



Is Docker going to replace VMware?

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Background



software
with specific platform
requirement



invalid
platform

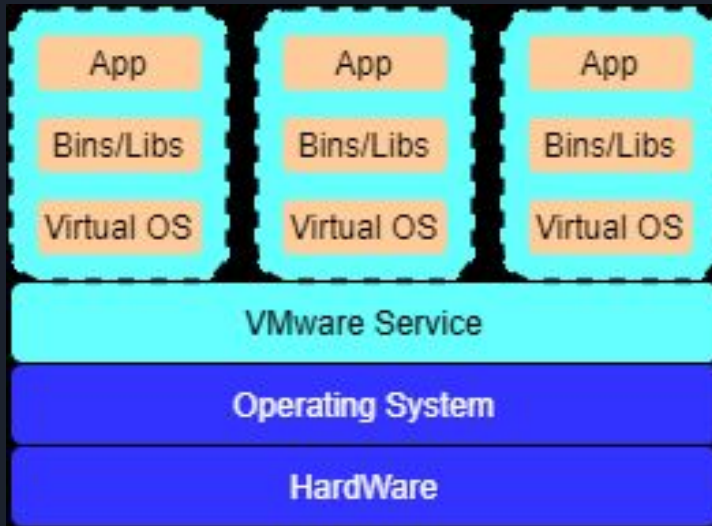


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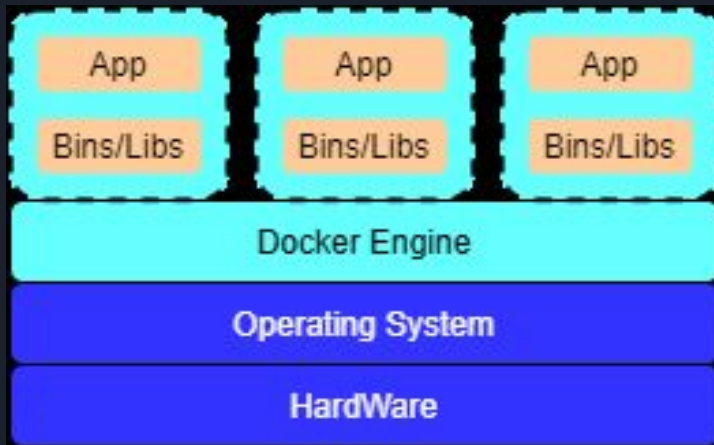
invalid
platform

Introduction to VMware vmware®



- Provides isolation at hardware abstraction level
- Requires hypervisor layer that sits between VMware and hardware
- Each machine contains its own OS, binaries/ libs and application

Introduction to Docker docker



- Provides isolation at OS level
- Only requires docker engine, hence not fully isolated
- Containers share OS/ its bins/libs with each other, but it is read-only
- Direct hardware access to the host



Docker vs VMware - Speed





	Docker	VMware
Time to start	<100 millisecond	Similar to start a OS (~5 second)
Application Performance	Depends	



Docker vs VMware - Space

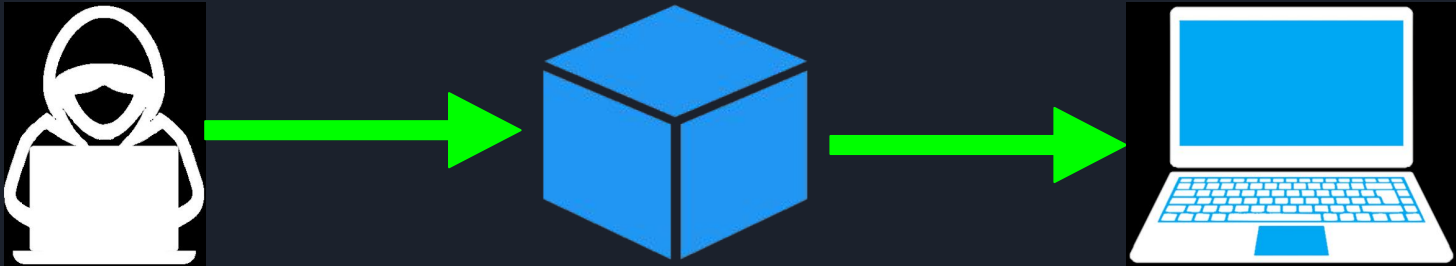
	Docker	VMware
Disk Storage	< 1 GB (Mostly)	several GB
RAM	< 1 GB	~ 2 GB

Docker vs VMware - Monitor

	Docker	VMware
Command Line User Interface		
Graphic User Interface	 XService	 OS dependent

Docker vs VMware - Security

Docker:



VMware





Conclusion

- Docker will be more popular for general enterprise deployment that makes up some percentage of VMware users due to its scalability & portability
- But VMware will not be obsolete (at least in the near future)
 - Transitioning from VM to Docker takes time for large enterprise
 - VMware will still have its position within the industry due to its full isolation & security