

mSIS Security Policy and Protocol

Introduction

This Policy details the secure use of mSIS as a tool for the capture and reporting of internet intelligence and investigations (i3).

- mSIS is a powerful i3 software application developed and owned by Qwarie Ltd.
- mSIS allows the researcher to capture, protect and secure personal data and evidence during an investigation, and to distribute that personal data and evidence securely, through the mSIS reporting function, so that the whole process is compliant with current legislation.
- mSIS allows the user to apply best practice security controls against unauthorized access and the modification of personal data and evidence throughout the judicial process of capture, disclosure and prosecution.

This Policy should be read in conjunction with the mSIS Data Protection Compliance Statement.

Scope

Part 1: Data Security

Qwarie applies the following secure practices for the capture of personal data:-

1.1. Login Credentials

The Customer organisation shall assign at least one Customer Admin User with responsibility for login credentials of each licence user.

The Customer Admin User shall be obliged to provide a login for each Licenced User, with the following protocol.

Usernames with the following format: xxxx-yyyy-zzzz, where;

- xxxx is an acronym of the Customer organisation with no more than 4 characters, and where;
- yyyy is the initials of a name of the researcher, or of the false persona used for research, with no more than 4 characters, and where;
- zzzz is a 4 digit numeric code, that shall render the user-name unique, and, so that;
- the 3 sections of the user-name shall be separated by a hyphen "-" character.

Passwords shall have a minimum of 12 characters. Qwarie recommends a strong password (that contains lowercase and uppercase letters, numbers, special characters). A story based passphrase, created by the user, should be easy to commit to memory.

The Customer Admin User shall provide to Qwarie, one username for each single user licence procured, and;

For each multi-user licence, the Customer Admin shall provide to Qwarie, a quantity of usernames, as agreed between the Parties.

The Customer Admin User shall maintain a record of each licence username.

The Customer Admin User shall have the right to modify a login.

Licenced Users shall not have the right to modify a login.

The Customer Admin User is obliged to make a secure record of each login and shall be responsible for password recovery.

Login credentials should be applied into the Qwarie CRM or, transmitted through secure communication (see sub-section 1.2. of this Policy).

1.2. Secure Communication

Qwarie provides secure communication of User login credentials, with the Qwarie CRM.

Alternatively, Qwarie provides a public key for secure e-mail communication.

The Qwarie public key is published on <https://www.qwarie.com/documents>.

Where a Customer has a public key, it should be made available to Qwarie, so that the Parties might communicate with secure e-mail.

Where the Customer does not supply an option for a secure e-mail, so that Qwarie is obliged to communicate with unsecure e-mail, there are alternative channels for secure communication that are:-

- Signal client, and;
- WhatsApp client, and;
- SMS.

Also, the Customer may elect to save a file within a Zip Archive and apply a password to the Archive, transmit the Archive to Qwarie by e-mail and send the password by SMS or other secure means (see above).

1.3. Secure authentication

Each research user is identified through the authentication process, so that the user is validated as a legitimate and authorised user with rights to conduct research and create an evidence report.

Authentication functions are implemented through the following process:-

- to authenticate the login to mSIS, the credentials are sent to a Qwarie server;
- where the username & password combination is correct, and the account has an active subscription, access to mSIS is granted;
- each day, mSIS checks with the Qwarie server to verify that a subscription attached to an account is still active;
- as with the login process, the username and password are sent to the Qwarie server for verification;
- login credentials are stored by Qwarie;
- login data may be requested from Qwarie.

2. Encryption

Encryption is the method by which any type of data is converted from a readable form to an encoded version that can only be decoded by another entity if they have access to a decryption key.

Encryption is one of the most important methods for providing security and does not allow attackers to compromise passwords and login credentials.

- The only data that is sent by mSIS to any Qwarie server are login credentials;
- mSIS stores the credentials in a secure local database;
- Data is communicated to any Qwarie server over an encrypted connection, using the TLS 1.2 cryptographic protocol;
- Backup of the local database that stores the login credentials is performed constantly.

3. Public Key

Public keys are used to convert a message into an unreadable format. Decryption is carried out using a different, but matching, private key. Public and private keys are paired to enable secure communication.

Part 2: Evidence Security

Qwarie applies the following secure practices for the management of evidence:-

1. Evidence storage on the hard-drive of the user

Where mSIS is deployed, all research performed by a logged-in user and every element within a Case Bundle is saved locally, onto the user's computer, or where required, to a local server.

- No data is saved to Qwarie, or any other external server, and;
- No data can leak to Qwarie, or any other external server.

Furthermore, where mSIS is deployed to perform research, the local browser might be set-up at the user's discretion, to keep a history of pages visited and cookies delivered. These records are saved on the user's local computer.

No data capture is sent to Qwarie, or is accessible by Qwarie, or any other party.

Each Case Bundle includes a report in PDF & HTML format, with an Audit Log, a decision log, a Hashes folder, and an Attachments folder with all screenshots and attachments gathered during the research process.

These records are saved on the user's local computer. No data is sent to Qwarie, or is accessible by Qwarie or any other party.

2. Audit Logs

Where mSIS is deployed, the Audit Log contains a record of each individual search that a user performs.

Where the browser history is deleted, the only record of the pages searched, is recorded in the Audit Trail file.

The Audit Trail is a log file that is saved and stored within the Case Bundle, as an HTML file type.

The user may export the Case Bundle outside of mSIS, onto the user's own computer, or a connected Local Area Network drive, and to any other server as determined by the user.

3. Hashes File

Hashes ensure that transmitted data has not been tampered with. The following measures have been implemented into mSIS:-

- when exporting a Case Bundle, a new file, "hashes", is created, that contains all report resources hashes;
- the title of the file shall be "Hash file has been generated by "username "+ "at" + timestamp of the case export function;

- alongside the text version, the hashes file shall have an image version also, to make it harder to tamper with evidence;
- the hashes file becomes a hashes folder that contains individual files from all the exports that were made during an investigation (text + image version);
- when importing a Case Bundle, it is verified that the hashes of all files inside the Case Bundle match the values inside the hash file, and;
- if the values inside the hash file are different, a pop-up warning message shall appear that shall allow the user to, either stop or continue with the import.

4. Case Bundle Naming

- Each Case Bundle export shall have the appended time stamp of the export and initials of the username logged in at that time;
- The user shall choose between case name or case number for the Case Bundle name;
- When the setting is applied, it holds true for all new naming until the setting is modified;
- The same name used for the Case Bundle shall be appended to Report.pdf, the Attachments folder, the folder with archived pages, the Audit Log and the timestamp folder;
- Files shall be appended with the case number, excepting the config and data.json file that be DoNotModify.json.

Notification of changes to this Policy

From time to time, Qwarie may make changes to this Security Policy and Protocol to reflect any changes in security practices in accordance to changes in legislation, best practice and technology enhancements. To be notified of changes to this Policy, please subscribe to the Qwarie e-mail list.
