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# Docker-based Distributed Application Control System

## Design and Implementation

**Abstract:** Docker is an environmental deployment tool in recent years. Docker is very popular in operation engineers and programmers, because it can achieve portable application deployment. Docker operations are quite a lot, the corresponding linux commands are also complicated, which is inconvenience memory. And Remote API produced solved the problem, according to which it can develop a control system of Docker operations. The system mainly includes the host management, container management, image management and rights management module, using the foreground and background side of the complete separation development model, the development framework for Angular and ThinkPHP, and background make GET/POST/DELETE calls through PHP curl. The system can replace almost docker commands, which greatly reduced deployment and maintenance time, also, container and image running conditions can be more intuitive, and it is conducive to more quickly discover the running problem, reduce the maintenance's work. The system is tested, it meets the requirements of the efficient maintenance and achieves the design goal.

**Key words:** Docker, container, image, Remote API, visual control