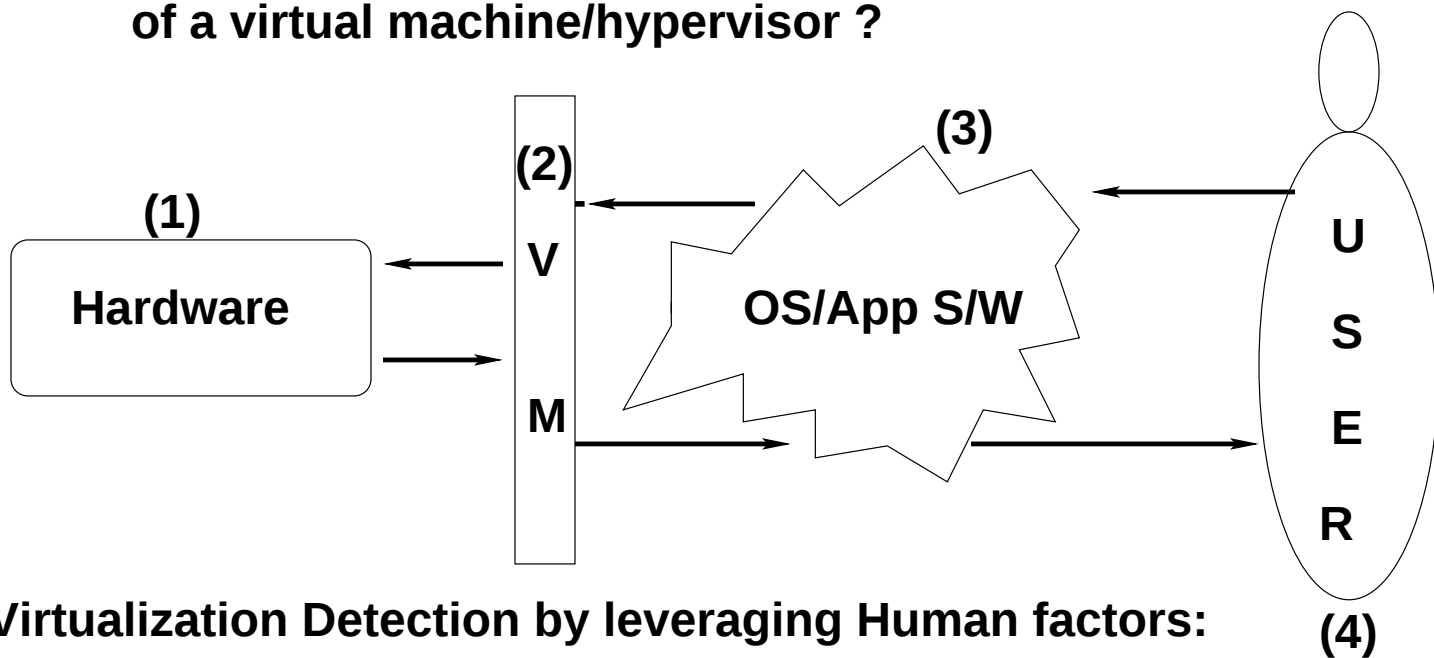


Virtualization Detection problem : how can the O/S or applications tell if they are running on top of a virtual machine/hypervisor ?



Virtualization Detection by leveraging Human factors:

- (1) Hardware (2) the virtual machine/hypervisor layer
(3) O/S/application (4) User Form a closed loop**

OS/applications cannot probe VM layer because it will fake any responses the Application wants to hear.

My solution : look the other way instead: for human users some biologically determined constants do not vary much from user to user: for example persistence of vision

Application will be bundled with simple visual clips that when run on bare metal get rendered fast enough to not be seen as jerky (persistence of vision ~ 30 frames/sec for all people). This rate is pre determined when the UVW (Uncover Virtualization Wizard work-suite) is compiled before the application is shipped. Now any slowdown due to emulation or trapping of instructions will make the video rendering very different

User response will be very different (user may be asked what they see (obviously the question can be camouflaged user ans box randomly placed and user keystrokes transformed thru some prior known encryption so hypervisor cannot fake user responses)