# Reclaiming privacy in the web with Whonix on KVM

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### Who am I

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# Agenda

- 1. Introduction
- 2. Hypervisors and emulators
- 3. QEMU/KVM
- 4. Privacy Operating Systems
- 5. Whonix
- 6. Tor network
- 7. Hands-on: Installing Whonix on QEMU/KVM

### 1. Intro

What are we doing today?

Installing on our local machine one of the most privacy-focused systems available (and reviewing some concepts before that)

### 2. Virtualization Platforms: Hypervisors and emulators

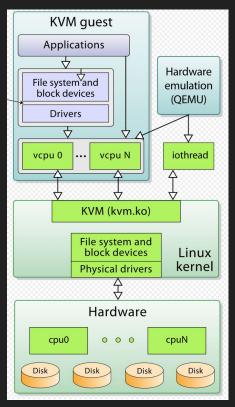


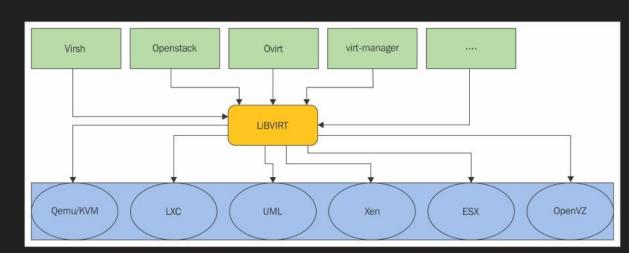
Hardware virtualization - type 1 and 2



Software emulation: emulates the hardware

# 3. QEMU/KVM



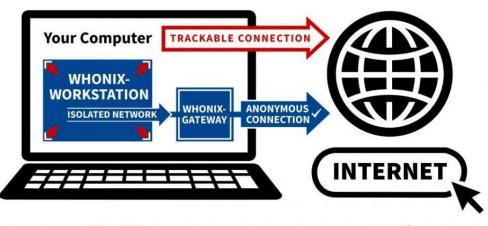


#### 4. Privacy-focused Operating Systems



### 5. Whonix

#### **Whonix Anonymity Architecture**

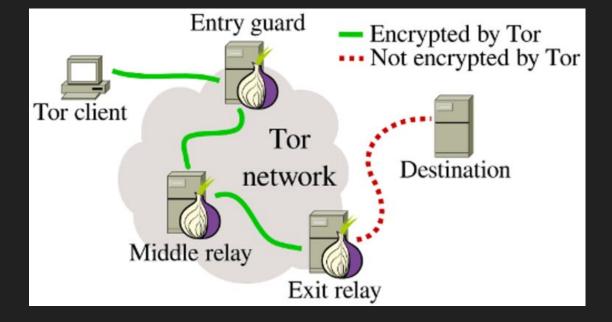


The red arrows **X** K indicate that misbehaving / leaky applications can't break out of **Whonix-Workstation**.

All network connections are forced to go through **Whonix-Gateway** where they are torified and routed to the Internet.

# 6. Tor network





# 7. Hands-on: Installing Whonix on QEMU/KVM

https://github.com/caldito/whonix-kvm-workshop

- 1. Installing QEMU/KVM, libvirt and virt-manager
- 2. Whonix download, verification and extraction
- 3. Whonix network setup
- 4. Whonix VM and disks setup
- 5. Start and connect to the internet anonymously

# Thank you!