Customer use case: School

Organisation Profile

A UK based independent boarding school – a member of the Rugby group of schools. The school boards some 800 pupils. The campus is spread across 100 acres and new buildings have been acquired in the vicinity.

IT profile

The school uses Microsoft based systems. End-users connect via Wi-Fi and wired infrastructure to access the school systems. These are managed through several, non-integrated systems. Systems are managed in house using a variety of opensource and element managers. The students have guest access, though this is heavily controlled to prevent harm to such a young user base.

Project Drivers

The end of life of a key NAC system was a catalyst for evaluation of a replacement. Core NAC feature was to deny access to non-approved devices. It needed to be agentless and not require 802.1x nor mac pre-authorisation on the switches. The school was also looking at how to control "unauthorised" network usage. This is where the students might obtain a staff credentials to bypass student controls. The bursar also wanted to take the opportunity to save money on the overall IT budget.

Evaluation and Proof of Concept (PoC)

Rebasoft was chosen for a PoC based on technical features, cost, and ease of deployment. The organisation also wanted to deliver quick results to meet project timeframes. The areas for evaluation were:

- Deliver NAC functionality including port blocking and VLAN steering
- Auto discover all assets, including hardware, OS, installed applications and enabled features to identify non-authorised systems with full visibility to reduce manual effort
- Check systems against security policy:
  - Is anti-malware installed?
  - Is disk encryption enabled?
  - Are secure settings enabled to prevent users installing software or Autorun programs from running?
- Deliver vulnerability scanning (which was not covered in house), but in the PoC revealed a number of potential issues
- Investigate replacement of SolarWinds & Kiwicat tools for monitoring and configuration backup

Challenges

The organisation had SolarWinds for monitoring and Bradford networks for NAC. There was a degree of overlap in systems and little visibility on compliance with security policy. The network infrastructure was being updated as it had been configured with a high degree of segmentation that made management difficult.

The other issue was that while there were school owned devices (PC's and other systems), there were thousands of pupil owned devices- iPhones, Tablets, Watches, Kindles and more. These systems were constantly accessing the network to gain access to non-allowed services using "stolen" credentials

Rebasoft Approach

Rebasoft overcame the challenges

- Quick results: Rebasoft was deployed on a Hyper-V platform
- Network data was collected from the existing HPE networks switching infrastructure, including configuration backups
- End point data was collected with WMI to allow security compliance reporting
- Port blocking and VLAN steering was demonstrated
- Systems monitoring (switches and servers was established – with email (with alert supersession for duplicate events)
- Vulnerability scan showing Wi-Fi high severity issues

Little involvement was needed from the IT operations team, other than providing credentials and network access (firewall rules). Rebasoft did not need to install software agents on PC's.

Rebasoft Benefits

Rebasoft delivered and exceeded the stated needs:

1) Network visibility & device search capability. Down to device details on each port
2) Improved perimeter security & rogue Network device/shadow IT detection
3) Vulnerability testing to improve internal security & reduce/avoid annual internal pen testing fees
4) Real-time asset database with monitoring available for selected systems
5) Automation & config collections - improve systems management & aid resilience
6) Additional reports for breaches of access rules avoiding the need for spend on log/SIEM tools
7) Cost savings through the retirement of existing monitoring tools – with relevant cost savings on maintenance fees

Outcome

"We reduced costs which helped the school with its financial aims. Reduced server and polling loads on the network. We were able to become more effective with fewer systems to operate and use. This meant saved time & reduction in errors. We also like the fact that Rebasoft is a UK company with local development office in Reading, makes for easier & stronger relationship with our chose vendor" – Network manager

See for yourself how Rebasoft can improve any organisation's cyber-resilience