



Pakistan Telecom Authority Headquarters, Islamabad

PTA Cyber Security Advisory No.:100

28-Aug-2020

Subject: Advisory for securing links with Franchisees and APIs shared with 3rd Party for value added services

It has been reported that most of the Telecom operators are not observing security precautions while establishing links with their franchisees or other value added service providers. Keeping in view, following security guidelines forwarded for all Telecom operators who are sharing consumer data with franchisees or any other third party for value added services, for strict compliance:

- i. Audit trail in the form of Source query logging must be enabled and mapped against each Franchise ID or third-party connection, for accountability.
- ii. All third-party VAS services, franchise applications used to query customer data should be integrated with a security monitoring solution (i.e. SIEM).
- iii. Furthermore, the operators should also consider API management solution.
- iv. A baseline for normal behavior may be recorded based upon the historical data and according to that rate limiting should be applied. The data source should be integrated with SIEM including all Franchise and third-party software/applications. Use-cases to monitor anomalies such as bulk querying, identity theft etc. should be created. Alerts should be configured, in case of usage above the threshold is detected.
- v. The franchise application and all third-party applications must be accessed through whitelisted static IP addresses. Concurrent sessions need to be restricted for franchise ID. Also, VPN need to be established with all of the franchisees and third-parties.
- vi. Data visibility for franchise should be limited.
- vii. Applications should be designed for accessibility from latest bowsers and should not be based on obsolete technologies. Moreover, all critical inhouse/outsourced application development must pass regressive security testing by the qualified and certified team of security experts and approved by the senior management before brining into the production.
- viii. SLA's with franchise's and all third-parties, should incorporate NDA and breach penalties including legal requirements from section 6,7,8 of PECA 2016.