switch to hive numer n
cd <key>                - change current key
ls | dir [<key>]        - show subkeys & values,
cat | type <value>      - show key value
dpi <value>             - show decoded DigitalProductId value
hex <value>             - hexdump of value data
ck [<keyname>]          - Show keys class data, if it has any
nk <keyname>            - add key
dk <keyname>            - delete key (must be empty)
ed <value>              - Edit value
nv <type#> <valuename>  - Add value
dv <valuename>          - Delete value
delallv                 - Delete all values in current key
rdel <keyname>          - Recursively delete key & subkeys
ek <filename> <prefix> <keyname>  - export key to <filename> (Windows .reg file
format)
debug                   - enter buffer hexeditor
st [<hexaddr>]          - debug function: show struct info
q                       - quit

(...)\default\Settings\AllowSignInOptions> ed value
EDIT: <value> of type REG_DWORD (4) with length 4 [0x4]
DWORD: Old value 1 [0x1], enter new value (prepend 0x if hex, empty to keep old
value)
-> 0
DWORD: New value 0 [0x0],

(...)\default\Settings\AllowSignInOptions> q


<>=======<> chntpw Main Interactive Menu <>=======<>

Loaded hives: <SOFTWARE>

  3 - RecoveryConsole settings
  4 - Show product key (DigitalProductID)
    - - -
  9 - Registry editor, now with full write support!
  q - Quit (you will be asked if there is something to save)
```

```
    What to do? [1] -> q

    Hives that have changed:
     #  Name
     0  <SOFTWARE>
    Write hive files? (y/n) [n] : y
     0  <SOFTWARE> - OK
    ubuntu-mate@ubuntu-mate:/media/ubuntu-
    mate/3AF82C48F82C04AB/Windows/System32/config$
```

2.4. Manage the user as needed

Use `chntpw` again to manage the user as needed.

You need to install the program, browse to the folder where the ./Windows/System32/config/ folder is, and execute the command like the own shown below:

```
    ubuntu-mate@ubuntu-mate:/media/ubuntu-
    mate/3AF82C48F82C04AB/Windows/System32/config$ sudo chntpw -i SAM
```

Proceed as needed, and remember to quit with `q`, and save the changes with `y` (lowercase)

3. Use the tool and enjoy

Follow the instructions for the chosen tool, in your case. And enjoy.

Alias names for this page:

Rescue | Reset | Fix | Boot | GRUB | Emergency | USB | Ventoy | DiskWriter | USB Disk Writer | Multiwriter | ISO

---

[1] https://rufus.ie

[2] https://www.ventoy.net/

[3] https://etcher.balena.io

[4] https://www.ventoy.net/

[5] https://www.system-rescue.org/

[6] https://www.supergrubdisk.org/rescatux/

[7] https://help.ubuntu.com/community/Boot-Repair

[8] https://tech-couch.com/post/resetting-windows-passwords-from-linux

[9] https://ostechnix.com/reset-windows-password-with-linux-live-cd/

[10] https://www.hexnode.com/mobile-device-management/help/script-to-disable-sign-in-options-on-windows/

[11] https://answers.microsoft.com/en-us/windows/forum/all/how-to-disable-windows-hello/05ab5492-19c7-4d44-b762-d93b44a9cf65

[12] https://support.microsoft.com/en-in/help/322756/how-to-back-up-and-restore-the-registry-in-windows

[13] https://superuser.com/a/289963