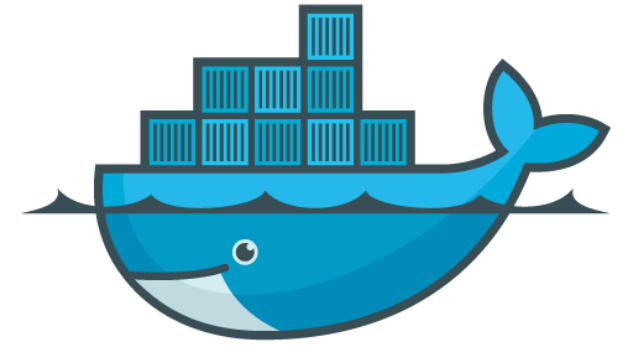


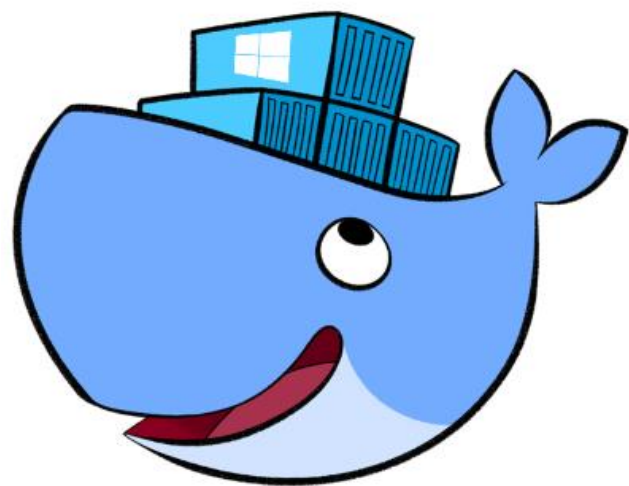
7º Docker Meetup BH

Dockerizando no ambiente
Windows



docker

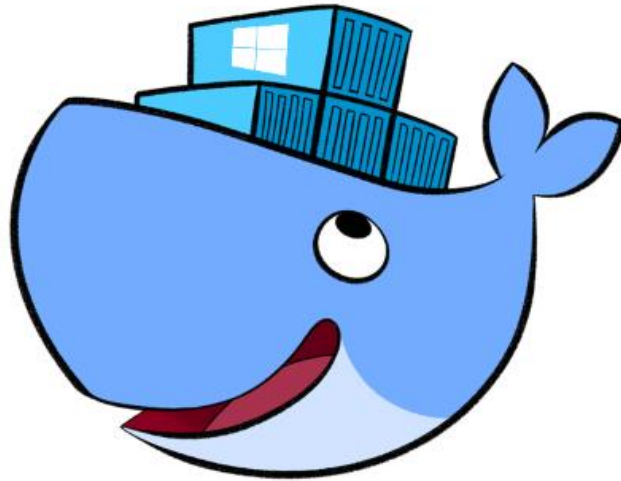




Conteúdo

- Docker no Windows?
- Por que Containers e não VMs?
- Processo de Instalação
- Executando seu primeiro container docker no Windows
- Casos de Uso
- Docker Windows ou Linux?

Docker no Windows?



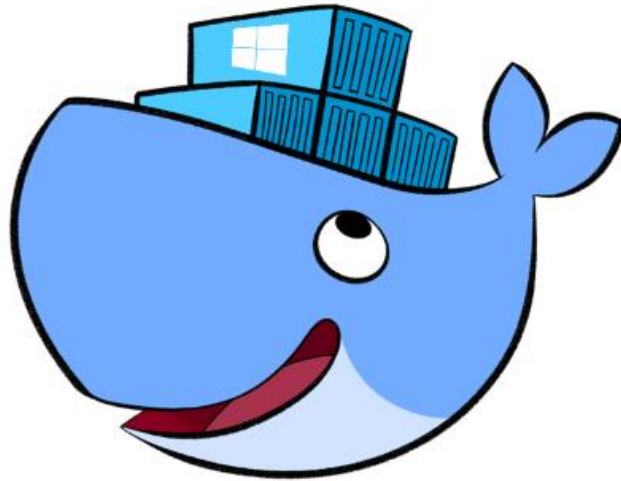
História

2013 – Docker e Solomon Hykes

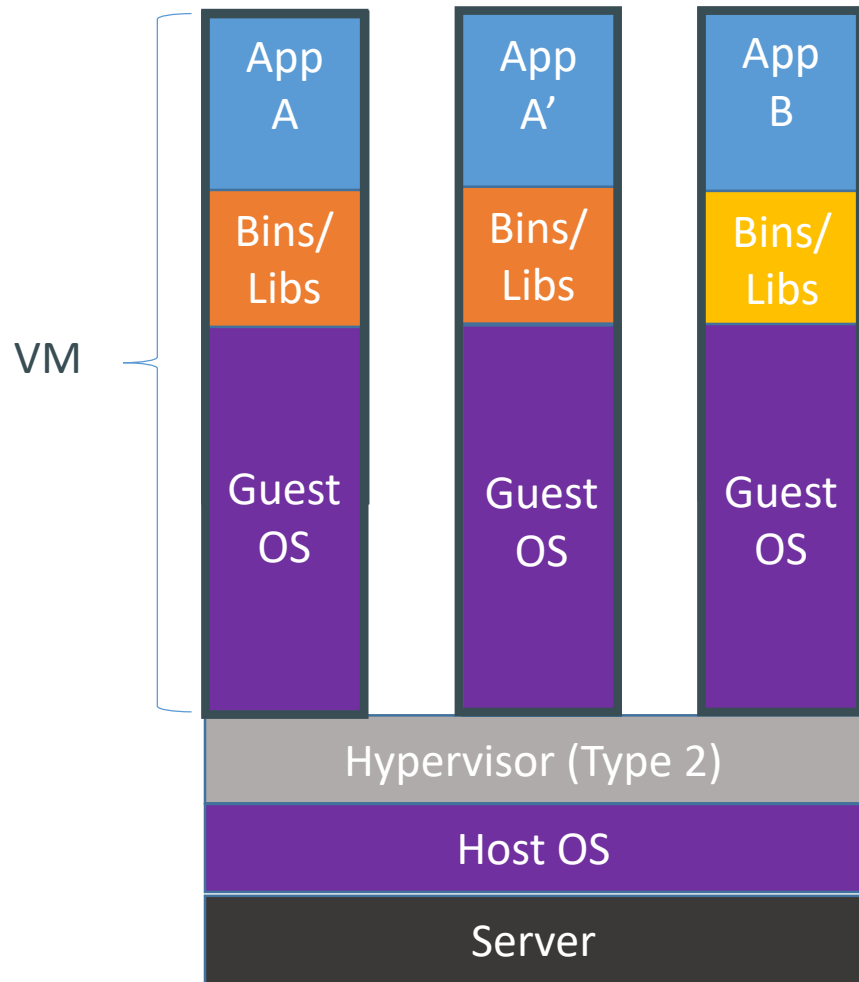
2014 – Projeto Windows Server Containers

2016 – Windows Server 2016 - Solomon Hykes e Taylor Brown

Por que Containers e não VMs?

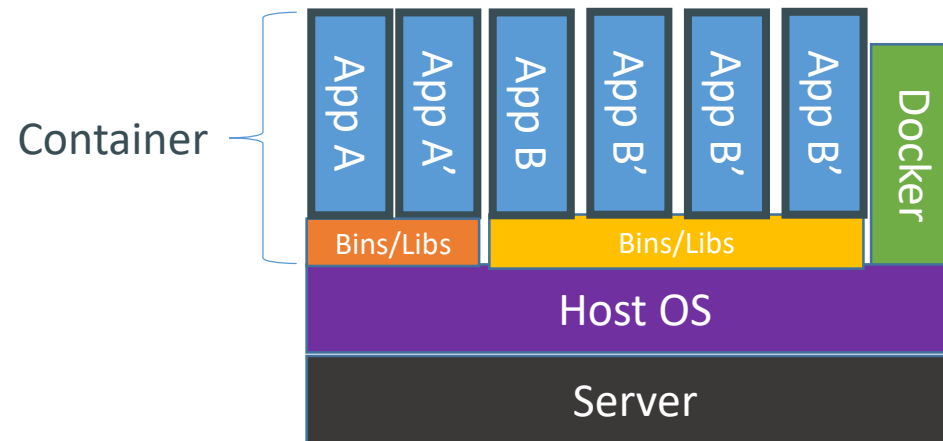


Por que Containers e não VMs?

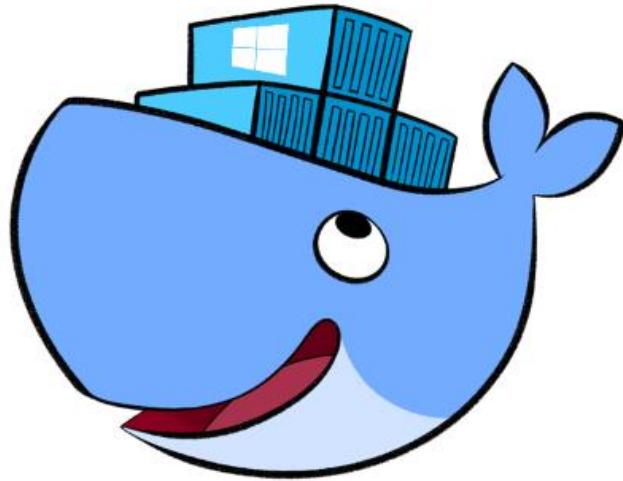


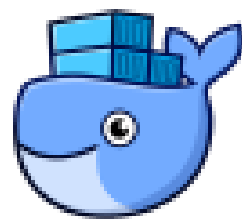
Containers executam isolados, mas compartilham o SO, binários e bibliotecas

...O resultado é uma implementação significativamente mais rápida, muito menos sobrecarga, migração mais fácil, reinicialização mais rápida



Processo de Instalação





Docker Desktop



Windows PowerShell

Formas de Instalação no Windows

Processo de Instalação

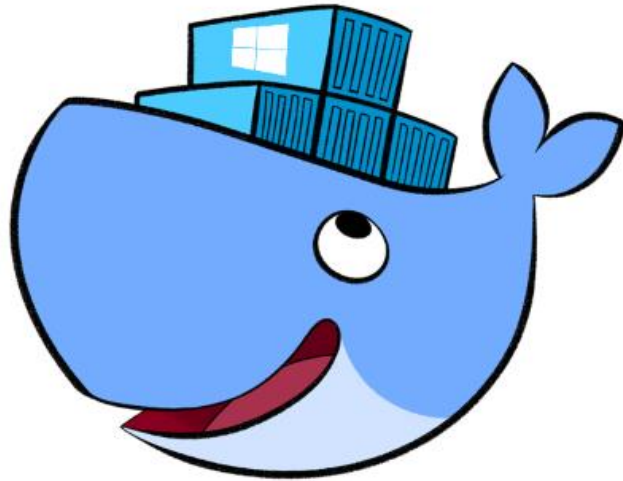
Install-Module DockerMsftProvider –Force

Install-Package Docker -ProviderName DockerMsftProvider –Force

(Install-WindowsFeature Containers).RestartNeeded

Restart-Computer

Executando seu primeiro container Docker no Windows



Executando seu primeiro container Docker no Windows

```
docker run hello-world:nanoserver
```

```
Unable to find image 'hello-world:nanoserver' locally
```

```
nanoserver: Pulling from library/hello-world
```

```
bce2fbc256ea: Pull complete
```

```
3ac17e2e6106: Pull complete
```

```
8cac44e17f16: Pull complete
```

```
5e160e4d8db3: Pull complete
```

```
Digest: sha256:25eac12ba40f7591969085ab3fb9772e8a4307553c14ea72d0e6f98b2c8ced9d
```

```
Status: Downloaded newer image for hello-world:nanoserver
```

```
Hello from Docker!
```

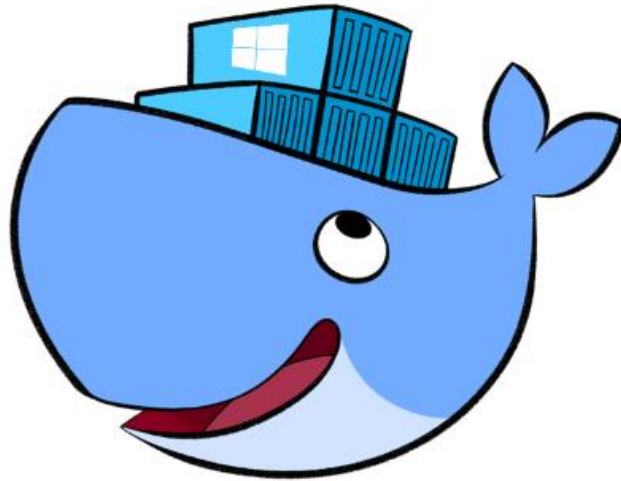
```
This message shows that your installation appears to be working correctly.
```

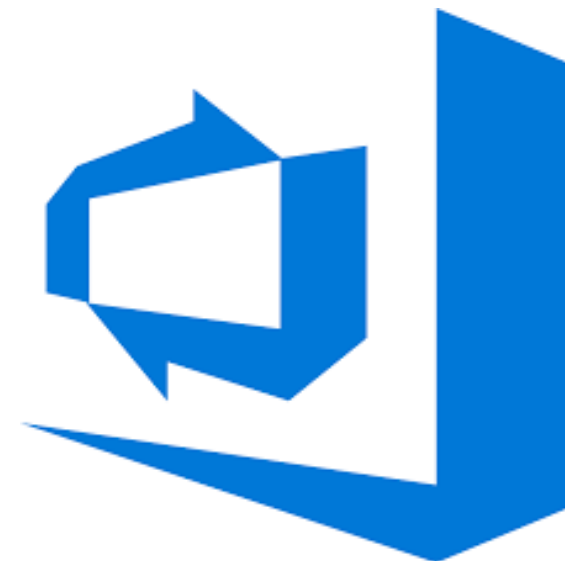
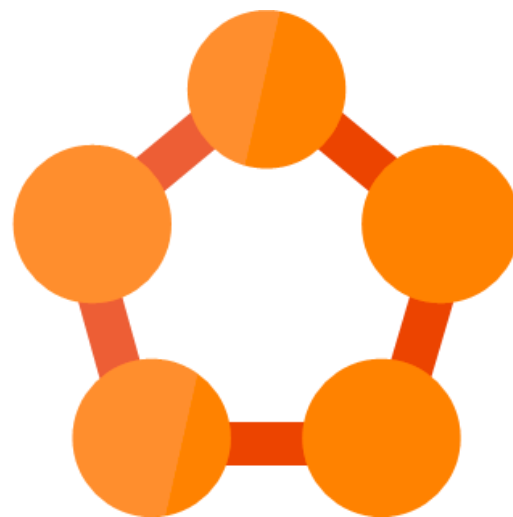
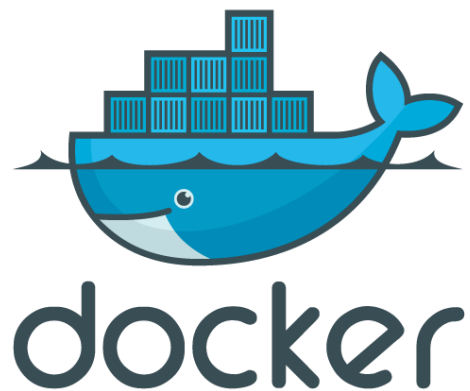
Executando sua primeira aplicação container Docker no Windows

```
docker container run -d -p 80:80 --name iis microsoft/iis
```

```
docker run -it --rm -p 8000:80 --name aspnet_sample  
mcr.microsoft.com/dotnet/framework/samples:aspnetapp
```

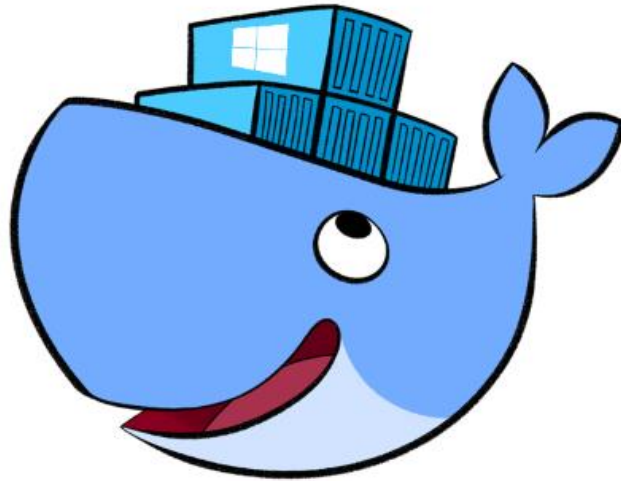
Mas Edson, e na Nuvem como fica?





Casos de Uso

Docker Windows ou Linux?



Docker Windows ou Linux!

Semelhanças

- Contêineres de aplicativos.
- Executados nativamente.
- Ambos administrados pelo Docker
- Eles fornecem os mesmos recursos de portabilidade e modularidade em ambos os sistemas operacionais.
- Docker Swarm
- Service Fabric
- Kubernetes

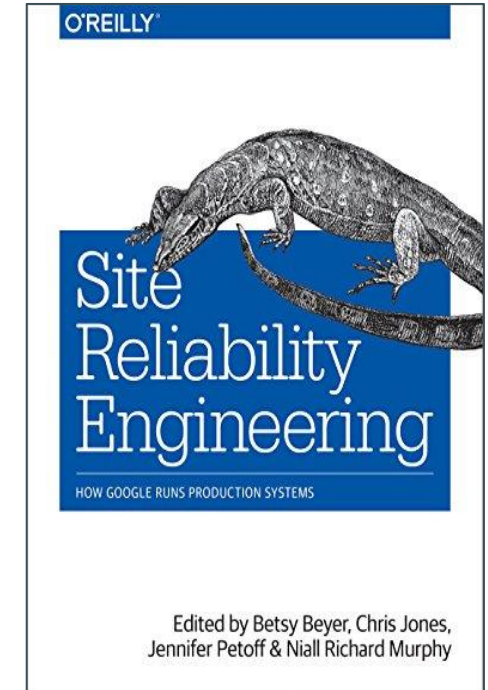
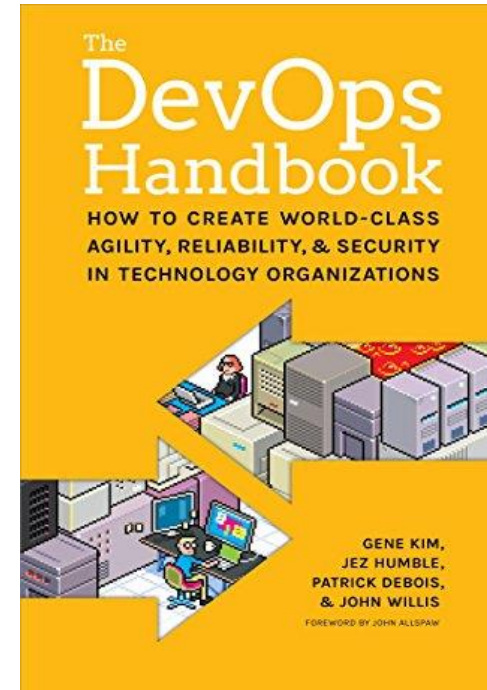
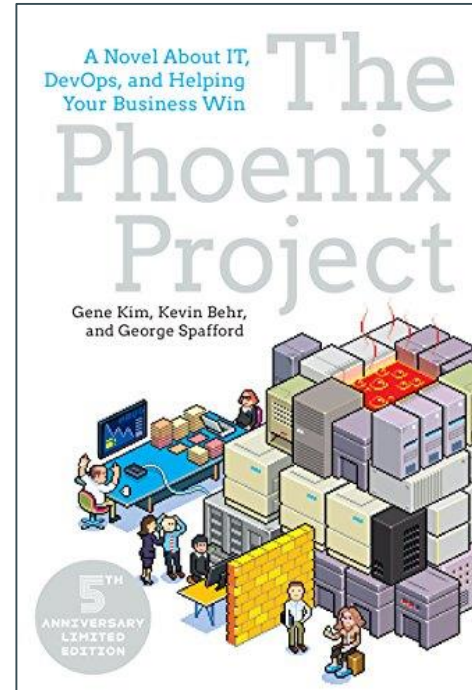
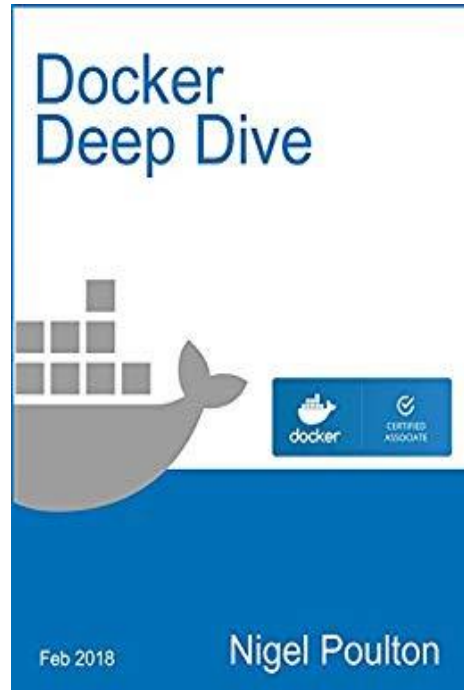
Diferenças

- Windows Server 2016+ e Windows 10.
- Compatibilidade de imagens.
- Network

Aprenda Mais!

- <https://docs.microsoft.com/pt-br/virtualization/windowscontainers/quick-start/quick-start-windows-server>
- <https://docs.microsoft.com/pt-br/dotnet/standard/microservices-architecture/container-docker-introduction/docker-defined>
- <https://github.com/docker>
- <https://github.com/docker/labs/tree/master/windows>
- <https://docs.docker.com/docker-for-windows/>
- <https://msdn.microsoft.com/en-us/magazine/mt797649>

Literatura!



Muito Obrigado!

