VERTICAL SYSTEMS GROUP

Year-End 2018
U.S. Ethernet LEADERBOARD
Report

CenturyLink Retains Top Rank on U.S. Ethernet LEADERBOARD
Ranks #1 for the second consecutive year

Vertical Systems Group's year-end 2018 market share analysis for U.S. Carrier Ethernet services shows that CenturyLink has attained the top LEADERBOARD position for the second consecutive year. Following the merger of Level 3, CenturyLink surpassed longtime market leader AT&T in 2017 to rank first in the U.S. Ethernet services market.

LEADERBOARD Roster

The U.S. Carrier Ethernet LEADERBOARD is the industry benchmark for measuring market leadership in the delivery of retail Ethernet services.
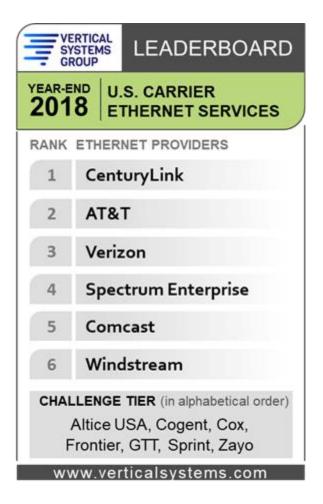
CenturyLink, AT&T, Verizon, Spectrum Enterprise, Comcast and Windstream are the six companies that have attained a position on the 2018 U.S. Carrier Ethernet LEADERBOARD based on year-end retail port share.

To qualify for a LEADERBOARD rank, network providers must have a share of four percent (4%) or more of the U.S. Ethernet services market.

Challenge Tier

The U.S. Challenge Tier requires a port share between 1% and 4%.

Seven companies attained a year-end 2018 Challenge Tier citation as follows (*in alphabetical order*): Altice, Cogent, Cox, Frontier, GTT, Sprint, and Zayo.

VERTICAL SYSTEMS GROUP — **LEADERBOARD**

YEAR-END 2018 | **U.S. CARRIER ETHERNET SERVICES**

RANK	ETHERNET PROVIDERS
1	CenturyLink
2	AT&T
3	Verizon
4	Spectrum Enterprise
5	Comcast
6	Windstream

CHALLENGE TIER (in alphabetical order)

Altice USA, Cogent, Cox, Frontier, GTT, Sprint, Zayo

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2018 Ethernet LEADERBOARD Recap

- LEADERBOARD companies supplied more than half of all retail customer Ethernet ports installed in the U.S. as of the end of 2018.

- A total of six Ethernet providers qualified for the 2018 U.S. Ethernet LEADERBOARD, as compared to seven in 2017. Cox, which dropped into the Challenge Tier in 2018, had previously held a LEADERBOARD rank.

- Four Incumbent Carriers (CenturyLink, AT&T, Verizon, and Windstream) plus two Cable MSOs (Spectrum Enterprise and Comcast) are represented on the latest LEADERBOARD.

- Each of the 2018 U.S. LEADERBOARD companies has received MEF CE 2.0 certification, which ensures that their Ethernet services comply with industry-recognized specifications.

- CenturyLink ranks third on the 2018 Global Provider LEADERBOARD, following AT&T and Colt (U.K.). This industry benchmark for the multinational Ethernet network segment ranks service providers based on ports installed outside of their respective home countries.

Market Player Tier

Other providers selling U.S. retail Ethernet services with port share below 1% are in the Market Player tier.

The 2018 Market Players include the following companies (*in alphabetical order*): Alaska Communications, American Telesis, Atlantic Broadband, BT Global Services, Cincinnati Bell, Consolidated Communications, Crown Castle Fiber, DQE Communications, Expedient, FiberLight, FirstLight, Fusion, Global Cloud Xchange, Great Plains Communications, Logix Fiber Networks, LS Networks, Masergy, MetTel, Midco, NTT America, Orange Business, RCN Business, Segra, Tata, TDS Telecom, Telstra, TPx, Unite Private Networks, US Signal, WOW!Business and other companies selling retail Ethernet services in the U.S. market.

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U.S. Ethernet Services Market Trends

Customer demand in the U.S. remains strong for Ethernet connectivity services that support the higher bandwidth, performance and security requirements of enterprise networking applications.

- **The base of Ethernet customer installations in the U.S. increased 12% in 2018 to more than 1.1 million ports.** This double-digit growth follows a 13% increase in 2017.

- In 2018, 100 Mbps was the largest speed segment in the U.S. based on customer port installations. The smallest, but fastest growing speed segment is 10+ Gbps.

"Despite its relative maturity, the Ethernet market continues to expand at a healthy pace. U.S. port installations grew more than twelve percent in 2018, in line with our forecasts."

Rick Malone, principal
Vertical Systems Group

- Ethernet revenue growth is pressured by declining prices and changing service mixes. SD-WAN migration is a notable catalyst for change as customers shift purchases from switched Ethernet services to Dedicated Internet Access.

- Customer deployments of Ethernet services in 2018 focused on connectivity to high-traffic VPN sites, data centers, cloud-based SaaS applications, and Internet access.

- Fiber build-outs across the U.S. drove new Ethernet business in 2018. The top five Ethernet LEADERBOARD companies have the highest number of fiber-lit commercial buildings in the U.S. Benefits of fiber-based services are lower bandwidth costs per bit, and the ability to scale bandwidth as required.

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2018 Ethernet Market Share Calculations

Market share calculations for this year-end 2018 U.S. LEADERBOARD analysis are based on the number of billable retail Ethernet customer ports per service provider as tracked by Vertical Systems Group.

Calculations use the U.S. Ethernet base as of December 31, 2018. Share figures include retail ports only (*i.e., no wholesale services*).

All ports are counted equally for share calculations, regardless of the access rate of the port. The speed segments tracked for market analysis are as follows: 10+ Gbps, 1 Gbps, 100 Mbps, 10 Mbps, and Sub-10 Mbps.

Vertical Systems Group defines six Carrier Ethernet service types from a market perspective based on what network service providers are offering and enterprise customers are purchasing.

The Ethernet service segments included in this analysis are as follows: Dedicated Internet Access (DIA), Ethernet Access to IP/MPLS VPNs, Ethernet Private Lines (EPL), Ethernet Virtual Private Lines (EVPL), Metro LAN, and WAN VPLS (Virtual Private LAN Service).

About Vertical Systems Group

Detailed Ethernet statistics and port share results that power the Year-End 2018 U.S. Carrier Ethernet LEADERBOARD are available exclusively with subscription to Vertical Systems Group's Emerging Networks Service (ENS) Research Programs.

Vertical Systems Group is recognized worldwide as a leading market research and strategic consulting firm specializing in defensible quantification of the networking industry.

Contact us for more information
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