

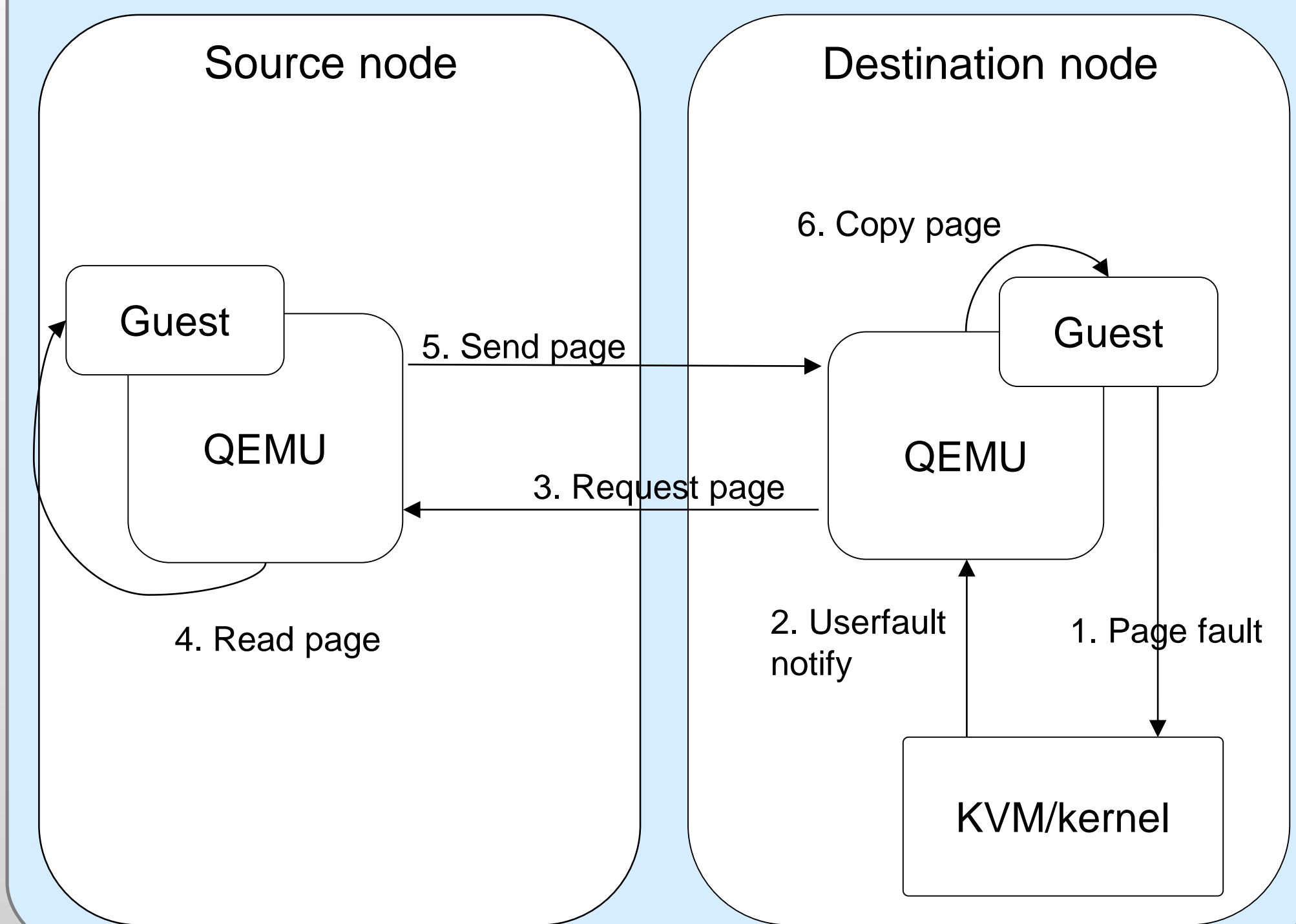
## Post-copy Migration

Post-copy migration allows reduction of application downtime and reduces overall network bandwidth used for application migration. It also guarantees convergence, as opposed to pre-copy.

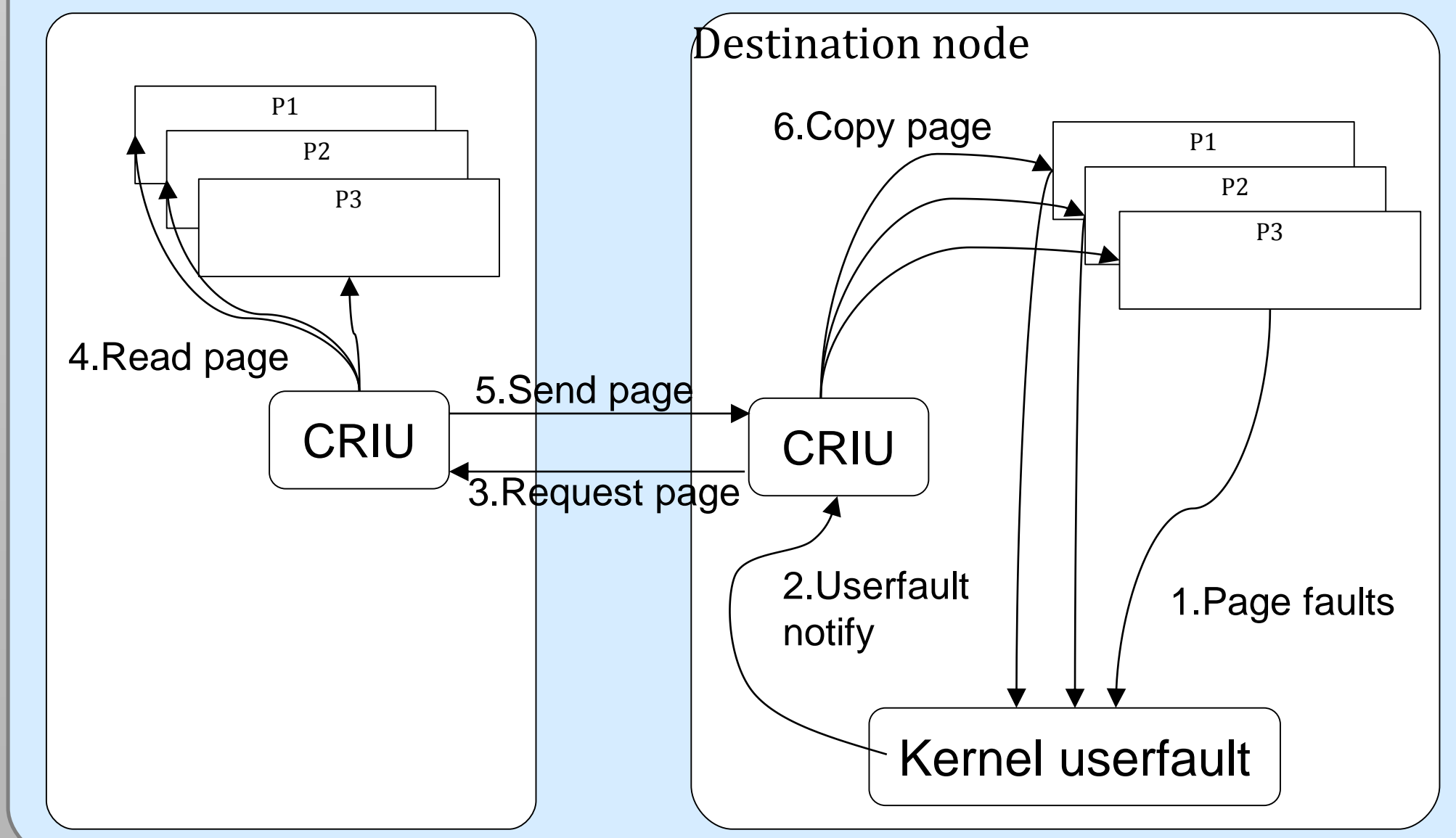
### Linux Implementation

The Linux implementation relies on the *userfaultfd* feature of the kernel. The userspace application *CRIU* uses this feature to orchestrate the migration.

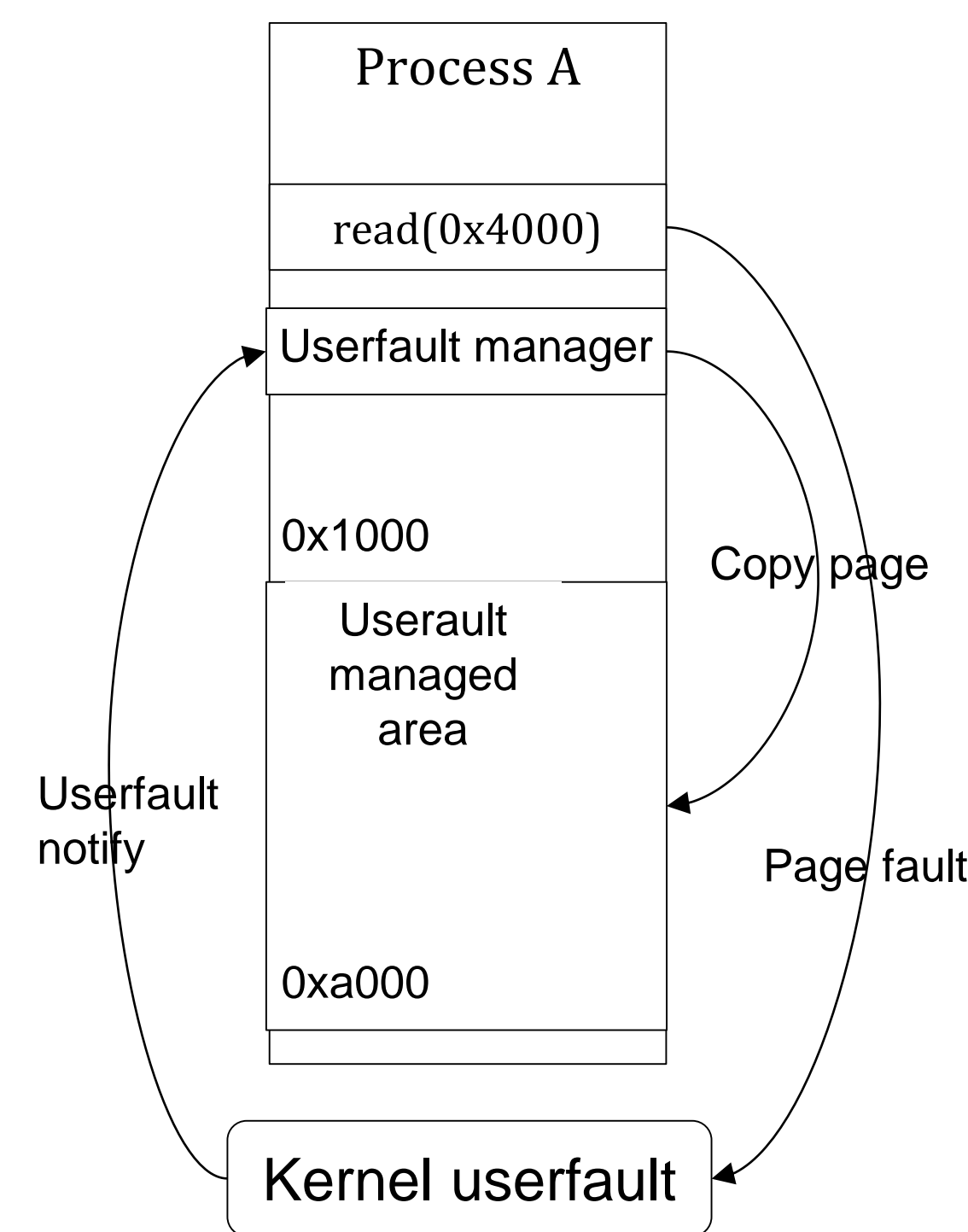
#### VM Post-Copy Migration



#### Container Post-Copy Migration



#### Cooperative Userfault

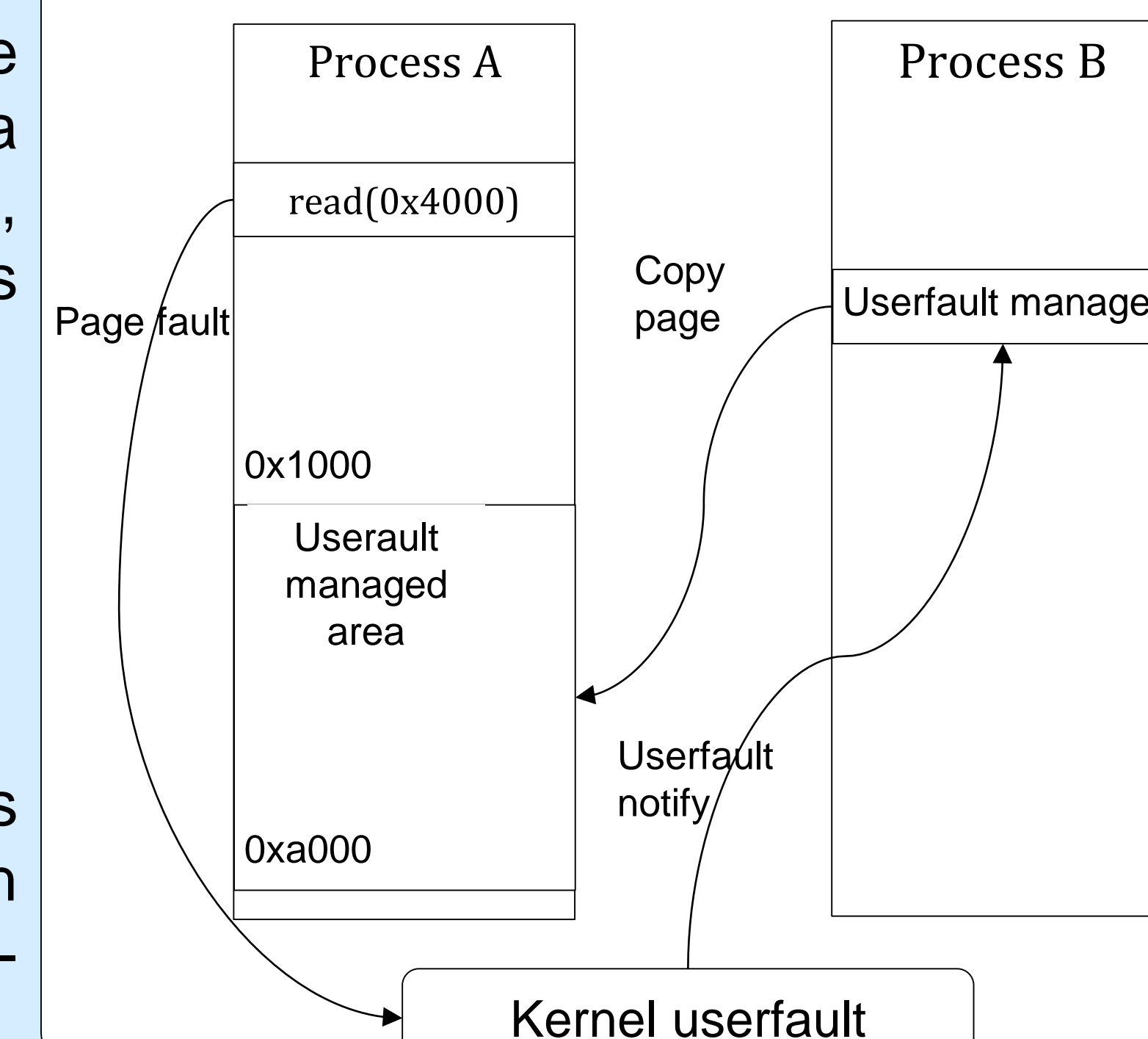


Container migration uses an userspace tool called CRIU that collects the information necessary to migrate a container, including its memory dump, and then restores the container process tree on the destination host



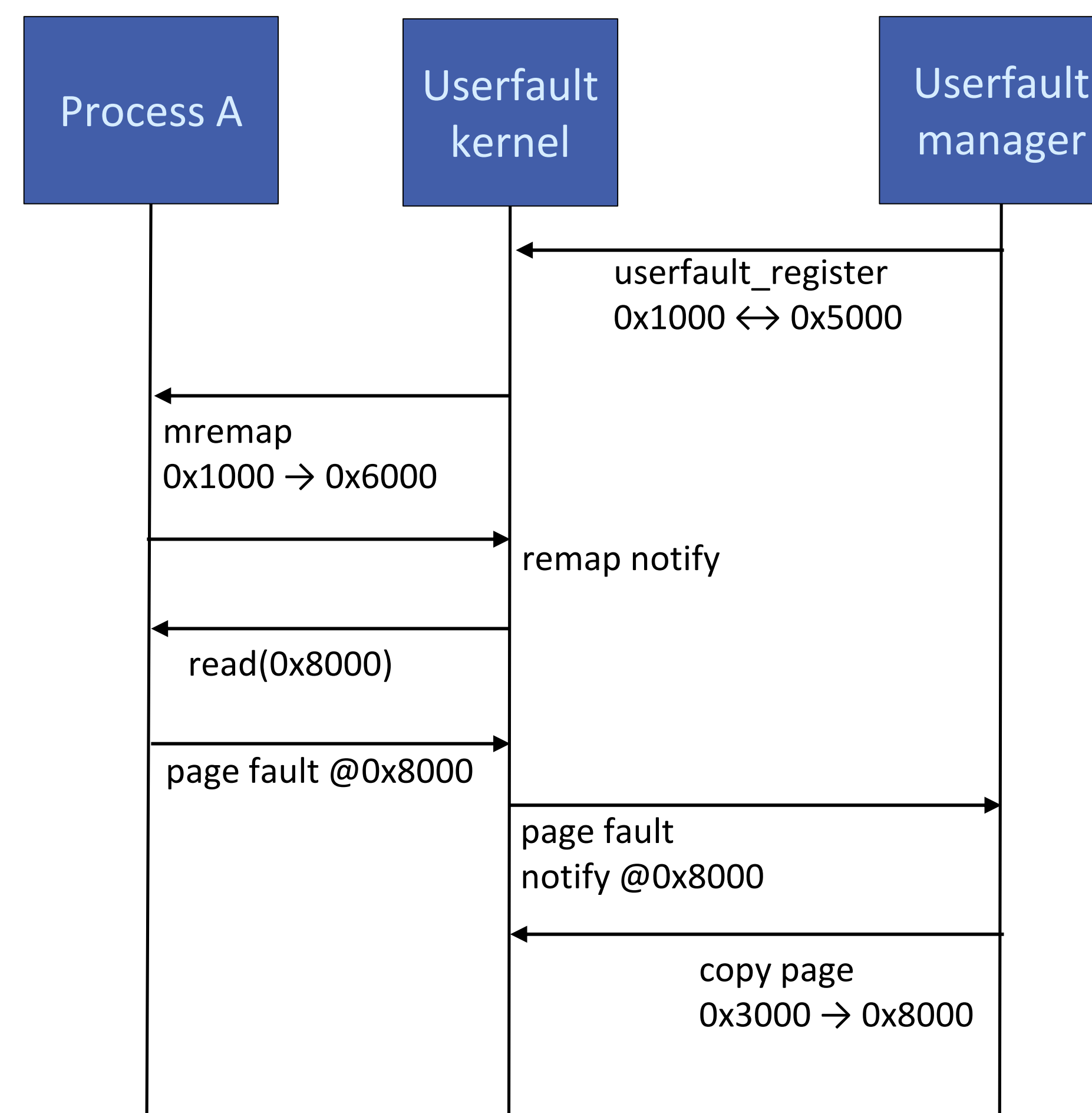
Since CRIU is an independent process and does not share address space with the restored process, it must use non-cooperative userfault.

#### Non-cooperative Userfault



### Cooperative Userfault

Monitor and faulting threads share address space



### Non-Cooperative Userfault

Monitor is in a separate process with its own address space

