Hughes Networks SD-WAN managed service ticks all the right boxes

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Summary

As we enter 2019, the SD-WAN market is heating up: MSPs are adding more SD-WAN vendors to their portfolios of managed products, and there are new entrants in the form of established branch networking vendors adding SD-WAN capabilities. Hughes Networks – a relative unknown – has been offering SD-WAN to its established customer base and is in a good position to expand its influence with new and existing customers. This would add competitive pressure to MSPs, initially in North and South America and Europe.

The 451 Take

Hughes Networks has a strong managed SD-WAN and unified threat management security with its HughesON service comparable to other cloud managed SD-WAN and MSP services. The company has an established record with broadband aggregation and satellite networking as well as a solid set of customers, and can be highly competitive. The company is best known for satellite networking, and that could be a hurdle as it tries to raise awareness among the general enterprise customers that don't need or want satellite. Hughes could differentiate itself from other managed SD-WAN MSPs by adding more vertical-specific products and services to its managed portfolio.

Context

Hughes Network Systems is a wholly-owned subsidiary of Echostar Corp and is headquartered in Germantown, Maryland. Echostar acquired Hughes Communications in 2011 for an estimated $2bn. Hughes is best known as a business and residential satellite network provider, but it also provides a variety of wired and wireless WAN services ⬚ via service provider partners – primarily in the US, Canada, Mexico, Western Europe and Latin America, most recently in Brazil, Colombia, Peru and Ecuador with aspirations to expand into other regions at some point. Hughes has a strong presence in the retail, oil and gas, hospitality, and government verticals with marquee names such as Albertsons, BP, Chevron, Costco, Kohl's and TJX.

Hughes Network Systems' revenue ending nine months on September 2018 was $1.27bn, which is a 19% increase over 2017. Hughes doesn't break out revenue from consumer and enterprise businesses, but Hughes' Q3 revenue was $445m for a 17% growth over last year, and the company has been enhancing its WAN capabilities by adding quality-of-service enforcement, application classification and compression. Hughes launched its ActivePath SD-WAN service in 2016. With HughesON, Hughes Networks also provides last-mile aggregation using a variety of WAN connection types including T1, fixed wired and wireless from regional and national service providers, as well as satellite from its own portfolio. Because Hughes can manage last-mile connections, it competes with managed service providers attached to service providers.

Hughes claims more than 30,000 sites using its SD-WAN, most of which are existing customers that enabled the capability. Hughes also offers other managed services to enterprises including managed security event management and response, managed firewall, and customer and employee engagement services, as well as vertical-specific offerings in areas such as retail, financial services and manufacturing.

Technology

Hughes offers its SD-WAN capabilities via à la carte subscriptions, allowing customers to tailor their services to their particular needs. The services are licensed by feature and not by capacity, which is somewhat unusual compared to both hardware vendors and managed service providers in the SD-WAN segment where capacity-based licensing is the norm. Hughes offers two hardware platforms, (only the HR4860 runs ActivePath), and the Fortinet next-generation firewall and UTM suite. The company has integrated its software with FortiOS, enabling zero-touch provisioning of the appliances and seamless hardware management and policy control.

- **ActiveQoS** monitors network activity and WAN performance and adjusts the bandwidth consumption via queueing and traffic shaping based on current WAN conditions and traffic types. When used in conjunction with ActiveClassifier, ActiveQoS application types are automatically classified and dynamically managed as conditions change.

- **ActiveCompression** maximizes bandwidth consumption by losslessly compressing data before it traverses the WAN, thereby using less capacity. The benefits of compression vary based on the type of traffic that is passing over the WAN. As more traffic is compressed using TLS, the benefits of compression will diminish since encrypted data is not compressible.

- **ActiveClassifier** automatically and dynamically classifies traffic types, including encrypted traffic, using heuristic analysis of packet behaviors. Once a packet is classified, the tool applies policies to different applications to create 10 prioritization queues to facilitate the ActiveQoS traffic shaping. In addition to its heuristic classification, ActiveClassifier can classify more than 4,200 applications, including sub-applications such as Facebook Messenger, using an application identification database.

- **ActivePath** offers intelligent path control for network traffic over the WAN based on a predefined policy, current network conditions and application classification. Supporting recovery techniques such as forward error correction, which can recreate lost packets and optimizations for cellular data, ActivePath efficiently uses the WAN with little administrative overhead.

The Hughes ActiveTechnologies suite along with the Fortinet firewall and the HR4860 hardware platform and the managed service constitute the Hughes managed SD-WAN service.

Competition

Hughes competes directly with regional, national and global managed service providers, including those that are attached to WAN service providers. These MSPs pose the greatest competition because there is less that sets Hughes apart from established MSPs. Hughes develops much of its own technology and partners with Cisco Meraki and Fortinet to offer SD-WAN services. The company is planning to add one more SD-WAN partner in 2019. Competitive MSPs are aggressively

partnering with two or more SD-WAN vendors with market-share-leading branch networking vendors such as Fortinet and Palo Alto to build a versatile and rich suite of managed services. MSPs have the advantage of established footprints in their respective regions, and like Hughes, can aggregate bandwidth from service provider partners to close gaps in coverage.

Hughes also competes with SD-WAN product vendors that reach enterprises through the traditional VAR and integrator channel. Equipment vendors such as Aerohive, Aruba Networks, Cisco and Extreme offer cloud managed wired and wireless networking, as well as location services for hospitality and retail, adding value for customers. Hughes, like other MSPs, can provide a complete branch WAN managed service including wired and wireless aggregation where equipment vendors often don't, leaving the acquisition of WAN services up to the customer or channel partner.

SWOT Analysis

Strengths	Weaknesses
Hughes has a large customer base and a proven track record in the field. As a bandwidth aggregator and satellite network provider, Hughes can connect even the remotest offices. A strong vertical focus also helps tailor the service and messaging to use cases.	Hughes is not well known in the US for anything other than satellite networking, and that inhibits consideration from enterprises looking for managed SD-WAN. Hughes has very little footprint outside North and South America.
Opportunities	**Threats**
Hughes could offer differentiated services by expanding the managed capabilities within certain verticals such as retail, transportation, and oil and gas by supporting a variety of customized on-premises hardware and software, as well as services.	Large national and global managed service providers and integrators have also identified managed services as a critical opportunity and are creating additional services that compete head on with Hughes.

Source: 451 Research, LLC

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