

Microsoft PowerShell Core For Linux Now Available as a Snap [\(betanews.com\)](#)

Posted by msmash on Friday July 20, 2018 @03:20PM from the Microsoft-loves-Linux dept.

Canonical announced on Friday that [Microsoft's PowerShell Core is now available on Linux platform as a Snap](#). From a report: *If you aren't familiar, a Snap is essentially a packaged version of a program that can be easily installed on many Linux distributions. Many see it as the future of Linux, as it has the potential to reduce fragmentation. "Built on the .NET Framework, PowerShell is an open source task-based command-line shell and scripting language with the goal of being the ubiquitous language for managing hybrid cloud assets. It is designed specifically for system administrators and power-users to rapidly automate the administration of multiple operating systems and the processes related to the applications that run on those operating systems," says Canonical.*

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Excellent news (Score:5, Funny)
by [MightyMartian \(1523865\)](#) on Friday July 20, 2018 @03:28PM ([#56981854](#))
A piece of software that fills out a much-needed gap in the Linux world. Thanks, Microsoft; we could not expect any less from

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Re:Excellent news (Score:5, insightful)
by [cayenne8 \(626475\)](#) on Friday July 20, 2018 @03:33PM ([#56981890](#)) [Homepage](#) [Journal](#)
I'm trying to figure out in what universe would a use case be made for replacing native, tried and true shells for Linux with some POS from MS?

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Re: (Score:2)
by [ausekilis \(1513635\)](#)
Embrace - They've integrated Bash and X-Windows into MS Windows with they Linux subsystem work in the past couple years.
Extend - Lets take the most god-awful approach to system administration and add it to a simple (mostly) straight-forward shell.
Extinguish - ??? How are they going to snub out 100+ distros and millions (billions?) of lines of open source floating in the ether?

Re: (Score:3)
by [MrKaos \(858439\)](#)
How are they going to snub out 100+ distros and millions (billions?) of lines of open source floating in the ether? systemd :)

Re: (Score:1, Flamebait)
by [Hadlock \(143607\)](#)
Object-oriented shell languages are pretty rad, very intuitive, has auto-complete/intellisense built in so that third party editors can take advantage of it, you don't need to know the syntax of sed/awk, and jq-type functionality works for free, supports package management etc. It's somewhere in-between perl and ruby as a shell.

Probably will be largely ignored by the linux community, but by having powershell support in linux, you can take your windows-land scripts and execute them on linux without h
[2 hidden comments](#)

Re: (Score:2)
by [GoRK \(10018\)](#)
I mean this stuff only works if you have programs and cmdlets that actually return and operate on such objects. Now, in addition to writing your powershell script, you also have to write wrapper libraries that control the native linux tools to present something that is API compatible with whatever windows api you are trying to use. Anyone who has tried to get a WinForms application running under Mono/Linux can tell you how well this shit is going to work.

Re: (Score:3)
by [Tough Love \(215404\)](#)
Object-oriented shell languages are pretty rad
Sure, it's like an awkward substitute for a Python script if that floats your boat.

Re:Excellent news (Score:4, Interesting)
by [hulled \(956533\)](#) on Friday July 20, 2018 @04:06PM ([#56982068](#))
So what you want is [xonsh](#) [github.com] then?

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Re:Excellent news (Score:4, Insightful)
by [MightyMartian \(840721\)](#) on Friday July 20, 2018 @04:30PM ([#56982154](#)) [Journal](#)
Most of the advantage of Powershell comes from access to WMI and other core API functions. As an actual shell goes, it's a horrible bloated monstrosity that is the exact opposite of the Unix philosophy. And without a lot of the hooks, or basically some compatibility layer to turn convert Windows API calls into /proc and /etc hooks, one can imagine it will be even slower than it is on Windows, and with limited functionality. And really, the whole philosophy of Powershell, with its OOP nature, comes out of its origins as basically a CLI for .NET. There really isn't anything comparable in the *nix world save perhaps for some of the GUIs out there.
I get it. This is some way to try to attract a wider base to its toolset, and maybe a bit the other way, but I cannot imagine anyone going through the bloat of bringing up a Powershell script when something like bash will be that much faster and far more intuitive for someone steeped in the *nix world.
Powershell and the whole way the Windows ecosystem is evolving makes truer every day that those who do not understand Unix are doomed to reimplement it badly.

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Re: (Score:3)
by [thegreatbob \(693104\)](#)
As an actual shell goes, it's a horrible bloated monstrosity that is the exact opposite of the Unix philosophy. Ah, good ol' "Do many things, while aspiring to mediocrity, except when I don't feel like it, or on Tuesdays."

Re: (Score:2)
by [jrumney \(197329\)](#)
Most of the advantage of Powershell is that it manages to improve on some of the deficiencies in CMD.exe. Plonked into Linux, the complete lack of support for pipes is going to be a show-stopper off the bat. I guess it might have advantages when dealing with systemd, but for traditional Unix commands it will fall flat.

Re: (Score:2)
by [E.Ultra \(1673484\)](#)
Thanks for letting us know that it was not only music, films and babes that where better in the 1980s but also terminal syntax!

Re: (Score:1)
by [Your Average Joe \(303066\)](#)
Next the MS sex-bot that has no holes and is adverse to sex. LOL no dilly bar and no roast beef. Not sure what the sex bot will do... But it is a new segment and they are panning on world domination!

Re: (Score:2)
by [MightyMartian \(840721\)](#)
And for no -trivial automation tasks? At some point, if you're go to administer any system, you're going to have to learn how it works, and not just throw some poorly-fitting compatibility layer on top of it so system administrators of one system don't have to put the effort into learning another.

Re: (Score:1)
by [Your Average Joe \(303066\)](#)
Windows is on the desktop... Moving to Samba 4.8 and 4.9, no need for MS file and print servers anymore. NASes are going to move that way too or already have. :)

Re: (Score:1)
by [Your Average Joe \(303066\)](#)
No this is only for MS to manage Azure. they should have not doubled down on Windows and just switched Azure to run Linux... If coke on the third floor had to buy coke from the fourth floor they might just put Pepsi in the machines... Microsoft should have been broken up. I bet the OS guys would run MySQL and the MS-SQL guys would run Linux...
Meanwhile when I asked the old GTE about upgrading the GTD-5 switch to support ISDN-BRI they said they could not it was too expensive as the fourth floor would not

Re: (Score:3)
by [nnet \(20306\)](#)
The universe where you don't need a Windows machine to run vmware powershell cmdlets because the vmware perl sdk isn't as functionally complete as the powershell sdk.

Re: (Score:3)
by [Malthus \(248271\)](#)
Powershell is bad enough, but having to run Windows, everytime you need to use it is even worse. And if your job requires you to deploy to the Azure cloud, then I can see a use for this. Although I believe they now have Linux CLI utils for that as well.

Re: (Score:2)
by [grep -v '.*' * \(780312\)](#)
would a use case be made for replacing native, tried and true {tools} for Linux with some POS
Oh, did someone mention **SystemD**?

Mod me down, that's fine; I'm moving to FreeBSD. Hopefully S*D will stay working long enough while I plan and execute the move. Not on BTRFS ("But it works fine for me") volumes, either.

Re: (Score:2)
by [mikael \(484\)](#)
Because IT managers might only know Microsoft PowerShell, and so they will push to use it for the Linux systems under their control.

Re: (Score:1)
by [Your Average Joe \(303066\)](#)
Good managers manage and let the technical details get worked out buy the techies. they might ask for details but the bigger goal is to get to a destination, don't micro-manage your techies, they will hate the job/supervisor and find another job...

Re: Excellent news (Score:2)
by [Billy Gates \(198444\)](#)
Easy object based systems like Azure and Windows servers where everything is an object, not a string or text file. PS is not a POS. It's just different as something like cygwin is not useful to do much on Windows in comparison as a result. This is welcome for DevOps and System Admins who manages multiple systems.

That's not the gap. (Score:1)
by Anonymous Coward
I really NEED a Microsoft Linux distro.
Of course, with all the special Microsoft proprietary extensions.
Microsoft GNOME or Microsoft KDE. And obviously a Microsoft Linux Kernel.

Why? (Score:4, Insightful)
by [devslash0 \(4203435\)](#) on Friday July 20, 2018 @03:34PM ([#56981892](#))
Why, oh why, would I install something that is:
- slow
- bloated
- in all likelihood harvesting data behind your back
- trying to replace something which isn't broken (a Linux terminal)
- dependent on .NET
on my machine? {deity_of_choice}, why would I even permit .NET to exist in my system in the first place?

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Re: (Score:2)

by [Tough Love \(215404 \)](#)

I know right? It's weird, but It's what happens when Microsoft hires the Gnome mafia.

Re: (Score:1)

by Anonymous Coward

Why, oh why, would I install something that is:

- slow
 - bloated
 - in all likelihood harvesting data behind your back
 - trying to replace something which isn't broken (a Linux terminal)
- Yeah, we have systemd for all that already...

Re: (Score:2)

by [dyfet \(154716 \)](#)

Indeed, as a "ubiquitous language for managing hybrid cloud assets", there is, for just one example, ansible, which already does all that, is also cross platform, and has no special dependencies or runtime overhead requirements either on the host or any on the target.

.NET is dangerous to depend on (Score:3)

by [jbn-o \(555068 \)](#)

To elaborate on that last point: being dependent on works under the "Microsoft Patent Promise for .NET Libraries and Runtime Components" is considerably dangerous because of [the profound limits for software reuse and modification, and because of how limited this "patent promise" is](#) [endsoftpatents.org]. You cannot deal in the "Microsoft Patent Promise for .NET Libraries and Runtime Components" covered software as you can with free software (which is so named because it respects a user's freedoms to run, inspect, share, and modi

Re: .NET is dangerous to depend on (Score:3)

by [Billy Gates \(198444 \)](#)

Microsoft has released and opensourced

NET for Linux [time ago](#) [slashdot.org] so your concerns are outdated.

Re: Why? (Score:2)

by [Billy Gates \(198444 \)](#)

Hi Devslash0 this is your boss posting.

Are you finished migrating to Azure yet that the CIO wanted? Oh yeah we need a convenient way to DevOps your Linux app for the Windows Systems Admins that they are familiar with that integrated well with Azure and is object based for our needs, not text based which won't work.

Thanks and could you also Dev ops some on premise Windows Servers as well? We know you like Linux and that is fine but make it happen in your Linux scripting environment?

Thanks

Re: (Score:1)

by [devslash0 \(4203435 \)](#)

I quit. :-)

Re: (Score:1)

by Anonymous Coward

A few comments above someone mentioned that not even all Powershell scripts run on every version of Windows

that includes Powershell...

I still have bash scripts from years ago that still run and if one of them doesn't after an upgrade it's usually a

rather simple fix... Now what was that about brittle?

If your text parsing is brittle, you're doing it wrong.

Re: Please explain (Score:2)

by [Billy Gates \(198444 \)](#)

How do you ask sed and grep your Azure and Amazon containers on the cloud?

Re: (Score:2)

by [nnet \(20306 \)](#)

because vmware's perl sdk is sorely lacking. I hate having to have a wondows machine just to exec some vmware cmdlets.

Run it with systemd (Score:1)

by Anonymous Coward

To experience the stability and security you've come to expect from Microsoft Windows!

Re: (Score:2)

by [MightyMartian \(840721 \)](#)

Because, of course, there's no way to do remote admin on Linux. Thank fucking god that Microsoft came along to help us all do what we've been doing on *nix systems for fucking decades.

Jesus Christ, do any of you skills even know what's being going on in the *nix world since Windows was a 16-bit

kludge running on top of DOS?

[1 hidden comment](#)

Re: (Score:2)

by [MightyMartian \(840721 \)](#)

Or they could take a few days, learn the *nix toolkit and then not have to invoke a shell that's going to have to load .NET, a bunch of libraries that will themselves have to be wrappers to replicate Win32 calls. It's going to be like Cygwin in reverse, and run just as badly.

Re: (Score:2)

by [MightyMartian \(840721 \)](#)

That's not really the point. The underlying APIs are very dissimilar and to replicate the kinds of calls PowerShell uses for automation is going to require some sort of translation layer to convert Linux system calls and the configurable settings in /proc and /etc. It's the inverse of Cygwin. I don't care if the whole thing gets compiled to binaries, there's going to be a hit on performance (and it's not like powershell is any speed demon even in a Windows environment). Those wrapper libraries are going to

Re: i dunno (Score:3)

by [Billy Gates \(198444 \)](#)

Explain then how to automate a few tasks on 100 Linux servers some on premise and some in the cloud without having to log into each one?

Since Powershell is object based you can do more with a for each statement for 100 servers and use custom apis to work the magic without an expensive 3rd party tool. You can do a PSremote session if you want too or just use Azure RM or snmp without having to touch each server.

Re: (Score:2)

by [MightyMartian \(840721 \)](#)

Plp the scripts into /use/local/bin on the machines in mirror fashion. Tools like ssh can be scripted as well. Come on, this ain't rocket science.

Re: (Score:1)

by [aticus.finch \(5463416 \)](#)

Explain then how to automate a few tasks on 100 Linux servers some on premise and some in the cloud without having to log into each one?

We've been doing this for the last 20 years. What makes you think we suddenly lost this ability?

See, this is the problem with "techies" who only know windows - they're so ignorant that they can't even recognise their ignorance. We've been automating tasks on 100's of linux servers just fine using Ansible or similar. Hell, you don't even need Ansible. If your servers already have the admin's public keys in authorized_hosts you can pretty much do anything from a script on the admin end.

Since Powershell is object based you can do more with a for each statement for 100 servers and use custom apis to work the magic without an expensive 3rd party tool. You can do a PSremote session if you want too or just use Azure RM or snmp without having to touch each server.

Hello Mr Windows Adm

Administrating multiple OSes (Score:2)

by [TheDarkener \(198348 \)](#)

"...designed specifically for system administrators and power-users to rapidly automate the administration of multiple operating systems..."

Oh you mean like how Windows has always treated dual-booting multiple operating systems? And support for filesystems of different operating systems? And pretty much any honest-to-goodness, not-embrace-and-extinguish support for *anything* other than M\$ products on M\$ operating systems, *especially* open-source products of any kind?

As I do see this as a positive move for

Re: (Score:1)

by [telek83 \(1350439 \)](#)

If you like M\$ PowerShell and want to continue to use it on Linux.. great. YAT - Yet Another Tool. If you don't like it/don't want to use it - then DON'T!

No one is making you use it. No one is even saying that you have to install it.

If I was working as a sysadmin (either Linus or M\$) I would think it great to have the same administrative scripting system on multiple platforms. If I was a Linux only shop - meh... no reason to learn something else as Bash is working just fine.

Having used both (BASH and PowerShell) - I can say that they are both tortuous, but in different ways. They are both powerful, but in different ways. And both are products of their times.

Ya kno, similar words were said about systemd... you don't have to use it... until you do... YAT is great don't get me wrong, but the moment some GUI dev requires PS it's no longer YAT... it will be forced down everyones throat.

Re: (Score:1)

by Anonymous Coward

your_soul.so

Re: What dependencies? (Score:2)

by [TimMD909 \(260285 \)](#)

Note that libyoursoul.so requires libyourwallet.so

VMWare (Score:3)

by [nnet \(20306 \)](#) on Friday July 20, 2018 @04:34PM ([#56982184](#)) [Journal](#)

Can you install the VMWare cmdlets on it, or otherwise import them for use?

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Re: (Score:2)

by [nnet \(20306 \)](#)

Very nice, thanks!

This is bizarre... (Score:2)

by [Junta \(36770 \)](#)

A *shell* as a snap seems to be an odd choice. It should be embedded in whatever environment.

Powershell doesn't make sense as an end in and of itself, and 'Snap' and similar strategies only really possibly make sense for software that is an end in and of itself...

Powershell Beware (Score:2)

by [CHK6 \(583097 \)](#)

I use Powershell out of requirement, not out of love. What irks me this is the

It is designed specifically for system administrators and power-users to rapidly automate the administration of multiple operating systems. Pure marketing BS around automation. Many PowerShell operations now require two-factor authentication for service accounts for hybrid cloud environments and newer services are becoming increasingly difficult to integrate with at the Azure level. I have an arms length of PowerShell that I have to manually execute, because there is no automation authentication available. Granted there are some really cool PowerShell things, but it also has pitfalls too.

Since at least Wednesday (Score:3)

by [RhettLivingston \(544140 \)](#) on Friday July 20, 2018 @06:40PM ([#56982834](#)) [Journal](#)

I installed this Wednesday to check out a challenge someone posted in a forum.

The challenge was to implement the following powershell script using bash:

```
param(
    [Parameter(Mandatory=$True)]
    [datetime]$FromDate,
    [Parameter(Mandatory=$True)]
    [datetime]$ToDate,
    [Parameter(Mandatory=$False)]
    [ValidateScript({Test-Path -PathType Container $_ })]
    [string]$Directory = '.'
)
```

```
Get-ChildItem -Include '*.JPG','*.PNG' -Recurse -Path $Directory | Where-Object { $_.CreationTimeUtc -ge $FromDate -and $_.CreationTimeUtc -le $ToDate } | ForEach-Object { $_.FullName }
```

The challenge author also specified that the bash script should match the functionality of the above including:

1. Output the full filename one per line that fulfills the requirements

2. I'll totally run the script on a directory that contains some of the more exotic possible file names. (Good luck with that one)

3. Define the parameters the script can take. Meaning two required parameters - FromDate and ToDate - and one optional parameter the directory. If no directory is specified just use the current one.

4. Do validation of the passed in parameters. The directory should exist, the datetimes should be valid datetimes and not something else.

5. And we certainly want tab completion for the parameters and a help that lists what parameters it takes. So the usual bash equivalent of this:

Code:

Get-Help .\test.ps1

test.ps1 [-FromDate] [-ToDate] [[-Directory]] []

My first thought was, "I can get a bash script to run on any version of Windows and have been happily using bash and tesh on Windows since Windows 95 in the 90s. Can that Powershell script run on Linux?" Surprisingly, I installed the powershell core snap, copied the script to test.ps1, and ran it with no issues. It doesn't convert me to powershell, but I was surprised the argument didn't hold.

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Re: (Score:2)

by [whoever57 \(658626 \)](#)

The validation might take a few lines, but other than that, I see nothing that cannot easily be done with "find".

Re: (Score:2)

by [RhettLivingston \(544140 \)](#)

I'd agree. find handles the actual performance of the operation pretty nicely. It was the named parameters, validation, and automatic provision of help that gives powershell a boost. Another nice thing, while using powershell interactively, there was autocompletion on parameter names for commands in the shell. And, I've had issues with find and other linux commands differing from system to system. This wouldn't be as vulnerable to that.

I have to install cygwin on windows to use bash and all of the common G

Hmm... (Score:3)

by [fahrbot-bot \(874524 \)](#) on Friday July 20, 2018 @07:10PM ([#56982954](#))

Snap ... Many see it as the future of Linux, ...

And many don't. (but they did, back in the 1980s when static-linking was all the rage)

Powershell ... is designed specifically for system administrators and power-users to rapidly automate the

Administration of **multiple operating systems** ...

Meaning: Windows, Windows Server ...

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Powershell (Score:2)

by [MrKaos \(858439 \)](#)

Powers hell.
IME it's a powerful but clunky piece of garbage.

- [This ... \(Score:2\)](#)
by [The Dougster \(308194 \)](#)
... is about the dumbest fucking thing I have ever read.
- [Re: \(Score:1\)](#)
by [TimMD909 \(260285 \)](#)
If he isn't hung for treason before then.
[Are](#) [wikipedia.org] [you](#) [wikipedia.org] [off](#) [wikipedia.org] [your](#) [wikipedia.org] [meds](#) [wikipedia.org]?
- [Everything is shit \(Score:1\)](#)
by [OrangeTide \(124937 \)](#)
Because the Linux way of things is so much better, where binaries from one distro won't run on another because of ever so slightly different versions between libraries or changes to ABI. Shipping binaries for Ubuntu 16.04 and don't expect them to work correctly on 14.04 or 18.04. That is how we end up in situations where teams are locked to a specific version of a specific distro.
- [4 hidden comments](#)
- [Re: \(Score:2\)](#)
by [Tough Love \(215404 \)](#)
the Linux way of things is so much better, where binaries from one distro won't run on another because of ever so slightly different versions between libraries or changes to ABI
Got specific examples or is it more fun to fart out generic claims cluelessly?

- [Re: \(Score:2\)](#)
by [Junta \(36770 \)](#)
Well, if you build for Ubuntu 18.04 and then try to run on say RHEL6, then you are going to have fundamental challenges.
However, if you build RHEL6, then generally that executable can run on Ubuntu 18.04, so a build system should target the oldest you want to support.
This can also trip you up with Windows, but the releases are so infrequent by comparison that people don't notice it as much.

- [Re: \(Score:2\)](#)
by [Tough Love \(215404 \)](#)
Well, if you build for Ubuntu 18.04 and then try to run on say RHEL6, then you are going to have fundamental challenges.
Build what?

- [Re: \(Score:2\)](#)
by [Hognoxious \(631665 \)](#)
/!\ Hey, I think I found Lennart Poettering!

- [Re: \(Score:3\)](#)
by [bulled \(956533 \)](#)
So you are proposing that the best solution is to bundle all your dependencies into a single package with your target program and avoid getting the security updates that the distro provides for those dependencies. A snap requires that the user trust _each_ snap provider to update their snap for every fix to every dependency.

- [Re: \(Score:2\)](#)
by [OrangeTide \(124937 \)](#)
So you are proposing that the best solution is [...]
The only thing I proposed is that it's all shit. So please don't put words in my mouth when I have been clear and concise on my position.

- [Re: \(Score:2\)](#)
by [MightyMartian \(840721 \)](#)
Ever heard of static linking? If it's that big a concern to you, then just throw it all in one binary. Or as one big ass self-contained application under /opt. But really, most developers out there know how to use the major distros package managers, so they take the extra 15 minutes it takes to convert and test an rpm as a deb file or whatever. Fuck me, but either you're an idiot, or the laziest human being alive.

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