NAME

logksi - Log signature tool of Keyless Signature Infrastructure (KSI).

SYNOPSIS

logksi [**-h**][**--version**]

logksi command -h

logksi command [*service_parameters*] [*options*]

DESCRIPTION

Keyless Signature Infrastructure (KSI) is an industrial scale blockchain platform that cryptographically ensures data integrity and proves time of existence. Its keyless signatures, based on hash chains, link data to global calendar blockchain. The checkpoints of the blockchain, published in newspapers and electronic media, enable long term integrity of any digital asset where only trusted publications file or a publication string in printed media is needed to perform the verification.

Log signature tool is specifically designed to add and manage KSI signatures for any type of logs, it enables:

•   Integrating temporary files containing log signature blocks and KSI signatures into one final log signature file (**logksi-integrate**(1)).

•   Sign recovery of possible unsigned blocks in a final log signature file (**logksi-sign**(1)).

•   Extending of KSI signatures in a log signature file (**logksi-extend**(1)).

•   Verifying the KSI signatures in a log signature file (**logksi-verify**(1)).

To use **logksi** the log entries and log blocks need to be hashed. List of accepted hashing algorithms is available in help text (**-h**).

KSI COMMANDS

sign   Signs the previously unsigned log blocks in a given log signature file. Only to be used for sign recovery, as routine signing should be done during logging itself. See **logksi-sign**(1) for more information.

verify   Verifies existing log signatures. See **logksi-verify**(1) for more information.

extend   Extends existing log signatures to the given publication. See **logksi-extend**(1) for more information.

integrate
          Integrates temporary log signature file with signature blocks and log signature file containing the KSI signatures into final log signature file. See **logksi-integrate**(1) for more information.

conf   Defines the KSI service configuration. See **logksi-conf**(5) for more information.

OPTIONS

-h   Print help text. Use **logksi command -h** to print help for the specific command.

--version
          Print version info.

EXIT STATUS

0   **Exit success.** Returned if everything is OK.

1   **Exit failure.** A general failure occurred.

3   **Invalid command-line parameter.** The content or format of a command-line parameter is invalid or a parameter is missing.

4   **Invalid format.** Input data to KSI library is invalid, for example signature or publication file format is invalid.

5   **Network error.** KSI log signature tool is unable to connect to the service, connection is timed out or an HTTP error was returned from the KSI service.

6	**Verification error.** Verification of signature or document hash failed.
7	**Extending error.** Error in extending a signature or an error was returned by KSI Extender.
8	**Aggregation error.** Error returned by KSI Aggregator.
9	**Input / output error.** Unable to read or write file.
10	**Cryptographic error.** Error may be generated due to mistrusted or unavailable hash algorithm or by an invalid PKI signature/mistrusted certificate.
11	**HMAC error.** HMAC of aggregation or extend response does not match.
12	**No privileges.** Operating system did not grant privileges to perform an operation.
13	**System out of memory.**
14	**Authentication error.** KSI Aggregation or Extending service did not accept the provided access credentials.
16	**Invalid configuration.** KSI log signature tool configuration or KSI C API library configuration is invalid.

ENVIRONMENT

The **KSI_CONF** environment variable points to the KSI configuration file containing the KSI service related parameters such as the URLs to the KSI Aggregator and Extender service and the corresponding access credentials. See **logksi-conf**(5) for more information.

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SEE ALSO

logksi-sign(1), **logksi-integrate**(1), **logksi-extend**(1), **logksi-verify**(1), **logksi-conf**(5)