

Disposal of data, systems and storage devices

Any disposal of any data, system or storage devices shall be done in closely monitored manner. All the sensitive data, including encrypted system files, shall be removed completely before disposal of any system or storage device. The critical information on such devices shall be removed by using methods such as crypto shredding / degauss / Physical destruction as applicable.

Sharing of Information

Quarterly reports containing information on cyber-attacks and threats experienced by our team and measures taken to mitigate vulnerabilities, threats and attacks including information on bugs / vulnerabilities / threats that may be useful for other Stock Brokers / Depository Participants shall be submitted to Stock Exchanges / Depositories.

Data Security

All the critical data need to be identified and encrypted using strong encryption methodologies, such as masking of critical information, masking of passwords while logging in, encrypted transfer of password to server etc.

All the ports, for connecting external storage device or unauthorised USB tokens, of all critical systems as well as network connected systems shall be disabled and log shall be maintained for all the access granted for any given time to any users with specific reason of same.

Any authorized access to Printers, Scanner shall be prevented by application of proper access control and restricting the usage to prevent misuse of resources and to avoid transmission of sensitive data. Use of mobile phones shall not be allowed to any employees for dealing with clients as well as any other external parties and any call to clients shall be made using baseline phones having voice logger facility only.

Vulnerability Assessment and Penetration Testing (VAPT)

IT Team with the help of IT Experts shall regularly conduct vulnerability assessment to detect security vulnerabilities in the IT environments exposed to the internet.

Penetration test shall also be carried out atleast once in a year

In case of vulnerabilities discovered in off-the-shelf products (used for core business) or applications provided by exchange empanelled vendors, IT Team shall report them to the vendors and the exchanges in a timely manner.

Remedial actions should be immediately taken to address gaps that are identified during vulnerability assessment and penetration testing.

Monitoring and Detection

We shall establish appropriate security monitoring systems and processes to facilitate continuous monitoring of security events / alerts and timely detection of unauthorized or malicious activities, unauthorized changes, unauthorized access and unauthorized copying or transmission of data / information held in contractual or fiduciary capacity, by internal and external parties. The security logs of systems, applications and network devices exposed to the internet shall also be monitored for anomalies.

Further, to ensure high resilience, high availability and timely detection of attacks on systems and networks exposed to the internet, we shall implement suitable mechanisms to monitor capacity utilization of its critical systems and networks that are exposed to the internet, for example, controls such as firewalls to monitor bandwidth usage.

Systems managed by vendors

Where the systems (IBT, Back office and other Customer facing applications, IT infrastructure, etc.) are managed by vendors and due to which we shall not be able to implement some of the aforementioned guidelines directly, we shall instruct the vendors to adhere to the applicable guidelines in the Cyber Security and Cyber Resilience policy and obtain the necessary self-certifications from them to ensure compliance with the policy guidelines.

Patch management

Team shall perform rigorous testing of security patches and updates, where possible, before deployment into the production environment so as to ensure that the application of patches do not impact other systems.

Team shall also ensure that the patch management procedures include the identification, categorization and prioritization of patches and updates. An implementation timeframe for each category of patches should be established to apply them in a timely manner.

Network Security Management

Continuous and consistent application of security configuration shall be made to Operating Systems, Databases, Network devices and enterprise mobile device with in the IT environment. The LAN and wireless network networks shall be secured with Firewall and Intruder Controller and continuous monitoring shall be made towards any attempt of unauthorized access to the network.

Every individual as well as network connected system shall have an Anti Virus Software with Anti Malware and Anti Ransom ware protection.

Response and Recovery

Alerts generated from monitoring and detection systems should be suitably investigated in order to determine activities that are to be performed to prevent expansion of such incident of cyber attack or breach, mitigate its effect and eradicate the incident.

The response and recovery plan should have plans for the timely restoration of systems affected by incidents of cyber-attacks or breaches, for instance, offering alternate services or systems to Customers. Team shall ensure that we have the same Recovery Time Objective (RTO) and Recovery Point Objective (RPO) as specified by SEBI for Market Infrastructure Institutions vide SEBI circular CIR/MRD/DMS/17/20 dated June 22, 2012 as amended from time to time

Any incident of loss or destruction of data or systems should be thoroughly analyzed and lessons learned from such incidents should be incorporated to strengthen the security mechanism and improve recovery planning and processes

Training and Education

We shall work on building Cyber Security and basic system hygiene awareness of staff (with a focus on staff from non-technical disciplines).

We shall also conduct periodic training programs to enhance knowledge of IT / Cyber Security Policy and standards among the employees incorporating up-to-date Cyber Security threat alerts.

The training programs should be reviewed and updated by team to ensure that the contents of the program remain current and relevant.

Certification of off-the-shelf products

IT team shall ensure that all the off-the-shelf products procured for core business activities should bear Indian Common criteria certification of Evaluation Assurance Level 4 provided by STQC. Custom developed / in-house software and components need not obtain the certification, but have to undergo intensive regression testing, configuration testing etc. The scope of tests should include business logic and security controls.

Periodic Audit

We shall arrange to have our system audited on periodic basis and shall obtain certification from any independent auditor, capable to do the same.

Physical Security

Physical access to the critical systems should be restricted to minimum and only to authorized officials. Physical access of outsourced staff/visitors should be properly supervised by ensuring at the minimum that outsourced staff/visitors are accompanied at all times by authorized employees.

Physical access to the critical systems should be revoked immediately if the same is no longer required.

Perimeter of the critical equipment room (server Room) shall be secured physically and monitored by employing physical, human and procedural controls such as the use of security guards, CCTVs, card access systems, mantraps, bollards, etc. where appropriate