

## **Explain how Docker can help to address Configuration Management issues for the following:**

**Integration:** Let's say a company is working on **web application** that has a particular set of systems in play w.r.t all the tools being used for development such as IDE like PyCharm, Testing Tool for Reports like TestRail, AWS for Backend and so on, which in turn should be shared across all the systems of people working on it in order to maintain similarity. So docker containers allows us to be able to share environments from one group to another, instead of taking pain to install the JBOSS three times in different environments.

**Testing:** Docker takes care of the exemplary issue of guaranteeing that you test a similar application you ship. Since everything the application needs to run is bundled in the container, it can run typically and reliably over the pipeline, and with various designs - not any more troublesome factors to find. In the event if a Bug is there, at that point the bug can be targeted in the respective container image.

**Deployment:** Docker manages to reduce deployment to seconds. This is because it creates a container for every process and does not boot an OS. The three reasons which are key to streamline production deployments are that it supports packaged applications, it supports "Build Once, Deploy Many Times in Multiple locations", it supports easy rollback.

**Customer Support:** One of the key advantages of Docker is the way it eases issue resolution and provides customer support. Clients can take their own setup, put it into code, and send it with no issues.

**Internal and external hackers who might attack the system:** From a security perspective, Docker guarantees that applications that are running on holders are totally isolated and disconnected from one another, allowing you full oversight over traffic stream and the board. For example, to solve security issue ADP uses Docker Datacenter. Docker Content Trust enables their IT ops team to sign images and ensure that only signed binary will run in production. They also perform automated container scanning.

**Citation :**

<https://dzone.com/articles/top-10-benefits-of-using-docker>

<https://www.infoworld.com/article/3130670/the-hidden-benefits-of-docker-for-qa.html>