oVirt Networking

Ovirt workshop 2013

Livnat Peer
Red Hat
A logical entity that represents a layer 2 broadcast domain
Adding a new Network

- Select a Data Center
- Define network properties (VLAN, MTU, Role)
- Make the network available in selected clusters
Host Level Configuration

- Optional Vs. Required Networks
- Host level configuration:

![Setup Host Networks]

- Verify connectivity between Host and Engine
- Save network configuration
Supported Configuration - Linux Bridge

Virtualization Management the oVirt way
What's New in 3.3?
Network Profiles & VNIC QoS
External Network Provider

- **Internal network** - network that was added directly in oVirt
- **External network** - network that is managed by an external network provider and is consumed within oVirt
- **External network provider** - an independent network manager which collaborates with oVirt by implementing a predefined API.

- External networks can be discovered in oVirt and then can be used within oVirt for example in VMs.
- User can configure permissions on external networks once they are discovered, like they do for internal networks.
Network Provider API

- **GetAllNetworks()**
  - Retrieve list of all (external) networks on provider

- **CreateNetwork()**
  - Create new network on provider and import it

- **UpdateNetwork()**
  - Edit the network on the provider
Neutron Integration

- Support different technologies
  - GRE tunnels
  - VXLAN
- Future leverage of
  - Security Groups
  - IPAM
  - L3 capabilities
Multiple gateways
Architecture Changes in VDSM 3.3

- Configurators based architecture
- Technology oblivious persistence layer
Road Map

- Network QoS
- Host profiles
- Network Labels
- Private networks
- Cisco, VMFEX, UCS
- Neutron Integration con.
  - Security groups
  - IPAM, floating IP/NAT
- Configurable MAC pool
- SRIOV
- IPv6
THANK YOU!

http://www.ovirt.org