

ABSTRACT

A method and apparatus for marking a dirty page during the live migration of a virtual machine, a back-end device, and a chip. The method comprises: receiving a current DMA write request of a target virtual function device, on the basis of the current DMA write request, determining whether to generate a current dirty page write request, if the generation of a current dirty page write request is determined, generating a corresponding current dirty page write request, if the previous dirty page write request of the target virtual function device has not been stored, storing the current dirty page write request, if the previous dirty page write request of the target virtual function device has been stored, determining, on the basis of a write address of the current dirty page write request and a write address of the previous dirty page write request, whether to merge the current dirty page write request and the previous dirty page write request, and if the merging of the current dirty page write request and the previous dirty page write request is determined, storing a merged dirty page write request, and if the merging of the current dirty page write request and the previous dirty page write request is not determined outputting the previous dirty page write request to a post-stage module, and storing the current dirty page write request.

(FIG. 1)