ARES

50% Security Staffing Efficiency at US Nuclear Plants

CASE STUDY

CASE STUDY SUMMARY

AVERT PS
PHYSICAL SECURITY

AVERT Physical Security (AVERT-PS) is unique Security Risk Assessment (SRA) software used to perform a Vulnerability Assessment (VA) of the facility along with providing the capability to visualize, quantify, assess and optimize security posture. This solution's holistic and integrated approach, delivers accurate, measurable, and repeatable assessments of physical security design and operations.
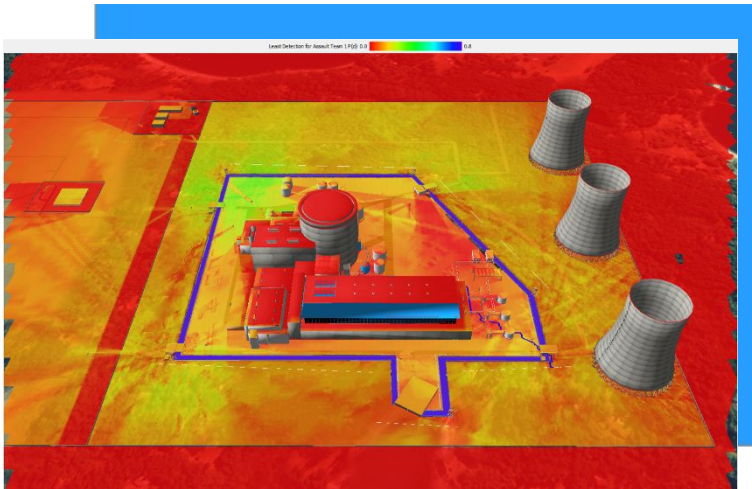
AVERT VT
VIRTUAL TABLETOP

AVERT Virtual Tabletop provides an interactive state-of-the-art virtual training exercise environment to prepare for security threats, incidents, responses and operational conditions.
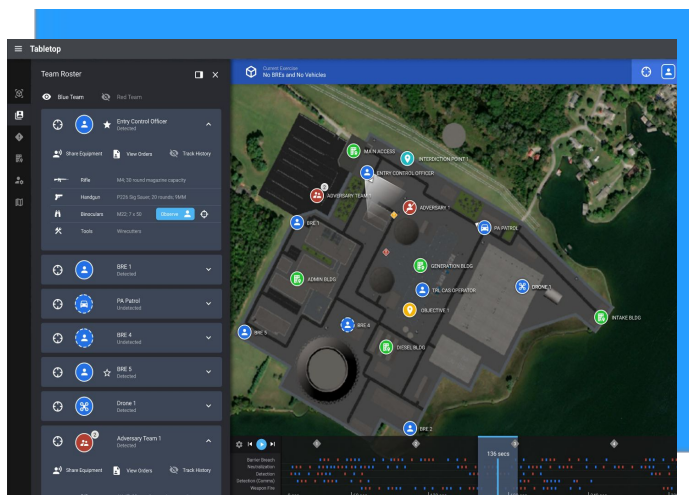
OBJECTIVE

Since the early 2000's our Confidential client has had a goal to optimize physical security staffing, striving to save costs, while maintaining or improving overall physical security effectiveness. The Confidential client has continually been working to improve physical security and safety by leveraging and utilizing the latest technology.

SOLUTION

Example AVERT-PS Heat Map (not Confidential Client)

Example AVERT-VT Exercise (not Confidential Client)

The Confidential client used the AVERT-PS software to develop 3D Digital Twins of each of their nuclear power plants and then used those models to establish a baseline physical security posture from which reviews and evaluations were performed. Using the baseline model, variations to the security posture (i.e., changing guard rounds, re-positioning BREs, etc.) were performed to optimize the physical security posture. The Confidential client continually uses the AVERT-PS software to support outages (i.e., temporary locations for equipment, maintaining clear paths, etc.), for major upgrades, training and to support full and limited scope FOF exercises.

The Confidential client obtained the AVERT-VT software, in the beginning of the COVID-19 pandemic to support the training requirements for a planned security modification being implemented during the next outage. The AVERT-VT software has provided new insights into security training including the ability to provide unique training to security Response Team Leaders (RTLs). The Confidential client is discussing ways to gain NRC credit for the use of the tool to perform exercises and support training, which would improve physical security effectiveness and could also result in cost savings.

RESULTS

ENHANCED SECURITY – The AVERT-PS software confirmed the existing security posture, identified a few scenarios that previously were not known and was able to fortify our response through the use of simulation and training.

COST SAVINGS – Through the use of the AVERT-PS software, FOF exercises and related programs, the Confidential client has been able to justify and reduce physical security staff to the NRC licensed minimum staff. Through the use of the AVERT-PS software, the Confidential client has reduced security costs resulting in yearly cost savings on the order of $15M.

ROI – The Confidential client has consistently had ROI payback periods of approximately 1 year.