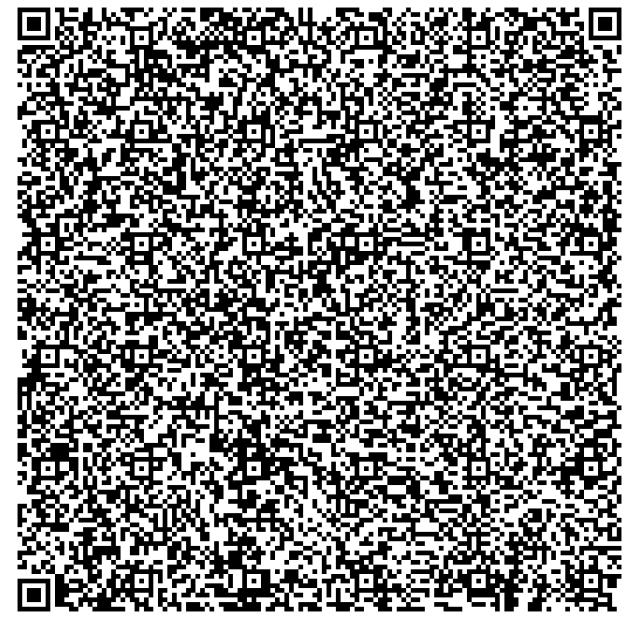# PaperCrypt Recovery Sheet

What is this?

This is a PaperCrypt recovery sheet. It contains encrypted data, its own creation date, purpose, and a comment, as well as an identifier. This sheet is intended to help recover the original information, in case it is lost or destroyed.

Binary Data Representation

Data is written as base 16 (hexadecimal) digits, each representing a half-byte. Two half-bytes are grouped together as a byte, which are then grouped together in lines of 22 bytes, where bytes are separated by a space. Each line begins with its line number and a colon, denoting its position and the beginning of the data. Each line is then followed by its CRC-24 checksum. The last line holds the checksum of the entire block. For the checksum algorithm, the polynomial mask 0x864cfb and initial value 0xb704ce are used.

Recovering the data

Firstly, scan the QR code, or copy (i.e. type it in, or use OCR) the encrypted data into a computer. Then decrypt it, either using the PaperCrypt CLI, or manually construct the data into a binary file, and decrypt it using OpenPGP-compatible software.

PaperCrypt Version: devel
Content Serial: LCU3HF
Purpose: Example Sheet
Comment: Lowercase PDF Example
Date: Tue, 26 Sep 2023 21:54:48.392480500 CEST
Content Length: 362
Content CRC-24: 87cb91
Content CRC-32: 65f3a426
Content SHA-256: 4wJH4KkzJQSoDjl0hXIbTV6ONs1xTomnY3baS37m0nw=
Header CRC-32: e7555212

```
 1: c3 2e 04 09 03 08 ff 84 6e 39 1e 08 c9 84 e0 c3 e4 77 b7 64 00 d6 a29a6c
 2: 09 c6 3d 84 b5 a7 99 1d 93 2d 1c cf d1 40 3d ce 64 f6 f5 b5 65 c2 f58f43
 3: 5e 2b 19 a4 d2 c0 77 01 0d f9 6c 1a d8 4a 14 42 94 fe 43 6a 14 32 f7ca7d
 4: c0 6c 04 90 cb 6c d4 43 5c 23 2f 91 46 be d1 22 94 8b d3 af 47 69 c30b47
 5: 4e 0f 69 35 5e 7e 3f 95 7c 15 9a 5f d9 87 18 93 b7 51 bf 40 1b 69 959d96
 6: 10 33 64 e9 4e f2 f1 24 1c b1 59 81 87 77 1c 71 b9 13 c9 d5 9c 10 c24989
 7: 96 4e 4f b1 d0 9d d2 9a 08 7b e5 2f ea 07 34 a1 a6 31 7b 4c bb 0b 09bc09
 8: a4 09 12 4f 95 d8 cc 58 2b 1f 16 a6 2e 31 f9 c0 b8 17 74 b8 6d 34 d59c79
 9: ce 15 70 8a 56 fe 5b 39 07 10 9d a9 4f bb 10 58 21 67 b3 e1 5e e5 75720b
10: 9f ba 82 04 42 3c f5 2d f1 d8 3b 9c ae d8 87 91 05 8e 86 a4 bd b7 f3e184
11: d2 76 2b 18 ad d8 3f ef ab 6a ec 14 79 1e d0 5d de 98 f4 f1 61 46 fb56fa
12: 91 73 2d 41 92 58 90 9f 50 1d 18 a4 ff 14 6f 85 f0 d8 9a a3 04 04 f34625
13: 0e d0 01 ca 7d e8 e0 88 e9 42 48 1d b8 72 55 46 4f 9b eb e5 5f 95 6f804d
14: 00 d1 66 ca c9 f5 a2 ef ef 3d 5c d3 bb e8 cc b5 32 8c 04 85 3e 4e 755055
15: 3c 48 a5 27 5f 80 b0 09 95 3b 6c 04 2e db 1e f5 05 d3 c3 69 32 06 0e8399
16: 4f d1 1c a4 82 c6 8e f3 bc 4b 2b cb fb 07 17 3b 2b 3a c4 ae ae 72 72f89a
17: 5b 70 d4 ce f8 80 a6 17 4c 3c fa5a05
18: 87cb91
```