Sabey Data Centers' Intergate Xchange (IGX) would like to establish a Layer 2 transport interconnect (10G) with the Seattle Internet Exchange (SIX)

This document provides the technical specifications as required by the SIX in order to approve such a request.

Summary

The purpose of this interconnection is to extend the SIX fabric throughout the IGX network which currently spans WA and OR. The mechanism by which this would be accomplished is via a 10 Gigabit Ethernet port attached to the exchange fabric. As new peers are added to the SIX fabric via the interconnection, the IGX NOC will provide the SIX staff with the MAC address associated with each peer. This information will be used by the SIX staff to update the MAC address filter on the interface(s) facing the IGX.

The IGX device, an Extreme Networks 8910, will bridge (via layer 2 transport) IGX clients throughout WA and OR that wish to peer at the SIX. Remote SIX fabric access port speeds will be either 1G or10G. The IGX NOC will closely monitor the SIX facing port(s) to stay ahead of any potential congestion. Administrative control of all devices in the IGX network is held by Cascadeo (operator of the IGX network) and Sabey Data Centers.

Implementation Specifics

All IGX customers requesting access to the SIX fabric will be required to meet the SIX interconnection requirements. In order to ensure the exacting standards of reliability for the SIX are maintained, we will provision all SIX access ports on the IGX network with the following configuration:

```
config port x:x vlan vm_six limit-learning 1 action blackhole

=> limits the client to 1 and only 1 MAC address (the switch black holes
traffic associated with any additional MAC addresses).

config elrp-client periodic "vm_six" ports x:x log disable-port permanent

=> automatically and immediately shuts down a port when the switch sees a
special frame that it originated.
```

Any violations of these restrictions will automatically trigger, aside from the stated actions, an alert to the IGX NOC which will initiate an immediate investigation into the cause. The aforementoned configuration intentionally calls for manual intervention by the IGX NOC / Engineering teams in order to re-activate the client's access to the switch fabric. Prior to doing so, the IGX staff will investigate the reason for the alert and confirm that the issue has been resolved.

The IGX will provide the SIX with SNMP access (RO) to the interface statistics associated with the IGX interfaces attached to the SIX fabric.

Connection Information

Sabey IGX / SIX interconnection

IGX: Singlemode Fiber from the Sabey IGX FMMR panel to the SIX FMMR panel
IGX customers desiring a connection to the SIX fabric will have the appropriate L2 transport provisioned on their IGX ports.

Operations Information

IGX Network Operations

The IGX NOC is globally distributed and operates on a 24x7x365 basis.

Contact methods are as follows:

```
Phone: 1-866-9-NETOPS x9
Email: noc-urgent@cascadeo.com
```

Conclusion

As a network running Layer 2 transport (sans STP), we are intensely aware of the dangers of Layer 2 loops. The same care, scrutiny, and security practices that we apply to all aspects of IGX operations, will be applied to our interconnection with the SIX fabric.

Thank you for your consideration.

-Ophir

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Sabey IGX Network