Tiny **machine learning** solves warfighter ID challenge

A **consortium formed** in mid-2021 has rapidly developed a solution to the problem of authenticating the identity of defence personnel during tactical operations.

The trio – Thales Australia, Microsoft and Tasmania’s Fortifyedge – has established a project called Nexium Defence Cloud Edge to address this issue of confirming that personnel are who they say they are. Central to the ‘zero trust’ authentication capability is tiny machine learning (ML) technology that can be embedded into body-worn devices such as a smartwatch or parts of a uniform, for instance.

Fortifyedge’s MoveID tiny ML technology runs advanced neural networks on various body-worn devices to constantly access the identity of the user to enable decisions to be made at the tactical level even when access to the cloud is denied. MoveID runs passively in the background on soldiers’ wearables, computing devices and the Microsoft Azure Stack Edge Mini R so they can focus on the mission and not traditional biometrics, passwords, personal identification numbers or smart cards to access systems.

“We do this from the edge to cloud as we’ve developed with Thales and Microsoft for the tactical edge with anything an operator wears, carries or interacts with, enabling tactical operators to access security systems at the speed of relevance in a secure and trusted way,” a Fortifyedge spokesperson told *DTR*.

– **Staff Reporters**

**ABOVE:** The Nexium Defence Cloud Edge capability enables the identity of deployed personnel to be authenticated rapidly and on the move. Image: ADF