



#### JENS NEUHALFEN

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

3,141€

2,718 €

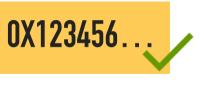
#### SLEEP BETTER WITH CONTENT ENCRYPTION

### DATA INTEGRITY & ASSOCIATION





## EVE GETS AN INSTANT PROMOTION



## Problem: Protected data can be "replayed".

# 0x4711...

### DATA INTEGRITY & ASSOCIATION

0X123456...

Problem: Protected data can be "replayed".



### DATA INTEGRITY & ASSOCIATION

OX123456...

Problem: Protected data can be "replayed".

Solution: Cryptographically bind data to context.

User 	Salary	MAC*
Alice	3,141€	0xabcd
Eve	2,718€	0x9876
t including the userna	main tha hack/bra	•••