



FOiMGuard
Fiber Optic Sensor Fence System

Total Perimeter Security Solution

The World Leading Total Security Solution Provider
Huneed Technologies



Huneed Technologies 



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Company Overview

The World Leading Total Security Solution Provider Huneed Technologies

Huneed Technologies, a leading South Korean supplier of electronic defense equipment, has a rich history of achievement spanning 40 years.



Providing various tactical communication systems for military applications, Huneed Technologies is now promising Network Centric Operation (NCO) for future digital battlefield with its Communication, Command & Control, Network (C3N) capabilities, which can also be applied to fast-changing IT solution business.

Based on the many experiences and know-how from supplying military products, Huneed Technologies expanded its business field to security systems to meet the market's growing demand for integrated security solutions.

Huneed Technologies provides a wide range of security systems which can include the perimeter intrusion detection system 'FOMGuard', surveillance systems, video motion detection and centralized control systems. Huneed Technologies has provided its security systems to military and government organizations requiring the highest level of security services for their key facilities, and also to the public sector who wish to protect their properties from intruders.

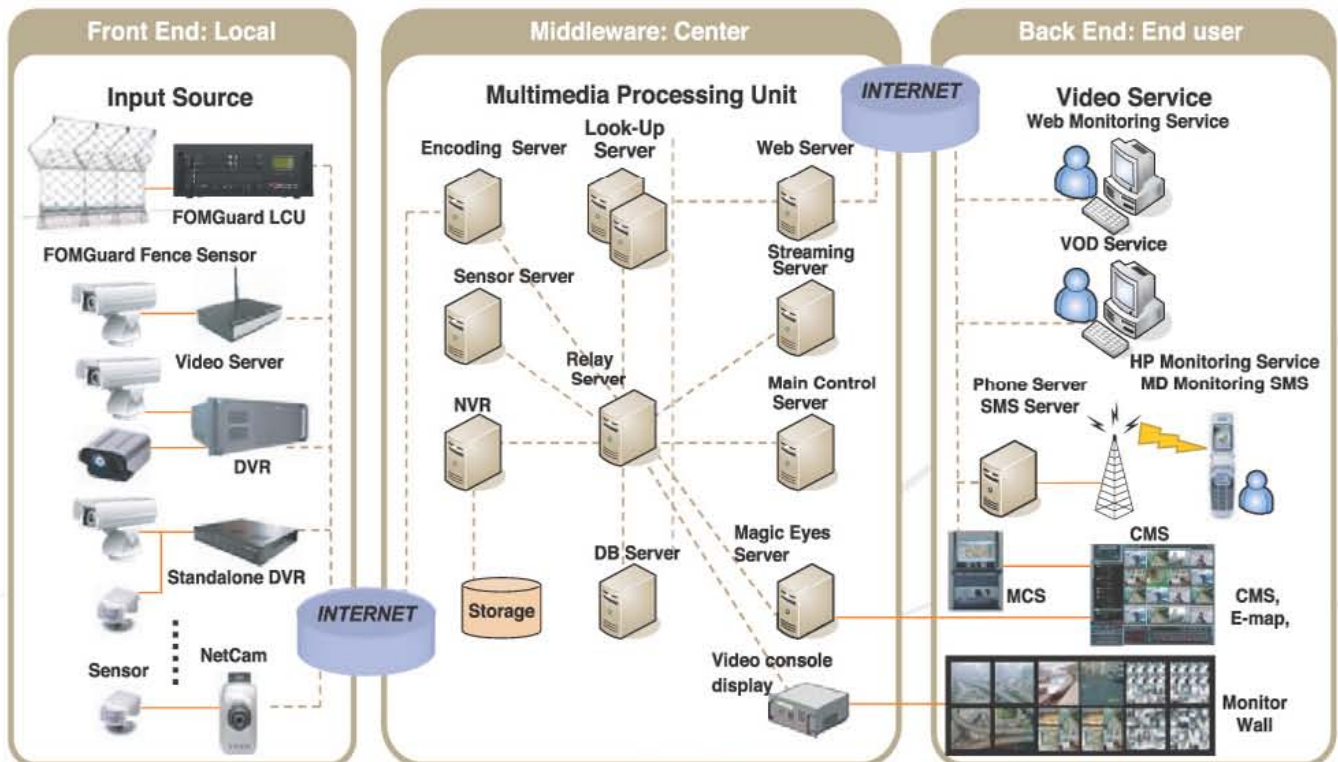


To be a world leader in the field of security systems, Huneed Technologies is putting its utmost efforts to upgrade its technological capabilities and provide the best security services to customers all over the globe.



Total Perimeter Security System Introduction

Huneed Technologies is a solution provider and system integrator for perimeter security. We offer complete system integration, development, design, installation, after sales service, and training, therefore enabling us to provide our clients turn-key projects.

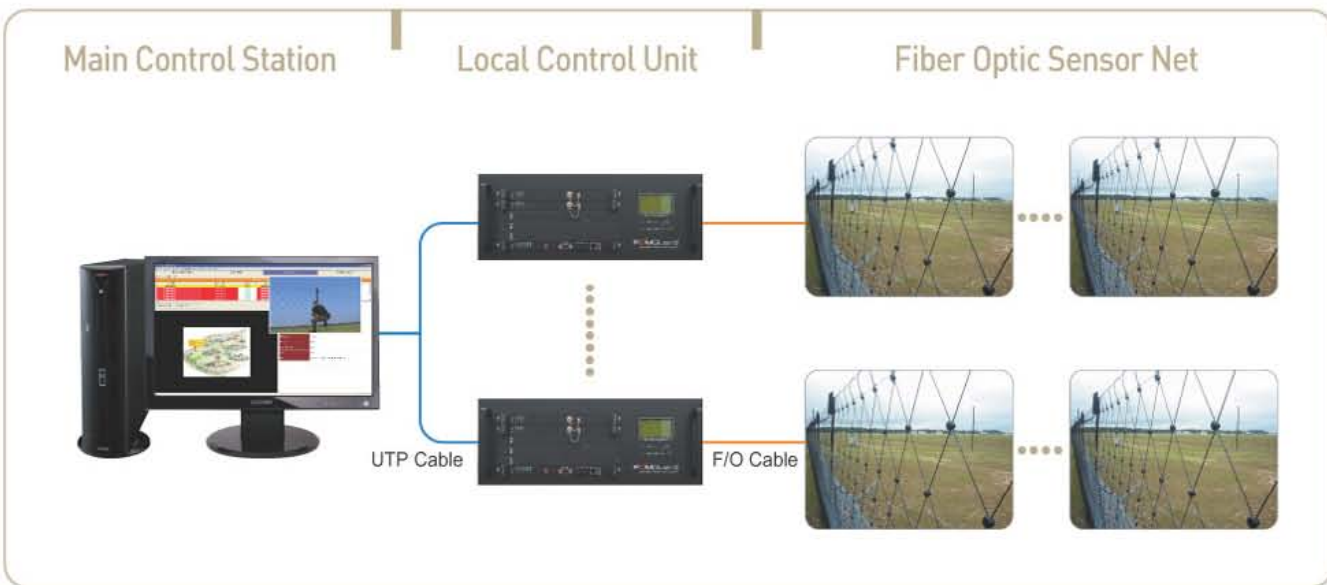




Perimeter Intrusion Detection System

FOMGuard is an intrusion detection system offering a complete perimeter security solution. After thorough testing by the US Air Force's FCT Program, FOMGuard exceeded all requirements to be a qualified security defense system.

FOMGuard automatically locates and displays the location of intrusion upon detection. The system employs OTDR (Optical Time-Domain Reflectometer) technology measuring optical fiber status. Pulses of light are sent through the Fiber Optic Sensor Net and the returning pulses are analyzed to detect intruders using specialized controllers.



Specifications	Descriptions
Probability of Detection	Over 99%
False Alarm Rate	No false alarm & the lowest nuisance alarm
Pinpoint Accuracy	±50cm [20inch]
Operating Temperature	-55°C ~ +85°C [-67°F ~ +185°F]
Maintenance Operation Availability	99.78%
Coverage (2.5m[8.2ft] fence height)	FOMGuard HOST- 5P : Up to 2km [1.25mile]
Dimensions / Weight	FOMGuard HOST- 5P : 437 W x 341 D x 177 H mm / 9.2Kg
Interface	Easy interface with other security systems such as CCTV and Access Control systems via Ethernet Network
Applicable Installations	Installation over any type of perimeter fence or barrier
Outdoor Requirements	No outdoor infrastructure such as power supplies and anti-lightning work required for the fence



Perimeter Intrusion Detection System

Why FOMGuard?

The new standard "FOMGuard"

- ▶ FOMGuard is the new high-tech solution developed to make up for the flaws with existing perimeter intrusion detection systems such as Tautwire and Vibration sensors

The lowest Nuisance / False Alarm Rate

- ▶ Virtually eliminates false and nuisance alarms
- ▶ Not affected by environmental conditions such as wind, rain, snow, humidity, etc.
- ▶ Tested through the US Air Force FCT Program
- ▶ Tautwire and vibration sensors install more lines to increase detection, but this increases cost and false alarms
- ▶ Other systems can have increased false alarms due to plants and trees growing along the perimeter
- ▶ Incessant false alarms from vibration and tautwire sensors cause many sites to turn off their systems

No Extra Costs

- ▶ No additional infrastructure such as power supplies and anti-lightning work are required along the perimeter because controllers are indoors
- ▶ Vibration and tautwire sensors are installed along the perimeter, requiring power and protection from the environment

Easy & Efficient Repair / Maintenance

- ▶ Cut or damaged lines need to be fully replaced on vibration and tautwire sensors
- ▶ FOMGuard pinpoints the exact location of defective points and is easily repaired through fusion splicing
- ▶ Low and easy maintenance allows for long term cost benefits

Cost Effectiveness

- ▶ Perimeter intrusion detection systems operate for over 10 years, making long term cost analysis crucial
- ▶ FOMGuard requires virtually no additional costs in the long run
- ▶ Other systems frequently turned off due to false alarms are NOT worth the savings

**Therefore,
The solution for perfect perimeter security is FOMGuard!**



Perimeter Intrusion Detection System

Application

The Fiber Optic Sensor Net has a wide variety of solutions that can be applied to secure a site's perimeter. The flexible nature of the cable design means different configurations can be highly customized to meet the needs of any project requirements.

Installed Over Existing Fences

The most common configuration for the system is the Fiber Optic Sensor Net installed over an existing fence such as chain-link fences. This means installation is simple and convenient without having to install any supports for the net.



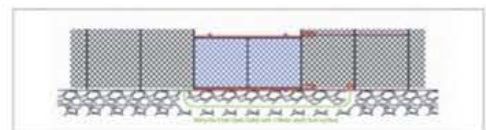
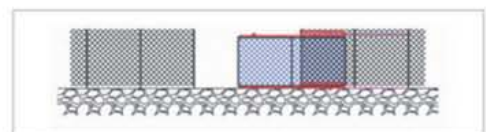
Wall Installations

As net coverage is not required on a solid barrier such as a brick wall, the net can be customized to fit on top of walls to prevent climbers. The Fiber Optic Sensor Net's height can be customized as low as 40cm to cover the barrier top, and of course higher depending on site requirements.



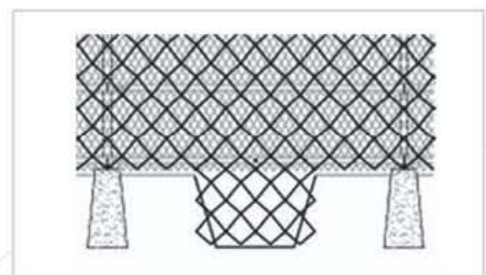
Gates & Drains

Every perimeter fence has some sort of gate to allow/prevent entry. These breaks in the perimeter usually require a separate type of sensor such as IR or microwave to cover these high traffic areas. With the fiber optic sensor net, it can be customized to integrate with various types of gates without interfering with normal operations.



Customized Gate Solution

There is also the possibility of large pipes, moats, or other obstacles the fence must build around to secure. After a site survey of the terrain conditions and points of interest, the Fiber Optic Sensor Net can be customized to seamlessly integrate with any non-uniform areas along the perimeter.



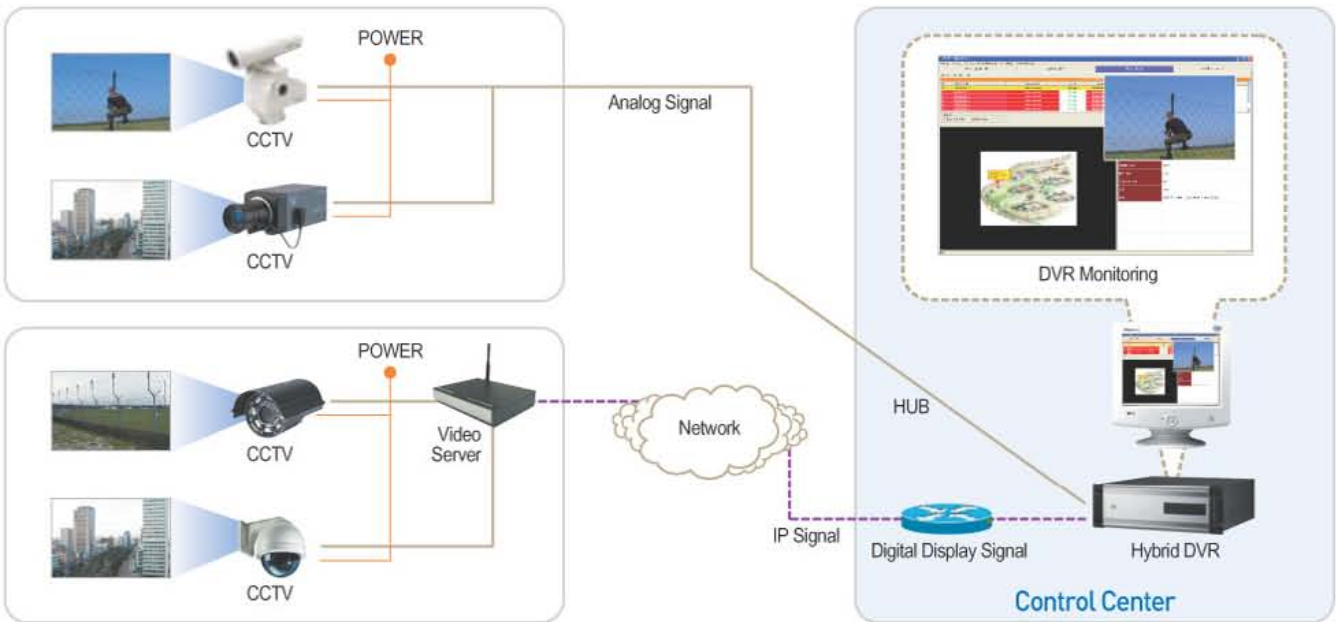
Customized Drain Solution



CCTV System

System Overview

A wide variety of CCTV solutions can be provided depending on customer requirements and specific perimeter security design.



Components

Huneed Technologies has numerous suppliers and partners, meaning we are able to provide a wide variety of CCTV related products. This facilitates our ability to meet even the most demanding project requirements in a rapid amount of time, while also providing project management, design, training and after-service.



CCTV Cameras

DVR



Night Vision Cameras



Video Surveillance Manager

Cisco Technology Developer Program

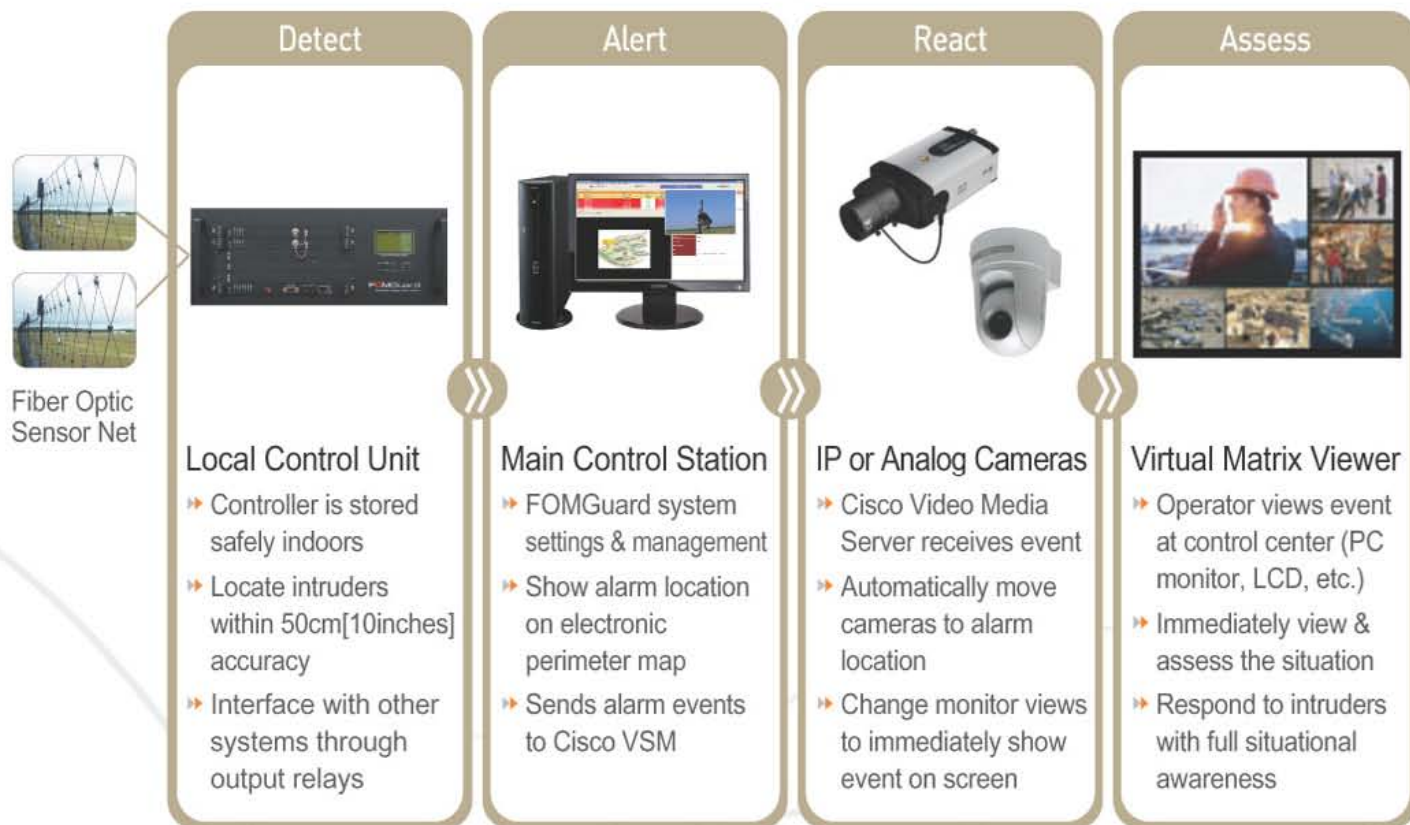
Huneed Technologies is proud to be a part of the Cisco Technology Developer Program (CTDP). The program works with partners that have complementary and compatible technologies to offer exciting new capabilities to customers around the globe. All solutions have verified interoperability, adhere to strict standards and can only be completed through close collaboration with Cisco.

The Integrated Solution

FOMGuard combined with Cisco Video Surveillance Manager (VSM) provides a powerful, fully automated and highly scalable system with comprehensive detection and surveillance capabilities. By communicating through event messages over an IP network, the system can be configured to react to events in a wide variety of ways, including:

- Move camera presets to the exact alarm location
- Automatically change monitor views to focus on the intruder
- Display the intruder's location on a digital map display
- Send email notifications

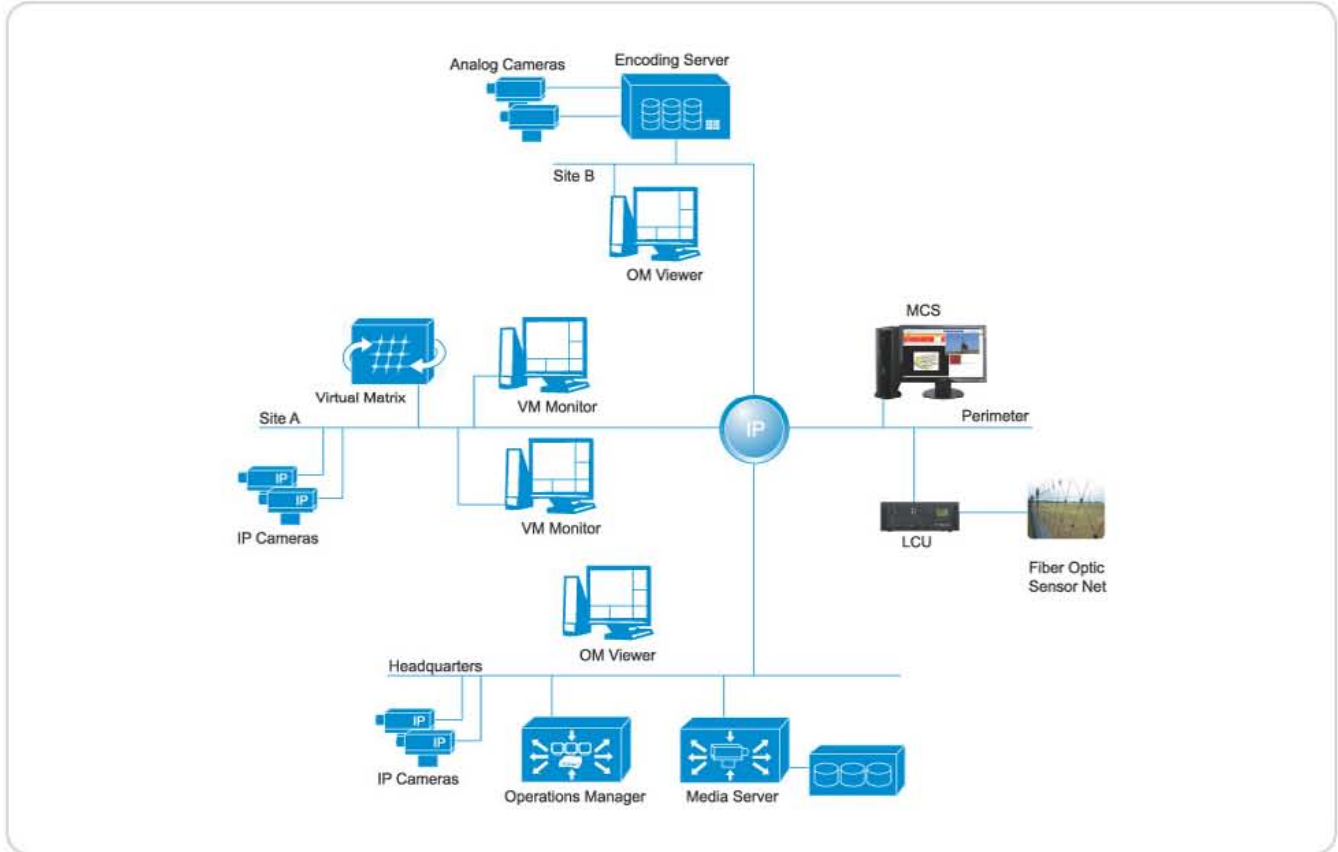
FOMGuard+Video Surveillance Manager





Video Surveillance Manager

FOMGuard + VSM Solution Components



Video Surveillance Manager Components

- **Media Server (MS)**
Highly scalable and reliable video management platform that manages, replicates, distributes, and archives video streams.
- **Operations Manager (OM)**
Web-based user interface that authenticates and manages access to video feeds. Allows management of Media Server hosts, Virtual Matrix hosts, cameras, encoders, and viewers.
- **Virtual Matrix (VM)**
Monitors video feeds in command center and allows operators to control the video being displayed on local and remote digital monitors.
- **Encoding Server (ES)**
Encodes, distributes, manages, and archives digital video feeds. Allows analog cameras to work on IP network.

FOMGuard Components

- **Main Control Station (MCS)**
Control station for FOMGuard that allows system settings and management, electronic map display, and interface with VSM
- **Local Control Unit (LCU)**
Analyzes status of the Fiber Optic Sensor Net. It communicates all alert information with the MCS and covers up to 2km [1.24 miles] of perimeter length.
- **Fiber Optic Sensor Net**
The Fiber Optic Sensor Net consists of only fiber optic cable, crossover buttons and optional accessories. The height is customizable and also has solutions for gates, drains, waterways, etc.



Application

Huneed Technologies' security solutions can be used to secure a wide variety of sites, including commercial, residential and military complexes.



- Airports
- Utilities
- Government Facilities



- Military Bases
- Research & Scientific Laboratories
- Correctional Center

- Nuclear Power Plants
- Water Treatment Plants
- VIP Residential District



- Border Security
- Ports
- Temporary Security Sites



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