

Data Center Networking Simplified and Automated

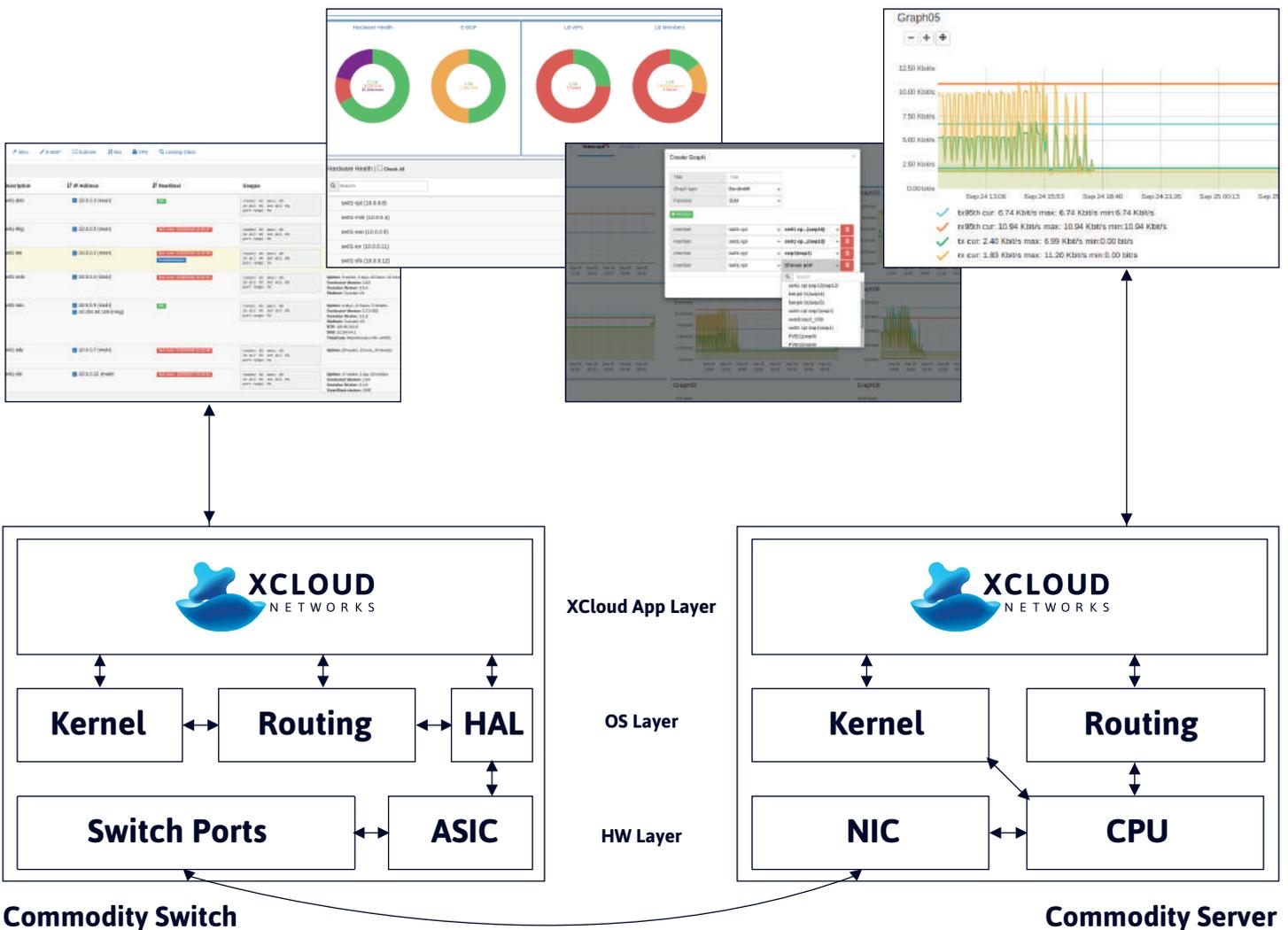


XCloud Networks provides an out-of-the-box automated solution to run complete data-center networks based purely on open networking technologies. It fully automates deployment and management of network infrastructure and provides all the required applications in an easy to manage and ready to use fashion.

- Built-in automation: to save engineers' time from spending on repetitive tasks letting them to direct saved time more towards strategy and company growth.
- Commodity hardware as a universal building block: for comprehensive network, no vendor lock-in, no overpriced equipment to save capital expenses up to 30X.
- Seamless integration with various open-source software and OCP equipment: to get industry's best functionality/time/cost ratio.

- Out of the box
- Monitoring
- Backup
- Analytics
- HW/SW Load balancer
- ACL
- VPN
- NAT
- BGP (full table)
- No-impact maintenance
- Zero touch provisioning
- L2/L3 Switching
- Resource slicing
- Approval procedures

Intuitive, easy to use graphical UI for comprehensive network management

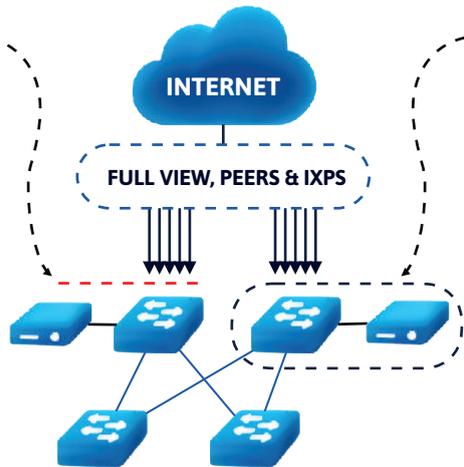


ACL ENFORCEMENT

XCloud Networks' platform provides functionality for engineering team to easily manage security policies taking care about approval procedures, logging requirements and change history.

XCloud agent running on the hardware side spins configuration in accordance to approved ACL entries or object oriented service groups which engineers define from the GUI.

Stateless access control enforcement in combination with easy-to-use GUI in many cases eliminates need of expensive firewall boxes and it is completely decentralized.



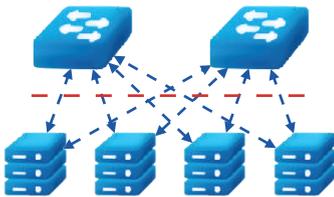
BORDER ROUTER

By attaching our "NFV Offloader" to the switch which is a good example of combining hardware and software it becomes possible to handle full routing table and do NAT.

Adding BGP peers by few clicks in the GUI.

40Gbps towards high prefix neighbors + 720Gbps towards low number prefix neighbors.

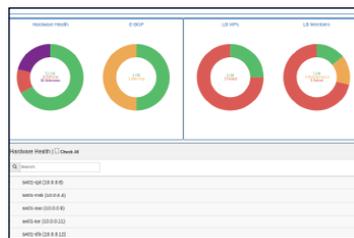
LOAD BALANCER



Zero extra cost hardware load balancer is scalable with no throughput constrains, basically switch forwards packets in load balancing mode at the full line rate. This most efficient load balancer hashes source/destination ip/protocol/port to ensure integrity of transport layer such as TCP.

Need an application layer load balancer or SSL offloading then HAProxy integration helps. Connect some servers to the network fabric, running HAProxy+Linux+XCloud agent, then it becomes part of whole system including monitoring, analytics, logging and management is fully available from the GUI handling all the necessary details automatically

MONITORING & MAINTENANCE

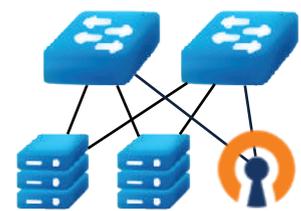


Our integrated fault prediction and detection system constantly follows telemetry information from every hardware unit.

In case maintenance has to be done, device can be safely powered off after enabling maintenance mode which tells every neighboring device to re-route the traffic.

In the event of switch replacement it should not necessarily be replaced by the same model or even same vendor, just any of validated switches with amount and types of ports you need, then network operating system can be installed automatically and configuration of previously removed switch can be automatically restored.

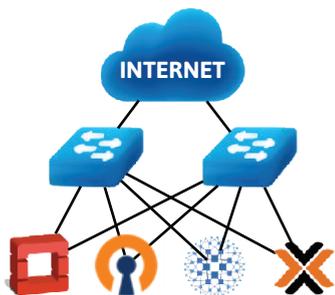
VPN & ENCRYPTION



Seamless integration with OpenVPN enables easy-to-configure elegant site-to-site or remote access VPN without need to buy expensive hardware.

You simply enable site-to-site and/or remote-access VPN by push of a button then configuration is rolled out automatically including setup and future updates of OpenVPN endpoints, dynamic routing between sites, redundancy, encryption keys and monitoring.

SERVER VIRTUALIZATION



Seamless integration with open source platforms including Proxmox and Openstack helps to apply same network principles and to use one single GUI to control the whole network including virtual network of the KVM based server virtualization.

L3 LEAF/SPINE DESIGN

L3 leaf/spine topology solves problem of west-east traffic. Fabric allows utilization of all links, avoids usage of legacy protocols like spanning tree, with almost no limits in scalability.

Servers can be connected to any number of switches (not just 2) fully utilizing every connected port and in this case there is no stacking or any kind of state replication between switches so top of the rack switches are acting totally independent which saves from failures commonly happening in the software part of stack-designed models.

Switches of diverse modes, vendor and technology can be used in this design.

CDN & DISTRIBUTED NETWORKS



Deploying CDN basically means running a distributed network spread across the world. Our software helps to structure and see all statistics, monitor the health and proactively prevent failures as well as to manage big number of remote devices on the scale and cost-efficiently.