

# Puppet Labs and Cumulus Linux

## The New Era of Network Automation

### Puppet Labs

Puppet Labs IT automation software automates the configuration and ongoing management of machines, devices and the software running on them, so IT operations teams spend less time fighting fires and more time deploying great software.

With Puppet Enterprise, their flagship commercial product, IT operations teams can make rapid, repeatable changes and automatically enforce the consistency of systems and devices—across physical and virtual machines, on-premise or in the cloud.

The powerful Puppet language is a domain-specific language (DSL) that allows administrators to define the desired end state of their resources without writing fragile, complex procedural code that increases the risk of outages from human error. Code written with the Puppet DSL is also simpler to read and write than procedural code, making it easier to review and reuse. Administrators can write Puppet code just once, then reuse it and share it with others in their organization.

### Cumulus Linux

Cumulus Linux is the first full-featured Linux OS for data center networking, running seamlessly over bare metal switches. Through the power of an open ecosystem, customers now can acquire affordable hardware and software through a variety of models — fully integrated with their choice of hardware and software, or be the integrator themselves.

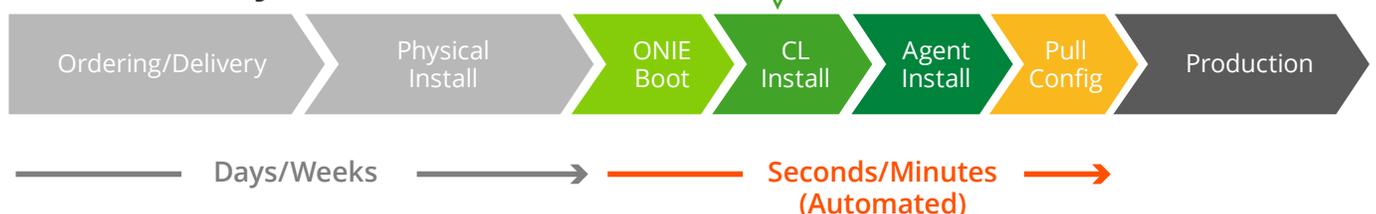
The new disaggregated model enables the industry to build high capacity networks that are easy to deploy and affordable, helping customers realize the full promise of the software-defined data center. With the use of existing compute toolsets like Puppet, Cumulus Linux creates a multi-platform operating system for networking hardware that makes building, managing and automating massive-capacity next-generation data center networks simple.

Automation is an essential tool for every IT organization and has seen much success over the last decade across the compute and storage industry. Customers must leverage it in networking and have the capability to provision switches dynamically and manage them in an efficient mechanism.

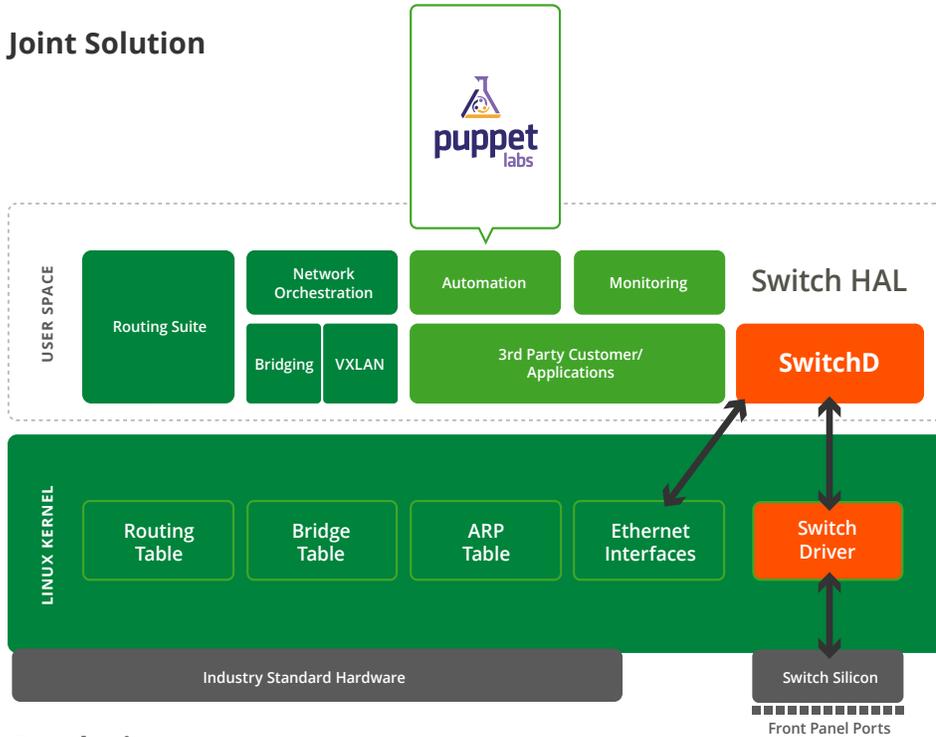
### The Traditional Way



### The New Way



## Joint Solution



## Conclusion

Using Puppet Enterprise, you can easily automate repetitive tasks, quickly deploy critical applications, proactively manage change, scale from 10s of servers to 1000s, and deploy 100s to 1000s of switches, on-premise or in the cloud.

Leveraging Cumulus Linux as a platform enables you to operate a switch as if it were a Linux server, so it's like a developer's paradise, full of customizations for enhancing your specific needs beyond a typical API handoff. The ability to manage an underlying growing network is critical to meeting the needs of the application demands and the business SLAs desired in today's virtualized world.

Cumulus Linux enables a consistent experience between the network and compute while leveraging existing investment of orchestration tools and driving the next wave of scale, collaboration and innovation in networking.

## Solution Benefits:

- Quickly deploy the growing ecosystem of Puppet modules and applications into any destination, including virtualized environments and the hybrid cloud
- Accelerate PaaS and application deployment by streamlining the deployment process and eliminating duplication of work using reusable code and blueprints
- Support for the cross-node dependencies common in multi-tier application deployments
- Enables standardized configurations for enterprise environments
- Support for multiple Puppet masters in multiple environments, such as dev, test and production
- Support for integrated, end-to-end application deployment starting with provisioning the VM, through full-stack provisioning

## Get Started!

- Download Puppet Enterprise and manage 10 nodes free: <http://info.puppetlabs.com/download-puppet-enterprise.html>
- Download the latest version of Cumulus Linux: <http://cumulusnetworks.com/downloads/>
- Download the puppet module for Cumulus Linux: [https://forge.puppetlabs.com/cumuluslinux/netdev\\_stdlib\\_cumulus\\_linux](https://forge.puppetlabs.com/cumuluslinux/netdev_stdlib_cumulus_linux)

## About Cumulus Networks®

Cumulus Networks unleashes the power of open networking and accelerates its adoption with Cumulus Linux, the operating system for open networking. Founded by veteran networking engineers from Cisco and VMware, Cumulus Networks makes the first Linux operating system for networking hardware and fills a critical gap in realizing the true promise of the software-defined data center. Just as Linux completely transformed the economics and innovation on the server side of the data center, Cumulus Linux is doing the same for the network. It is radically reducing the costs and complexities of operating modern data center networks for service providers and businesses of all sizes. Cumulus Networks has received venture funding from Andreessen Horowitz, Battery Ventures, Sequoia Capital, Peter Wagner and four of the original VMware founders. For more information visit [cumulusnetworks.com](http://cumulusnetworks.com) or follow [@cumulusnetworks](https://twitter.com/cumulusnetworks).