# **Better Together**

**Better Cybersecurity Built by, and for, Higher Education** 







# **Mastering Change, Maximizing Certainty**

Higher education has always been about transformation, even as that pace has recently accelerated. Adapting to new community demands, modernizing how institutions operate, and evolving to empower new kinds of learning outcomes: colleges and universities have always been on the leading edge of whatever comes next.

But that change always sets its own pace, sometimes iterative and incremental, and sometimes dramatically disruptive, always multiplied by complexities that are unique to higher education. Multiple interconnected systems, dissolving campus borders, overlapping compliance frameworks—it all keeps institutions on their toes, and creates the need for solutions that can bring simplicity and visibility to the complexity.

This is especially true in cybersecurity, as institutions are working to protect an uncertain new normal. The challenges of 2020 have illuminated risks—some old, some new—that continue to stand in the way of mastering whatever comes next.

- · Securely delivering remote work and learning
- Protecting critical intellectual property, especially research
- Solving for application and user security inside the cloud
- Innovating for both efficiency and effectiveness

These are operational and strategic challenges, both compounded by long-term budget concerns. Every institution—no matter the size or shape—is facing the same challenges, even if their unique needs vary.







# The Power of Collective Design



The collective nature of the challenge also makes a collaborative response possible.

While higher education has always been a highly cooperative space, cross-institution collaboration is more important than ever, leading to new common standards and best practices, economies of scale, and community-driven solution design.

These joint efforts are foundational in helping institutions modernize across diverse functions: teaching and learning, research, facilities, and business operations. This includes technology from infrastructure to endpoint, which has made the Internet2 NET+ program so important. Since its formation in 1997, Internet2 has worked to provide educational and research institutions access to the cutting-edge technology tools and services they need to modernize with confidence.

From their initial core focus on a better higher education network backbone, the consortium's scope has expanded to include cloud solutions, research support, and other tools and services specifically tailored for research and education. And, given the critical need for protecting information and intellectual property in a world of varied threats, cybersecurity is now a core Internet2 focus.

- Schools need to quickly move from overlapping point solutions
- They also need to find ways to simplify security in the hybrid multicloud
- They have to do it all while chasing both dollars and talent
- While staying ahead of ever-evolving compliance and regulatory frameworks

#### Committee

- · University of Nebraska: Rick Haugerud, CISO
- · University of Kansas: Mary Walsh, CIO
- · University of Kentucky: Brian Nichols, CIO
- · Rice University: Marc Scarborough, CISO
- · Villanova University: Michele Dickinson, CISO
- · Drexel University: Pablo Molina, CISO
- · Duquesne University: Tom Dugas, CISO
- · Carahsoft: Calvin Poe, Tim Boltz, Khalil Yazdi
- Internet2 NET+ team: Nick Lewis, Sean O'Brien, Emily Nichols, and Tara Gyenis



### **Securing the Way Forward, Together**

Palo Alto Networks is proud to join this partnership, giving higher education institutions a smarter strategy—and better tools—for securing users, applications, and information. Working together with Internet2 members and leadership, we're giving institutions of all shapes and sizes access to community-designed and tested security solutions that lower the cost and complexity of meaningful, from-the-ground-up security modernization.



# Securing Modern Campuses and a Collaboration-First Future

It's time to stop compromising: higher education cybersecurity must be guided by a collective vision and common solutions path. Palo Alto Networks is committed to helping guide both through our work with Internet2, bringing unmatched product leadership to the unique challenges of protecting new ways of working and learning.

#### **Collective vision**

The broader the view, the stronger the security. It's how you create the visibility necessary to build and inform controls. And it helps you respond to risks—and opportunities—faster.

Palo Alto Networks drives visibility by integrating our products into more services across today's borderless campuses. Traditional IT, IoT, ICS, and other systems—a bigger picture leads to smarter security.

#### Common solutions path

Variety drives complexity. Optimizing the technology stack used to drive modernization reduces operational costs while boosting solution effectiveness.

We're giving institutions a flexible, future-ready security platform built around common views and tools. This not only reduces skill and resource gaps but also makes for easier automated threat detection and response.

# Comprehensive, End-to-End Solution Reach

Today's higher education security professionals need every advantage they can get. Working with the Internet2 member community, we've built and priced an integrated solutions platform that gives institutions everything they need to build toward meaningful modernization and a Zero Trust network architecture.

- Highly effective remote access solution for teaching, learning, and working
- A unified platform for securing apps across all networks, clouds, datacenters, and beyond
- AI-enabled threat detection at every user and technology touchpoint
- Automated security operations that multiply the impact of team expertise



# Not Just a Platform, but a Path Forward

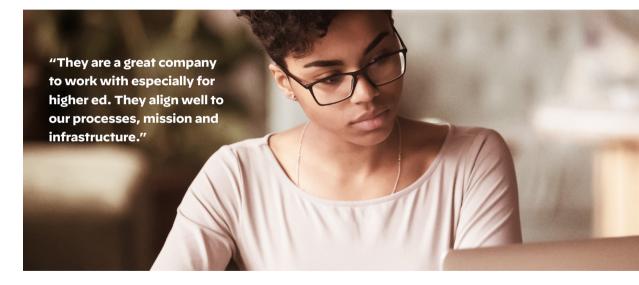


## **Community-Built and Tested**

Every facet created with higher education in mind

We collaborated with Internet2 to gather requirements and understand challenges. We then worked across the community throughout the solution design and validation phases. This means testing configurations for similar environments. The goal is to give higher education solutions that make sense for the education community.

- · Peer-tested services
- Maturity-focused product bundles (e.g., remote learning, complex campuses, smarter security ops)
- Community-validated configuration and integration





### **Easy to Afford and Operate**

Stretch budgets across the solution lifecycle

We understand the budget constraints facing our higher education customers. We're focused on building solutions that deliver a superior return on dollars—and a simple, straightforward procurement process. The move from a complex multivendor environment to a single integrated environment cuts back on time and talent demands.

- · Community-wide volume discount pricing
- · Higher education structured contract vehicles
- Better economics than single-point solutions

### **Goes Beyond Compromise**

The higher education mission deserves the very best

Higher education cybersecurity is too important to be undercut by resource shortages and systemic constraints. We're proud to bring unmatched product leadership to the Internet2 community, giving institutions easier access to a platform that evolves alongside your needs, with ongoing guidance by a community of practice.

- · Best-in-class and affordable
- · Templated but flexible
- · Foundational and future-ready

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The bundles allow us to participate in leading-edge higher ed procurement without red tape—and get advantaged pricing.





# Four Solution Bundles to Meet You Wherever You Are

#### 1: Secure Remote Access

The person—not the location—is now the network perimeter. This requires a fundamentally different approach to protecting higher ed users as they teach, learn, and explore. More than ever, connections must be fast, seamless, and secure.

Prisma Access helps institutions design and deliver modern, flexible, policy-driven secure remote access at scale—connecting any user, any application, any device, any network—while optimizing the user experience. Consolidating more point products into a single cloud-delivered platform, Prisma Access simplifies the delivery of comprehensive security to all users and locations, making it the ideal solution for also securing SD-WAN installation at satellite sites and offices. The solution bundle drives robust security across the entire connection, from user to application and from cloud to the edge.

#### Foundational First Step in Security Modernization

### Simplified approach

- Pre-configured for higher education security environments
- Built around community best practices and playbooks
- · Fast, simple, and complete system onboarding
- Consolidated networking and security delivered as-a-service from the cloud

#### Rich feature set

- Flexible VPN options secure data in transit: IPsec, SSL/IPsec, and clientless VPN
- Industry-leading firewall as a service (FWaaS) prevents threats from impacting users
- Cloud SWG with AI-informed, policy-driven access control protects against web-based attacks

- Advanced prevention from Cortex XSOAR, Cortex, XDR, and WildFire detect and block exploits, malware, and command-and-control traffic
- Data loss prevention (DLP) categorizes sensitive data and applies access control policies

### **Exceptional user experience**

- Easy to install and intuitive to use
- Low-latency inspection
- Universal cross-device compatibility

And since this is all built and delivered in the cloud, security teams can spend less time managing tools and more time focused on strategic decision-making.





# 2: Comprehensive Cloud Native Security

Teaching, learning, and discovery come to life through applications. Institutions need simpler ways to manage and secure the diverse application needs of their many stakeholders in and out of the cloud.

Prisma Cloud enables institutions to better secure their entire application continuum, from on-premises legacy workloads to native tools and services being consumed in the cloud. This gives teams a single lens and lever for moving beyond compliance to effective real-world security, integrating critical security defenses directly into existing application environments, and gives risk managers much-needed peace of mind.

It's past time for security teams to work alongside IT in the cloud.



#### **Critical efficiencies**

- · Reduce alerts and time spent on oversight
- Secure applications across the application lifecycle
- · Smarter risk analysis and prioritization

### **End-to-end segment security**

- Host security (VMs)
- · Containers and Kubernetes
- · Serverless security
- · Web Application and API Security

### **Embedded cloud provider integration**

- AWS
- Azure
- · Google Cloud
- · Alibaba Cloud
- · Oracle Cloud Infrastructure





### **3: Deep Threat Contextualization**

Even as known threats evolve, new risks emerge. Higher education must leverage collective threat intelligence—sharpened by AI—to secure important assets against bad actors who never seem to sleep.

As users, devices, and applications proliferate, institutions need better solutions for quickly sifting through millions of data points to spot emerging trends and patterns. Palo Alto Networks Cortex XDR and XDR Pro put ML and AI to work against threats from endpoint to datacenter to edge, ensuring a consistent security posture that scales and shifts as required.

Security teams need to augment their own expertise with superior threat intelligence.



#### **Critical new capabilities**

- · Detect and investigate threats faster
- Enable critical context- and behavior-driven risk analysis
- Turn threat intel into smarter in-depth defenses
- · Conduct expert, proactive threat hunting

# Complete network, cloud, and endpoint protection

- Protect against traditional threats plus malicious insiders, policy violations, external threats, ransomware, fileless and memoryonly attacks, and advanced zero-day malware
- Third-party integration (e.g., Check Point, Fortinet, Cisco ASA, Okta, PingOne, PingFederate, Azure Active Directory, Google Cloud, Google Kubernetes, AWS, and Windows Event Collector)
- · DNS- and URL-based attack protection

# Driven by cutting-edge data and decision science

- Continuous monitoring across all endpoints and assets
- · Industry-leading AI and ML
- Expansive Cortex Data Lake threat intel database
- All informed by Internet2 community playbooks

It all becomes part of the context-driven risk analysis and prioritization institutions need to move toward meaningful Zero Trust, especially across today's dissolving campus borders.



### **4: Automated Security Operations**

Securing what matters against a world in motion is hard work. The smarter approach is to build systems that scale cybersecurity teams' ability to respond with agility and at scale. Already-lean security teams are spending way too much time on ad-hoc and repetitive, manual tasks, leading to staff burnout and slower response times. Cortex XSOAR helps institutions streamline incident response processes and eliminate busywork through powerful automation, so security teams can focus on threat hunting, critical incident investigations, and proactive shoring up of defenses.

This must be the end state: a SOC strategy that effortlessly evolves over time.



#### **Automate with confidence**

- Manage all your incidents and threat feeds on a single platform
- Leverage huge repository of out-of-box integrations and automated playbooks for a wide variety of security use cases
- Benefit from combined knowledge of industry's largest SOAR community

#### Collaborate across divisions

- Bring together current operational security/IT silos
- Automate protection across multiple clouds and environments
- Leverage best practices from across higher education as well as other verticals

### **Built for Innovation and Integration**

- 90% faster response
- 650+ product integrations
- 18,000+ DFIR members

Cortex XSOAR gives institutions the ability to orchestrate security operations in real-time, but with less effort. It's not just about making the right decision but turning that well-informed clarity into continuous cybersecurity readiness.





# Collaboration Changes Everything: A Platform, a Path, and a Partnership



Higher education has always thrived in cooperation. The hard work of the Internet2 community has prepared institutions for a quickly unfolding future—creeping complexity or dramatic disruption alike. But even the best preparation isn't enough, especially when it comes to cybersecurity.

That's why we're confident this partnership is so important. By lowering barriers of adoption, increasing solution standards, and delivering a superior source of threat intel, we believe we can play a critical role in helping create a true community of practice, where institutions collectively face—and master—emerging risks.

This is what our collaboration with Internet2 is all about: helping institutions of any size, shape, or transformation pace move toward meaningful maturity.

Working together, we believe the future can look brighter than ever.





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