The future of Windows Virtualization

The Hypervisor

- Thin layer of software running on the hardware
- Supports creation of *partitions*
  - Each partition is a *virtual machine*
  - Each partition has one or more *virtual processors*
  - Partitions can own or share hardware resources
  - Software running in partition is called a *guest*
- Enforces memory access rules
- Enforces policy for CPU usage
  - Virtual processors are scheduled on real processors
- Enforces ownership of other devices
- Provides simple inter-partition messaging
  - Messages appear as interrupts
- Exposes simple programmatic interface called “hypercalls”