

## **A METHOD FOR VIRTUAL MACHINE INTROSPECTION AT NATIVE SPEED**

### **Abstract**

This invention relates a system and method for creating an Immersive Execution Environment (or ImEE) for a Virtual Machine Introspection (VMI) in an operating system such that physical memory of a target Virtual Memory (VM) is accessed at native speed. The method comprising: allocating at least one of a plurality of Computer Processing Unit (CPU) cores and a physical memory region in a memory of the operating system; setting a CR3 register of the allocated CPU core identical to a CR3 register of a CPU core of the target VM such that the allocated CPU core uses a page table of the target VM for translating a virtual address (VA) into an intermediary physical address (IPA) by the CR3 register of the allocated CPU and the CR3 register of the CPU core of the target VM; preparing a first data structure and a second data structure in the allocated physical memory region for completing the IPA to Physical Address (PA) translation, wherein the first and second data structures are directed to different PA.

Figure 1 to accompany the abstract