

Software-Defined Rack Scale Architecture

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System Goals

Store and retrieve memory pages from a remote host

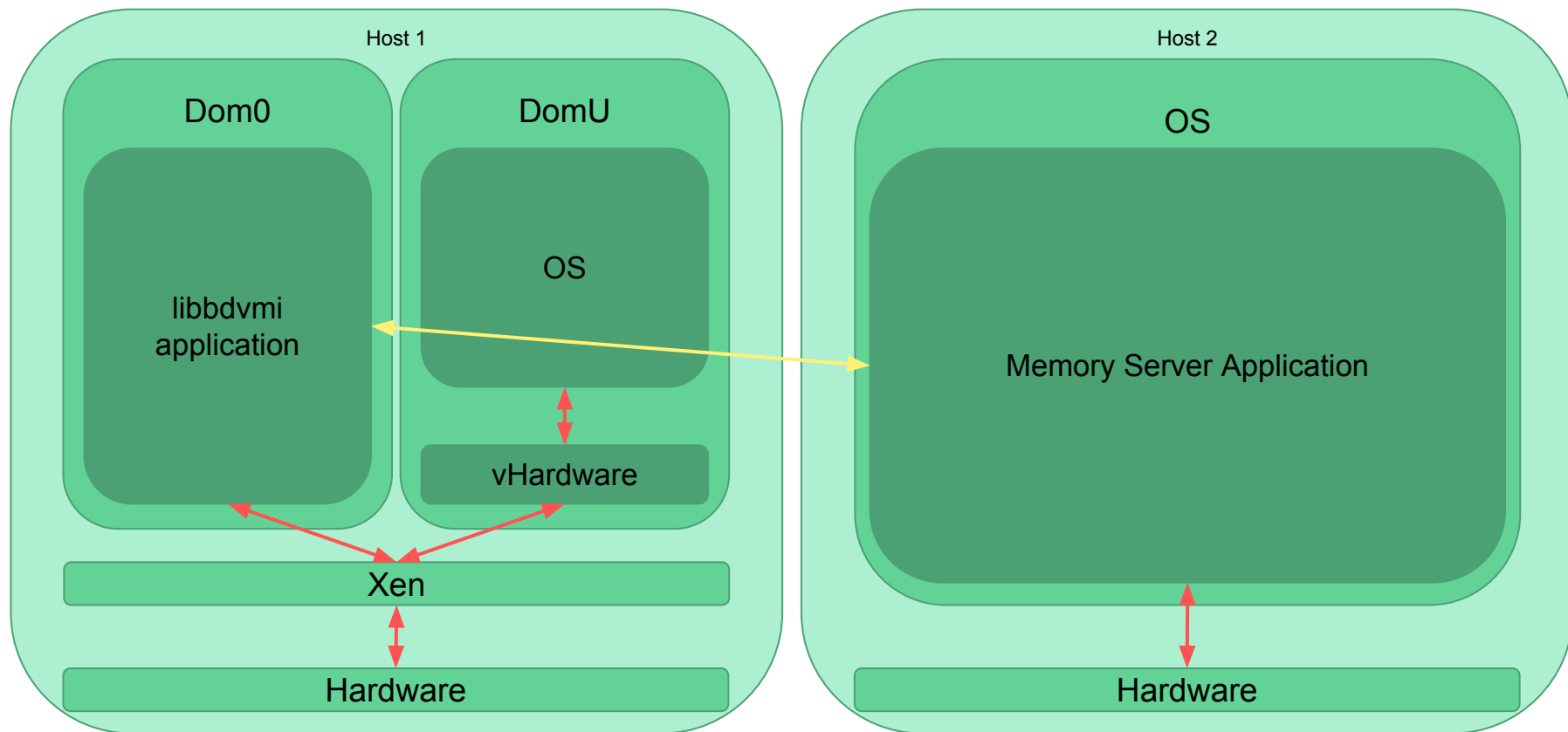
Manage memory page access control

Automatically swap pages to/from remote host

Key Components

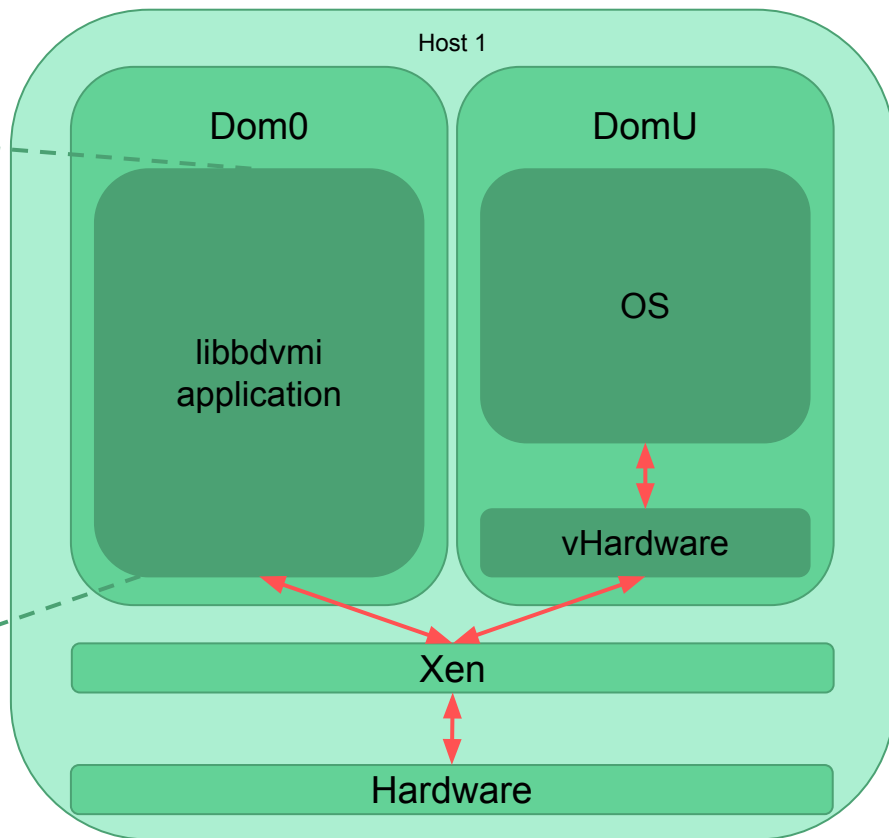
- Xen
- libbdvmi
- Memory paging algorithm
- Remote memory server

System Design



Host 1 Design

- Leverage libxc and xen
- Monitors accesses to marked pages
- Upon mem_event, swap page
- Communicate via network to remote memory server
- Change page access control



Host 2 Design

