Common NFVI Telco Taskforce Paris Face-To-Face Sessions

Pankaj Goyal, AT&T

Reference Model Chapter 6 Reference NFVI HW Profiles and Configurations

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Reference NFVI HW Profiles and Configurations Agenda

- Terminology
- Revisit Karine's: "Rationale to separate SW and HW Profiles"
- Host Profiles (HW Profiles and Configurations)
 - Compute
 - Network



Reference NFVI HW Profiles and Configurations Terminology

Profile: pertinent information about <something>

HW Profile: associated only with information on the physical hardware

HW Profile and Configurations: rather wordy

Host Profile: can it be used to describe all of the pertinent information irrespective of the source of that information

What term should we use?



Reference NFVI HW Profiles and Configurations Rationale to separate SW and HW Profiles

Rationale for decoupling SW Profile and HW Profile

• Characterise SW and HW components and configuration separately

Other Reasons

- SW Capabilities are of concern to the users including workload (VNF) developers
- Cloud Operators need to provide these SW Capabilities by configuring
 - Physical Server (BIOS)
 - Software Layer (VIM, Hypervisor, Host Operating System, etc.)

Is there a relationship between SW and Host Profiles?



Reference NFVI HW Profiles and Configurations HW (Host) Profiles and Configurations: Compute

Feature	Description	Basic Type	Network Intensive	Compute Intensive
Minimum Number of CPU	This determines the number of CPU exist within each physical server	2	2	2
Minimum Number of Cores per CPU	This determines the minimum number of cores needed per each CPU.	20	20	20
NUMA		Ν	Y	Y
Simultaneous MultiThreading (SMT/HT)		Y	Y	Y
GPU	Hardware Acceleration	Ν	Ν	Y

Issues/Changes? Are these all relevant? What is missing?



Reference NFVI HW Profiles and Configurations HW (Host) Profiles and Configurations: Network

Feature	Description	Basic Type	Network Intensive	Compute Intensive
NIC Ports	Total Number of NIC Ports available in the platform	4	4	4
Port Speed	Port speed specified in Gbps	10	25	25
PCIe slots	Number of PCIe slots available in the platform	8	8	8
PCIe speed		Gen 3	Gen 3	Gen 3
PCIe Lanes		8	8	8
Cryptographic Acceleration	IPSec, Crypto			
SmartNIC	offload vSwitch functionality to hardware			

Issues/Changes? Are these all relevant? What is missing?



Appendix







7