



## Modernizing Cyber Security Education at Calhan High School

### The Situation

Calhan High School instructor Jeff McGuirk noticed a significant gap between local education in cyber security and the key skills that business hiring managers were looking for in candidates. Indicative of the growing cyber skills shortage globally and combined with his observations that students graduating school were not equipped with the “soft” professional skills employers expect, Jeff saw an opportunity to modernize how cyber security concepts were taught at Calhan High School.

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“It really helps you develop skills starting from Linux and on from there and it’s great for helping you learn about and figure out networks and ports, which are a big part of hacking.”

– Calhan student

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## The Solution

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Jeff was introduced to Circadence at a cyber security conference in June 2019. When he learned about Circadence's Project Ares® gamified cyber learning platform, he immediately saw the benefit it could bring to Calhan High School students enrolled in the Computer Information Technology



Jeff envisioned and eventually implemented an entire cyber security curriculum that incorporated Project Ares' immersive lab environment into the classroom. Project Ares was embraced by 16 students in September 2019 and continues to be used today as a learning tool. Students are using the platform to prepare for an A+ Exam through CompTIA at the end of the class term. Students played the cyber learning games, learned Linux basics, and leveraged the platform's Media Center to understand cyber concepts and build skills relevant to real-world cyber job duties. Students were introduced to cyber tools like Wireshark and Packet Sniffing and basic Python programming, too.

In the future, Jeff envisions launching a 'cyber consortium' in partnership with other schools in the same district to empower students to develop and pursue an interest in IT and cyber security throughout their school career. The programs would help students design, create and implement systems that are cyber secure so that regardless of the career field they enter into, they understand the importance of practicing good cyber hygiene.

## The End-User Benefits

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- Students are building professional skills that enable them to stand out during internship and job interviews
- Students are taking ownership of their own learning and doing so voluntarily thanks to the gamified elements in the platform, which keep them engaged and enticed to keep learning
- Students receive tangible results in Project Ares: receiving either an in-platform Project Ares work role certificate or official CompTIA certification for those who take and pass the exam.

Learn more about Calhan High School at [www.calhanschool.org](http://www.calhanschool.org).

## Calhan High School Fast Facts

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Industry:  
K-12 Education



Number of students:  
175



Students using Project Ares:  
16

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Learning through gamification has proven to be a wonderful way for students to learn and retain what they learn. The fact that they don't just teach theoretical content on cybersecurity but actually get hands-on experience using the tools a real security analyst will use in their job is amazing. It has really upped 'the game' when it comes to education.

– Mr. David Slothower, Superintendent of Calhan School District

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Project Ares is an award-winning, gamified cyber security learning platform that helps students and professionals build and keep skills sharp against evolving cyber threats. Practice and progress in the hands-on platform with foundational, intermediate and advanced cyber learning content. Its patented cyber range-as-a-service technology delivers authentic virtual machine-based exercises so cyber preparation is as true-to-life as it gets.

Visit [www.circadence.com](http://www.circadence.com) to learn more.

## LOCATIONS

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Circadence Corporation is a market leader in cyber security readiness. Powered by a culture of innovation and the demands of an evolving cyber landscape, Circadence delivers award-winning cyber learning solutions featuring gamification as a tool to create engaging, immersive learning that sticks. The company has developed product portfolio that addresses cyber learning needs from security awareness to complex cyber team interaction to address critical security challenges for enterprise, government and academic institutions. Circadence's solutions deliver persistent, immersive and true-to-life experiences that match and adapt to contemporary threat environments.

For more information, visit [www.circadence.com/contact](http://www.circadence.com/contact)