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1 Executive Summary:

An integrated high performance, extremely consistent, scalable, and protected network communication is crucial for every organization, which can safeguard, sensitive digital information. Hence the implementor need to explore every aspect about the security threats which can be leveraged by the hacker to gain access to those critical assets

The goal to implement network security to develop security posture around the digital workflow and process. which ensure safe and reliable business continuity, without any information leakage or any unfavourable factors, and also make sure that the all the digital assets which connected through networks have some security measure applied such as firewall, antivirus, encryption and access list. And so on.

This paper explores various security assessment while developing core network architecture and it also emphasizes to deliver a highly secure environment in which only legitimate key person who is dealing with core Infrastructure system, only have access to the critical applications such as DNS server web server, Syslog server or any other service which can require the optimum security from internal as well as the outer world

2 Block A: Architecture and Communication

As networks grow, its complexity will also increase, and so it poses greater (Varadharajan et al., 2019)administrative and execution challenges. However, there are certain protocol and policy-driven mechanism offer a promising solution to overcome some of those challenges. Network Security is a multi-dimension approach it cannot be fulfilled by only one single methodology hence Implementor needs to apply certain control (Wang et al., 2007) on the network topology such as VLAN.IDS IPS, VPN and Access list, which can further strengthen the security posture of the Networks In the BLOCK A demonstrates how the end to end connectivity configured according to figure [figure 1.1]

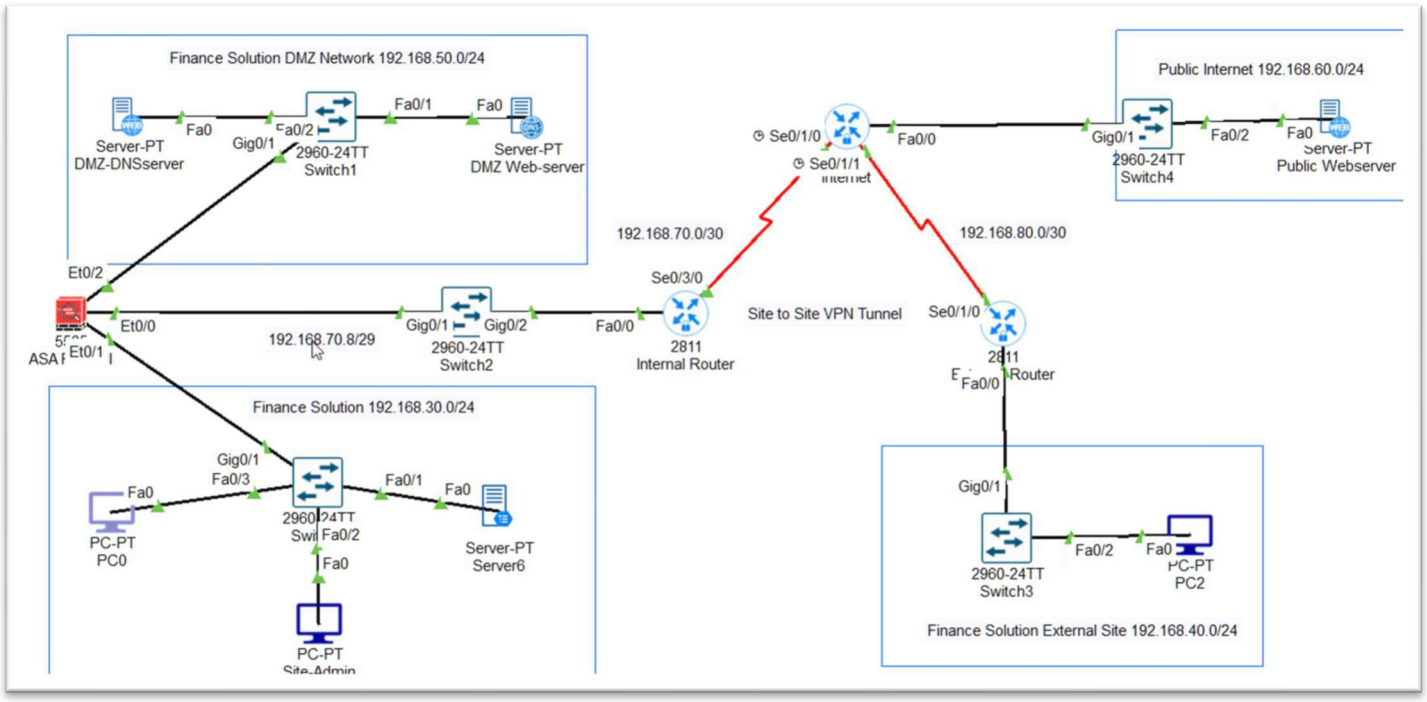

Figure 1.1 [Network Infrastructure Diagram with DHCP, DNS, Web, Syslog server with Site to site VPN connectivity]