



oVirt on a stick – hands on lab

January 2013

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Overview

- Concepts and aim
- Installation
- Run my VM
- What can I do with it
- Portals
- APIs



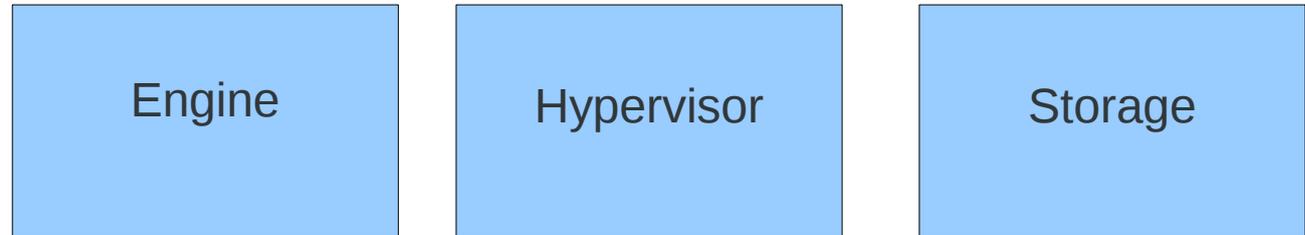
oVirt Live USB concepts

- Live Fedora spin
- Demo/POC purposes
- Don't overload: storage=memory
- Requirements: VT/AMD-v 4/8GB ram
- Stateless
- Boot from USB and let's start playing

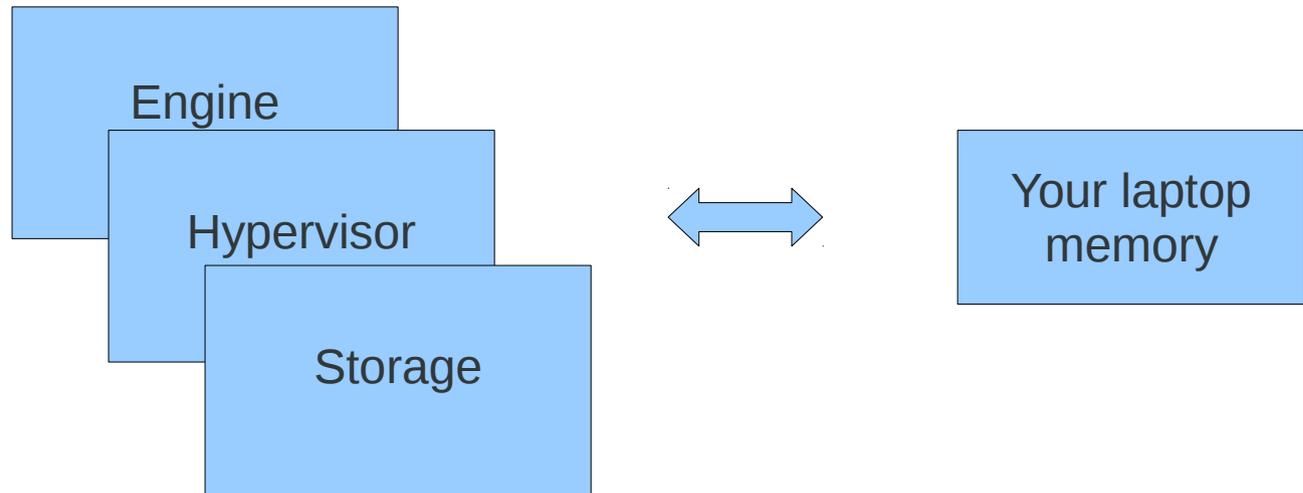


Structure

Scalable deployment-



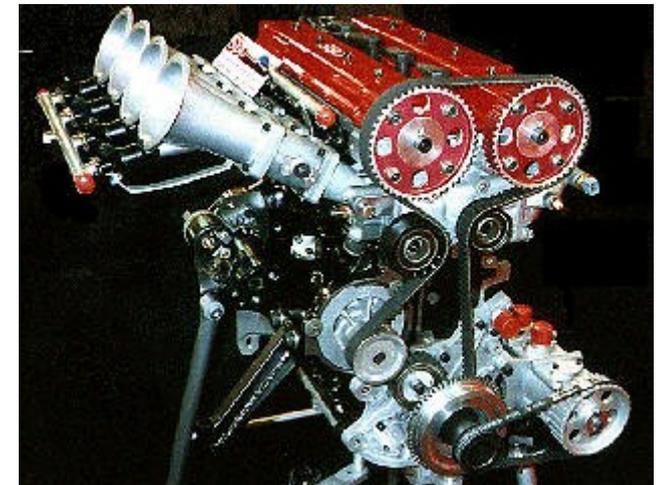
All In One USB deployment-



engine-setup



- **Ensure the laptop is connected to the guest wireless!**
 - **HIDDEN SSID:** netapp
- setup automatically or interactive – should take around 4 minutes
- Watch through the process
 - Basic installation
 - CA, Jboss, Database, default entities, iptables, httpd
 - All in one plugin
 - Local storage, local host
 - oLive plugin
 - Attach iso, copy iso files, create vm





Terminal

File Edit View Search Terminal Help

We trust you have received the usual lecture from the local System Administrator. It usually boils down to these three things:

- #1) Respect the privacy of others.
- #2) Think before you type.
- #3) With great power comes great responsibility.

device ovirtmgmt already exists; can't create bridge with the same name



oVirt Installation

oVirt allInOne is going to be installed
Choose which option you would like to install
INFO: all passwords on the live system are: "oVirt!"

automatic

OK

Close

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device ovirtmgmt already exists; can't create bridge with the same name
executing sudo /usr/bin/engine-setup --answer-file=/home/oVirtuser/oVirtLiveFiles/ovirt-answer

Welcome to oVirt Engine setup utility

Stopping ovirt-engine service... ovirtlive.localdomain did not resolve into an IP address

Warning: Weak Password.

Warning: Weak Password.

Installing:

AIO: Validating CPU Compatibility...	[DONE]
AIO: Adding firewall rules...	[DONE]
Configuring oVirt-engine...	[DONE]
Configuring JVM...	[DONE]
Creating CA...	[DONE]
Updating ovirt-engine service...	[DONE]
Setting Database Configuration...	[DONE]
Setting Database Security...	[DONE]
Creating Database...	

Terminal

File Edit View Search Terminal Help

(Please allow oVirt Engine a few moments to start up.....)

**** To access oVirt Engine browse to <http://ovirtlive.localdomain:80> ****

Additional information:

- * oVirt Engine CA SSL Certificate SHA1 fingerprint: A6:6B:9A:41:5B:EE:72:FE:78:CB:19:00:2C:51:64:EB:49:89:13:55

- * SSH Public key fingerprint: 21:28:97:8b:e6:22:ca:72:10:b6:5f:ae:8f:2a:be:18

- * A default ISO share has been created on this host.

- If IP based access is required, please add the following entry in `/etc/exports`

- * oVirt Engine requires the following ports to be opened on the firewall:

22, 80, 443

- * an example of the iptables rule can be found at: `/etc/ovirt-engine/iptables`

- * The installation log file is available at: `/var/log/ovirt-engine/engine-setup_2013_01_21_21_16_27.log`

- * Please use the user "admin" and password specified in order to login into oVirt Engine

- * To configure additional users, first configure authentication domains using the 'engine-manage-domains' utility

setup ended successfully

YAD

setup ended successfully

opening ovirt-engine now on <https://localhost.localdomain>

OK

Untrusted Connection - Mozilla Firefox

File Edit View History Bookmarks Tools Help

Untrusted Connection



https://localhost.localdomain



Google



Mozilla Firefox is free and open source software from the non-profit Mozilla Foundation.

Know your rights...

connection is secure.

Normally, when you try to connect securely, sites will present trusted identification to prove that you are going to the right place. However, this site's identity can't be verified.

What Should I Do?

If you usually connect to this site without problems, this error could mean that someone is trying to impersonate the site, and you shouldn't continue.

Get me out of here!

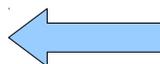
► Technical Details

▼ I Understand the Risks

If you understand what's going on, you can tell Firefox to start trusting this site's identification. **Even if you trust the site, this error could mean that someone is tampering with your connection.**

Don't add an exception unless you know there's a good reason why this site doesn't use trusted identification.

Add Exception...





Open Virtualization Manager

Welcome to Open Virtualization Manager.
Version 3.2.0-1.20130107.git1a60fea.fc18

Portals

User Portal

Administrator Portal

Reports Portal



oVirt Engine Web Administration - Mozilla Firefox

Tree

Expand All Collapse All

- System
 - Default
 - Storage
 - Networks
 - ovirtmgmt
 - Templates
 - Clusters
 - Default
 - Hosts
 - VMs
 - local_datacenter
 - Storage
 - ISO
 - local_storage
 - Networks

Bookmarks

Tags

Name	Host	IP Address	Cluster	Data Center	Memory	CPU
local_vm			local_cluster	local_datacenter	0%	0%

root@localhost:~

```
[root@localhost ~]# wget ftp://192.168.122.1/pub/TinyCore-current.iso
--2013-01-21 21:24:15-- ftp://192.168.122.1/pub/TinyCore-current.iso
      => 'TinyCore-current.iso'
```

```
Connecting to 192.168.122.1:21... connected.
```

```
Logging in as anonymous ... Logged in!
```

```
==> SYST ... done.      ==> PWD ... done.
```

```
==> TYPE I ... done.   ==> CWD (1) /pub ... done.
```

```
==> SIZE TinyCore-current.iso ... 12564480
```

```
==> PASV ... done.    ==> RETR TinyCore-current.iso ... done.
```

```
Length: 12564480 (12M) (unauthoritative)
```

```
100%[=====>] 12,564,480  ---K/s   in 0.09s
```

```
2013-01-21 21:24:16 (130 MB/s) - 'TinyCore-current.iso' saved [12564480]
```

```
[root@localhost ~]# engine-iso-uploader -u admin@internal -i ISO upload TinyC
ore-current.iso
```

```
Please provide the REST API password for the admin@internal oVirt Engine user
(CTRL+D to abort):
```

```
INFO: TinyCore-current.iso uploaded successfully
```

```
[root@localhost ~]#
```

oVirt Engine Web Administration - Mozilla Firefox

Search: Storage:

Data Centers Clusters Hosts Networks Storage Disks Virtual Machines Pools Templates

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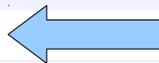
Tags

Volumes Users Edit Remove Events

Domain Name	Domain Type	Storage Type	Format	Cross Data-Center Status
ISO	ISO	NFS	V1	Active
local_storage	Data (Master)	Local on Host	V3	Active

General Data Center Images Permissions Events

File Name	Type
TinyCore-current.iso	CD/DVD



Edit Desktop Virtual Machine

- General
- Initial Run
- Console
- Resource Allocation
- Boot Options**
- Custom Properties

Boot Sequence:

First Device

Second Device

Attach CD

Linux Boot Options:

kernel path

initrd path

kernel parameters



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Bookmarks

Tags

local_vm:1 - Press SHIFT+F12 to Release Cursor - Remote Viewer

TinyCore

```

Boot TinyCore
Boot TinyCore (on slow devices, waitusb=5)
Boot Core (command line only).
Boot Core (command line only on slow devices, waitusb=5)
  
```

Press ENTER to boot, TAB to edit, or press F1 for more information.

Boot TinyCore with Embedded X/GUI extensions.
 Boot media is removable. Use TAB to edit options for specific needs.

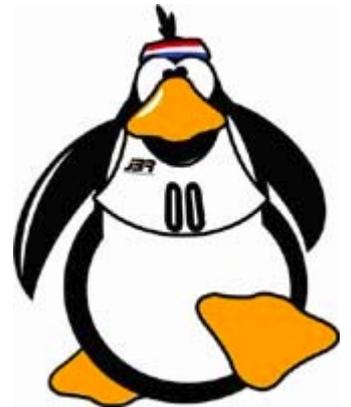
BIOS default device boot in 49 seconds...

engine-iso-uploader

- Let's download a TinyCore image and upload it to the ISO domain
- Make sure your computer is on the **netapp** wireless network
- Step 1: become root (or interactive sudo)
 - `sudo -i`
- Step 2: copy image from lab FTP service
 - `wget ftp://10.55.54.75/pub/TinyCore-current.iso`
- Step 3: upload image
 - `engine-iso-uploader -u admin@internal -i ISO upload TinyCore-current.iso`

Ok, let's run a VM

- Login to admin console (admin/oVirt!)
- Edit your VM and attach the TinyCore ISO
- Run your VM
- Open spice console
- Play around



User portal- let's have a look

- Using admin portal add a user role permission to one of the VMs
- Login to user portal
- Play around basic/advance view



Vm life cycle

- Snapshot (live or not)
- Suspend a VM
- Restore it
- Change cd
- Stop/kill the vm



RESTful API

`http(s)://server:port/api/aaa/xxx-xxx/bbbb/yyy-yyy`

1 2 3 4 5 6 7

1. protocol
2. server details
3. entry point (base resource)
4. collection
5. resource
6. sub-collection
7. sub-resource

- Browse to:
 - <https://localhost.localdomain/api>





THANK YOU !

http://wiki.ovirt.org/wiki/OVirt_Live
engine-devel@ovirt.org
users@ovirt.org

[#ovirt irc.ovirt.org](irc://irc.ovirt.org/#ovirt)