# WSL2

* Faster Git Prompt
* Using Windows Terminal with Bash and then SSH: correct colors
* tmux for deploying on multiple Instances
* Native docker mounting

# Installation

## Win2004

* nach windows updates suchen und installieren
* Media Creation Tool 2004 herunterladen und ausführen

## WSL 2

<https://docs.microsoft.com/de-de/windows/wsl/install-win10>

* Feature WSL installieren (über GUI), alternativ:

dism.exe /online /enable-feature /featurename:VirtualMachinePlatform /all /norestart

* Kernel aktualisieren (https://docs.microsoft.com/de-de/windows/wsl/wsl2-kernel)
* wsl --set-default-version 2
* wsl --set-version Ubuntu 2 (fixup, falls Ubuntu installiert wurde, bevor default version gesetzt wurde)

## Ubuntu

* aus dem Store Ubuntu installieren und starten
* sudo sh -c "echo 'ubuntu ALL=(ALL) NOPASSWD:ALL' > /etc/sudoers.d/10-ubuntu"
* Alle Mounts symlinken: sudo ln -s /mnt/c/ /c
* ~/.ssh von Windows hinzu
* dotfiles installieren:

curl -LO https://vipc.de/bootstrap && bash bootstrap -a -k <keyfile>

## docker

* Upgrade docker to at least 2.3.0.2
* General > Use the WSL 2 based engine
* Resources > WSL Integration > Ubuntu aktivieren
* <https://stackoverflow.com/questions/62441307/how-can-i-change-the-location-of-docker-images-when-using-wsl2-with-windows-10-h/63752264#63752264>
  + Durch Import/Export kann der überflüssige Platzverbrauch gelöscht werden
* sudo usermod -aG docker ubuntu (then, logout and login)

## VS Code

* Remote - WSL installieren

## Windows Terminal

* Neue settings.json verwenden

# Notes

## Docker

Must be started before Ubuntu is initialized. Test via docker version.

## Git

Use Git Repos only from within Ubuntu: Much faster, you don’t need to think about core.autocrlf

## No Internet in VPN

There are problems connecting to Internet when VPN is connected using old SonicWall NetExtender Client.

<https://docs.microsoft.com/de-de/windows/wsl/troubleshooting#bash-loses-network-connectivity-once-connected-to-a-vpn>

<https://github.com/microsoft/WSL/issues/416>

### Solution:

1. Install SonicWALL Mobile Connect from Microsoft Store
2. Windows Settings > Netzwerk und Internet > VPN > VPN-Verbindung hinzufügen
   1. VPN-Anbieter: SonicWall Mobile Connect

# Move WSL data to another disk

wsl -l -v

wsl --shutdown

wsl --export <distro> <filename>

wsl --unregister <distro>

wsl --import <distro> <install-location> <filename>

rm <filename>

# WSL data file layout

wsl-data

    distro

        <distro-name>

            ext4.vhdx

    docker

        docker-desktop

            ext4.vhdx

        docker-desktop-data

            ext4.vhdx

# Links

* <https://devblogs.microsoft.com/commandline/wsl2-will-be-generally-available-in-windows-10-version-2004/>
* <https://devblogs.microsoft.com/commandline/sharing-ssh-keys-between-windows-and-wsl-2/>
* <https://www.hanselman.com/blog/HowToSetUpDockerWithinWindowsSystemForLinuxWSL2OnWindows10.aspx>
* Set up VS Code dev env: <https://www.youtube.com/watch?v=j0PPcUUtHlw>
* <https://stackoverflow.com/questions/58846319/mount-native-ext4-partition-in-wsl2/58959729#58959729>
* <https://medium.com/rkttu/do-not-install-your-wsl-distro-from-microsoft-store-a322b94e8e2>
* <https://intellij-support.jetbrains.com/hc/en-us/community/posts/360004275400-Developing-in-Windows-Subsystem-for-Linux>