

IXP Operations Update

December 2014

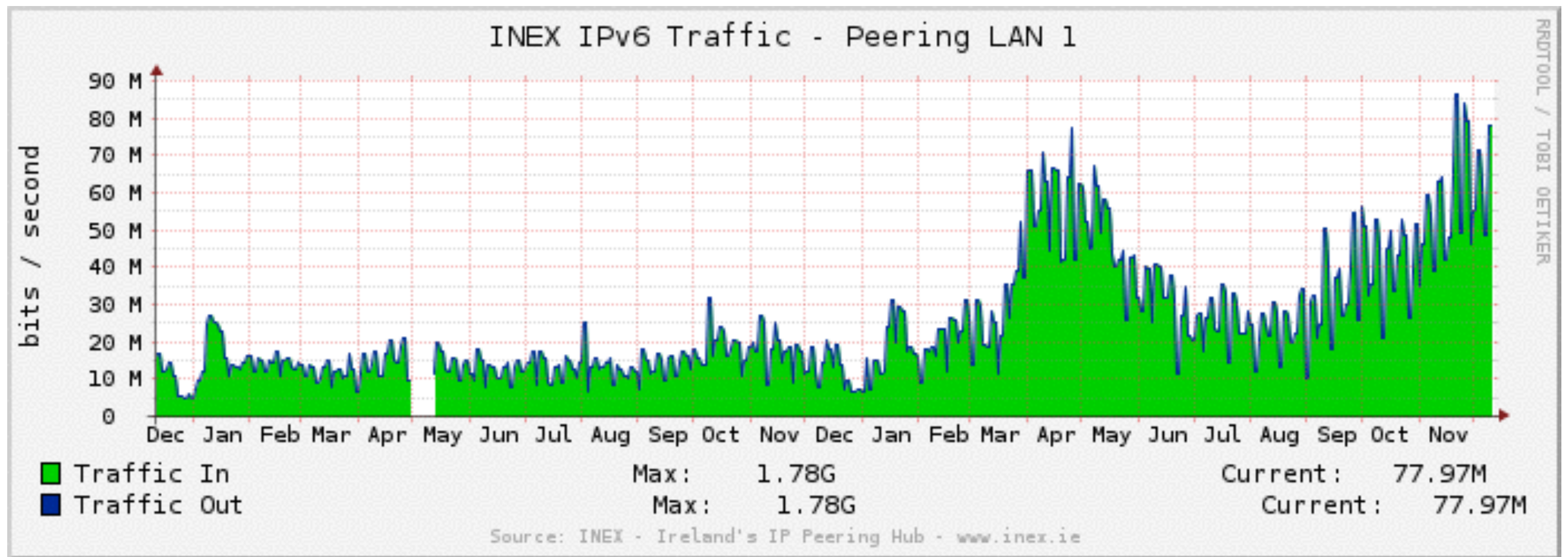


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i n t e r n e t n e u t r a l e x c h a n g e

A Different Opening Graph



There is IPv6 content on the exchange: Google, Akamai, Netflix, Microsoft and more



New / Upgraded Connections

Apr - Webdiscount (RS, open, LAN1 TCYCTY, 100Mb)

Apr - Hibernia Networks (Atrato) (no RS, selective, LAN1 IXDUB2, 1Gb)

Apr - Host Ireland (RS, open, LAN1 TCYKCP, 1Gb)

Apr - Amazon to 20Gb

Jun - Digital Planet (HETG) (RS, open, IXDUB1, 1Gb - LAN2 pending)

Aug - BT Ireland to 20Gb LAN1

Aug - Government Networks to 20Gb

Aug - Microsoft to 30Gb

Oct - Hurricane Electric (open, LAN1 TCYKCP 10Gb)

Oct - HEAnet to 20GB (LAN1)

Nov - IMS / iMedia (RS, open, LAN1+2 TCYKCP, 1Gb each)

Dec - Convergence Group (no RS, open, LAN1 TCYCTY, 1Gb)



Planned Upgrades / (Re)connections

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Yahoo! should be reconnecting by early 2015 at 10Gb

HE to peer with route servers

Akamai going to 20Gb

eircom going to 40Gb

Tibus going to 20Gb

Plus some prospects in the works....

Please review your capacities and don't get caught out!



Brocade Issues

i n t e r n e t n e u t r a l e x c h a n g e

After ~5 near-eventless years:

- STP topology change / L2 loop tickles a port security bug on CES2k
- 2 x RMAs of Turboiron 24X's in the last two months - port asic failures
- IPv6 L2 ACL bug on FESX



NWBP Update

i n e x
i n t e r n e t n e u t r a l e x c h a n g e

Previously announced:

INEX is opening a point of presence in Telecity NWBP
Expected to be operational in 2014 (subject to contract)



NWBP Update

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Expected to be operational in 2014 (subject to contract)

- We have the rack, PDUs
- We have all necessary equipment
- Dark fibre provider taking longer than promised
- Due to civils on one end, will open singly-homed to KCP and bring CTY online later
- Still hoping for *operational in 2014!*



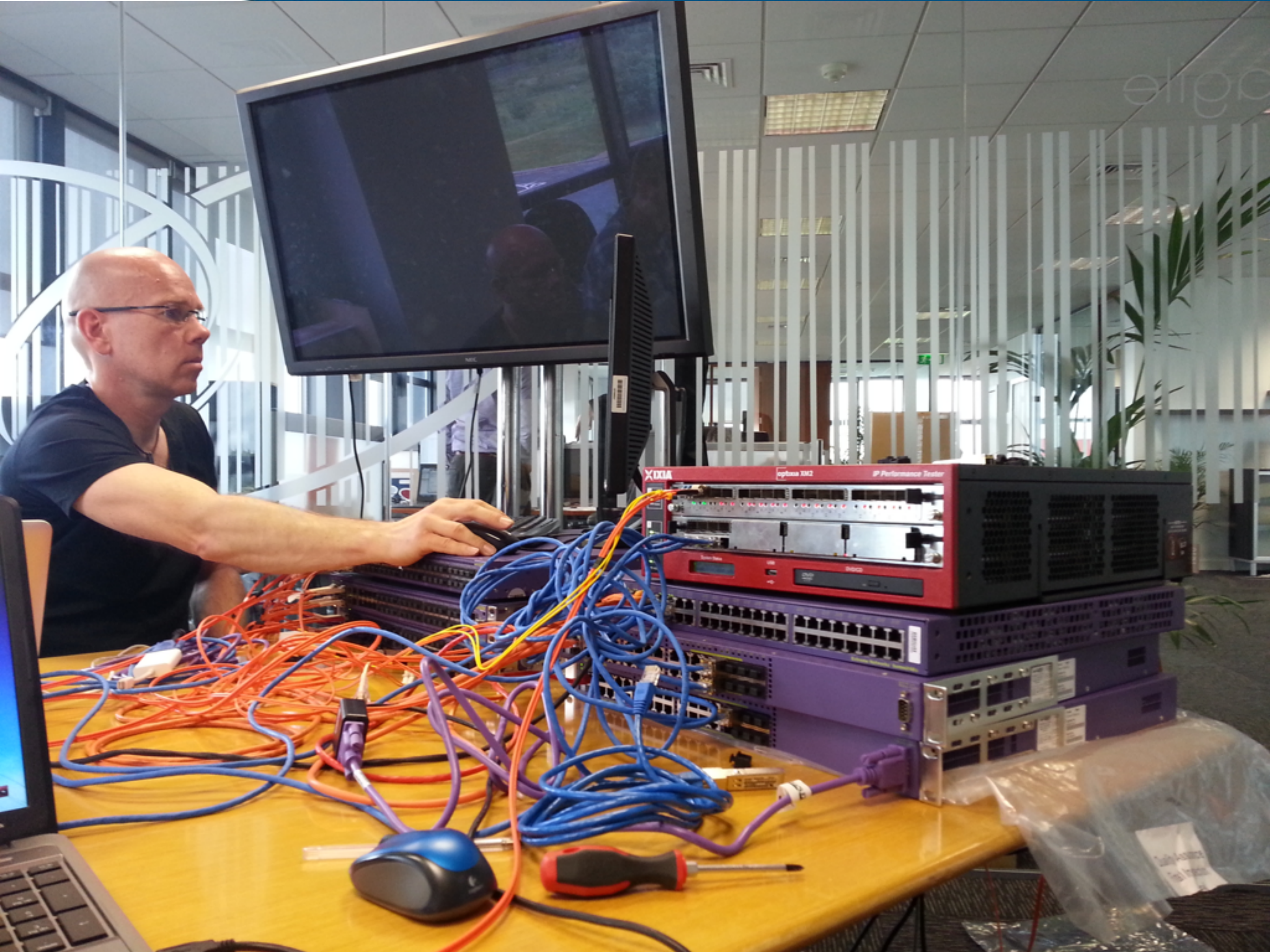
LAN1 Forklift Upgrade

i n e x
i n t e r n e t n e u t r a l e x c h a n g e

INEX is upgrading to a VPLS network build on Extreme Networks kit

Summit X670 for network core; Summit X460 for network edge

Lab tested at Agile Networks' new HQ in April, with successful PoC





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X670 provides 48x10G in 1U; x460 provides 48x1G UTP.

Ordered from Agile and delivered mid-October





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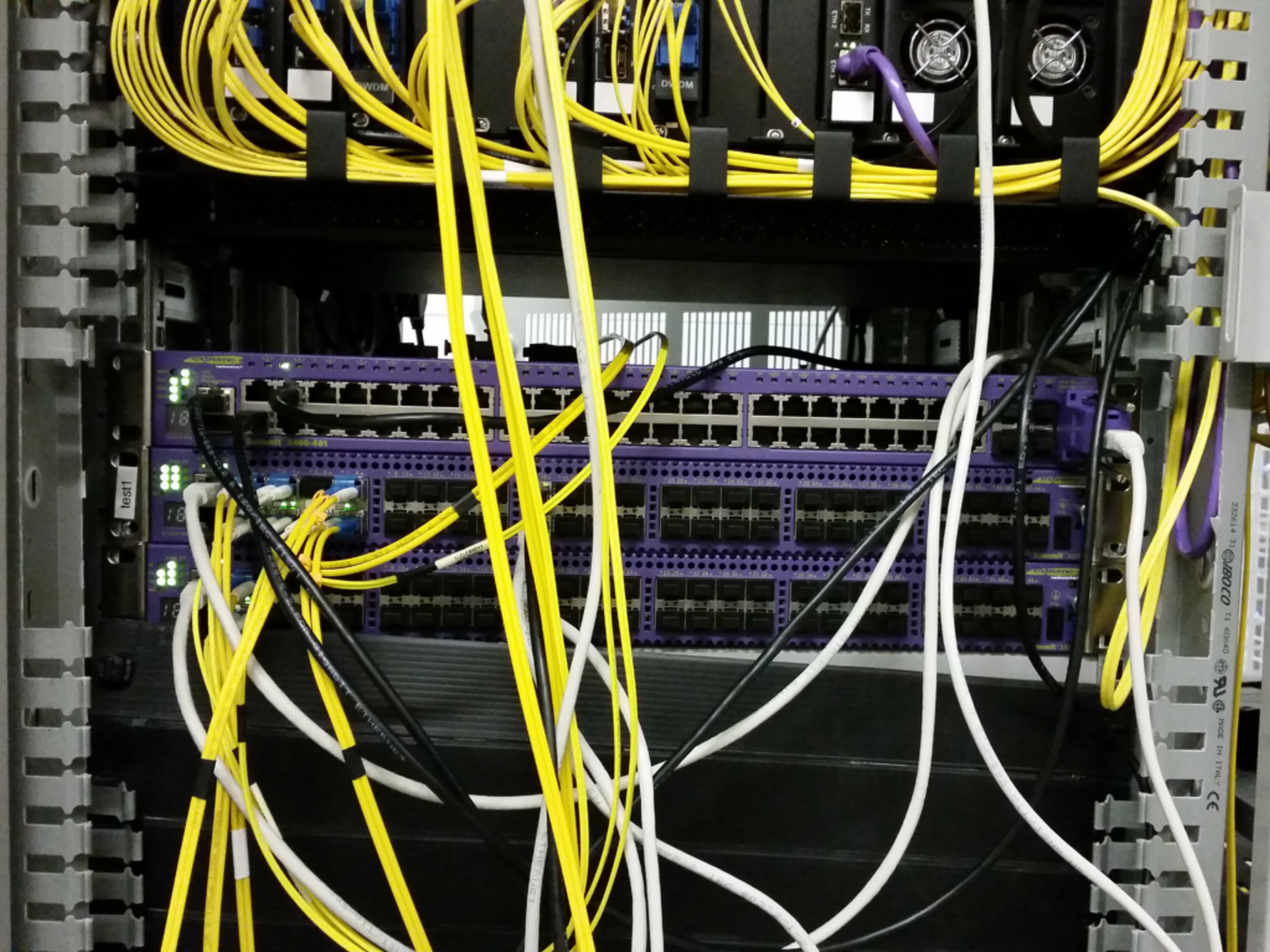
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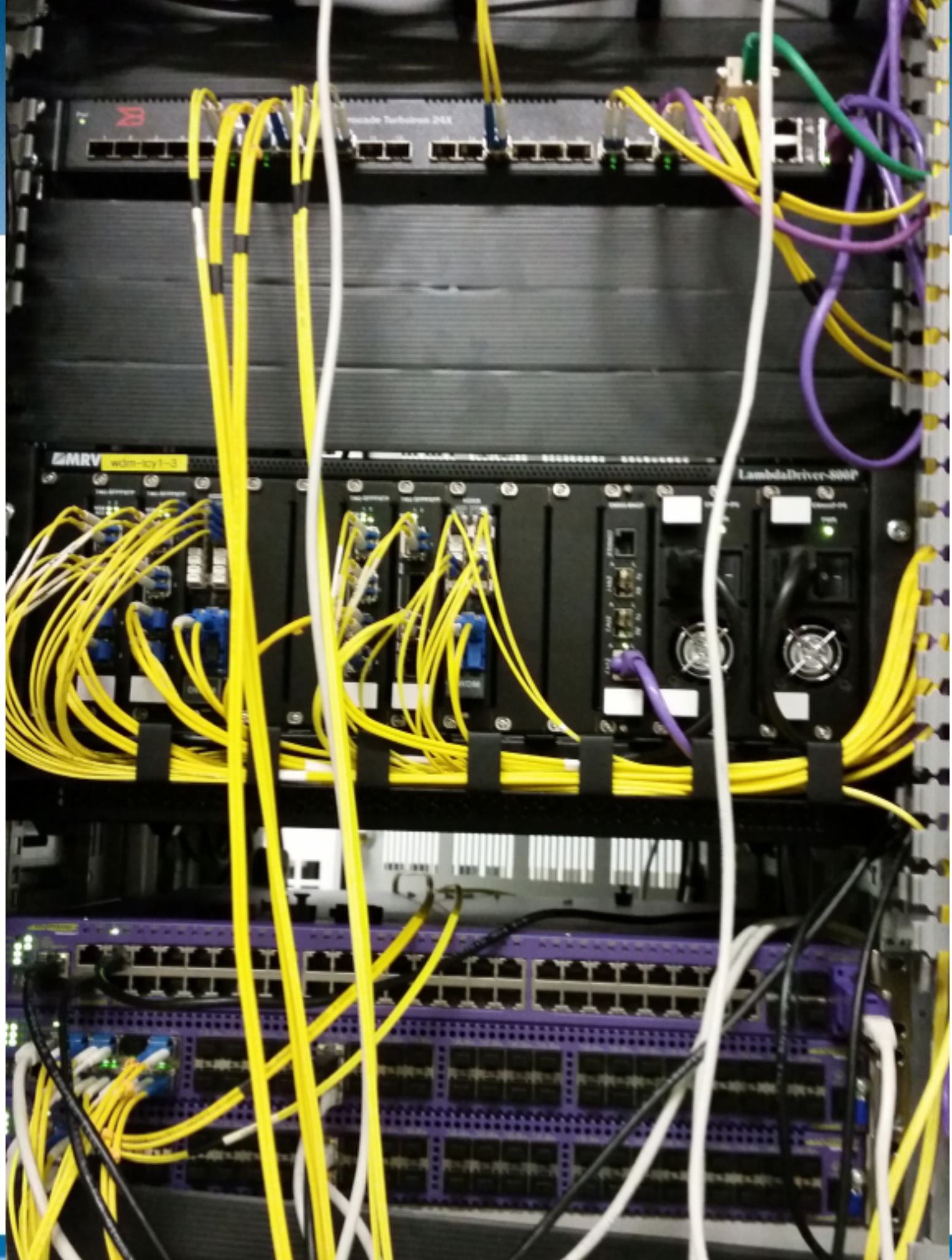
Lab tests completed; currently inserting X670s into the network.





Lab work includes template configs for:

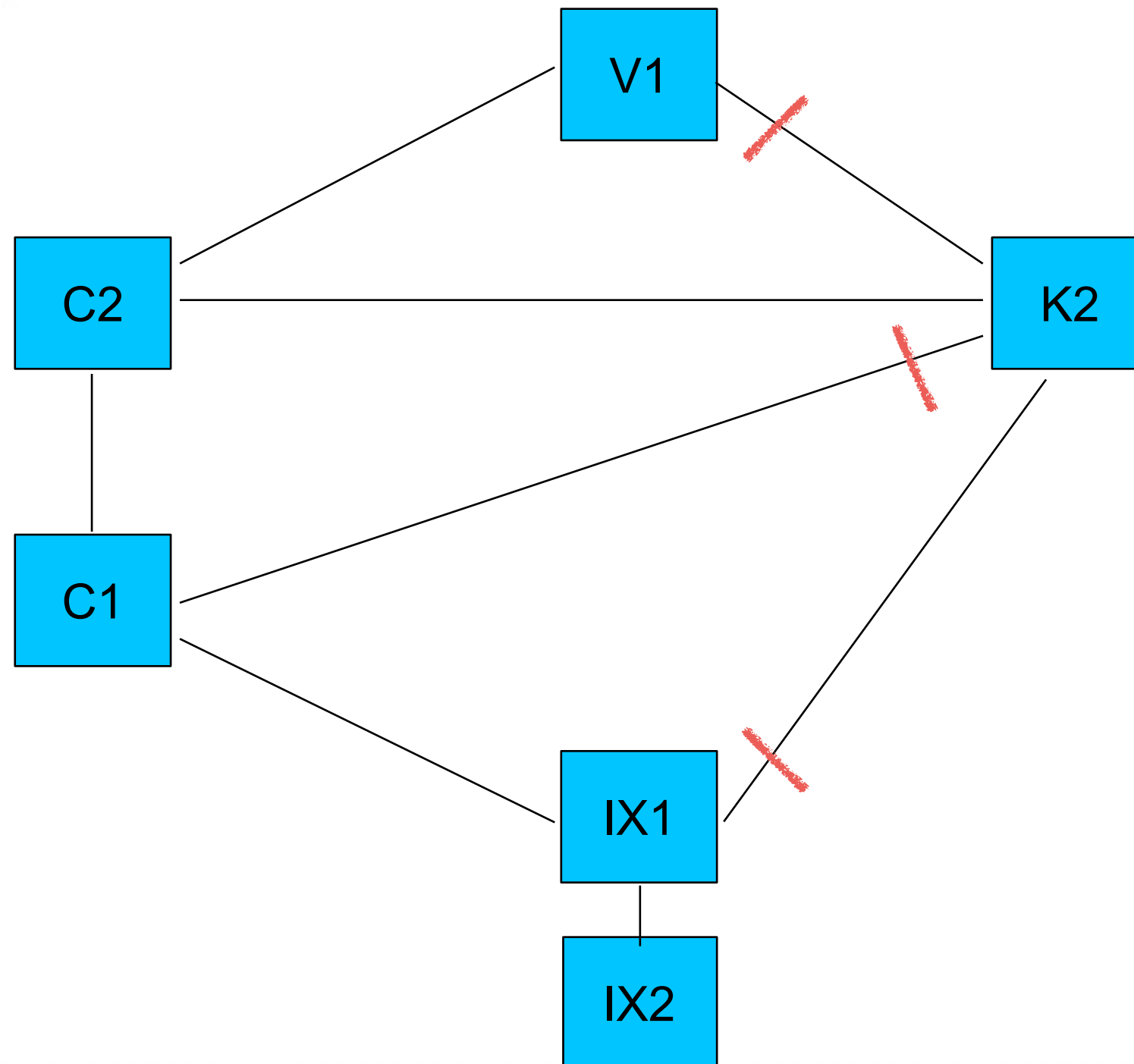
- Mgmt access & TACACS+
- NTP / Syslog / SNMP
- VLANs
- STP
- Sflow
- LLDP / EDP
- LAGs / LACP
- Port mirroring
- Storm control
- L2 ACLs
- Port security
- UTP Auto-neg / hard coding





i n t e r n e t n e u t r a l e x c h a n g e

LAN1 Core TI24X Topology Before Upgrade





LAN1 Forklift Upgrade - Schedule

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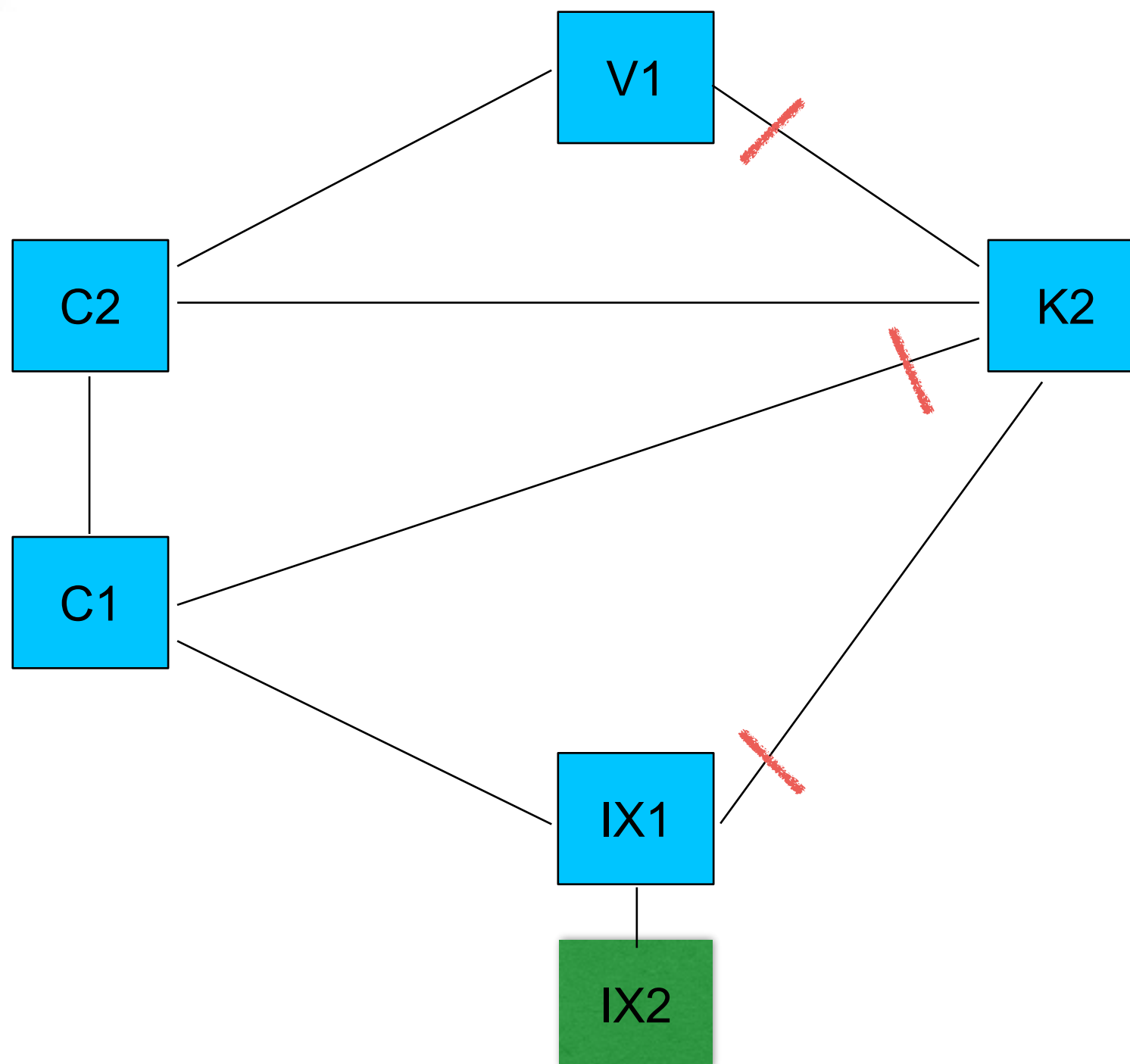
Our current schedule for this operation is:

Nov 27: replacement of current 10G switch in Interxion DUB2 with new 10G core/access switch **[DONE]**



i n t e r n e t n e u t r a l e x c h a n g e

LAN1 Core Upgrade





LAN1 Forklift Upgrade - Schedule

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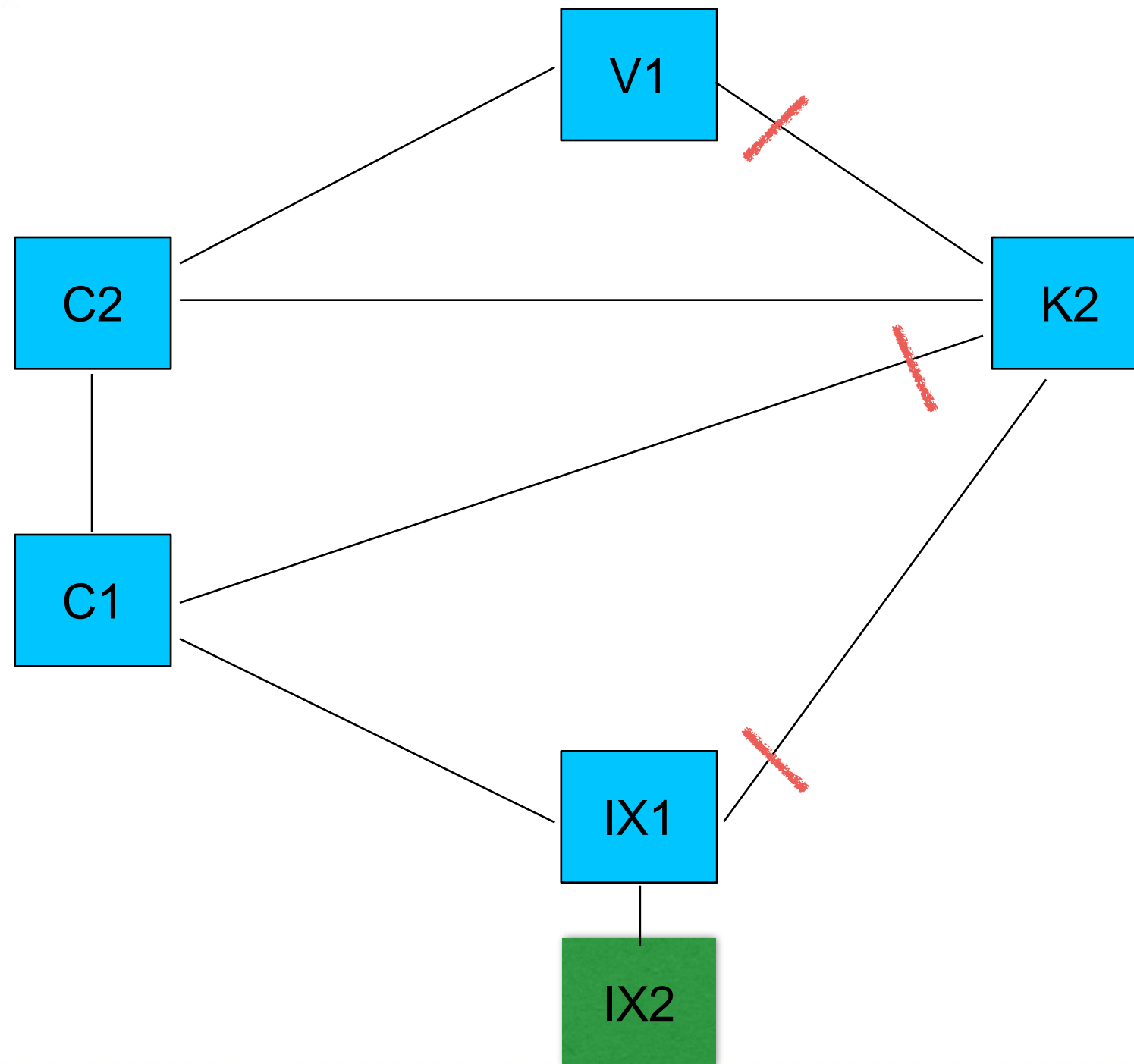
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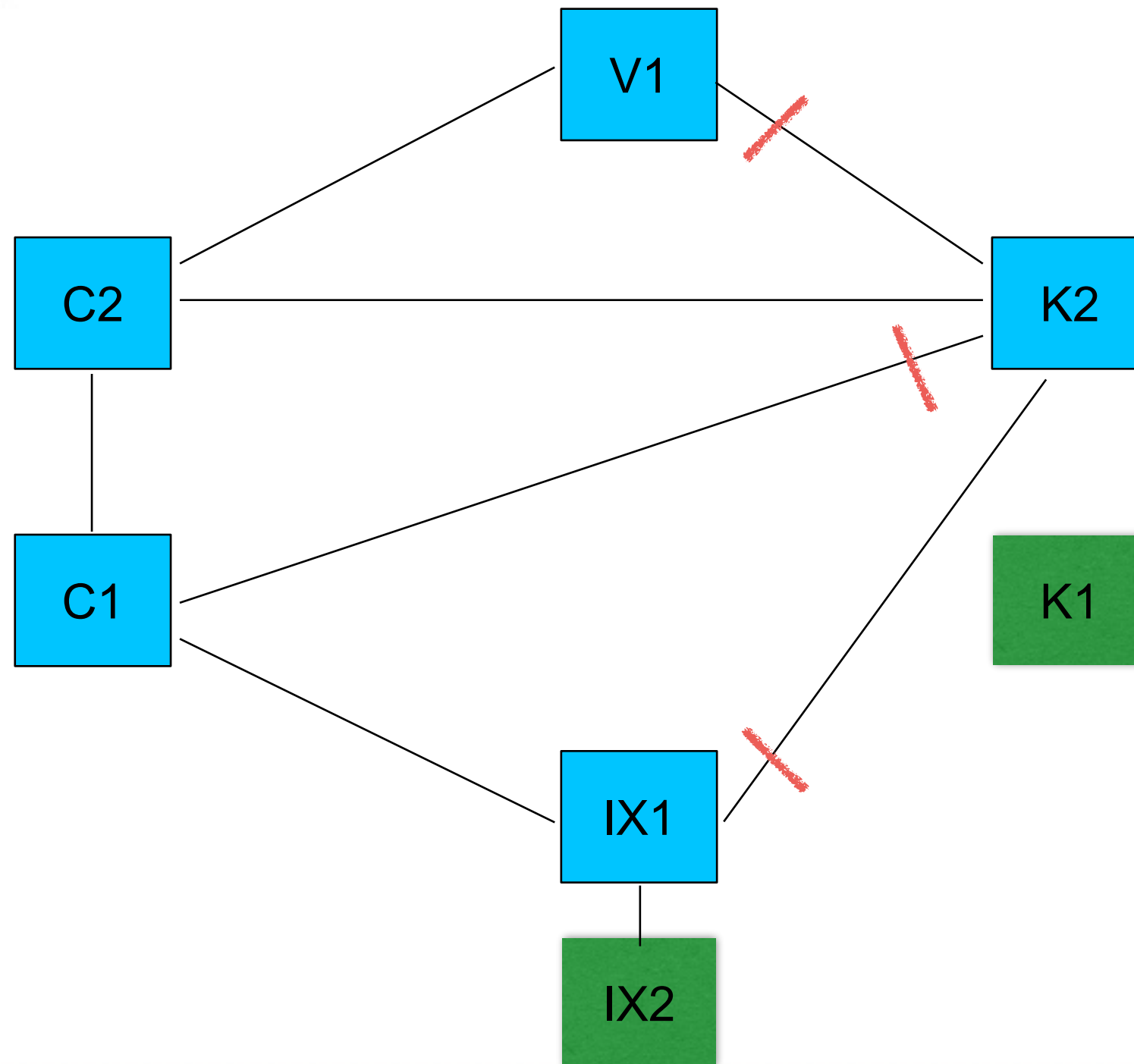
Example Insertion of x670 into KCP





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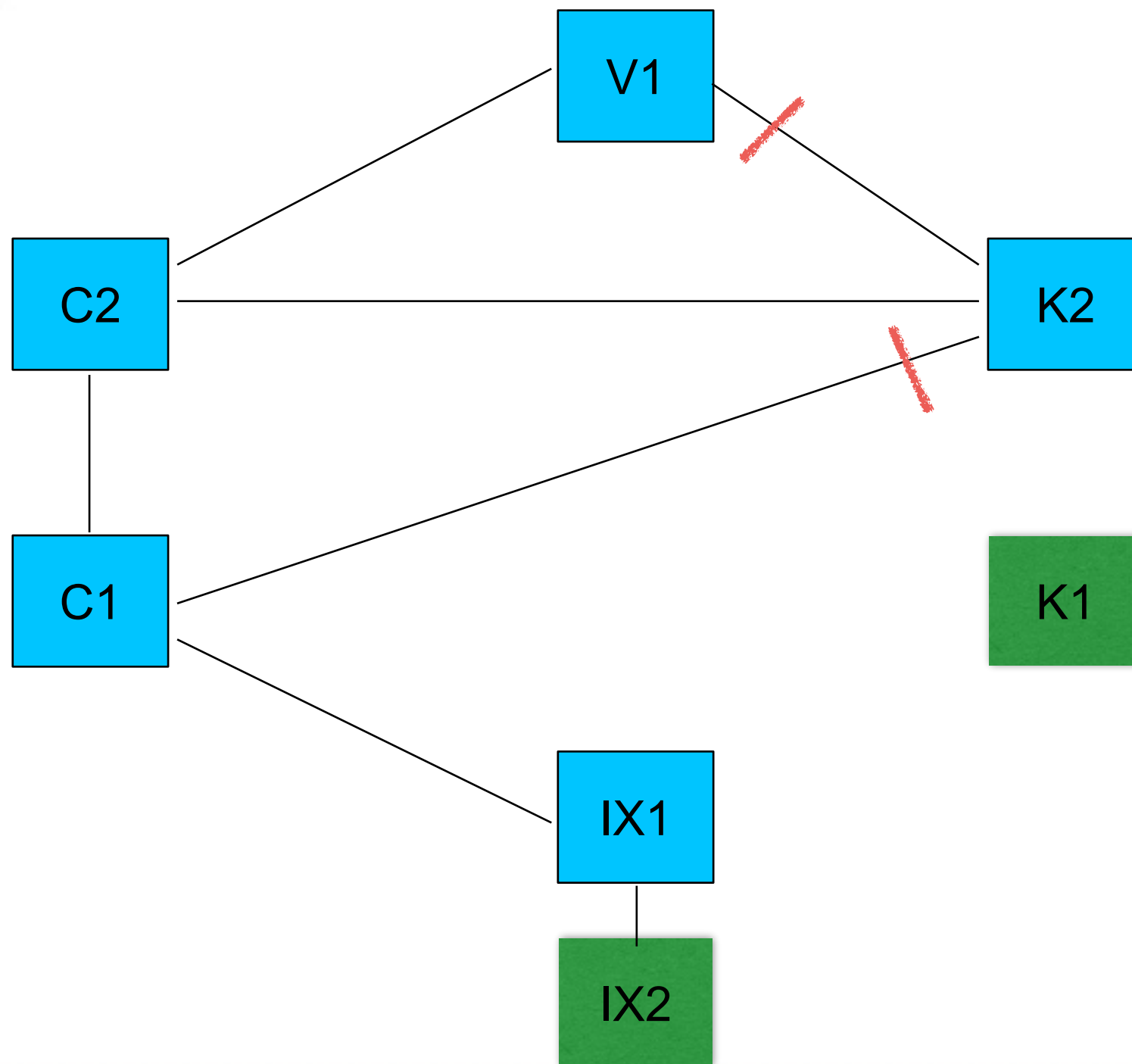
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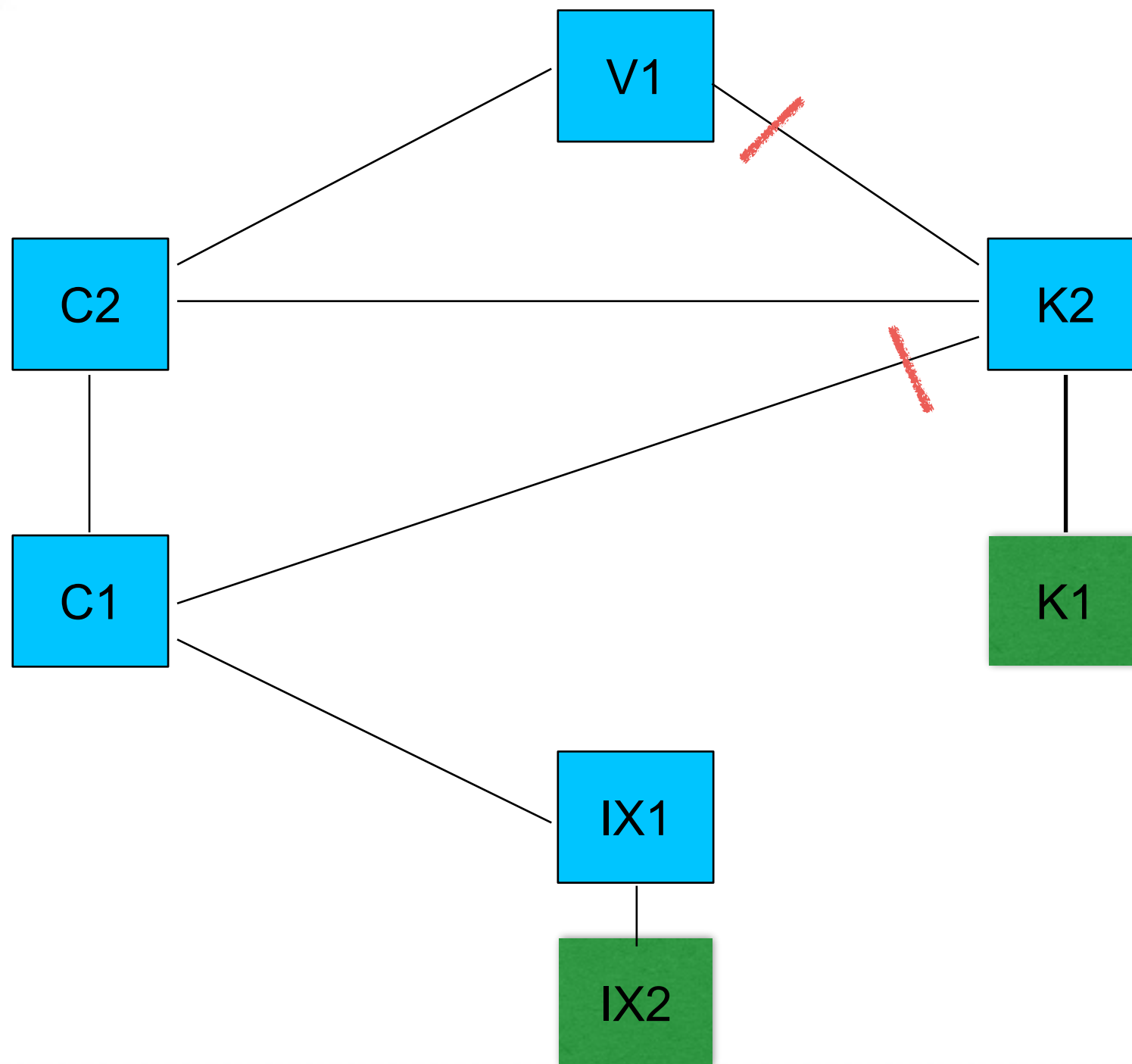
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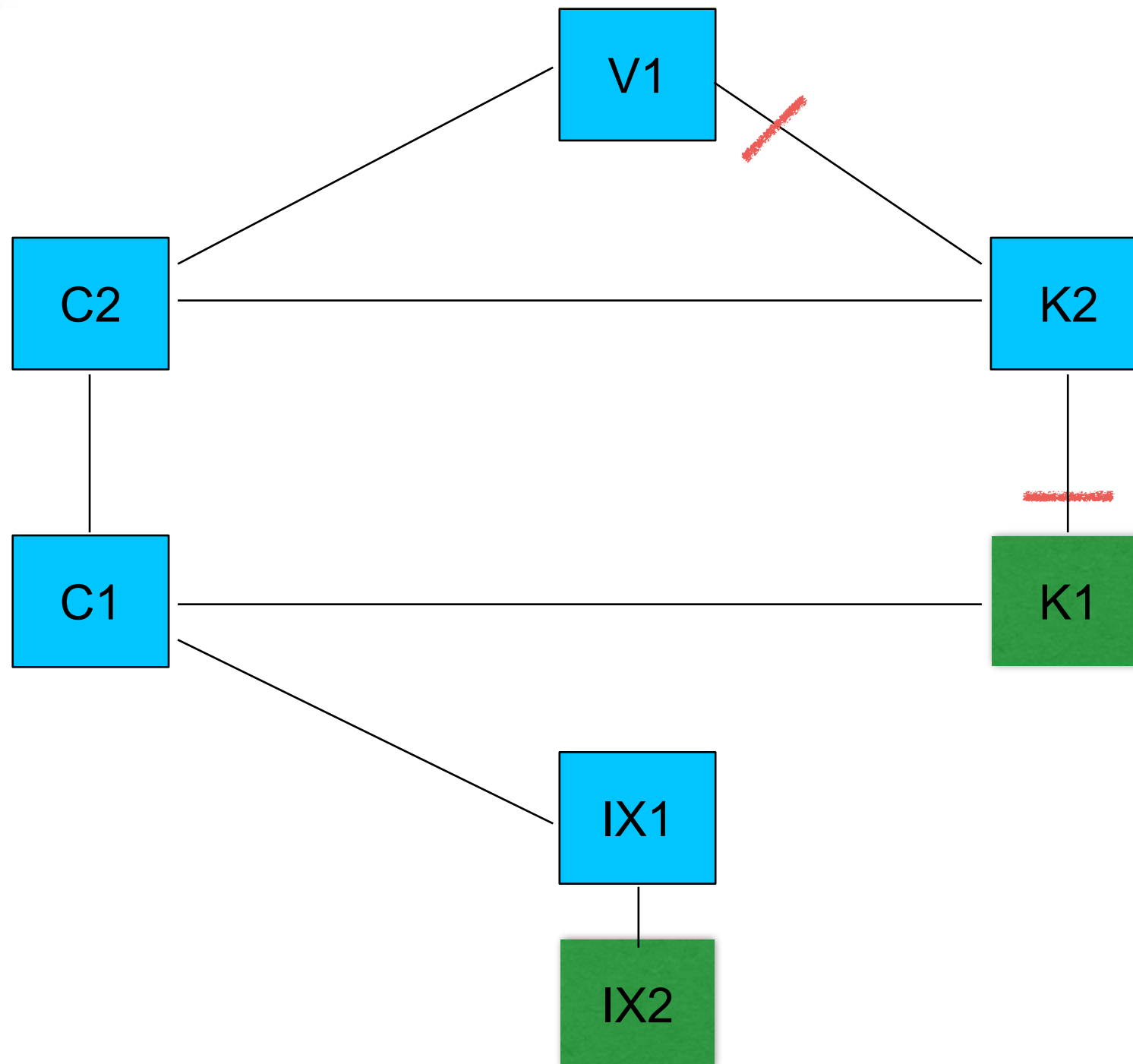
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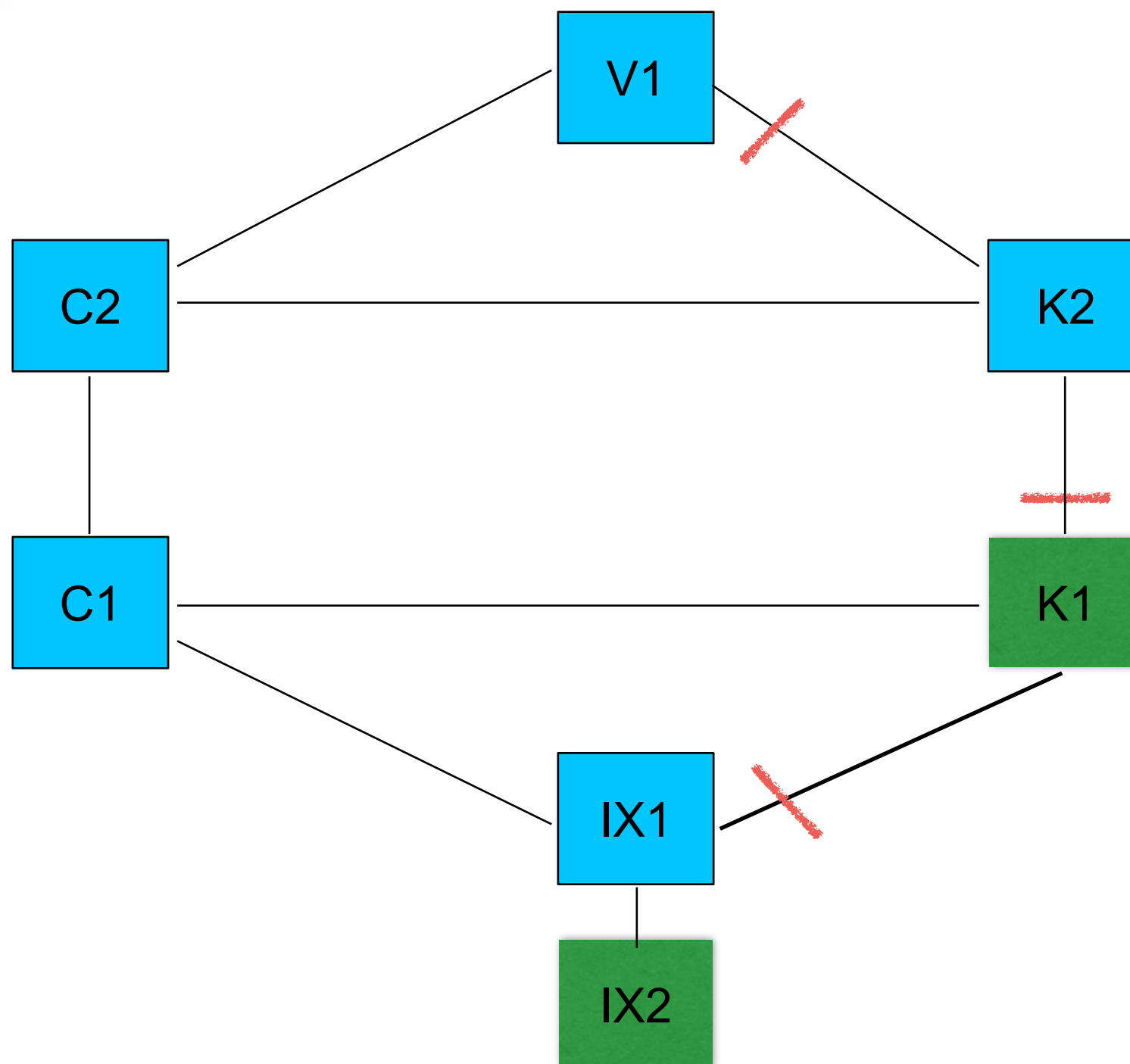
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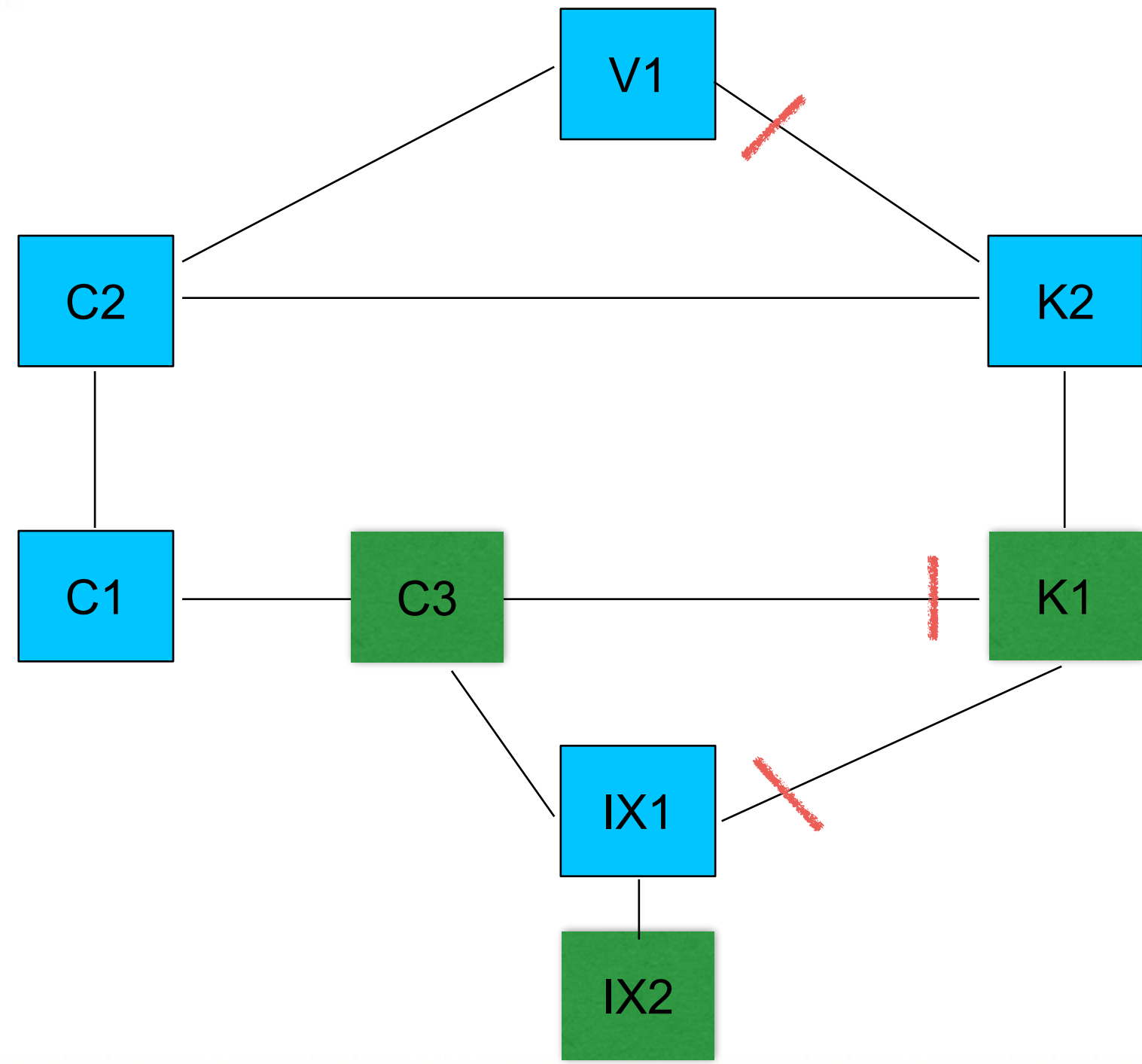
Dec 11: insertion of new 10G core / access switch in Telecity Citywest, and migration of 4x10G KCP-CWT core trunk from to new kit. **[DONE]**

[break for December change freeze]



i n t e r n e t n e u t r a l e x c h a n g e

After Last Night's Maintenance:





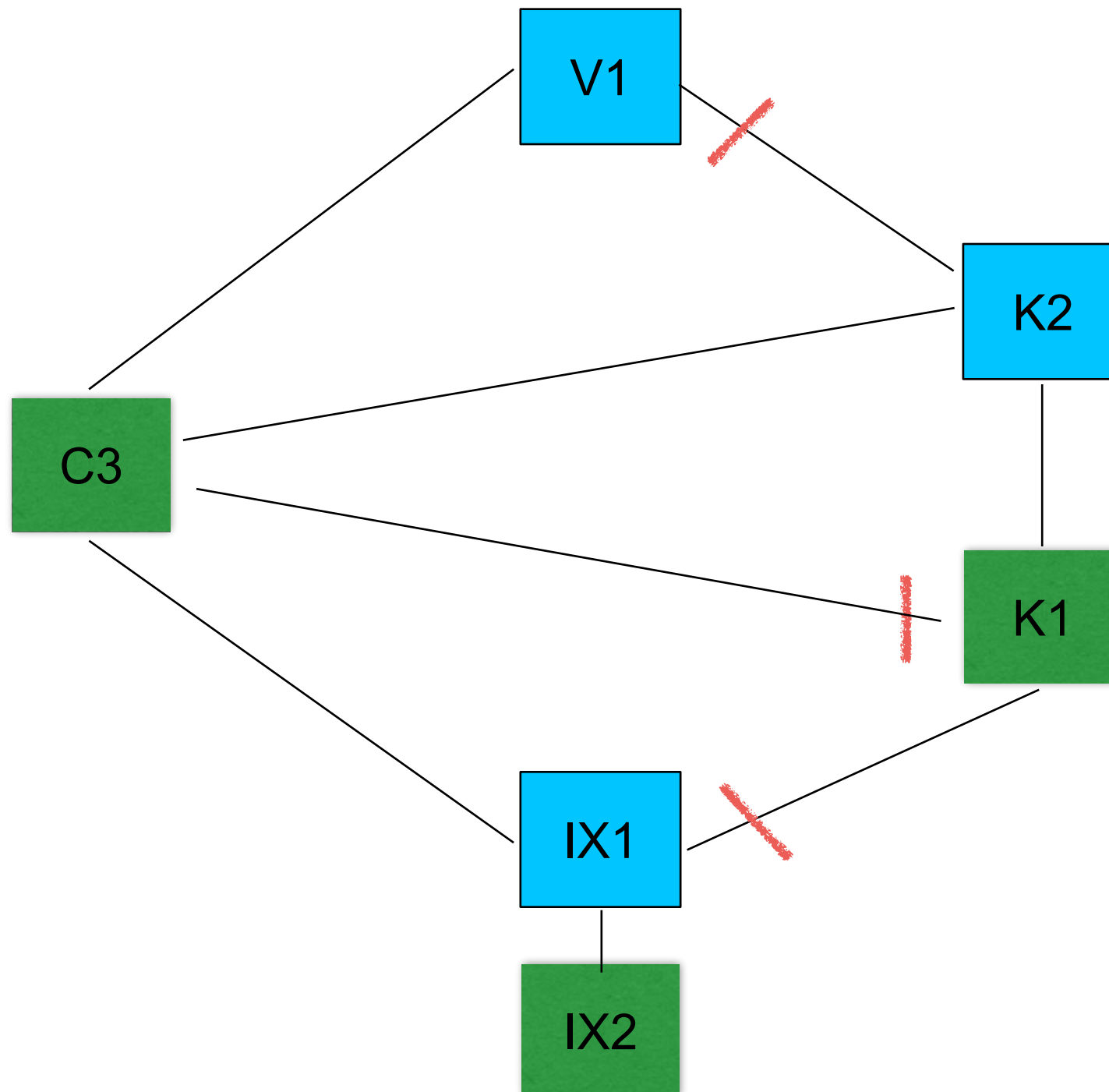
LAN1 Forklift Upgrade - Schedule

Jan 15: migration of all 10G member ports in Telecity Citywest.



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Jan 15th:





LAN1 Forklift Upgrade - Schedule

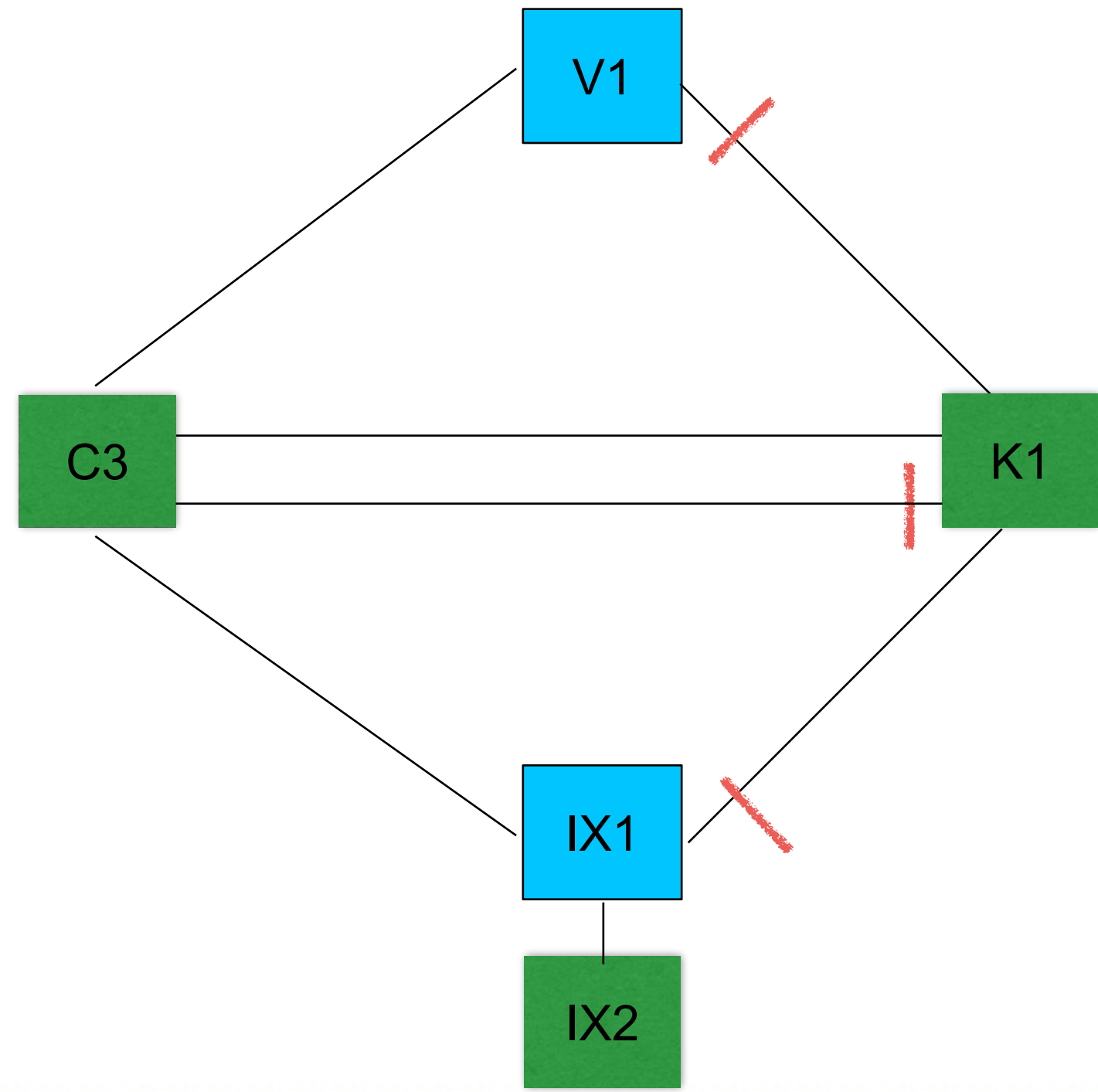
Jan 15: migration of all 10G member ports in Telecity Citywest.

Jan 22: migration of all 10G member ports in Telecity Kilcarbery.



i n t e r n e t n e u t r a l e x c h a n g e

Jan 22nd:





LAN1 Forklift Upgrade - Schedule

i n t e r n e t n e u t r a l e x c h a n g e

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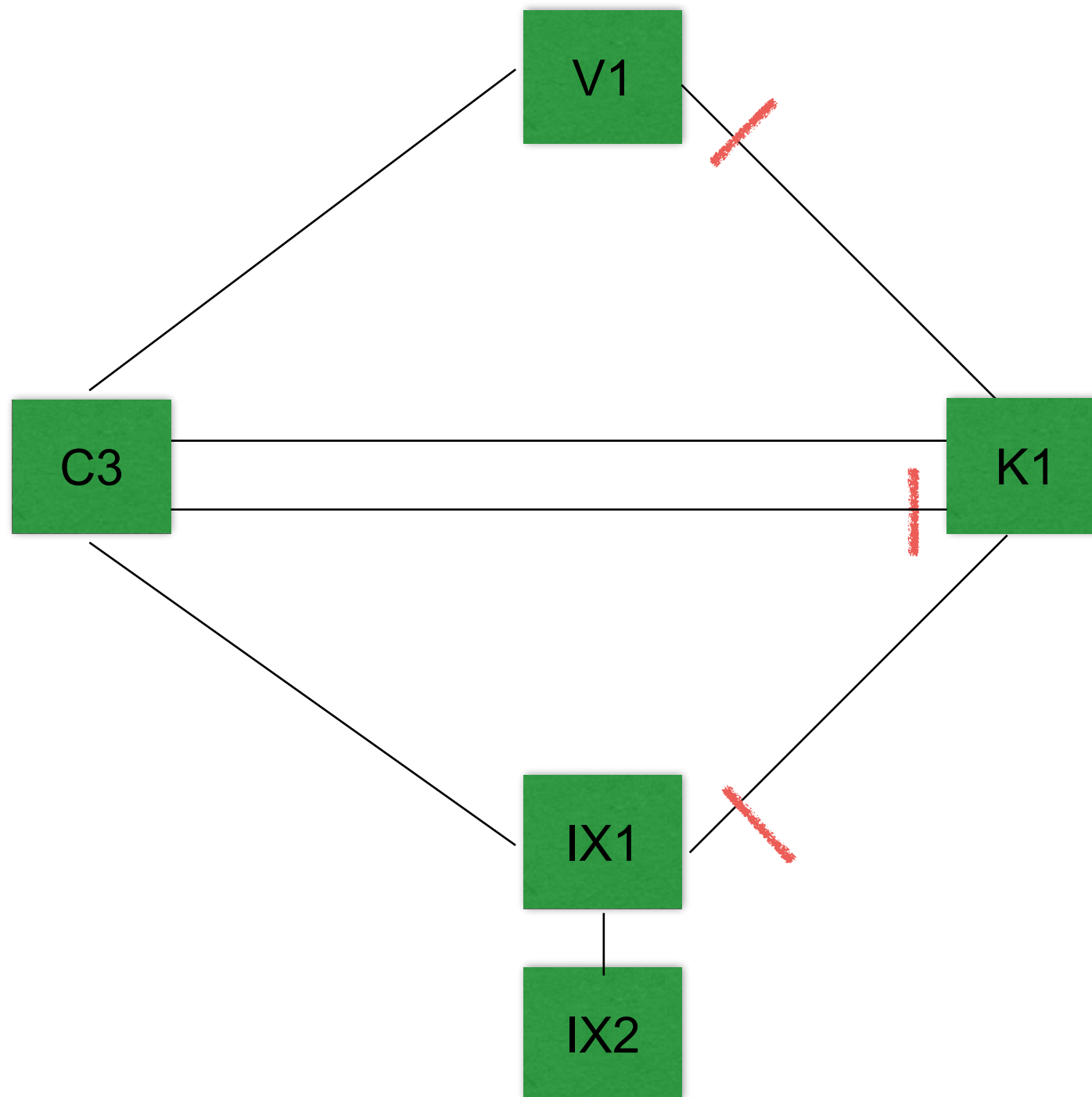
Jan 22: migration of all 10G member ports in Telecity Kilcarbery.

Jan 29: replacement of current 10G switches in Interxion DUB1 and Vodafone Clonsaugh with new switches, including member port migration.



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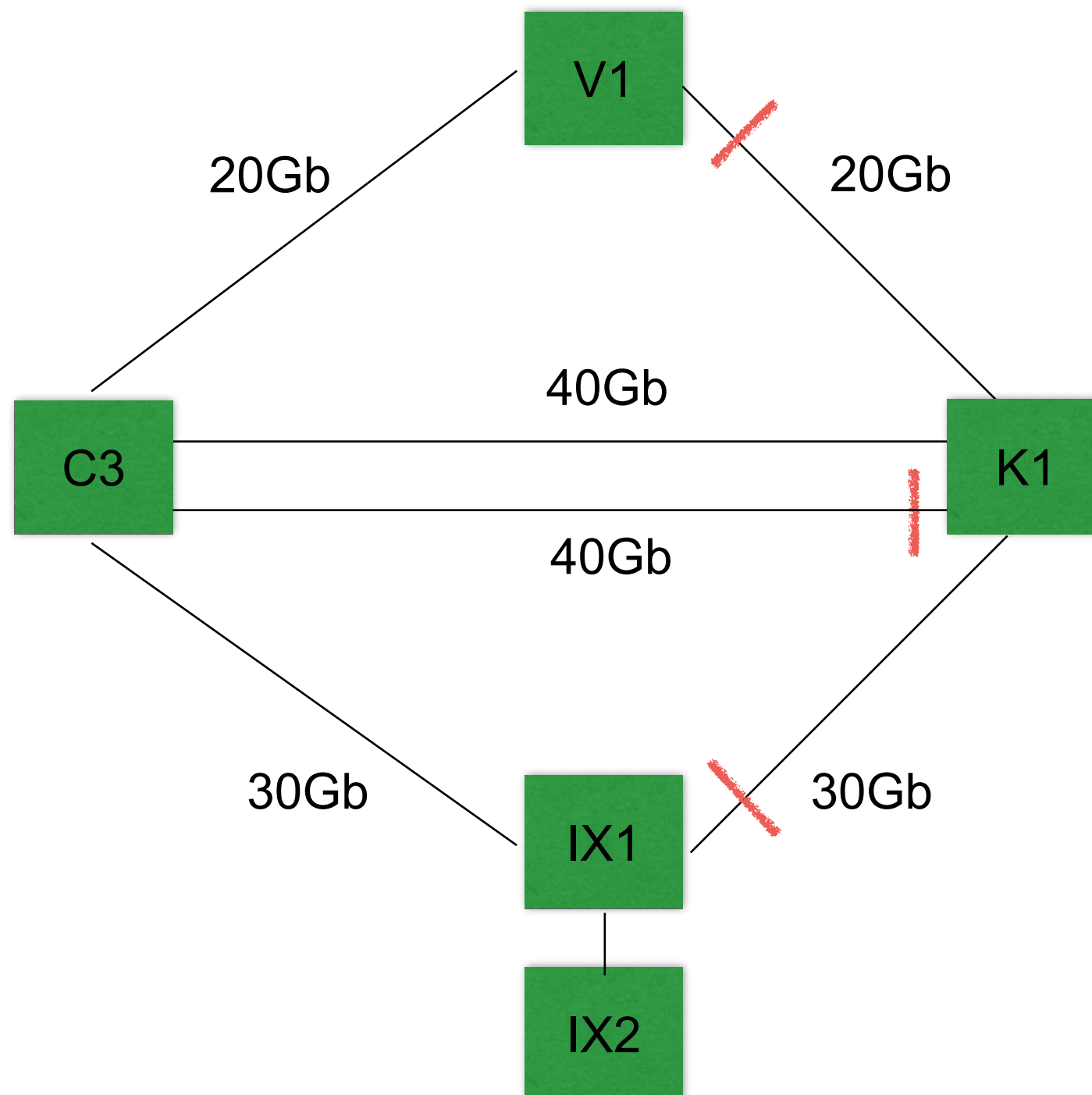
Jan 29nd:





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Core Links





LAN1 Forklift Upgrade - Schedule

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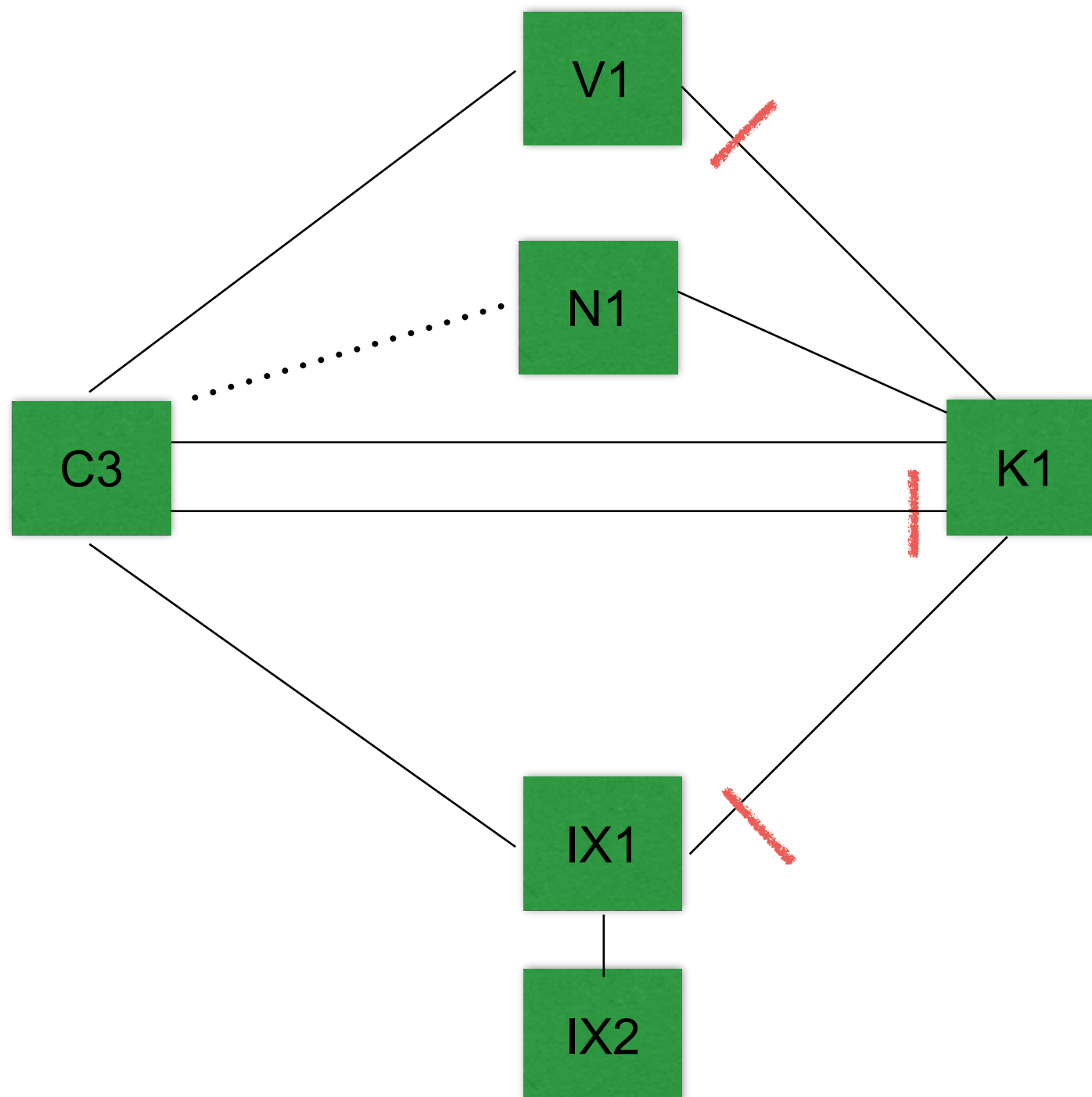
Feb 12: replacement of Telecity Kilcarbery 100M/1G access switch with Extreme x460.

Feb 19: replacement of Telecity Citywest and Interxion DUB1 100M/1G access switches with Extreme x460 units.



i n t e r n e t n e u t r a l e x c h a n g e

NWBP





Operations Support Procedure

i n t e r n e t n e u t r a l e x c h a n g e

INEX Operations current support details are always available on: <https://www.inex.ie/ixp/static/support>

Please try and email **operations@inex.ie** rather than individual team members.

We're experimenting with emailing reminders of maintenance just before we start it.



Operations Update

i n e x
i n t e r n e t n e u t r a l e x c h a n g e

That's all folks...

...any questions?