

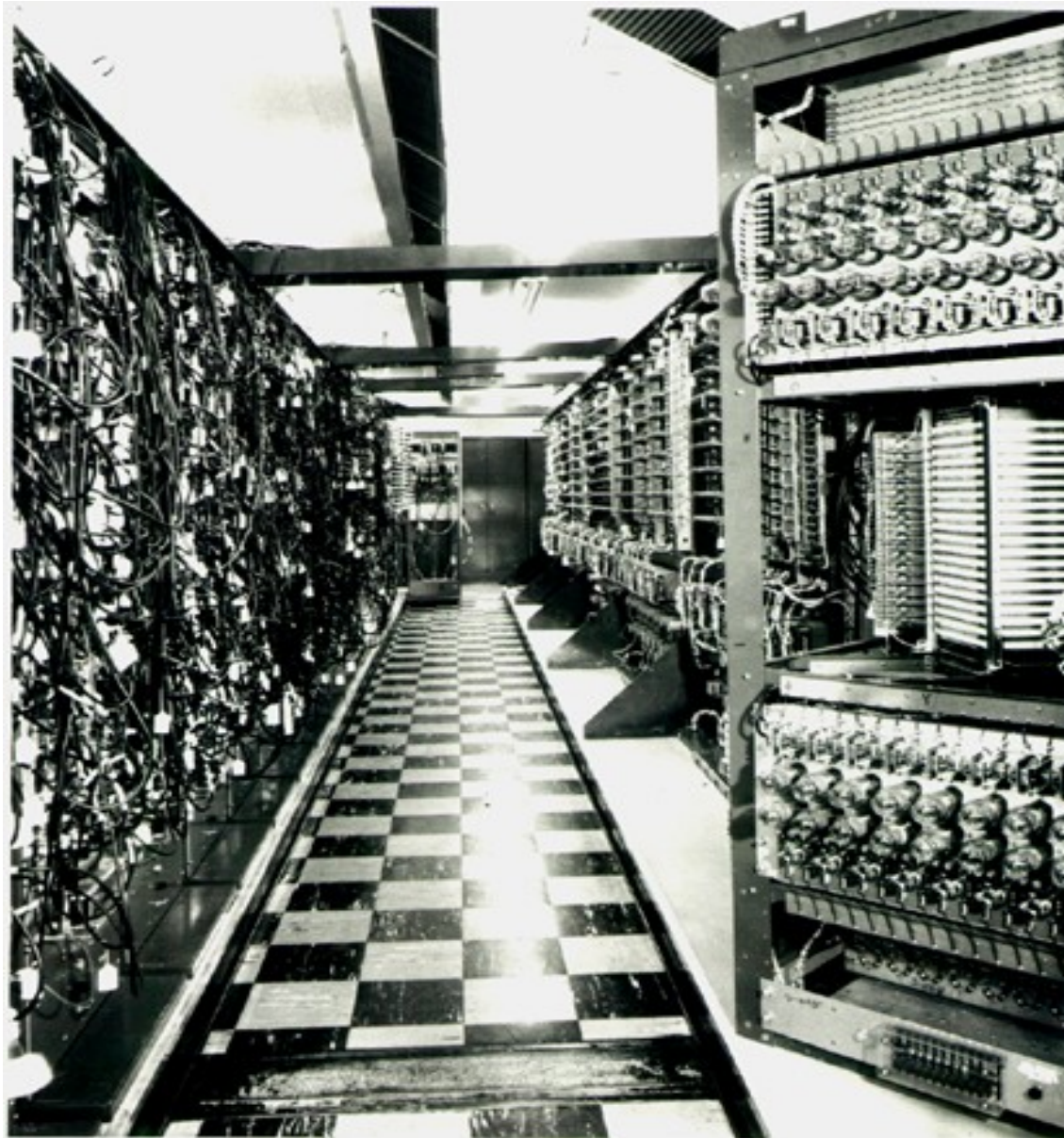
# Virtualização em datacenters usando o Xen

Vinícius Lopes da Silva

# Conceito amplo



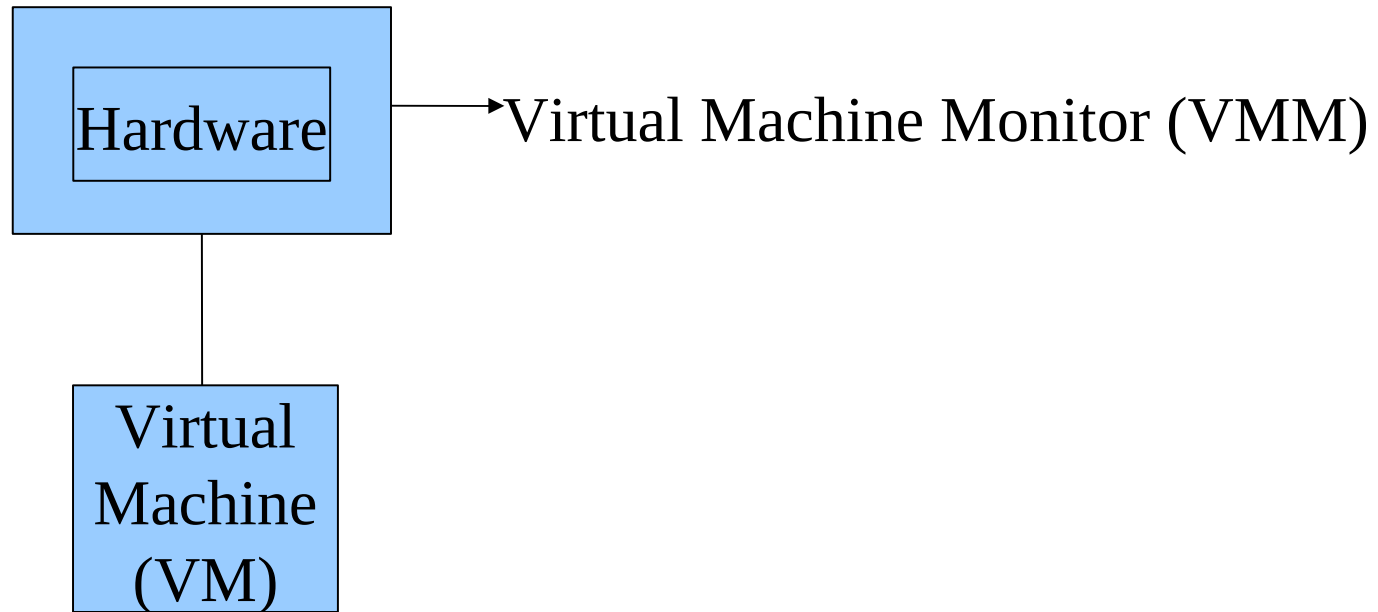
# História



# A ascensão da virtualização



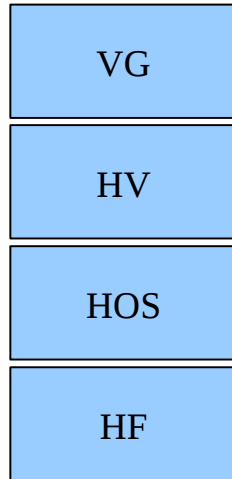
# Alguns conceitos de virtualização



# Formas de virtualização



# Emulação



VG: Virtual guest

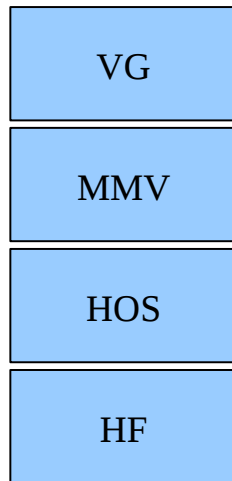
HV: Hardware virtual

HOS: Host operating system

HF: Hardware físico



# Virtualização completa



VG: Virtual guest

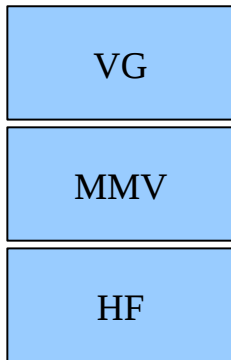
MMV: Monitor de Máquina Virtual

HOS: Host operating system

HF: Hardware físico



# Paravirtualização

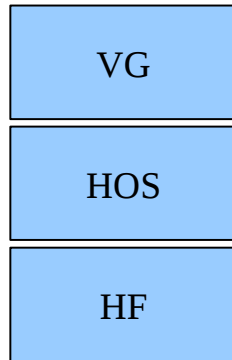


VG: Virtual guest

MMV: Monitor de Máquina Virtual

HF: Hardware físico

# Virtualização a nível de sistema operacional



VG: Virtual guest

HOS: Host operating system

HF: Hardware físico

# Virtualização de biblioteca



# Virtualização de aplicação



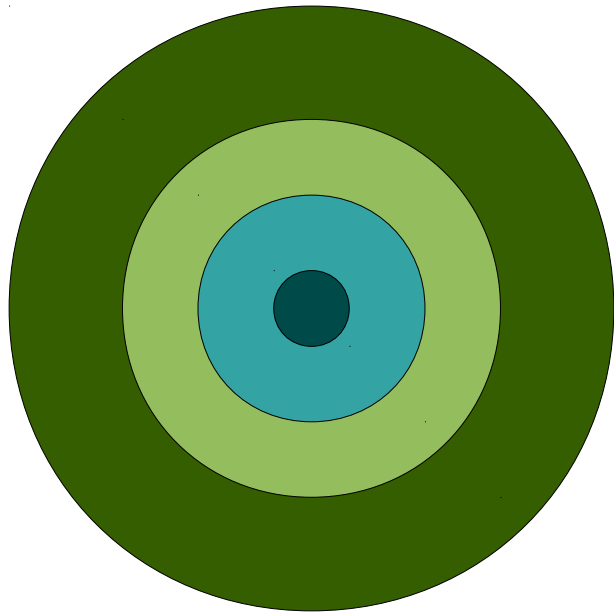
# Projeto XenoServer



# Por que o Xen ?



# Poder ilimitado ao Xen





# Guest Domains (GD)

DomU\_1

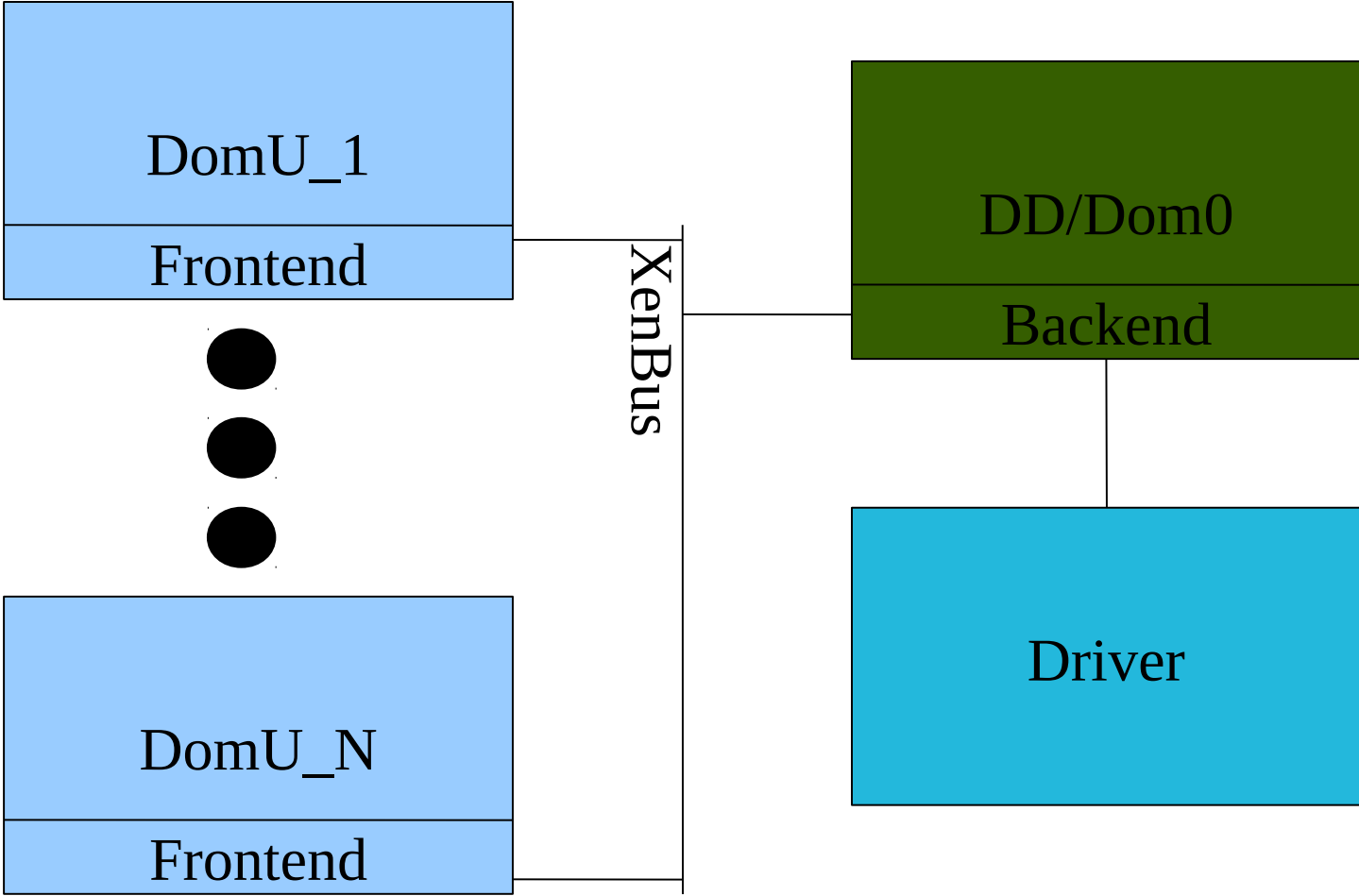


Dom0

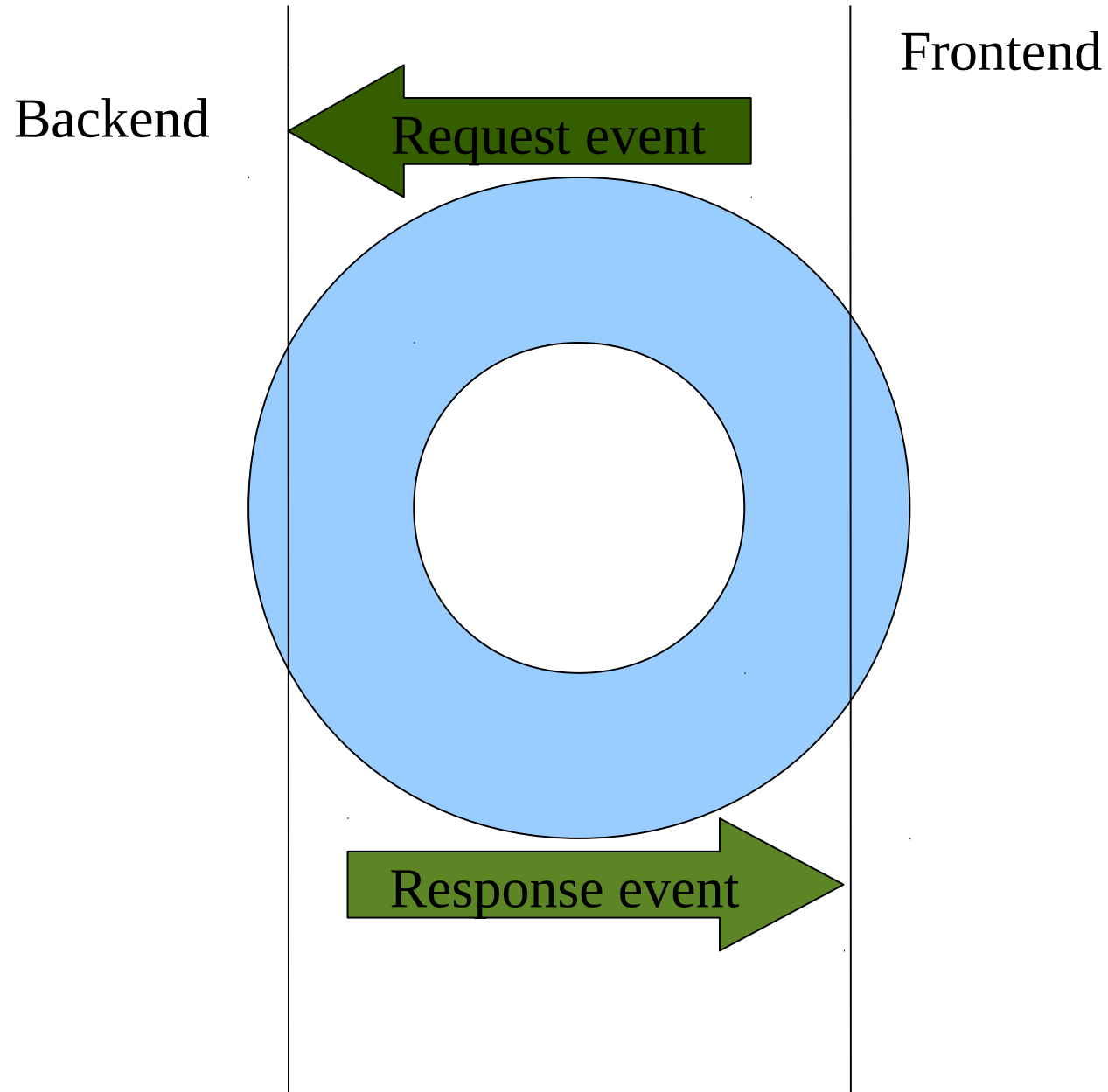
# Controle de dispositivos



# Split-driver model



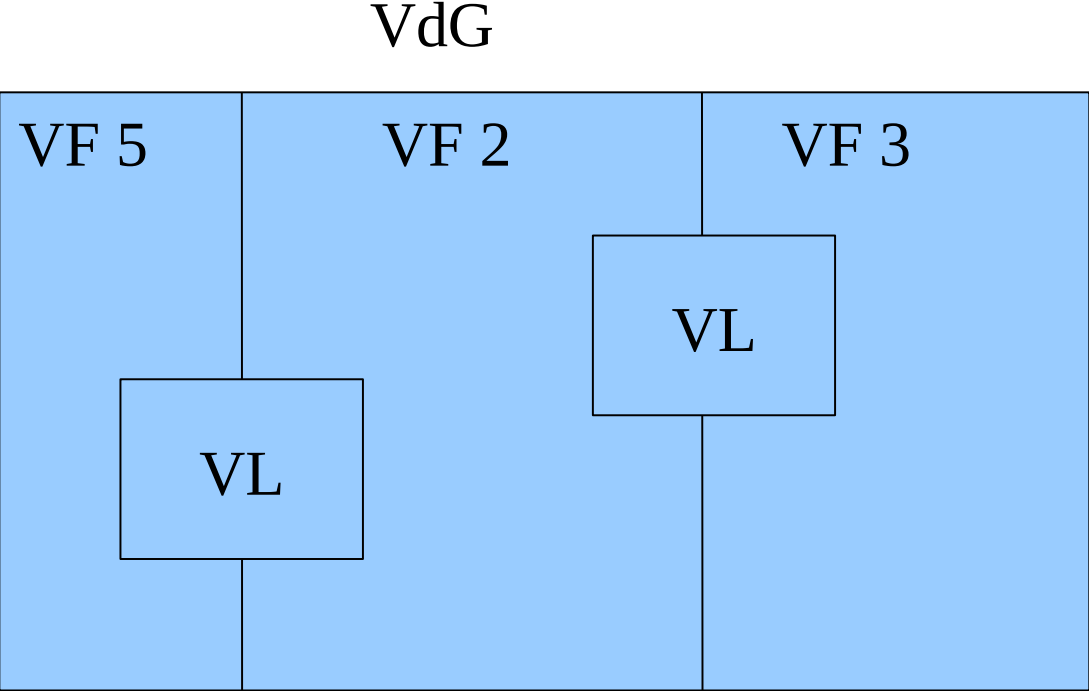
# Anel de requisições



# Armazenamento de Guest Domains



# Logical Volume Manager (LVM)

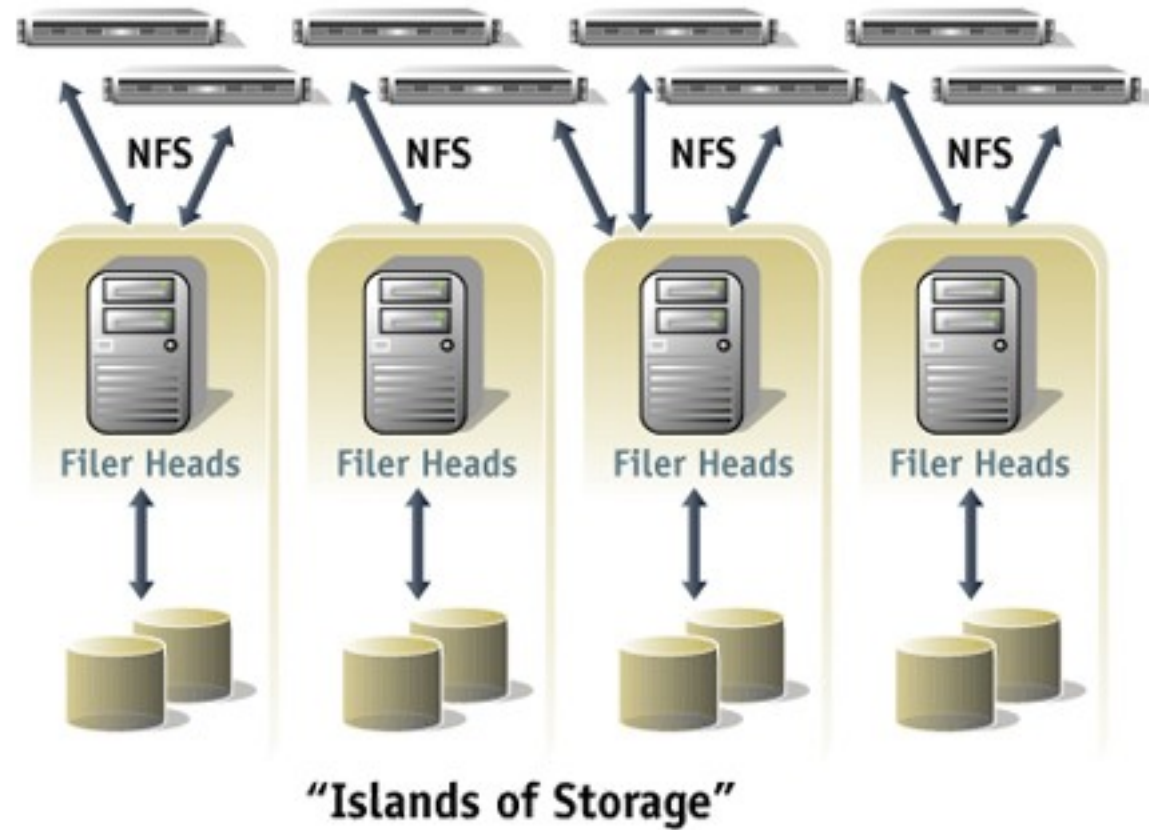


# Copy-on-Write (CoW)

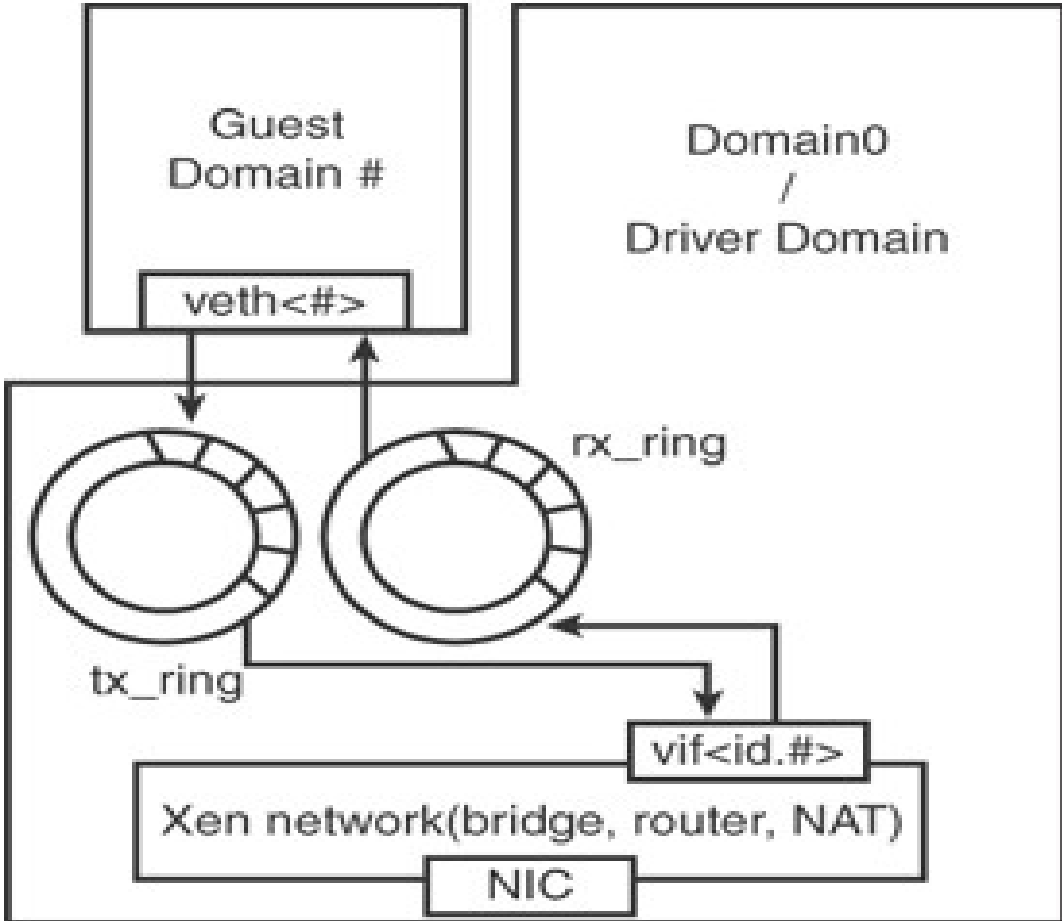




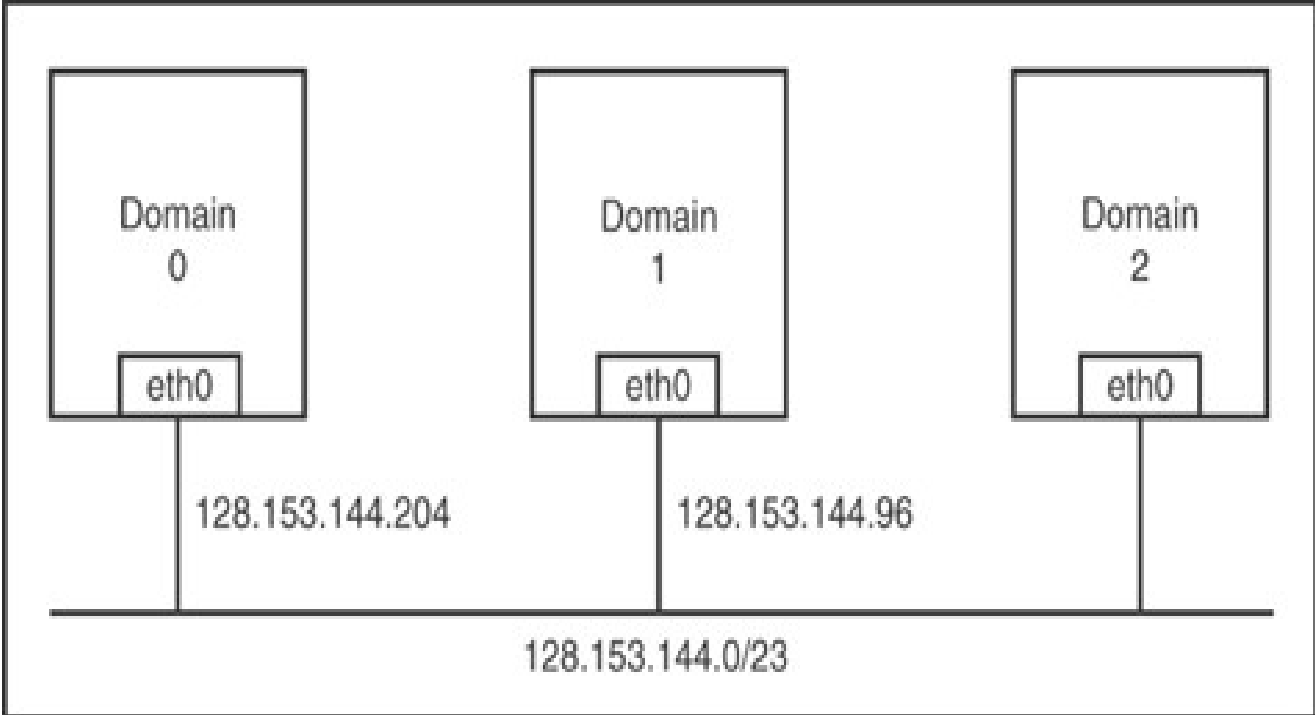
# Armazenamento nfs



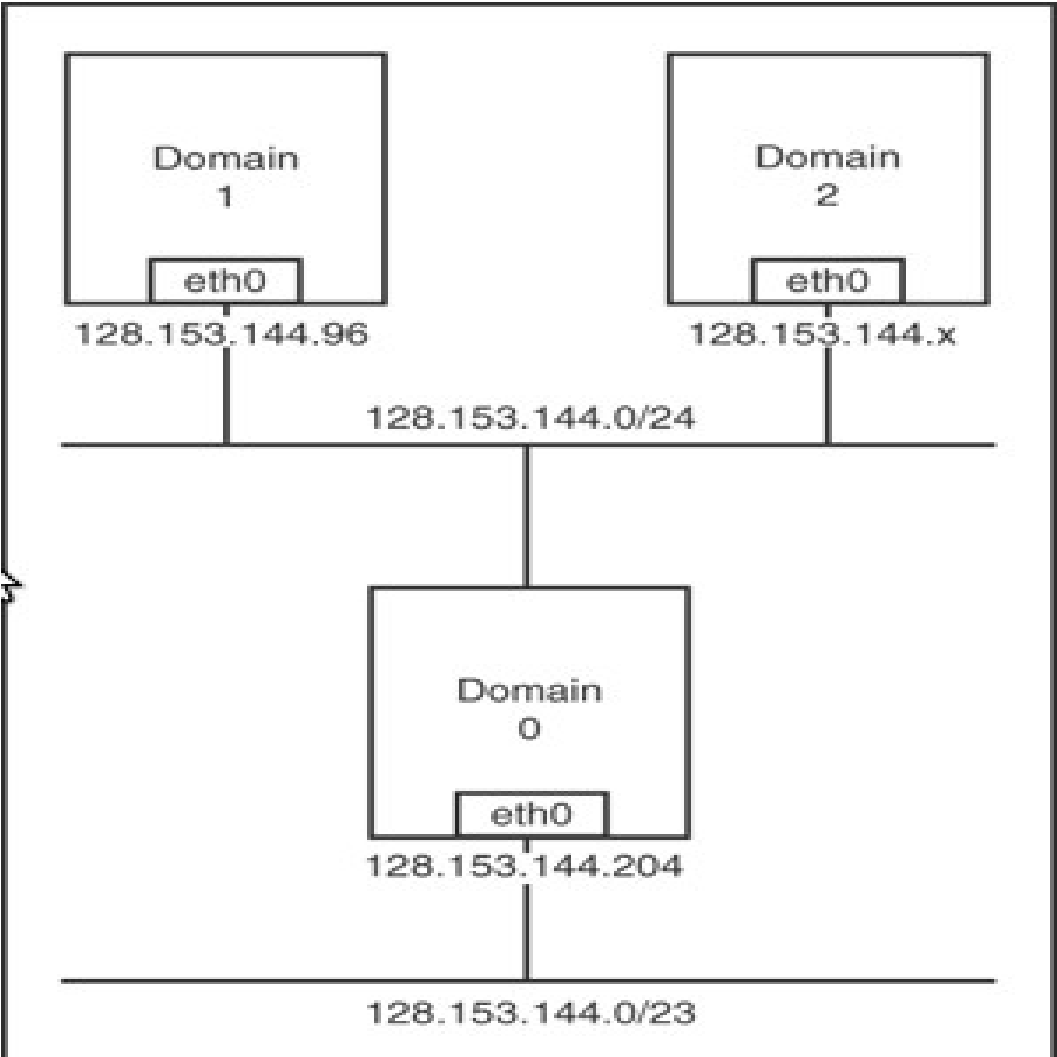
# Redes



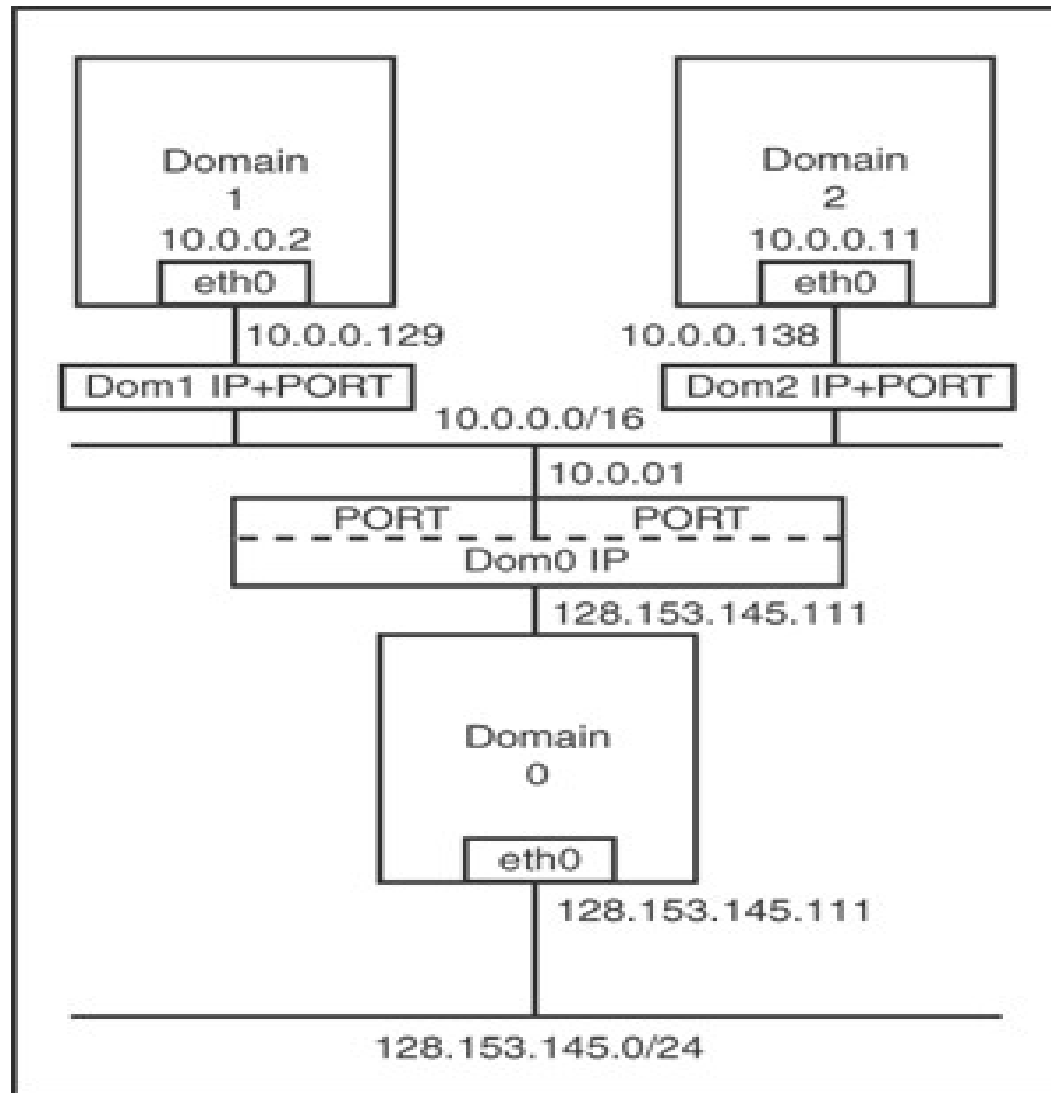
# Bridge



# Roteador



# NAT



# Migração de máquinas virtuais



# Cold migration





# Warm migration



# Live migration



# Gerência de recursos

Memória virtual

Escalonador baseado em créditos





# Créditos

As imagens dos slides 24, 25, 26 e 27 foram retiradas do livro *Running Xen: A Hands-on Guide to the Art of Virtualization*.

As demais imagens utilizadas são de autoria do autor ou pesquisadas no google.