



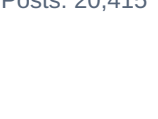
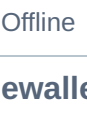



Index » Kernel & Hardware » Kernel compiling - general duration to be expected

Pages: 1

<div> <div>z33d3vill</div> <div> <div>Member</div> <div> From: South Africa Registered: 2021-12-06 Posts: 17 </div> <div>Website</div> </div> </div>	<div> <div>2021-12-06 18:29:12</div> <div>#1</div> </div> <div> <p>Hi, z33d3vill here.. hope all are well..</p> <p>I'm currently getting myself a solid backing on software engineering/development (both actually as they not quite the same lol)</p> <p>So I'm busy compiling a Linux-clear Kernel from the lovely AUR.. used YAY to obtain the repo and PKGBUILD etc.. I'm curious.. as no definitive answer seems "clear".. how long is it supposed to take?</p> <p>Thanks in advance, Regards, Nick</p> <p><i>Last edited by z33d3vill (2021-12-06 19:15:08)</i></p> <p>Perhaps, it's not just what we do.. that defines us.. but moreso how we don't do what we we're meant to.. People are all 4 seasons in one, be understanding..</p> </div> <div>Offline</div>
<div> <div>z33d3vill</div> <div> <div>Member</div> <div> From: South Africa Registered: 2021-12-06 Posts: 17 </div> <div>Website</div> </div> </div>	<div> <div>2021-12-06 18:49:36</div> <div>#2</div> </div> <div> <p>Oh, for the record.. I use tty straight up, can't get enough 🤔.. those DE's and all just kill the linux legacy for me.. so, my laptop is also thee Corei5-5250U 2.7GHz 2015 DELL.. installed Archlinux myself, 3 mild strokes later and mild surgery. I succeeded. So no copy paste king promise hahaha..</p> <p>Perhaps, it's not just what we do.. that defines us.. but moreso how we don't do what we we're meant to.. People are all 4 seasons in one, be understanding..</p> </div> <div>Offline</div>
<div> <div>Trilby</div> <div> <div>Inspector Parrot</div> <div>  </div> <div> Registered: 2011-11-29 Posts: 30,383 </div> <div>Website</div> </div> </div>	<div> <div>2021-12-06 18:55:35</div> <div>#3</div> </div> <div> <p>Please edit your post to give this thread an actual title according to our guidelines. EDIT: thanks, the new title is great.</p> <p>To answer your question, somewhere between 5 minutes and the heat death of the universe depending on your hardware, system configuration (particularly whether you've configured a -j flag for 'make' in makepkg.conf), and kernel config that is being used. You can cut kernel compilation times by orders of magnitude or more by setting up your environment well and only building what you need for your hardware - given this, there can be no real estimate, even ballpark.</p> <div> <div>z33d3vill wrote:</div> <div> installed Archlinux myself, 3 mild strokes later and mild surgery. I succeeded. So no copy paste king promise hahaha.. </div> </div> <p>I'm not sure anyone would have doubted it before, but saying all that does raise suspicion.</p> <p><i>Last edited by Trilby (2021-12-06 22:37:32)</i></p> <p>"UNIX is simple and coherent" - Dennis Ritchie; "GNU's Not Unix" - Richard Stallman</p> </div> <div>Offline</div>
<div> <div>z33d3vill</div> <div> <div>Member</div> <div> From: South Africa Registered: 2021-12-06 Posts: 17 </div> <div>Website</div> </div> </div>	<div> <div>2021-12-06 19:00:43</div> <div>#4</div> </div> <div> <p>Hi Trilby, Sorry about that, I'm sarcastic by gene-pool ha..</p> <p>Oh I see.. so it can vastly differ and solely depends on modules selected? Hardware and software being used during the process? and I'm certain your compiler choices and library picks also contribute?</p> <p>Perhaps, it's not just what we do.. that defines us.. but moreso how we don't do what we we're meant to.. People are all 4 seasons in one, be understanding..</p> </div> <div>Offline</div>
<div> <div>z33d3vill</div> <div> <div>Member</div> <div> From: South Africa Registered: 2021-12-06 Posts: 17 </div> <div>Website</div> </div> </div>	<div> <div>2021-12-06 19:05:31</div> <div>#5</div> </div> <div> <p>Hahaha! Off topic, I've been trapped by how intricate archlinux is.. I did try mint and a few (regrettably:/).. and yes I did use the Archinstall script as I did have an issue getting my system to recognise the bootloader.. I use systemd.. buut.. I eventually realised that installers kill the most epic part AND.. unless you want a thorough use of your system.. don't use the darn installer.. I can post my log? Once my machine is done compiling 🤖</p> <p>Perhaps, it's not just what we do.. that defines us.. but moreso how we don't do what we we're meant to.. People are all 4 seasons in one, be understanding..</p> </div> <div>Offline</div>
<div> <div>z33d3vill</div> <div> <div>Member</div> <div> From: South Africa Registered: 2021-12-06 Posts: 17 </div> <div>Website</div> </div> </div>	<div> <div>2021-12-06 19:12:29</div> <div>#6</div> </div> <div> <p>Hmm.. okay, I see.. well awesome thanks Trilby, I feel like it's just doing its job I guess.. for anxiety reasons I had to be sure it wasn't a over-looked element on my side.. hopefully it's finished before I'm 40 haha.. have a great one.. so upon exit, I'll adjust the title although I'm a hit unsure what's more fitting? So I'll edit it again and hope haha.. cheers for now 🤗</p> <p>Perhaps, it's not just what we do.. that defines us.. but moreso how we don't do what we we're meant to.. People are all 4 seasons in one, be understanding..</p> </div> <div>Offline</div>
<div> <div>ewaller</div> <div> <div>Administrator</div> <div>  </div> <div> From: Pasadena, CA Registered: 2009-07-13 Posts: 20,415 </div> </div> </div>	<div> <div>2021-12-06 19:15:07</div> <div>#7</div> </div> <div> <p>It can take hours on a multicore system. Custom kernels where you only compile the drivers you need for your system are a bit faster. More RAM helps.. SSD Helps.</p> <p>Nothing is too wonderful to be true, if it be consistent with the laws of nature -- <i>Michael Faraday</i> The shortest way to ruin a country is to give power to demagogues.— <i>Dionysius of Halicarnassus</i> --- How to Ask Questions the Smart Way</p> </div> <div>Offline</div>
<div> <div>z33d3vill</div> <div> <div>Member</div> <div> From: South Africa Registered: 2021-12-06 Posts: 17 </div> <div>Website</div> </div> </div>	<div> <div>2021-12-06 19:20:00</div> <div>#8</div> </div> <div> <p>Ewaller, just showing acknowledgement..</p> <p>So you don't assume I'm shrude.. I wanted to add more ram... but she's so old, and I don't have any noticed performance issues (which is good) the day I got it, I downloaded Debian and wiped windows off clean haha.. everyone laughed, except windows.. 😊</p> <p>Perhaps, it's not just what we do.. that defines us.. but moreso how we don't do what we we're meant to.. People are all 4 seasons in one, be understanding..</p> </div> <div>Offline</div>
<div> <div>Trilby</div> <div> <div>Inspector Parrot</div> <div>  </div> <div> Registered: 2011-11-29 Posts: 30,383 </div> <div>Website</div> </div> </div>	<div> <div>2021-12-06 22:46:24</div> <div>#9</div> </div> <div> <p>A few very poor data points:</p> <p>The first time I tried compiling a kernel I did almost everything wrong. I didn't do any customization and just used the "vanilla" kernel config used by the arch devs. I was using a netbook with an atom processor. I don't recall if it had an SSD or HDD, probably the latter. I think it only had 1 or 2 G of ram. I also didn't adjust makepkg.conf at all (so make was using a single core). I started the build early one evening. The next morning after breakfast I interrupted the process and gave up.</p> <p>I've never had very flashy or powerful hardware, but on less ridiculously under-powered fairly-average off-the-shelf consumer laptop I tried compiling a kernel again. I customized the config by monitoring actual module use on my hardware, I adjusted makepkg.conf appropriately to use all cores, I had an SSD and a semi-respectable 4GB ram. This time the build took in the range of an hour or so.</p> <p>I'm pretty sure I've heard one of our community members who builds many kernels that they share in an unofficial repo share their build time on a <i>many</i>-core'd server with much better specs for building and tweaked and adjusted for building kernels ... and I think it was in the range of a few minutes.</p> <p>All these variables impact the build time. In my very limited experience, I suspect the most substantial impact comes from core count and trimming the kernel config to build just what you need (assuming you're over some minimal thresholds of ram which pretty much any semi-modern system would be).</p> <p><i>Last edited by Trilby (2021-12-07 01:07:10)</i></p> <p>"UNIX is simple and coherent" - Dennis Ritchie; "GNU's Not Unix" - Richard Stallman</p> </div> <div>Offline</div>
<div> <div>jasonwryan</div> <div> <div>Anarchist</div> <div>  </div> <div> From: .nz Registered: 2009-05-09 Posts: 30,426 </div> <div>Website</div> </div> </div>	<div> <div>2021-12-06 23:47:18</div> <div>#10</div> </div> <div> <p>My custom kernel takes 20-25 minutes on a nearly 10 year old i5 laptop.</p> <p>Arch + dwm • Mercurial repos • Surfraw</p> <p>Registered Linux User #482438</p> </div> <div>Offline</div>
<div> <div>z33d3vill</div> <div> <div>Member</div> <div> From: South Africa Registered: 2021-12-06 Posts: 17 </div> <div>Website</div> </div> </div>	<div> <div>2021-12-07 00:07:48</div> <div>#11</div> </div> <div> <p>Trilby, I see your name all over these forums.. you must be Hollywood by now 🤖 haha.. you know, I am only 6 months into my life-long journey.. and I still have a world to learn, so yes.. I too felt this is "taking long".. and canceled it manually.. I realised now now, I did make adjustments but not the ones in accordance with module selection and exclusion.. Blame eagerness or flat out I was a stu-pid haha..</p> <p>As for jasonwryan..</p> <p>25 minutes? That's actually.. impressive.. I'll have to figure that one out, I prefer practical, being spoon fed just doesn't have real world usefulness beyond the moment, so good to know 🤖 it's possible</p> <p>Perhaps, it's not just what we do.. that defines us.. but moreso how we don't do what we we're meant to.. People are all 4 seasons in one, be understanding..</p> </div> <div>Offline</div>
<div> <div>ewaller</div> <div> <div>Administrator</div> <div>  </div> <div> From: Pasadena, CA Registered: 2009-07-13 Posts: 20,415 </div> </div> </div>	<div> <div>2021-12-07 00:19:05</div> <div>#12</div> </div> <div> <p>Remember, the stock kernel runs on a huge variety of different hardware, so it has a lot built in, and it has a huge collection of loadable modules. When building a custom kernel, you can pare that down to only those items you need. I usually build modules in to the kernel to support things that are intrinsic to my machine, and use modules for things I might plug into a USB port.</p> <p>That means I only need one Ethernet driver, one wireless driver, one video driver, one USB driver, one flavor of PCI-e driver, the file systems I intend to use, etc.. If you do it right, you can build a kernel that does not require an initrd (A habit I picked up from Gentoo).</p> <p>Speaking of which; if you are truly interested in learning about building a kernel, you may want to check out the excellent documentation over on the Gentoo site. It is most definitely possible to build a kernel using the Gentoo documentation and install and use it on Arch. Of course, it becomes your task to maintain that. For years, my system was set up with both the stock Arch Kernel *and* a custom monolithic kernel without initrd that I could start as a uEFI stub. Less than 1 second from POST to a login prompt.</p> <p>https://wiki.gentoo.org/wiki/Handbook:AMD64 https://wiki.gentoo.org/wiki/Handbook:A ... ion/Kernel</p> <p><i>Last edited by ewaller (2021-12-07 00:23:49)</i></p> <p>Nothing is too wonderful to be true, if it be consistent with the laws of nature -- <i>Michael Faraday</i> The shortest way to ruin a country is to give power to demagogues.— <i>Dionysius of Halicarnassus</i> --- How to Ask Questions the Smart Way</p> </div> <div>Offline</div>
<div> <div>Trilby</div> <div> <div>Inspector Parrot</div> <div>  </div> <div> Registered: 2011-11-29 Posts: 30,383 </div> <div>Website</div> </div> </div>	<div> <div>2021-12-07 01:11:47</div> <div>#13</div> </div> <div> <p>I think you're onto a new tagline for that distro there:</p> <p>Gentoo: save seconds of boot time by spending hours compiling.</p> <p>"UNIX is simple and coherent" - Dennis Ritchie; "GNU's Not Unix" - Richard Stallman</p> </div> <div>Offline</div>
<div> <div>ewaller</div> <div> <div>Administrator</div> <div>  </div> <div> From: Pasadena, CA Registered: 2009-07-13 Posts: 20,415 </div> </div> </div>	<div> <div>2021-12-07 02:33:48</div> <div>#14</div> </div> <div> <p>🤖</p> <p>I dunno, every now and again I hear the siren's song and am tempted to go back. I like Arch and generally like the way things are packaged. I mostly miss the <i>USE</i> flags; I think they would appeal to your sense of sensibility of paring things down to be as simple as practical for your use cases. Compile times were not all that bad; most things were quick and painless. Kernels hurt. Xorg was painful. KDE was excruciating. The real PITA were circular dependencies. Package A with the use flags you want depends on Package B. Package B depends on Package A. You get to figure out that if you turn down the USE flags you specify, you can build A without B. Then, then B can be built against the stripped down A. Then you can go back and install the full blown A against B. Your system generally found these at about 03:30 -- hours after you hit the sack, and an hour or two before having to get up for \$DAYJOB. If lucky, after your shower and coffee you could attempt a fix and restart it to let it churn while you are away.</p> <p>Nothing is too wonderful to be true, if it be consistent with the laws of nature -- <i>Michael Faraday</i> The shortest way to ruin a country is to give power to demagogues.— <i>Dionysius of Halicarnassus</i> --- How to Ask Questions the Smart Way</p> </div> <div>Offline</div>
<div> <div>z33d3vill</div> <div> <div>Member</div> <div> From: South Africa Registered: 2021-12-06 Posts: 17 </div> <div>Website</div> </div> </div>	<div> <div>2021-12-10 07:41:40</div> <div>#15</div> </div> <div> </div> <div>Offline</div>

Member

From: South Africa
Registered: 2021-12-06
Posts: 17

Website

Offline

Hahaha! I've noticed the copious amounts of gentoo (kernel compiling) links in my search feeds.. I've been ignoring them, guess I judged a book by its cover 🙄.. Ewaller, thanks for the suggestions I'm for sure going to give them a keen look.. appreciated 🙏

I'm quite enjoying the whole "what makes a kernel tick, even slower during compile time".. hahahaha! You two Arch-veterans got jokes I see.. D

Perhaps, it's not just what we do.. that defines us.. but moreso how we don't do what we we're meant to..
People are all 4 seasons in one, be understanding..

z33d3vill

2021-12-10 07:44:04

#16

Member

From: South Africa
Registered: 2021-12-06
Posts: 17

Website

Offline

Geez, what's your day job? Haha! You doing some clearly well known manoeuvre (to you) booting so quickly.. if I understood correct??

Perhaps, it's not just what we do.. that defines us.. but moreso how we don't do what we we're meant to..
People are all 4 seasons in one, be understanding..

z33d3vill

2021-12-10 07:46:31

#17

Member

From: South Africa
Registered: 2021-12-06
Posts: 17

Website

Offline

I'LL be honest, I do keep Xfce4 geared and ready if I require a change of pace, but my console is always login screen.. I'll toggle the GUI IF needed.. otherwise, I'm more the tty guy.

Perhaps, it's not just what we do.. that defines us.. but moreso how we don't do what we we're meant to..
People are all 4 seasons in one, be understanding..

z33d3vill

2021-12-10 19:50:11

#18

Member

From: South Africa
Registered: 2021-12-06
Posts: 17

Website

Offline

Trilby and Ewaller.. shall we mark this one as closed? Hahaha! I've successfully compiled my linux-clear kernel.. using my .config from my current running kernel (the linux-zen).. I must say, it took only 15 minutes haha.. boots, and all that jazz.. thanks a ton for the calm factor.. now I know how to correctly compile a kernel, or this method and it's appropriate application.. From South Africa, I thank you gents 🙏)


Perhaps, it's not just what we do.. that defines us.. but moreso how we don't do what we we're meant to..
People are all 4 seasons in one, be understanding..

jasonwryan

2021-12-10 19:56:08

#19

Anarchist



From: .nz
Registered: 2009-05-09
Posts: 30,426

Website

Offline

Learn how to use the edit button: you don't need to keep bumping the thread: [https://wiki.archlinux.org/title/Genera ... es#Bumping](https://wiki.archlinux.org/title/General_discussion#Bumping)

Arch + dwm • Mercurial repos • Surfw

Registered Linux User #482438

z33d3vill

2021-12-10 20:03:19

#20

Member

From: South Africa
Registered: 2021-12-06
Posts: 17

Website

Offline

Bumping? I don't quite know the jargon used around here.. so, I'm not meant to reply and click submit?

Perhaps, it's not just what we do.. that defines us.. but moreso how we don't do what we we're meant to..
People are all 4 seasons in one, be understanding..

z33d3vill

2021-12-10 20:03:54

#21

Member

From: South Africa
Registered: 2021-12-06
Posts: 17

Website

Offline

Oh, edit.. is that the preferred? My bad haha..

Perhaps, it's not just what we do.. that defines us.. but moreso how we don't do what we we're meant to..
People are all 4 seasons in one, be understanding..

Pages: 1

Index » Kernel & Hardware

» Kernel compiling - general duration to be expected

Jump to

Kernel & Hardware

Go

Atom topic feed

Powered by FluxBB