

# Top 10 Network Issues in Apache CloudStack

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# Agenda

- Introduction
- Top 10 Network Issues
- Q&A



# VLAN Issues 1

- Switch misconfiguration
  - Symptoms
  - All VLANs trunked by default? Or denied?
- Other network problems



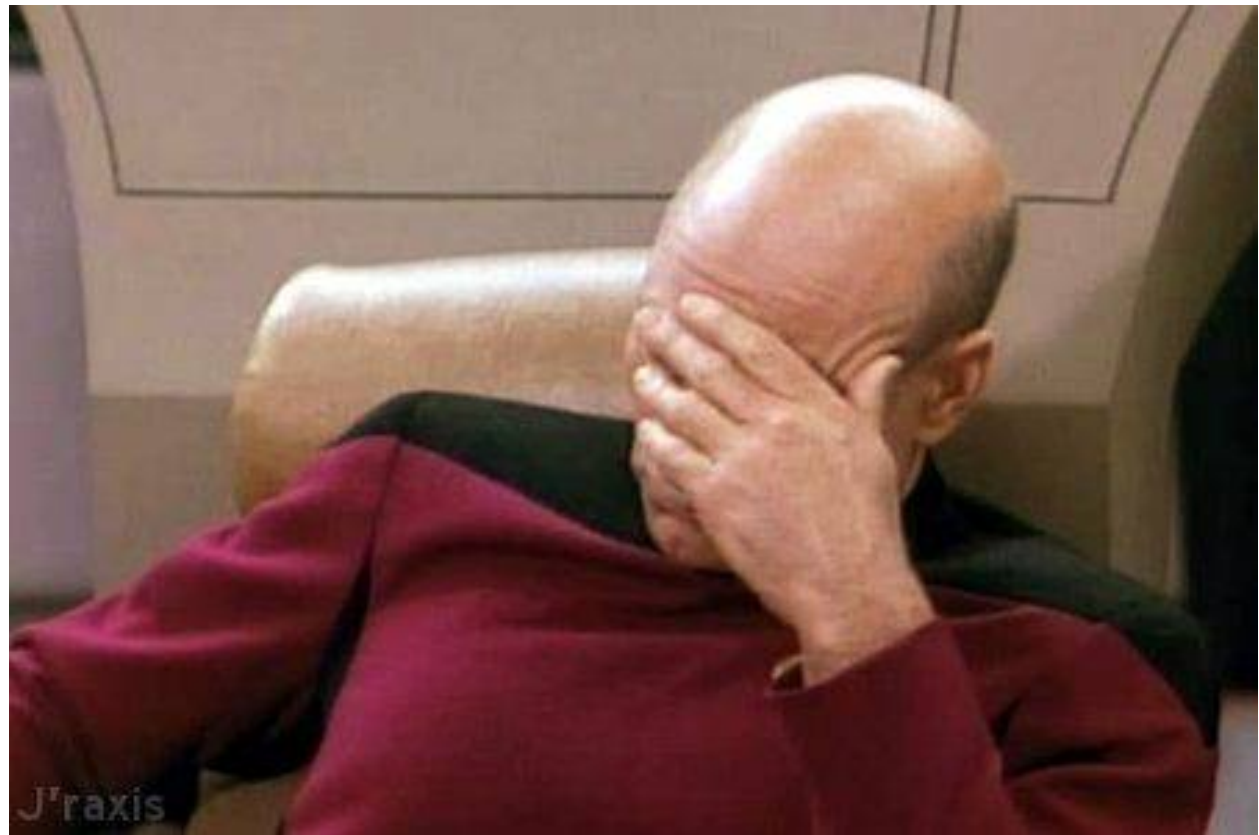
# VLAN Issues 2

- Hypervisor problems
  - NIC drivers
  - Bonding
    - xe-switch-network-backend?
  - Cabling
  - VLAN scaling
- Database hacking
  - Stop that!



# Open vSwitch

- Default on XenServer / XCP
  - VMware + Nicira?
- Weirdness
- `ovs-appctl`



# Security Groups

- KVM
  - Works out of the box (unless it doesn't)
- XenServer / XCP
  - Must enable Linux bridge back-end
  - Must install CSP (XS <6.1)
- vSphere...



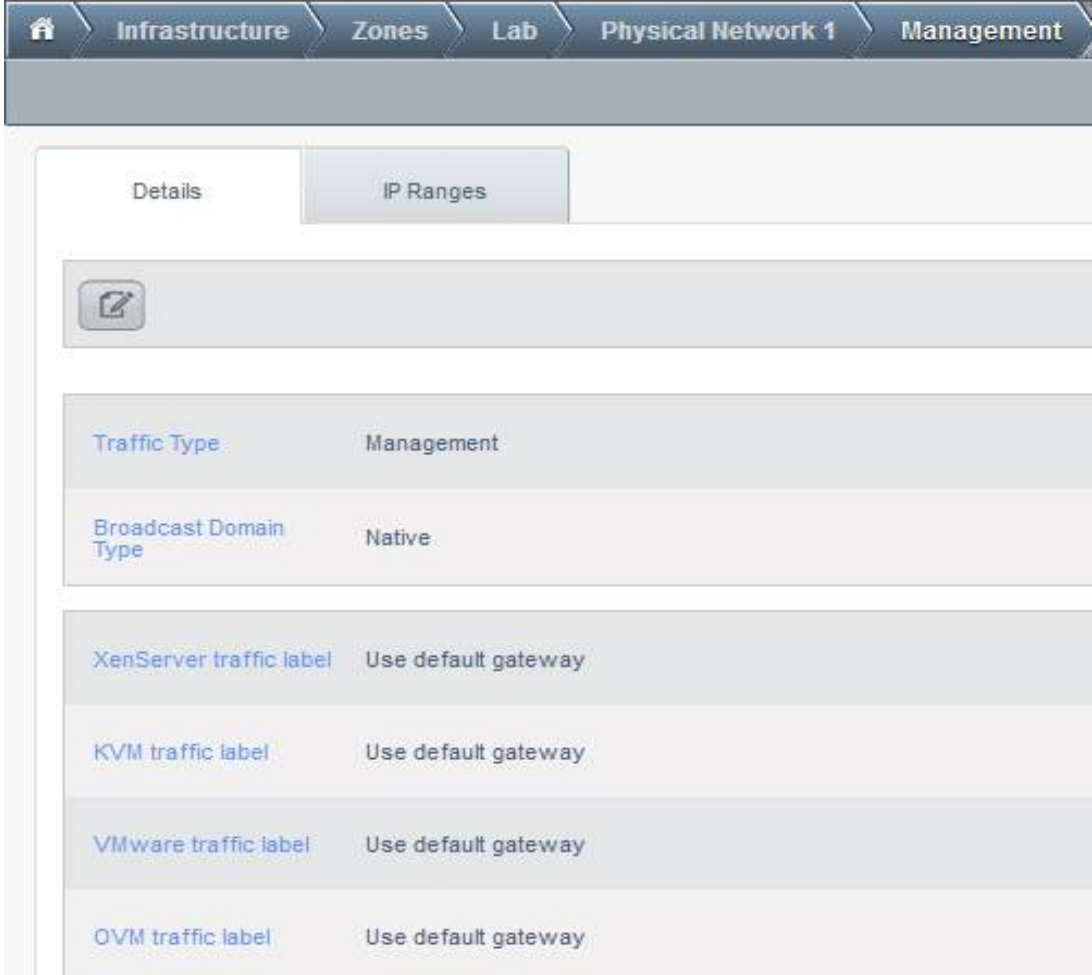
# “Host” Connectivity

- Hypervisors
- System VMs
- Secondary Storage
  - Alert status is normal



# CloudStack “Physical Networks”

- Not necessarily “physical”
- Traffic labels
  - Multiple NICs
  - Mgmt. traffic on a VLAN



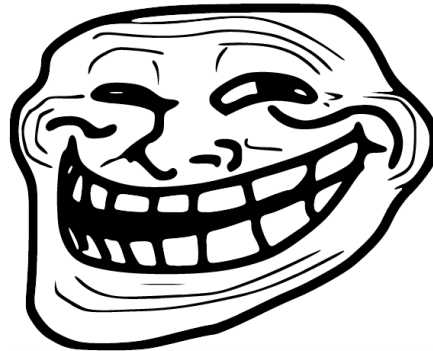
The screenshot shows the CloudStack management interface for a Physical Network. The breadcrumb navigation at the top indicates the path: Infrastructure > Zones > Lab > Physical Network 1 > Management. Below the navigation, there are two tabs: 'Details' (selected) and 'IP Ranges'. A 'Details' section contains a table with the following configuration:

Traffic Type	Management
Broadcast Domain Type	Native
XenServer traffic label	Use default gateway
KVM traffic label	Use default gateway
VMware traffic label	Use default gateway
OVM traffic label	Use default gateway



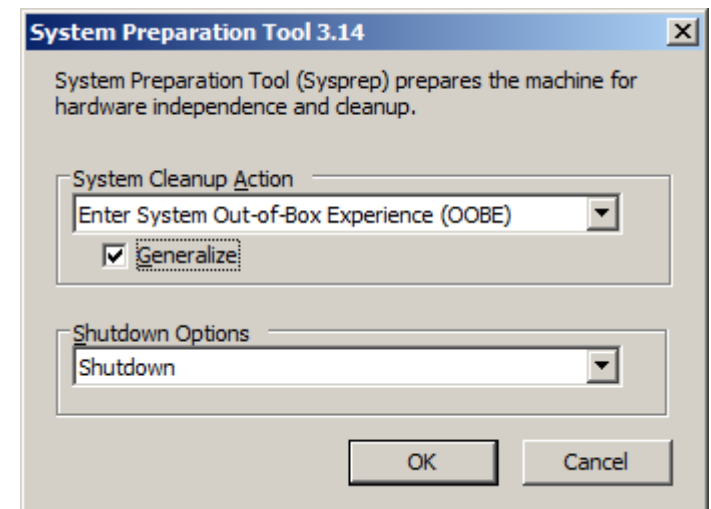
# Console Proxy VM

- Connectivity to CPVM
  - Management server
  - End-users (web browser)
- realhostip.com
- SSL certificate
  - Wildcard, or include all possible hostnames
  - a-b-c-d.yourdomain.tld
- Problem?
  - Destroy CPVM



# Templates

- eth0, or is it eth1? Or maybe p192p1?
- “sysprep” for Windows, your own solution for Linux
- Prepare in CloudStack environment?
- Can't “import” them?



# Password Reset Feature

- Reset script problems
  - DHCP client and version
- Daemon problems
  - 8080/tcp on virtual router
  - socat process, `serve_password.sh`

# User- and Meta-data

- Where is it?
- Problems?
  - Stop/start VM
  - Stop/start virtual router
  - Destroy/recreate virtual router
  - Check management-server.log

# Q&A

- Any questions?

