Arcturus

Part of the CYBERFORT group

Penetration Test Attestation

for

SafeToNet

Mobile Application Security Assessment, September 2020

Overview

Arcturus is a leading cyber security consultancy holding CREST and CHECK accreditations. Part of The Cyberfort Group, which brings together leaders in the field of data security, we are built on the four pillars of information security, which we combine to deliver complete data assurance.

SafeToNet commissioned Arcturus to perform a penetration test of their Android and iOS mobile applications; to provide independent verification and assurance that the applications and network security controls in place are adequate, have been correctly implemented and are commensurate with the value and nature of the data processed.

Requirements

To deliver this assessment Arcturus carried out both automated and targeted manual penetration testing to attempt to identify any potential or actual vulnerabilities that could threaten the confidentiality, availability and integrity of the information stored and processed by SafeToNet's applications and systems.

Security consultants at Arcturus follow a rigorous testing methodology to ensure that all testing is performed to a very high standard.

Our Mobile Application assessment covered everything on-device and server-side. The consultants provided a detailed analysis of mobile applications, including coverage for all the OWASP Top 10 mobile vulnerabilities. We provided coverage of these areas by using decompiling techniques, emulated in-memory analysis as well as network traffic inspection and review.

Scope of Work

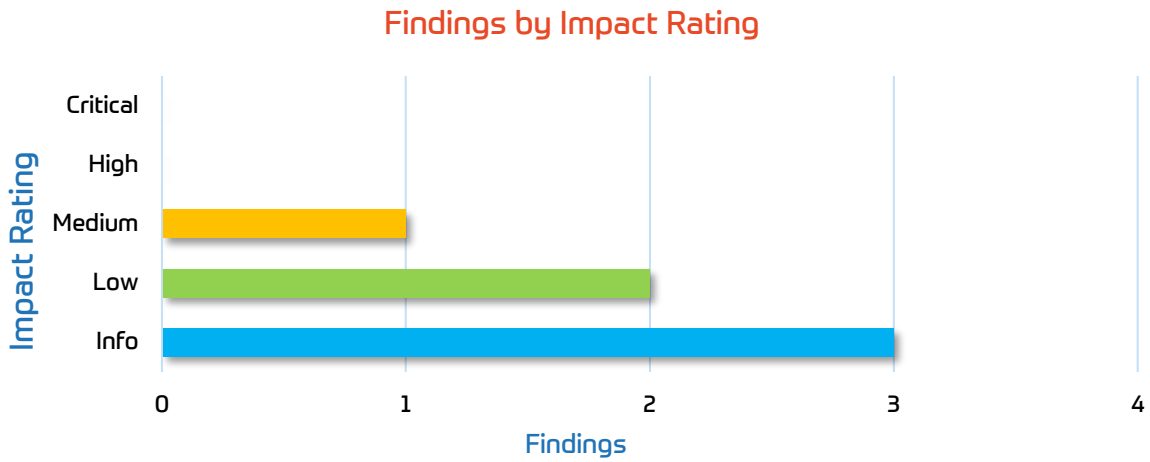
The tests were carried out over several days and included the following areas:

- **SafeToNet Android and iOS applications** (as of 31/05/2020)
- **SafeToNet testing endpoint "qa.safetonet.io"** (13.73.145.215)

The main scope of this penetration test was the security of the SafeToNet mobile apps. SafeToNet's network infrastructure will be assessed additionally during a dedicated penetration test.

Summary of Findings

Overall, the security measures evaluated in the scoped environment were effective. The available data and threat environment at the time of testing indicate that the likelihood of an attacker exploiting any of the system's components is low. The vulnerabilities found do not pose an imminent risk but should be added to the application enhancement roadmap and implemented as part of a defence in depth approach. All findings have been discussed at length with SafeToNet so they are clear on the risks associated and how to implement a fix for each of them.



Attestation

With this report Arcturus attests that we have penetration tested the software and environments listed in the "Scope of Work" section to expose security weaknesses.

The mobile application security testing identified no high or critical risks. Our analysis suggests the vulnerabilities identified do not represent an imminent public attack threat.

Overall, the security adopted on the tested systems is aligned with industry-accepted practices and is in accordance with widely adopted security standards (OWASP, NIST, OSSTMM).

This certification can be validated by contacting Arcturus Security Ltd. and referencing the number 1267.

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