New-PSDrive – How to use PowerShell Net Use alternative

Last updated April 7, 2022 by Rudy Mens

We all know the Net Use command that we can use to map network drives from the command line. Although we can use Net Use in PowerShell, there is a more powerful alternative, the New-PSDrive cmdlet.

With the New-PSDrive cmdlet, we cannot only map network drives but also create drive mappings to local folders or registry keys on our computer. Drives created with the cmdlet can be temporary for only the current PowerShell sessions or persistent so they can be used in explorer.

In this article, we are going to take a closer look at all the possibilities of the New-PSDrive cmdlet with some useful examples for you to use.

Temporary vs Persistent drives

Before we are going to take a look at how to create the network drives, I first want to explain the difference between temporary and persistent drives.

They are great to use when you need to interact with a remote folder or a long folder path on your local computer.

Persistent drives are assigned a drive letter and therefore can also be used in Explorer. They will remain available when you close the PowerShell session or even reboot your computer.

Adding a new network drive with New-PSDrive

To map a network drive with PowerShell, we are going to create a persistent network connection. This way the network drive will be available in Explorer and other tools and not only in PowerShell.

There are a couple of required parameters to create a network connection:

Parameter	Description
Name	Must be an available drive letter
PSProvider	Set to **FileSystem** for network shares and folders
Root	The network location that you want to map

So to map the network share \\VBoxSvr\Win11 and assign it the drive letter v: we can use the following command:

```
1. New-PSDrive -Name V -PSProvider FileSystem -Root \\VBoxSvr\Win11 -Persis
```

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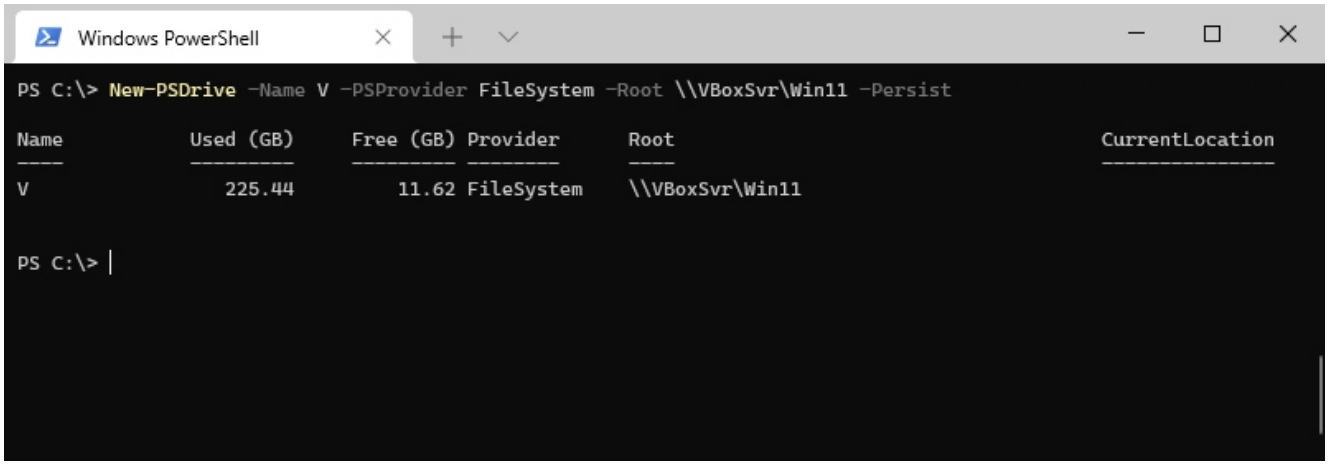

New-PSDrive network mapping

The network location will now be available in Explorer or any other tool that you want to use.

Using different credentials for the mapped network drive

Just like with Net Use we can use different credentials to open a remote network drive. For this, we first need to create a credential object that we can use to map the

```
# Get the credentials
$cred = Get-Credential

# Create the drive mapping with the credentials
New-PSDrive -Name V -PSProvider FileSystem -Root \\VBoxSvr\Win11 -Persist -Credential $cred
```

Creating a Temporary Drive Mapping in PowerShell

As mentioned we can also create a temporary drive mapping with PowerShell. With temporary mappings, we are not limited to letters only. We can give any name we want to the mapping. Also, we can create a mapping to a local folder on our computer.

For example, we can create a mapping to our log folder with:

```
New-PSDrive -Name Log -PSProvider FileSystem -Root c:\temp\logfiles -Description "Log Folder"
```

This way we can quickly navigate to the log files with `cd log:`. But we can not only navigate to the folder, we now also reference the mapping in other cmdlets. For

```
1. Get-ChildItem log:
```

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new-PSDrive

Creating a persistent mapping to a local folder

Temporary mappings are gone after you close the PowerShell window. There is no option to store mappings to local folders with New-PSDrive. But when you need to access a long folder path often from PowerShell then you could add the cmdlet to your PowerShell Profile. This way the mapping will be recreated every time you open PowerShell.

First, open your profile:

If you get an error that your profile is not found, then follow this article to quickly create one.

In your PowerShell profile add the following line:

```
# Create shotcuts to long folder paths
New-PSDrive -Name Log -PSProvider FileSystem -Root c:\temp\logfiles -Description "Log Folder" | Out-Null
```

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Note that we added `| Out-Null` to the cmdlet. By default, the cmdlet will output the results of the drive mapping. But we don't want that every time when we open a new PowerShell session.

Mapping Registry keys with New-PSDrive

Besides mapping network drives and folders, we can also map registry keys with the New-PSDrive cmdlet. By default, you will find already a mapping to the HKEY_CURRENT_USER key and HKEY_LOCAL_MACHINE key. You can few these with the command:

```
Get-PsDrive -PSProvider Registry

# Result
```

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```
5.  ----           ---------     --------- --------      ----
    ---------------
6.  HKCU                                   Registry      HKEY_CURRENT_USER
7.  HKLM                                   Registry      HKEY_LOCAL_MACHINE
```

If you want to create a mapping to the HKEY_USERS hives you can do the following:

```
1.  New-PSDrive -Name HKU -PSProvider Registry -Root HKEY_USERS
```

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We are not limited to the top-level registry gives, you can create mappings to any registry key you want. For example, the HKCU Windows NT key:

```
1.  New-PSDrive -Name WinNT -PSProvider Registry -Root
    HKEY_CURRENT_USER\Software\Microsoft\Windows NT
```

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You can now easily add, edit or remove registry keys using the create mapping:

```
1.  # WinNT: is the mapping that we created earlier
2.  New-Item –Path WinNT: –Name LazyAdmin
```

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Wrapping Up

To be honest, there is little advantage to using the New-PSDrive if you only want to

But when you only need to create a mapping in a PowerShell session, or when you want to create a shortcut to local folders or the registry, then the cmdlet can be quite useful.

If you have any questions, just drop a comment below!

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