

## Solution Brief

# NEC PF6800 ProgrammableFlow<sup>®</sup> SDN Controller Starter Kit

## Overview

NEC PF6800 ProgrammableFlow SDN Controller starter kits make it easy to get started with Dell Openflow switch hardware, and true SDN controller software in core-and-pod data center designs. Starter kits include switching hardware, software, support, and cables for fast and easy deployment. With the NEC ProgrammableFlow SDN controller customers are able to leverage the OpenFlow protocol, enabling full network virtualization and ability to easily and cost-effectively deploy, control, monitor and manage secure multi-tenant networks.

Features of the ProgrammableFlow SDN controller include:

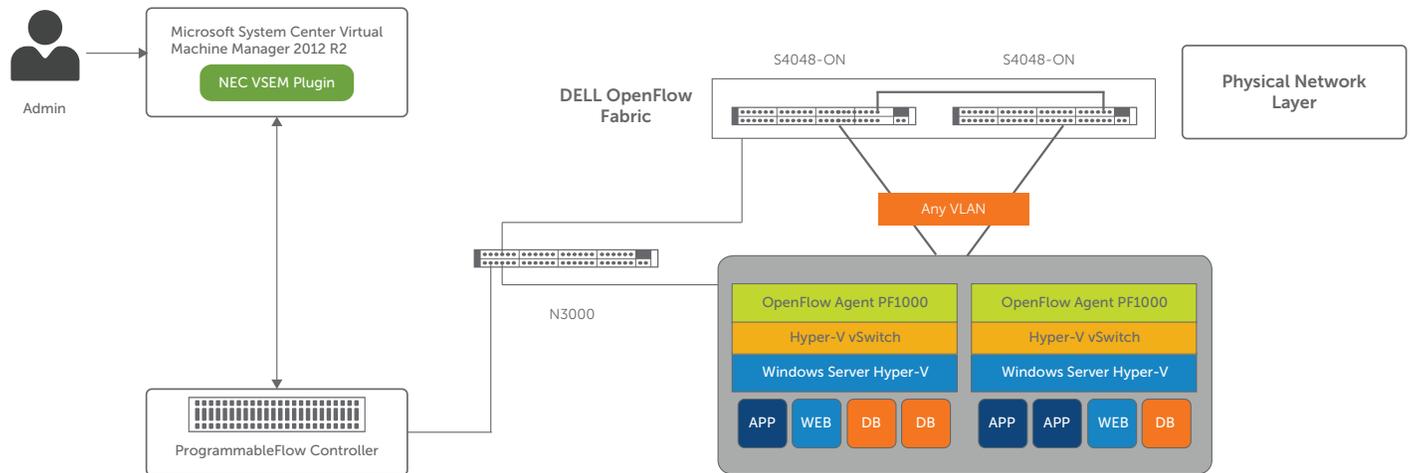
- End-to-end network visualization through a network monitoring function. The complete flow is depicted graphically for granular management.
- Network automation and configuration reducing ongoing network administration expenses as much as 80%.
- Multi-tenant capabilities enabling isolated, secure networking.
- Integration with OpenStack and Microsoft System Center Virtual Machine Manager for greater agility and streamlined operations.

## Components

NEC ProgrammableFlow controller starter kits include:

- **Dell Openflow Switch Hardware :**
  - Leaf switches are capable of delivering 48x10GbE connections and 6x40GbE connections to the spine and 24x1GbE to servers and 2x10GbE connections to the spine. Spine switches are capable of 32x40GbE down to leaf switches.
- **SDN Controller:** NEC PF6800 ProgrammableFlow Controller v6.1, GUI, 5 switch license, and cluster software.
- **Support/Maintenance:** NEC ProgrammableFlow starter kits include 1 year software support and maintenance. Bundled hardware has 3 year support/maintenance.

## Reference Design for DELL MS SCVMM starterkit physical topology



### Starter Kits

Item	Quantity	Notes
Dell Networking N3024	1	2 x SecureChannel and Management
Dell Networking S4048-ON	2	ToR
10G cables	4	Server to ToR (redundant)
40G cables	4	Core link – not mandatory (can use 10G also)
NEC PF6800 ProgrammableFlow Controller Cluster Starter pack	1	Standalone*
OFvS license	2	To manage PF1000

### \* Controller HW requirement

Microsoft Hyper-V Server  
2012 R2  
CPU: Xeon E5-2660 v3  
Memory: 64GB  
HDD: 300GB (RAID1)  
Ethernet ports: 2 x 1Gbe

### Next Steps

When you're ready to find out more about the NEC ProgrammableFlow SDN controller starter kit contact a Dell expert at <https://marketing.dell.com/solutions>.

