



Mimic safely extracts maintenance data

Challenge

- The propulsion platform management system onboard the Royal Navy's (RN) nuclear submarine is used to inform maintenance decisions when deciding which assets are safe to operate and which assets are reaching the end of their safe and useful life.
- Containing confidential and valuable data, the RN required a tool that would retain the control system's integrity and be able to safely extract data whilst remaining secure and intact.

Solution

- Already trusted by the RN, James Fisher Mimic's (JFM) condition monitoring technology was first-choice onboard the new Astute-class submarines.
- JFM designed and created a data extraction system to fulfil the RN's complex specification.
- After thorough testing, the system was installed onto a custom-built server and workstation before being exhaustively tested on the submarine to ensure the system fully maintains the safety protocols of the nuclear control system.

Results

- Mimic condition monitoring enables the RN to successfully collect, store, analyse, extract and report any numeric parameter within the control system, increasing operational availability.
- The pre-set alarms and warnings trigger remedial or maintenance tasks to ensure the safe running of the nuclear plant, the submarine propulsion and hotel systems, improving safety and reliability.
- As a result of the bespoke data extraction system's success, it was subsequently installed onto the Astute sister submarines Ambush, Artful, Audacious and Anson.