# What is Docker and what is it used for?

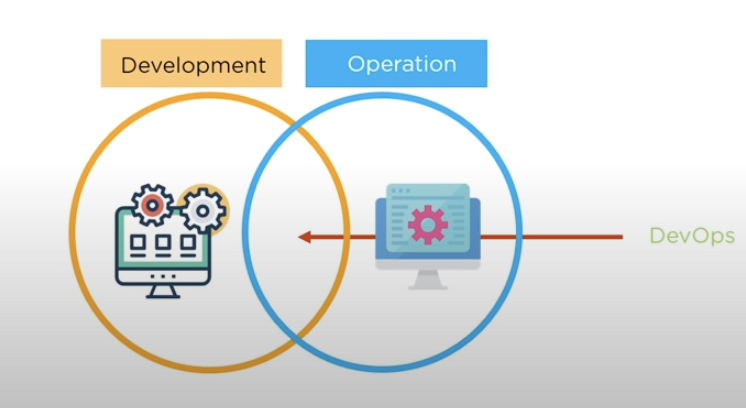
Docker is a virtual environment used to run programs.

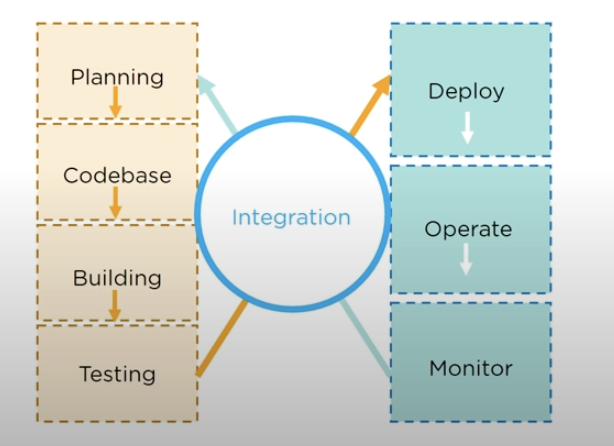
Docker vs Virtual Machine

|  |  |  |
| --- | --- | --- |
| Criteria | Virtual Machine | Docker |
| OS Support | Occupies a lot of memory space | Docker Containers occupy less space |
| Boot-up time | Long boot-up time | Short boot-up time |
| Performance | Running multiple virtual machines leads to unstable performance | Containers have a better performance as they are hosted in a single Docker engine |
| Scaling | Difficult to scale up | Easy to scale up |
| Efficiency | Low efficiency | High efficiency |
| Portability | Compatibility issues while porting across different platforms | Easily portable across different platforms |
| Space allocation | Data volumes cannot be shared | Data volumes can be shared and reused among multiple containers |

## What is DevOps and its tools

DevOps is a collaboration between development and operation teams which enables continuous delivery of applications and services to our end users.





For planning and Codebase we use tools like Jira & Git.

For Building we use Maven and Gradle

Testing Selenium

Deploy and operation Docker & Chef

Monitor -> Nagios

## What is Docker?

Docker is a tool which is used to automate the deployment of applications in lightweight containers so that applications can work efficiently in different environments.