



# Product Update

LINX 113

**Mike Hellers**

Product Development Manager

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25/05/2021

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**01** PVLAN And Closed User Groups

**02** Microsoft Azure Peering Service

**03** BCP 214 – BGP Session Culling

01

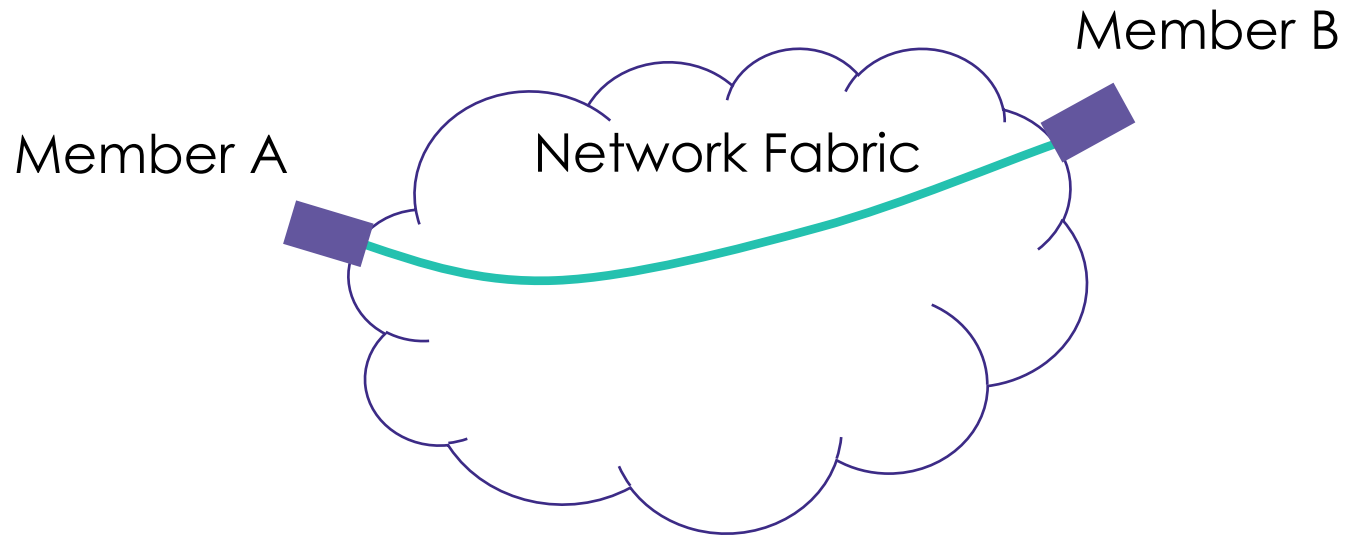
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## PVLAN and Closed User Group

## Private VLAN and Closed User Groups

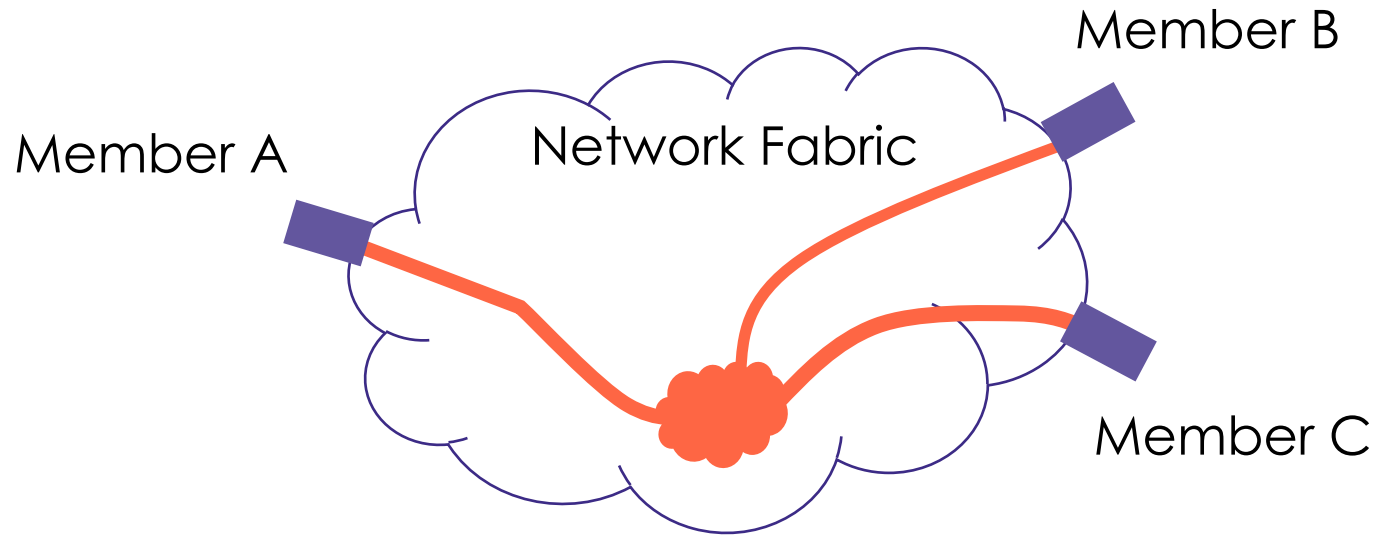
- Available on LON1, LON2, Manchester and NoVA
- Simple and straight forward Layer2 services
- Available on existing ports or dedicated ports
  - Configuration of existing ports will be changed from an access port to a dot1q enabled trunk port.
  - Existing Peering Service will be presented on VLAN 100.
- Bandwidth from 50Mbps to 10Gbps
- Available for direct connected members and ConneXions members

## Private VLAN



- Point to Point Layer 2 service between two members
- Single MAC address by default, but that limit can be increased
- 1500 byte MTU
- No charges to Member B

## Closed User Group



- Private Layer 2 instance between two and more members
- Service charged to Member A (Owner)
- Only Setup fee for members joining the Closed User Group
- Participating members do not need to connect at the same bandwidth
- Maximum bandwidth defined by owners Service



### Private VLAN Service

Use this form to order new private VLAN services between members.

#### Private VLAN Service Details

**LAN \*** LINX Manchester ▾

**Service Type \*** Point to Point ▾

**Service Name \*** My PVLAN Service

Choose Your Own Name/Identifier for this Private VLAN.

**Bandwidth \*** 100 Mbps ▾

Do you want this to be MAC ACL protected?

#### Your details

**Organisation Name \*** LINX

**ASN \*** Select ASN ▾

**Full Name \*** Mike Hellers

**Email Address \*** mike.hellers@gmail.com

**Telephone Number** Telephone Number

**Which port will be used \*** Select a port ▾

**VLAN ID \*** VLAN ID

#### Member B Details

**Organisation Name \*** Select an organisation ▾

**ASN \*** Select ASN ▾

**Full Name \*** Full Name

**Email Address \*** Email Address

### Closed User Group PVLAN Service

Use this form for setting up a new Closed User Group PVLAN or to Join an existing one.

#### Private VLAN Service Details

**LAN \***

**Action \***  Create a new closed user group  Join existing closed user group

**Service Name \***  Name/Identifier of closed user group [i](#)

**Bandwidth \***

#### Your details

**Organisation Name \***

**ASN \***

**Full Name \***

**Email Address \***

**Telephone Number**

**Which port will be used \***

**VLAN ID \***

Submit Order



### My Ports

Ports **Trunks**

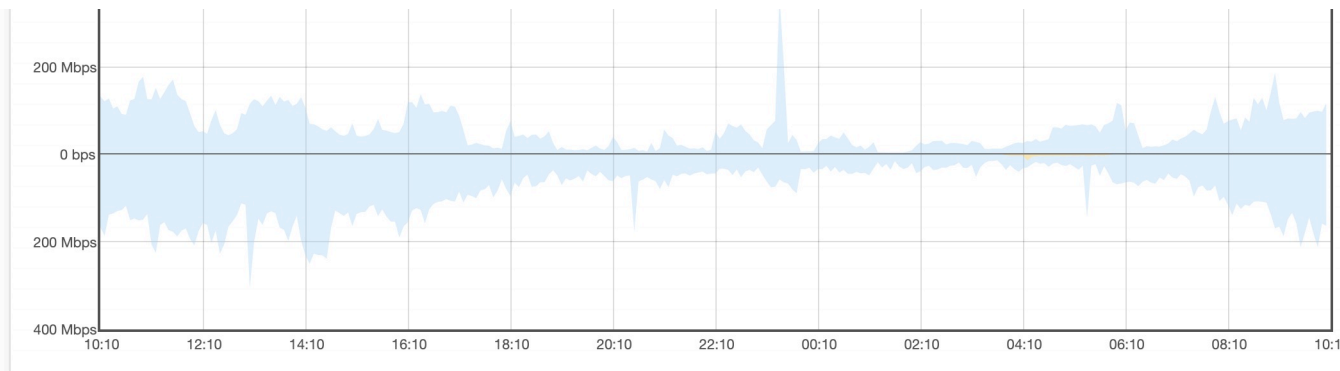
Show: 10 Search:

Switch ▲	Port ▲	LAN	Size	Service Type	Current In	Current Out	Average In	Average Out	↓↑
edge-1-10	3/24	lon1	10 Gbps	Multiservice Port	117.17 Mbps	163.19 Mbps	58.80 Mbps	89.89 Mbps	<input type="checkbox"/>
edge-1-10	3/24 VLAN: 100	lon1		Peering Unit	117.17 Mbps	163.19 Mbps	58.80 Mbps	89.58 Mbps	<input checked="" type="checkbox"/>
edge-1-10	3/24 VLAN: 221	lon1	1 Gbps	Private VLAN ( )	38.59 bps	38.13 bps	41.04 bps	304.41 kbps	<input checked="" type="checkbox"/>

Showing 3 of 3 records

Pages: Previous 1 Next

Switch ▲	Port ▲	LAN	Size	Service Type	Current In	Current Out
edge-1-10	3/24	lon1	10 Gbps	Multiservice Port	117.17 Mbps	163.19 Mbps
edge-1-10	3/24 VLAN: 100	lon1		Peering Unit	117.17 Mbps	163.19 Mbps
edge-1-10	3/24 VLAN: 221	lon1	1 Gbps	Private VLAN ( )	38.59 bps	38.13 bps



Chat Now ?

## PVLAN and Closed User Group

- > Same pricing for PVLAN and Closed User Group
- > Only Install fee charged for joining a Closed User Group
- > 1 month term

Service	Install Fee	Monthly Recurring Fee
100mbps – 2GE	£200	£25
3GE	£200	£60
4GE	£200	£80
5GE	£200	£100
10GE	£200	£200

02

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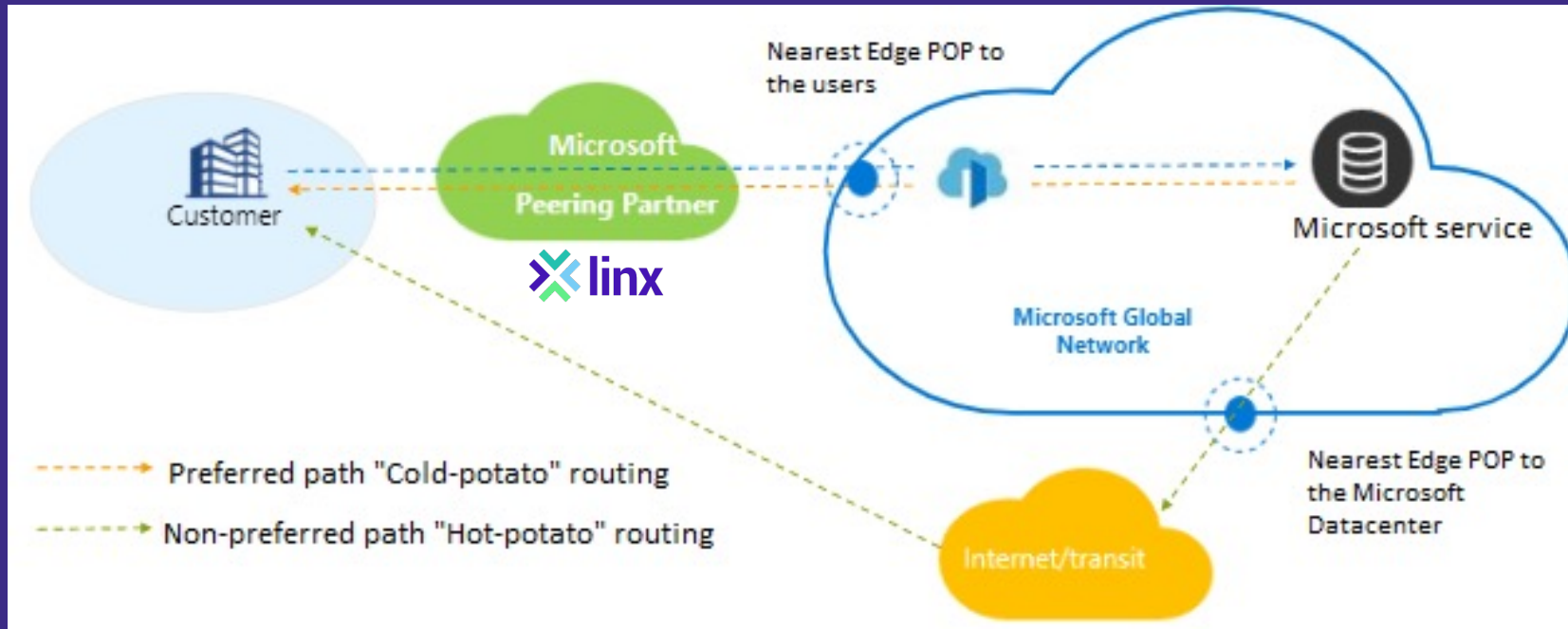
## Microsoft Azure Peering Service (MAPS)

# Microsoft Azure Peering Service

## Key Features

- Ensures that the egress traffic from the prefixes registered with Peering Service connections takes the nearest Microsoft Edge PoP locations on the Microsoft global network
- Traffic insight such as latency, throughput, packet loss for last mile, mid mile and first mile connectivity
- Route analytics and statistics. Events for route leak/hijack detection or non-optimal routing
- SLA on network-availability and packet-delivery on Microsofts network
- No minimum bandwidth

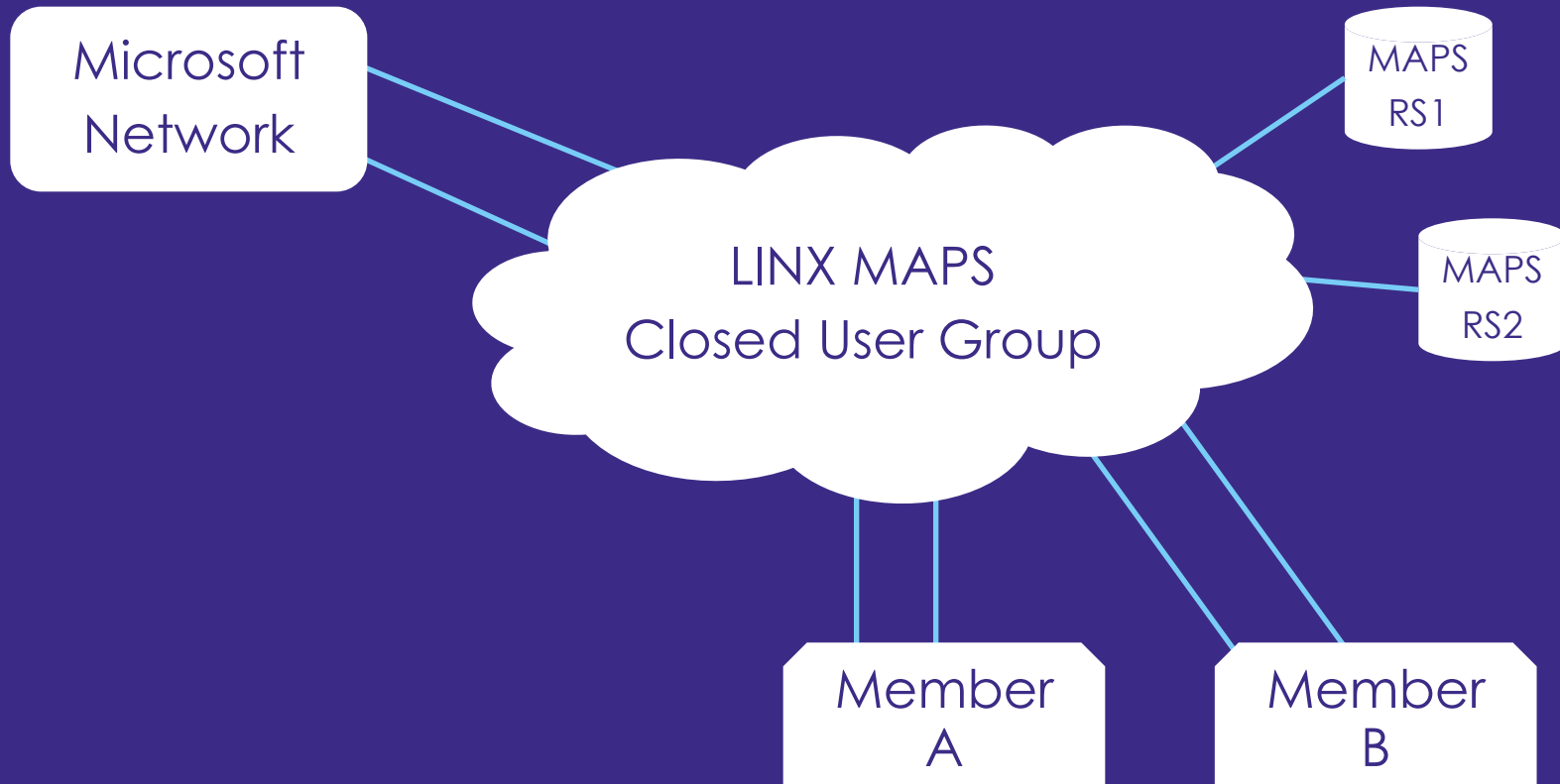
# Microsoft Azure Peering Service



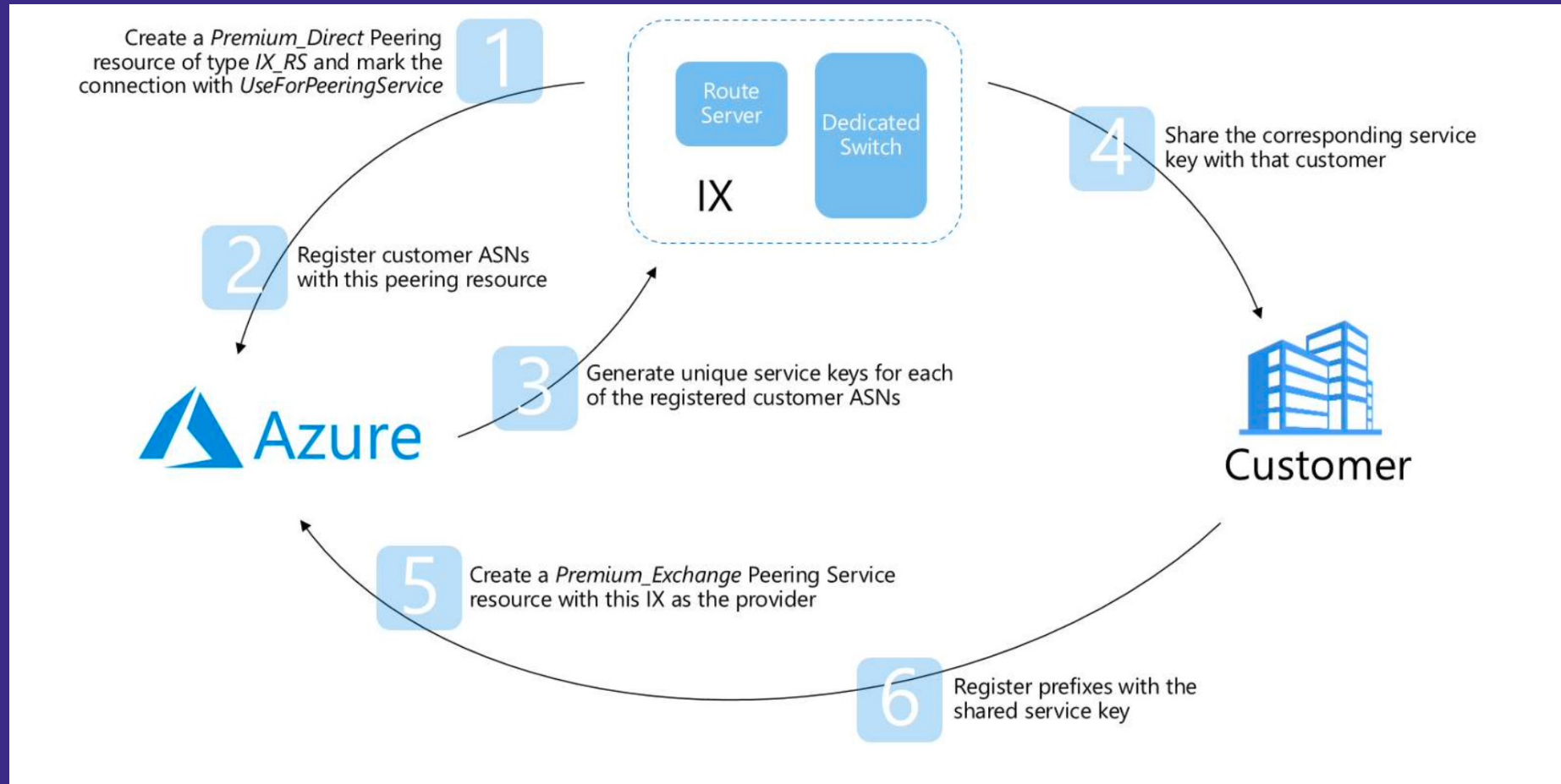
## Cold-potato routing

Ensures that traffic stays on the high-capacity, low-latency and highly reliable Microsoft global network until it's as close to the destination as possible

# Network Topology



# MAPS Ordering and Setup workflow



## MAPS pricing

Service	Install Fee	Monthly Recurring Fee
Up to 3 Gbps	£300	£80
Up to 5 Gbps	£300	£100
Up to 10 Gbps	£300	£200



03

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## BCP214 BGP Session Culling

## BCP 214 – BGP Session Culling

- Reduce the impact of service affecting maintenance by proactively tearing down members BGP sessions before the start of a maintenance
- Implemented by blocking TCP port 179 on members ports ahead of maintenance start, allowing for traffic to converge through alternative paths
- Popular request by members
- Currently in the final implementation stages
- Possibilities for members to opt-out through the portal

## Why only now?

- Fully integrated into our backend systems including the Network Config automation platform and the Maintenance ticket system
- Flexibility needed to allow selection of member services per Site, per Switch or per Linecard depending on the maintenance
- Possibility for members to opt-out
- No manual configuration changes

## How and when?

- System changes are being completed during the current and next agile sprint
- Once fully implemented, we will provide a 2 week notice before starting to use it during future maintenances, allowing for any member who wants to opt-out to do so
- Every maintenance ticket will have a notice mentioning that BCP214 will be used as part of the maintenance
- We will only use it for service impacting maintenance work, and not for at risk maintenances



Thank you

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