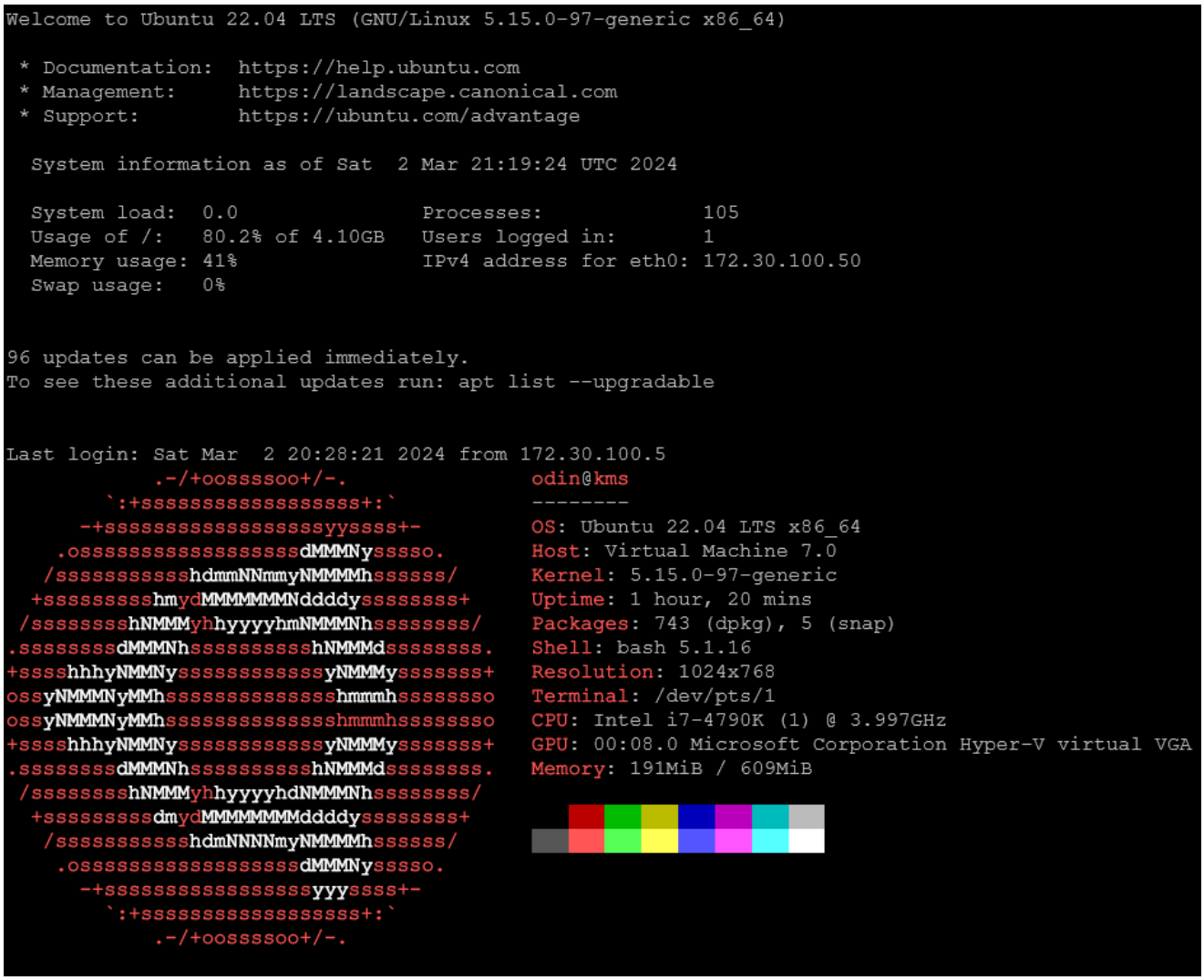
Upgrading eval edition to datacentre standard

To upgrade the EVAL_DATACENTRE_EDITION version of windows server 2022 (free license, expires after 180 days) you'll need a KSM, valid product key (Microsoft provide these themselves for free...) and a machine/vm you'd like to activate.

KMS Installation

To install a KSM, you'll first need a Linux box of some form. I went with ubuntu server for low resource usage.



as we can see in the SSH session, I've given the machine minimal amounts of resources and I've also statically assigned an ip (255.255.255.0/24 subnet mask) *this is very important*

to install the KSM you'll need "groff" & "build-essentials" these can be installed by using apt. you'll also need to make sure the "GIT" tool is installed before performing this:

```
sudo apt install git
```

```
sudo apt install groff
```

```
sudo apt install build-essentials
```

"**sudo**" runs this with root (administrator) privileges.

"**apt**" is a packet manager, think windows store but for a command line.

you can remove tools with ***apt remove*** and even check for system upgrade with ***apt upgrade***.

PLEASE make sure you're in the directory you want to be in before you initiate the git clone otherwise it **WILL** just clone into the directory you're in.

you're going to want to use the git tool with this URL which is a GitHub repository (repo) I'd highly recommend creating your own directory within /home/ such as */home/KMS/* you can do this with mkdir *name*.

```
odin@kms:~/KMS/vlmcsd$ pwd
/home/odin/KMS/vlmcsd
```

```
git clone https://github.com/Wind4/vlmcsd
```

Once you've successfully cloned the repo onto your machine, you're going to want to cd into the directory it's created I.E "*/home/KMS/vlcmsd*" this is where the tools we installed earlier come in.

if you run "make" it should start to compile from the /src/ file directly and print a bunch of stuff to the terminal.

once it's created if you cd into /bin/ within /vlmcsd/ there should be **2 executables** you're going to want to run **vlmcsd***

```
-rwxrwxr-x  1 odin odin 62568 Mar  2 20:14 vlmcs*
-rwxrwxr-x  1 odin odin 50368 Mar  2 20:14 vlmcsd*
odin@kms:~/KMS/vlmcsd/bin$
```

Once you run vlmcsd* you can check the service is up by doing:

```
sudo lsof -i :1688
```

once we run the above command, we can see the **vlmcsd service** running with two version. One version is **ipv4**, and the other **ipv6**.

```
odin@kms:~/KMS/vlmcsd/bin$ sudo lsof -i :1688
COMMAND  PID USER   FD   TYPE DEVICE SIZE/OFF NODE NAME
vlmcsd  6046 odin    3u  IPv6  55738      0t0  TCP *:1688 (LISTEN)
vlmcsd  6046 odin    4u  IPv4  55739      0t0  TCP *:1688 (LISTEN)
```

once we've confirmed the service is up, running and on the same network with connectivity to the windows device you'd like to activate you'll be ready for step 2 of the process.

Microsoft supply their own product keys (surprisingly) with their own documentation on KMS's
https://learn.microsoft.com/en-us/windows-server/get-started/kms-client-activation-keys

In this list we're going to focus on the 2022 server datacentre edition keys.

```
Product Key Provided by MS: WX4NM-KYWYW-QJJR4-XV3QB-6VM33
```

If you're particularly dense at times, you might've installed the incorrect version of MS-Server-2022, this being the EVAL edition which you **cannot** activate.

To change the KMS being used by your install, you'll need the IP address of your local KMS server and an elevated command prompt window.

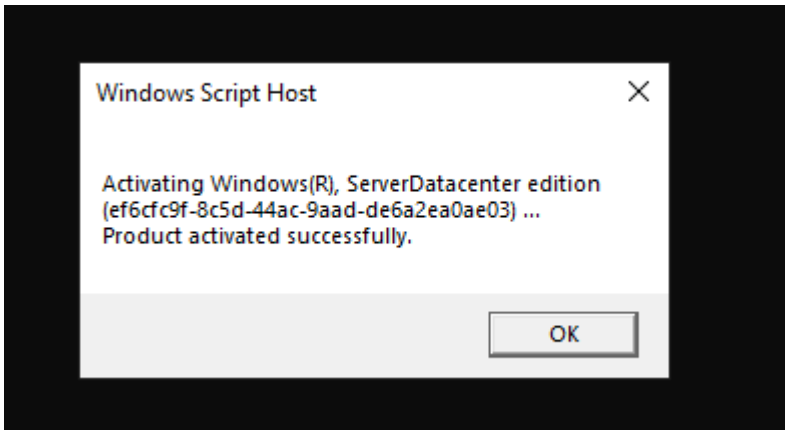
We'll first start off by running:

```
slmgr /ipk **PRODUCT KEY**
```

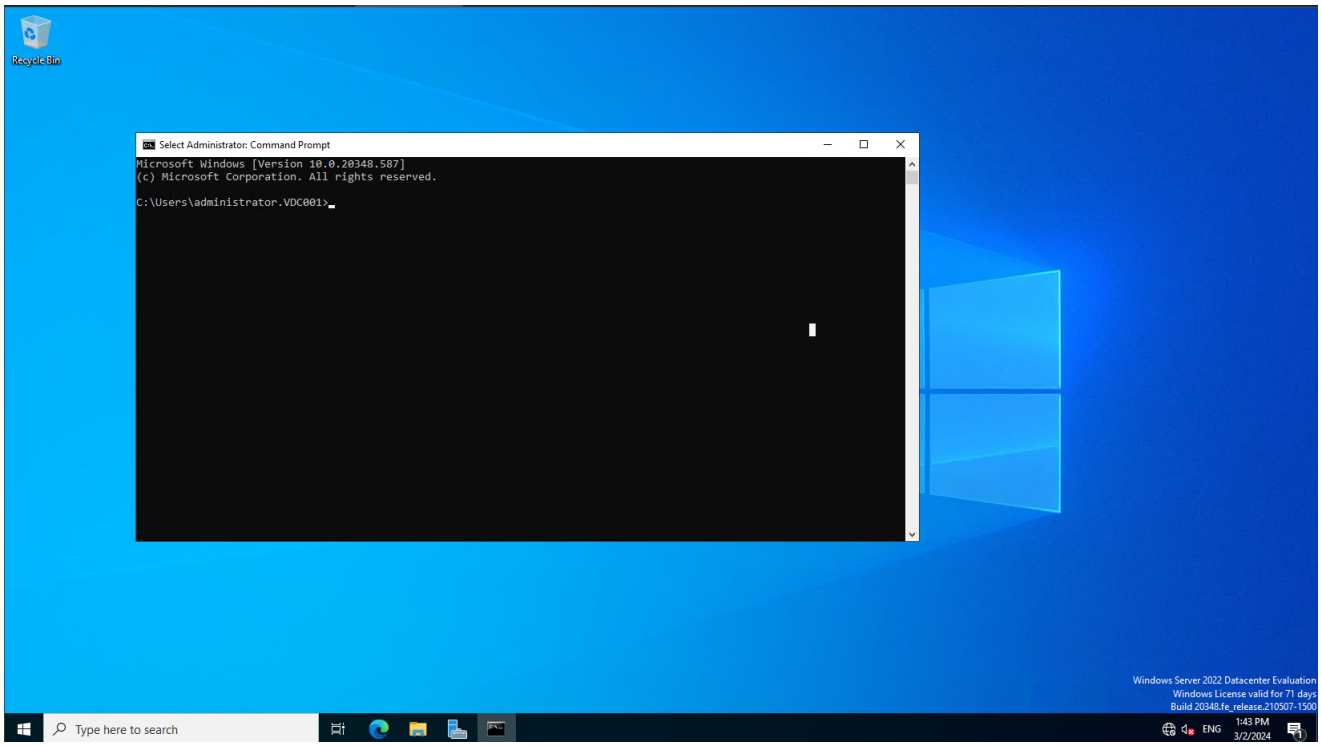
```
slmgr /skms *KMS SERVER IP*
```

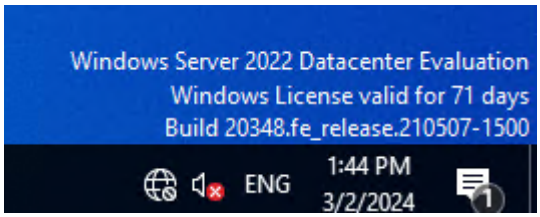
```
slmgr /ato
```

You'll know this has worked and applied the license *forever* if you see this popup:



We're going to segue quickly on how to versions. We'll need access to the VM running the eval edition and an elevated command prompt. **NOT POWERSHELL.**

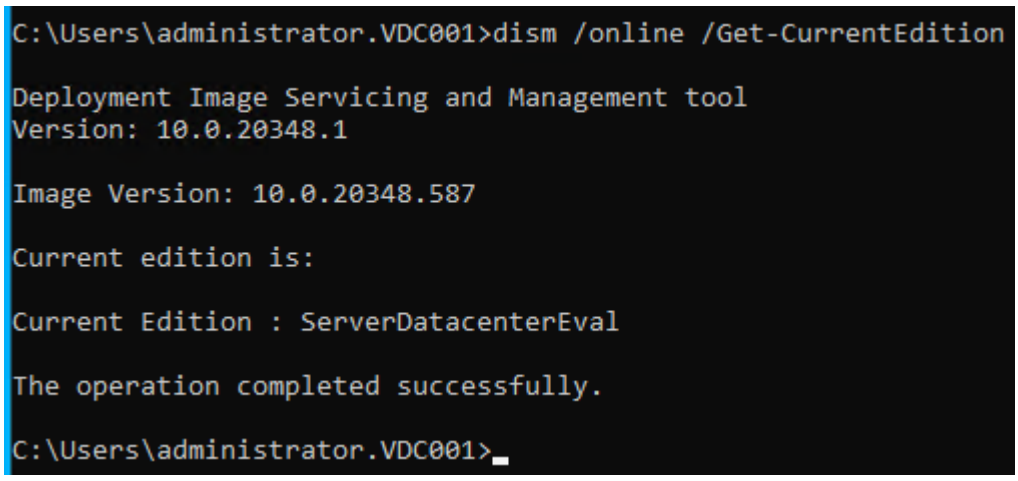




we can see in the corner of my VM i have a license expiry reminder! time to fix that using tools provided by MS.

We'll start off by running DISM (Deployment Image Servicing and Management tool)

```
C:> DISM /Online /Get-CurrentEdition
```



we can see the current edition is "ServerDatacentreEval" i'd like that to change.

```
C:> DISM /Online /Set-Edition:ServerDatacenter /AcceptEula /ProductKey:WX4NM-KYWYW-QJJR4-XV3QB-
6VM33
```

```
C:\Users\administrator.VDC001>dism /online /Set-Edition:ServerDatacenter /AcceptEula /ProductKey:WX4NM-KYWYW-QJJR4-XV3QB
-6VM33

Deployment Image Servicing and Management tool
Version: 10.0.20348.1

Image Version: 10.0.20348.587

Starting to update components...
Starting to install product key...
Finished installing product key.

Adding package Microsoft-Windows-ServerDatacenterEdition~31bf3856ad364e35~amd64~~10.0.20348.587
[=====                      10.0%                          ]
```

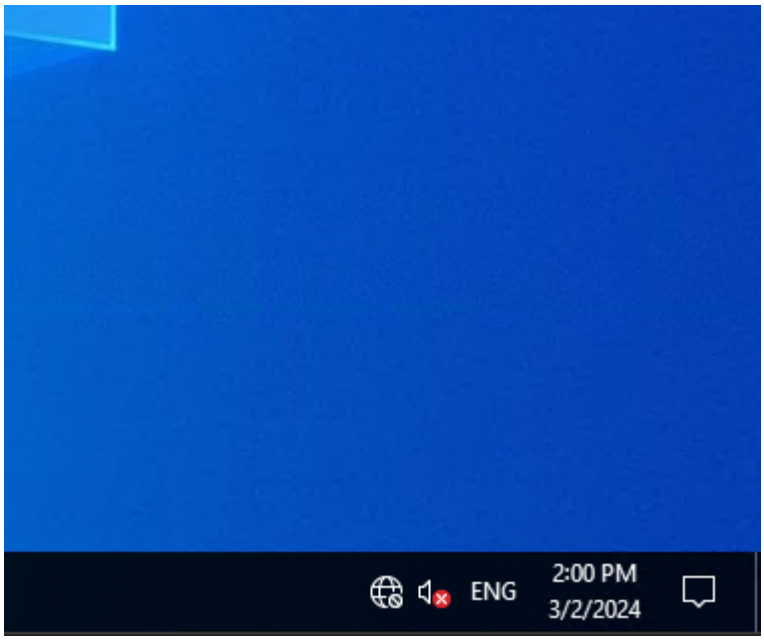
it's now changing our version to the *correct* version of 2022 datacenter!

```
Adding package Microsoft-Windows-ServerDatacenterEdition~31bf3856ad364e35~amd64~~10.0.20348.587
[==========================100.0%==========================]
Finished updating components.

Starting to apply edition-specific settings...
Finished applying edition-specific settings.

The operation completed successfully.
Restart Windows to complete this operation.
Do you want to restart the computer now? (Y/N)
```

Once we restart we shouldn't see the license reminder in the bottom right of our screen!



Amen and Godspeed.

Closing Notes:

I've tested this approach with two installs of datacentre eval edition and a single windows 10 device that didn't have an active license. as you would've guessed the exact same approach i used for the servers worked for the windows 10 device.

This is a really useful way to keep Microsoft products *permanently* and useful for deploying test environments that dont expire.

I've tested all of this by using Microsoft's built-in Hyper-V manager and just using free evaluation or non-activated versions of .ISO files they provide on their websites.