

Duke University, DISH Wireless and Cisco part of collaboration to launch a higher education neutral host network

WASHINGTON, D.C., April 21, 2022 – Internet2, Duke University, DISH Wireless and Cisco today announced the launch of a neutral host network pilot for higher education institutions using Citizens Broadband Radio Service (CBRS) shared spectrum.

For the first time, the availability of low-cost, shared wireless spectrum using the CBRS in the 3.5-3.7 GHz band allows enterprises to own and operate private LTE and 5G networks. Private networks enable mobile and fixed wireless broadband access across a variety of innovative cases. For higher education institutions, the many applications include things like smart campuses to internet of things (IoT) sensor networks, extended coverage for campus Wi-Fi, fixed wireless services and support for research testbeds.

“Every college and university has experienced dramatic increases in wireless needs from our mobile-first communities. Rather than providing two separate infrastructures throughout our campuses — cellular and Wi-Fi — the holy grail has always been for a single, common network delivering both cellular and high-speed private Wi-Fi,” said Tracy Futhy, vice president and chief information officer, Duke University. “The recent availability of CBRS, together with our collaboration with Internet2, DISH Wireless and Cisco, makes this vision a reality by delivering a private Duke wireless network over the carrier-grade cellular infrastructure that stretches throughout our campus.”

Private mobile networks can better and more efficiently serve mobile subscribers, including on-campus students and faculty, via a radio access network (RAN)-sharing agreement between mobile operators and universities, also referred to as a Neutral Host Network (NHN).

“It can be difficult for today’s current wireless networks to provide consistently reliable connectivity and coverage across an entire university campus. The goal of this innovative neutral host proof of concept is to improve the quality of the connectivity across Duke’s campus through the use of a private CBRS-connected 5G network,” said Stephen Bye, chief commercial officer, DISH Wireless. “Our objective is to enhance connectivity across the campus with this groundbreaking collaboration with our partners.”

To implement a Neutral Host Network using CBRS on campus, Internet2, Duke University, DISH Wireless and Cisco are collaborating to pilot this solution, validating the feasibility of a scalable, multi-tenant, architecture with CBRS. The trial will launch in summer 2022. The Neutral Host Network will integrate Duke University’s private network, powered by Cisco’s Private 5G as a service platform and Internet2’s upgraded fifth-generation national research and education network, with DISH Wireless’ 5G network.

“Together with Internet2 and DISH, we are creating a future-ready, private mobile network that will provide seamless connection from private to public networks while extending existing Wi-Fi to increase connectivity and transform experiences for students, faculties, and communities on campuses like Duke University,” said Masum Mir, VP/GM, Cable, IoT and Mobile, Cisco. “Cisco Private 5G technology will enable both mobile 4G applications today and future 5G innovations across campus services, safety and security, remote research, and more.”

This innovative collaboration emerged from a new Future Wireless Working Group (FWWG) established by Internet2 in March 2020. The FWWG convened multiple university chief information officers and technology leaders to consider the impact, challenges, and opportunities for community-wide collaboration to evaluate and implement emerging wireless technologies, such as 5G, in higher education. These technologies will support higher education research and development initiatives and enhance campus services.

"We are excited to help our higher education members evaluate the use of advanced wireless technologies across a variety of innovative uses," added Howard Pfeffer, president and CEO, Internet2. "Our operational capabilities for services, such as eduroam Wi-Fi roaming and our fifth-generation national research and education network, combined with our role as a convener allows Internet2 to bring together and enable unique collaborations between universities and leading industry providers."

About DISH Wireless

DISH Network Corporation is a connectivity company. Since 1980, it has served as a disruptive force, driving innovation and value on behalf of consumers. Through its subsidiaries, the company provides television entertainment and award-winning technology to millions of customers with its satellite DISH TV and streaming SLING TV services. In 2020, the company became a nationwide U.S. wireless carrier through the acquisition of Boost Mobile. DISH continues to innovate in wireless, building the nation's first virtualized, standalone 5G broadband network. DISH Network Corporation (NASDAQ: DISH) is a Fortune 200 company. For company information, visit about.dish.com.

About Cisco

Cisco (NASDAQ: CSCO) is the worldwide leader in technology that powers the Internet. Cisco inspires new possibilities by reimagining your applications, securing your data, transforming your infrastructure, and empowering your teams for a global and inclusive future. Discover more on The Network and follow us on Twitter. Cisco and the Cisco logo are trademarks or registered trademarks of Cisco and/or its affiliates in the U.S. and other countries. A listing of Cisco's trademarks can be found at www.cisco.com/go/trademarks. Third-party trademarks mentioned are the property of their respective owners. The use of the word partner does not imply a partnership relationship between Cisco and any other company.

About Internet2

Internet2® is a non-profit, member-driven advanced technology community founded by the nation's leading higher education institutions in 1996. Internet2 serves 323 U.S. universities, 59 government agencies, 46 regional and state education networks and through them supports more than 80,000 community anchor institutions, over 1,000 InCommon participants, and 54 leading corporations working with our community, and 70 national research and education network partners that represent more than 100 countries. Internet2 delivers a diverse portfolio of technology solutions that leverages, integrates, and amplifies the strengths of its members and helps support their educational, research and community service missions. Internet2's core infrastructure components include the nation's largest and fastest research and education network that was built to deliver advanced, customized services that are accessed and secured by the community-developed trust and identity framework.

Internet2 offices are located in Ann Arbor, Mich.; Denver, Colo.; Washington, D.C.; and West Hartford, Conn. For more information, visit <https://internet2.edu> or follow @Internet2 on Twitter.
