



Extreme[®]
networks

ESSENTIAL GUIDE TO E-RATE SUCCESS

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A woman with long dark hair, wearing a red and black plaid shirt and a white headset, is seated at a desk. She is looking at a large computer monitor. The monitor displays a video conference with several participants. The background is a plain wall. The overall image has a dark, blue-tinted overlay.

Extreme Networks and the US E-Rate Program

Extreme Networks and the US E-Rate Program

Extreme Networks has been intimately engaged in helping schools and libraries improve education for over 20 years. We are the number three category one provider having been involved with the program from its inception, closely following each change and modification.

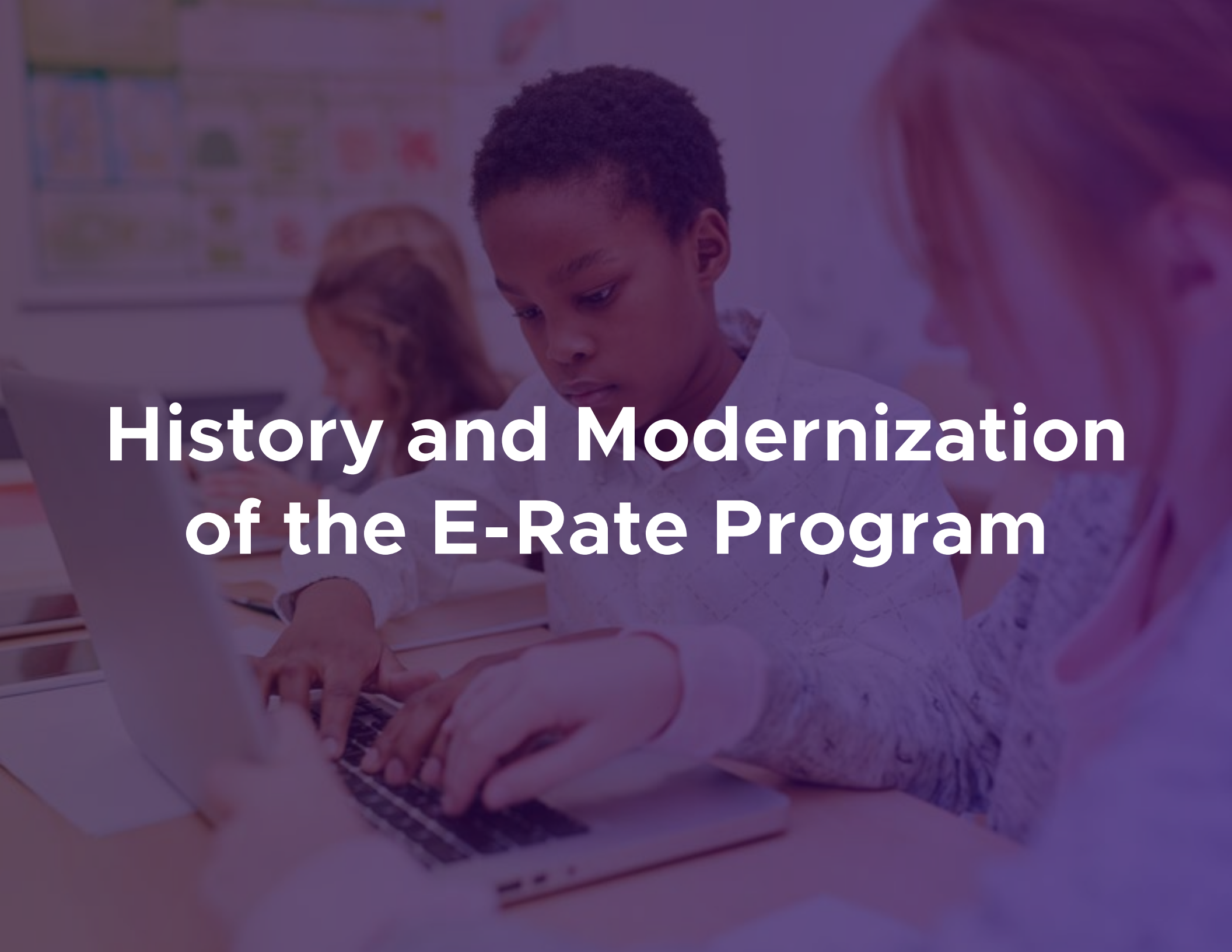
We make connecting simple and easy with effortless networking experiences that enable educators to advance and improve learning outcomes. We push the boundaries of technology, leveraging the powers of machine learning, artificial intelligence, analytics, and automation. With a culture of agility, we anticipate the needs of educators and their students as they develop. Over 20,000 schools and universities globally trust our end-to-end, cloud-driven networking solutions and rely on our top-rated services and support to accelerate the digital transformation of education and deliver progress like never before.

Extreme Systems delivers these benefits to education:

- **Operational Efficiency:** AI-based analytics deliver proactive situational awareness to boost staff communication, and engagement
- **Personalized Learning:** Easily integrate with your student directory and provide bandwidth where and when it is needed

Student Safety and Privacy:

- Cloud security tools allow IT administrators to protect student information. They also offers data encryption and logging capabilities to satisfy education specific compliance requirements

A young boy with short dark hair is the central focus, intently looking at a laptop screen and typing on the keyboard. He is wearing a light-colored, patterned sweater. The background is a classroom with other students, including a girl with blonde hair and another student with long hair, all appearing to be working on laptops. The entire image has a semi-transparent purple overlay. The text "History and Modernization of the E-Rate Program" is centered over the image in a bold, white, sans-serif font.

History and Modernization of the E-Rate Program

History and Modernization of the E-Rate Program

Recent changes have expanded on the basic program that goes back to July 23, 2015, when the FCC released the landmark update to the E-Rate program with the 7th Report and Order. The infusion of funding available for schools and libraries has helped them reach important digital learning goals by connecting students to resources in STEM areas that are necessary for preparing students to compete in the global economy. Mobile learning and the device explosion had left many schools behind the curve and the E-Rate program is the primary education technology funding source in the US with the money behind the message to move our classrooms into the digital world.

E-Rate Program Highlights

On December 3, 2019, the Federal Communications Commission issued a Report and Order making significant changes to E-Rate rules for Category Two funding applications. The highly anticipated Order adopts a permanent Category Two budget system for all applicants and establishes streamlined Category Two rules which were put in effect in Funding Year 2021. The Order extends the “test period” rules used during Funding Years 2015-2019 for a final year while increasing all applicant budgets by 20% for Funding Year 2020. [Read more](#) highlights.

Funding requests for Category One requests are met first and Category Two is funded with the remaining resources. Since FY2015, demand has not exceeded available funding. This program has been an overwhelming success since its inception in 1998 and this evolution only serves as the critical next step. The program highlights below are focused on the impact to service providers and how you are poised to help schools connect to the future.

- Revamping the Priority systems into two categories of service
 - Category 1 – Internet access and WAN (traditional voice services are being phased out, services to be eliminated beginning with FY2015: paging, e-mail, voice mail, and web hosting)
 - Category 2 – LAN/WLAN

A photograph of a woman and two children walking outdoors, overlaid with a purple tint. The woman is on the left, wearing sunglasses and a light-colored jacket. The children are in the center and right, both wearing backpacks. The text "Funding Allocation Formula for School Districts" is centered over the image in a large, white, sans-serif font.

Funding Allocation Formula for School Districts

Funding Allocation Formula for School Districts

Starting in Funding Year 2021, the 5-year budget calculations will work as follows:

For schools and school districts: (Enrollment) x \$167 = total pre-discount budget \$ available for a 5-year period

Example—5,000 (Student enrollment) X \$167 X = \$835,000 pre-discount budget for 2021-2025

If this district in the example above with 5,000 students has a 70% discount rate, then USAC would cover up to \$584,500 (70%) and the district would be responsible for the remaining \$250,500 (30%). This 30% is often referred to as the district's "match" portion.

The calculation is \$4.50 per square foot for all libraries (both rural and urban). The per-site funding "floor" was increased from \$9,200 per site to \$25,000 in the beginning of FY 2021.

Discount rates are now calculated for the entire district. District enrollment divided by eligible student count. Applicants can file per entity but must use the new discount rate.

- District-wide budgets
- Eligible Non-Instructional Facilities (NIFs) do not have pre-discount budgets; the applicant must allocate NIF costs to one or more of the entities that will benefit from the service
- MAXIMUM discount that can be received for Category 2 is 85%
- Managed Internal Broadband Services (MIBS) will be eligible for Category 2 support. Applicants can enter into multiyear contracts, for up to 5 years. Support will only be committed for one year at a time. Applicants that are in multiyear contracts will have the option to file a streamlined 471 application after the initial 470/471 application process
- Competitive bidding will still be required for managed wireless
- Eligible managed Wi-Fi expenses include the management and operation of the LAN/WLAN, including installation, activation, and initial configuration of eligible components, and onsite training on the use of eligible equipment. Eligible managed Wi-Fi expenses do not include a managed voice service

- Universal Service Administrative Company (USAC) aims to commit or deny all workable applications by September 1 of the funding year.
- Transparency – Item 21 attachments will begin to be accessible to the public from USAC’s website. Applicants and service providers will not be required to disclose past year’s information.
- All documents and applications are in the E-Rate Productivity Center (EPC). Invoicing is streamlined and reimbursement to the applicant is now paid directly to the applicant when using the BEAR process.
- Invoice Extension – Applicants are allowed to request and automatically receive a single one-time 120-day extension of the invoicing deadline.

% of Total Students Eligible for National School Lunch Program	Category One Schools and Libraries Discount Matrix		Category Two Schools and Libraries Discount Matrix	
	Discount Level		Discount Level	
	Urban Discount	Rural Discount	Urban Discount	Rural Discount
<1	20	25	20	25
1-19	40	50	40	50
20-34	50	60	50	60
35-49	60	70	60	70
50-74	80	80	80	80
75-100	90	90	85	85

Discount Matrix for Category 2



Eligible Services List

Eligible Services List

Here is the most recent (2024) eligible services list.

<https://www.fundsforlearning.com/news/2023/09/fy2024-draft-eligible-services-list-released/>

Category One

Data transmission and/or Internet access services are eligible in Category One. These services include:

- Asynchronous Transfer Mode (ATM)
- Broadband over Power Lines
- Cable Modem
- Digital Subscriber Line (DSL)
- DS-1 (T-1), DS-3 (T-3), and Fractional T-1 or T-3
- Ethernet
- Integrated Services Digital Network (ISDN)
NOTE: Dedicated voice channels on an ISDN circuit are no longer eligible
- Leased Lit Fiber
- Leased Dark Fiber (including dark fiber indefeasible rights of use (IRUs) for a set term)
- Self-Provisioned Broadband Networks (applicant owned and operated networks)
- Frame Relay
- Multi-Protocol Label Switching (MPLS)
- OC-1, OC-3, OC-12, OC-n
- Satellite
- Switched Multimegabit Data Service
- Telephone dial-up
- Wireless (e.g., microwave)

NOTES:

(1) Eligible costs include monthly charges, special construction, installation and activation charges, software, modulating electronics and other equipment necessary to make a Category One wired or wireless broadband service functional ("Network Equipment"), and maintenance and operation charges, including costs for software needed for the operation of or maintenance of Network Equipment. Network Equipment and maintenance and operation costs for existing networks are eligible. All equipment and services, including maintenance and operation, must be competitively bid.

(2) Applicants that seek bids for leased dark fiber must also seek bids for leased lit fiber service and fully consider all responsive bids. Similarly, applicants that seek bids for self-provisioned broadband networks must also seek bids for the needed connectivity via services provided over third-party networks, and fully consider all responsive bids.

(3) Applicants may seek special construction funding for the upfront, non-recurring costs for the deployment of new or upgraded facilities. The eligible components of special construction are construction of network facilities, design and engineering, and project management.

(4) Staff salaries and labor costs for personnel of the applicant or underlying beneficiary are not E-Rate eligible.

(5) Consulting services that are not related to the installation and configuration of the eligible components are not eligible. These include services related to application assistance, program advice, and other activities not tied directly to actual installation and initial configuration of components.

Category Two

Eligible Broadband Internal Connections

- Antennas, connectors, and related components used for internal broadband connections
- Cabling
- Caching
- Firewall services and firewall components separate from basic firewall protection provided as a standard component of a vendor's Internet access service
- Racks
- Routers
- Switches
- Uninterruptible Power Supply (UPS)/Battery Backup
- Access points used in a local area network (LAN) or wireless local area network (WLAN) environment (such as wireless access points)
- Wireless controller systems
- Software supporting the components on this list used to distribute high-speed broadband throughout school buildings and libraries (applicants should request software in the same category as the associated service being obtained or installed)

NOTES:

(1) Functionalities listed above that can be virtualized in the cloud, and equipment that combines eligible functionalities, like routing and switching, are also eligible.

(2) A manufacturer's multi-year warranty for a period up to three years that is provided as an integral part of an eligible component, without a separately identifiable cost, may be included in the cost of the component.

(3) Caching is defined as a method that stores recently accessed information. Caching stores information locally so that the information is accessible more quickly than if transmitted across a network from a distance. A caching service or equipment that provides caching, including servers necessary for the provision of caching, is eligible for funding.

(4) Applicants may request both equipment and the software necessary to use the equipment on the FCC Form 470, or request just the equipment on the FCC Form 470, and still receive support for both the equipment and the software necessary to use the equipment (e.g., right-to-use software or client access licenses) by requesting the equipment and software either together or separately on the FCC Form 471. However, software upgrades and patches, including bug fixes and security patches, are considered basic maintenance of internal connections, and as such, applicants should seek bids for basic maintenance of internal connections if they intend to request funding for these services.

Ineligible Products

- End-user equipment, PCs, mobile devices, projectors, peripherals
- Video and telephony equipment
- Server infrastructure (excluding caching)
- Non-critical infrastructure
- Advanced security, content/spam/virus filtering, physical security, management/monitoring
- Extended or upgraded warranties



Extreme Eligible Products

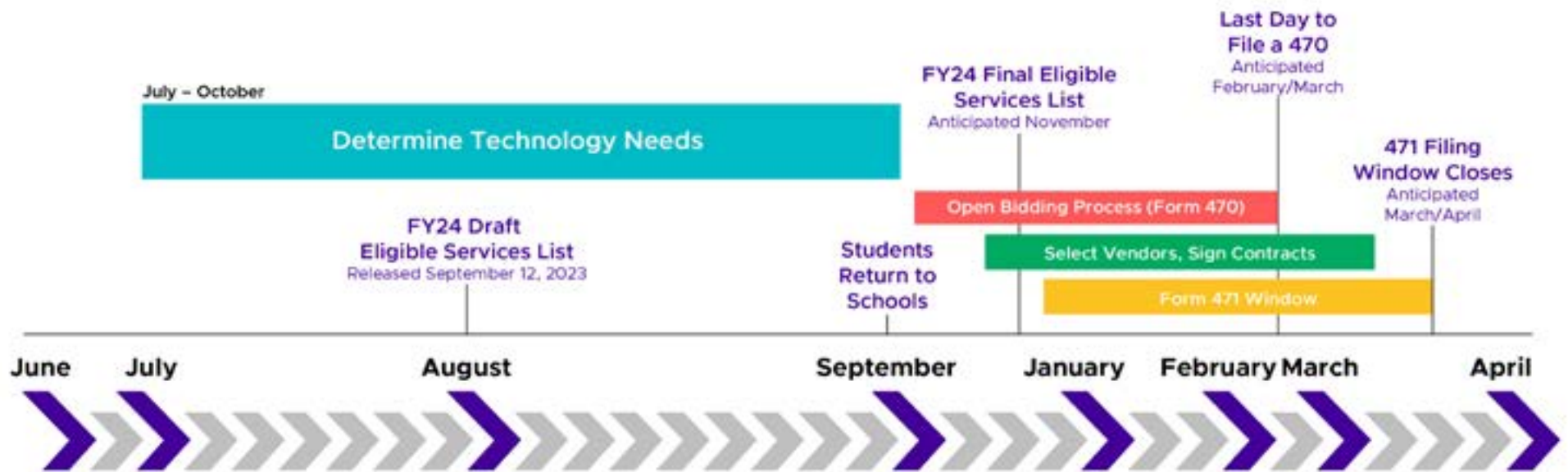
Extreme Eligible Products

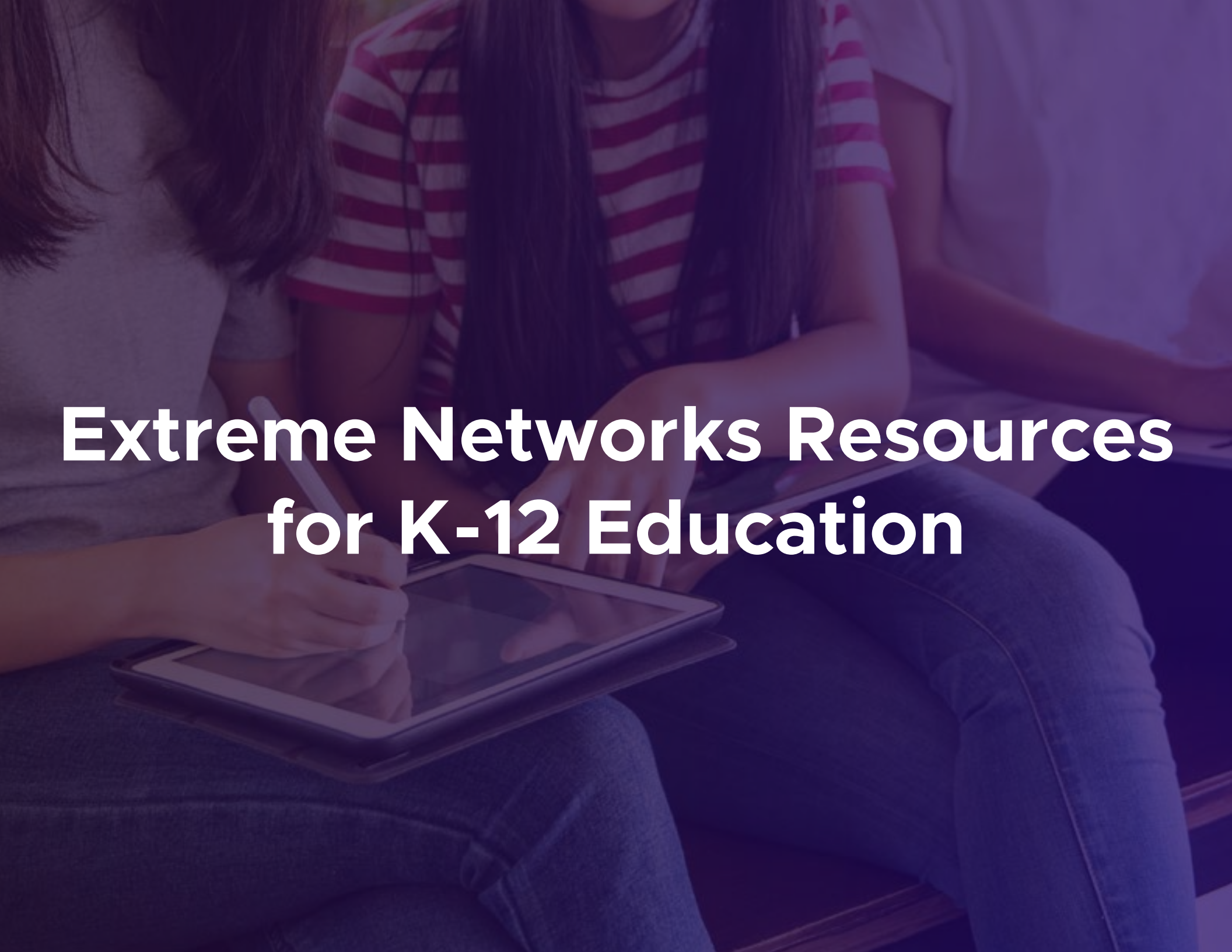
E-Rate Category	Required Capabilities	Extreme Solutions	How We Do It Better
Category 2 – Internal Connections	High Density, Pervasive Wi-Fi	<ul style="list-style-type: none"> • All wireless access points • Necessary accessories and antennas • Necessary right-to-use subscription licenses for ExtremeCloud™ IQ Pilot • All virtual wireless controllers • All hardware wireless controllers 	<ul style="list-style-type: none"> • Highly scalable, seamless and secure Wi-Fi connectivity • Most scalable and resilient cloud orchestration • Flexible deployment options: on-premise, private, public cloud • Enhanced data retention in the public cloud • Simplified right-to-use licensing and integral universal LLW simplifies E-Rate filing processing
Category 2 – Internal Connections	Wired Edge and Backhaul	<ul style="list-style-type: none"> • All switches – Edge to Core • Necessary switching fan modules, power supply modules, and cables (each SKU filed as a separate line item - not bundled together) • Necessary core and connectivity licenses • Necessary right-to-use subscription licenses for ExtremeCloud IQ Pilot 	<ul style="list-style-type: none"> • High performance wired backhaul, cross-platform stacking, embedded application controls • Hot swappable power supplies and fans • Most scalable and resilient cloud orchestration • Enhanced data retention in the public cloud • Simplified subscription licensing and integral universal LLW simplifies E-Rate filing processing
Category 2 – Managed Internal Broadband Services (MIBS)	Artificial Intelligence for IT Operations (AIOps)	<ul style="list-style-type: none"> • ExtremeCloud IQ CoPilot 	<ul style="list-style-type: none"> • Enhanced AIOps streamlines IT daily activities • Leverages explainable machine learning (ML) to provide verifiable actions • Delivers better student outcomes via proactive problem identification
Category 2 – Basic Maintenance of Internal Connections (BMIC)	Services and Support	<ul style="list-style-type: none"> • Basic Maintenance • TAC and OS = 100% eligible • Advanced Hardware Replacement = 0% eligible 	<ul style="list-style-type: none"> • Extreme Networks' Global Technical Assistance Center • Support Center (GTAC) provides technical support 24x7x365 • ExtremeWorks offerings let you choose the exact level of service ideal for your organization
Category 1 – Internet Access and Data Transmission Services	WAN Connectivity	<ul style="list-style-type: none"> • ExtremeCloud SD-WAN 	<ul style="list-style-type: none"> • Highly-granular WAN optimization • Improved WAN performance • All-inclusive subscription packaging
Not Eligible	Control and Monitoring of Network and All Devices, Guest Access	<ul style="list-style-type: none"> • ExtremeControl • Extreme AirDefense 	<ul style="list-style-type: none"> • Consistent device policy based on over 40 attributes centrally implemented, enforced end-to-end • Simple device onboarding, 100% fidelity of all IP assets • Internet filter and firewall integration, MDM integration, content filter integration for CIPPA Compliance.



FY 2024 Estimated E-Rate Timeline

FY 2024 Estimated E-Rate Timeline



A photograph of three students sitting at a desk in a classroom, using tablets. The student on the left is writing on a tablet with a white stylus. The student in the middle is looking at a tablet. The student on the right is also looking at a tablet. The image has a blue tint and a semi-transparent dark blue overlay.

Extreme Networks Resources for K-12 Education

Extreme Networks for K-12 Education

Useful information on Extreme Networks and E-Rate.

- [Personalized Learning for K-12 Education](#)
- [STEM and Robotics for Primary and Secondary Education](#)
- [E-Rate Program Update and BEAR Process Best Practices \(Webinar\)](#)
- [Important E-Rate Terminology](#)
- [Eight E-Rate Myths](#)
- [Official USAC Website](#)
- [FCC E-Rate Update](#)



Case Studies of US School Districts

Case Studies of US School Districts

- [Bringing Digital-First Learning Into the Classroom With Enhanced Wireless](#)
- [Elmbrook School District Enhances Connected Experience Through Agile Resilient Network](#)
- [Maximizing IT Budget with Futureproof Wireless Network at Tornillo ISD](#)
- [King Chavez Neighborhood of Schools Powers Digital Learning](#)
- [Extreme Networks Helps Connect Upper St. Clair School District With a Single Network](#)
- [West Lothian Council Modernizes Wireless to Deliver Better Learning Experience](#)



Customer Quotes

Customer Quotes

“The Fabric is the best part of Extreme. Its made our deployment in the network engineering side so much easier. The things they are doing with it today have made it amazing. I know it’s going to help us accomplish our goals with technology for our school districts and make everything so much easier.”

Justin Davidson, Network Engineer, Jefferson County Public Schools

“If a student’s test fails due to tech difficulties, there are real-world implications to that, so that it was nice to have an infrastructure back in place that just met everything I threw at it.”

Christopher Tawes, Director of Technology, BART Charter

“ExtremeCloud IQ is a major tool we can use to see the devices on the wireless and understand what they’re trying to access. We’re seeing where all the bandwidth is going and understand what the students are trying to access, what we need to block, and what devices are trying to get on the network - especially outside devices that we don’t want on our network.”

Christopher Escarsega, Network Administrator, Tornillo ISD

“Wi-Fi should be as easy as writing on a chalkboard. It should just be in place and you don’t have to worry about it. Since installing the Extreme Networks solution, we don’t give a second thought to Wi-Fi.”

Raymond Berrott, Director of Technology, Upper St. Clair School District



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