

Client: Red Deer Polytechnic

Red Deer Polytechnic (RDP) formerly called Red Deer College is an educational institution located in Red Deer, Alberta, between Calgary and Edmonton. It offers more than 100 academic diplomas, degrees, technical, and trade programs. Supporting staff, students, facilities, building security, contractors, and guests on the same network infrastructure presents a unique set of challenges. The client turned to OnX for help with enhancing its security posture and ensuring that all traffic at the Internet and Data Center edge is normalized, inspected, and permitted based on a dynamic data access security policy.

Challenge	OnX Canada solution	Results
Existing system architecture lacked segmentation and provided a direct data path between the campus and Data Center. This presented a real and tangible systems and data security risk.	OnX enhanced the network to optimize the data path and implemented a multi-site cluster of high-performance Firepower appliances to segment the campus and Data Center networks.	By introducing segmentation and a policy enforcement point between the trust zones, the client is confident that they have the necessary visibility, tools, and technology to identify and block threats on the network.
Internet Edge firewalls were nearing the end of their life cycles and new and improved alternatives were sought.	OnX virtualized the Internet Edge and Data Center firewalls and migrated the policy to the new systems.	By consolidating multiple firewalls onto physical appliances, the client simplified their hardware lifecycle management and operational processes.
Overall implementation of firewalls and security protocols were up for review given the diverse work locations of staff and faculty.	 OnX cleaned and audited the historical configurations before migrating and optimized the security policies. 	The new security infrastructure exceeded the client's requirements for segmentation, visibility, and policy enforcement.

Challenge

RDP's leadership expressed concern about an increasing number of security challenges faced by their SecOps teams and sought to improve their overall security posture. The primary objective was protecting their sensitive data and critical assets within their Data Centers. To achieve this, the institution engaged OnX to deliver an infrastructure assessment and security review inclusive of recommendations for remediation. A modernized security platform and segmentation between the campus and Data Center was deemed paramount to a successful outcome.

OnX Canada solution

The client tasked OnX engineers with enhancing their security architecture through the implementation of a high performance and scalable Data Center Edge firewall cluster. OnX identified an opportunity to further consolidate the Internet Edge firewalls onto the new security appliances as part of a larger lifecycle refresh.

OnX led the effort with RDP to implement a pair of Cisco Data Center-class Next Generation Firewalls (NGFW). The design leveraged new features and capabilities only supported by Cisco – specifically Split Spanned Multi-Instance clustering between Data Centers.

Results

By inserting a wall of protection between the campus and Data Center, Red Deer Polytechnic dramatically enhanced their security posture while introducing new operational tools for policy management, enforcement, network visibility, reporting, and forensic analysis. This supports the security operations team through process and workflow improvements as well as introducing new capabilities for the automation of threat detection and containment.

Integration with Cisco's broader security eco-system – including the Cisco Identity Services Engine (ISE) and SecureX – provides RDP a defense-in-depth strategy for securing their infrastructure in alignment with the complex challenges presented by their diverse user groups. Enhancements now possible thanks to the OnX team.

Contact us for more information on how OnX can apply advanced solutions to modernize your security environment.



