Azure vWAN Additional Design Considerations

Here are further considerations that you may need to know.

- Evaluate the need for multicloud connectivity and consistent architecture. Keep in mind that Azure vWAN is an Azure-only service.
- Remember that Azure vWAN features and options are only available in the Azure cloud. In a multicloud scenario, the customer would need to make additional efforts to implement a similar or compatible option in another cloud, which could increase the project's time and cost due to technology and skill gaps.
- Evaluate the manual user-defined route (UDR) management efforts required if the use case involves an NVA (Network Virtual Appliance)l or traffic steering for service insertion/chaining use case.
- Understand the manual UDR management efforts required to create segmentation and isolation with a policy-based approach.
- Review the VNET and Azure vWAN flow log details to make sure they align with the business objective of deeper visibility.
- Evaluate the requirements of using tools such as packet capture, tcpdump, packet drop, traceroute, ping, etc. with Azure vWAN.
- Analyze the Azure vWAN routing quota, BGP feature set, and advanced traffic engineering options provided by Azure vWAN. This should be reviewed for routes advertised to on-prem and the number of routes received from on-prem.
- Understand the BGP attributes available and analyze whether those attributes can be passed through the Azure vWAN transparently.
- Review the Azure vWAN BGP route table output to ensure it shows the routes and associated attributes required by the enterprise and meets the design requirements.
- Evaluate the automatic VNET CIDR route summarization requirements.
- Assess the cost of the Azure vWAN VNET connectivity.
- Evaluate the cost of saving and processing the Azure vWAN and VNET logs.
- Review the options supported by Azure vWAN if overlapping ID is the requirement to ensure requirements are met.
- Understand that line rate IPSec encryption over Azure Express Route could pose challenges as it would restrict that throughput to 1.25 Gbps.

Please refer to the following resources for Azure vWAN quota limits and the latest design considerations.

https://learn.microsoft.com/en-us/azure/virtual-wan/virtual-wan-about https://learn.microsoft.com/en-us/azure/virtual-wan/virtual-wan-faq
https://learn.microsoft.com/en-us/azure/virtual-wan/virtual-wan-expressroute-about
https://aviatrix.com/learn-center/cloud-providers/azure/