



2017 ACCOMPLISHMENTS

KINBER Services.

In 2017 31 new sites connected to PennREN, KINBER's statewide high-performance Research and Education Network in Pennsylvania.

KINBER has 195 total connections, including multiple connections for some organizations. This represents a 50% increase in connections since 2016.

Of the total connections, over 20 entities renewed, upgraded, or added additional services, ranging from increasing their speed from 1 Gbps to 100 Gbps, to adding Internet2 connectivity or adding KINBER's Managed Router service and 401 N. Broad Co-Location service.

KINBER upgraded its core backbone to support 100 Gbps across the optical network. Shortly thereafter, KINBER connected its first 100 Gbps customer in October 2017.

2017 also saw the addition of two new wide area network peering connections including WiscNet in Chicago and OARnet in Ohio.

Organizational Expansion. KINBER continued to grow and expand the organization in 2017 including the addition of a new second office in Boalsburg, PA. The Boalsburg office supports the daily activities and operations of the PennREN engineering staff and allows for enhanced network testing environments. 2017 also saw the hire of KINBER's newest member of its executive team, Nathan Flood, KINBER's first vice president. These additional milestones in KINBER's growth represent measured, steady organizational enhancements that will enable KINBER to best serve its ever-growing communities.

Leading Research. KINBER convenes and supports the most advanced research in the field and brings partnership opportunities and research collaborations to the Commonwealth of Pennsylvania. In October 2017, in collaboration with The Quilt, KINBER led the Campus Cyberinfrastructure (CC*) PI and Cybersecurity Innovation for Cyberinfrastructure (CICI) PI Workshop in Albuquerque, NM. This was the third annual NSF CC* workshop led by KINBER's president and CEO, Wendy Huntoon.



KINBER also continues activities as a regional partner on several NSF grants in PA including NSF CICI Regional: SAC-PA: Towards Security Assured Cyberinfrastructure in Pennsylvania led by the University of Pittsburgh and NSF CIF21 DIBBs: EI: Virtual Data Collaboratory: A Regional Cyberinfrastructure for Collaborative Data Intensive Science project led by Rutgers University and The Pennsylvania State University. KINBER was also a contributor to the first National Research Platform (NRP) Workshop held in Bozeman, Montana.

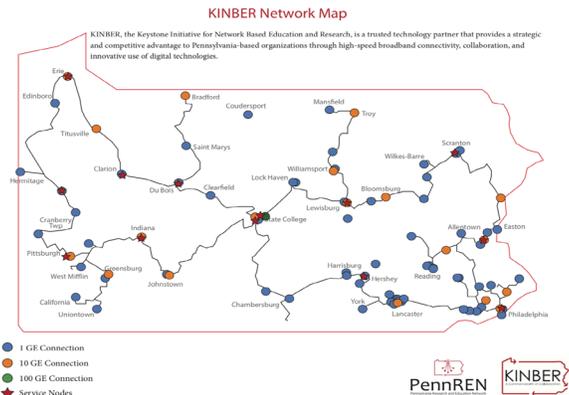
Support for cyberinfrastructure activities continued to be a priority for KINBER in 2017. KINBER worked with several Pennsylvania NSF 2017 Campus Cyberinfrastructure (CC*) awardees including Bucknell University, who received a grant for \$399,200 to support campus cyberinfrastructure and scientific innovation.

New Strategic Vision. KINBER's Board of Directors approved an updated strategic plan for 2017-2019. The new strategic plan builds upon the organization's accomplishments over the past eight years and sets a clear path for the future toward the vision of KINBER 2020. As articulated in the new 2017-2019 strategic plan KINBER's focus for the next three years will be to 1) Increase Value to Members 2) Ensure Sustainability and Diversify Revenue Sources 3) Expand Reach into Unserved/Underserved Areas 4) Build Strategic Partnerships with Service Providers, and 5) Enhance Communications and Recognition of KINBER Brand.

Supporting Community Anchor Institutions Across The Commonwealth. Focusing on support for community anchor institutions across the broad groups that KINBER serves, KINBER provided new services and opportunities for these sectors with a focus on library and local/county government. In November 2017, KINBER held the first community outreach event for libraries called "Get Connected: Transforming PA Libraries Through Broadband Opportunities" which brought together libraries and library systems from across the Commonwealth to learn about library focused grants, programs, services, new technologies, and strategic partnerships for libraries. The event featured a day of presentations and discussions around innovative maker spaces and community programs, the FCC and the future of E-Rate, TV Whitespace, Net Neutrality and other topics of interest to Pennsylvania libraries. KINBER was also invited to participate in several library focused grant projects including the Internet2 Toward Gigabit Libraries Library Broadband Toolkit project funded by the Institute for Museum and Library Services (IMLS) and several opportunities on use of TV Whitespace in support of reaching rural and unserved communities.



PennREN Network Enhancements. In 2017, KINBER added new capacity on the PennREN statewide network by increasing its core network to support 100Gbps and offering new peering with WISCNet and the WRIPS service providing direct connectivity for KINBER communities to Chicago. KINBER also completed a major network move of its Philadelphia POP location representing the next phase of KINBER's infrastructure growth and the ability to provide colocation services to KINBER members in a dedicated research and education network cage.



Offering New Services. As KINBER continued to grow its customers and expand its reach to rural and unserved areas, offering critical new services was a hallmark of 2017. New enhanced network security services such as KINBER's DDoS Mitigation service and colocation services continue to be in high demand by the communities KINBER serves. After a successful pilot, KINBER also began offering Library Network Assessment services to help support rural libraries as they evaluate their existing network infrastructure and consider the most cost-effective network enhancements and improvements for their environments. KINBER also added new Managed Router services and Amazon Web Service direct connection to its expanding services portfolio.

Strategic Partnerships. Leveraging strategic partnerships is a key part of KINBER's ability to bring opportunities to diverse communities across the Commonwealth of Pennsylvania. KINBER's participation in Educause, Internet2, The Quilt and other national organizations provides unique partnerships and collaborations for all. Within the Commonwealth, partnerships with the Pennsylvania Library Association, Office of Commonwealth Libraries, Healthcare Information and Management Systems Society, and others provide relevant engagement opportunities that support KINBER's customers and communities.