

MAKING YOUR DATA TAMPER-PROOF

Sometimes keeping information safe means more than making sure you find it when you need it. You also need to be sure no-one has access to it – no tampering – especially if you may need it as evidence in the future.



THE CLIENT

A UK Government Agency that required a secure evidence store.



THE CHALLENGE

Agency staff receive and capture information when working in a RESTRICTED domain. Although reasonably secure, this information can be accessed by a number of people and can be updated when necessary. Because this information may need to be used as evidence at a later date, a copy of it must be taken and stored in a SECRET domain at every stage of the process.

This information is in the form of data files, including both text and image-based files. The information is exchanged via email and these email messages themselves must also be saved securely into the domain.

As well as external threats, the Agency had to seriously consider the risk of insider threat, which can account for a significant percentage of cyber breaches. The Government Agency's challenge was therefore to find a solution that meant it was not possible to gain access to the secure copies from outside the SECRET domain.



THE SOLUTION

Nexor provided a solution comprising two servers – one in the RESTRICTED domain and one in the SECRET domain – with a data diode between them. The data diode ensures information can physically only go in one direction, in this case, only into the higher-security SECRET domain.

Initially only data files were transferred but subsequently the proxy servers were configured to also accept the email messages.

Nexor trained the Agency's staff to configure the diode. Most of the configuration was done prior to shipping the system, but final details were specified on site by the Agency's staff; allowing it to reduce its overhead.

Installation and training took place simultaneously, enabling staff to immediately use what they had learned. Anonymised feedback from the training was taken to ensure that it met the Agency's needs.

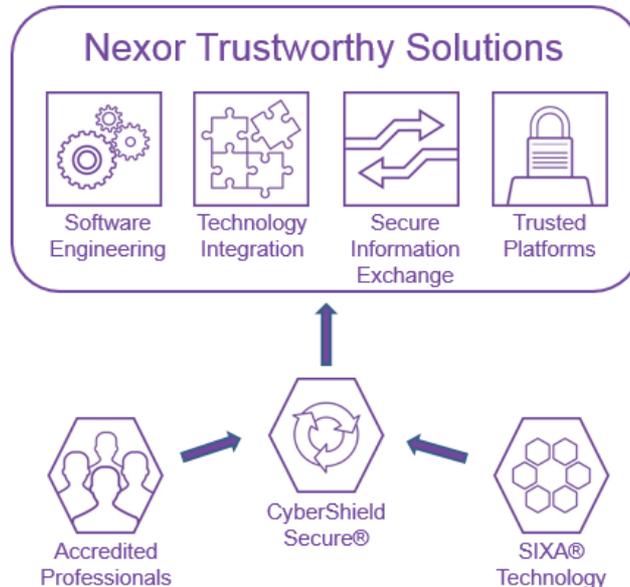
"The trainer was knowledgeable about the subject and the hands-on exercises enabled me to understand the content better."

(Government Agency staff member)



TRUSTING THE SOLUTION

The Nexor solution was developed through a combination of our accredited professionals, CyberShield Secure® processes and industry-leading SIXA® technology portfolio.



Critical to any security solution is gaining the confidence that it meets the security claim. The Nexor solution was designed to meet business critical customer requirements.

Specific measures that supported this were:

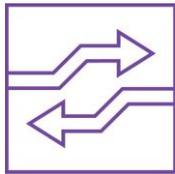
- The Nexor Data Diode is assured to Common Criteria EAL7+;
- All the appliances used were Common Criteria certified to Common Criteria EAL 4+;
- Software was developed using our CyberShield Secure® development process that conforms to Microsoft SDLC, CMMI and TickITplus standards;
- Use of threat modelling during development;
- Delivered using cyber security professionals with industry-recognised accreditations, such as CISSP (Certified Information Systems Security Professional), CSSLP (Certified Secure Software Lifecycle Professional) and CESG Certified Professionals;
- A three-year support and maintenance package was included in the solution.

THE IMPACT

The transfer of files to the SECRET domain happens seamlessly, without disruption to normal operations – as far as frontline agency staff are concerned, it is business as usual.

Should any of the information in the SECRET domain be required to provide evidence in the future, the agency can guarantee that it has not been possible to access it from the RESTRICTED domain using the connection secured by the data diode.

After the Agency had successfully installed and configured the solution at one of its sites, it considered that it had worked so well that it subsequently purchased and installed further solutions for deployment.



NEXOR CAPABILITIES

Nexor provides solutions to get information in to and out of secure networks. This enables organisations to perform more efficiently and effectively. The connection of secure networks is achieved by using people, process and technologies that align to best cyber security practice established by national authorities.