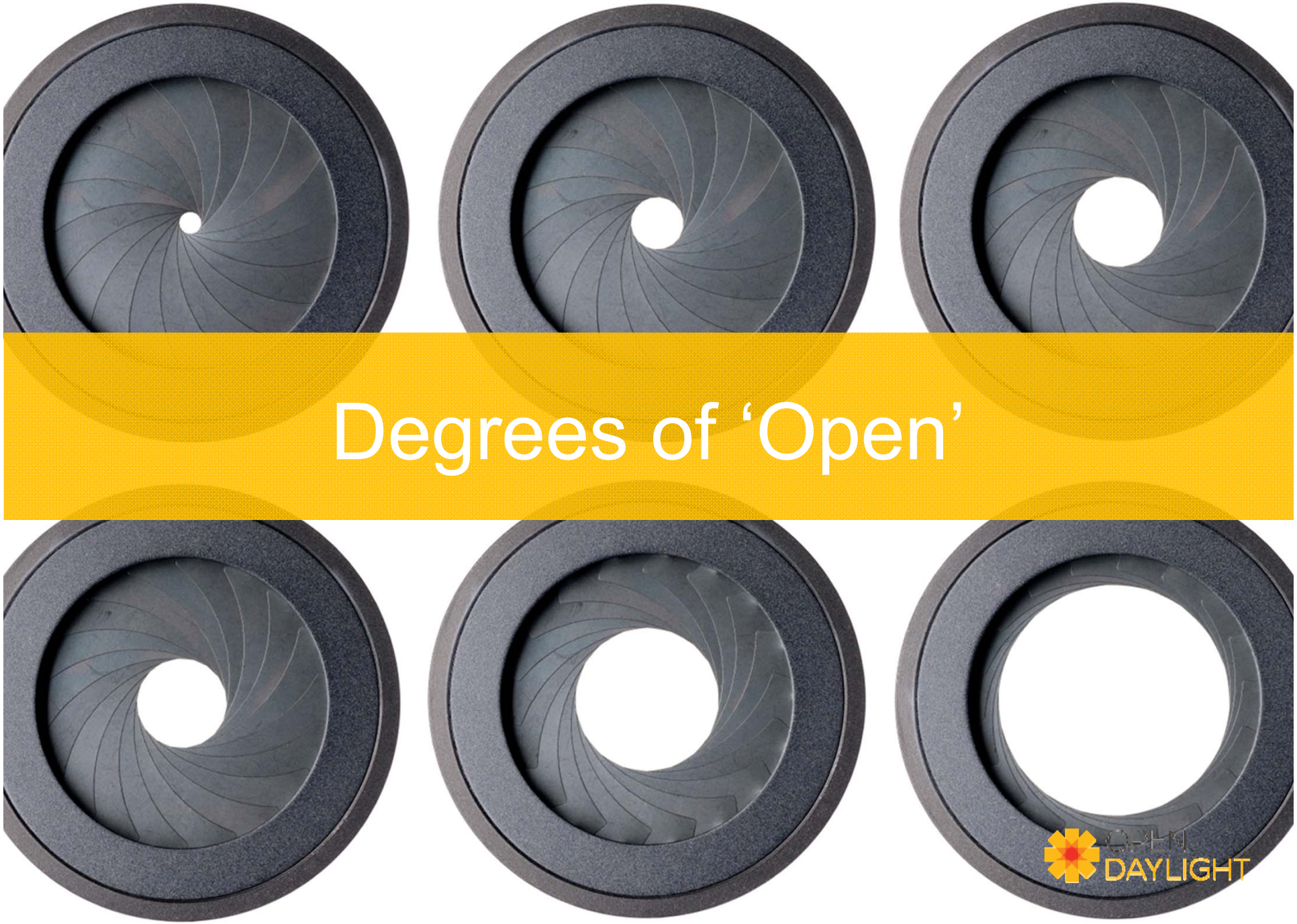
OPEN DAYLIGHT

Open Source is Key to Accelerating SDN Adoption

Neela Jacques, Executive Director, OpenDaylight


Degrees of ‘Open’
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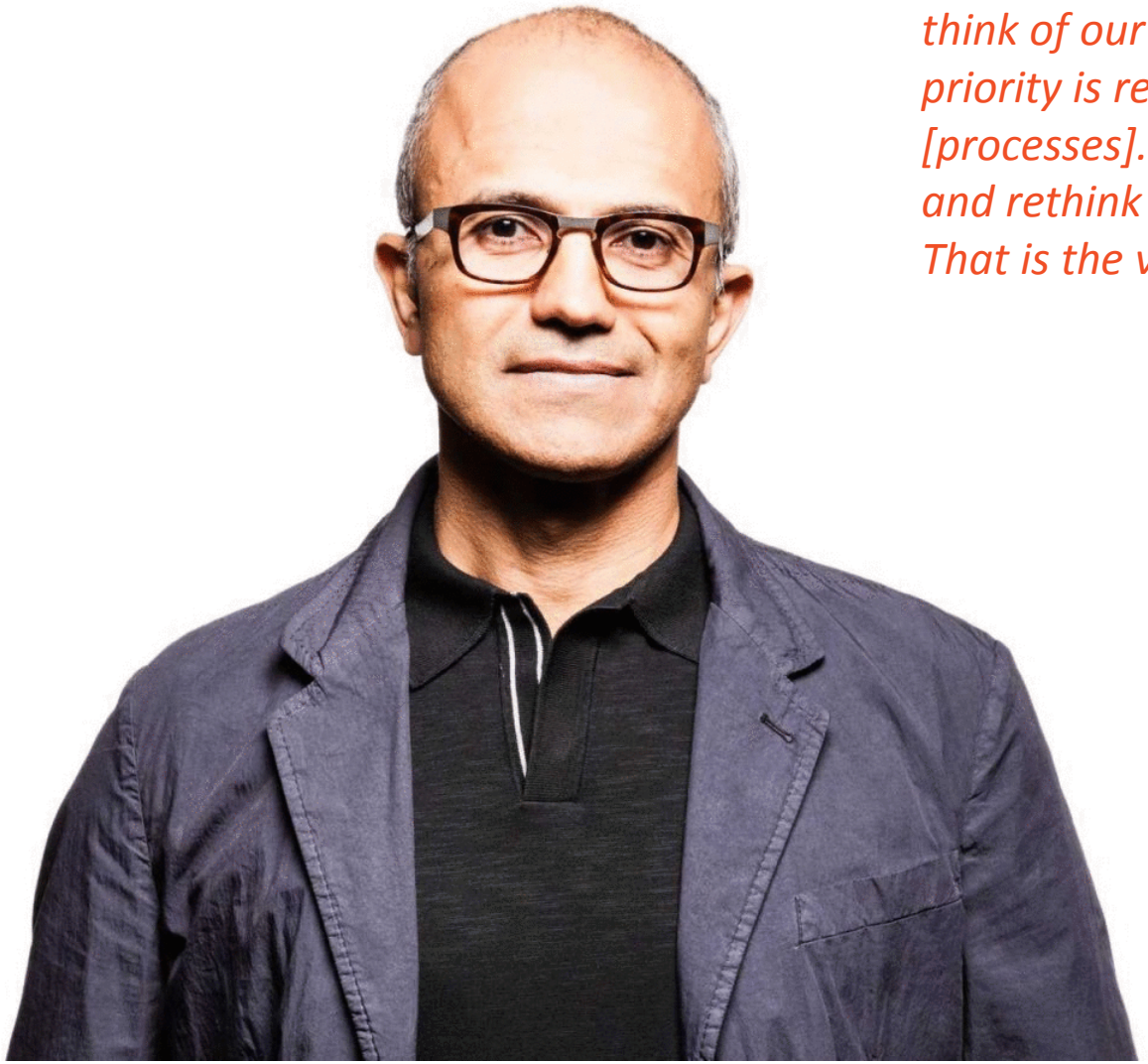

“We need places where we innovate and we need renewal is in the core. When I think of our challenge today ... the core priority is renewal of mainstream work [processes]. Let's take what we are good at and rethink it. That's not a side project. That is the very company itself.”

Microsoft CEO Satya Nadella

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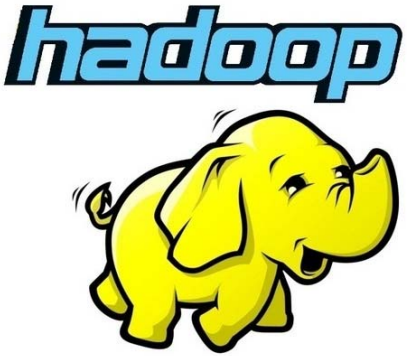
hadoop

MySQL™

openstack™

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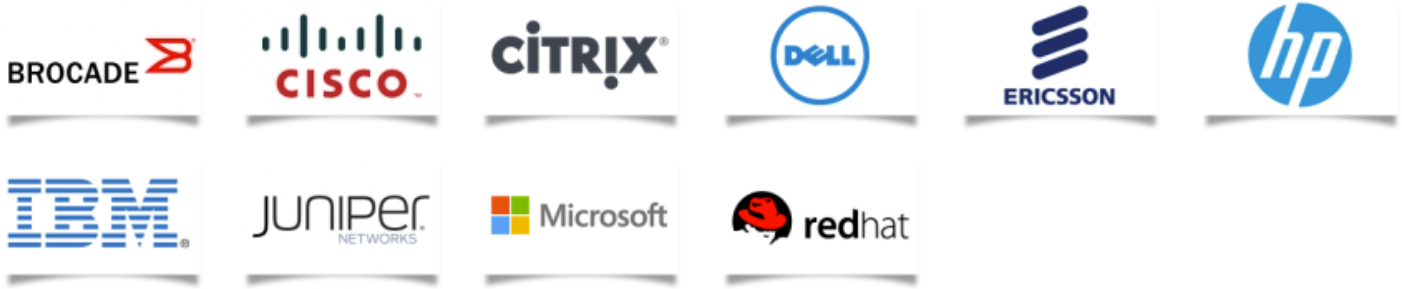
PLATINUM MEMBERS



GOLD MEMBERS

True Open Source Can Be Integrated

SILVER MEMBERS

SDN Needs a Common Platform

What is OpenDaylight?
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Community, Code & Acceptance
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Industry Value

- A broad SDN code base that anyone can use, plug into or contribute new enhancements
- A common environment for users and app developers
- Accelerated innovation by avoiding duplication of basic infrastructure
- Faster and higher quality development through sharing of resources

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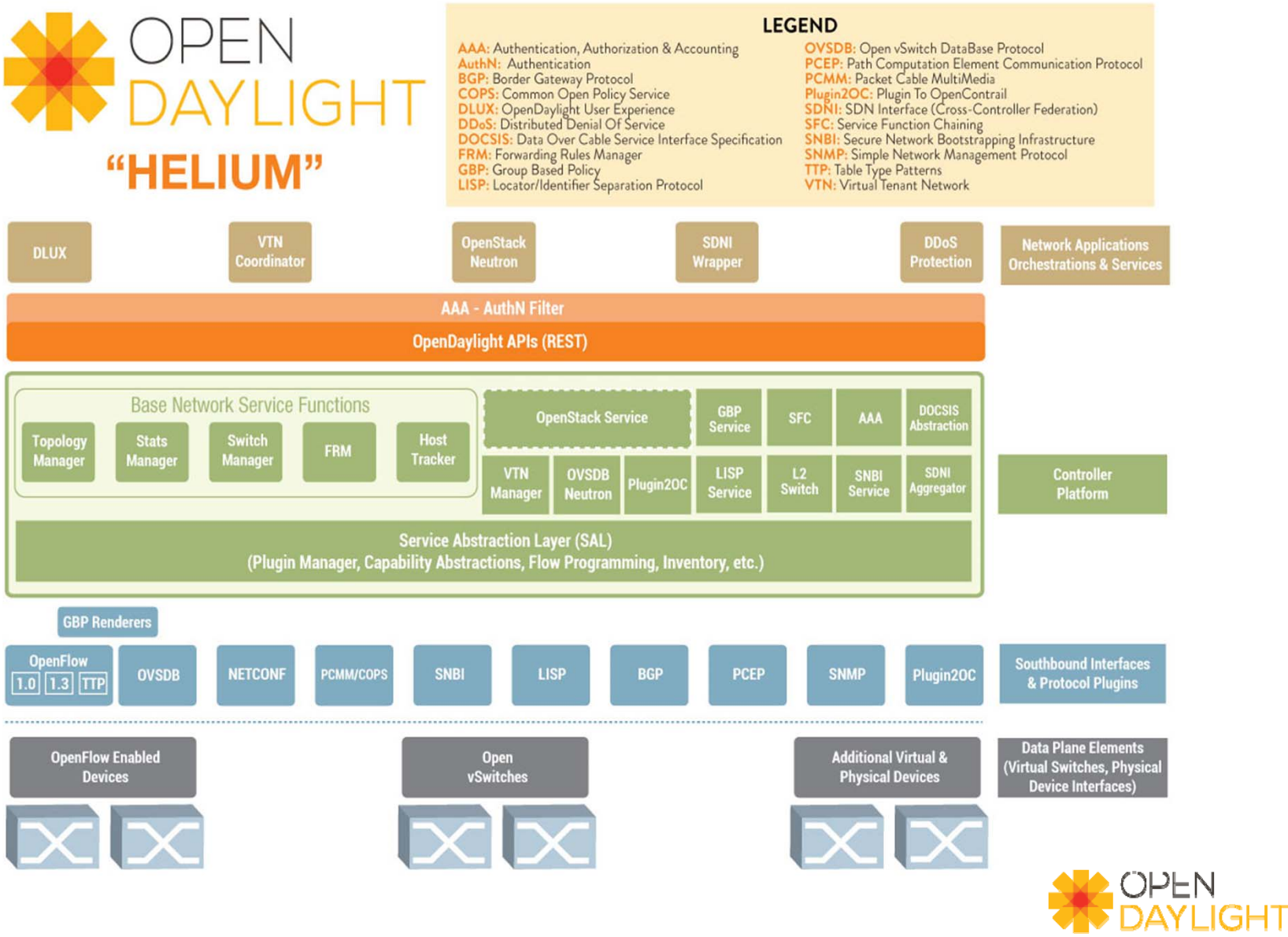
OPEN DAYLIGHT
"HELIUM"
LEGEND
AAA: Authentication, Authorization & Accounting
AuthN: Authentication
BGP: Border Gateway Protocol
COPS: Common Open Policy Service
DLUX: OpenDaylight User Experience
DDoS: Distributed Denial Of Service
DOCSIS: Data Over Cable Service Interface Specification
FRM: Forwarding Rules Manager
GBP: Group Based Policy
LISP: Locator/Identifier Separation Protocol
OVSDB: Open vSwitch DataBase Protocol
PCEP: Path Computation Element Communication Protocol
PCMM: Packet Cable MultiMedia
Plugin2OC: Plugin To OpenContrail
SDNI: SDN Interface (Cross-Controller Federation)
SFC: Service Function Chaining
SNBI: Secure Network Bootstrapping Infrastructure
SNMP: Simple Network Management Protocol
TTP: Table Type Patterns
VTN: Virtual Tenant Network
DLUX
VTN Coordinator
OpenStack Neutron
SDNI Wrapper
DDoS Protection
Network Applications Orchestrations & Services
AAA - AuthN Filter
OpenDaylight APIs (REST)
Base Network Service Functions
Topology Manager
Stats Manager
Switch Manager
FRM
Host Tracker
OpenStack Service
GBP Service
SFC
AAA
DOCSIS Abstraction
VTN Manager
OVSDB Neutron
Plugin2OC
LISP Service
L2 Switch
SNBI Service
SDNI Aggregator
Controller Platform
Service Abstraction Layer (SAL)
(Plugin Manager, Capability Abstractions, Flow Programming, Inventory, etc.)
GBP Renderers
OpenFlow 1.0 1.3 TTP
OVSDB
NETCONF
PCMM/COPS
SNBI
LISP
BGP
PCEP
SNMP
Plugin2OC
Southbound Interfaces & Protocol Plugins
OpenFlow Enabled Devices
Open vSwitches
Additional Virtual & Physical Devices
Data Plane Elements (Virtual Switches, Physical Device Interfaces)
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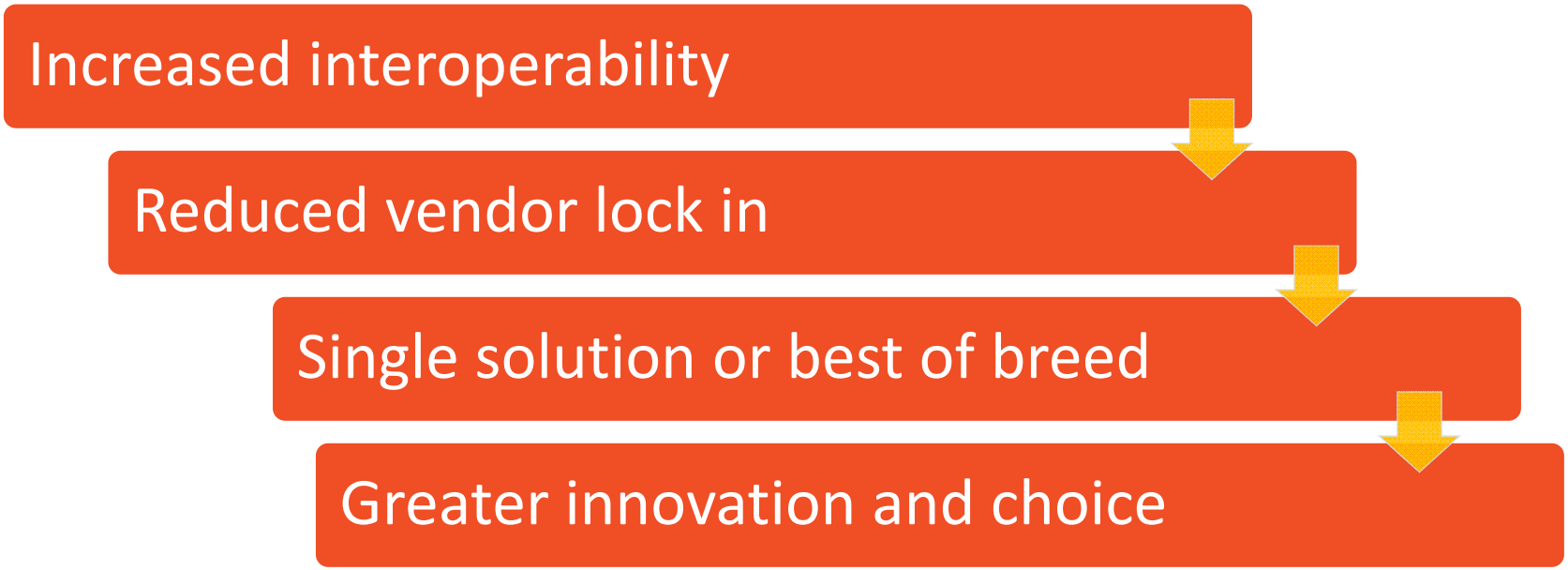
Why Should Users Care – Long Term



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Interoperability Isn't Easy
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Credit: Adapted from various Wikimedia images by Guety, Fir0002/Flagstaffotos, Tobias and MikeyMoose

Helping Evaluate Your SDN Process
Evaluate · Educate · Test
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Resources

- www.opendaylight.org
- wiki.opendaylight.org
- info@opendaylight.org
- #OpenDaylight IRC channel at freenode.net
- lists.opendaylight.org
- Meet-ups, HackFests, Dev Design Forum, Summit
- Join the conversation:
  - @NeelaJacques, @OpenDaylightSDN, #openSDN