

solutions

for **Chemical Facility
Anti-Terrorism Standards
(CFATS)**



duostech

Chemical Facility Anti-Terrorism Standards (CFATS)

DHS Risk Based Performance Standards Table Section 27.230

Task: RESTRICT AREA PERIMETER

Duos Solution Application:

Duos' Virtual Security Shield (**vss**) utilizes Intelligent Video, or IV, with radar, depending on perimeter size to establish a secure virtual perimeter with object identification and tracking, adjustable buffer zones & left/removed object detection. Long Range cameras with laser illumination and/or thermal imaging can also be utilized to enhance the systems' capabilities. Analytics for loitering/object counting/wrong way detection/tracking can be utilized. The command and control platform (**centraco**) is browser based (no client or seat fees), modular and open for integration to third party systems and sensors.

Link/Additional Information:

- <http://www.duoseotechnologies.com/DownloadCenter/VSS.pdf>
- <http://www.duoseotechnologies.com/DownloadCenter/Praesidium-1pg.pdf>
- <http://www.duoseotechnologies.com/DownloadCenter/centraco.pdf>
- <http://www.duoseotechnologies.com/DownloadCenter/Chemical-PlantSecuritySystem-CS.pdf>
- <http://www.duoseotechnologies.com/DownloadCenter/WP-VSS.pdf>

Task: SECURE SITE ACCESS

Duos Solution Application:

Compliance is achieved by selected camera analytics, **mast** - Mobile Advanced Surveillance Trailer for tactical special interest areas and **camia** - Collision Alert Monitoring and Impact Analysis for detection and quantification of impact on pipelines, docks, trusses, machinery, and tanks.

Link/Additional Information:

- <http://www.duoseotechnologies.com/DownloadCenter/centraco.pdf>
- <http://www.duoseotechnologies.com/DownloadCenter/mast.pdf>

Task: SCREEN CONTROL ACCESS/EGRESS

Duos Solution Application:

ices, Duos' Intermodal Inspection and Container/Tanker Exit System allows for inspection and cataloging of vehicle entry and exit. Duos has also integrated with under vehicle inspection systems and TWIC. Duos has deployed Chem./Rad./Explosive detection systems for rail lines, and the technology is transferable to vehicle entry/exit traffic.

Link/Additional Information:

- <http://www.duoseotechnologies.com/DownloadCenter/ICES.pdf>

Task: DETER, DETECT AND DELAY

Duos Solution Application:

Duos' **centraco**, command and control platform for the coordination of all systems and sensor technologies, provides complete situational awareness with a built in, customer defined "concept of operations" for planning and an orchestrated tactical response featuring a 3D immersive interface.

Link/Additional Information:

- <http://www.duoseotechnologies.com/DownloadCenter/centraco.pdf>

Task: SHIPPING, RECEIPT, AND STORAGE

Duos Solution Application:

Duos integrates with several RFID technologies and can track via its video analytics, removed objects and suspicious object/personnel.

Link/Additional Information:

- <http://www.duoseotechnologies.com/DownloadCenter/Praesidium-1pg.pdf>

Task: THEFT AND DIVERSION

Duos Solution Application:

Duos integrates with several RFID and other tracking (GPS) technologies and can track via video analytics, removed objects and suspicious events while coordinating a response (automatic or manual), such as controlling access points or gates or prompting visual and audible alerts via the command and control platform, **centraco**.

Link/Additional Information:

- <http://www.duoseotechnologies.com/DownloadCenter/centraco.pdf>
- <http://www.duoseotechnologies.com/DownloadCenter/TunnelSecuritySystem-CS.pdf>

Task: SABOTAGE

Duos Solution Application:

Selected camera analytics and/or the deployment of Mobile Advanced Surveillance Trailer (**mast**) can be used for the deterrence of sabotage. Duos' Collision Alert Monitoring and Impact Analysis (**camia**) detects and quantifies impact events on pipelines, docks, trusses, machinery, and tanks. Duos' **centraco** command and control can also integrate with PLC/PCS/ISC control systems for process protection and response activation/de-activation.

Link/Additional Information:

- <http://www.duoseotechnologies.com/DownloadCenter/centraco.pdf>
- <http://www.duoseotechnologies.com/DownloadCenter/mast.pdf>

Task: CYBER/PROCESS

Duos Solution Application:

Duos' **centraco** command and control integrates with PLC/PCS/ISC control systems for process protection and response activation/de-activation.

Link/Additional Information:

- <http://www.duoseotechnologies.com/DownloadCenter/Remote-BridgeMonitoringSystem-CS.pdf>
- <http://www.duoseotechnologies.com/DownloadCenter/centraco.pdf>
- <http://www.duoseotechnologies.com/DownloadCenter/SmartYard-CS.pdf>

Task: RESPONSE

Duos Solution Application:

Duos' **centraco** command and control integrates with computer aided dispatch and response scenario events.

Link/Additional Information:

- <http://www.duoseotechnologies.com/DownloadCenter/SmartYard-CS.pdf>
- <http://www.duoseotechnologies.com/DownloadCenter/centraco.pdf>
- <http://www.duoseotechnologies.com/DownloadCenter/Praesidium-1pg.pdf>

Task: MONITORING

Duos Solution Application:

All Duos systems incorporate a "Health Check" sensor/network and video integrity analysis software component that constantly polls for sensor and video calibration, connectivity, software updates/issues and HD disk status.

Link/Additional Information:

- <http://www.duoseotechnologies.com/DownloadCenter/Praesidium-1pg.pdf>
- <http://www.duoseotechnologies.com/DownloadCenter/mast.pdf>

Task: ELEVATED THREAT LEVELS

Duos Solution Application:

Based on the customer's concept of operation, Duos' technology can automatically or manually adjust sensitivity, sensor interaction, response, alerting, and create buffer zones to pre-determined security level based settings. This may include increased sensitivity of IV settings and sensors, opening of secure communication channels, shut down of process equipment, and auto locking of gates/doors. Selected area hardening is accomplished by deployment of tactical equipment or technology, such as **mast**.

Link/Additional Information:

- <http://www.duoseotechnologies.com/DownloadCenter/centraco.pdf>
- <http://www.duoseotechnologies.com/DownloadCenter/mast.pdf>
- <http://www.duoseotechnologies.com/DownloadCenter/Praesidium-1pg.pdf>

Task: REPORTING AND ORGANIZATION

Duos Solution Application:

Duos' browser based technology allows for access, on a permission level basis, to outside agencies or an individual user, based on the customer's operational plan, threat level or response scenarios without additional client or seat license requirements. Each feature within the system can be given a hierarchy of access and control based on pre defined permission levels.

Link/Additional Information:

- <http://www.duoseotechnologies.com/DownloadCenter/centraco.pdf>
- <http://www.duoseotechnologies.com/DownloadCenter/Praesidium-1pg.pdf>

Task: RESPONSE

Duos Solution Application:

Duos' versatile and modular recording and event storage options enable the customer to pre-define select reporting and incident events for storage, correlation and export. Video archive and incident storage time are configurable and expandable.

Link/Additional Information:

- <http://www.duoseotechnologies.com/DownloadCenter/Praesidium-1pg.pdf>