



JENS NEUHALFEN

| User | Salary | • • • |
|-------|--------|-------|
| Alice | | • • • |
| Eve | | • • • |
| • • • | • • • | • • • |



2,718 €

DATA INTEGRITY & ASSOCIATION

SLEEP BETTER WITH CONTENT ENCRYPTION





EVE GETS AN INSTANT PROMOTION



3,141€

Problem: Sensitive data can be manipulated.

DATA INTEGRITY & ASSOCIATION

0X123456..

Problem: Sensitive data can be manipulated.



DATA INTEGRITY & ASSOCIATION

OX123456...

Problem: Sensitive data can be manipulated.

Solution: Use cryptographic checksums with a secret.

| User | Salary | Checksum* |
|-------|---------|-----------|
| Alice | 3,141€ | 0x4711 |
| Eve | 2,718 € | 0xabcd |
| ••• | ••• | ••• |

^{*} Checksum with a secret: hmac, AEAD, public key signatures