



### JENS NEUHALFEN

User	Salary	Checksum*
Alice		0x4711
Eve		0xabcd
• • •	• • •	• • •



2,718 €

## DATA INTEGRITY & ASSOCIATION

### SLEEP BETTER WITH CONTENT ENCRYPTION

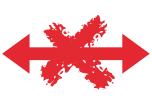




# THE CHECKSUMS DON'T MATCH, PROMOTION IS DECLINED



3,141€



## \* Checksum with a secret: hmac, AEAD, public key signatures

Problem: Sensitive data can be manipulated. Solution: Use cryptographic checksums with a secret.

## **DATA INTEGRITY & ASSOCIATION**

OX123456...

Problem: Protected data can be "replayed".

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

### DATA INTEGRITY & ASSOCIATION

OX123456..

Problem: Sensitive data can be manipulated.

Solution: Use cryptographic checksums with a secret.

Checksum\* User Salary Alice 0x4711... 3,141€ 0xabcd... Eve 10,000€ THE CHECKSUMS DON'T MATCH, PROMOTION IS DECLINED

\* Checksum with a secret: hmac, AEAD, public key signatures