

COTS modifications and security enhancements

Purpose

The purpose of this capability sheet is to provide some examples of the modifications and enhancements to COTS products for improving security and enabling their use in sensitive areas. SST modified items are normally sealed using tamper-evident labels, optionally serialised or bar-coded, for easy inspection and assurance.



Credentials

SST operates a purpose-built UK Government approved Secure Site in Gloucester with personnel security cleared to UK SC or DV.



SST is registered on the UK Defence Contractors List, maintains EN ISO 9001:2008 quality certification and is a CESG accredited TEMPEST test facility/manufacturer and Crypto Custodian up to high grade.

Laptops

The modification of intricate and sensitive internal components of laptops is a specialist undertaking in which SST have specialised for a number of years.



Removal of audio, camera, USB and wireless capabilities.

To customer requirements SST physically modifies the OEM items whilst ensuring that performance of the equipment is otherwise unaffected. The physical removal or disabling ensures the capability cannot be re-enabled using software or user intervention.



Installation of crypto hardware and software

By installing the CAPS approved encryption hardware or software and where possible integrating the token reader, SST can rebuild the disk image and deliver a fully working secure laptop.

Interface and Port modification

SST modifies, creates and disables interfaces, often integrating previously external devices into one laptop; for example Fibre Ethernet and Serial communications for crypto & satellite communication.



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VoIP phones

SST modifies VoIP telephones for deployment into sensitive areas. This may be as simple as a Push-to-talk handset or port sealing through to full TEMPEST Level A compliance.



Fibre Ethernet connectivity

Enables deployment of VoIP telephones into areas which only have a fibre network without re-cabling,



Push to talk handsets and Positive Disconnect

Enhance telephone security in sensitive areas, physical disconnection of handset microphone, directly replaces OEM handset. Positive Disconnect assures the physical disconnection of all microphones and speakers, with optional visible confirmation.

Bezel modification

Identify areas or security classifications with easily distinguished bezel colours, logos or department specific information.



Access Control

Integration of Biometric, smartcard or token access to VoIP services and Multi Function printer/scanners. Enables centralised identity/profile lookup for access, scanning destination and walk-up print.



Custom developments

SST has demonstrated expertise in COTS product modification with in-house 3D CAD modelling and rapid prototyping, electrical and electronics engineering.

