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## How to Shrink a Partition in Windows 10

Today, we will see how to shrink a partition or disk on your drive in Windows 10. This can be useful if you have extra space on your drive which you would like to use for installing another OS in a dual boot configuration. Or if you have a new computer with only one big partition created by the vendor, you might want to split it into two or more partitions to separate your personal data from the system drive.

In older Windows releases, shrinking the volume required a third-party tool. Modern Windows versions like Windows Vista, Windows 7, Windows 8.1 and Windows 10 allow shrinking partitions with free space in order to reduce their size and use that free space for creating another partition or installing a different operating system.

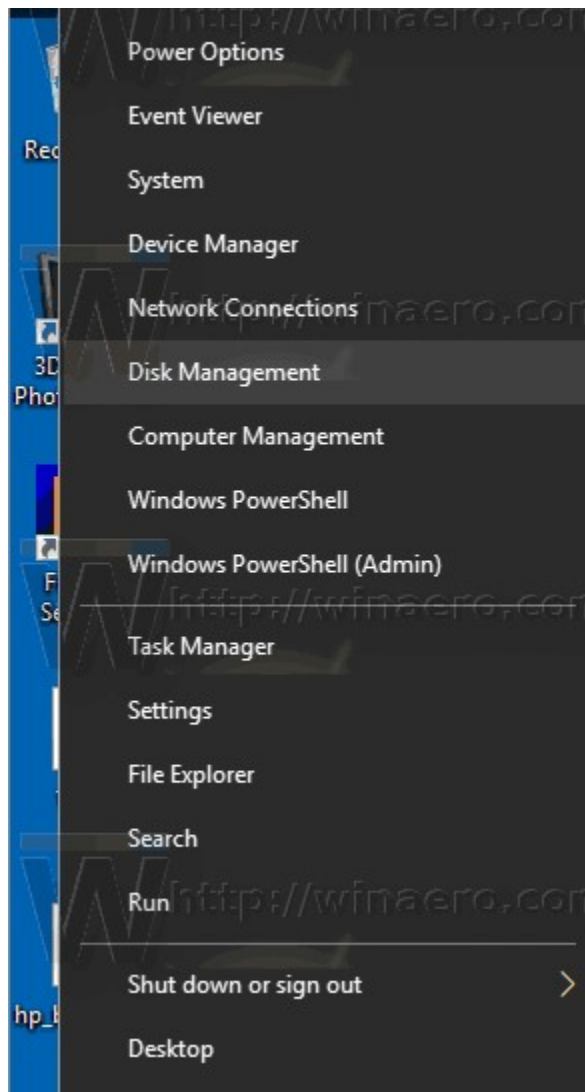
Many users prefer to create multiple partitions on their drive to avoid storing all data on the system partition which has Windows installed. Traditionally, the system drive is your C: drive. If it is large enough, you can shrink it and have partitions D:, E: and so on.

Windows 10 offers a number of methods that you can use to shrink your partitions. These include Disk Management, the console tool "DiskPart", and PowerShell.

**To shrink a partition in Windows 10**, do the following.

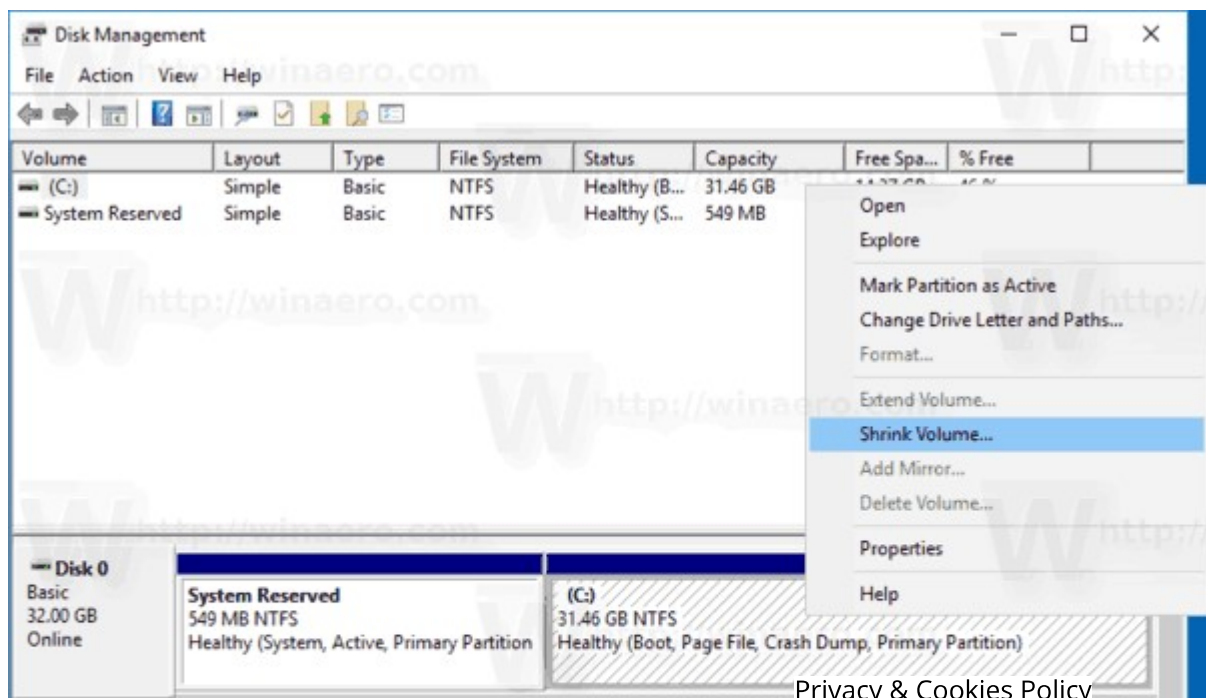
1. Press the `Win + X` keys together.
2. In the menu, select Disk Management.





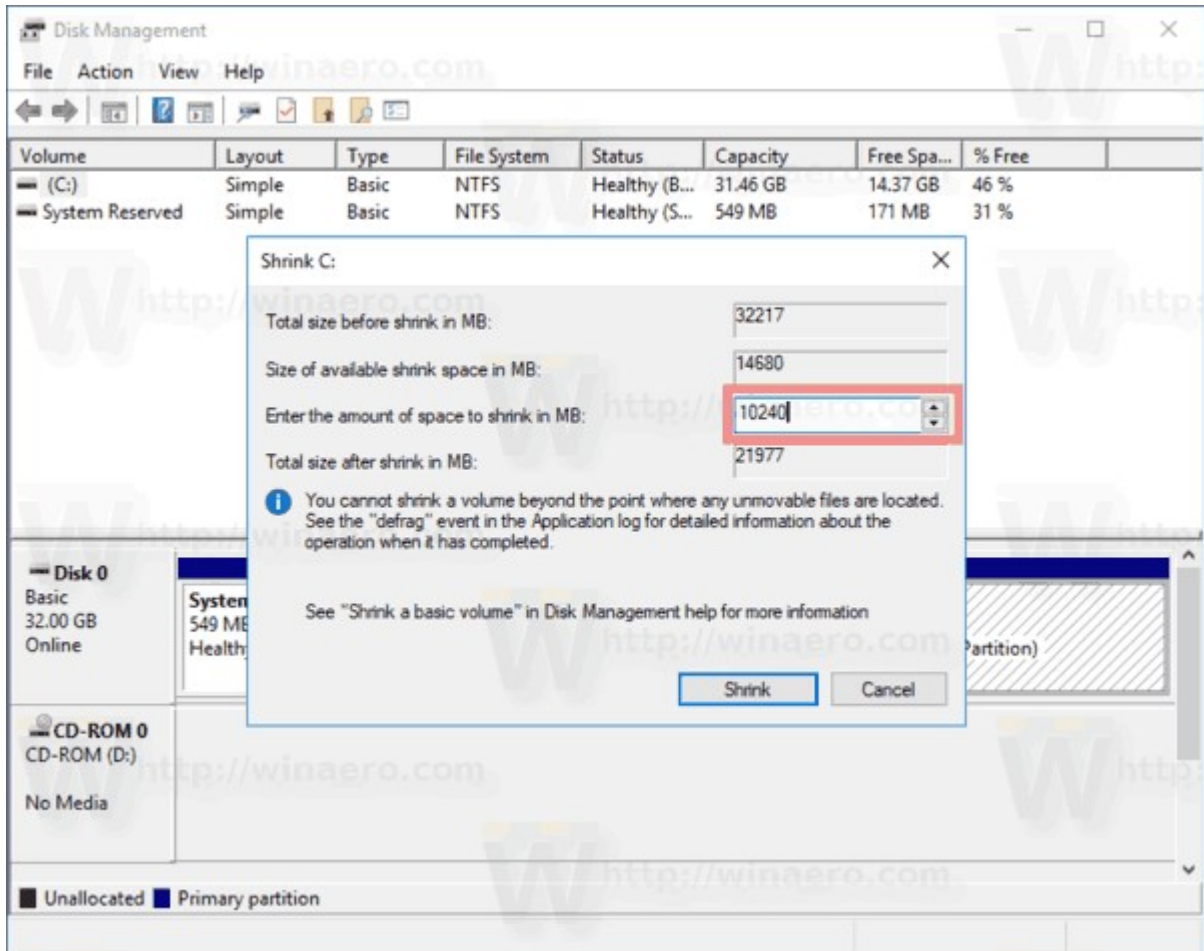
3. In Disk Management, right-click on the partition you would like to shrink.

4. Select *Shrink volume* in the context menu.



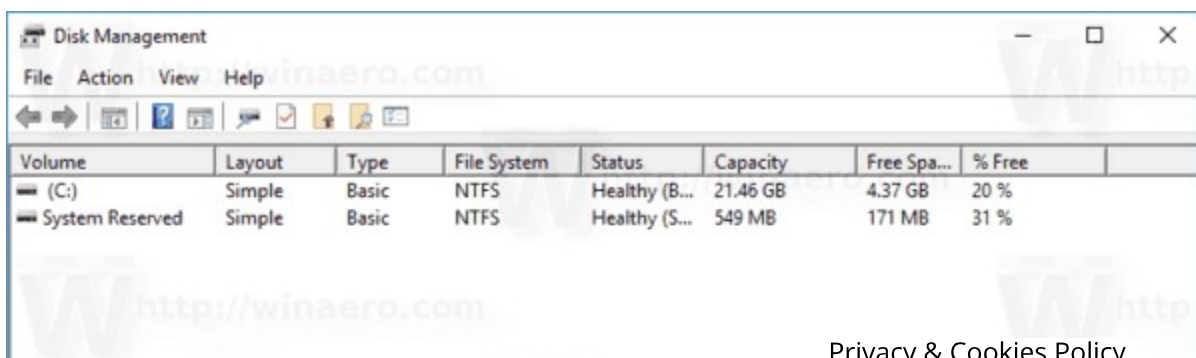


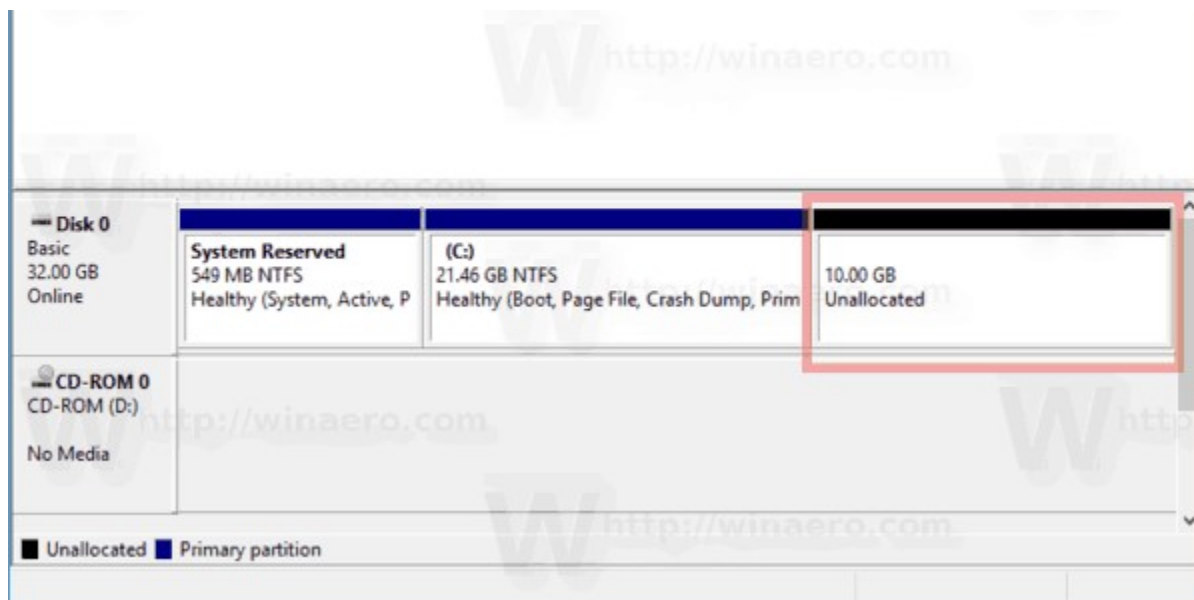
5. Type by how many MBs you want to shrink the partition, and click on Shrink.



You are done.

The process takes a few seconds but Disk Management shows no progress bar. Once the process is done, it will show you Unallocated space on the drive.





You can create a new partition with the Unallocated space if you need. Alternatively, you can reboot and install another operating system for a dual boot configuration.

Note: If for some reason, you are unable to Shrink your partition or if Disk Management gives you an error, you can try the following. Open [System Protection](#) and disable it temporarily for the partition which you wish to shrink.

Shadow copies, Restore Points and such system data sometimes prevent Windows from the shrinking the partition and restrict the quantity by which it can be shrunk. The maximum number of reclaimable bytes might be higher once system protection is disabled for the partition. You can re-enable System Protection once you have shrunk the partition.

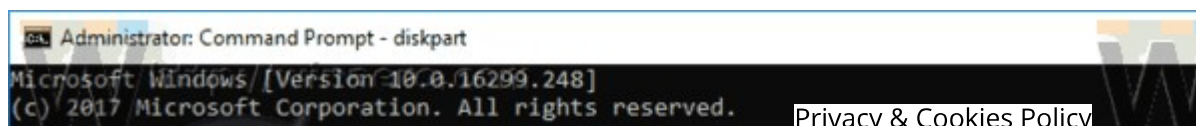
## Shrink a partition using DiskPart

DiskPart is a text-mode command interpreter bundled with Windows 10. This tool enables you to manage objects (disks, partitions, or volumes) by using scripts or by direct input at the command prompt.

Tip: [DiskPart can be used to wipe a disk or a partition securely.](#)

To shrink a partition using DiskPart, do the following.

1. Open [an elevated command prompt](#).
2. Type `diskpart`.
3. Type `list volume` to see all drives and their partitions.





```
C:\Windows\system32>diskpart

Microsoft DiskPart version 10.0.16299.15

Copyright (C) Microsoft Corporation.
On computer: DESKTOP-A961FEM

DISKPART> list volume
```

Volume ###	Ltr	Label	Fs	Type	Size	Status	Info
Volume 0	D			CD-ROM	0 B	No Media	
Volume 1		System Rese	NTFS	Partition	549 MB	Healthy	System
Volume 2	C		NTFS	Partition	31 GB	Healthy	Boot

```
DISKPART>
```

4. Look at the ### column in the output. You need to use its value with the command `select volume NUMBER`. Substitute the NUMBER portion with the actual partition number you want to shrink.

```
Administrator: Command Prompt - diskpart

Microsoft Windows [Version 10.0.16299.248]
(c) 2017 Microsoft Corporation. All rights reserved.

C:\Windows\system32>diskpart

Microsoft DiskPart version 10.0.16299.15

Copyright (C) Microsoft Corporation.
On computer: DESKTOP-A961FEM

DISKPART> list volume
```

Volume ###	Ltr	Label	Fs	Type	Size	Status	Info
Volume 0	D			CD-ROM	0 B	No Media	
Volume 1		System Rese	NTFS	Partition	549 MB	Healthy	System
Volume 2	C		NTFS	Partition	31 GB	Healthy	Boot

```
DISKPART> select volume 2

Volume 2 is the selected volume.

DISKPART>
```

5. Type `shrink querymax` to see the maximum number of reclaimable bytes that you can shrink the partition by.

```
Administrator: Command Prompt - diskpart

Microsoft Windows [Version 10.0.16299.248]
(c) 2017 Microsoft Corporation. All rights reserved.

C:\Windows\system32>diskpart

Microsoft DiskPart version 10.0.16299.15

Copyright (C) Microsoft Corporation.
On computer: DESKTOP-A961FEM

DISKPART> list volume
```

```
DISKPART> list volume

Volume ### Ltr Label          Fs      Type        Size     Status       Info
-----
Volume 0    D             NTFS     Partition   549 MB    Healthy      System
Volume 1    C             NTFS     Partition   31 GB     Healthy      Boot

DISKPART> select volume 2
Volume 2 is the selected volume.

DISKPART> shrink querymax

The maximum number of reclaimable bytes is: 14 GB (14679 MB)

DISKPART>
```

6. To shrink by maximum size allowed, just type shrink and press the `Enter` key.

7. To shrink by the specified size, type the command `shrink desired=size_in_MB`. Substitute 'size\_in\_MB' with a value that is not greater than the maximum number of reclaimable bytes.

```
Administrator: Command Prompt - diskpart

Copyright (C) Microsoft Corporation.
On computer: DESKTOP-A961FEM

DISKPART> list volume

Volume ### Ltr Label          Fs      Type        Size     Status       Info
-----
Volume 0    D             NTFS     Partition   549 MB    Healthy      System
Volume 1    C             NTFS     Partition   31 GB     Healthy      Boot

DISKPART> select volume 2
Volume 2 is the selected volume.

DISKPART> shrink querymax

The maximum number of reclaimable bytes is: 14 GB (14679 MB)

DISKPART> shrink desired=10240

DiskPart successfully shrunk the volume by: 10 GB

DISKPART>
```

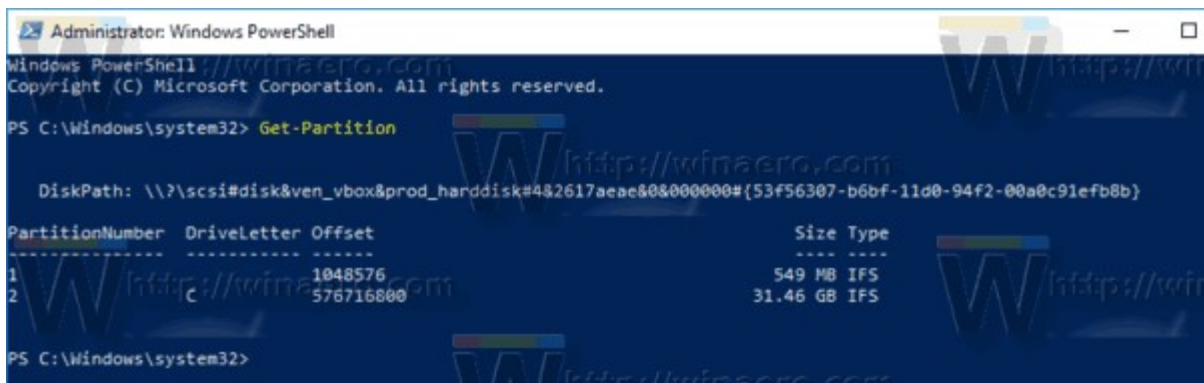
You should see the message *DiskPart successfully shrunk the volume by: value here*.

Finally, you can use PowerShell for doing the same operation.

## Shrink a partition using PowerShell

1. Open an [elevated PowerShell instance](#).
2. Type `Get-Partition` to see the list of your partitions.

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

PS C:\Windows\system32> Get-Partition

DiskPath: \\?\scsi#disk&ven_vbox&prod_harddisk#4&2617aeae&0&000000#(53f56307-b6bf-11d0-94f2-00a0c91efb8b)

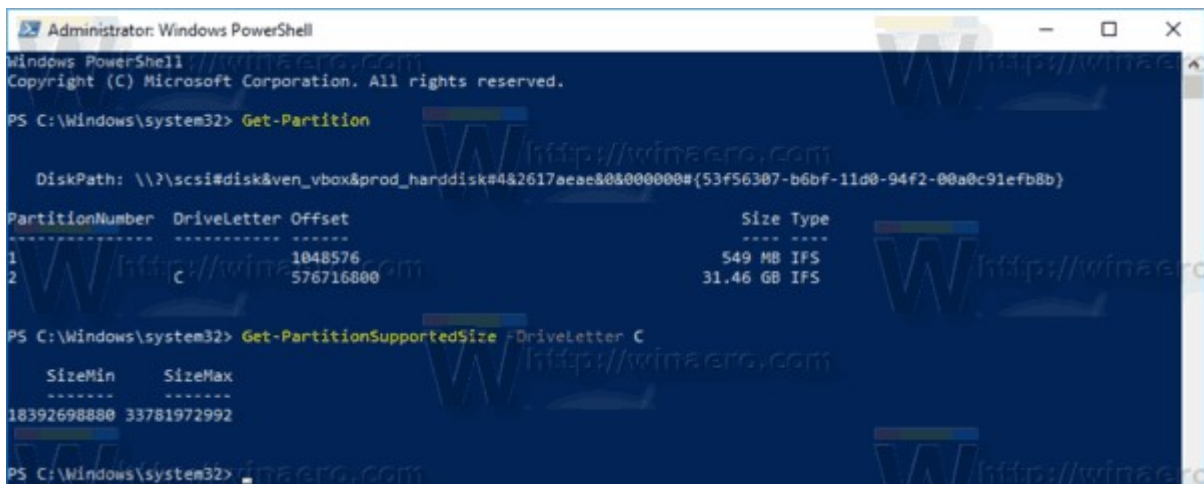
PartitionNumber DriveLetter Offset                Size Type
-----
1                1048576          549 MB IFS
2                576716800       31.46 GB IFS

PS C:\Windows\system32>
```

3. Note the drive letter and type the next command:

```
Get-PartitionSupportedSize -DriveLetter drive_letter
```

Replace the "drive\_letter" portion with the actual value to see the minimum and maximum size for this partition (SizeMin and SizeMax).



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

PS C:\Windows\system32> Get-Partition

DiskPath: \\?\scsi#disk&ven_vbox&prod_harddisk#4&2617aeae&0&000000#(53f56307-b6bf-11d0-94f2-00a0c91efb8b)

PartitionNumber DriveLetter Offset                Size Type
-----
1                1048576          549 MB IFS
2                576716800       31.46 GB IFS

PS C:\Windows\system32> Get-PartitionSupportedSize -DriveLetter C

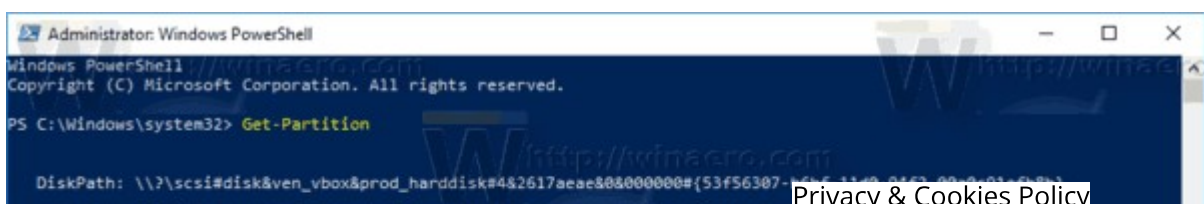
SizeMin SizeMax
-----
18392698880 33781972992

PS C:\Windows\system32>
```

4. The next command will shrink your partitions:

```
Resize-Partition -DriveLetter "drive_letter" -Size size_value
```

Supply the correct drive letter and its new size in bytes. The value should be between SizeMin and SizeMax values you've got from the previous step. This way, you can shrink or expand the partition.



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

PS C:\Windows\system32> Get-Partition

DiskPath: \\?\scsi#disk&ven_vbox&prod_harddisk#4&2617aeae&0&000000#(53f56307-b6bf-11d0-94f2-00a0c91efb8b)
```

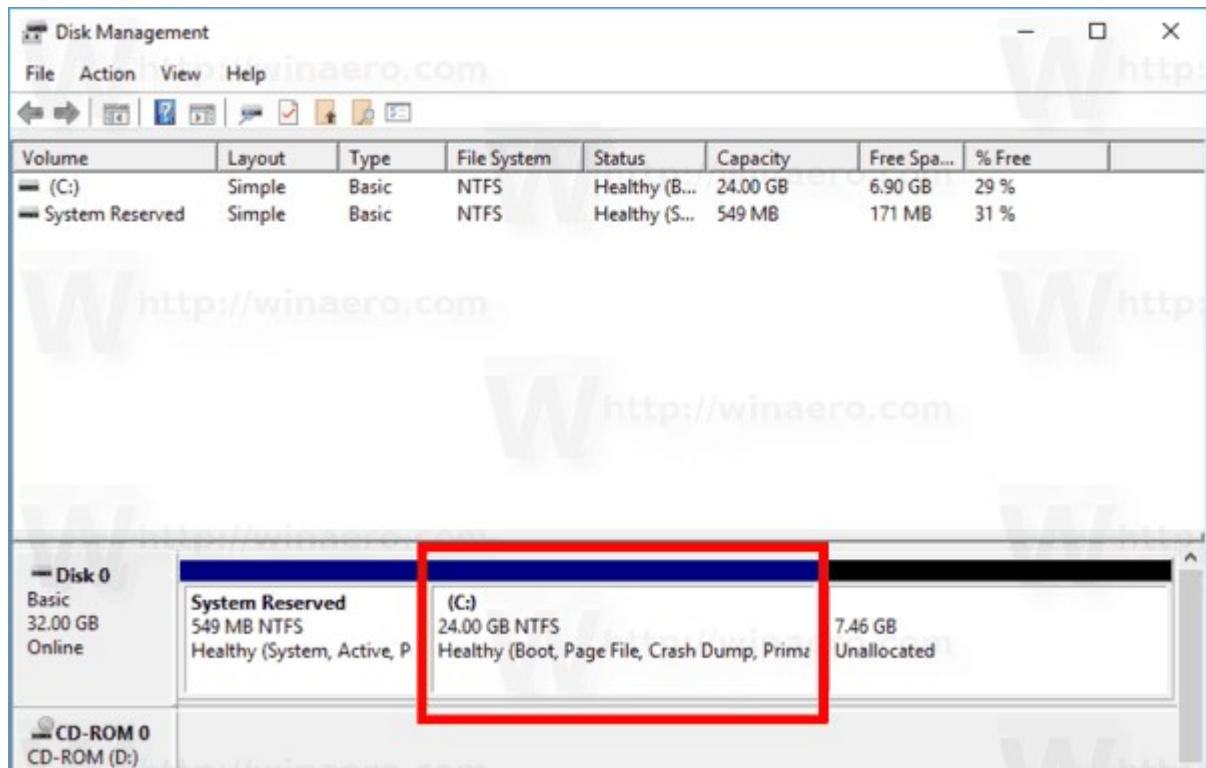


```
PartitionNumber  DriveLetter  Offset                Size  Type
-----
1                C:          1048576             549 MB  IFS
2                C:          576716800          31.46 GB  IFS

PS C:\Windows\system32> Get-PartitionSupportedSize -DriveLetter C

SizeMin  SizeMax
-----
10392698880 33781972992

PS C:\Windows\system32> Resize-Partition -DriveLetter C -Size 24GB
PS C:\Windows\system32>
```



Tip: The -Size argument accepts size modifiers like:

- Size 1KB - for one kilobyte.
- Size 1MB - for one megabyte.
- Size 1GB - for one gigabyte.

That's it!

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This entry was posted in Windows 10 and tagged Windows 10 Disk Management, Windows 10 Shrink Partition on February 26, 2018 [<https://winaero.com/shrink-partition-windows-10/>] by Sergey Tkachenko.

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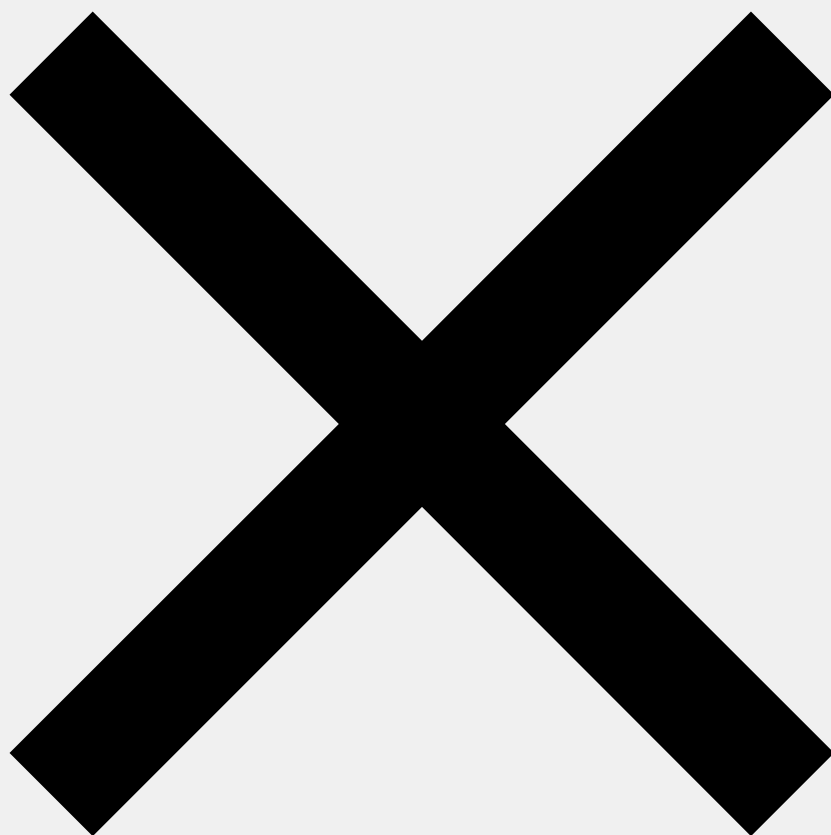
### About Sergey Tkachenko

Sergey Tkachenko is a software developer from Russia who started Winaero back in 2011. On this blog, Sergey is writing about everything connected to Microsoft, Windows and popular software. Follow him on Telegram, Twitter, and YouTube.

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