



# SECURITY MECHANISMS AND THE BO SYSTEM

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# Security and Confidentiality

- Security and confidentiality of all data in VIRRGIN as FSC's highest priority



ISO 270001-  
certified  
resources



world-class security  
partner resources  
manage our  
technology solutions

# User Authentication

- **FSC Internal Users:**
  - Authenticated via FSC's Active Directory (User ID and password).
  - Requires MFA
- **Role Based Access Control**
  - Users only see what they are permitted to
- **Agent Users and Non-Agent Users:**
  - Authenticated by User ID and password issued by VIRRGIN system.
  - **\*NEW\* Multi-Factor Authentication (MFA):**
    - Required for all users to access VIRRGIN.



# Geographic Access Restrictions

## Agent and Non-Agent Users:

- Access restricted to the British Virgin Islands (BVI).
- System checks every connection to VIRRGIN to ensure connection originates from BVI.

## VIRRGIN Lite

- Restricted access to verified users for specified transactions

# Access Control Mechanisms

- **Password Protection:**
  - Passwords transmitted and stored using one-way encryption.
  - Prevents anyone, including administrators, from reading passwords in clear text.
- **Granular Access Control:**
  - Fine-tuned permissions ensure sensitive data is accessible only to those who need it for their role.
- **Automatic Logout:**
  - Disconnects inactive users after 30 minutes of inactivity.
- **Failed Access Attempts:**
  - Monitors consecutive failed login attempts.
  - Locks account after reaching a set threshold.

# Audit and Encryption

## Comprehensive Audit Trails:

- All user activities within the application are logged and monitored.
- This creates transparency and allows us to identify and address suspicious behaviour quickly.

## End-to-End Encryption:

- Data is encrypted both in transit and at rest
- Ensuring it is unreadable to unauthorised users even if intercepted.

# Infrastructure Security

- **Endpoint Protection:**
  - Protects against viruses and malware.
  - Intrusion Prevention System (IPS) protection.
- **Network Security**
  - Firewalls that provide additional IPS protection
  - Network segmentation
  - Enforces rules to limit types of traffic in and out of the network and between servers and switches.
- **Access Limitation:**
  - Limits access to VIRRGIN from BVI IPs, Hong Kong / VIRRGIN Lite agent IPs.
  - HTTPS connections via SSL for external access to VIRRGIN.





# Continuous Monitoring and Protection

## Ongoing Monitoring:

- Detection and response on all VIRRRGIN hardware, both on-premises and in the DR.
- Dedicated team of cyber security engineers monitoring logs and our network traffic

## Vulnerability Scanning:

- Continuous scanning and remediation of vulnerabilities.

## Managed Risk

- Network End-Point scanning, assessing and mitigating





# How These Measures Protect You

- **Reduced Risk of Unauthorised Access:**
  - By combining MFA, geographic restrictions, and AD-controlled access, the system ensures that only the right people get in.
- **Data Integrity and Confidentiality:**
  - Encryption and network safeguards maintain data privacy.
- **Accountability:**
  - Audit trails and access controls provide transparency, so actions are always traceable.
- **Quick Incident Response:**
  - MDR services enable rapid containment of threats to minimize risk.



# How can you help?

We, the users, are the weakest link

You may recall the various breaches in recent years

- Most, if not all, were a result of something done or not done by a user.

Partner with us to ensure that your staff is trained to recognise security red flags; awareness is key!

Cyber Security engineers are coming up with more and more ways to get to our corporate and personal data.

Stay Vigilant!



# FSC MEET THE REGULATOR

**FORUM** *BVI*