

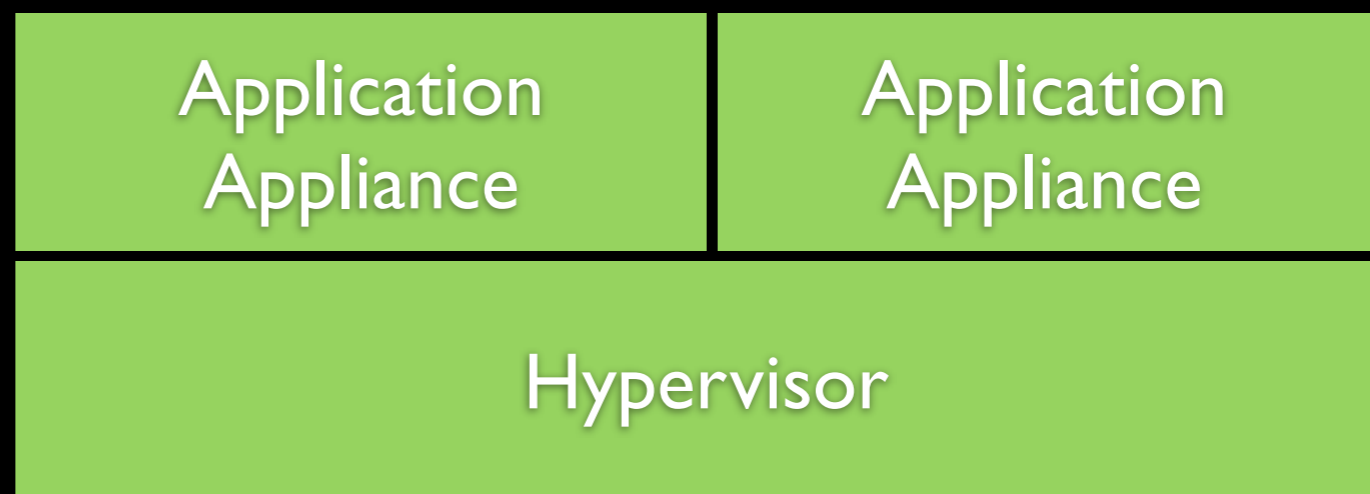


JeOS Virtual Appliances

rod@hiperlogic.com

Why Virtual Appliances?

Make things as simple as possible, but not simpler
-Albert Einstein



Sunday, April 25, 2010

Reduced complexity
Better optimization
One Throat to Choke
Cloud Ready

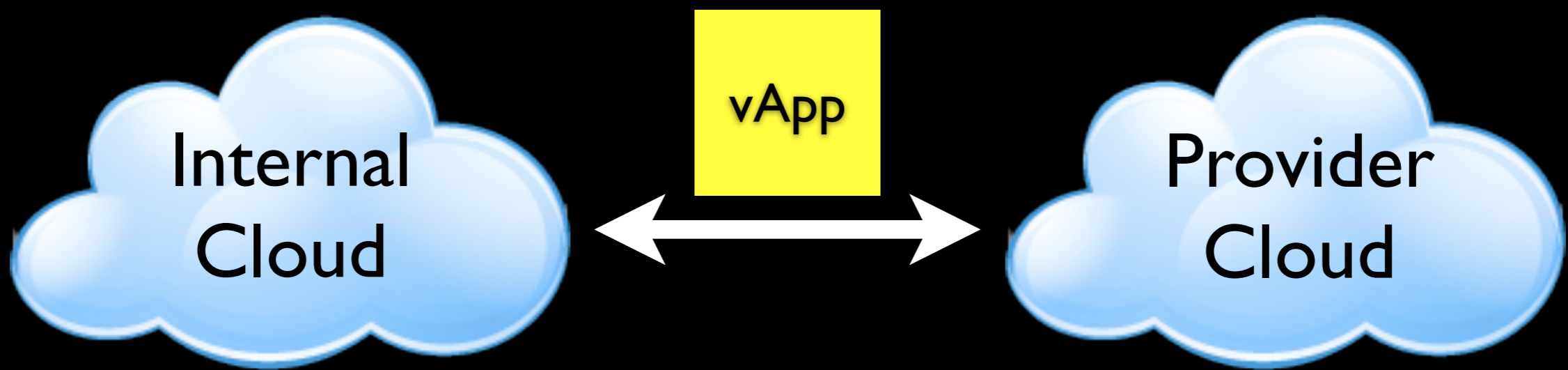
One Throat to Choke Support



Application Tuned



Cloud Ready



Sunday, April 25, 2010

vApp turns new and existing applications into self-describing and self-managing entities. vApp leverages OVF, an open industry standard, to specify and encapsulate all components of a multi-tier application as well as the operational policies and service levels associated with it. Just like the UPC bar code contains all information about a product, the vApp gives application owners a standard way to describe operational policies for an application which the virtual datacenter OS can automatically interpret and execute.

Which JeOS?



Sunday, April 25, 2010

AOS = Red Hat Advanced Operating System

OEL = Oracle Enterprise Linux JeOS

Lime JeOS = Open Suse JeOS

Orange JeOS = CentOS JeOS

rPath = Commercial JeOS



Windows Server Core
2.5 GB



JeOS
200 MB

Sunday, April 25, 2010

Most virtual appliances are Linux based due to size, and simplified licensing

Best Practices

Sunday, April 25, 2010

Web Configuration

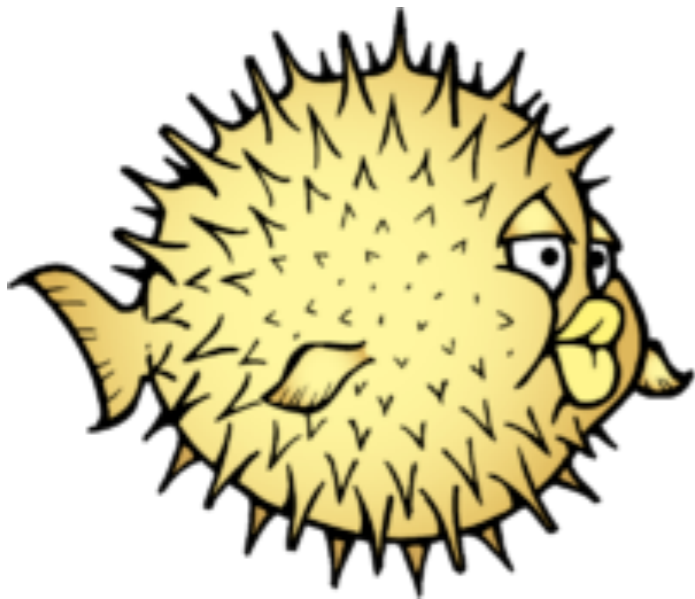


Firefox
Take back the web

Sunday, April 25, 2010

Have a web based management infrastructure to avoid having the user interact with the VM directly.

On the Fly



Sunday, April 25, 2010

Generate SSH keys, database, and passwords on the fly and do not hardcode them.

Install VMware Tools



Sunday, April 25, 2010

- Install VMware tools, or open-vm-tools. Run `vmware-config-tools.pl`
- Passes messages from the host operating system to the guest operating system.
- Executes commands in the operating system to cleanly shut down or restart.
- Sends a heartbeat to a VMware Server, if you use the virtual machine with VMware Server.
- Synchronizes the time in the guest operating system with the time in the host operating system.
- Enhanced network driver `vmxnet`
- SVGA driver

Clean It Up



Sunday, April 25, 2010

Clean the appliance before shipping. Set back default passwords, remove OpenSSH, remove \$HOME/.ssh for users and root, clean /tmp, delete history with history -c, clean out /var/log, delete mail, and truncate syslog.

Delete all extraneous VM files (leave just the .vmx and vmdk(s))

Remove floppies, CD's and other devices that aren't used from VM

Provide an Update Mechanism



Sunday, April 25, 2010

Provide an update mechanism, if you don't IT will try to update the base operating themselves which can sometime lead to disaster.

Compress It



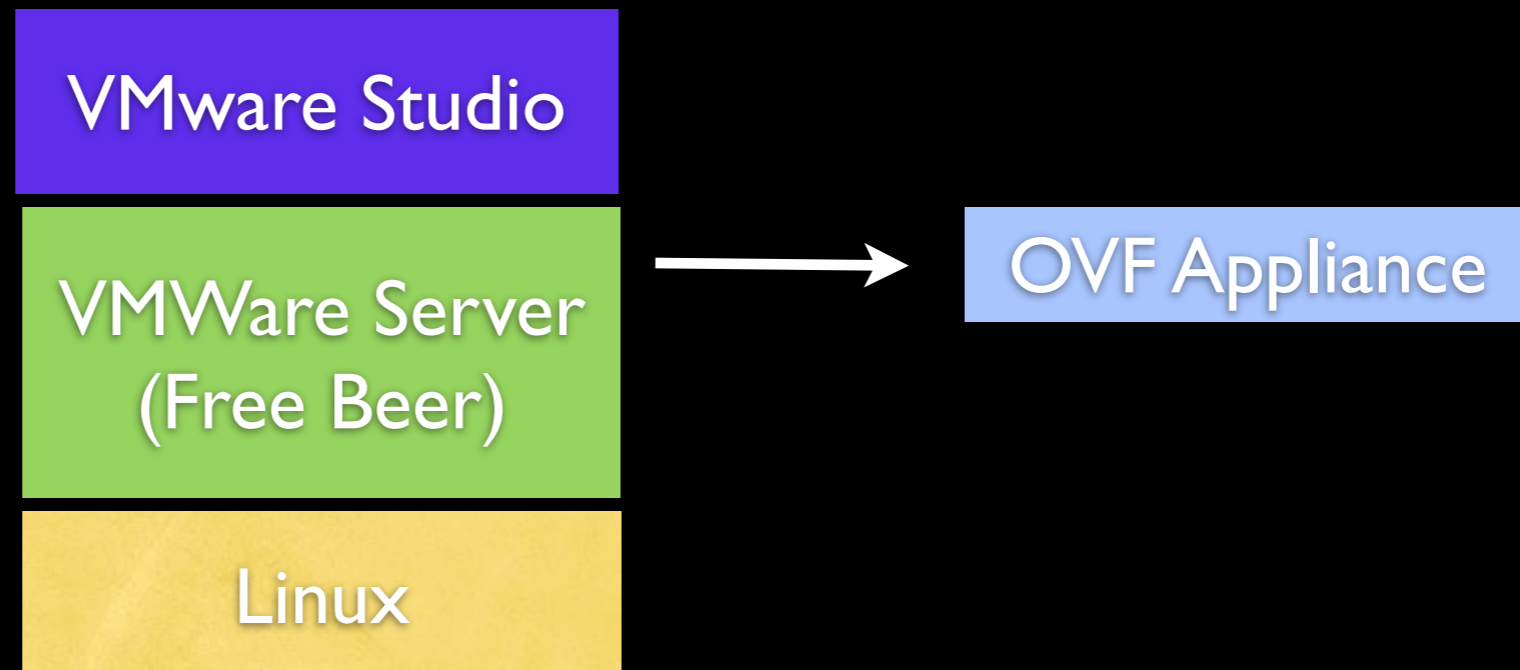
Sunday, April 25, 2010

7zip or other.

Creating Appliances

Sunday, April 25, 2010

VMware Studio



Sunday, April 25, 2010

Open Virtualization Format - VMware



Appliance List

Create a New Appliance

A wizard will guide you through the process of creating a new appliance and an optional update repository for this appliance.

Enter a unique appliance profile name to identify this appliance. The new appliance profile will be saved in "/opt/vmware/var/lib/build/profiles" directory.

Select a profile from the list below that will determine the initial configuration for this appliance.

Centos 5.0 [Template]

Centos 5.2 [Template]

Redhat 5.1 [Template]

Suse 10.2 [Template]

Ubuntu 7.04 [Template]

Ubuntu 7.10 [Template]

Ubuntu 8.04 [Template]

Cancel

Create New Appliance

Download

Actions

Create Appliance...

Import Appliance...

FAQ

[How do I delete an old profile that is no longer needed?](#)

[How do I delete builds related to an Appliance?](#)

[Why is VMware Server needed to create builds?](#)

[Does the VMware Studio virtual machine run only on VMware Server?](#)

Rodney Mach

rod@hiperlogic.com

[twitter:chamdor](https://twitter.com/chamdor)

rodmach.com/blog