

Penta Network Security Monitoring

A Penta Consulting Managed Service

Discover and monitor the infrastructure to improve availability and improve cybersecurity within an international mining organisation

setting the scene

The extensive IT network, in a remote part of the world, is critical to support mining operations with administrative and SCADA systems. Using IT equipment in this type of hostile environment often leads to problems and failure. Highly manual processes, with limited staff, always moving equipment lead to downtime and security issues.

understanding the challenge

A series of outages & security compromises have led the company to look at the network infrastructure. The advice was to replace the network infrastructure to solve the issues. The company had no confidence that this was the right route to take. Simply replacing equipment would be very expensive and no guarantee of fixing the root cause. They were not even sure what equipment they had.

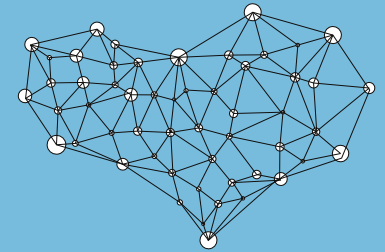
creating the solution

The Penta Managed Security Services system immediately highlighted the disparity between live switches and spreadsheet records.

Discovered systems were automatically enrolled and then monitored. This reduced the manual effort to ensure monitoring is always up to date. Having this monitored system is highly valuable when problems occur as they can be quickly isolated and fixed. As well as this a number of network interfaces were found with errors and incorrect settings.

An accurate inventory of switch type, OS and utilisation were automatically built. A capacity assessment was produced from this data, showing switch utilisation. It showed that in excess of 60% of the switch capacity was unused - this helped confirm the decision not just to replace the network.

Maintenance and replacement estimates were slashed as a result of understanding which systems were critical and how heavily used they were. Judicious use of existing systems allowed a **saving in excess of £100,000 in the first year** through maintenance savings and avoiding unnecessary replacement of perfectly functional devices, saving further capital outlay.



Accurate discovery found 60% of the switch capacity was unused

Total Coverage

Beyond the network infrastructure itself, endpoints were also discovered & classified; while this was outside the initial scope it showed gaps in Malware defences and number of unsupported production windows systems.

These gaps and unsupported systems, potentially vulnerable, could be an attack vector leading to security breaches.