



# Enabling solutions with software defined networks

for next generation research infrastructure

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Software defined networks is technology that is emerging from the networking research laboratories.

This technology is changing the way networks operate and improves the ease and speed that converged compute, storage and networking solutions are created.



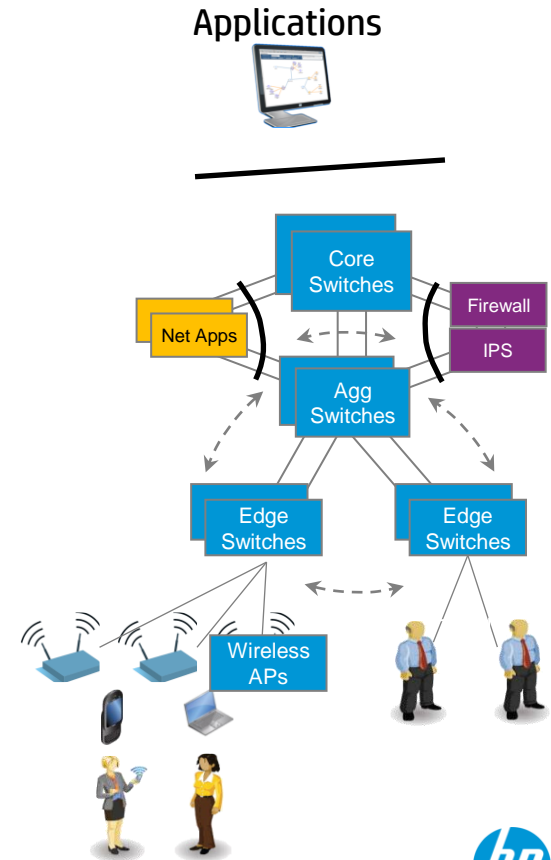
In the SDN architecture, the control and data planes are decoupled, network intelligence and state are logically centralized and the underlying network infrastructure is abstracted from the applications.



# Traditional Networks

Applications send data over the network (and observe network service levels), but do not interact directly with the network infrastructure

Infrastructure uses distributed algorithms to determine forwarding and routing decisions, and uses internal configuration for security and quality of service settings

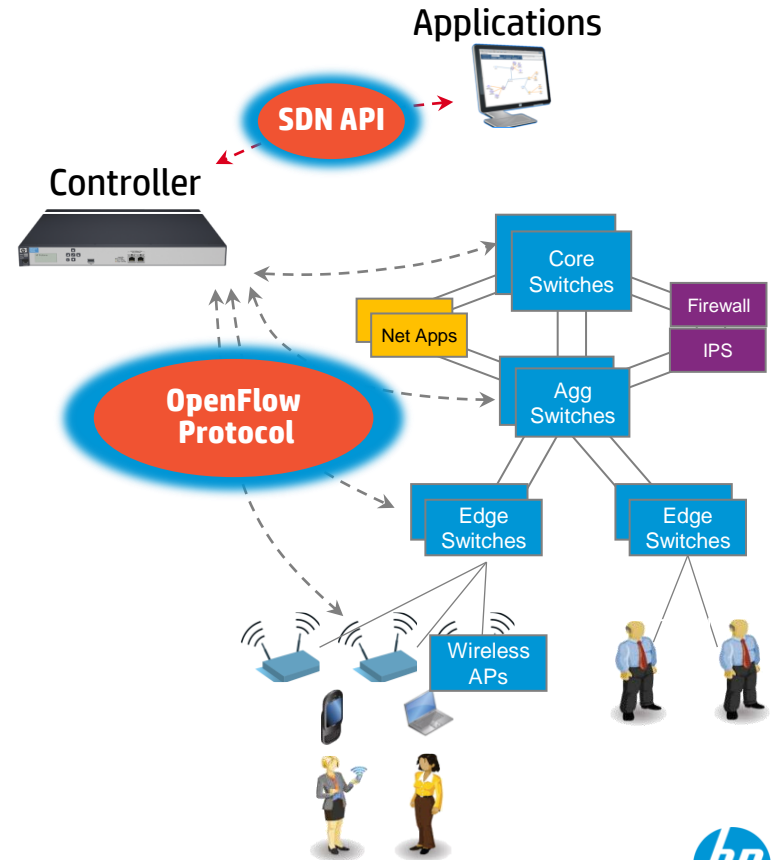


# SDN Networks

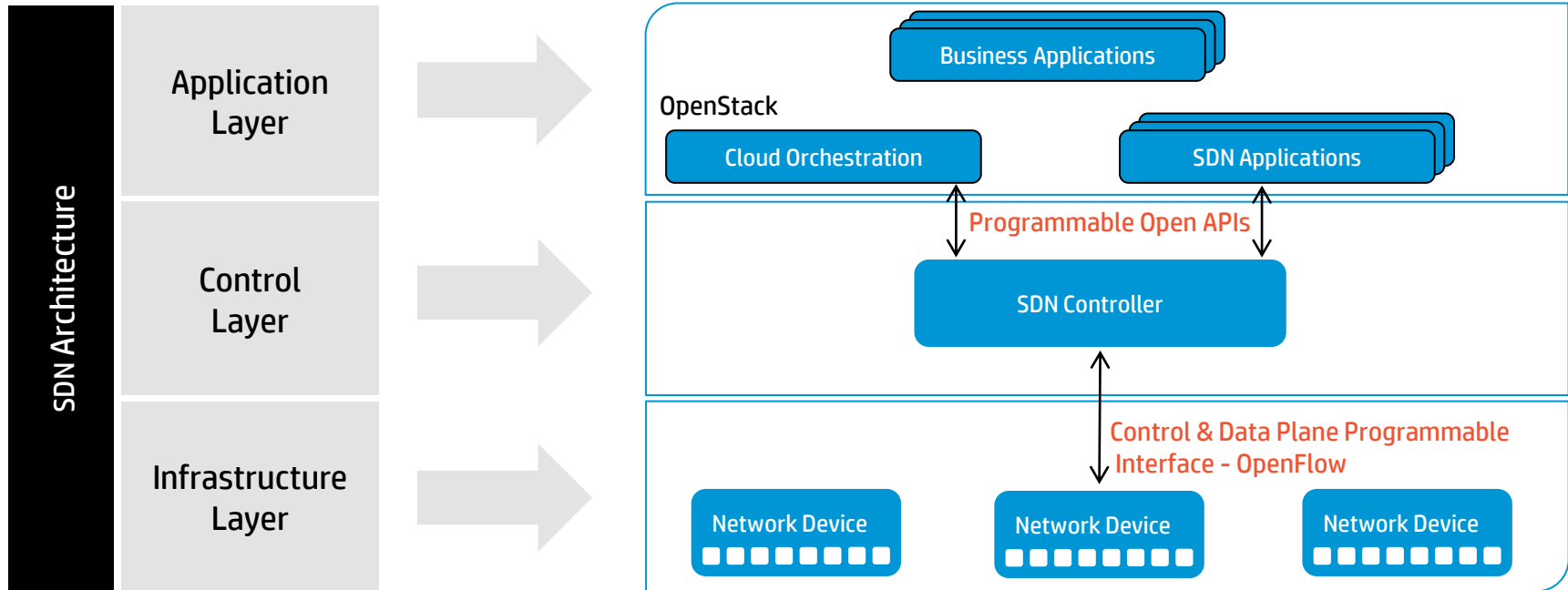
Applications specifies network design and policies

Control compile these policies into forwarding instructions and uses the OpenFlow protocol to set these instructions on the switches and routers

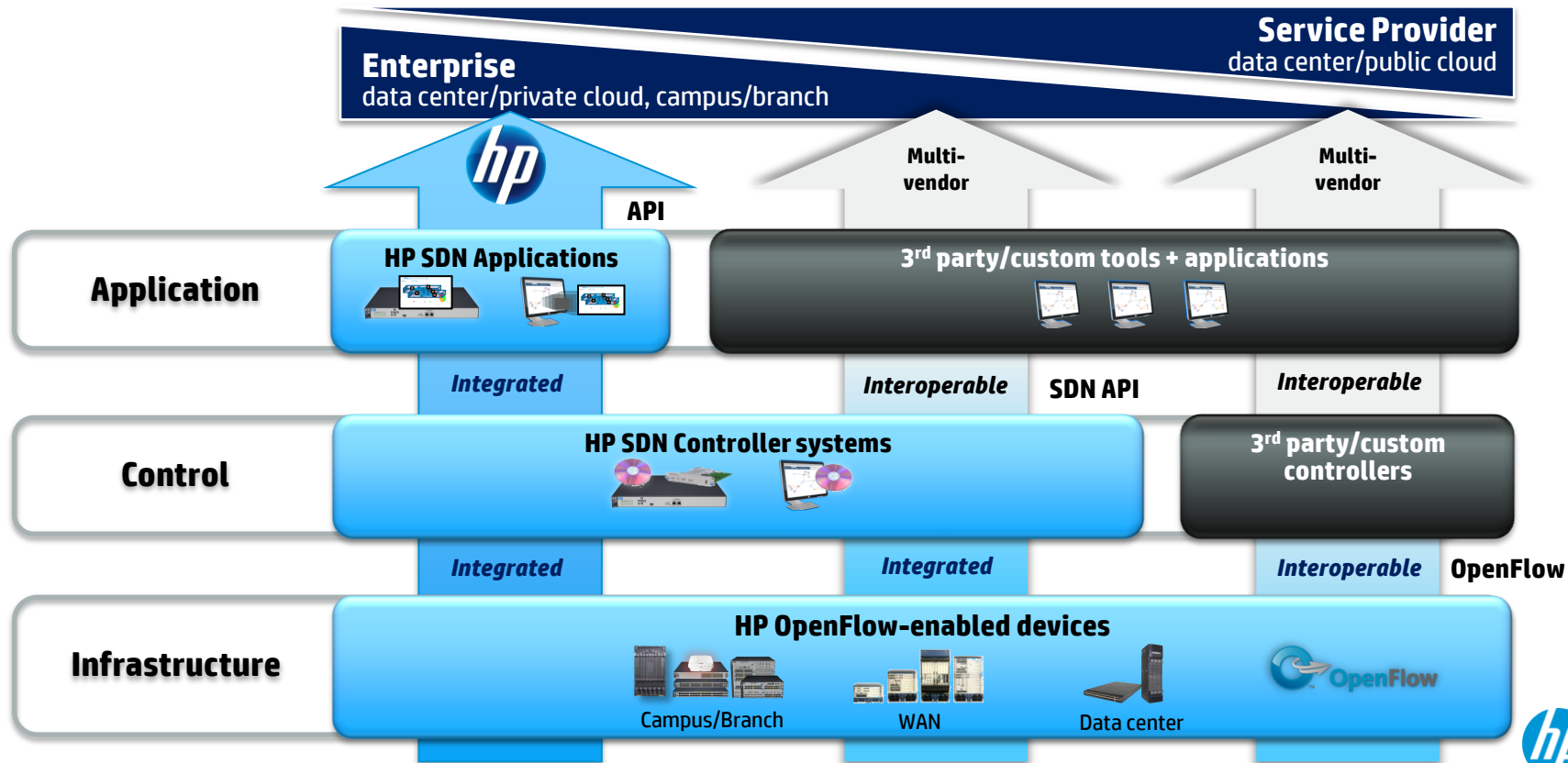
Infrastructure execute these forwarding instructions and report flow statistics to the controller



# Applying Business Logic to the Network

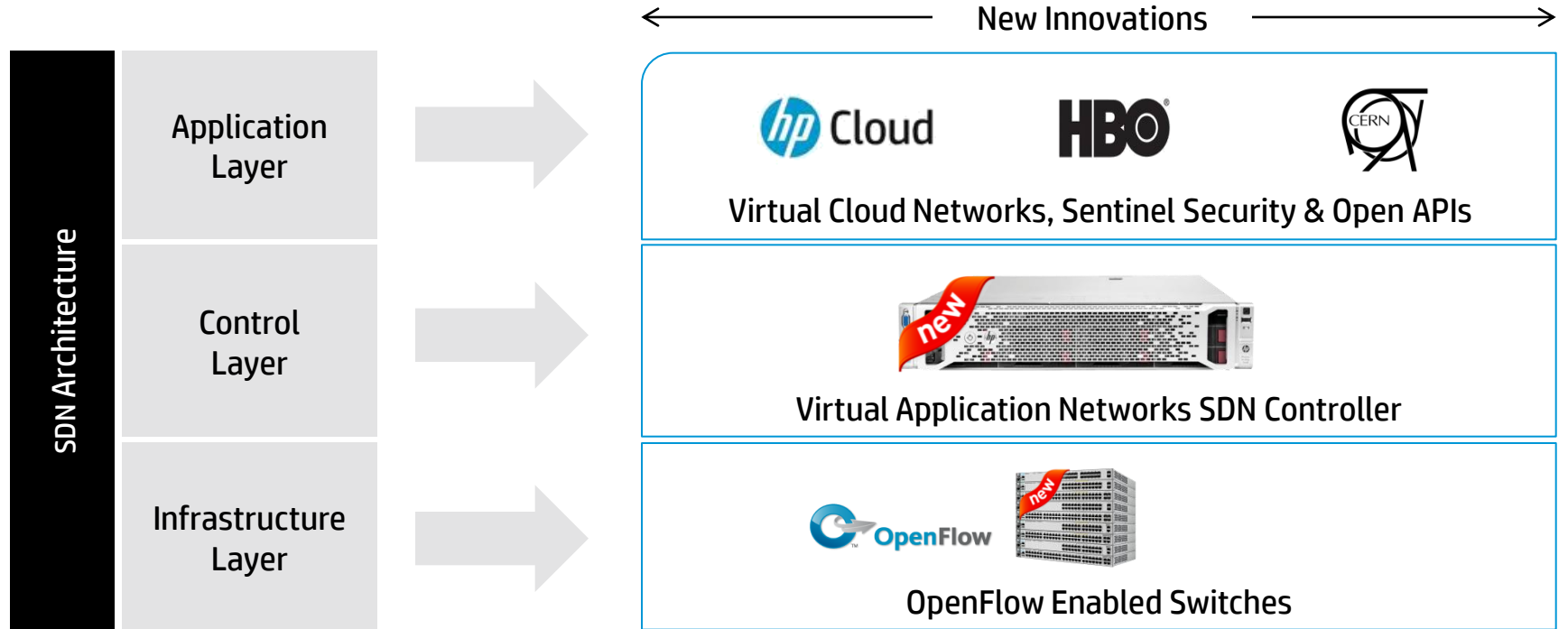


# HP OpenFlow/SDN Solution Vision



# HP Delivers SDN to Achieve Agility

Ability to Apply Business Logic to Network Behavior in a Dynamic Fashion





# Thank you

