Virtualising our CPE

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Mantychore is part-funded by the EC under Grant Agreement № 261527
What’s the problem?
Switch
Transmission
One big router?
Virtualise
Virtualise
Demo
Why do this in this way?
On demand provisioning
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<td>Maintenance</td>
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Quick, easy changes
Automatic inventory
Automatic monitoring
Access to outside networks

Select First Endpoint (p2p 2467)

Encapsulation: VLAN

Swounters marked as INVALID or interfaces marked as UNAVAILABLE?
See Wiki documentation on valid P2P Services and how interface availability is determined.

Format of interfaces:
InterfaceNameX/Y [TAG] (possible UNAVAILABLE reason) = > endpoint description if set

Provider Edge Router

Provider Edge Switch

Switch: gd5-sw1.ardnet.net
Port: GigabitEthernet/10/4 [P2P] = > MANTICORE M20 ge-0/3/0

Multiple P2Ps may use this interface - a single, short string (or characters) is for all these P2Ps.

Previous Description: MANTICORE M20 ge-0/2/0
New Description: MANTICORE M20 ge-0/2/0

Note: Endpoint description must be provided. The characters " ; $ ! ? will be removed.
Format: "L3-Router-Name Interface" (e.g. "cr2-cwt Gig6/3")

Select This Endpoint

Note: All required information has not been entered or selected yet.

p2p 2467 Details:

Description: foo
User: dave
Status: Incomplete
VC ID: n/a

Select Endpoint
Delete this Request (further confirmation required)
Modify Request description
View log for this Request
Framework for NaaS

Open source

CLI + RESTful API

Developing a GUI

Integrated with Bandwidth on Demand
On demand provisioning

Provide abstractions
OpenNaaS framework Single instance
On demand provisioning

Provide abstractions

Delegation
<table>
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<th>Client</th>
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<td>VRRP address</td>
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<td>Link addresses</td>
<td>Internal routing</td>
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<td>VLAN numbers</td>
<td>Firewall filter</td>
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“If you need a machine and don’t buy it then you will ultimately find that you have paid for it and don’t have it.”

Henry Ford
“More pilots than the RAF”

Senior Visa exec
Today

One thing: vCPE

Simple OSPF

Dual-star BGP

Simple VRRP
Work to do
Download: opennaas.org/download/

Documentation: opennaas.org/documentation/

Mailing lists: opennaas.org/community/
Thank you!

www.opennaas.org