# drbl-virt

(DRBL-Virtualization)

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# Why drbl-virt!?



#### drbl-virt Characteristics

#### DRBL Virtualization

 not only deployment tools, but also virtual resource management tool

#### Diskless VM

- don't care about storage and image problem
- easy to migration

#### Softwate Module

easy installation on DRBL environment

## Virtualization Manager

- Xen remote management interfaces
- KVM management interface

### OpenNEbula, Eucalyptus, DRBL

- DRBL is diskless environment
  - ONE & Euca need local HD
- DRBL client doesn't bridge
  - o but ONE & Euca need bridge
- Eucalyptus has dhcp by himself
  - o which DRBL/Euca dhcp is hander

## Why drbl-virt, again!?

- DRBL -> physical machine (diskless client)
- drbl-virt -> virtual machine (diskless vm)
  - no storage problem
  - no bridge problem (patch in pxe-initrd)

## drbl-virt component

#### Installation

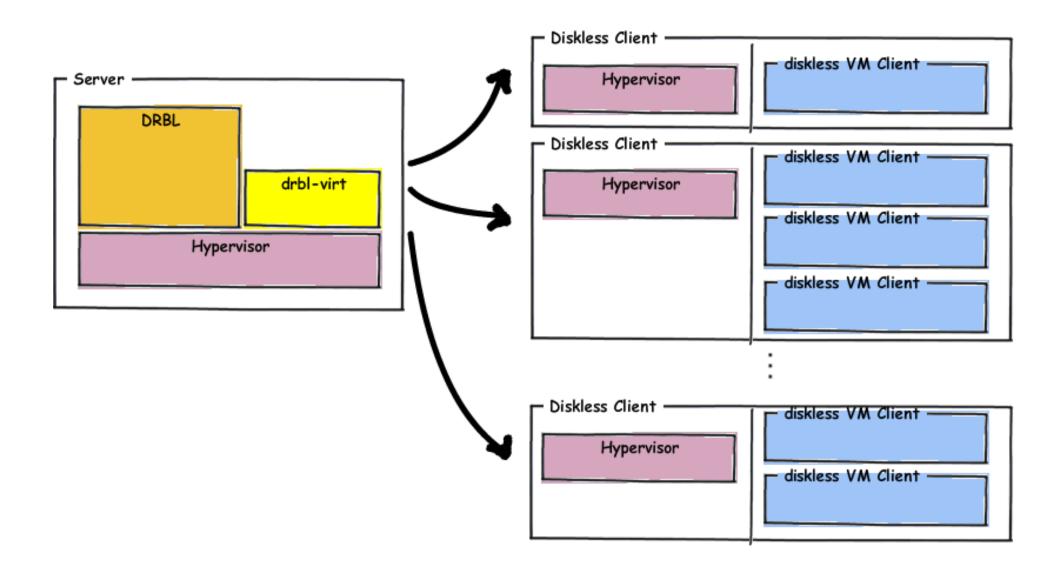
- 1. install hypervisior
- 2. patch DRBL
- 3. re-deploy DRBL

#### Resource Management

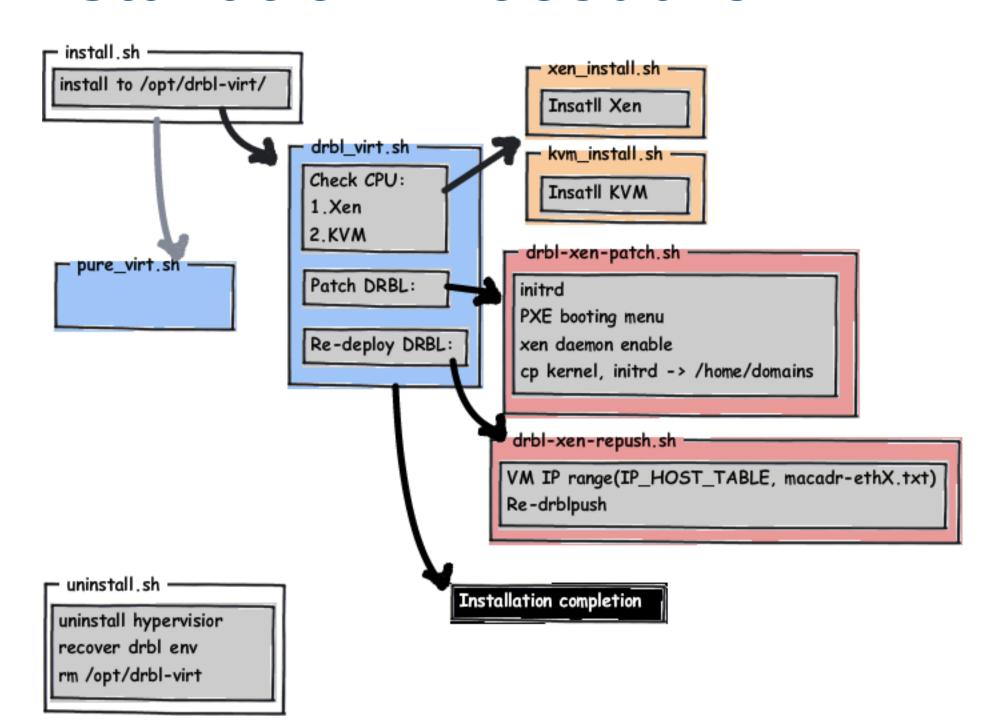
- 1. physical machine management
- 2. virtualization machine management

### Web Management (developing)

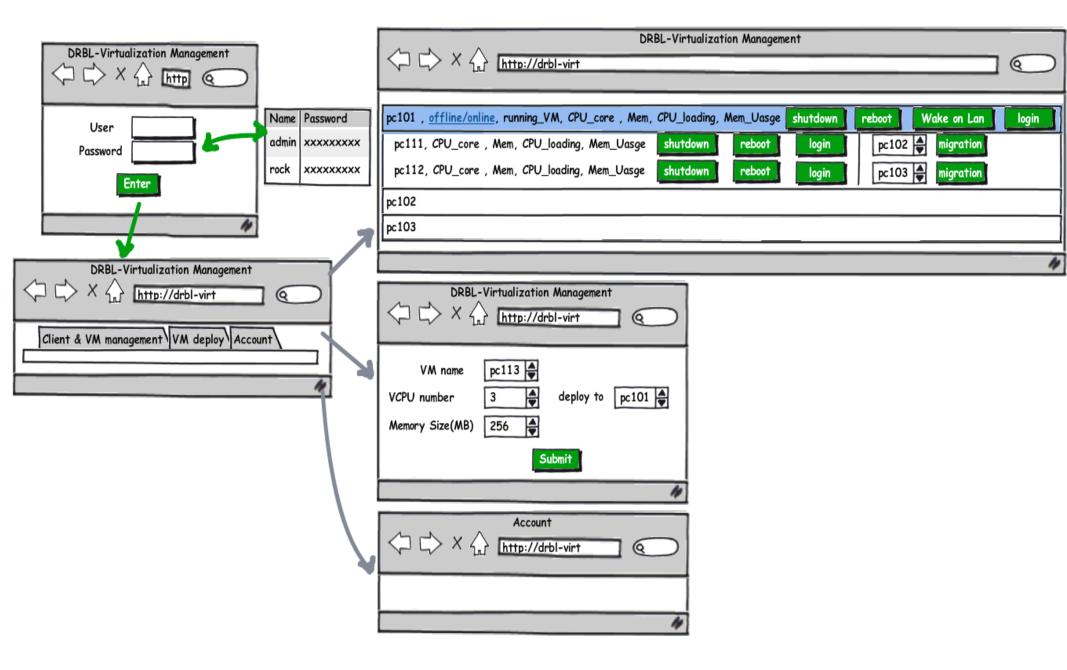
#### drbl-virt Architecture



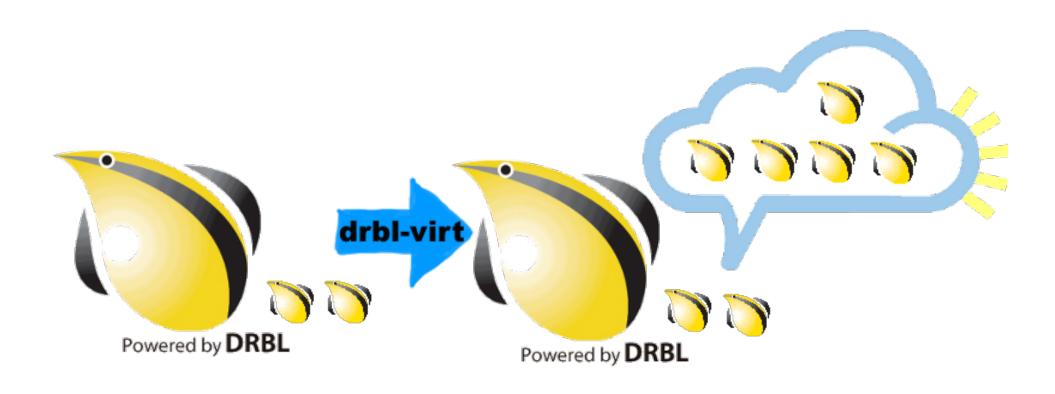
#### Installation Procedure



## Resource & Web Management



# Demo View





- 1. Installation
- 2. Deployment
- 3. Resource Creation
- 4. monitor
- 5. management



#### 1. Installation



# Demo 2. Deployment



# 3. Resource Creation



# Demo 4. Monitor



# 5. Management



#### **Future Work**

- Installation

  - Ubuntu, CentOS, SUSE
- Web Management
  - o front-end: jQuery, CSS, HTML
  - o back-end:?
- Other ?
  - o libvirt: python



# Any Comments

# Suggestion

- Casper
  - o write server engine
  - o root socket
- Jazz
  - lighttpd
  - o sqllite
  - o more simple installation