

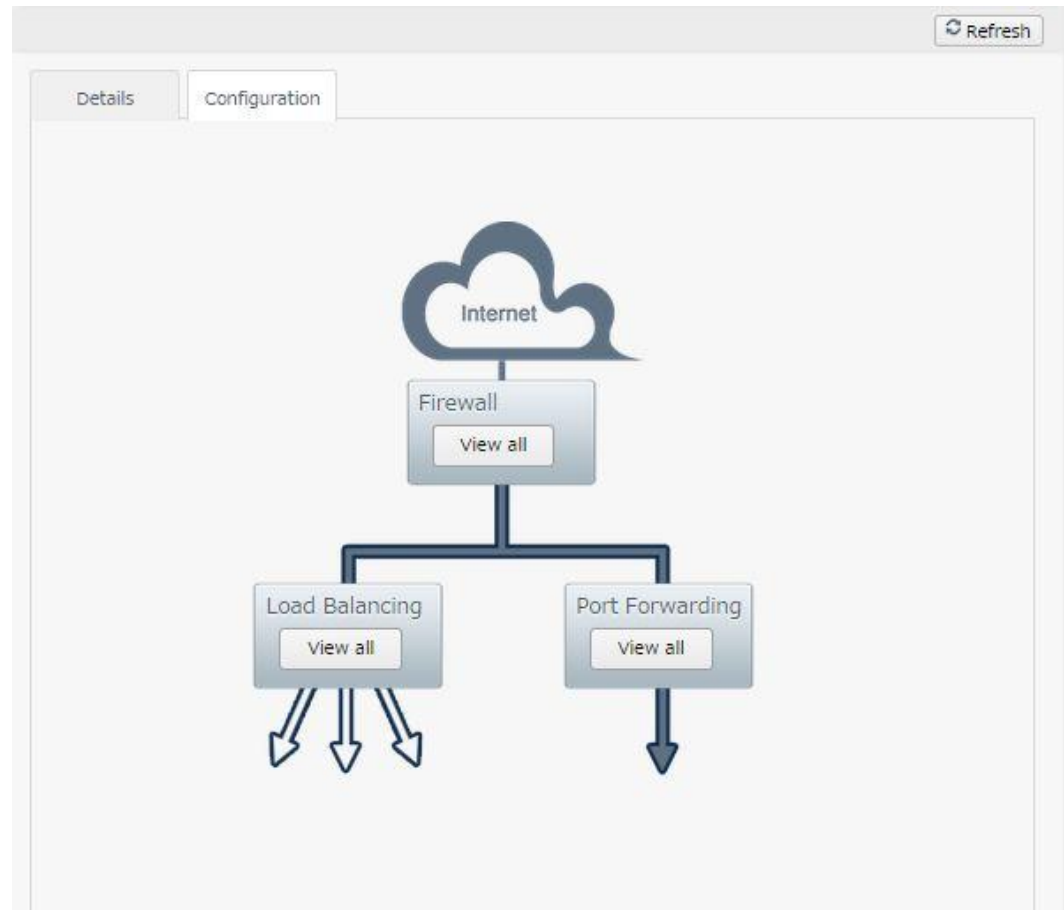
CloudStack Tech Talks - Networking

 **cloud
STACK** | **DAYS**

**Chinzan-so Hotel &
Conference Center
Tokyo, Japan | June 2, 2015**

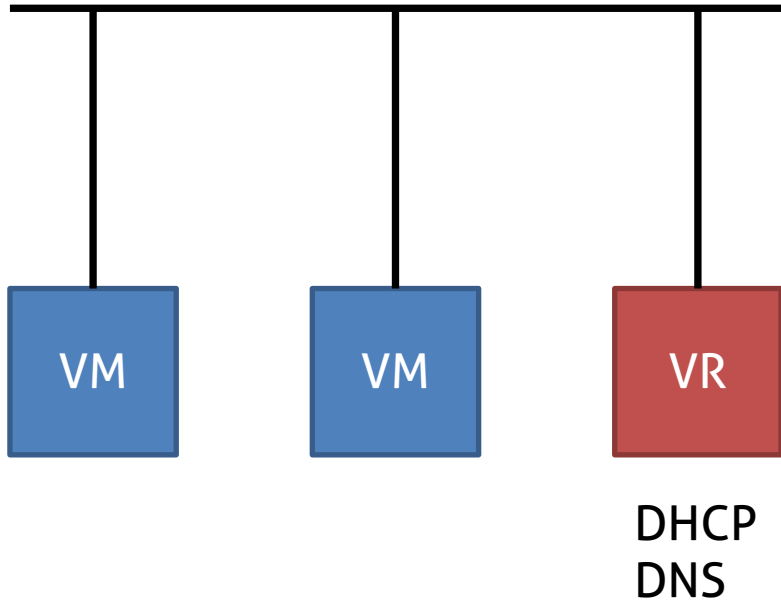
Apache CloudStack Network Overview

- Network Types
 - Basic
 - Advanced
- Traffic Types
 - Public
 - Guest
 - Management
 - Storage
- VPC
- SDN Approaches



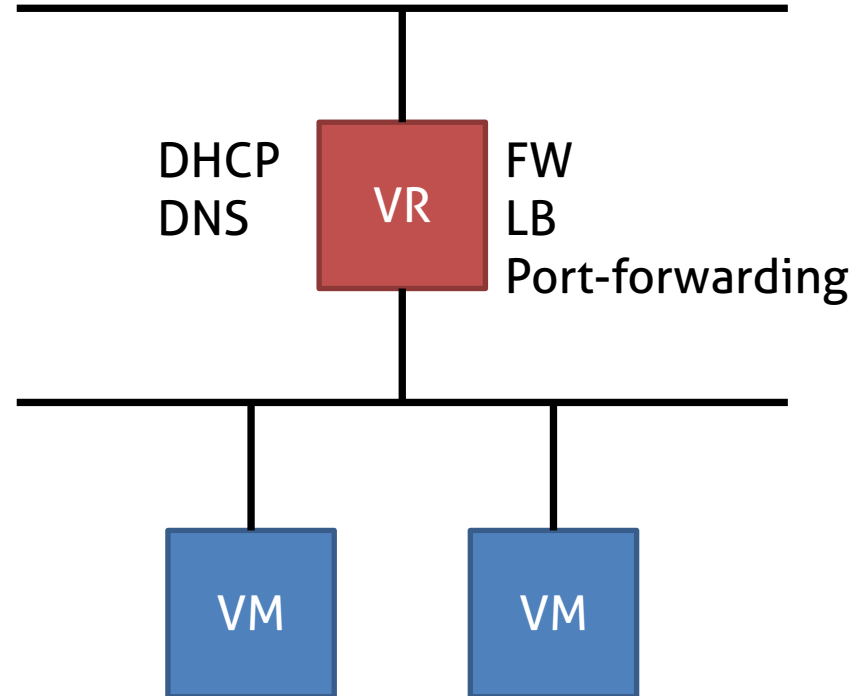
Network Types

Basic



Flat Network
L3 Isolation(Security Group)
Simple and Scalable

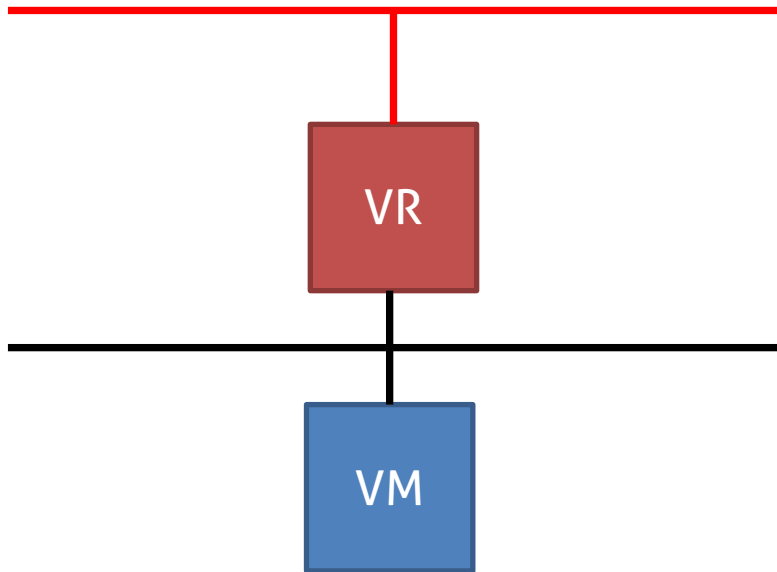
Advanced



L2 Isolation
Additional Network Services

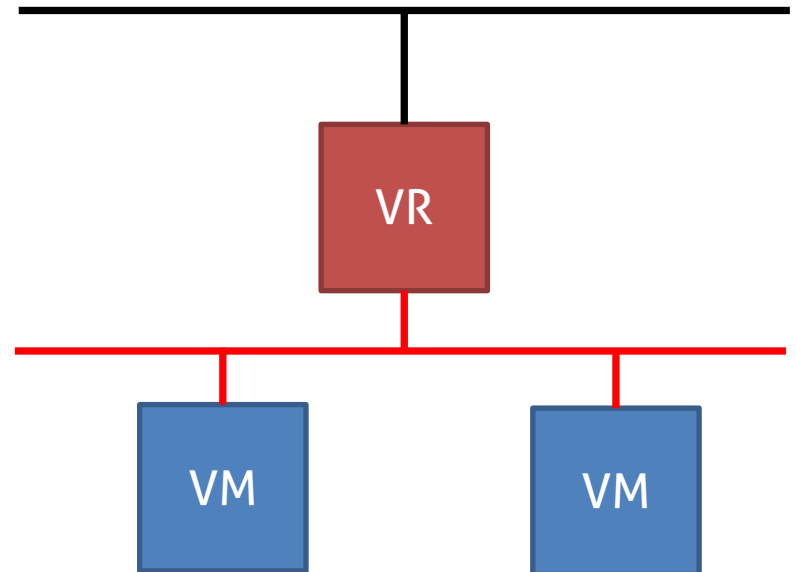
Traffic Types

Public



Connect to outside network
Provide Public IPs

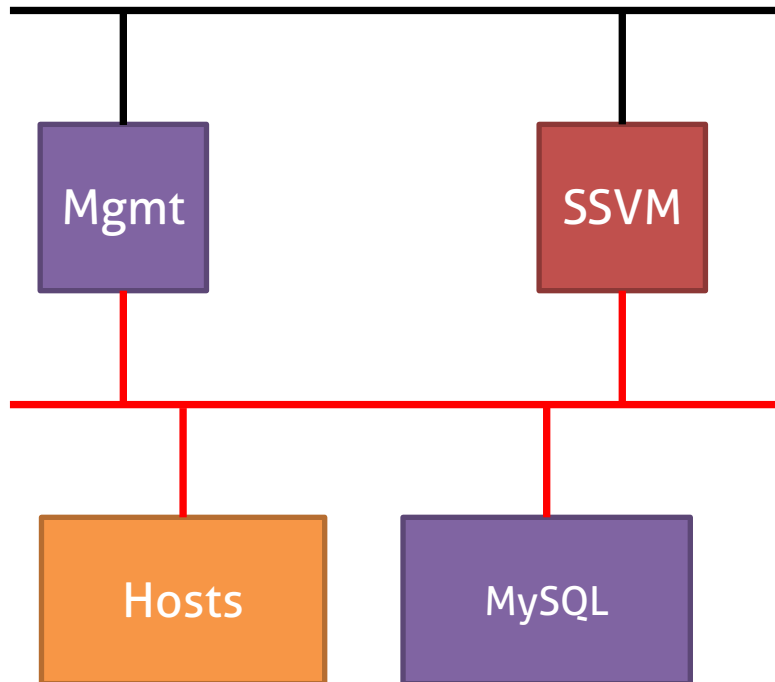
Guest



VM to VM Connection
Connect to VR(Advanced)
Direct to outside network(Basic)

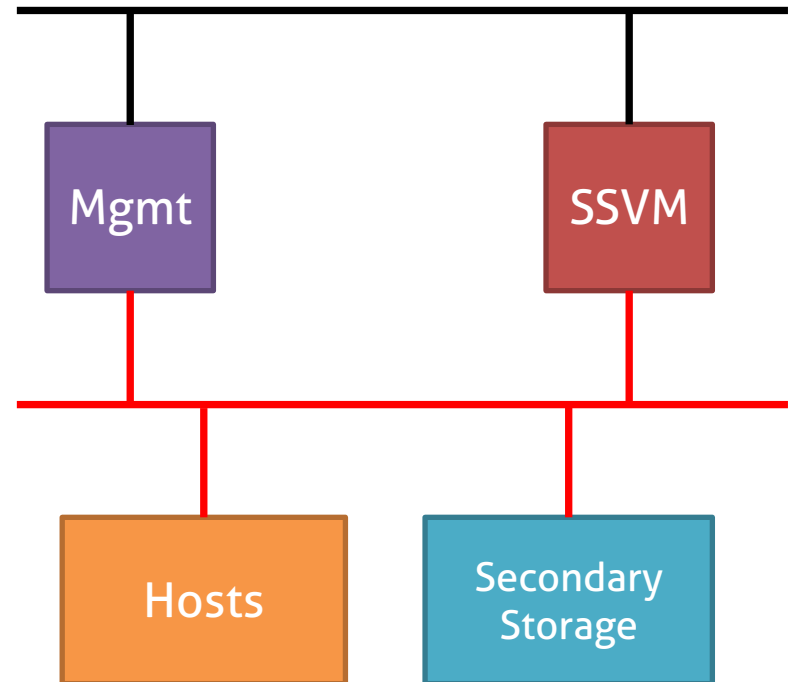
Traffic Types

Management



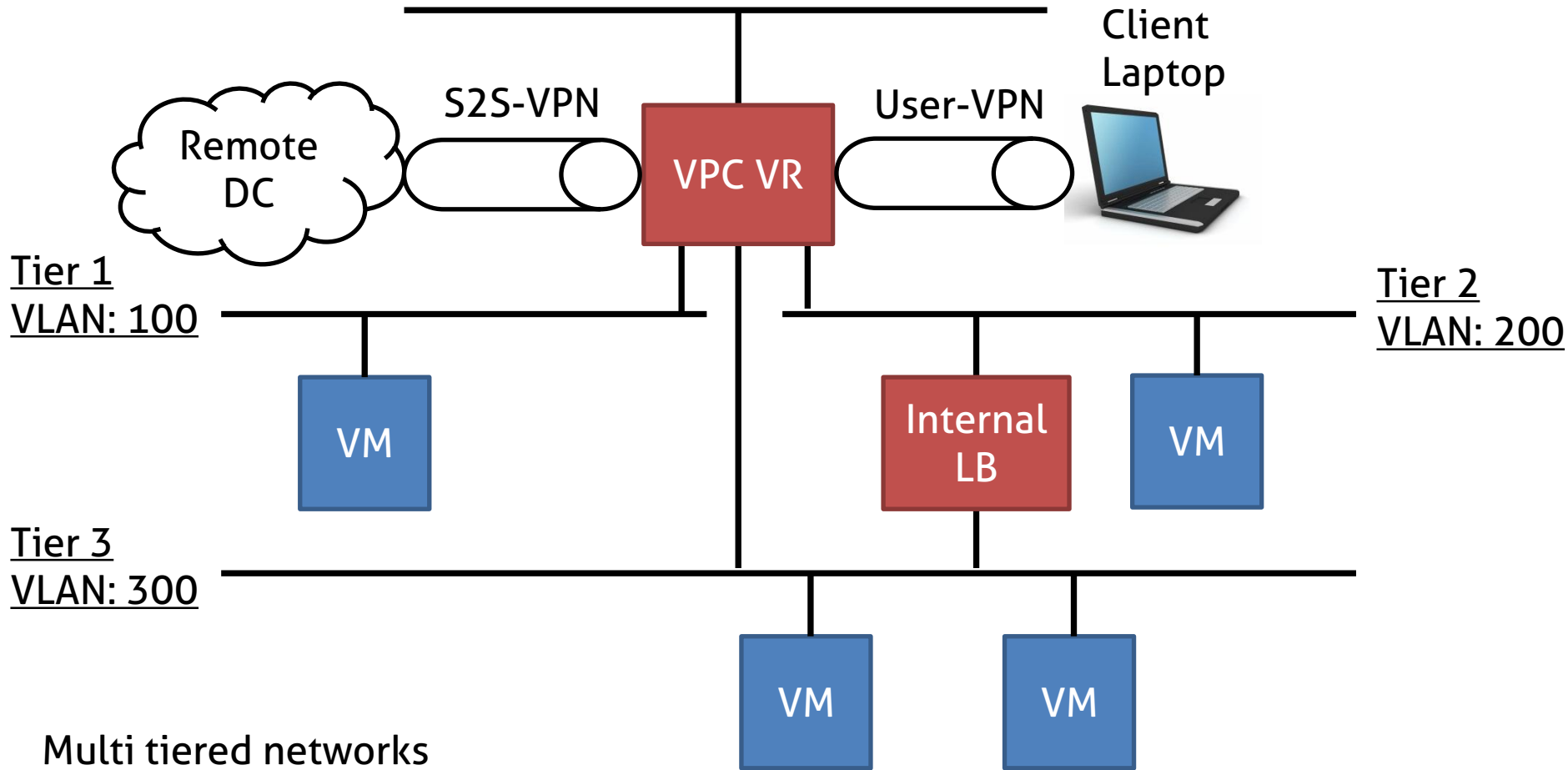
Manage system component
(Physical Host, MySQL, SSVM ...etc)

Storage



Storage I/O for Secondary Storage
Image Copy
Bootstrap for systemvm

VPC(Virtual Private Cloud)



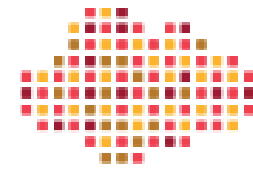
Multi tiered networks
Isolated VLAN
Internal Load Balancer

And more...

- Virtual Router
- VPC Virtual Router
- Internal LB
- Citrix NetScaler
- F5 Load Blancer
- Juniper SRX Firewall
- Paloalto Firewall
- Baremetal DHCP
- Baremetal PXE
- OVS
- VMware NSX
(firmed Nicira NVP)
- Midokura Midonet
- BigSwitch BCF
- Cisco VNMC
- Nuage VSP

SDN Solution

Sanjeev Singh
&
Shiv Gurunathan



nuagenetworks

**Enhancing Apache CloudStack Networking
with Nuage Networks SDN Solution**