



OpenShift on Azure using Azure templates

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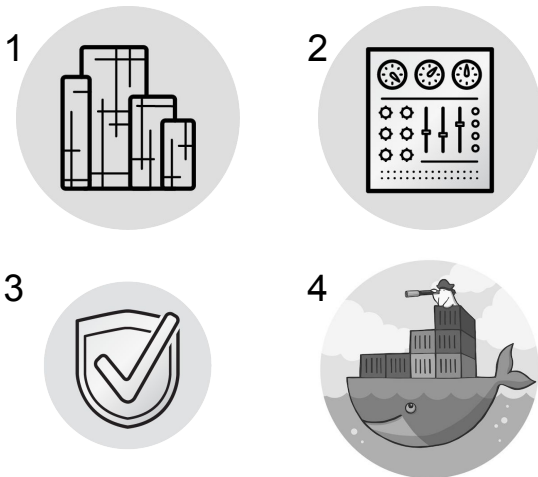
AGENDA

Key Discussion Points

- Why containers?
- OpenShift on Azure using Azure templates
- Giant demo explosion

WHAT ARE CONTAINERS?

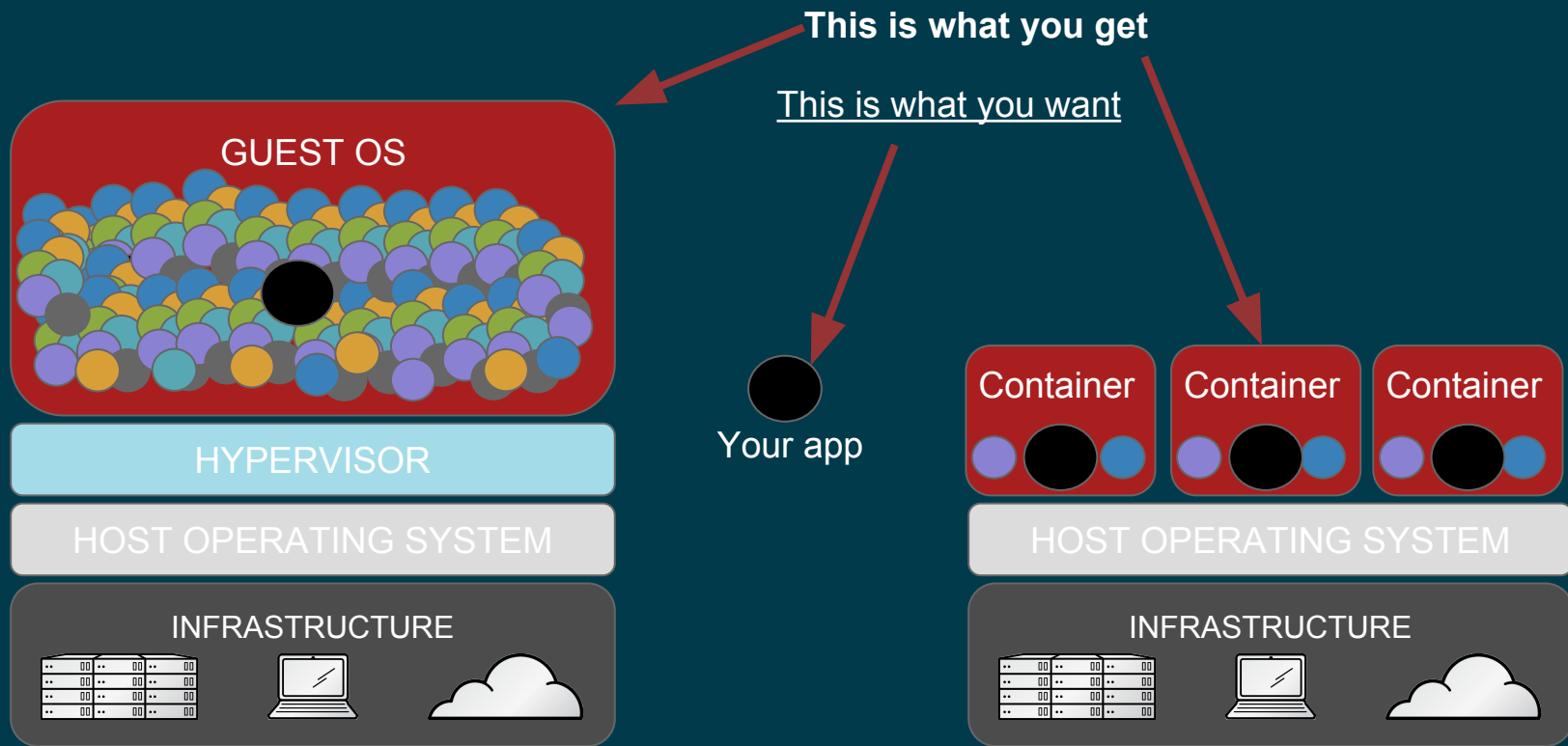
(REALLY OLD) OPERATING SYSTEM TECHNOLOGY



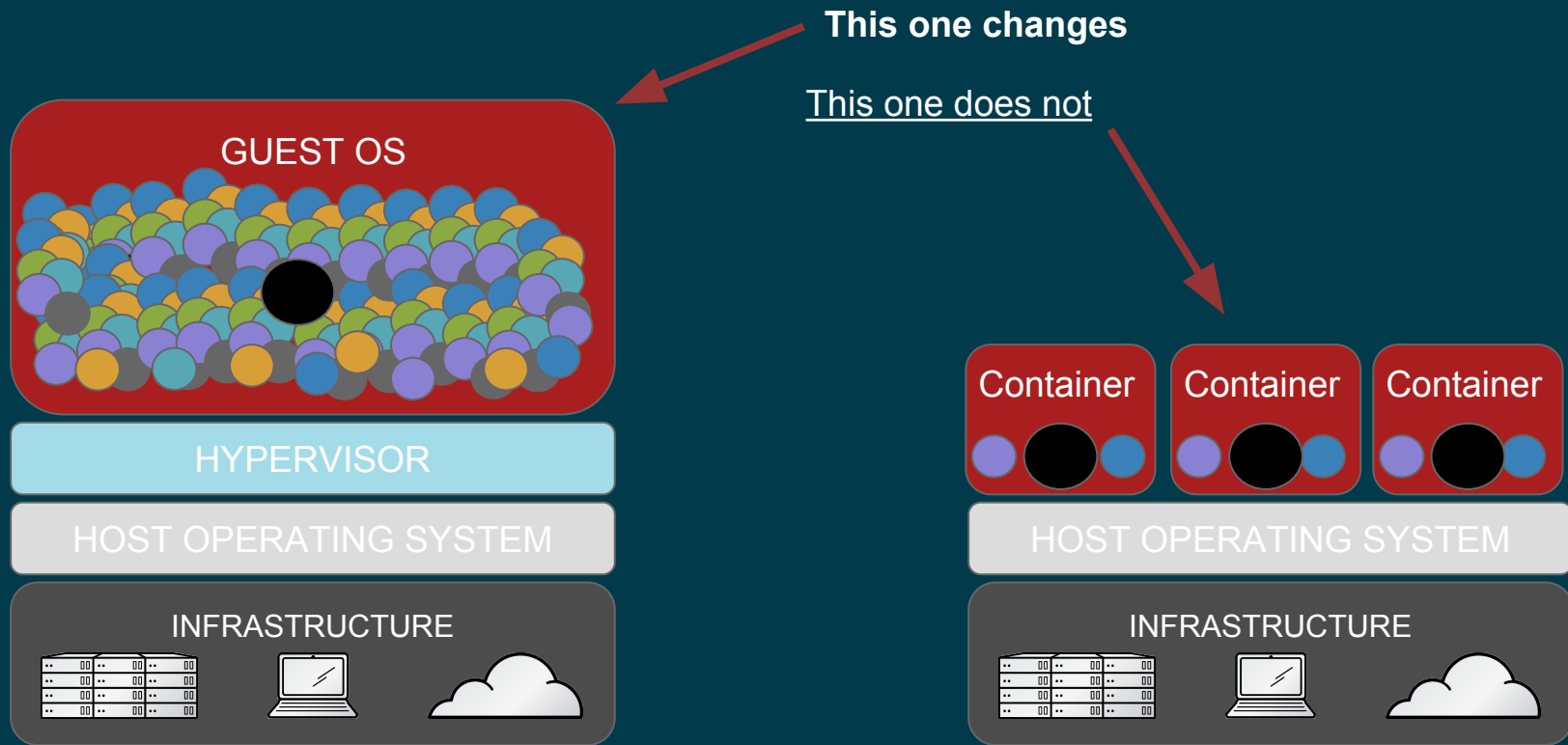
RED HAT CONTAINER TECHNOLOGY
CONSISTS OF:

1. KERNEL NAMESPACES
2. CONTROL GROUPS (cgroups)
3. SELINUX
4. DOCKER PACKAGING FORMAT

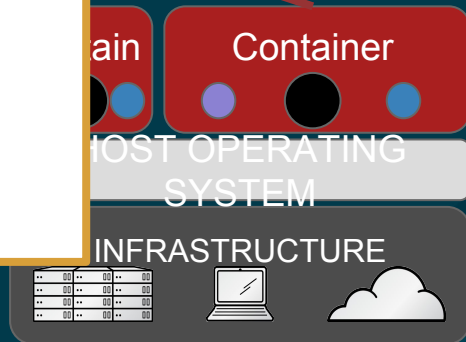
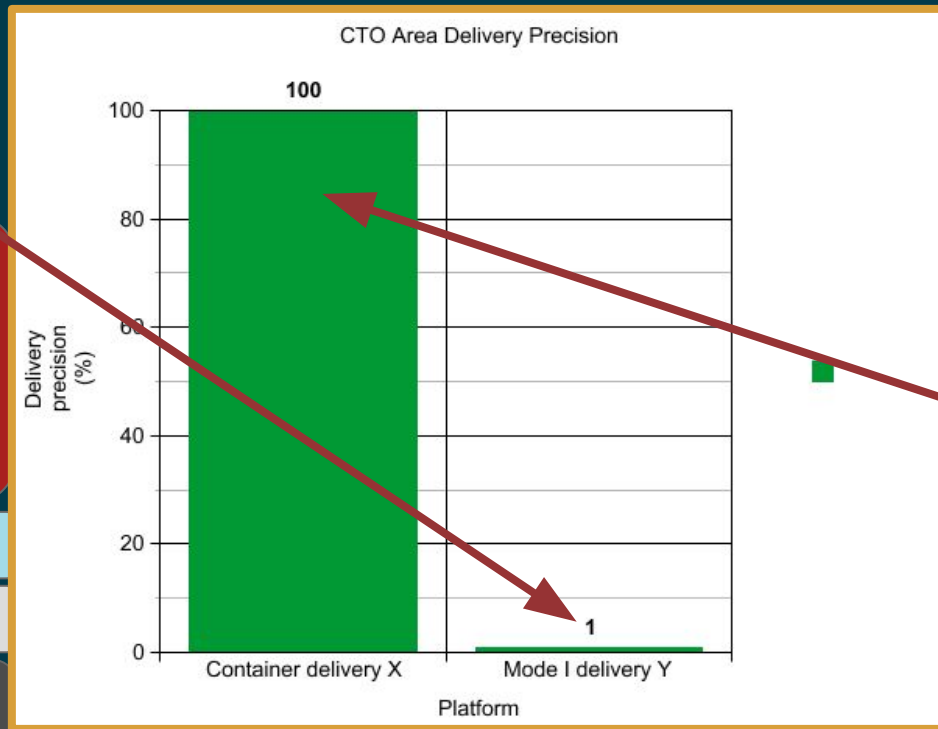
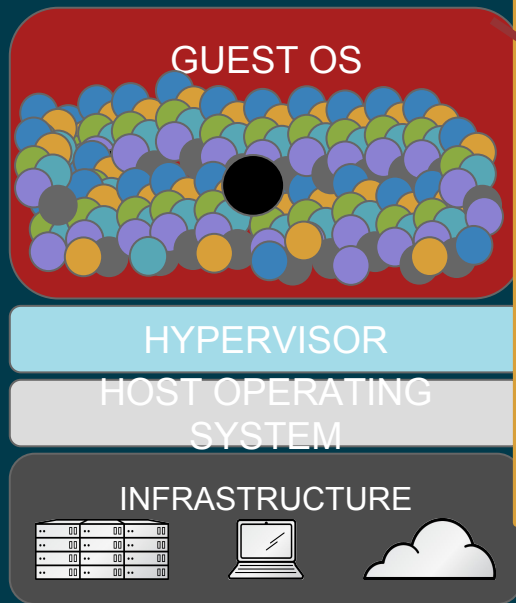
VIRTUAL MACHINES vs. CONTAINERS



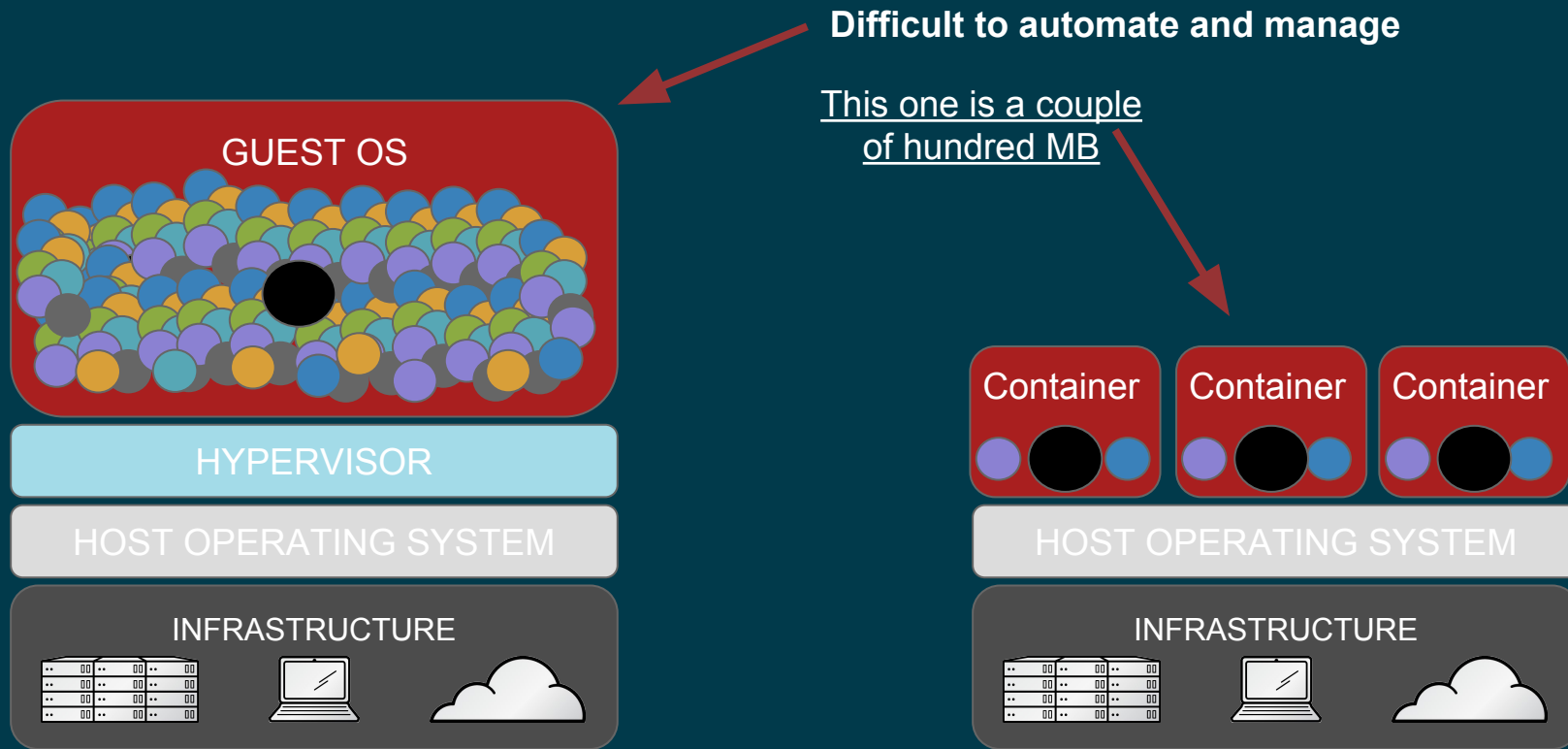
VIRTUAL MACHINES vs. CONTAINERS



VIRTUAL MACHINES vs. CONTAINERS



VIRTUAL MACHINES vs. CONTAINERS



Azure deployment templates

- Via <http://portal.azure.com>
- Via 'azure group deployment create changeMe changeMe --template-uri ..'
- Example OpenShift 3.4 deployment templates:
 - a. <https://github.com/haroldwongms/openshift-containerplatform> ← Upstream
 - b. <https://github.com/mglantz/openshift-containerplatform> ← Where I do bugfixing
 - c. <https://github.com/mglantz/ocp-enterprise> ← Tested and works, somewhat stable
- Write-up available here: <http://blog.hacka.net/#post123>

Azure deployment preparation

- Get an OpenShift subscription
- Get Pool ID of subscription via 'subscription-manager list --available'
- Create a SSH key to deploy with 'ssh-keygen'
- Create an Azure account and an Azure subscription (Pay-As-You-Go)
- Download the Azure CLI here <https://docs.microsoft.com/en-us/azure/xplat-cli-install>
- Upload SSH key to Azure Keystore, which can be created with below script:

```
#!/bin/bash
```

```
GROUP=$1
```

```
if [ "$GROUP" == "" ]; then
```

```
    echo "Azure resource group unset. Usage: $0 <azure-resource-group>"
```

```
    exit 1
```

```
fi
```

```
azure group create $GROUP 'North Europe'
```

```
azure keyvault create -u ${GROUP}KeyVaultName -g $GROUP -l 'North Europe'
```

```
azure keyvault secret set -u ${GROUP}KeyVaultName -s ${GROUP}SecretName --file /home/theuser/.ssh/id_rsa
```

```
azure keyvault set-policy -u ${GROUP}KeyVaultName --enabled-for-template-deployment true
```

ONE DOES NOT SIMPLY

DEMONSTRATE TECHNOLOGY

A photograph of Donald Trump from the chest up, wearing a dark blue suit, white shirt, and red tie. He is giving a thumbs up with his right hand. The background is a blue stage backdrop with some orange text visible on the left. The image has a meme-like quality with large white text overlaid.

It was a great demo.

It was the best demo ever.



THANK YOU



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