



How TalTech Improved Its Cybersecurity Curriculum Using RangeForce

Challenge

TalTech's cybersecurity faculty are constantly calibrating their curriculum to ensure students understand the complicated threat landscape. With so much complexity in this field, the cybersecurity department faced unique logistical and educational challenges in its approach to teaching.

The school's existing processes for developing hands-on learning tools could not keep pace with the demand for educational content. Professors dedicated so much time and effort to preparing lessons and evaluations that they lacked the time needed to actually teach their students.

There was an immediate need for the university to identify a robust technology partner that could support hands-on cybersecurity learning environments at scale. A viable solution would need to cut setup time as well as cost.

Solution

In 2016, TalTech implemented RangeForce with the goal of overcoming its teaching constraints. The university introduced on-demand, cloud-based training as part of a new hands-on approach to teaching. Using pre-built modules from the Battle Skills platform, deploying interactive learning environments became a fast and simple process.

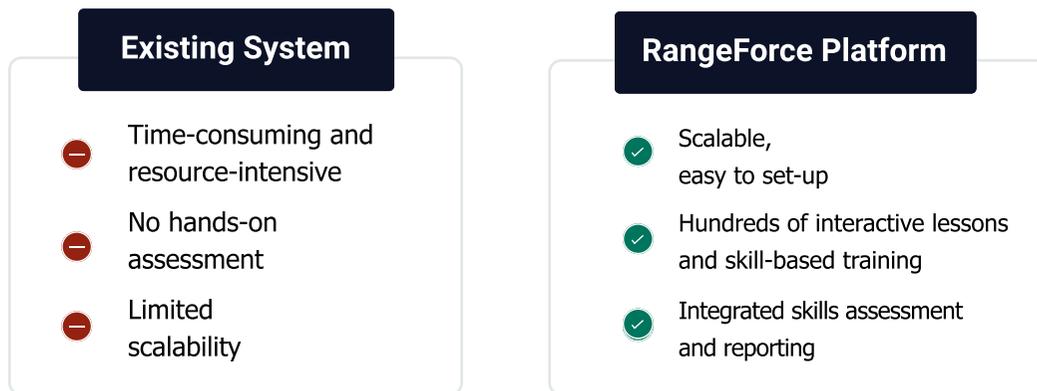
Today, TalTech utilizes RangeForce at both the undergraduate and graduate levels. Students are impressed with the interactive nature of the platform and see incredible value in the ability to face-off against real cyberattacks before entering the workforce. Prior to using RangeForce, experience with cyberattacks was limited to theoretical discussions or threat intelligence reports.

Customer Background



Tallinn University of Technology (TalTech) is Estonia's flagship science and engineering university.

TalTech continues to explore other valuable applications of the RangeForce solution. Assessments are now incorporated into the graduate admission process, assisting the university in identifying and attracting top talent to its prestigious Masters in Cybersecurity program.



Results

Since 2016, RangeForce has helped train over 625 TalTech students. Before deploying RangeForce, professors would spend up to 80 hours preparing a single cybersecurity course for a class of 100 students. That number has since dropped by 75%, with the same course preparation taking less than 20 hours to complete.

Similarly, RangeForce helps to streamline the assessment and evaluation process. It now takes a TalTech professor approximately 20 minutes to grade students with the help of RangeForce's automated reporting capabilities. This process previously required about 16 hours per every 100 students; a prohibitively time-consuming operation.

Most importantly, RangeForce enables TalTech students to experience real cybersecurity concepts in action. Whether identifying and containing real threats or working with real security tools, TalTech students are better equipped to bring value to cybersecurity teams upon graduation.

“It’s a scalable method for the university to evaluate skills and also assess levels of motivation and problem-solving. RangeForce is many times cheaper than building your own cyber range and I don’t need to outsource technical help.” - TalTech Cybersecurity Lecturer