

ABSTRACT

A runtime virtual machine system. The system comprises: a user mode application program (101); an asynchronous IO model (102), which is used for sharing an IO request memory queue between the user mode application program (101) and a kernel mode; and a dynamic runtime library (103), which can be loaded when the user mode application program (101) is started, wherein the dynamic runtime library (103) is used for generating, after being loaded, a runtime virtual environment for replacing a runtime environment of the user mode application program (101), the dynamic runtime library (103) comprises an IO operation library function hook (1031) and a monitoring thread function (1032), the IO operation library function hook (1031) is constructed on the basis of a native library function of the user mode application program (101), and the IO operation library function is used for adapting an application program interface of the native library function and the asynchronous IO model (102) in the runtime virtual environment, such that an IO operation of an operating system where the user mode application program (101) is located is transformed to be processed by the asynchronous IO model (102).

(FIG.1)

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