

Criação e configuração de máquina virtual com Linux mint.

Desenvolvi o trabalho usando o meu computador pessoal e por conta de limitação de memória de disco pois, uso um SSD de 120 GB, decidi fazer algumas adaptações no roteiro de trabalho a ser realizado. A primeira foi para evitar a instalação de mais um aplicativo no meu computador. Usei o recurso de virtualização, que eu já uso, integrado ao windows 10: O Hyper-v [1]. Também limitei o disco da maquina virtual a 15 GB, mantendo as partições de UEFI e SWAP com os tamanhos especificados no roteiro, dividindo as partições de "root" e "home" no espaço restante na mesma proporção que o roteiro sugere para 40 GB (55% para a home e 45 para o root).

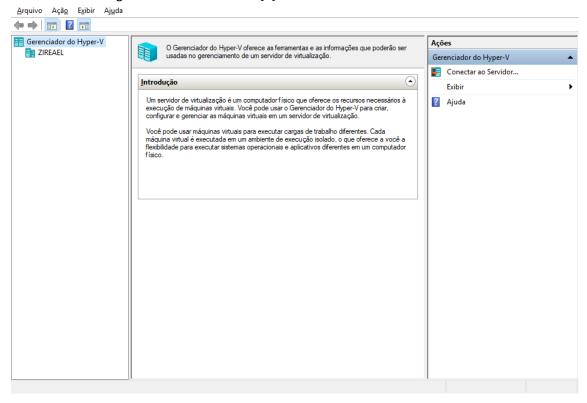
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1 Preparação.

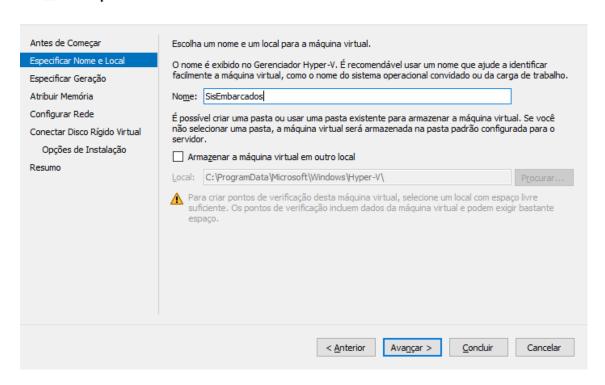


1.1 Download da imagem do Linux Mint 19.1 [2]



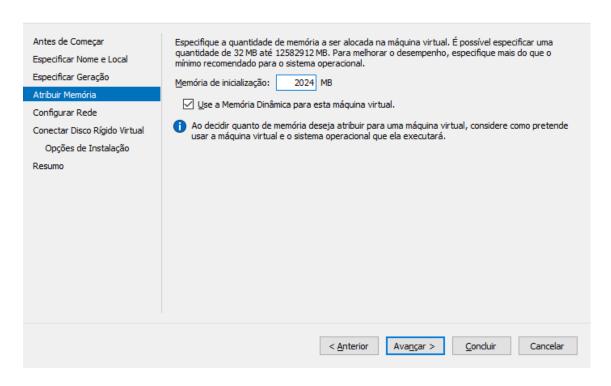
1.2 Painel de gerenciamento do Hyper-v

Especificar Nome e Local



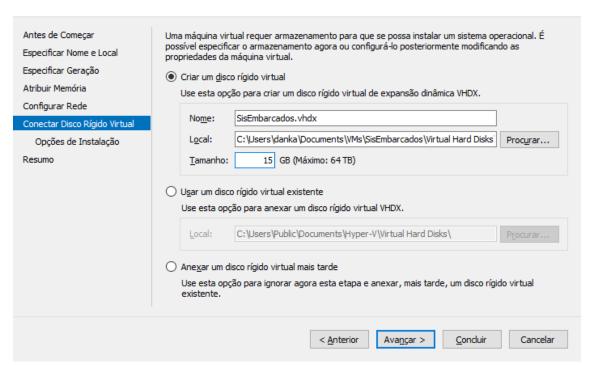
1.3 Nomiei a VM como SisEmbarcados.

Atribuir Memória



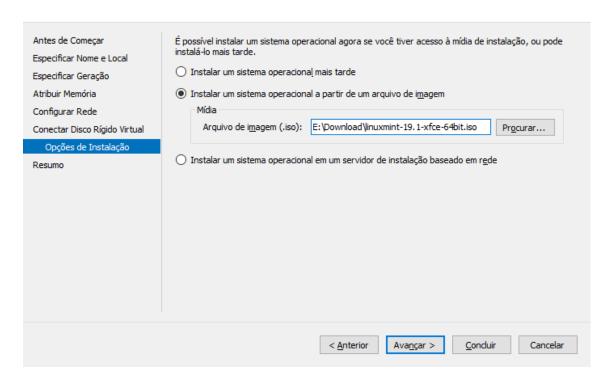
1.4 Configurei a memória.

Conectar Disco Rígido Virtual



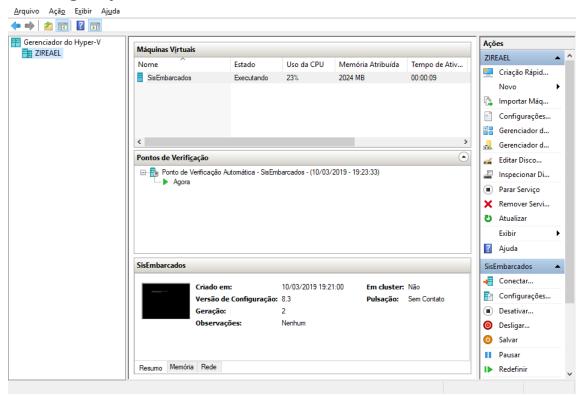
1.5 Configurei o disco virtual.

Opções de Instalação

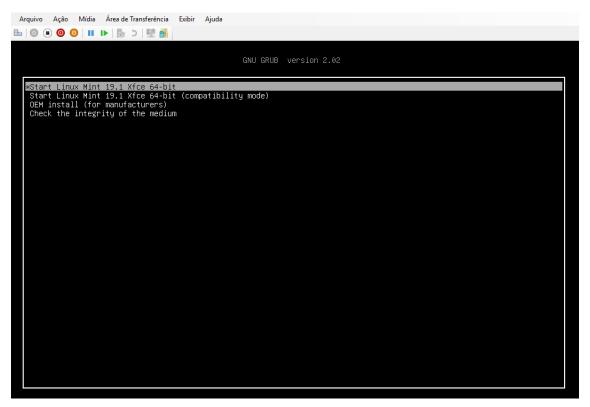


1.6 Selecionei a imagem do linux para instalar na primeira execução da VM.

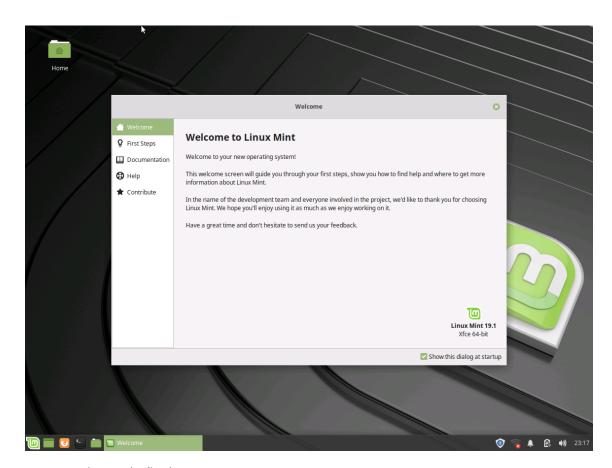
2 Configuração do Linux.



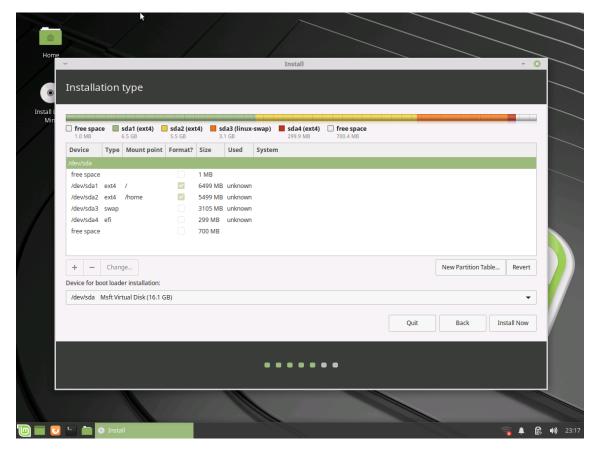
2.1 inicialização da maquina virtual.



2.2 Boot da imagem do Linux, selecionei a opção de live cd.



2.3 Inicio da instalação do Linux.



2.4 Particionamento do HD.

```
Calculating upgrade... Done
The following package was automatically installed and is no longer required:
libfreetype6
Use 'sudo apt autoremove' to remove it.
The following packages have been kept back:
lxd lxd-client netplan.io
The following packages will be upgraded:
apparmor apport apt apt-utils base-files bind9-host bsdutils cloud-init cloud-initramfs-copymods
cloud-initramfs-dyn-netconf console-setup console-setup-linux cryptsetup cryptsetup-bin curl dirangr
distro-info-data dnsutils dpkg e2fsprogs fdisk friendly-recovery gcc-8-base gettext-base git git-man gnupg
gnupg-l10n gnupg-utils gpg gpg-agent gpg-wks-client gpg-wks-server gpgconf gpgsm gpgv initramfs-tools
initramfs-tools-bin initramfs-tools-core irqbalance keyboard-configuration kmod krb5-locales landscape-common
libapparmorl libapt-inst2.0 libapt-pkg5.0 libbind9-160 libblkid1 libcom-err2 libcryptsetup12 libcurl3-gnut1s
libcurl4 libdns-export1100 libdns1100 libdrm-common libdrm2 libext2f52 libfdisk1 libgcc1 libglib2.0-0
libglib2.0-data libgssapi-krb5-2 libirs160 libis-cexport169 libisc169 libisccc160 libisccf60 libisccrypt03 libkmod2
libkrb5-3 libkrb5support0 libldap-2.4-2 libldap-common liblwres160 liblxc-common libkx1 libmount1 libmspack0
libnss-systemd libpar-systemd libparted2 libpci3 libper15.26 libplymouth4 libpvlkit-agent-1-0 libpolkit-backend-1-0
libpolkit-gobject-1-0 libpython3-stdlib libpython3.6 libpython3.6-minimal libpython3.6-stdlib libsmartcols1 libss2
libss11.0.0 libss11.1 libstdc+6 libsystemd0 libudev1 libuuid1 libx11-6 libx11-data libxm12 lshw lxcfs man-db mount
networkd-dispatcher nplan open-iscsi open-vm-tools openssh-client openssh-server openssh-sftps-server openssl
overlayroot parted pciutils perl perl-base perl-modules-5.26 plymouth plymouth-theme-ubuntu-text policykit-1 psmisc
python3-problem-report python3-apport python3-apt python3-apt python3-distupgrade python3-gdbm python3-minimal
python3-forbinimal snapd software-properties-common sosreport systemd systemd-sysv tar tmux tzdata ubuntu-keyring
ubuntu-release-upgrader-cor
```

2.5 Update e upgrade da distribuição.

```
dankas@Zireael:-$ sudo apt-get install build-essential manpages-dev
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following package was automatically installed and is no longer required:
libfreetype6
Use 'sudo apt autoremove' to remove it.
The following additional packages will be installed:
binutils binutils-common binutils-x86-64-linux-gnu cpp cpp-7 dpkg-dev fakeroot g++ g++-7 gcc gcc-7-base
gcc-8-base libalgorithm-diff-perl libalgorithm-diff-xs-perl libalgorithm-merge-perl libasan4 libatomic1 libbinutils
libc-dev-bin libc6-dev libcc1-0 libcilkrts5 libdpkg-perl libfakeroot libfile-fcntllock-perl libgcc-7-dev libgcc1
libgomp1 libisl19 libitm1 liblsan0 libmpc3 libmpx2 libquadmath0 libstdc++7-dev libstdc++6 libtsan0 libubsan0
linux-libc-dev make
Suggested packages:
binutils-doc cpp-doc gcc-7-locales debian-keyring g++-multilib g++-7-multilib gcc-7-doc libstdc++6-7-dbg
gcc-multilib autoconf automake libtool flex bison gdb gcc-doc gcc-7-multilib libgccl-dbg libqomp1-dbg libitm1-dbg
glibc-doc bzr libstdc++-7-doc make-doc
The following NEW packages will be installed:
binutils binutils-common binutils-x86-64-linux-gnu build-essential cpp cpp-7 dpkg-dev fakeroot g++ g++-7 gcc gcc-7
gcc-7-base libalgorithm-diff-perl libalgorithm-diff-xs-perl libalgorithm-merge-perl libasan4-libatomic1 libbinutils
libc-dev-bin libc6-dev libcc1-0 libcilkrts5 libdpkg-perl libfakeroot libfile-fcntllock-perl libagcc-7-dev libgomp1
libisl19 libitm1 liblsan0 libmpc3 libmpx2 libquadmath0 libstdc++-7-dev libtsan0 libubsan0 linux-libc-dev make
manpages-dev
The following packages will be upgraded:
gcc-8-base libgcc1 libstdc++6
3 upgraded, 40 newly installed, 0 to remove and 154 not upgraded.
Need to get 1001 k8/37.6 MB of additional disk space will be used.
Do you want to continue? [Y/n]
```

2.6 Instalação do pacote para indicado na proposta do trabalho.

3 Testes da instalação.

```
dankas@zireael:~/aula$ gcc -o main main.c
dankas@zireael:~/aula$ ls
main main.c
dankas@zireael:~/aula$ _

dankas@zireael:~/aula$ _
```

3.1 Compilação do arquivo "main.c" gerado pela instrução "CAT".

```
dankas@Zireael:~/aula$./main
hi, kids!
dankas@Zireael:~/aula$_
```

3.2 Teste do programa após ser compilado.

```
dankas@Zireae]:~/aula$ gcc -o main main.c
main.c: In function 'main':
main.c: S:11: error: expected ';' before 'i'
for (i=0. i<argc; i++){
main.c:5:22: error: expected ';' before ')' token
for (i=0. i<argc; i++){
dankas@Zireae]:~/aula$ vi main.c
dankas@Zireae]:~/aula$ dankas@Zireae]:~/aula$</pre>
```

3.3 Compilação do segundo código, cometi um erro de digitação. Corrigi o erro e recompilei, testando a passagem de argumentos.

Referências

- [1] Microsoft, "Hyper-V no Windows 10," Microsoft, [Online]. Available: https://docs.microsoft.com/pt-br/virtualization/hyper-v-on-windows/index. [Acesso em 10 março 2019].
- [2] Linux Mint, "Linux Mint 19.1 "Tessa" MATE (64-bit)," [Online]. Available: https://linuxmint.com/edition.php?id=263. [Acesso em 10 março 2019].