◎ CUMULUS

Cumulus Linux Overview

WEB-SCALE NETWORKING FOR ENTERPRISE CLOUD

Cumulus Networks unlocks the network stack so you do not have to rely on proprietary vendors. Build a network based on your needs and your budget, and scale with ease using a web-scale architecture.

Build a better network with Cumulus Linux

Cumulus Linux is a powerful open network operating system that allows you to automate, customize and scale using web-scale principles like the world's largest data centers. It accelerates networking functions on over 50 switch models (1G, 10G, 25G, 40G and 100G) from 9 different OEMs with your choice of optics and two silicons. Cumulus Linux was built for automation, scalability and flexibility, allowing you to build a data center network that ideally suits your business needs.

Cumulus Linux provides:

ECONOMICAL SCALABILITY

With commodity hardware and a standardized Linux stack.Our customers have increased operational efficiency by reducing time to production by up to 95%, reduced CapEx by up to one third and reduced OpEx by up to 74%.

BUILT FOR THE AUTOMATION AGE

Cumulus Linux is a powerful, networking-focused, Linux distribution based on Debian that offers a completely open architecture and is designed for easy automation.

STANDARDIZED TOOLSETS

Existing open source and commercial Linux applications run natively. That means you can use your existing tools, like for automation and others, to improve efficiency and multiply the number of switches per operator.

CHOICE AND FLEXIBILITY

Choose from 50+ hardware platforms, from 9 vendors, and two different types of silicon. Build your network based on your needs and your budget, and pivot easily as the industry changes.

Cumulus Linux is the ultimate choice when it comes to flexibility and innovation, enabling the best of breed hardware and technology ecosystem.

CUMULUS LINUX KEY FEATURES:

ETHERNET VIRTUAL PRIVATE NETWORKS (EVPN)

Get freedom from layer 2 complexities with this modern, standards-based, interoperable technology that allows legacy layer 2 applications to operate over next-generation layer 3 networks.

NETWORK COMMAND LINE UTILITY (NCLU)

Use our rich and simple command line for easy network configuration and operation.

OSPF UNNUMBERED

Create configs faster and simplify automation by no longer depending on unique IP addresses.

BGP UNNUMBERED

Automation gets even easier with this simplified IP approach. All you need is one IP template for leaf nodes and one for the spine nodes. Easy, right?

REDISTRIBUTE NEIGHBOR

Get VM and host mobility by plugging your server into any redistribute neighbor-enabled switch, making it layer 3 discoverable on the fabric. If you have to move the server, there's no need to reconfigure.

PRESCRIPTIVE TOPOLOGY MANAGER (PTM)

Efficiently go from whiteboard to physical cable. With PTM, you can program your data center to verify connections and resolve issues faster.
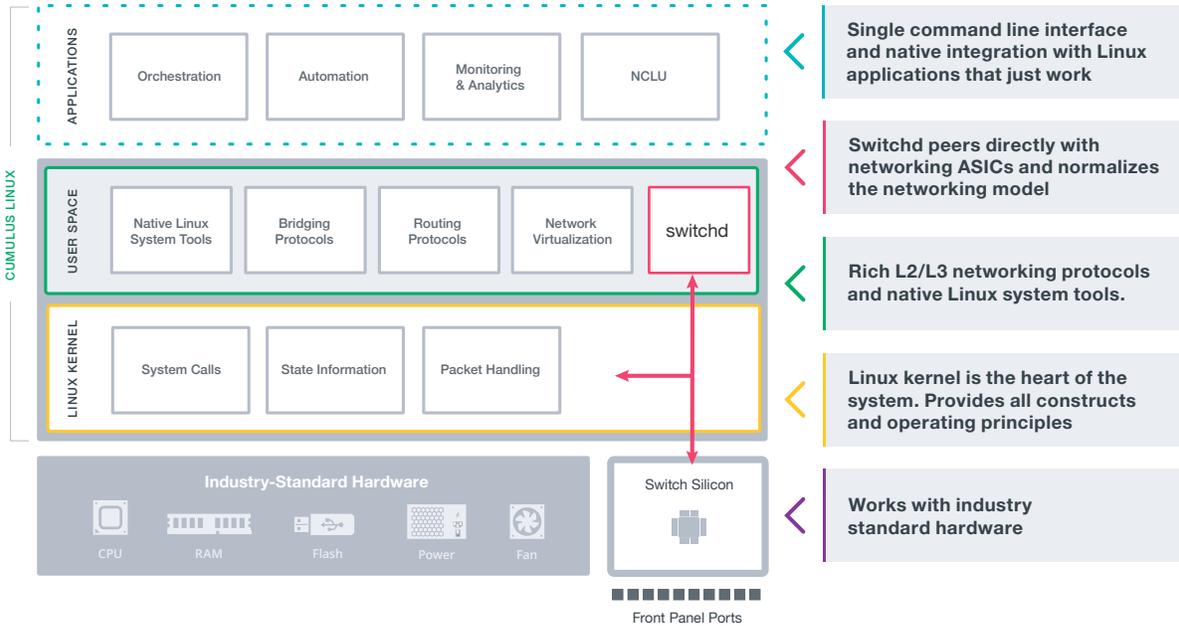
VIRTUAL ROUTING AND FORWARDING

Run multiple network paths without the need for multiple switches, giving you traffic isolation and network segmentation for multiple devices.

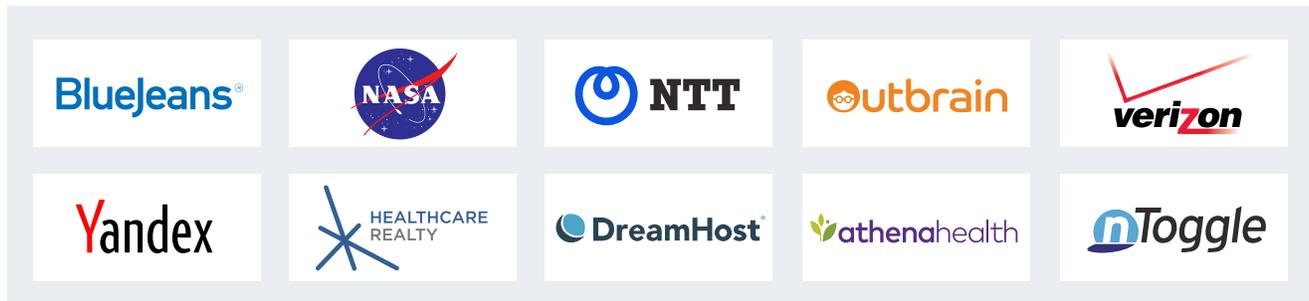### LIGHTWEIGHT NETWORK VIRTUALIZATION (LNV)

Accelerate VXLAN deployments with a controllerless solution.

CUMULUS LINUX ARCHITECTURE

APPLICATIONS
- Orchestration
- Automation
- Monitoring & Analytics
- NCLU

> Single command line interface and native integration with Linux applications that just work

USER SPACE
- Native Linux System Tools
- Bridging Protocols
- Routing Protocols
- Network Virtualization
- switchd

> Switchd peers directly with networking ASICs and normalizes the networking model

> Rich L2/L3 networking protocols and native Linux system tools.

LINUX KERNEL
- System Calls
- State Information
- Packet Handling

> Linux kernel is the heart of the system. Provides all constructs and operating principles

Industry-Standard Hardware
- CPU
- RAM
- Flash
- Power
- Fan

Switch Silicon

Front Panel Ports

> Works with industry standard hardware

600+ CUSTOMERS AND COUNTING

28% of the Fortune 50 have already adopted Cumulus Linux

Try Cumulus Linux

CUMULUS VX

Cumulus VX is a community-supported virtual appliance that enables cloud admins and network engineers to preview and test Cumulus Networks technology at zero cost. You can build sandbox environments to learn open networking concepts, prototype network operations, and script and develop applications risk free. With Cumulus VX, you can get started at your pace, on your time and in your environment.

cumulusnetworks.com/vx

CONTACT YOUR CUMULUS NETWORKS SALES TEAM

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