UKNOF - May2020

Running a Global IXP in a Lockdown World

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Agenda

01 Lockdown Traffic Changes

02 Business as usual?...not really!

03 Working together while Working from Home

linx

01

Lockdown Traffic Changes

Lockdown Traffic Changes

❯ Starting early March we started to see new all-time traffic peaks on a nearly daily basis for several weeks

❯ The first peak coincided with major game updates being pushed by CDNs

❯ March 10th: 4.73 Tbps

❯ March 17th: 4.88 Tbps

❯ March 24th: 5.00 Tbps

❯ March 25th: 5.05 Tbps

❯ March 26th: 5.08 Tbps

❯ March 27th: 5.26 Tbps

linx
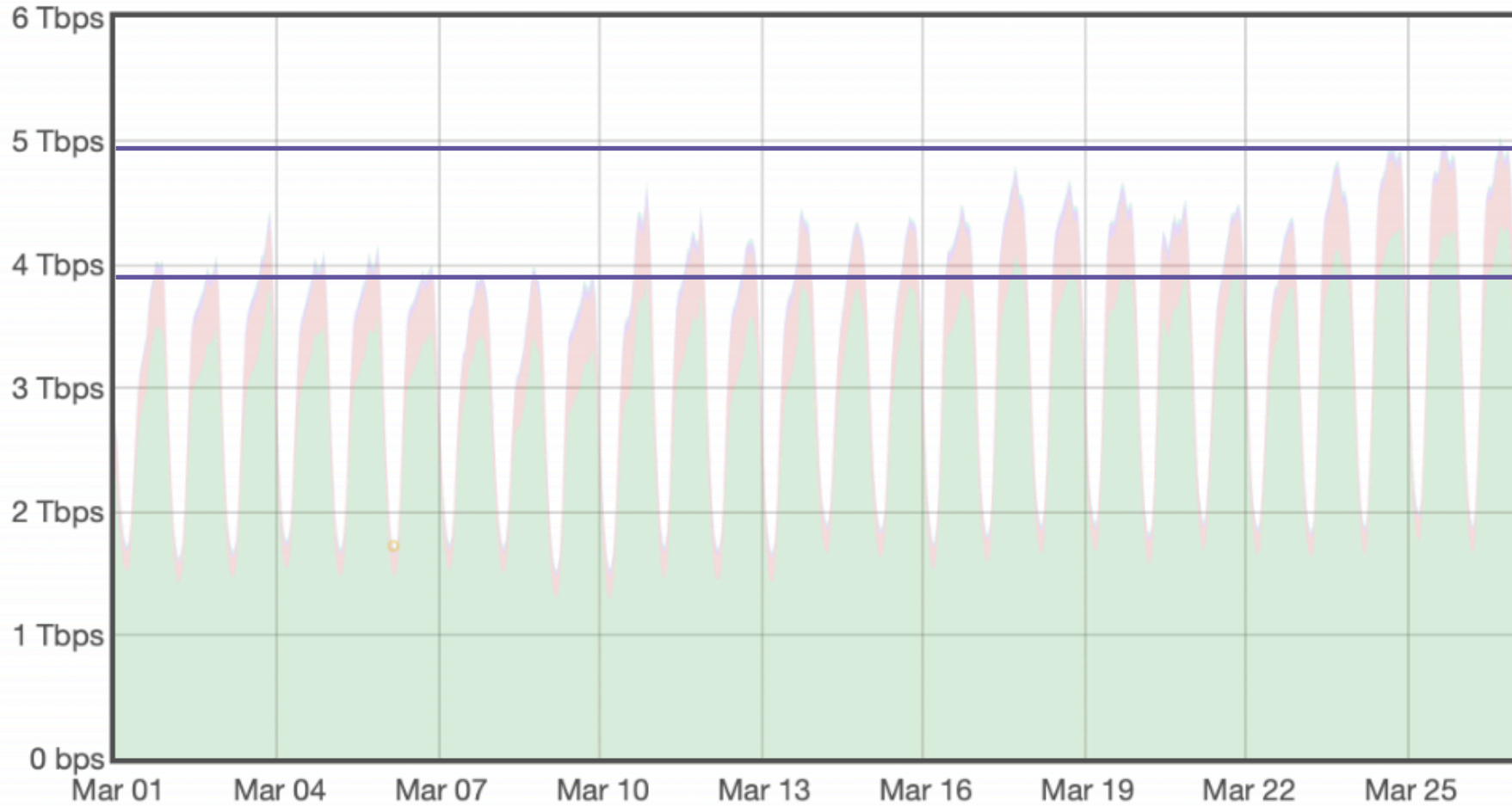
What was the impact to the network?

› Our principle has for many years been to run the network at maximum of 50% utilization in normal situation, and complete capacity upgrades before reaching traffic levels above 75%.

› The network is still in an interim setup until we have completed removal of the PTX routers.

› But: 25% traffic growth within a period of two weeks is not something we normally see.

LON1:
We did hit >80% on one of the links to Interxion.
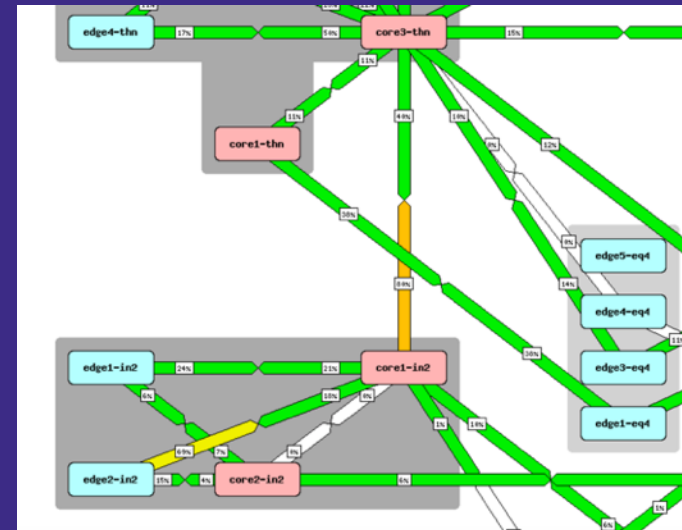
03

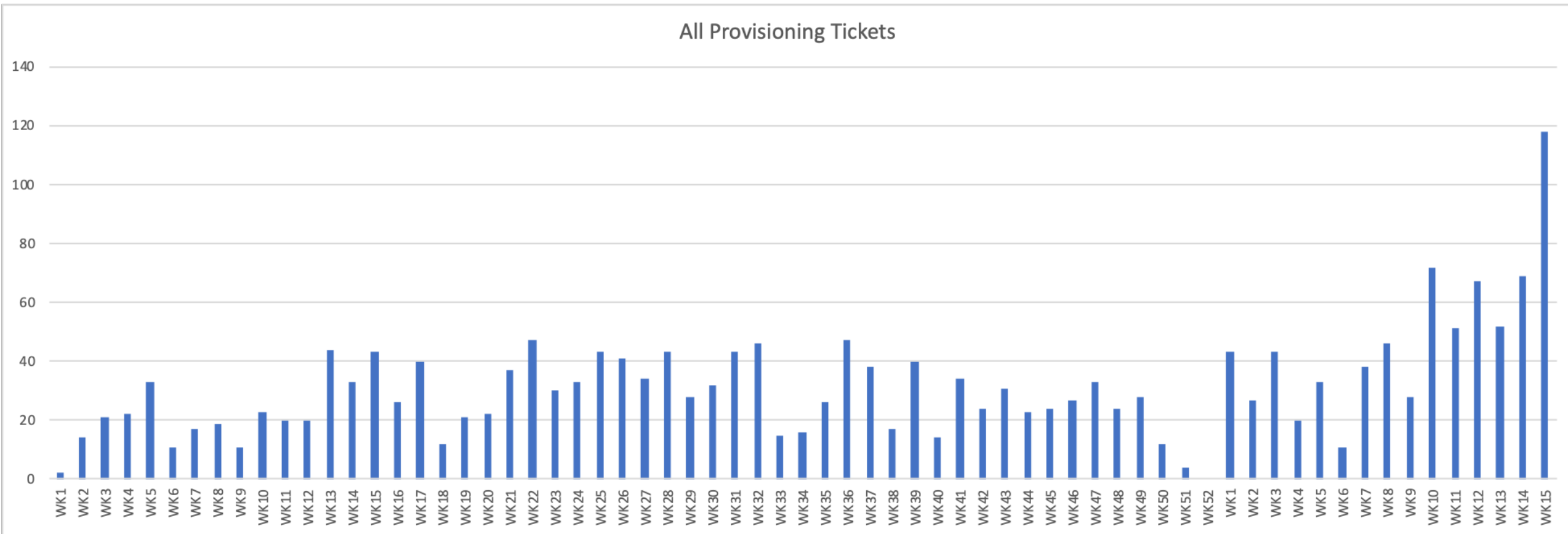## Business as usual?
…not really!

Working from home and other changes

> The Engineering team (and most other LINX staff) started working from home full time around March 12th.

>> Since our move to WeWork, bringing with it an untrusted WiFi network, all staff were using VPN connectivity already.

> The 24/7 NOC team moved to Working from Home a week later as they were able to commute outside of peak times.

>> NOC engineers did not have company laptops, so these were purchased early on when it became clear that we might have to WfH.

> All projects requiring site visits were put on hold.

> Site access limited to urgent work and member provisioning tasks.

> Where possible, additional member ports were pre-patched, and additional 100G cards installed at some sites.
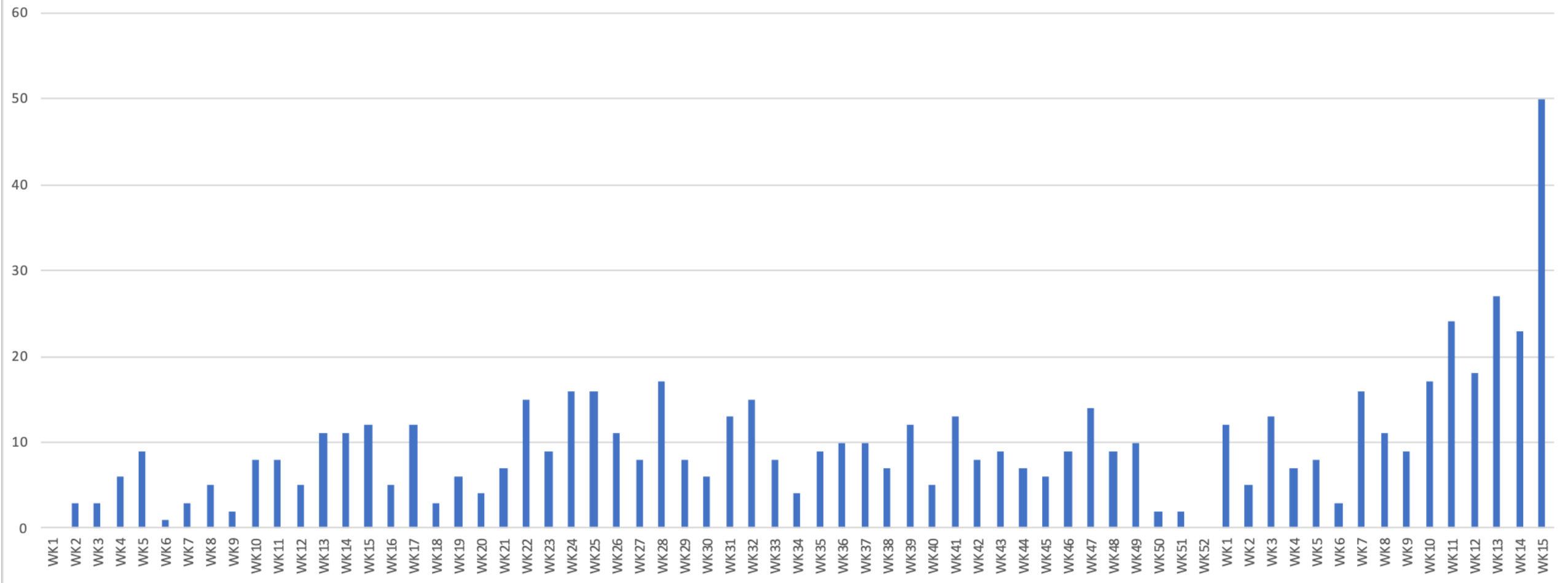
Provisioning tickets

- Immediate rise in number of provisioning tickets
- Majority of orders are port upgrades and new port orders
- Increase in Intrasite and Intersite PI orders

All Provisioning Tickets

Port Capacity (upgrades, new ports) - Provisioning Tickets actively worked on

Business as usual? … not really!

- Over the last weeks we have constantly adjusted to the changing situation:
  - Limiting site visits wherever possible
    - So far, we have had no issues getting access to any of the sites and were following the adjusted (and changing) procedure recommended by each datacenter operator.
  - Use of personal cars instead of public transport
  - Increased use of Remote Hands services when and where possible

04

Working together while Working from Home

Working together while Working from Home

› Daily "Good Morning" video calls with the Engineers, including the NOC team

› Video bridges open 24/7 for Engineers and the NOC to drop in an out whenever wanted or needed

  › Allows the two people on shift for the NOC to still work together seamlessly. Engineers join NOC bridge when needed.

  › Engineering bridge allows for questions to be raised, coordination of work but also "water cooler" type discussions

Thank you

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