Administrators of web servers fight a constant battle to keep their software current and secured from automated tools that roam the Internet looking for easy targets. With the increasing frequency of patches and the increasing complexity of web servers and the web applications that run on them, this is no easy task. Moving target defense solutions are a class of security solutions that use rotation of services or other strategies to create uncertainty for the attacker. The moving target defense solution presented in this paper rotates between two web servers on a single virtual machine with the goal of increasing the complexity of reliably targeting the software of an individual web server implementation. This paper also explores the evaluation of moving target defense systems, the requirements for such a system to be usable in industry, and the testing platform for our moving target defense solution.