NOXCrypt v2.3.0 — Public Specification

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1. Name

NOXCrypt v2.3.0 is a proprietary cryptographic algorithm designed specifically for the NOX system. Its purpose is to provide encryption that cannot be recognized as encryption, including disguising as various media formats and random binary streams. It is also based on the mechanism of Deep InCrypting (NOX development).

2. Goals and Features

- Hiding not only the content of the data but also the very fact of its existence.
- Output data can imitate images, audio, video, or arbitrary binary data.
- Disguise as popular formats (e.g., JPEG, MP3, PNG).
- Exclusive use within the NOX ecosystem.
- Dynamic key, uniquely generated for each session.
- Mechanism of Deep InCrypting (NOX development) as an additional privacy layer.

3. Architecture

The architecture uses cascading stages of data transformation, including substitutions, mixing, and adding controlled noise. Specific mathematical schemes and internal tables are confidential information and are not disclosed in the public version of the specification.

4. Key and Sessions

The encryption key has a high length and is dynamically formed using random and session parameters. For each session, unique tables and transformation rules are created, preventing reuse of keys and encryption patterns.

5. Masking

The algorithm is capable of converting the encrypted stream into a form corresponding to different types of media files or network traffic, which significantly complicates the identification of encrypted data transmission.

6. Security

Each session uses unique keys and sets of encryption rules. Even if traffic is intercepted, without access to the key decryption is impossible. The algorithm includes mechanisms to prevent cryptanalysis and to mask data structure.

7. Application

NOXCrypt can encrypt text, voice data, and arbitrary binary streams, transforming them into forms that do not arouse suspicion. The algorithm is optimized for high speed and low latency during data transmission.

8. Conclusion

NOXCrypt is a next-generation cryptosystem focused on ensuring maximum confidentiality and anonymity, as well as resistance to detection and analysis. This specification provides an overview of the technology and does not disclose internal algorithmic details.