

DEPLOYING COMPLEX APPS IN A WHOLE NEW WAY

*Understanding Docker
Containers, Virtual
Appliances and More*





Docker - A New Way to Simplify and Scale

Software developers today are moving at breakneck speed to create applications that run much like the Internet—decoupled, distributed, everywhere, at any time.

With different components like micro-services, libraries and infrastructure all interacting, the creation and deployment of these applications is anything but straightforward.

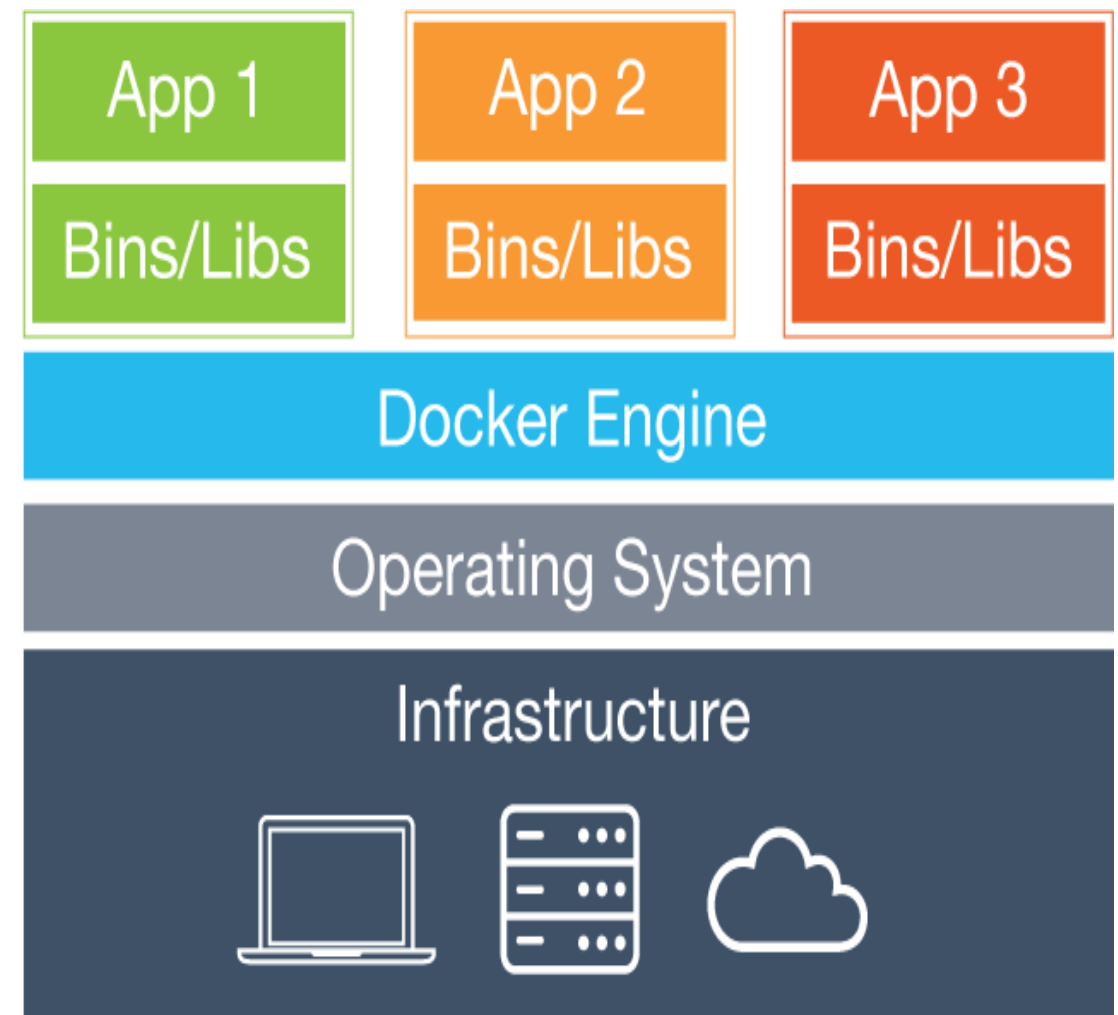
Docker technology gives teams a new way to make complex application deployment and scaling much easier.

This eBook explores Docker containers and how they differ from other deployment options such as virtual appliances and Windows containers.



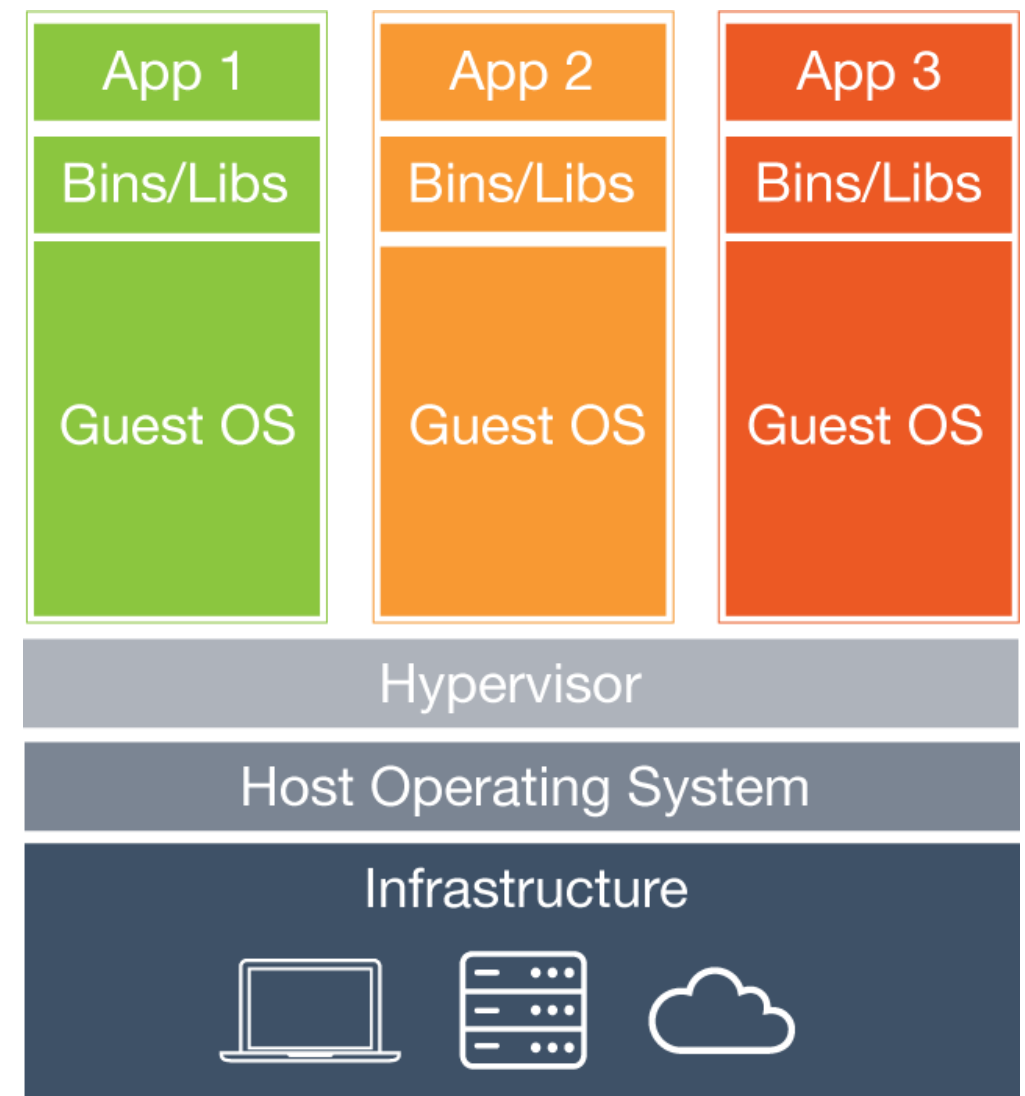
What is Docker?

- An open platform to build, ship and run distributed applications as containers
- Containers include the application, binaries and libraries
- Each application shares a single OS
- Lightweight structure creates efficient disk usage and image downloads
- Deploy delta between versions (union of file systems) to update an application



What is a Virtual Appliance?

- A pre-configured virtual machine image ready to run on a hypervisor or in the cloud
- Contains applications, binaries, libraries and OS
- Each application has its own copy of OS, binaries and libraries
- Ship to the customer as an image, run in the data center or upload to the cloud
- To update an application, deploy a new virtual appliance



Which Option Should I Use?



Consider these use cases to determine what works best for your needs:

Docker Container

- Run isolated copies of an application for dev/test vs. production
- Run different release versions of an application
- Run different customer versions of an application

Virtual Appliance

- Run application with different types of OS
- Run application with different versions of same OS (service packs)
- Run different versions of an application

Deployment Options

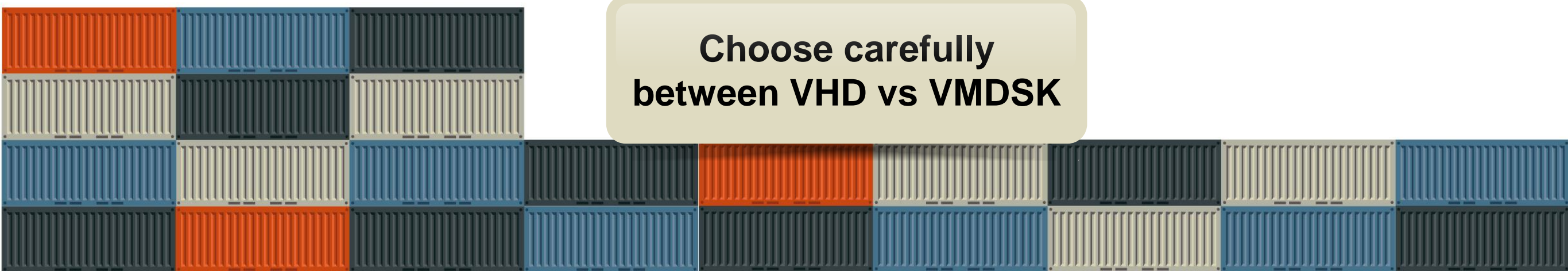


Docker Container

- Internal deployment by developer
- Hosted application for customer by software vendor
- Host in the cloud
- Deliver an image
 - TAR

Virtual Appliance

- Internal deployment by developer
- Hosted application for customer by software vendor
- Host in the cloud
- Deliver an image
 - OVF
 - OVA (TAR)



**Choose carefully
between VHD vs VMDSK**

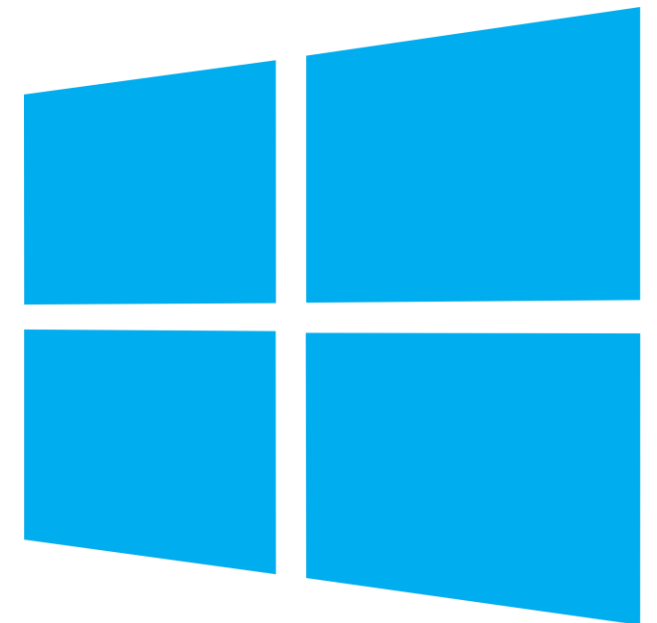
What about Windows?

Microsoft has been working with Docker on Windows containers, including:

- Windows Server containers
(uses shared Windows OS)
- Hyper-V containers
(similar to virtual appliance)



*Docker is coming to Windows.
Docker tools or PowerShell can be
used to manage Windows containers.*



Summary of Platforms

Virtual Appliances

- For Linux applications with or without a user interface
- Run from any hypervisor or cloud service that can host a Linux Virtual Machine

Docker Containers

- For Linux applications without a user interface
- Run from a physical or virtual Linux host or cloud service

Windows Containers

- For Windows applications without a user interface
- Run from a physical or virtual Windows Server or cloud service

TECH TIP



Have your legal team review licensing for the OS and any bundled dependencies before delivery to customers

TECH TIP



Can run a Linux VM with Docker from Windows or a Mac



Common Questions

What is the difference between Docker and other application virtualization solutions like Microsoft App-V?

Docker is for distributed applications in the data center or running in the cloud, while Microsoft App-V is for desktop applications.

Is there any training available on Docker?

On the Internet you will find documentation and videos that cover how to use Docker and virtual appliances. And we encourage you to contact Flexera Software or join our Community Forum discussions. Get a good thread out there to help us refine our InstallAnywhere documentation or add your insights.

Our installer prompts for a lot of information. So we would need to provide default responses for all prompts in order for the Docker container to run, right?

Correct, InstallAnywhere asks for command switches and parameters that need to be passed to the installer to use when building your Docker container or virtual appliance.

How does the build process for the virtual appliance or container deal with custom code or scripts that are normally run during the installation process on the target system?

The installer runs into that virtual space. It's actually installing applications. Anything that installer would be doing is being done in that virtual space. So it starts in the virtual environment, runs the installer and all its logic and saves the results of that as a Docker image or virtual appliance. That way all the logic and everything is captured.





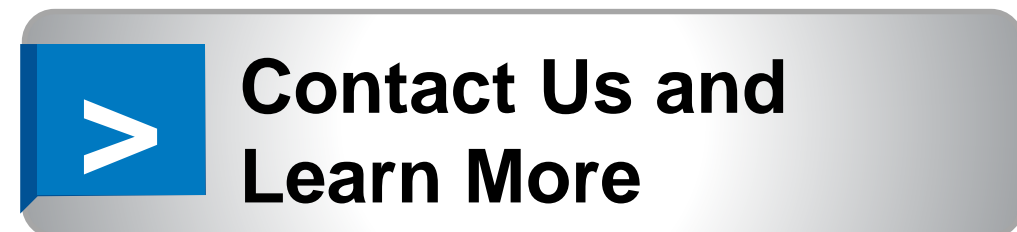
and



**Ready for
Docker Containers
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