

Hughes Managed SD-WAN

Distributed SD-WAN for Distributed Organizations

Distributed organizations face unique challenges when it comes to their networks, especially for those incorporating broadband. Agency sites can have vastly different broadband access types and infrastructures, which can wreak havoc on overall network performance, while increasing management complexity. Adding Cloud-based applications to the mix compounds the problem.

The Software-Defined Wide Area Network, or SD-WAN, is the next-generation solution to solve these problems. As a trusted technology and managed services leader, Hughes is well-positioned to deliver on the promise of SD-WAN. The Hughes Managed SD-WAN solution, which leverages ActiveTechnologies™, transforms ordinary broadband connections into enterprise-grade, high-performance WANs.

Hughes Managed SD-WAN is a carrier agnostic solution with nationwide coverage leveraging wireline, wireless, and satellite transports. Designed especially for highly distributed organizations, Hughes Managed SD-WAN is the leader in Distributed SD-WAN. Our SD-WAN solutions are typically deployed with a single location device integrating broadband optimization, multipath traffic steering, routing, and security functions to minimize complexity and cost.

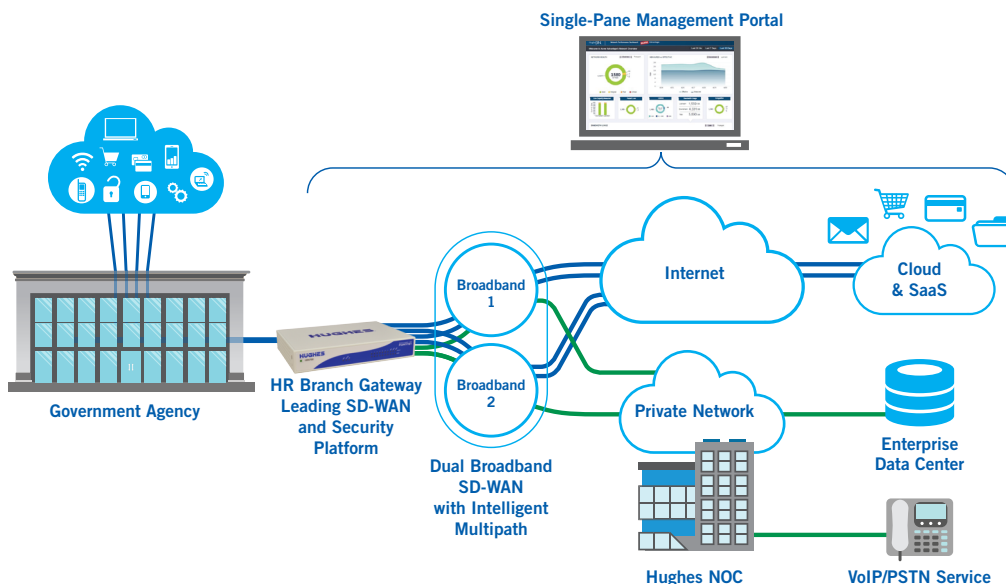
What Is Hughes Managed SD-WAN?

- It's an end-to-end turn-key network that can be implemented on an existing network infrastructure quickly and easily.
- It's agnostic to WAN transport. As a leading provider, Hughes can integrate and manage cost-effective broadband access nationwide via wireline, wireless, and satellite.
- A Managed SD-WAN offloads Internet traffic closer to the edge of the network for improved network performance.
 - Hughes HR Line of Branch Gateways, with advanced premises-based edge security, enables Direct Internet Access (DIA), off-loading Internet and Cloud traffic direct from premises edge.
- It simplifies network complexity through 24/7 WAN management, including zero-touch configuration and Web-based network performance management.
- Managed SD-WAN delivers dynamic load sharing across multiple connections for better traffic flow. At the heart of SD-WAN is the Active/Active capability to dynamically allocate traffic across multiple active paths.
 - ActivePath includes several technologies, including Intelligent Multipath Replication (IMR), which steers critical flows (such as VoIP) simultaneously over multiple transport to ensure the data packets arrive as needed for a great customer experience.
 - ActivePath provides intelligent support for metered broadband connections (such as 4G/LTE), reducing networking costs while improving application uptime
- Hughes Managed SD-WAN includes additional optimization tools with our ActiveTechnologies. Not available from other SD-WAN providers, Hughes ActiveTechnologies result in significantly faster processing times and an improved end user experience and the best possible WAN solution.

“Few competing service providers can match Hughes proven experience with delivering SD-WAN services.”
– *Global Data*



HughesON is a suite of innovative, Cloud-ready network and digital media solutions designed for the unique needs of distributed enterprises in the public sector, including local, state, and federal agencies.



Powerful Network and Performance Analytics

The combination of detailed network data gathered by Hughes ActiveTechnologies and sophisticated new visualization delivers deep insights into the performance of the enterprise network—unveiling conditions previously hidden that impact application performance, such as broadband brownouts, site level congestion, and underperforming broadband connections.

The HughesON Portal delivers these insights starting with a network level dashboard, which consolidates the overall state of the network based upon multiple Key Performance Indicators (KPIs), enabling viewers to quickly understand important details, such as the top sites using bandwidth, percent usage of backup / secondary paths, and capacity gains due to compression. Detailed drill-downs are available to determine if factors, such as changes in transport capacity, latency, or packet loss could be impacting application performance.

Key Advantages

- **Industry-leading security:** No more security scores
- **Fully managed service delivery:** We focus on your network so you can focus on serving constituents
- **Faster processing:** Delivers an improved end user experience
- **Nonstop application delivery:** Brownouts are a thing of the past
- **Guaranteed real-time application quality:** Ensures video download and streaming speeds and VoIP call quality

About Hughes

Hughes Network Systems, LLC (Hughes) is the global leader in broadband satellite technology and services for home and office, including HughesNet®, the world's largest satellite network with over 1 million residential and business customers across North America and Brazil. Hughes also provides HughesON™ managed network solutions to enterprise and government through innovative wireline and wireless network technologies. To date, Hughes has shipped more than 7 million systems to customers in over 100 countries, representing approximately 50% market share. Headquartered outside Washington, D.C., in Germantown, Maryland, USA, Hughes operates sales and support offices worldwide, and is a wholly owned subsidiary of EchoStar Corporation (NASDAQ: SATS), a premier global provider of satellite communication solutions. For additional information about Hughes, please visit www.hughes.com.

**For additional information, please call 844-817-5290
or visit government.hughes.com.**